

TECHNICAL ACTIVITIES BOARD

**AWARDS AND
RECOGNITION
MANUAL**

2021

Includes new and revised awards
(Approved by TAB through June 2021)



PREFACE

The IEEE shall recognize those who contribute to and support the purposes of the Institute in an exceptionally worthy manner. In furtherance of this objective, the Institute has created and fostered a broad program of formal recognitions, scholarships and awards of all types. The Institute encourages the formation of awards committees in its geographical, professional and technical entities to recognize outstanding achievements and services for the benefit of the IEEE and the engineering profession, and for those accomplishments which enhance the quality of life for all people throughout the world.

IEEE Awards serve several purposes: (1) they are an expression of recognition for outstanding contributions to the art and science of electrical and electronics engineering; (2) they are an incentive to youth to emulate excellence, (3) they are a personalized recognition of the achievements of the profession and its members to the public, and (4) they identify the IEEE with these achievements.

IEEE Policies

The *Technical Activities Board Awards and Recognition Manual* provides a comprehensive listing of awards (including scholarships and other student awards) sponsored by IEEE Societies, Technical Councils, Technical Conferences, and the Technical Activities Board, itself. Information contained in this new edition of the Manual reflects the current information on approved awards on file in the Technical Activities Department.

Awards are grouped under the headings of their sponsoring entities (primarily Societies and Technical Councils), with information that includes description/purpose, prize, eligibility, basis for judging, and presentation. If more detailed information is required for a specific award, it may be available through the sponsoring entity's Awards Committee.

The Eligibility and Selection process for all awards shall comply with procedures and regulations established in IEEE and society governing documents, in particular with IEEE Policy 4.4 on Awards Limitations.

In addition to the listing of awards, the Manual contains information on:

Awards and recognition products

How to obtain approval for new and revised awards

Template for Establishing a New IEEE Society/Council Award

Template for Establishing a New IEEE Technical Conference Award

Guidelines for Technical Conference Awards

IEEE Medals and Field Awards

<http://www.ieee.org/about/awards/index.html>

IEEE policies and procedures governing awards

<http://www.ieee.org/about/awards/information.html>

Authorization for Donation of Award Honorarium to IEEE Foundation

Finally, an index, organized by award type (e.g., best published paper, conference paper, service, fellowship), is provided for convenient reference.

Please direct your questions, suggestions, comments, and requests for information regarding this Manual to:

Society Member and Committee Services

IEEE Technical Activities

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LIST OF AWARDS

(Note: Those listed in Blue are managed through the IEEE FOUNDATION)

IEEE Division Awards (1 award)

IEEE Division VI Distinguished Leadership Award\

IEEE TAB Committee Awards (1 award)

IEEE Entrepreneurship Impact Award

IEEE Aerospace and Electronic Systems Society (15 awards)

IEEE AESS Pioneer Award

M. Barry Carlton Award

Harry Rowe Mimno Award

[Fred Nathanson Memorial Radar Award](#)

IEEE AESS Technical Panel of the Year Award

IEEE AESS Chapter of the Year Award

[Warren D. White Award for Excellence in Radar Engineering](#)

[Walter R. Fried "PLANS" Best Paper Award in Navigation](#)

IEEE AESS Organizational Leadership Award

IEEE AESS Judith A. Resnik Space Award

IEEE AESS Robert T. Hill Best Dissertation Award

IEEE AESS Engineering Scholarship

IEEE AESS Industrial Innovation Award

[IEEE Michael C. Wicks Radar Student Travel Grant](#)

IEEE AESS Early Career Award

IEEE Antennas and Propagation Society (23 awards)

[Distinguished Achievement Award](#)

Sergei A. Schelkunoff Transactions Prize Paper Award

Harold A. Wheeler Applications Prize Paper Award

R.W.P. King Award

Honorary Life Member of AdCom

[Raj Mittra Travel Grant](#)

Best Student Paper Award

[Chen-To Tai Distinguished Educator Award](#)

AP-S Chapter Award

Outstanding Service Award

[John Kraus Antenna Award](#)

IEEE Piergiorgio L.E. Uslenghi Prize Paper Award

[IEEE Donald G. Dudley, Jr. Undergraduate Teaching Award](#)

IEEE Antennas and Propagation Edward E. Altshuler Prize Paper Award

[IEEE Lot Shafai Mid-Career Distinguished Achievement Award](#)

[IEEE Harrington-Mitra Award in Computational Electromagnetics](#)

[IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Antenna Measurements and Applications](#)

[IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Computational Techniques in Electromagnetics](#)

IEEE AP-S Eugene F. Knott Memorial Pre-Doctoral Research Grants

IEEE AP-S Doctoral Research Grants

IEEE AP-S Student Design Contest

[IEEE Ulrich L. Rohde Humanitarian Technical Field Project Award](#)

[IEEE AP-S C.J. Reddy Travel Grant for Graduate Students](#)

IEEE Biometrics Council (3 awards)

IEEE Biometrics Council Meritorious Service Award

IEEE Biometrics Council Leadership Award

IEEE Biometrics Council Best Doctoral Dissertation Award

IEEE Broadcast Technology Society (7 awards)

Special Service Award
Matti S. Siukola Memorial Award
Scott Helt Memorial Award
Clyde M. Hunt Memorial Student Paper Award
IEEE Broadband Multimedia Symposium – Best Paper Award
IEEE Jules Cohen Award for Outstanding Broadcast Engineering
IEEE Broadcast Technology Society/AFCCE Jules Cohen Memorial Scholarship (JCMS)

IEEE Circuits and Systems Society (19 awards)

IEEE Circuits and Systems Society Mac Van Valkenburg Award
IEEE Circuits and Systems Society Charles A. Desoer Technical Achievement Award
IEEE CAS Meritorious Service Award
Chapter-of-the-Year Award
IEEE CAS John Choma Education Award
Outstanding Young Author Award
IEEE Transactions on Circuits and Systems Guillemain-Cauer Best Paper Award
IEEE Transactions on Computer-Aided Design Donald O. Pederson Best Paper Award
IEEE Transactions on Circuits and Systems Darlington Best Paper Award
CSVT Transactions Best Paper Award
Transactions on Very Large Scale Integration Systems Prize Paper Award
CAS Industrial Pioneer Award
Multimedia Prize Paper Award
CASS Vitold Belevitch Circuits and Systems Award
IEEE Circuits and Systems Society ISCAS Student Best Paper Award
IEEE CAS Student Travel Grants
IEEE Circuits and Systems Regional Chapter-of-the-Year Awards: Regions 1-7, Region 8, Region 9, and Region 10
IEEE Transactions on Biomedical Circuits and Systems Best Paper
IEEE CASS Pre-Doctoral Grants

IEEE Communications Society (27 awards)

Edwin Howard Armstrong Achievement Award
Award for Public Service in the Field of Telecommunications
Donald W. McLellan Meritorious Service Award
Leonard G. Abraham Prize
Stephen O. Rice Prize
William R. Bennett Prize in the Field of Communications Networking
Fred W. Eilersick Prize
Best Tutorial Paper Award
Chapter Achievement Award
IEEE Communications Society Joseph LoCicero Award for Exemplary Service to Publications
ComSoc/IT Joint Paper Award
Harold Sobol Award for Exemplary Service to Meetings & Conferences
IEEE Communications Society Distinguished Industry Leader Award
Guglielmo Marconi Prize Paper Award
Multimedia Prize Paper Award
IEEE Communications Society/ Korean Information and Communications Society Exemplary Global Service Award
IEEE Communications Society Award for Advances in Communication
IEEE Communications Society Industrial Innovation Award
IEEE Communications Society Heinrich Hertz Award for Best Communications Letter
IEEE Communications Society Charles Kao Award for Best Optical Communications & Networking Paper
IEEE Communications Society Education Award
IEEE Communications Society Young Author Best Paper Award
IEEE Communications Society Best Survey Paper Award
IEEE Communications Society Robert M. Walp Industry Humanitarian Award
IEEE Internet of Things Journal Best Paper Award
IEEE Internet of Things Journal Outstanding Service Award
IEEE Communications Society Outstanding Paper Award

IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society) (19 awards)

Neural Networks Pioneer Award
IEEE Transactions on Neural Networks and Learning Systems Outstanding XXXX Paper Award (bestowed in XXXX)
IEEE Transactions on Fuzzy Systems Outstanding XXXX Paper Award (bestowed in XXXX)

IEEE Transactions on Evolutionary Computation Outstanding XXXX Paper Award (bestowed in XXXX)
Evolutionary Computation Pioneer Award
Fuzzy Systems Pioneer Award
IEEE Computational Intelligence Society Enrique Ruspini Award for Meritorious Service
Outstanding Chapter Award
Outstanding PhD Dissertation Award
IEEE Outstanding Computational Intelligence Society Early Career Award
IEEE Outstanding Computational Intelligence Society Organization Award
IEEE Computational Intelligence Magazine Outstanding NNNN Paper Award
IEEE Transactions on Games Outstanding NNNN Paper Award
IEEE Transactions on Autonomous Mental Development Outstanding NNNN Paper Award
IEEE Transactions on Emerging Topics in Computational Intelligence Outstanding Paper Award
IEEE <Conference Name> Best Paper Award
IEEE <Conference Name> Best Student Paper Award
IEEE <Conference Name> Best Poster Paper Award
IEEE Computational Intelligence Society Conference Competition Awards

IEEE Computer Society (34 awards)

[W. Wallace McDowell Award](#)
Eckert-Mauchly Award
IEEE Computer Society Women of the ENIAC Computer Pioneer Award
Taylor Booth Education Award
Computer Entrepreneur Award
IEEE Computer Society Edward J. McCluskey Technical Achievement Award
IEEE Computer Society/Software Engineering Institute Watts S. Humphrey Software Process Achievement Award
Hans Karlsson Award
Periodical Outstanding Paper Awards
Conference Outstanding Paper Awards
Software Engineering Best Paper Award
K.S. Fu Memorial Best Paper Award
Wing Toy Best Student Paper Award
Sidney Fernbach Memorial Award
[Lance Stafford Larson Memorial Award](#)
[Richard E. Merwin Award for Distinguished Service](#)
IEEE Computer Society T. Michael Elliot Distinguished Service Certificate
Outstanding Contribution Certificate
Meritorious Service Award
Certificate of Appreciation
Outstanding Chapter Award
Richard E. Merwin Scholarships
Tsutomu Kanai Award
IEEE Computer Society Mary Kenneth Keller Computer Science and Engineering Undergraduate Teaching Award
Seymour Cray Computer Engineering Award
Harlan D. Mills Award
Multimedia Prize Paper Award
IEEE Computer Society 60th Anniversary Award
[IEEE/ACM Ken Kennedy Award](#)
[IEEE B. Ramakrishna Rau Award](#)
IEEE-CS Charles Babbage Award
IEEE Internet of Things Journal Best Paper Award
IEEE Internet of Things Journal Outstanding Service Award
IEEE CS TCCA Young Computer Architect Award

IEEE Consumer Technology Society (name change effective 16 August 2020) (5 awards)
(formerly Consumer Electronics Society)

Outstanding Service Award
Chester Sall Awards
Significant Achievement Award
IEEE Consumer Technology Society Corporate Innovation & Leadership Award
IEEE Consumer Technology Society Distinctive & Exemplary Industry Leader Award

IEEE Control Systems Society (15 awards)

IEEE Control Systems Technology Award

IEEE CSS Hendrik W. Bode Lecture Prize
IEEE CSS Distinguished Member Award
IEEE CSS George S. Axelby Outstanding Paper Award
IEEE CSS Outstanding Chapter Award
IEEE Conference on Decision and Control (CDC) Best Student Paper Award
IEEE Transactions on Control Systems Technology Outstanding Paper Award
IEEE Control Systems Magazine Outstanding Paper Award
IEEE Conference on Control Technology and Applications (CCTA) Best Student Paper Award
IEEE Antonio Ruberti Young Researcher Prize
IEEE/CSS Transition to Practice Award
[IEEE CSS Award for Technical Excellence in Aerospace Control](#)
IEEE *Transactions on Control of Network Systems* Best Paper Award
[IEEE Control Systems Society Roberto Tempo Best CDC Paper Award](#)
IEEE Control Systems Letters Outstanding Paper Award

IEEE Council on Electronic Design Automation (6 awards)

IEEE Phil Kaufman Award for Distinguished Contributions to Electronic Design Automation
IEEE/ACM A. Richard Newton Technical Impact Award in Electronic Design Automation
IEEE CEDA Ernest S. Kuh Early Career Award
IEEE CEDA Distinguished Service Award
[IEEE *Transactions on Computer-Aided Design* Donald O. Pederson Best Paper Award](#)
William J. McCalla ICCAD Best Paper Award

IEEE Council on RFID (1 award)

IEEE XXXX Emily Sopensky Meritorious Service Award

IEEE Dielectrics and Electrical Insulation Society (14 awards)

[IEEE Thomas W. Dakin Award](#)
[Eric O. Forster Distinguished Service Award](#)
Golden Omega Award
Insulation Hall of Fame
J.B. Whitehead Memorial Lecturer
Hans Tropper Memorial Lecture
Graduate Student Fellowships
Bernhard Gross Memorial Lecture
Dilip Das-Gupta Memorial Award
IEEE DEIS Eric O. Forster Memorial Lecture
[IEEE Caixin Sun and Stanislaw Grzybowski Lifetime Achievement Award](#)
[IEEE Caixin Sun and Stanislaw Grzybowski Young Professional Achievement Award](#)
[IEEE Caixin Sun and Stanislaw Grzybowski Best Student Paper Awards](#)
[IEEE DEIS Steven A. Boggs Young Investigator Award](#)

IEEE Education Society (13 awards)

IEEE William E. Sayle II Award for Achievement in Education
Edwin C. Jones, Jr. Meritorious Service Award
McGraw-Hill Jacob Millman Award
IEEE Transactions on Education Theodore E. Batchman Best Paper Award
Benjamin J. Dasher Best Conference Paper Award
Helen Plants Outstanding Conference Special Session Award
Ronald J. Schmitz Award
Harriett B. Rigas Award
Mac Van Valkenburg Early Career Teaching Award
Distinguished Member Award
Chapter Achievement Award
Distinguished Chapter Leadership Award
IEEE Student Leadership Award

IEEE Electromagnetic Compatibility Society (24 awards)

Richard R. Stoddart Award for Outstanding Performance
Laurence G. Cumming Award for Outstanding Service
[EMC Society President's Memorial Scholarship Award](#)
IEEE Richard B. Schulz Best Transactions Paper Award
Chapter-of-the-Year Award

Society Citation
IEEE EMC Honored Member Award
Certificate of Appreciation
Technical Achievement Award
Certificate of Acknowledgment
Certificate of Recognition
Most Improved Chapter Award
Student Paper Award
Student Design Awards
EMC Society Best Symposium Paper Award
[Leo L. Beranek Student Travel Grant](#)
IEEE EMC Society Chapter Founder's Award
IEEE EMC Society Symposium Chair Award
IEEE EMC Society Hall of Fame Award
IEEE Sustained Service to the Society Award
IEEE Special Service to the IEEE EMC Society Award
IEEE EMCS Award for Excellence in Continuing EMC Engineering Education
[IEEE James C. Klouda Memorial Scholarship Award](#)
IEEE EMC-S Young Professional Award

IEEE Electron Devices Society (16 awards)

J.J. Ebers Award
Distinguished Service Award
Paul Rappaport Award
IEEE EDS William R. Cherry Award
EDS 'Chapter of the Year' Award
Graduate Fellowship Program
EDS George E. Smith Award
Electron Devices Society Region 9 Annual Outstanding Student Paper Award
IEEE EDS Graduate Masters Fellowship Program
IEEE Electron Devices Society Education Award
IEEE Electron Devices Society Early Career Award
IEEE Robert Bosch Micro and Nano Electro Mechanical Systems Award
IEEE PVSC Stuart R. Wenham Award
IEEE EDS Journal of Electron Devices (JEDS) Society Best Paper Award
IEEE EDS Undergraduate Student Scholarships (5)
[IEEE EDS Lester F. Eastman Award](#)

IEEE Electronics Packaging Society (*formerly IEEE Components, Packaging, and Manufacturing Technology Society-name change effective 15-August-2017, awards offered through CPMTS*) (12 awards)

David Feldman Outstanding Contribution Award
Outstanding Sustained Technical Contributions Award
Electronic Manufacturing Technology Award
ECTC Best Paper Award
Outstanding Young Engineer Award
ECTC Best Poster Session Paper Award
IEEE EPS Chapter of the Year Award
IEEE EPS Exceptional Technical Achievement Award
IEEE EPS Regional Contributions Award
Transactions on Components, Packaging, and Manufacturing Technology Prize Paper Award
IEEE EPS PhD Fellowship
IEEE EPS Corning Leadership in Glass Award

IEEE Engineering in Medicine and Biology Society (15 awards)

Academic Career Achievement Award
Early Career Achievement Award
Service Award
EMBS Student Paper Competition Geographic Finalist Awards
EMBS Student Paper Competition Open Finalist Awards
EMBS Student Paper Competition 1st, 2nd, and 3rd Awards
EMBS Whitaker Foundation Student Design Competition Awards
Paralyzed Veterans of America Best Paper Award -*IEEE Transactions on Rehabilitation Engineering*
IEEE EMBS Outstanding Performance Award for an EMBS Student Club or Chapter
IEEE EMBS Best New Chapter Award

IEEE EMBS Best New Student Chapter/Club
IEEE EMBS Professional Career Achievement Award
[IEEE EMBS Award for Excellence in Biomedical Technology in Memoriam of William J. Morlock](#)
IEEE Engineering in Medicine and Biology (EMBS) Technical Award
IEEE EMBS Outstanding Chapter Award

IEEE Geoscience and Remote Sensing Society (17 awards)

IEEE GRSS Fawaz Ulaby Distinguished Achievement Award
Outstanding Service Award
Transactions Prize Paper Award
Letters Prize Paper Award
Symposium Prize Paper Award
Interactive Session Prize Paper Award
Honorary Life Member
GRS-S Student Prize Paper Award
GRS-S Education Award
GRS-S Chapter Excellence Award
[IEEE Mikio Takagi Student Prize](#)
IEEE GRS-S J-STARS Prize Paper Award
IEEE GRS-S Highest Impact Paper Award
IEEE GRSS David Landgrebe Award
IEEE GRSS Regional Leader Award
IEEE GRSS Early Career Award
IEEE GRSS Industry Leader Award

IEEE Industrial Electronics Society (14 awards)

Dr.-Ing. Eugene Mittelmann Achievement Award
Anthony J. Hornfeck Service Awards
IEEE Outstanding Paper Award for the *IEEE Transactions on Industrial Electronics*
AdCom Life Member Award
Best Conference Paper Award
IEEE J. David Irwin Early Career Award
Student Best Paper Award
IEEE Best Paper Award for the *IEEE Industrial Electronics Magazine*
IEEE Outstanding Paper Award for the *IEEE Transactions on Industrial Informatics*
IEEE IES Best Chapter Award
[IEEE Rudolf Chope Research & Development Award](#)
[IEEE Bimal Bose Award for Industrial Electronics Applications in Energy Systems](#)
IEEE/ASME *Transactions on Mechatronics* Best Paper Award
IEEE IES Best Student Branch Chapter Award

IEEE Industry Applications Society (37 awards)

Outstanding Achievement Award
IEEE IAS Distinguished Service Award
Society Prize Paper Awards
Society Chapter Awards
IEEE Industrial and Commercial Power Systems Department (I&CPS) Achievement Award
Pulp and Paper Industry Technical Conference Award for Meritorious Service
IEEE Industrial and Commercial Power Systems Department (I&CPS) Prize Paper Award
Petroleum and Chemical Industry Technical Conference Prize Paper Awards
Cement Industry Technical Conference Prize Paper Awards
Rural Electrification Conference Paper Award
IEEE Electric Machines Prize Paper Awards (IPCSD)
James Melcher Prize Paper Awards
IEEE Industrial Drives (IPCSD) Prize Paper Awards
IEEE Industrial Power Converter Prize Paper Awards (IPCSD)
IEEE Manufacturing Systems Development and Applications Award of Merit
IEEE IAS Andrew W. Smith Outstanding Young Member Achievement Award
IEEE Power Systems Engineering Prize Paper Awards (I&CPS)
R. W. Mills Award
IEEE Power Electronics Devices and Components Prize Paper Awards (IPCSD)
IEEE Power Systems Protection Prize Paper Awards (I&CPS)
[Myron Zucker Undergraduate Student Design Awards](#)
[Myron Zucker Graduate Student Design Award](#)

Industry Applications Magazine Prize Article Award
Industrial Automation and Control Conference Award
[Industrial Power Conversion Systems Department Gerald Kliman Innovator Award](#)
IEEE Cement Industry Meritorious Service Award
IEEE IAS Production and Application of Light Committee Prize Paper Awards (MSDAD)
[IEEE James A. Rooks Memorial Student Intern Program](#)
[IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award](#)
IEEE IAS Graduate Student Thesis Contest
IEEE IAS Outstanding Young Member Service Award
IEEE Industry Applications Society Electrical Safety Committee (IPCSD) Prize Paper Awards
IEEE Industry Applications Society Renewable and Sustainable Energy Committee (IPCSD) Prize Paper Awards
IEEE Industry Applications Society Transportation Systems Committee Prize Paper Awards (IPCSD)
IEEE IAS Outstanding Educator/Mentor Award
IEEE IAS Petroleum and Chemical Industry Committee Outstanding Young Professional Achievement Award
IEEE International Future Energy Challenge Award

IEEE Information Theory Society (9 awards)

Claude E. Shannon Award
Paper Award
[ComSoc/IT Joint Paper Award](#)
Chapter of the Year Award
IEEE Aaron Wyner Distinguished Service Award
IEEE Jack Keil Wolf ISIT Student Paper Award
[IEEE Information Theory Society Padovani Distinguished Lecturer Program Fund](#)
IEEE Information Theory Society Thomas M. Cover Dissertation Award
IEEE Information Theory Society James L. Massey Research & Teaching Award for Young Scholars

IEEE Instrumentation and Measurement Society (15 awards)

IEEE Instrumentation and Measurement Society Technical Award
IEEE Instrumentation and Measurement Society Andy Chi Best Paper Award
IEEE Instrumentation and Measurement Society Distinguished Service Award
IEEE Instrumentation and Measurement Society Career Excellence Award
IEEE Instrumentation and Measurement Society Outstanding Young Engineer Award
IEEE Instrumentation and Measurement Faculty Course Development Award (Grant)
IEEE Instrumentation and Measurement Graduate Fellowship Award
[IEEE J. Barry Oakes Advancement Award](#)
IEEE Instrumentation & Measurement Society Best Application in I & M Award
IEEE Instrumentation & Measurement Society Outstanding Chapter Award
IEEE Instrumentation & Measurement Society Best Student Chapter Award
IEEE Instrumentation & Measurement Society Outstanding Technical Committee Award
IEEE Instrumentation & Measurement Society Student Best Paper Technical Conference Award
IEEE Instrumentation & Measurement Society Student Travel Technical Conference Grants
IEEE Instrumentation and Measurement Society Best Dissertation Award

IEEE Intelligent Transportation Systems Society (6 awards)

IEEE Outstanding ITS Application Award
IEEE Outstanding ITS Research Award
IEEE ITS Institutional Lead Award
IEEE ITS Lifetime Achievement Award
IEEE ITSS Best Dissertation Award
IEEE ITSS Young Researcher/Engineer Award

IEEE Magnetics Society (5 awards)

[Achievement Award](#)
[Student Prize Paper Award](#)
[IEEE Magnetics Society Distinguished Service Award](#)
[IEEE Magnetics Society Early Career Award](#)
[IEEE Magnetics Society Mid-Career Award](#)

IEEE Microwave Theory and Techniques Society (19 awards)

Honorary Life Member of Society
Microwave Career Award
Distinguished Service Award

Distinguished Educator Award
Microwave Pioneer Award
Microwave Application Award
Microwave Prize
N. Walter Cox Award
Distinguished Microwave Lecturer
IEEE MTT-S Graduate Fellowships/IEEE MTT-S Tom Brazil Graduate Fellowship
MTT-S Undergraduate/Pre-Graduate Scholarships
MTT-S Outstanding Young Engineer Award
[Harold Sobol Travel Grant](#)
IEEE *Microwave Magazine* Best Paper Award
IEEE *Microwave and Wireless Components Letters* Tatsuo Itoh Prize
IEEE MTT Society Outstanding Chapter Award
IEEE *Transactions on THz Science and Technology* Best Paper Award
IEEE MTT-S Student Design Competition (SDC) Award
IEEE MTT-S Graduate Student Challenge Award

IEEE Nanotechnology Council (5 awards)

Pioneer Award in Nanotechnology
Early Career Award in Nanotechnology
Distinguished Service Award
IEEE Best Paper Award for the *IEEE Transactions on Nanotechnology*
IEEE Nanotechnology Council (NTC) Chapter of the Year Award

IEEE Nuclear and Plasma Sciences Society (34 awards)

Merit Award
Richard F. Shea Distinguished Member Award
Radiation Effects Award
Particle Accelerator Science and Technology Award
Computer Applications in Nuclear and Plasma Sciences Award
Plasma Science and Applications Award
Early Achievement Award
Graduate Scholarship Award
The Edward J. Hoffman Medical Imaging Scientist Award
Bruce H. Hasegawa Young Investigator Medical Imaging Science Award
Paul Phelps Continuing Education Grant
Erwin Marx Award
Peter Haas Pulsed Power Award
IEEE Arthur H. Guenther Pulsed Power Student Award
Fusion Technology Award
IEEE Glenn F. Knoll Radiation Instrumentation Outstanding Achievement Award
Radiation Instrumentation Early Career Award
IEEE NPSS Christopher J. Thompson Student Paper Awards
IEEE Igor Alexeff Outstanding Student in Plasma Science Award
Particle Accelerator Science and Technology Doctoral Student Award
[IEEE Charles K. Birdsall Award for Contributions to Computational Nuclear and Plasma Sciences](#)
[IEEE Ronald J. Jaszczak Graduate Award](#)
[IEEE Valentin T. Jordanov Radiation Instrumentation Travel Grant](#)
[IEEE Glenn F. Knoll Post-Doctoral Educational Grant in Nuclear Science and Instrumentation](#)
[IEEE Glenn F. Knoll Graduate Educational Grant in Nuclear Science and Instrumentation](#)
[IEEE Magne "Kris" Kristiansen Award for Contributions to Experimental Nuclear and Plasma Science](#)
IEEE Emilio Gatti Radiation Instrumentation Technical Achievement Award
IEEE Radiation Effects Early Achievement Award
IEEE Nuclear and Plasma Sciences Society Medical Imaging Technical Achievement Award
[IEEE Nuclear and Plasma Sciences Society Robert J Barker Graduate Student Award for Excellence in Pulsed Power Applications](#)
IEEE Transactions on Plasma Science Best Paper Award
IEEE Transactions on Radiation and Plasma Medical Sciences Best Paper Award
IEEE Transactions on Nuclear Science Best Paper Award
[IEEE NPSS Edward J. Hoffman Early Career Development Grant.](#)

IEEE Oceanic Engineering Society (7 awards)

IEEE OES Distinguished Technical Achievement Award

IEEE OES Distinguished Service Award
IEEE OES Scholarship Award
IEEE OES Presidential Award
IEEE OES Company/Institution Award
IEEE OES Emeritus Award
IEEE OES Award for Most Innovative Engineering in a Competition System

IEEE Photonics Society (formerly Lasers and Electro-Optics Society) (14 awards)

Quantum Electronics Award
Award for Engineering Achievement
Distinguished Service Award
[William Streifer Award for Scientific Achievement](#)
PHOS Distinguished Lecturer Awards
Outstanding Chapter Service Award
Best Student Paper Award
Best Student Paper Award, PHOS' xx
John Tyndall Award
PHOS Graduate Student Scholarship Program
[Aron Kressel PHOS Award](#)
IEEE PHOS Young Investigator Award
[IEEE Photonics Society Laser Instrumentation Award](#)
IEEE Photonics Society Technical Skills Educator Award

IEEE Power Electronics Society (20 awards)

Richard M. Bass Outstanding Young Power Electronics Engineer Award
IEEE PELS Harry A. Owen, Jr. Distinguished Service Award
IEEE Power Electronics Society Transactions Prize Paper Award
IEEE Power Electronics Society Best Chapter Award
IEEE International Future Energy Challenge Award
IEEE PELS R. David Middlebrook Achievement Award
IEEE Joseph John Suozzi INTELEC Fellowship Award in Power Electronics
IEEE Power Electronics Society Prize Letter Award
IEEE Modeling and Control Technical Achievement Award
[IEEE PELS Energy Storage Innovation Award](#)
IEEE JESTPE (*IEEE Journal of Emerging and Selected Topics in Power Electronics*) Prize Paper Award
IEEE PELS Sustained Energy Systems Technical Achievement Award
IEEE Award for Achievement in Power Electronics Standards
IEEE PELS Vehicle and Transportation Systems Achievement Award
IEEE Power Electronics Emerging Technology Award
IEEE McMurray Award for Industry Achievements in Power Electronics
IEEE PELS Award for Achievements in Power Electronics Education
IEEE PELS Ph.D. Thesis Talk Award (P3Talk)
IEEE Transactions on Transportation Electrification Prize Paper Awards
IEEE PELS Technical Achievement Award for Integration and Miniaturization of Switching Power Converters

IEEE Power & Energy Society (32 awards)

[IEEE PES Uno Lamm HVDC Award](#)
IEEE PES Meritorious Service Award
[IEEE PES Award for Excellence in Power Distribution Engineering](#)
[IEEE PES Outstanding Power Engineering Educator Award](#)
IEEE PES Outstanding Young Engineer Award
IEEE PES Chapter Outstanding Engineer Award
[IEEE PES Prize Paper Award](#)
IEEE PES Technical Committee Prize Paper Award
IEEE PES Chapters Council Award
IEEE PES Technical Committee Distinguished Individual Service Award
IEEE PES Working Group Recognition Award
[IEEE PES Outstanding Chapters Award](#)
[IEEE PES Nari Hingorani FACTS Award](#)
[IEEE PES Cyril Veinott Electromechanical Energy Conversion Award](#)
[IEEE PES Nari Hingorani Custom Power Award](#)
[IEEE PES Charles Concordia Power Systems Engineering Award](#)
IEEE PES Robert Noberini Distinguished Contributions to Power Engineering Professionalism Award

IEEE Power & Energy Society Leadership in Power Award
IEEE Power & Energy Society Lifetime Achievement Award
IEEE PES Douglas M. Staszkesy Distribution Automation Award
IEEE PES Roy Billinton Power System Reliability Award
IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award
IEEE PES G. Ray Ekenstam Memorial Scholarship
IEEE PES CSEE Yu-Hsiu Ku Electrical Engineering Award
IEEE Power & Energy Society Ramakumar Family Renewable Energy Excellence Award
IEEE PES Prabha S. Kundur Power System Dynamics and Control Award
IEEE PES Scholarship Plus Initiative
IEEE PES Wanda Reder Pioneer in Power Award
IEEE PES Outstanding Chapter Volunteer Award
IEEE Power & Energy Society Erich Gunther Future Power Innovator Scholarship
IEEE International Future Energy Challenge Award
IEEE Power & Energy Society Outstanding Student Scholarship

IEEE Product Safety Engineering Society (4 awards)

Service Acknowledgement Award - IEEE PSES Certificate of Appreciation Award
Service Acknowledgement Award - IEEE PSES Certificate of Recognition Award
IEEE PSES Chapter-of-the-Year Award
IEEE Product Safety Engineering Society Sustained Service Award

IEEE Professional Communication Society (5 awards)

Alfred N. Goldsmith Award for Distinguished Contributions to Engineering Communication
Emily K. Schlesinger Award for Distinguished Service to the Professional Communication Society
The Rudolph J. Joenk, Jr. Award for the Best Paper in the *IEEE Transactions on Professional Communication*
Ronald S. Blicq Award for Distinction in Technical Communication Education
IEEE James M. Lufkin Award for Best Paper at International Professional Communication Conference

IEEE Reliability Society (8 awards)

Annual Reliability Society Award
Chapters Awards
Education Award
Best Paper Award - *IEEE Transactions on Reliability*
Certificate of Achievement - Chapter Chairperson
Company Recognition Award
Society Lifetime Achievement Award
IEEE Reliability Society Student Achievement Award

IEEE Robotics and Automation Society (33 awards)

IEEE Transactions on Robotics King-Sun Fu Memorial Best Paper Award
IEEE ICRA Best Conference Paper Award
IEEE ICRA Best Student Paper Award
IEEE Early Academic Career Award in Robotics and Automation
IEEE Early Government or Industry Career Award in Robotics and Automation
Pioneer in Robotics and Automation Award
IEEE RAS Distinguished Service Award
IEEE Transactions on Automation Science and Engineering Best Paper Award
IEEE Transactions on Automation Science and Engineering Googol Best New Application Paper Award
IEEE Inaba Technical Award for Innovation Leading to Production
IEEE/IFR Invention and Entrepreneurship Award
IEEE RAS Most Active Technical Committee Award
IEEE RAS Chapter-of-the-Year Award
IROS Harashima Award for Innovative Technologies
IEEE ICRA Best Paper Award in Service Robotics
IEEE CASE Best Student Paper Award
IEEE RAS George Saridis Leadership Award in Robotics and Automation
IEEE ICRA Best Paper Award in Automation
IEEE CASE Best Conference Paper Award
IEEE ICRA Best Paper Award in Robot Vision
IEEE ICRA Best Paper Award in Robot Manipulation
IEEE Conference on Automation Science and Engineering Best Application Paper Award
IEEE Robotics and Automation Award for Product Innovation

[IEEE ICRA Best Paper Award in Cognitive Robotics](#)
[IEEE ICRA Best Paper Award in Medical Robotics](#)
[IEEE ICRA Best Paper Award on Human-Robot Interaction](#)
IEEE Robotics and Automation Letters Best Paper Award
IEEE Robotics and Automation Magazine Best Paper Award
IEEE ICRA Best Paper Award on Multi-Robot Systems
IEEE/ASME Transactions on Mechatronics Best Paper Award
IEEE Transactions on Haptics Best Application Paper Award
IEEE Transactions on Haptics Best Paper Award
IEEE ICRA Best Paper Award on Unmanned Aerial Vehicles
IEEE International Conference on Robotics and Automation Most Influential Paper Award

IEEE Sensors Council (9 awards)

IEEE Sensors Journal Best Paper Award
IEEE Sensors Council Meritorious Service Award
IEEE Sensors Council Technical Achievement Award
IEEE Sensors Council Young Professional Award
IEEE Sensors Council Outstanding Chapter Award
IEEE Sensors Council Lifetime Contribution Award
IEEE Sensors Letters Best Paper Award
IEEE Internet of Things Journal Best Paper Award
IEEE Internet of Things Journal Outstanding Service Award

IEEE Signal Processing Society (23 awards)

IEEE SPS Norbert Wiener Society Award
IEEE SPS Claude Shannon-Harry Nyquist Technical Achievement Award
[IEEE Best Paper Award](#)
IEEE SPS Leo L. Beranek Meritorious Service Award
IEEE SPS *Signal Processing Magazine* Best Paper Award
Young Author Best Paper Award
IEEE SPS Carl Friedrich Gauss Education Award
[Guglielmo Marconi Prize Paper Award](#)
[Multimedia Prize Paper Award](#)
IEEE Signal Processing Magazine Best Column Award
IEEE Signal Processing Letters Best Paper Award
IEEE Signal Processing Society Donald G. Fink Overview Paper Award
IEEE Signal Processing Society Sustained Impact Paper Award
IEEE SPS Conference Best Paper Award for Industry
IEEE SPS Industrial Innovation Award
IEEE SPS Amar G. Bose Industrial Leader Award
IEEE SPS Meritorious Regional/Chapter Service Award
IEEE SPS Pierre-Simon Laplace Early Career Technical Achievement Award
IEEE SPS Regional Distinguished Teacher Award
IEEE SPS Best PhD Dissertation Award
IEEE Signal Processing Cup Competition
IEEE Signal Processing Video and Image Processing Cup Competition
IEEE Signal Processing Society 5-Minute Video Clip Contest (5-MICC)

IEEE Society on Social Implications of Technology (3 awards)

IEEE Carl Barus Award for Outstanding Service in the Public Interest
IEEE Brian O'Connell SSIT Distinguished Service Award
IEEE SSIT Norbert Wiener Award for Social and Professional Responsibility

IEEE Solid-State Circuits Society (14 awards)

Journal of Solid-State Circuits Best Paper Award
Lewis Winner Award for Outstanding Conference Paper
Beatrice Winner Award for Editorial Excellence
ISSCC Evening Session Award
Jack Kilby Outstanding Student Paper Award
ISSCC Jack Raper Award
Outstanding Chapter of the Year Award
IEEE SSCS Pre-Doctoral Achievement Award
[IEEE Brokaw Award for Circuit Elegance](#)

IEEE Solid-State Circuits Society Distinguished Service Award
IEEE Solid-State Circuits Society New Frontier Award
IEEE Solid-State Circuits Society Innovative Education Award
IEEE Solid-State Circuits Society Industry Impact Award
IEEE Silkroad Award Program of the International Solid-State Circuits Conference (ISSCC)

IEEE Council on Superconductivity (6 awards)

Award for Continuing and Significant Contributions in the Field of Applied Superconductivity
Van Duzer Prize Award
Max Swerdlow Award for Sustained Service to the Applied Superconductivity Community
IEEE Council on Superconductivity Carl H. Rosner Entrepreneurship Award
IEEE CSC Graduate Study Fellowship in Applied Superconductivity
IEEE Dr. James Wong Award for Continuing and Significant Contributions to Applied Superconductor Materials Technology

IEEE Systems Council (3 awards)

IEEE Systems Council Outstanding Service Award
IEEE Systems Journal Best Paper Award
IEEE Systems Council James O. Gray Scholarship

IEEE Systems, Man, and Cybernetics Society (14 awards)

Norbert Wiener Award
Joseph G. Wohl Outstanding Career Award
Outstanding Contribution Award
Franklin V. Taylor Memorial Award
Andrew P. Sage Best Transactions Paper Award
IEEE International Conference on Systems, Man, and Cybernetics Best Student Paper Award
IEEE SMC Best Associate Editor Award
IEEE Most Active SMC Technical Committee Award
IEEE Outstanding SMC Chapter Award
IEEE Outstanding SMCS Student Branch Chapter Award
IEEE SMC Lotfi A. Zadeh Pioneer Award
IEEE SMC Early Career Award
IEEE SMC Meritorious Service Award
IEEE SMC Outstanding Service to Humanity Award

IEEE Technology and Engineering Management Society (formerly IEEE Technology Management Council/IEEE Engineering Management Society) (6 awards)

Engineering Manager of the Year Award
Transactions Publication Awards
Honorary Life Member Award
Certificate of Appreciation for Chapter Chairs
Engineering Management Educator of the Year Award
Engineering Management Innovation Award

IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society (15 awards)

Achievement Award
Walter G. Cady Award
I. I. Rabi Award
IEEE Ferroelectrics Recognition Award
Outstanding Paper Award
Distinguished Lecturer Award
C. B. Sawyer Memorial Award
Distinguished Service Award
The Rayleigh Award
Bernhard Gross Memorial Lecture
Dilip Das-Gupta Memorial Award
IEEE Ferroelectrics Young Investigator Award
IEEE Ultrasonics Early Career Investigator Award
IEEE Carl Hellmuth Hertz Ultrasonics Award
IEEE Robert E. Newnham Ferroelectrics Award

IEEE Vehicular Technology Society (17 awards)

[IEEE Jack Neubauer Memorial Award](#)
IEEE Honorary Membership Award
IEEE VTS Outstanding Service Award
IEEE James Evans Avant Garde Award
IEEE Neal Shepherd Memorial Best Propagation Paper Award
IEEE VTS Chapter-of-the-Year Award
[IEEE Daniel E. Noble Fellowship Award](#)
[IEEE Transportation Electronics Fellowship](#)
[IEEE Stuart Meyer Memorial Award](#)
IEEE Best Vehicular Electronics Paper Award
IEEE Best Land Transportation Paper Award
IEEE Vehicular Technology Society Hall of Fame Award
IEEE Vehicular Technology Society Early Career Award
IEEE Vehicular Technology Society Women's Distinguished Career Award
IEEE Vehicular Technology Society Student Travel Awards
IEEE VTS Motor Vehicles Challenge Award
IEEE Vehicular Technology Society Best Magazine Paper Award

Inter-Entity Awards (16 awards)

Autotestcon Frank McGinnis Professional Achievement Award
Autotestcon Walter E. Peterson Best Paper Award for New Technology
Autotestcon David M. Goodman Best Paper Award for Management Topics
Transactions on Semiconductor Manufacturing Best Paper Award
[ComSoc/IT Joint Paper Award](#)
Bernhard Gross Memorial Lecture
Dilip Das-Gupta Memorial Award
[Guglielmo Marconi Prize Paper Award](#)
[Multimedia Prize Paper Award](#)
IEEE Communications Society/Korean Institute of Communication Sciences Exemplary Global Service Award
IEEE/ACM A. Richard Newton Technical Impact Award in Electronic Design Automation
[IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award](#)
[IEEE/ACM Ken Kennedy Award](#)
[IEEE PES CSEE Yu-Hsiu Ku Electrical Engineering Award](#)
IEEE International Future Energy Challenge Award
IEEE/ASME *Transactions on Mechatronics* Best Paper Award
IEEE Internet of Things Journal Best Paper Award
IEEE Internet of Things Journal Outstanding Service Award

REFERENCE MATERIAL

Awards and Recognition Products

Obtaining Award Approval
Template for Establishing a New IEEE Society/Council Award
Template for Establishing a New IEEE Technical Conference Award
Guidelines for Technical Conference Awards

Donating Award Honorarium to IEEE Foundation

Index – Awards by type

**LIST
OF
AWARDS**

IEEE DIVISION AWARDS

For all Division awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Division VI Distinguished Leadership Award (established in 2016)

Description: The Distinguished Leadership Award is given for an achievement(s) or contribution(s) that propagates the Fields of Interest of more than one IEEE Division VI Society, to other Societies within the Division, and/or, to the wider IEEE, and/or to appropriate organizations outside IEEE.

Prize: The award consists of a certificate and plaque, which will be presented at an event that is mutually agreeable to the recipient and the Chair of the Division VI's Awards Committee. The costs will be paid from the Division Directors budget. No travel/hotel funding is available for the recipient or presenter of the award.

It is expected that there could be multiple recipients of this award. But there shall be no more than 4 recipients selected in any year. The award committee may opt to not select any recipients for the award. If there is a team of recipients selected, the Awards Committee may opt to count the 'team' as one recipient or may opt to count each 'team' members separately, and, in such case, and in consultation with the Division Director, the Award Committee may use its discretion in regard to incurring the cost of multiple plaques.

Funding: Funded by the IEEE Division VI Director's account.

Eligibility: An individual(s) nominated for this award must be an IEEE member of any grade. In exceptional cases, the Awards Committee can select a non-IEEE member or an organization.

Basis for Judging: Division VI member Societies can be characterized as possessing Fields of Interest that have significant appeal across IEEE. Division VI Societies desire to promulgate their Fields of Interest throughout IEEE. To accomplish greater penetration for Division VI Fields of Interest throughout IEEE and acquire derivative benefits (e.g., share of conference revenues, spread of their Field of Interest) there are many approaches, one of the most effective is to approach other IEEE operating units and other non-IEEE organizations with a package offer (e.g., speakers and activities from various Division VI Societies).

The intent of this award is to promote efforts to expand the reach of the Fields of Interests of as many Division VI Societies as possible. While several Division VI Societies reach-out within Division VI, to other IEEE operating units, and/or non-IEEE organizations individually, this award seeks to promote collaborative efforts among more than one Division VI Society—as many as possible.

A nomination letter, which must be verified by the Society Presidents in-question, can be submitted by any person who can attest to the nominee(s) accomplishments. The achievement(s) and/or contribution(s) should be a specific and concisely characterized accomplishment(s) that are directly applicable to more than one Division VI Society's effort to create meaningful collaboration to expand the reach the various Society's Fields of Interest.

For example, achievements(s) contribution(s) could be: collaborating with IEEE societies that conduct large conferences to include sessions that provide knowledge from the Field(s) of Interest of more than one Division VI society, forming collaboration(s) with IEEE-USA's PACE program to provide Division VI expertise to IEEE-USA PACE activities. The achievement(s) and/or contribution(s) and the proposed award recipient's involvement should be substantial and provide ongoing meaningful activity.

Presentation: This award will be presented at an event that is mutually agreeable to the award recipient(s) and the Chair of the Division VI's Awards Committee.

TAB COMMITTEE AWARDS

For all TAB Committee awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Entrepreneurship Impact Award (established in 2020)

Description: The IEEE Entrepreneurship Impact Award will honor an individual / team who has had a significant impact on the engineering-driven entrepreneurial ecosystem. The accomplishments of the candidate should be of "significant importance" and should have made a distinguishing contribution to the entrepreneurial ecosystem.

Prize: The person / team will receive an honorarium of \$2,000 USD, and a plaque commemorating their achievement. Annual award.

Funding: Funded by the IEEE Entrepreneurship Committee. The TAB budget includes the IEEE Entrepreneurship budget. Any reimbursements of travel or conference fees to be provided as part of the award, should clearly specify that the reimbursements will follow IEEE Policies and Procedures.

Eligibility:

- Both IEEE Members and Non-IEEE Members may self-apply or be nominated by others
- Candidates cannot be members of the IEEE Entrepreneurship Awards Committee
- Candidate must not be a past president of the IEEE Entrepreneurship Impact Award
- Eligibility and Selection process shall comply with procedures and regulations established in IEEE and TAB governing documents, particularly with IEEE Policy 4.4 on Awards Limitations.

Basis for Judging: Award recipients will be scored and selected based on judging criteria

- Entrepreneurial Spirit
- Value creation
- Impact
- Sustainability

Publicity: IEEE Entrepreneurship Portal, IEEE Entrepreneurship Newsletter, IEEE Entrepreneurship Social Networking sites.

IEEE AEROSPACE AND ELECTRONIC SYSTEMS SOCIETY
AES-10 (Division IX)

For all Aerospace and Electronic Systems Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **IEEE AESS Pioneer Award** (first presented in 1949) (revised prize 2013) (revised title 2021)

Description: Awarded annually to a person or a small group for electronics aerospace development more than 20 years ago which is still in wide use.

Prize: \$3,000 and Plaque. Travel expenses of up to \$1,000 per individual (up to a maximum of \$1,500 for multiple awards) may be authorized by President of Society.

Funding: Funded by the IEEE Aerospace and Electronic Systems Society.

Basis for Judging: Importance of contributions.

Presentation: At NAECON.

2. **M. Barry Carlton Award** (first presented in 1957)

Description: To recognize the best paper published in the *IEEE Transactions on Aerospace and Electronic Systems* and to honor the memory of M. Barry Carlton.

Prize: \$1,000 and Plaque. If more than one awardee, the monies are divided equally with individual Plaques. Travel expenses of up to \$1,000 per individual (up to a maximum of \$1,500 for multiple awards) may be authorized by President of Society.

Funding: Funded by the IEEE Aerospace and Electronic Systems Society.

Eligibility: Authors of papers published in *AES Transactions* during the previous fiscal year.

Basis for Judging: Importance as an advancement in state-of-the-art, AES technology of interest to AESS members, originality, quality, scholarly character.

Presentation: At a convenient IEEE conference.

3. **Harry Rowe Mimno Award** (first presented in 1978)

Description: To recognize and foster excellence in clear communications of technical material of widespread interest to AESS members, and in doing so, to honor the contributions of *AES Transactions* Editor-in-Chief Emeritus Dr. Harry Rowe Mimno to the AESS and IEEE for over 50 years.

Prize: \$1,000 and Plaque. If more than one awardee, the monies are divided equally with individual Plaques. Travel expenses of up to \$1,000 per individual (up to a maximum of \$1,500 for multiple awards) may be authorized by President of Society.

Funding: Funded by the IEEE Aerospace and Electronic Systems Society.

Eligibility: Authors of paper published in the *AES Magazine* during the previous fiscal year.

Basis for Judging: Excellence in clear communications and widespread interest to AESS members.

Presentation: At a convenient IEEE conference.

4. **Fred Nathanson Memorial Radar Award** (established in 1993)
(formerly Radar Systems Panel Award)

Description: To recognize a young (less than 40 years of age) AESS radar engineer whose performance is particularly noteworthy as evidenced by his contributions to the radar art.

Prize: \$1,000 and Plaque. Travel expenses of up to \$1,000 can be authorized by the AESS President.

Funding: Award funded by the IEEE Aerospace and Electronic Systems Society from funds generated by AESS Radar Systems Panel Conferences. **The Nathanson family has arranged for an Education Grant of an additional \$1,000 for continuing education in the radar area funded through an endowment administered by the IEEE Foundation.**

Eligibility: Young (less than 40 years of age) AESS radar engineers whose performance is particularly noteworthy as evidenced by contributions to the radar art over a period of several years.

Basis for Judging: Individual contributions to the radar community through technical papers, presentations, inventions, or products.

Presentation: At National Radar or International Radar Conference depending on which is held in a particular year.

5. **IEEE AESS Technical Panel of the Year Award** (first presented in 1977) (revised 2021)

Description: To recognize an AESS Technical Panel whose performance is particularly noteworthy during the previous year in supporting AESS.

Prize: \$1,000 for the panel to use in enhancing its operations and furthering AESS objectives. The proposed application of funds by the panel must be pre-authorized by the AESS Treasurer.

Funding: Funded by the IEEE Aerospace and Electronic Systems Society.

Eligibility: Technical Panels of AESS.

Basis for Judging: Noteworthy performance in one or more categories: a) leadership and/or participation in AESS conferences, b) generation and maintenance of IEEE Standards, c) generating and reviewing technical papers in their fields of interest, d) providing support and technical guidance in potential new areas of applications in their fields of interest.

Presentation: At a convenient IEEE conference.

6. **IEEE AESS Chapter of the Year Award** (revised in 2020) (revised title 2021)

Description: To annually recognize the AESS Chapter whose performance is particularly noteworthy during the previous year.

Prize: \$5,000 (includes \$2,000 prize and \$3,000 in support of the programs that led to chapter of the year).

Funding: Funded by the IEEE Aerospace and Electronic Systems Society.

Eligibility: Chapters of AESS.

Basis for Judging: Noteworthy performance in one or more categories: a) supporting AESS conferences, b) AESS membership drives, c) number of successful Chapter meetings.

Presentation: At any AESS conference.

7. **IEEE Warren D. White Award for Excellence in Radar Engineering** (established in 1999)

Description: To recognize a radar engineer for outstanding achievement due to a major technical advance, or a series of advances over time, in the art of radar engineering. This award may be given annually, if outstanding candidates are nominated, but is expected to be given at least every 3 years, because major technical achievements, in the field of radar, of this nature, do not happen every year. It is expected that normally the recipient will be a single individual.

Prize: \$2,000 stipend, Plaque and travel expenses funded by a Memorial Endowment. (The President of the Society may authorize, if needed by the winner, up to \$1,000 for travel expenses to the conference where the award will be presented). If there are multiple winners, each will receive a plaque and they will equally share the stipend.

Funding: **Funded entirely by the Warren D. White Memorial Endowment administered by the AESS and managed by the IEEE Foundation.**

Eligibility: The nominee shall have made a major technical contribution, or a series of such contributions, to the art of radar engineering. This contribution shall be evidenced to the radar community through technical papers, presentations, inventions, or products. However, it is expected that this contribution, or contributions, shall be so significant and of a nature that it is already publicly well known to the radar community at large and to the members of the AESS Radar Panel.

Basis for Judging: A major technical contribution or series of contributions, to the art of radar engineering evidenced to the radar community through technical papers, presentations, inventions, or products.

Presentation: The award shall be presented, in the year when a winner is selected, at the next IEEE National or International Radar Conference.

8. **IEEE Walter R. Fried “PLANS” Best Paper Award in Navigation** (established in 2001) (revised prize 2002, 2013)

Description: To recognize the best paper, in honor of the late Walter R. Fried, presented at the “Position, Location and Navigation Symposium (PLANS)” conference.

Prize: A maximum of \$1,200 of the award funded from the Walter Fried Endowment distributed as follows: 1) single author who presents the paper at PLANS: \$750 and plaque; 2) multiple authors: honorarium of \$750 to be split equally among the authors; design, production and personalization of a plaque for the author that presents the paper at PLANS and paper certificates for the other authors, with a total cost not to exceed \$450. Award is biennial.

Funding: **Funded by an endowment provided by the family of Walter Fried, and administered by the IEEE Foundation. Walter was an IEEE Life Fellow and served on the PLANS Executive Committee and the AESS Board of Governors for many years. His last responsibility was VP for Technical Operations, which included oversight of the AESS Distinguished Lecturers Program and the AESS Technical Panels.**

Eligibility: Papers that are submitted for the current year’s PLANS conference in sufficient time to be judged by the Award Selection Committee are eligible. The awardee’s paper must have been selected to be published in the current year’s PLANS Proceedings, and he/she must attend the symposium to both present the paper and receive the award. If multiple authors are listed in the paper, the primary author and winner of the award will be considered the person that will be presenting the paper at the PLANS conference. Only one plaque and one check will be issued to this winner.

Basis for Judging: Generally accepted criteria for publication in archival journals: technical content, innovation, importance and timeliness of the subject matter and conciseness, clarity and completeness of the written material.

Presentation: At one of the PLANS luncheons to the highest ranked paper that is presented at the symposium.

9. **IEEE AESS Organizational Leadership Award** (established in 2007) (revised title 2021)

Description: This award is to recognize candidates that have the unique capability of conceiving and organizing innovative and successful events in the field of interest of the IEEE Aerospace and Electronic Systems Society (AESS).

Prize: \$1,000 and Plaque. In the case of multiple recipients, a plaque will be given to each recipient and the prize will be shared equally. In case of financial hardship, up to \$1,500 in travel expenses can be authorized by the AES Society President for the recipient to attend the AESS conference award ceremony.

Funding: Funded by the IEEE Aerospace and Electronic Systems Society.

Eligibility: The nominee shall be the proponent and/or the organizer of a pattern, or a focused single event in AESS's fields of interest. The candidate does not have to be an IEEE or AESS member; however, the event must qualify as one approved by the AESS BoG to be within its established fields of interest. Current voting members of the AESS BoG or current members of the Award Committee are ineligible for the award while in that status.

Basis for Judging: Factors that will be considered are: innovation in content and/or organizational approach; constructively bringing together industry, academia and government; visionary events that lead to new AESS services and/or advances in the fields; or those that advance AESS on a global basis; and those for which the candidate grows capability over multiple events and time.

Presentation: Presented at any one of the AESS sponsored conferences, based on the recipient's availability, but preference should be given to those conferences that host the twice-yearly Board of Governors meeting.

10. **IEEE AESS Judith A. Resnik Space Award** (established in 2014)

Description: This AESS Judith A. Resnik Space Award is to honor Dr. Judith A. Resnik by recognizing candidates that have provided outstanding contributions to space engineering in the AESS Fields of Interest; i.e. "the organization, systems engineering, design, development, integration, and operation of complex systems for space, air, ocean, or ground environments."

Prize: The Judith A. Resnik Space Award will consist of an honorarium of \$2,000 and a plaque for the recipient presented at a convenient IEEE and/or AESS conference. If there is more than one winner, each will receive a plaque and the honorarium will be evenly divided. In the case of financial hardship, a total of up to \$1,500 in travel expenses per year can be authorized by the AESS President for the recipient to attend the selected conference's award ceremony.

Funding: The Aerospace and Electronic Systems Society (AESS) will administer and fund the Judith A. Resnik Space Award on a continuing basis.

Eligibility: The candidate does not have to be an IEEE/AESS member, but given everything else being equal, a member will be given preferential consideration. The Space achievement has to be deemed to have made a particularly noteworthy contribution in the AESS Field of Interest. The nomination package must present adequate documentation to permit a proper evaluation of the candidate's contribution.

Basis for Judging: The Award Committee will make its selection of a recipient, select a proposed conference for the presentation, and notify the recipient to confirm availability to attend. After a presentation venue has been firmed up, the AESS Awards Chairman will initiate the process of obtaining the honorarium and plaque.

Candidates will be ranked and the one receiving the most #1 votes will be the recipient. A major consideration will be the individual's contributions to the AESS Field of Interest demonstrated by the nomination package and reinforced by the endorsement letters.

Nominees found qualified, but not winning in the current cycle, can be carried over by majority vote of the Awards Committee. At that time, if desired, the nomination package can be updated by the nominator and, if desired, additional endorsements solicited for the next year.

Presentation: The Judith A. Resnik Space Award will be an annual award subject to receiving sufficient qualifying nominations. The award can be presented at any convenient AESS or IEEE conference selected based on the recipient's availability, but preference should be given to those conferences that also host the twice-yearly AESS Board of Governors Meeting.

11. **IEEE AESS Robert T. Hill Best Dissertation Award** (established in 2014) (revised in 2020)

Description: This Robert T. Hill Memorial Award for "Best Ph.D. Dissertation" is to honor Robert Tyler Hill by recognizing candidates that have recently received a Ph.D. degree and have written an outstanding Ph.D. dissertation in the field of interest of the IEEE Aerospace and Electronic Systems Society (AESS). This AESS sponsored annual award's purpose is to grant international recognition for the most outstanding Ph.D. dissertation by an AESS member. The goals of the AESS in establishing this award are to foster increased participation, encourage individual effort, and reward outstanding contributions in the AESS fields of interest.

Prize: The Robert T. Hill Best Dissertation Award will consist of an honorarium of \$1,000 and a plaque for a single recipient presented at a convenient IEEE/AESS conference. In the case of financial hardship, up to \$1,500 in travel expenses can be authorized by the AES Society President for the recipient to attend the selected IEEE/AESS conference's award ceremony.

Funding: The Aerospace and Electronic Systems Society (AESS) will administer and fund the Robert T. Hill Best Dissertation Award on a continuing basis.

Eligibility: An eligible candidate must be a graduate of an accredited university which requires a dissertation to receive a Ph.D. degree. The nominee must be an AESS member or student member in good standing at the time of submission of the application package. Preferentially, the nominee should have been awarded the Ph.D. degree in the last 24 months prior to the nomination. The Ph.D. dissertation has to be deemed to have made a particularly noteworthy contribution in the AESS Field of Interest. The nomination package must present adequate documentation to permit a proper evaluation of the candidate's contribution.

Basis for Judging: The Award Committee will make its selection of a recipient. A major consideration will be the individual's contributions to the AESS Field of Interest demonstrated in the nominee's Ph.D. dissertation. A proposed conference will be selected for the presentation, the recipient will be notified to confirm availability to attend and then the AESS Awards Chairman will be informed to start the process of obtaining the honorarium and plaque.

Nominees found qualified, but not winning in the current cycle, can be carried over by majority vote of the Awards Committee. At that time, if desired, the nomination package can be updated by the nominator and additional endorsements solicited for the next round.

Presentation: The Robert T. Hill Award for "Best Ph.D. Dissertation" will be an annual award subject to receiving sufficient qualifying nominations. The award can be presented at any convenient AESS or IEEE conference held in the same year as the winner is announced. The conference selected should be based on the recipient's availability, but preference should be given to those conferences that also host the twice-yearly AESS Board of Governors Meeting.

13. **IEEE AESS Engineering Scholarship** (established in 2018) (revised 2021)

Description: The scholarship recognizes students pursuing studies in Electrical Engineering and Systems Engineering.

Prize: Graduate Student: Single Annual Award - Only One Allowable Recipient Selected Annually. \$10,000 and a certificate; Undergraduate Student: Two Annual Awards of \$10,000 and a certificate for Undergraduate student. Funds will be paid to the school on behalf of the student.

Funding: The scholarships are funded by the IEEE Aerospace and Electronic Systems Society (AESS).

Eligibility: IEEE/AESS student members studying electrical engineering at the undergraduate level and “systems engineering” or “systems” at the graduate level from an accredited university, with no other scholarships and a cumulative grade point average (GPA) of 2.8 (out of 4) or above, or equivalent measure of academic performance where GPA is not utilized.

“Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for this award shall be ineligible to receive, or act as a nominator or reference for this award.” “No AES Board member/officer or member of the selection committee shall be able to nominate.” An immediate family member of the AESS Board/officer or member of the selection committee is not eligible for this award.

Basis for Judging: Evaluations will be based on the application and stated financial need. The application shall include an essay on why these fields of study are important and how the applicant could have impact in these fields. At least 3 letters of recommendation shall be provided, two of which shall be from current or former university professors who taught the applicant or know him or her personally.

Presentation: The award will be presented at an appropriate IEEE AESS Conference.

12. IEEE AESS Industrial Innovation Award (established in 2019)

Description: To recognize an individual or team at any level who were industry employees whose technical contributions have resulted in significant advances in integrated electronic systems and large-scale integrated interoperable systems within the scope of the Society.

Prize: \$1,500 per awardee (up to maximum of \$4,500 per award), plaque and certificate. In the event that there are more than three awardees, the maximum prize shall be divided equally among all awardees and each shall receive a plaque and certificate.

Funding: Funded by IEEE AESS operating budget.

Eligibility: The award shall be open to individuals at any level who were industry employees and played a significant role in the technical contribution at the time of the accomplishments being recognized. Candidate need not be an IEEE AESS member. It is preferred that recipients of the IEEE AESS Industrial Innovation Award be members of IEEE. However, the IEEE Board of Governors may approve the presentation to a non-member upon the recommendation of the IEEE AESS Board of Governors. Current officers and members of the AESS Board of Governors are ineligible. Self-nominations are not accepted or considered. Members of the AESS Board of Governors are not permitted to submit nominations.

Basis for Judging: Criteria for the candidate selection are quality, significance and impact of contributions, papers published in archival journals, papers presented at conferences and symposia, patents, best paper awards, editorial roles, demonstration of leadership, and, in general all the demonstrated and objective achievements which have led to advancement of the AES engineering profession. The award selection committee will develop the selection criteria and appropriate weightings based on the impact and breadth of the nominees’ contributions to the advancement of AES knowledge and technologies and the strength of reference letters.

Presentation: The award will be presented at a convenient IEEE AESS Conference.

13. IEEE AESS Early Career Award (established in 2020)

Description: To recognize an individual, whose age has not reached the 41th birthday by the nomination deadline, and who has made outstanding contributions to aerospace and electronic systems. The “early career award” for Radar is the Fred Nathanson Award. This early Career Award is for an individual working in all the other areas of interest of AESS. This proposed new award does not overlap with any existing award in the AESS awards portfolio and consequently avoids the potential for an awardee to receive two awards for the same recognition.

Prize: \$2,000 for the awardee and a plaque. In addition, the reimbursement of up to \$1,000 to attend the award ceremony can be authorized by the AESS President.

Funding: Funded by IEEE AESS operating budget.

Eligibility: This award is to recognize an individual, whose age has not reached the 41th birthday by the nomination deadline, and who has made outstanding contributions to aerospace and electronic systems. The recipient must be a current member of the IEEE and AESS and have been a member of the IEEE and AESS for at least the previous 3 calendar years plus the year of the nomination. Current officers and members of the AESS Board of Governors are ineligible, as well as are ineligible previous recipients of this award, of the Fred Nathanson Early Career Award and winners of IEEE Field Awards. Self-nominations are not accepted. Members of the AESS Board of Governors are not permitted to submit nominations or reference letters. The AESS Awards Chair may need to work with the AESS Early Career Award Committee Chair and the Fred Nathanson Award Committee Chair to ensure the nominee is in the appropriate award category. In fact, the endowed Fred Nathanson Early Career award is only for an individual working in radar technologies. The AESS Early Career Award is for an individual working in all the other areas of interest of AESS. Nominations to IEEE AESS Early Career Award are non-compatible with parallel nominations to Fred Nathanson Award. In case of double nomination the decision to void one or the other nomination is left to the AESS Awards Chair. Any unresolved disagreements between the Fred Nathanson and Early Career awards chairs will be settled by the AESS President. A nominee can only be in one of the two categories and can only win one of the two awards. Eligibility and Selection process shall comply with procedures and regulations established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous winners of this award are ineligible.

Basis for Judging: Criteria for the candidate selection are quality, significance and impact of contributions, papers published in archival journals, papers presented at conferences and symposia, patents, best paper awards, editorial roles, demonstration of leadership, and, in general all the demonstrated and objective achievements which have led to advancement of the AES engineering profession. The award selection committee will develop the selection criteria and appropriate weightings based on the impact and breadth of the nominees' contributions to the advancement of AES knowledge and technologies and the strength of reference letters.

Presentation: The award will be presented at a convenient IEEE AESS Conference.

14. IEEE Michael C. Wicks Radar Student Travel Grant (established in 2020)

Description: To provide travel support to enable graduate students who are primary author on a paper in the area of radar signal processing accepted for presentation during the annual IEEE Radar Conference to attend the conference and present their research. The primary author is the student who presents the paper and attends the conference in person. Up to 4% of the prior year fund IEEE Foundation fund balance may be used. Every five years when the International Radar Conference is held in the United States an additional 1% of the prior year fund balance may be used for the same purpose. Support shall be provided in the form of reimbursement after the student has attended and presented their accepted paper. This award does not overlap with any existing award in the AESS Award portfolio and consequently avoids the potential for an awardee to receive two awards for the same recognition.

Prize: This is a travel grant. The donation fund guarantees \$5,000 for each year, plus another \$1,000 every 5th year when the International Radar Conference is held in the United States. There will be no prize sharing. This is a pool of money to be shared among recipients chosen at the discretion of the selection committee. The number of recipients is recommended by the Conference Chair and the Technical Program Committee Chair of each conference, so the number of recipients may vary from year to year depending on the number of qualified paper submissions and quality. Final selection is made by the Selection Committee as outlined in the document.

Funding: **Funded by a donation provided by Michael C. Wicks to the IEEE Foundation.**

Eligibility: Recipients must be a member of IEEE and AESS at the time of nomination and must be a graduate student who is primary author on a paper in the area of radar signal processing accepted for presentation during the annual IEEE Radar Conference, or the IEEE International Radar Conference when held in the United States. The student must attend the conference and present his/her paper in order to receive the award. Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents,

particularly with IEEE Policy 4.4 on Awards Limitations. Previous award winners are not eligible.

Basis for Judging: Selection will be based on paper quality, and distance needed to travel. Since this is a travel grant, the greater the distance, the more likelihood of selection.

Presentation: The award will be presented at the conference in which the recipient paper is being presented.

IEEE ANTENNAS AND PROPAGATION SOCIETY

AP-03 (Division IV)

For all Antennas and Propagation Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Distinguished Achievement Award** (first presented in 1984) (revised in 2000)

Description: To honor recognized outstanding technical achievement in the fields of Antennas and Propagation.

Prize: \$2,000 and Certificate

Funding: **Honoraria funded by contribution directly from the IEEE Antennas and Propagation Society, managed by the IEEE Foundation**, certificate funded by the IEEE Antennas and Propagation Society.

Eligibility: Preference given to APS members.

Presentation: Annually, at APS Symposium.

2. **Sergei A. Schelkunoff Transactions Prize Paper Award** (first presented in 1958) (revised in 1994, 2000, 2001)

Description: To recognize the best paper published in *IEEE Transactions on Antennas and Propagation*.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Antennas and Propagation Society.

Eligibility: Authors of original papers published in *IEEE Transactions on Antennas and Propagation* during prior year.

Basis for Judging: Technical contributions, clearest style of presentation.

Presentation: Annually, at APS Symposium.

3. **Harold A. Wheeler Applications Prize Paper Award** (first presented in 1974) (revised in 1994, 2000)

Description: To recognize the best applications paper published in *IEEE Transactions on Antennas and Propagation*.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Antennas and Propagation Society.

Eligibility: Authors of papers published in *IEEE Transactions on Antennas and Propagation* during prior year.

Basis for Judging: Applications contents, technical contribution, clarity of presentation.

Presentation: Annually, at APS Symposium.

4. **R. W. P. King Award** (first presented in 1974) (revised in 1994, 2000)

Description: To recognize the best paper by an author under the age of 36 published in *IEEE Transactions on Antennas and Propagation*.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Antennas and Propagation Society.

Eligibility: Original papers published in *IEEE Transactions on Antennas and Propagation*, submitted by author less than 36 years of age at the time of submission.

Basis for Judging: Technical contribution, clearest style of presentation.

Presentation: Annually, at APS Symposium.

5. **Honorary Life Member of AdCom** (first presented in 1956)

Prize: Complimentary Society membership (Society fees paid for life).

Funding: Funded by the IEEE Antennas and Propagation Society.

Eligibility: Must have been a member of APS for at least 10 years and an elected member of AdCom.

Basis for Judging: Significant technical contributions in the Antennas and Propagation field and outstanding services to the profession and IEEE.

Presentation: On occasion, at APS Symposium.

6. **Raj Mittra Travel Grant** (established in 1994) (revised prize/funding 2015)

Description: To support and encourage participation in the International IEEE Antennas and Propagation Symposium by providing travel funds to individuals exhibiting high aptitude or potential for research and who might otherwise be unable to attend.

Prize: One grant in the amount of \$1,000.00. The annual event registration expenses for the Raj Mittra travel grant awardee that attend the International IEEE Antennas and Propagation Symposium to receive the award is waived, that is, it is paid by the IEEE AP-S. The expenses for the award recipient that attend the International IEEE Antennas and Propagation Symposium Luncheon or Dinner is paid by the IEEE AP-S, in case the award is given at the Luncheon or Dinner

Funding: **Funded by an endowment from Prof. Mittra managed by the IEEE Foundation.** Registration Fee and Banquet Ticket for the awardee covered by the IEEE APS. Banquet ticket free only if the award winner is announced at the banquet.

Eligibility: Eligible candidates need not be members of IEEE, but must have contributions accepted for presentation at the International IEEE Antennas and Propagation Symposium. Candidates for an award in either the student or researcher categories cannot have previously received an award in that category. In order to receive the award, Awardees must personally present their contribution at a regular AP-S session organized at the Symposium.

Basis for Judging: Candidate's potential or demonstrated aptitude for research and his or her need for travel support. The candidate's research potential will be determined from his curriculum vita, letters of reference, and conference abstract or summary, all of which are to be submitted to the Awards Committee.

Presentation: Annually at the International IEEE Antennas and Propagation Symposium.

7. **Best Student Paper Award** (established in 1999) (revised in 2002)

- Description:* To recognize the best student paper presented at the annual IEEE Antennas and Propagation Society International Symposium.
- Prize:* \$700 and Certificate for 1st place winner; \$500 and Certificate for 2nd place winner; \$300 and Certificate for 3rd place winner.
- Funding:* Funded by the IEEE Antennas and Propagation Society
- Eligibility:* Full time students that clearly indicate that the paper is entered in the judging at the symposium. The student must be the first author. The student's advisor should attach a statement that their contribution is primarily advisory. The paper must conform to all other normal symposium submission requirements. There is no requirement for IEEE membership.
- Basis for Judging:* Significance of the contribution to the fields of antennas and propagation, originality, and clarity, based on the written summary paper and the oral presentation.
- Presentation* First place award presented at Symposium Awards Banquet; Second and Third Place Awards recognized at Banquet.

8. **Chen-To Tai Distinguished Educator Award** (established in 2000)

- Description:* To recognize an individual who has given outstanding service to education in the field of antennas and propagation, and who exemplifies the special human qualities of Chen-To Tai, whose exemplary career in teaching and research represents the highest qualities of service.
- Prize:* \$1,000 and plaque
- Funding:* **Funded by an endowment provided by the Tai family and administered by the IEEE Foundation**
- Eligibility:* A significant contributor to education in the field of antennas and propagation; preference given to AP-S members
- Basis for Judging:* A distinguished educator recognized in general by an academic career; documentation of having received other teaching awards; effectiveness as an educator supported by a list of graduates in the field whose accomplishments have become recognized; letters of support; outstanding record of research contributions documented in archival publications; service to AP-S.
- Presentation:* At the Awards Banquet during the annual Antennas and Propagation Symposium

9. **AP-S Chapter Award** (established in 2001)

- Description:* To recognize annually the best chapter of the IEEE Antennas and Propagation Society.
- Prize:* \$1,000 and Certificate. More than one chapter may be awarded per year.
- Funding:* Funded by the IEEE Antennas and Propagation Society
- Eligibility:* Chapters that are in good standing and fully functioning in the year prior to consideration for the award. Chapters that are joint with other Societies are eligible for consideration. The same chapter may not receive the award more than three consecutive years.
- Basis for Judging:* High level of performance in the areas of: extent and quality of presentations or other activities in the field of antennas and propagation; special projects or societal activities; fellow nominations and awards; increases in membership and attendance.
- Presentation:* At the Awards Banquet during the annual Antennas and Propagation Symposium.

10. **Outstanding Service Award** (established in 2002)

Description: To recognize significant contributions and outstanding service to the IEEE Antennas and Propagation Society.

Prize: Plaque

Funding: Funded by the IEEE Antennas and Propagation Society.

Eligibility: For individual awards, members of the IEEE Antennas and Propagation Society are eligible; for team awards, the leader of the team should be a member of the IEEE Antennas and Propagation Society.

Basis for Judging: Exceptional service to the IEEE Antennas and Propagation Society.

Presentation: When presented, the award will be given at the annual Antennas and Propagation Symposium.

11. **John Kraus Antenna Award** (established in 2003)

Description: To honor an individual or team that has made a significant advance in antenna technology. Award established by John D. Kraus, whose exemplary career in teaching, research, and invention represents the highest qualities of antenna engineering.

Prize: \$1,000 and Plaque. If multiple awardees, the honoraria will be shared equally. Travel and lodging expenses to the AP-S Symposium may be authorized by the AP-S President.

Funding: **The prize is funded by John D. Kraus through the IEEE Foundation.** Additional incidental expenses to be funded by the IEEE Antennas and Propagation Society.

Eligibility: A significant contributor to antenna technology; preference given to AP-S members.

Basis for Judging: The award shall be made to an individual or team that has devised a new or substantially improved method or device for radiating or receiving electromagnetic waves. Accomplishments may be recognized through letters of support; the record of research contributions may be documented in patents, archival publications or by endorsements by governmental or industrial organizations.

Presentation: At the Awards Banquet during the annual IEEE Antennas and Propagation Symposium.

12. **IEEE Piergiorgio L.E. Uslenghi Prize Paper Award** (established in 2008)

Description: The award will recognize the best paper published in IEEE Antennas and Wireless Propagation Letters (IEEE AWPL) in the preceding calendar year. Currently, there are no awards or recognition for high-quality manuscripts published in the Letters. The presence of the award will provide an incentive that will attract outstanding contributions to the Letters. IEEE AWPL was established in 2001 by the AP Society. Prof. P. L. E. Uslenghi was the founding Editor-in-Chief of this periodical and this award is named in his honor. This award does not conflict with the other existing IEEE Antennas and Propagation Society Awards recognizing best papers published in the IEEE Transactions on Antennas and Propagation (IEEE TAP).

Prize: The award consists of a certificate and a one-time monetary prize of \$1,000. In the case that the recognized paper has multiple authors, each author will receive a certificate while the prize of \$1,000 will be shared equally among them.

Funding: The Antennas and Propagation Society will provide the funds for this Award. The duration of the Award is indefinite.

Eligibility: The eligibility and selection process shall comply with procedures and regulations established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Authors of all papers appearing in AWPL during the preceding calendar year are eligible for the award, regardless of age or their membership status in IEEE and the Society. Two exceptions to this eligibility are that papers authored or co-authored by the Editor-in-Chief or the Chair of the Awards Committee are not eligible to be considered for the award.

Basis for Judging: Initial selection of the papers to be considered will be based on comments from reviewers, Associate Editors, and the Editor-in-Chief. The list of manuscripts so distinguished is forwarded to the Awards Committee Chair by the Editor-in-Chief as described earlier. Any member of the Society not serving on the Awards subcommittee can also request that papers be placed into consideration by directly contacting the Chair of the Awards Committee. Each member of the Awards subcommittee will then review the papers and rank them according to their technical quality, innovation, and impact. Each subcommittee member's ranking carries equal value. The Awards Committee Chair then compiles the results of the rankings and holds a meeting with the subcommittee that culminates in the selection of a winner.

Presentation: The award will be presented annually at the Society's awards banquet at the IEEE International Symposium on Antennas and Propagation.

13. **IEEE Donald G. Dudley, Jr. Undergraduate Teaching Award** (established in 2009)

Description: The Award will recognize outstanding and original contributions to undergraduate education by an individual at the early stage of his/her career as an educator in the general field of electromagnetics including theory, analytical solutions, numerical methods, antennas, propagation, phenomena visualization, and measurements. The award is aimed to recognize an individual who exemplifies the special human qualities of Donald G. Dudley, Jr., whose exemplary career in teaching and research represents the highest qualities of service.

Prize: The award consists of a plaque, a one-time monetary prize of \$1,000, and a voucher for \$500 for professional books and/or other educational aids.

Funding: **Funds for this Award come from three sources: Mrs. Marge Dudley, the SciTech Publishing, Inc. will provide annually vouchers of value of \$500 to be redeemed for professional books, and the AP Society which will assume the responsibility for the monetary prize for this award after the funds provided by Mrs. Dudley are depleted. The award will be managed by the IEEE Foundation.**

Eligibility: An individual employed at the level of assistant professor or equivalent at an accredited engineering educational institution is eligible for this award.

Basis for Judging: The recipient of this award is expected to have made an outstanding contribution to undergraduate education, whose impact extends beyond the individual's institution of employment. Criteria considered by the AP-S Awards Committee include (but are not limited to):

- Development and implementation of teaching/learning tools that are or can be made available to students and instructors worldwide and have gained documented acceptance by students and professors;
- Documented excellence in undergraduate teaching;
- Involvement with and direction of undergraduate students to prepare them for successful engineering careers;
- Curriculum development with inclusion of current research and knowledge that reflects the state of the art in courses, and
- Authorship of educational material.

Presentation: The award will be presented annually at the Society's awards banquet at the IEEE International Symposium on Antennas and Propagation.

14. **IEEE Antennas and Propagation Edward E. Altshuler Prize Paper Award** (established in 2010)

Description: To recognize the best contribution published in the *IEEE Antennas and Propagation Magazine* (the "Magazine") in the preceding calendar year. Currently, there are no awards or recognition for high-quality manuscripts published in the *Magazine*. The presence of the award will provide an incentive that will attract outstanding contributions to the *Magazine*. This award is named in honor of Edward E. Altshuler, a Life Fellow of the IEEE and long-time member of the Antennas and Propagation Society, and is being established by his family. This award does not conflict with the other existing IEEE Antennas and Propagation Society Awards recognizing best papers published in the *IEEE Transactions on Antennas and Propagation* (IEEE TAP) or the *IEEE Antennas and*

Wireless Propagation Letters (IEEE AWPL).

- Prize:* The award consists of a certificate and a one-time monetary prize of \$1,000. In a case where the recognized paper has multiple authors, each author will receive a certificate while the prize of \$1,000 will be shared equally among the authors.
- Funding:* The award is to be funded through an endowment donated by the family of Edward E. Altshuler.
- Eligibility:* Authors of all feature articles and contributions to columns and departments appearing in the *Magazine* during the preceding calendar year are eligible for the award, regardless of age or their membership status in IEEE and the Society. Two exceptions to this eligibility are that contributions authored or co-authored by the Editor-in-Chief or the Chair of the Best Paper Awards Committee are not eligible to be considered for the award.
- Basis for Judging:* Initial selection of the contributions to be considered will be based on comments from reviewers, Associate Editors, Editors, and the Editor-in-Chief. The list of manuscripts so distinguished will be forwarded to the Awards Committee Chair by the Editor-in-Chief as described earlier. Any member of the Society not serving on the Best Paper Awards Committee can also request that papers be placed into consideration by directly contacting the Chair of the Best Paper Awards Committee. Each member of the Best Paper Awards Committee will then review the papers and rank them according to their technical quality and value, clarity of presentation, innovation, and impact. Each committee member's ranking will carry equal weight. The Best Paper Awards Committee Chair will then compile the results of the rankings, and hold a meeting with the committee that will culminate in the selection of a winner.
- Presentation:* The award will be presented annually at the Society's awards banquet at the IEEE International Symposium on Antennas and Propagation.

15. **IEEE Lot Shafai Mid-Career Distinguished Achievement Award** (established in 2012)

- Description:* To recognize the past technical accomplishments and future potential of an outstanding woman of mid-career status in the field of antennas and propagation.
- Prize:* The prize consists of a plaque and a monetary prize/honorarium of \$1,000.
- Funding:* **The award was proposed by the family of Lot Shafai, represented by his wife Joanne Therrien and his daughter Leili Shafai, with donated funds provided by the family, in honor and recognition of Prof. Lotfollah Shafai's recipient of the 2011 Killam Prize in Engineering, and in support of outstanding mid-career women engineers in the field of antennas and propagation. In the event that the funds donated by the family of Lot Shafai for this award are depleted, the Antennas and Propagation Society will provide the funds for this Award. The duration of the Award is indefinite. Endowment managed through the IEEE Foundation**
- Eligibility:* Eligible nominees consist of women who are members of the IEEE, are less than 41 years of age on December 31 preceding the year of nomination, whose prior technical accomplishments and future potential earmark them as current and future leaders in the field of antennas and propagation, as well as role models for future generations of women in the field. Preference shall be given to members of the Antennas and Propagation Society.
- Basis for Judging:* Factors to be considered for evaluation of nominees include a letter of nomination, two additional letters of reference, and a résumé/curriculum vitae that demonstrates a strong record of prior accomplishments and future potential. Accomplishments and markers of future potential may include but are not limited to, noteworthy contributions to industrial, government, or academic based research and development, technical commercialization activities, publications, patents, technical project or program management, leadership positions, education activities such as mentorship and/or promotion of the field of antennas and propagation, etc.
- Presentation:* The award will be presented annually (if a qualified candidate is nominated) at the Society's awards banquet at the IEEE International Symposium on Antennas and Propagation. If required, travel expenses to the Symposium for the recipient and one guest shall be provided by the Society.

16. **IEEE Harrington-Mitra Award in Computational Electromagnetics** (established in 2013)

Description: To recognize the past technical accomplishments and future potential of an outstanding contributor to the area of Computational Electromagnetics.

Prize: The prize consists of a plaque and a monetary prize/honorarium of \$1,000.

Funding: **The award will be administered by the IEEE Foundation and funded by a contribution from former students, colleagues, and friends of Roger F. Harrington and Raj Mittra. In the event that the funds donated by the original proponents for this award are depleted after the initial twenty-five year period, the Antennas and Propagation Society reserves the right to terminate the Award, unless additional funds are deposited to the gift account of the IEEE Foundation to enable the Award to continue.**

Eligibility: The recipient must be a member of the IEEE in good standing.

Basis for Judging: Factors to be considered for evaluation of nominees include a letter of nomination, two additional letters of reference, and a resume/curriculum vitae that demonstrates a strong record of prior accomplishments and future potential. Accomplishments and markers of future potential may include but are not limited to, noteworthy contributions to publications in leading journals, such as the Transactions of Antennas and Propagation and Radio Science.

Presentation: The award will be presented annually at the Society's awards banquet at the IEEE International Symposium on Antennas and Propagation.

17. **IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Antenna Measurements and Applications** (established in 2013)

Description: This annual award is given to **two** most innovative conference papers presented at the annual topical meeting **on Antenna Measurements and Applications**.

Prize: **The two best innovative conference papers** award consist of a monetary prize/honorarium of \$500, each.

Funding: **The award will be administered by the IEEE Foundation by a contribution from Dr. Ulrich L. Rohde.**

Eligibility: The recipient/s of each award must be members of the IEEE and in good standing.

Basis for Judging: Factors to be considered for evaluation of the innovative papers will be determined primarily by the Technical program Committee associated with this conference. In addition, a larger version of the paper will be invited for submission to the IEEE Transactions on Antennas and Propagation and published after going through the usual review process for publication as an Invited Paper.

Presentation: The award will be presented annually at the awards banquet of this annual topical meeting **on Antenna Measurements and Applications**.

18. **IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Computational Techniques in Electromagnetics** (established in 2013)

Description: This annual award is given to **two** most innovative conference papers presented at the annual topical meeting **on Computational Techniques in Electromagnetics**.

Prize: **The two best innovative conference papers** award consist of a monetary prize/honorarium of \$500, each.

Funding: **The award will be administered by the IEEE Foundation by a contribution from Dr. Ulrich L. Rohde.**

Eligibility: The recipient/s of each award must be members of the IEEE and in good standing.

Basis for Judging: Factors to be considered for evaluation of the innovative papers will be determined primarily by

the Technical program Committee associated with this conference. In addition, a larger version of the paper will be invited for submission to the IEEE Transactions on Antennas and Propagation and published after going through the usual review process for publication as an Invited Paper.

Presentation: The award will be presented annually at the awards banquet of this annual topical meeting **on Computational Techniques in Electromagnetics.**

19. **IEEE AP-S Eugene F. Knott Memorial Pre-Doctoral Research Grants** (established in 2015)

Description: To encourage students to pursue a career in the area of electromagnetic in electrical engineering or a related field at an accredited institution of higher learning. These grants are intended to support pre-doctoral students involved in research directed by a faculty member at their institution who is a member of the IEEE Antennas and Propagation Society. These grants are named in memory of IEEE Life Fellow, Eugene F. Knott, who was well known for his contributions to the theory, reduction, and measurement of radar cross section.

Prize: Up to 6 Grants are given annually, with two competitions (cycles) held each year. Each recipient receives a full grant amount of \$1,500 and a certificate. Up to three grants are given per cycle with application deadlines of April 1 and November 1. Grants will only be given if a suitable awardee is identified.

Funding: The IEEE APS Eugene F. Knott Memorial Pre-Doctoral Research Fund has been established and will provide a maximum of \$3,000 (\$500 per recipient) annually. Every three to five years, IEEE APS may review the fund balance and may increase or decrease the number and amount of research grants given annually. APS will be responsible for funding \$6,000 (\$1,000 per recipient) annually.

Eligibility: *Recipients must:*

- Be an enrolled undergraduate (3-5 year program), or a master's student in electrical or a related field at an accredited institution of higher learning.
- Have completed or be enrolled in at least one electromagnetics course at the time of application.
- Show strong interest in a career in the area of electromagnetics.
- Have the endorsement of a university/college faculty member who is a member of the IEEE AP-S.
- Intend to work on a research project of at least one year in length that falls within the scope of the IEEE AP-S. The project may be started before the grant recipients are announced but must end before the student's current degree requirements are completed. Applications who expect to graduate less than six months after the application deadline are not eligible.

Basis for Judging: Selection will be based on the following criteria:

- Creativity and quality of the proposed project and the thoroughness with which it is described
- Discussion of the technical interests and skills of the student and how they relate to the proposed project.
- Quality of writing in the proposal (e.g. spelling, grammar, word choice, organization, style, clarity of figures).
- Recommendation letter, with particular emphasis on the items listed in the fourth bullet above.

Presentation: Recipients are notified via email by the committee chair. The grant is delivered through US mail. Recognition ceremonies are at the discretion of each recipient's institution.

20. **IEEE AP-S Doctoral Research Grants** (established in 2015)

Description: To encourage students to pursue a career in the area of electromagnetic in electrical engineering or a related field at an accredited institution of higher learning. These grants are intended to support doctoral students involved in research directed by a faculty member at their institution who is a member of the IEEE Antennas and Propagation Society.

Prize: Up to 10 Grants are given annually, with two competitions (cycles) held each year. Each recipient receives a full grant amount of \$2,500 and a certificate. Up to 5 grants are given per cycle with

application deadlines of April 1 and November 1. Grants will only be given if a suitable awardee is identified.

Funding: APS will be responsible for funding \$25,000 (\$2,500 per recipient) annually.

Eligibility: Recipients must:

- Be a student pursuing a PhD in electrical engineering or a related field at an accredited institution of higher learning.
- Be a member of the IEEE AP-S at the time of application.
- Have completed or be enrolled in at least one electromagnetics course at the time of application.
- Show strong interest in a career in the area of electromagnetics.
- Have the endorsement of a university/college faculty member who is a member of the IEEE AP-S.
- Intend to work on a research project of at least one year in length that falls within the scope of the IEEE AP-S. The project may be started before the grant recipients are announced but must end before the student's current degree requirements are completed. Applications who expect to graduate less than six months after the application deadline are not eligible.
- Previous recipients of the IEEE AP-S Eugene F. Knott Memorial Pre-Doctoral Research Grants are eligible for the grant. No more than one award of each type will be granted to a given student.

Basis for Judging: Selection will be based on the following criteria:

- Creativity and quality of the proposed project and the thoroughness with which it is described
- Discussion of the technical interests and skills of the student and how they relate to the proposed project.
- Quality of writing in the proposal (e.g. spelling, grammar, word choice, organization, style, clarity of figures).
- Recommendation letter, with particular emphasis on the items listed in the fourth bullet above in the application requirements.

Presentation: Recipients are notified via email by the committee chair. The grant is delivered through US mail. Recognition ceremonies are at the discretion of each recipient's institution.

21. **IEEE AP-S Student Design Contest** (established in 2017) (revised in 2020) (revised 2021)

Description: The APS Student Design Contest is an annual contest on the design of a device or system involving principally antenna and propagation aspects. It culminates with a demonstration by finalists at the annual IEEE Antennas and Propagation Society International Symposium, whereby finalists are subsidized to attend the Symposium to present their designs. Awards are given for first, second, and third prize. The Contest is designed to engage and encourage study in the areas of electromagnetics, particularly antennas and propagation. The Contest is targeted towards involving more undergraduate students in these fields, with teams of 2-5 students consisting of at least 50% undergraduates. Each team is advised by a professional mentor who is a member of the IEEE AP-S, but the work needs to be done by the students. The goal of each Contest edition will be announced during the symposium one year in advance the contest actually held and the call for proposals will be published within the following two months. The Contest involves three funding stages: a design subsidy for the top 6 design entries to be developed, a travel subsidy for 6 finalist teams to attend the IEEE AP-S International Symposium, and cash prizes for first, second, and third place.

Prize: **Design subsidies for finalist teams:** Up to 6 subsidies to be given each year. Each team receives an amount of \$1,500 to develop their designs between the fall submission deadline and the Symposium deadline.

Travel subsidies for finalist teams: Up to 6 subsidies to be given each year. Each team receives an amount of \$5,000 and a certificate of participation for competing in the contest.

Cash prizes for the top 3 teams: 3 prizes to be given each year. 1st, 2nd, and 3rd prize winning teams receive certificates and cash prizes of \$1,500, \$750, and \$250. Cash prizes are to be split evenly (undergraduate and graduate). Design and travel subsidies are awarded as a single lump sum to a designated team member or trustee.

Funding: Funded by the IEEE Antennas and Propagation Society. Design subsidies cost \$9,000 annually; Travel subsidies cost \$30,000 annually; Cash prizes cost \$2,500 annually. APS will be responsible for funding the sum (\$41,500) annually included in its Education Committee budget.

Eligibility: Contest applicants must:

- Be an enrolled undergraduate (3-5-year program), or graduate student in electrical engineering or a related field at an accredited institution of higher learning.
- Not required to be a member of the AP-S
- Organize a team consisting of 2-5 students with at least 50% being undergraduate students. For a 5-year Bachelor-cum-Master degree program, students in years 1 to 3 are considered undergraduates.
- Have their team advised by a professional mentor who is a member of the IEEE AP-S. The mentor contributes in an advisory role. Work needs to be done by the students. No student or mentor should be involved in more than one team.
- Have the endorsement of a university/collage faculty member who is a member of the IEEE AP-S
- Intend to work on the design project as specified by the Contest's annual Call for Proposals
- Submit the following materials as part of the contest:
 1. A preliminary design by the fall deadline, consisting of a four-page proposal detailing the design and bill of materials (which cannot exceed \$1,500)
 2. A letter from their mentor confirming their membership in AP-S and verifying the applicants are enrolled in degree programs.

The materials are assessed by a college of reviewers from the IEEE AP-S Education Committee. Six finalist teams are selected. Those finalists must submit, by a spring deadline:

- A final report (up to 8 pages) describing the design, providing a list of parts and materials, presenting photos of the final system, summarizing performance achievements with the design, and providing biographies of the team members.
- A video demonstration of the system (up to 5 minutes).

These materials are further evaluated by the college of reviewers and assigned merit scores used alongside evaluations of the final demonstrations at the Symposium.

Basis for Judging: All application materials submitted by the deadlines determined by AP-S must be written in English and integrated into a single PDF document. Electronic copies of each submitted application are distributed among the college reviewers, who are selected from the members of the Education Committee. A minimum of three reviewers are assigned per application, but occasionally we are able to assign four reviewers per application. Each application has a different set of reviewers.

Selection of finalists will be based on the following criteria:

- Creativity of the proposed project
- Likelihood of achieving the design goal and meeting specifications as defined in the Call for Proposals
- Quality of the written materials.

Numerical ratings of 1-5 for each criterion are assigned by the reviewers and a weighted average score is generated from the compiled scores of all of the application's reviewers. The group of applicants among the cluster of highest scores is then reviewed again by chair of the Design Contest.

Evaluation of finalists will be based on the following criteria:

- Justification of achieved performance of the final design
- Creativity of the proposed design
- Completeness of the description in the written report
- Functionality of the system as determined by the video

Numerical ratings of 1-5 for each criterion are assigned by the reviewers and a weighted average score is generated from the compiled scores of the application's reviewers. The scores here are augmented by scores from judges on the same criteria during the live demonstrations at the Symposium. The judges collectively decide the ranking of the finalists at the Symposium.

Presentation: Recipients are notified via email by the committee chair. The subsidies are delivered through wire transfer. Recognition of the finalists and award winners is done at the Awards Banquet during the Symposium.

Description: This annual award will be given to the top proposals (maximum of 2) submitted by the members of the IEEE AP society on advancement of technology for Humanitarian activities. The objective is to provide low cost solution for humanitarian technology and a clear path for low cost production so that technology can be available for mankind. This award is intended to engage and motivate members from IEEE Antennas and Propagation Society and increase AP memberships.

Prize: Recipients of the award will receive funds to construct the winning project selected by the Award Committee. It is recommended to disperse \$10,000 for the development in two stages (50% in beginning and 50% after the winning team submits expense receipts for reimbursement to avoid tax implications). One, at most two, projects will be selected per year. If two projects are selected, total prize including travel and installation expenses will be split between two projects equally. The funds distributed will be based on the estimated expenses proposed by the winning team but limited to a maximum of \$8,000 for the project and \$2,000 for logistics that include travel expenses. If the Awards Committee selects two projects, then both winning teams receive \$4,000 (for a total of \$8,000 per year) and \$2,000 estimated travel expenses. Recipients will also receive a Certificate of Recognition.

Funding: **The award will be administered by the IEEE Foundation by a contribution from Dr. Ulrich L. Rohde. Annually, the AP Society will receive \$10,000 to support this award. If two projects are selected, the additional travel expenses of \$2,000, if applicable, will be supported by AP-S. Certificates of Recognition will be funded from AP-S MGA and Chapter Activity Budget. If additional funds are needed in the future to continue supporting the award, the donor will be glad to support additional funding in conjunction with financial support from AP-S MGA and Chapter Activity budget.**

Eligibility: Recipients must be members of the IEEE Antennas and Propagation Society and in good standing.

Basis for Judging: Proposals are invited from AP-S members who are involved in developing know how and technology for responding to natural calamities, humanitarian, and disaster needs. Participation is encouraged from groups (maximum 5- persons on a team) involved in development of a system, or products, which utilizes antennas and wireless for humanitarian applications including but not limited to disaster relief, affordable healthcare, quality and safety monitoring of edible materials etc. The design may consist of a broad spectrum of science and technology; however, the focus should be how to take advantage of novel antennas & propagation technology. The design proposals will be evaluated using the following criteria:

- Novelty – the idea should be relatively new with near term application potential, must be possible to implement if selected for a prize.
- Impact – the proposal should demonstrate that, if implemented, the idea should be of significant benefit to many people.
- Depth – a superficial overview will not be sufficient; all claims must be backed by quantitative data, including available devices and prices, potential manufacturers, potential users, robustness, cost-effectiveness etc.

A report on the projects will be invited for submission to the *IEEE Antennas and Propagation Magazine* after going through the usual review process for publication as an Invited Paper. Proposals awarded will be selected upon the merits. After completion of the project, the Awards Committee will explore the follow-up for low cost production, which is the key requirement for humanitarian needs. The complete know-how of the technology will be uploaded on the IEEE AP-S SIGHT website (<https://www.ieeeaps.org/committees/ieee-aps-sight>). Selection of the award is in line with IEEE SIGHT and HAC Project Awards. The reason for establishing a similar type of award is to motivate members of APS. This is because proposals submitted by APS members in the past consequently were not approved by IEEE SIGHT and HAC because of limited budget.

Presentation: The announcement of the award will be made at the annual awards meeting of the IEEE AP society. The recipient will receive the Certificate/Plaque and funds for the completion of the project.

23. IEEE AP-S C.J. Reddy Travel Grant for Graduate Students (established in 2021)

Description: AP-S awards travel grants annually to help graduate students attend the annual IEEE International

Symposium on Antennas and Propagation. If the IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting is held in a given year solely as a virtual event, recipients may be selected for an educational grant instead of the travel grant. In the case of a hybrid event, both travel grants and educational grants may be given.

Prize: Up to six (6) travel grants to be given each year, nominally \$1,500 each, adjustable by the AP-S Education Committee as costs change over time up 10% per year with a maximum of \$3,000. The grant does not include the conference registration fee. Grants will be given only if suitable awardees are identified and necessary funds are available.

Funding: **The award will be administered by the IEEE Foundation and funded by an endowment provided by Dr. C. J. Reddy.**

Eligibility: Recipients must:

- Be a graduate student (MS or PhD) at the time of application enrolled in electrical engineering or a related field at an accredited institution of higher learning.
- Be an IEEE AP-S student member.
- Have the endorsement of a faculty advisor who is a member of IEEE AP-S.
- Have submitted at least one first-authored paper to be presented at the AP-S Symposium.
- *A student may receive only one travel grant. Previous award winners are not eligible. An advisor may endorse only one applicant at a time.*

Basis for Judging: Applications must be submitted by the deadline and must include all items listed below to be considered for review. All application materials must be written in English and be integrated into a single PDF document:

- Completed application form.
- First-authored conference paper to be presented at the AP-S Symposium.
- Brief research project description no more than one page long (including figures, if any) with a font size of at least 11 points. The project may be a new one or extended from the submitted conference paper. The list of references may extend beyond the first page.
- Brief curriculum vitae or resume no more than two pages long that includes periods of attendance at all schools, expected and completed graduation dates, and a list of published and submitted journal and conference papers.
- Recommendation letter from a faculty advisor, who must be a member of the IEEE AP-S. The letter should discuss the student's aptitude to perform the research, and provide justification of the student's need for the travel grant.

Selection will be based on the following criteria:

- A first-authored conference paper accepted for presentation at the AP-S Symposium.
- Quality of research and writing in the brief project description.
- Recommendation letter, with particular emphasis on the items listed in the last bullet above.

Presentation: Recipients are notified via email by the committee chair. Recognition ceremonies are at the discretion of each recipient's institution.

IEEE BIOMETRICS COUNCIL
BIO-46 (Division X)

For all Biometrics Council awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award

1. IEEE Biometrics Council Meritorious Service Award (established in 2015)

Description: To honor outstanding service in the field of biometrics.

Prize: The Award consists of a \$1000 honorarium and a Plaque. Only one recipient and the award cannot be split.

Funding: Funded by the IEEE Biometrics Council.

Eligibility: Any current IEEE member of the member societies of the Biometrics Council who has been active in the fields of interest of the IEEE Biometrics Council for more than 15 years at the time on nomination. Current officers of the Society's Executive Committee are ineligible.

Basis for Judging: Outstanding service in the field of Biometrics is the basis for judging.

Presentation: The award will be presented at the BTAS or IJCB Conference.

2. IEEE Biometrics Council Leadership Award (established in 2015)

Description: To honor outstanding leadership in the field of biometrics.

Prize: The Award consists of a \$2,000 honorarium and a Plaque. Only one recipient and the award cannot be split.

Funding: Funded by the IEEE Biometrics Council.

Eligibility: Any current IEEE member of the member societies of the Biometrics Council who has been active in the fields of interest of the IEEE Biometrics Council for more than 15 years at the time on nomination. Current officers of the Society's Executive Committee are ineligible.

Basis for Judging: Outstanding leadership in the field of Biometrics is the basis for judging.

Presentation: The award will be presented at the BTAS or IJCB Conference.

3. IEEE Biometrics Council Best Doctoral Dissertation Award (established in 2018)

Description: To express recognition for, and promote outstanding effort and contributions in doctoral dissertation in the field of interest to the IEEE Biometrics Council.

Prize: \$1,000 and a commemorative Plaque. One award allowed annually.

Funding: Funded by the IEEE Biometrics Council.

Eligibility: Any current member of IEEE. The award should be nominated by the respective advisor. One PhD advisor is entitled to nominate one dissertation at most per year. The nominated dissertation should be within one year after the successful defense date, at time of nomination. The original dissertation can be in any languages. The nominated dissertation should be written in English.

Basis for Judging: The nominated doctoral dissertation will be reviewed by the Award Committee based on (i) technical contributions, (ii) significance of long-term impact, and (iii) quality of writing and

presentation.

Presentation: The award will be presented at the BTAS or IJCB Conference.

IEEE BROADCAST TECHNOLOGY SOCIETY

BT-02 (Division IV)

For all Broadcast Technology Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Special Service Award** (established in 1981)

Description: To recognize outstanding service to the IEEE Broadcast Technology Society.

Prize: Plaque

Funding: Funded by the IEEE Broadcast Technology Society.

Eligibility: Members of the AdCom (including members-at-large and ex officio members).

Presentation: At Annual Broadcast Symposium.

2. **Matti S. Siukola Memorial Award** (established in 1982)

Description: To recognize the best paper presented at the Annual Broadcast Symposium.

Prize: Plaque

Funding: Funded by the IEEE Broadcast Technology Society.

Eligibility: Presenters of papers at the Annual Broadcast Symposium.

Basis for Judging: Overall technical quality, extent of original work, effectiveness of presentation, quality of visual aids.

Presentation: At the following year's Annual Broadcast Symposium.

3. **Scott Helt Memorial Award** (established in 1957) (revised in 2003)

Description: To recognize the best paper published in the *IEEE Transactions on Broadcasting*.

Prize: Plaque

Funding: Funded by the IEEE Broadcast Technology Society.

Eligibility: Authors of papers published in the *IEEE Transactions on Broadcasting* during the calendar year (1 January – 31 December) immediately prior to the Fall Broadcast Symposium.

Basis for Judging: General quality of paper, subject matter, originality, timeliness, contribution to the broadcasting field.

Presentation: At Annual Broadcast Symposium.

4. **Clyde M. Hunt Memorial Student Paper Award** (established in 1993) (revised 2007)

Description: To recognize a student paper of exceptional interest and applicability to the field of Broadcast Engineering.

Prize: First prize: \$250, Certificate and an all-expense paid trip to the Annual Broadcast Symposium to present the winning paper; Second and Third prize: \$250.00, Certificate, and complimentary

registration to the Annual Broadcast Symposium. (For coauthored papers, only principal author receives prizes (first, second, or third).

Funding: **Honoraria funded by the Clyde M. Hunt Memorial fund; administered by the IEEE Foundation.** Travel and Symposium registration funded by the IEEE Broadcast Technology Society.

Eligibility: Any student, undergraduate or graduate, pursuing a course of study in a field related to broadcast engineering is eligible. The student need not be a member of IEEE or BTS.

Basis for Judging: General quality, extent of original work, timeliness, and significance of the contribution to the broadcast engineering profession. The paper must be of sufficient quality to warrant publication in the *Transactions*.

Presentation: Given aperiodically, however presentation to be made at Annual Broadcast Symposium.

5. **IEEE Broadband Multimedia Symposium - Best Paper Award** (established in 2009)

Description: To recognize the best paper presented at the Annual *IEEE International Symposium on Broadband Multimedia Systems and Broadcasting* (Broadband Multimedia Symposium). The paper topic, research, presentation materials and presentation delivery will all be assessed.

Prize: Plaque for the principle author, and certificates for the remaining authors (if any), plus complimentary registration for the following year's Broadband Multimedia Symposium for the author accepting the award (year of presentation).

Funding: Funded by the IEEE Broadcast Technology Society.

Eligibility: All Presenters of papers at the *IEEE International Symposium on Broadband Multimedia Systems and Broadcasting* are eligible.

Basis for Judging: Overall technical quality, extent of original work, effectiveness of presentation, quality of visual aids.

Presentation: The Award will be presented annually at an Awards luncheon or dinner, held during the *IEEE International Symposium on Broadband Multimedia Systems and Broadcasting* in the following year.

6. **IEEE Jules Cohen Award for Outstanding Broadcast Engineering** (established in 2013)

Description: The IEEE Jules Cohen Award for Outstanding Broadcast Engineering is created to recognize outstanding broadcast engineering work that is exceptional in:

- Integrity and professionalism;
- Quality and thoroughness of the candidate's work;
- Extent and reach of the work; and
- Commitment to client success.

Prize: A plaque stating the reasons behind this award as well as a complimentary registration to the IEEE event at which the award is presented. Additionally, a \$500 cash prize will be awarded.

Funding: Funded by the IEEE Broadcast Technology Society.

Eligibility:

- Membership in IEEE BTS during the period of the achievement, and
- Has accomplished achievement in broadcast engineering that exemplifies the following key criteria:
 - Integrity and professionalism;
 - Quality and thoroughness of work;
 - Extent and reach of the work; and
 - Commitment to client success.

Basis for Judging:

- Feedback from clients;
- Feedback from peers;

- Period over which the achievement was made;
- Extent of the achievement;
- Demonstration of integrity and professionalism.

Presentation: Generally, the award will be given at the Annual Broadcast Symposium in Q4 or at the next year's Broadband Multimedia Systems and Broadcasting Symposium.

7. **IEEE Broadcast Technology Society/AFCCE Jules Cohen Memorial Scholarship (JCMS)** (established in 2016)

Description: To provide one or more scholarship awards for full-time Junior- or Senior-level undergraduate or graduate engineering students at accredited U.S. universities interested in a career in broadcast engineering. The scholarship honors the memory of IEEE Fellow and long-time AFCCE member and past President Jules Cohen.

Prize: Scholarship amounts shall be either \$5,000 or \$10,000 for both undergraduate and graduate students, based on qualifications, financial need, number of qualified applicants, and subject to availability of funds, and limited by the maximum total amount specified in the Funds section. A minimum of one undergraduate and one graduate award will be given each semester, subject to availability of qualified applicants and funds. A maximum of eight undergraduate and five graduate scholarships will be given each semester, subject to the same restrictions. In accordance with IEEE policy, individual awards are subject to the following limits.

- Undergraduate Scholarship \$500 to \$15,000 per semester, not to exceed \$15,000 annually
- Graduate Award \$1,000 to \$15,000 per semester, not to exceed \$15,000 annually. Scholarships will be awarded twice each calendar year (timing associated with Spring and Fall academic semesters). Prior applicants who were previously awarded a scholarship may re-apply one time subject to the award limits specified above. Prior applicants who were not previously awarded a scholarship may re-apply without limit.

Funding: Scholarship award funding is from IEEE BTS society funds. The maximum total amount available annually for scholarship awards is \$40,000.

Eligibility: To be eligible, applicants must complete and submit a scholarship application, including academic transcripts, and a personal statement. Applicants must be enrolled full-time in an engineering curriculum at an accredited U.S. university and have a good academic record. Undergraduates must have Junior or Senior standing. All applicants must express an interest in a career in broadcast engineering.

Basis for Judging: Ranking factors include explicit interest in broadcast engineering as expressed in a personal statement, academic record, financial need, and relevant extra-curricular activities. Initial ranking and award recommendations are made by the AFCCE Scholarship Fund Scholarship Committee (of which the IEEE BTS-designated representative is a member) with final award decisions made by the AFCCE Scholarship Fund Board of Directors (of which the IEEE BTS-designated director is a member). Award and funding decisions are by majority vote with the BTS-designated director breaking ties.

Presentation: Scholarships awards are sent to the awardee's university for disbursement to the awardee. A notification letter is sent to applicants informing them of the award decision.

IEEE CIRCUITS AND SYSTEMS SOCIETY
CAS-04 (Division I)

For all Circuits and Systems Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **IEEE Circuits and Systems Society Mac Van Valkenburg Award** (formerly Society Award) (revised 2000, and 2007) (revised 2020)

Description: To honor outstanding technical contributions in a field within the scope of the Society and outstanding leadership in the field.

Prize: \$2,000 and Plaque

Funding: **Honoraria funded by accrued interest earned from initial funding endowment provided by NEC and Philips; managed by the IEEE Foundation. If there is insufficient interest in the account to fund the award, the Society will provide the supplemental funding. The plaque is funded by the Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Must be a member of the IEEE CAS Society.

Basis for Judging: Quality and significance of contribution and continuity of technical leadership, contributions to CAS Society.

Presentation: Annually, at the ISCAS.

2. **IEEE Circuits and Systems Society Charles A. Desoer Technical Achievement Award** (revised 2010) (renamed and prize increased 2011) (revised 2013) (revised 2020)

Description: To honor outstanding technical contributions over a period of years within the scope of the Society as documented by publications (including patents).

Prize: \$2,000 and Plaque

Funding: **Honoraria funded by accrued interest earned from initial funding endowment provided by NEC and Philips; managed by the IEEE Foundation. If there is insufficient interest in the account to fund the award, the Society will provide the funding. The plaque is funded by the Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Must be a member of the IEEE CAS Society.

Basis for Judging: General quality and originality of contributions and continuity of effort, contributions to CAS Society.

Presentation: Annually, at the ISCAS.

3. **Meritorious Service Award** (revised 2000) (revised 2020)

Description: To honor outstanding long-term service to the welfare of the Society.

Prize: \$1,000 and Plaque

Funding: **Honoraria funded by accrued interest earned from initial funding endowment provided by NEC and Philips; managed by the IEEE Foundation. If there is insufficient interest in the account to fund the award, the Society will provide the funding. The plaque is funded by the Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Must be a member of the IEEE CAS Society.

Basis for Judging: Dedication, effort and contributions to CAS Society.

Presentation: Annually, at the ISCAS.

4. **IEEE CAS Chapter-of-the-Year Award** (revised 2008) (revised 2020)

Description: To recognize the CAS Society Chapter with the best yearly activities.

Prize: \$1,000 and Certificate to Chapter Officers

Funding: **Funded by the IEEE Circuits and Systems Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: The winning chapters must be IEEE Circuits and Systems Society Chapters (joint chapters are eligible). Self-nominations are allowed.

Basis for Judging: Best yearly activities in the categories of Chapter-sponsored technical activities, increase in membership, participation in AdCom meetings.

Presentation: Annually, at the ISCAS.

5. **IEEE CAS John Choma Education Award** (renamed 2015) (revised 2020)

Description: To honor outstanding contributions to education in a field within the scope of the Society as documented by publications of textbooks, research supervision of graduate and undergraduate students, development of short courses, participation in adult education. This award was renamed to recognize John Choma who was well-known and respected in CAS Society and community. His passion for the field and for education more than justifies the renaming of this award and CAS is honored to do so in remembrance and honor to him.

Prize: \$1,000 and Plaque

Funding: **Honoraria funded by accrued interest earned from initial funding endowment provided by NEC and Philips; managed by the IEEE Foundation. If there is insufficient interest in the account to fund the award, the Society will provide the funding. The plaque is funded by the Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Must be a member of the IEEE CAS Society.

Basis for Judging: General quality and originality of contributions and continuity of effort, contributions to CAS Society.

Presentation: Annually, at the ISCAS.

6. **Outstanding Young Author Award** (revised 2000)

Description: To honor an especially meritorious paper published in any one of the Society's Transactions whose author at the date of submission is less than 30 years of age.

Prize: \$500 for each author (maximum of \$2,000 per award) and Certificate

Funding: **Funded by the IEEE Circuits and Systems Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Authors of papers published in any one of the Society Transactions during the two calendar years preceding the award, who at the date of submission of the paper shall be less than 30 years of age.

Basis for Judging: General quality, originality, contributions, subject matter, and timeliness.

Presentation: Annually, at the ISCAS or ICCAD or ICCD.

7. ***IEEE Transactions on Circuits and Systems Guillemín-Cauer Best Paper Award*** (revised 2000, 2007)

Description: To recognize the best paper published in the *IEEE Transactions on Circuits and Systems*.

Prize: \$500 for each author (maximum of \$2,000 per award) and Certificate

Funding: **Funded by the IEEE Circuits and Systems Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Authors of papers published in the *IEEE Transactions on Circuits and Systems* during the three calendar years preceding the award.

Basis for Judging: General quality, originality, contributions, subject matter, and timeliness.

Presentation: Annually, at the ISCAS or ICCAD or ICCD.

8. ***IEEE Transactions on Computer-Aided Design Donald O. Pederson Best Paper Award*** (revised 2000, 2004, 2007) (*through 2009 – transferred to CEDA effective 2010*)

Description: To recognize the best paper published in the *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*.

Prize: \$500 for each author (maximum of \$2,000 per award) and Certificate

Funding: Funded by the IEEE Circuits and Systems Society.

Eligibility: Authors of papers published in the *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* during the three calendar years preceding the award.

Basis for Judging: General quality, originality, contributions, subject matter, and timeliness.

Presentation: Annually, at the ISCAS or ICCAD or ICCD.

9. ***IEEE Transactions on Circuits and Systems Darlington Best Paper Award*** (revised 2000, 2007)

Description: To recognize the best paper bridging the gap between theory and practice published in the *IEEE Transactions on Circuits and Systems*.

Prize: \$500 for each author (maximum of \$2,000 per award) and Certificate

Funding: **Funded by the IEEE Circuits and Systems Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Authors of papers bridging the gap between theory and practice published in the *IEEE Transactions on Circuits and Systems* during the three calendar years preceding the award.

Basis for Judging: General quality, originality, contributions, subject matter, and timeliness.

Presentation: Annually, at the ISCAS or ICCAD or ICCD.

10. **CSVT Transactions Best Paper Award** (established in 1992) (revised 2000)

Description: To recognize the best paper published in the *IEEE Transactions on Circuits and Systems for Video Technology*.

Prize: \$500 for each author (maximum of \$2,000 per award) and Certificate

Funding: **Funded by the IEEE Circuits and Systems Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Authors of papers published in the *IEEE Transactions on Circuits and Systems for Video Technology* during the three calendar years preceding the award.

Basis for Judging: General quality, originality, contributions, subject matter, and timeliness.

Presentation: Annually, at the ISCAS or ICCAD or ICCD.

11. **Transactions on Very Large Scale Integration Systems Prize Paper Award** (established in 1995) (revised 2000)

Description: To recognize the best paper published in the *IEEE Transactions on Very Large Scale Integration Systems*. To be instituted during the three calendar years preceding the award (*Transactions on VLSI Systems* first issued in 1993) and beginning in 1995.

Prize: \$500 per author, up to a maximum of \$2,000 (cash awards for prize papers having more than four co-authors would be \$2,000, split equally among all authors)

Funding: **Funded by the IEEE Circuits and Systems Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Authors of papers published in *IEEE Transactions on VLSI Systems*.

Basis for Judging: General quality, originality, contributions, subject matter and timeliness.

Presentation: Annually, at the ISCAS, ICCAD or ISCC.

12. **CAS Industrial Pioneer Award** (established in 1998) (revised in 2000) (revised 2020)

Description: To honor a person or persons with outstanding and pioneering contributions in developing academic and industrial research results into industrial applications and/or commercial products.

Prize: \$1,000 and Plaque. If more than one recipient, the monetary award will be divided equally. Maximum amount of award not to exceed \$1,000.

Funding: **Funded by the IEEE Circuits and Systems Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Any member of the IEEE Circuits and Systems Society, regardless of membership rank or age, is eligible for the annual Award. The Award may be granted only to nominees who have pioneered and developed innovative research, executed in either academe or industry that has resulted in either industrial applications or commercial products recognized widely for their utility. The time period over which the cognizant research was executed is immaterial.

Basis for Judging: Quality, originality, and significance of contribution, contributions to CAS Society.

Presentation: Annually, at the ISCAS.

13. **The Multimedia Prize Paper Award**, IEEE Circuits and Systems Society, IEEE Communications Society, IEEE Computer Society, and IEEE Signal Processing Society (established in 2002)

Description: To recognize an original paper in the field of Multimedia published in the *IEEE Transactions on Multimedia* in the previous calendar year.

Prize: \$500 and Plaque for each author. The total honorarium is not to exceed \$1,000.

Funding: **The award will be funded equally by the four sponsoring societies (IEEE Circuits and Systems, IEEE Communications, IEEE Computer and IEEE Signal Processing Societies) from the publication account for the *IEEE Transactions on Multimedia*, until an external sponsor is identified (will be sought in 2003). The IEEE Signal Processing Society is the managing partner for the *IEEE Transactions on Multimedia*. Accordingly, IEEE Signal Processing Society will be responsible for the administration of the Multimedia Prize Paper Award. However, the authority for all aspects of the journal resides collectively with its Steering Committee. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Authors of an original paper in the field of Multimedia, published in the *IEEE Transactions on Multimedia* in the previous year are eligible for the Marconi Prize Paper Award. The authors need not be members of the IEEE.

Basis for Judging: High quality, original paper composite of originality, utility, timeliness and clarity of presentation.

Presentation: Annually at the International Conference on Multimedia and Expo (ICME) by the General Chair of the conference, in the name of the four sponsoring societies. An award may not be given if a paper of high quality is not uncovered.

14. **CASS Vitold Belevitch Circuits and Systems Award** (established in 2003) (revised 2020)

Description: To honor a person who has made fundamental contributions in the field of circuits and systems. Contributions are expected to have a long-lasting impact on a field within the scope of CAS and/or open new vistas for research and development. There is a long tradition of groundbreaking work in the circuits and systems community and the award should recognize such contributions and stimulate outstanding achievements of this type. Belevitch's development of a coherent theory of passive multiports is a master example of such a fundamental contribution. The award shall be presented biennially.

Prize: \$1,000 and Plaque. Maximum amount of award not to exceed \$1000.

Funding: **Funded by the annual budget of the IEEE Circuits and Systems Society. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Any member of the IEEE Circuits and Systems Society, regardless of membership rank or age, is eligible for the biennial Award.

Basis for Judging: Quality, originality, and fundamental nature of contribution, and contributions to CAS Society.

Presentation: Biennially at the ISCAS.

15. **IEEE Circuits and Systems Society ISCAS Student Best Paper Award** (established in 2007)

Description: To recognize outstanding technical contributions by students, as evidenced by the quality of papers, their presentations, and their technical excellence (as demonstrated through Q&A and discussion).

Prize: Four \$500 awards for an annual total of \$2,000. If there is more than one student on a winning paper, the students will split the \$500 award. Each winning student author will receive a certificate or recognition. .

Funding: **Funded by the IEEE CAS Endowment Fund. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Winners must be full-time or part-time undergraduate or graduate (masters or doctoral) students at the time the paper is submitted to ISCAS. A faculty member must confirm that the students have done the most significant fraction of the technical work on the paper. Papers co-authored by members of the ISCAS Technical Program Committee and/or of the judging committee are excluded. Membership in IEEE and/or CASS are not required.

Basis for Judging: Winners will be chosen on the basis of multiple criteria: a) the quality of the paper, b) the quality of the oral presentation, as determined by the chair of the session, and c) the students' demonstrated excellence observed through presentation Q&A and discussion with the judging committee during the poster session.

Presentation: Presented during the Farewell Ceremony at the CAS flagship conference to enhance the award's prestige and serve as visible recognition for outstanding work.

16. **IEEE Circuits and Systems Society Student Travel Grants** (established in 2007) (revised 2015) (revised 2020)

Description: To provide financial assistance to IEEE Student Members to enable them to present their research work at CASS flagship conferences

Prize: The amount of financial assistance provided to each student will be based on specifics of the travel involved and cannot exceed a maximum of \$USD 1,500. The total grant amount allocated will be \$20,000, with \$5,000 for each of R1-7, R8, R9, and R10 – unused regional funds can be redistributed to other regional groups based on the recommendations from VP RAM and subject to the approval of the President. These awards can be used both as a reimbursement of expenses for attending a conference that has taken place up to one year before the grant application deadline, and also as a grant for attending a conference that will take place up to one year after the application deadline. Please note, the final amount given to the awardee will be based on expenses incurred by the student during the travel, not to exceed the awarded amount.

Funding: **Funded by IEEE CAS Endowment Fund. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: Students must have had their papers selected for presentation at the conference they plan to attend or have attended. A faculty member must confirm that the nominee is an undergraduate or graduate student and that he/she is an IEEE CASS member. Eligibility will also be based on financial needs.

Basis for Judging: Students receiving these grants must have had their papers selected for presentation at the CASS-flagship conference(s) they plan to attend or have attended.

- In the case the grant is for attending a conference occurring after the grant application deadline, a faculty member must confirm that the nominee:
 - is an undergraduate or graduate student and
 - is an IEEE CASS student member.
- In the case of reimbursement for attending a conference that occurred before the application deadline, it is sufficient to confirm that the nominee:
 - was an undergraduate or graduate student at the time of the conference, and

- is an IEEE CASS member and
- was an IEEE CASS student member at the time of the conference.
- The nominee must furnish written proof that the paper was accepted at the conference (e.g. email notification from the Technical Program Committee).
- The nominee must state in the application that he/she will attend or has attended the conference to present the paper.

Presentation: The financial assistance will be provided for travel through standard IEEE travel expense reimbursement process.

17. **IEEE Circuits and Systems Regional Chapter-of-the-Year Awards: Regions 1-7, Region 8, Region 9, and Region 10** (established in 2007) (revised 2020)

Description: To recognize the CAS Society Chapters in Regional areas with the best yearly activities in the categories of chapter-sponsored technical activities, and increase in membership. Award will recognize their contribution, with special consideration of their local constraints.

Prize: \$750 and Certificate to the four Regional Chapters of the Year. Presented to the chapter chair and must be used to fund chapter activities.

Funding: **Funded by the IEEE CAS Endowment Fund. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: The winning chapters must be IEEE Circuits and Systems Society chapters (joint chapters are eligible). Self-nominations are allowed.

Basis for Judging: The awards criteria include: number and quality of chapter activities, percentage of attending sponsored events, membership development activities and chapter growth, member promotions, local conferences/symposia/workshops, participation in the Distinguished Lecturer Program, involvement of students and YP members, and timeliness of reporting. The overall local environment and factors such as chapter size are considered.

Presentation: Presented annually at the banquet during the society's flagship conference, ISCAS.

18. **IEEE Transactions on Biomedical Circuits and Systems Best Paper Award** (established in 2009)

Description: The IEEE Transactions on Biomedical Circuits and Systems Best Paper Award recognizes the best paper published in the "Transactions on Biomedical Circuits and Systems" publication. The award is based on general quality, originality, contributions, subject matter and timeliness.

Prize: The recipient will receive a certificate and a check for \$500 (there is a maximum of \$2,000 per award if multiple authors - \$2,000 will be shared equally if there are more than 4 authors).

Funding: **Funded by the IEEE CAS Endowment Fund. Award is funded via CAS Award Fund in the IEEE Foundation.**

Eligibility: The winner does not have to be an IEEE and/or CASS member. The award is based on general quality, originality, contributions, subject matter and timeliness. Anyone who is an author of a paper published in the "Transactions on Biomedical Circuits and Systems" during the three calendar years preceding the award is eligible for nomination.

Basis for Judging: Submissions will go through a two-stage review process: in the first stage, committee members make a selection of the top papers from the nominations and prepare a short report on each of them. The first phase should last two weeks. The second stage is chaired by the CASS VP Publications. Together with the sub-committee members, a final decision is made on the award recipient. The second phase should last one week.

Presentation: Award will be given during the annual CASS flagship conference – International Symposium on Circuits and Systems (ISCAS).

19. **IEEE CASS Pre-Doctoral Grants** (established in 2014; revised 2019)

- Description:* Ten pre-doctoral grants to recognize a young member enrolled in a PhD program in a field related to the Circuits and Systems Society Field of Interest to facilitate mobility to conduct interdisciplinary research at another research department..
- Prize:* Up to 10 grants are given annually. Each recipient receives a full grant amount of \$2,500 and a certificate. Grants will only be given if a suitable awardee is identified. The recipient will receive compensation of up to USD \$1,000 for travel to a CASS flagship conference to receive the award.
- Funding:* Funded by the Circuits and Systems Society.
- Eligibility:* A CAS Society Member for at least two years and is enrolled in a PhD program related to the field of interest of CAS. Nominees must provide an endorsement of a university/college faculty member who is a member of IEEE CASS. Nominees must provide an endorsement from a CASS member host. Nominees who expect to graduate less than one year after the application deadline are not eligible. The grant is to be used for research purposes only.
- Basis for Judging:* Factors to be considered include:
- Past performance,
 - The expected outcome of the research program and how it advances the state-of-the-art,
 - Significance of research,
 - And involvement in the CAS Society (research topic, past publications, volunteer experience, etc.
- Presentation:* The grant will be presented annually at a CASS Flagship Conference.

IEEE COMMUNICATIONS SOCIETY
COMM-19 (Division III)

For all Communications Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Edwin Howard Armstrong Achievement Award** (originally Achievement Award, first presented in 1958-changed to present title in 1975) (revised 2003)

Description: To recognize outstanding contributions over a period of years in the field of interest of the Society.

Prize: \$2,000, Plaque and Certificate

Funding: **Funded by the Armstrong Memorial Research Foundation and administered by the IEEE Foundation.**

Eligibility: Must be a member of the IEEE Communications Society.

Presentation: Annually.

2. **Award for Public Service in the Field of Telecommunications** (first presented in 1976)

Description: To recognize major contributions to the public welfare through work in the field of Telecommunications.

Prize: \$1,000, Plaque and Certificate

Funding: Funded by the IEEE Communications Society. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation.**

Eligibility: No restrictions.

Presentation: Annually, if suitable candidate is available.

3. **Donald W. McLellan Meritorious Service Award** (first presented in 1976; renamed in 1979)

Description: To recognize outstanding long-term service to the welfare of the Communications Society.

Prize: \$1,000, Plaque and Certificate

Funding: Funded by the IEEE Communications Society. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation.**

Eligibility: Must be a member of the IEEE Communications Society.

Presentation: Up to two awards presented annually.

4. **Leonard G. Abraham Prize** (first presented in 1958; category defined in 1975; expanded scope in 2010; revised scope 2013)
(formerly Leonard G. Abraham Prize Paper Award in the Field of Communications Systems)

Description: To recognize the best original paper, in the category Communications Systems, published in the *IEEE Journal on Selected Areas in Communications* in the previous calendar year; author need not be an IEEE member.

Prize: Up to \$500 and Plaque per author (total prize not to exceed \$1,000)

Funding: Funded by the IEEE Communications Society. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.

Eligibility: Authors of original papers published in the *IEEE Journal on Selected Areas in Communications* in the previous calendar year. Author need not be a member of IEEE.

Basis for Judging: Quality, originality, utility, timeliness, clarity of presentation.

Presentation: Annually at ICC.

5. **Stephen O. Rice Prize** (first presented in 1975; expanded scope in 2010; revised scope 2013)
(formerly Stephen O. Rice Prize Paper Award in the Field of Communications Theory)

Description: To recognize the best original paper, in the category Communications Theory, published in the *IEEE Transactions on Communications* in the previous calendar year; author need not be an IEEE member.

Prize: Up to \$500 and Plaque per author (total prize not to exceed \$1,000)

Funding: Funded by the IEEE Communications Society. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.

Eligibility: Authors of original papers, in the category Communications Theory, published in the *IEEE Transactions on Communications* in the previous calendar year. Author need not be a member of IEEE.

Basis for Judging: Quality, originality, utility, timeliness, clarity of presentation.

Presentation: Annually at ICC.

6. **The Communications Society William R. Bennett Prize in the Field of Communications Networking**
(first presented in 1975; expanded scope in 2010; revised scope 2013) (formerly William R. Bennett Prize Paper Award in the Field of Communications Circuits and Techniques)

Description: To recognize the best original paper, in the category Communications Networking, published in the *IEEE/ACM Transactions on Networking* in the previous calendar year; author need not be an IEEE member.

Prize: Up to \$500 and Plaque per author (total prize not to exceed \$1,000)

Funding: Funded by the IEEE Communications Society. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.

Eligibility: Publication of original paper, in the category Communications Networking, published in the *IEEE/ACM Transactions on Networking* in the previous calendar year; author need not be an IEEE member.

Basis for Judging: Quality, originality, utility, timeliness, clarity of presentation.

Presentation: Annually at ICC.

7. **IEEE Communications Society Fred W. Ellersick Prize** (first presented in 1982; expanded scope in 2010) (formerly *Communications Society Magazine Prize Paper Award*) (revised 2021)

Description: To recognize the best original paper published in a Communications Society Magazine (*Communications or Network*) within the previous 3 calendar years.

Prize: Up to \$500 and Plaque per author (total prize not to exceed \$1,000). Maximum number of awards will be two (up to two papers per year), but only if a suitable number of recipients are identified.

Funding: Funded by the IEEE Communications Society. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.

Eligibility: Authors of original papers published in an IEEE Communications Society Magazine (*Communications or Network*) within the previous 3 calendar years. Author need not be a member of IEEE.

Basis for Judging: Quality, utility, timeliness, and clarity of presentation, comprehensible to the non-specialist.

Presentation: Annually at ICC.

8. **Best Tutorial Paper Award** (established in 1993; expanded scope in 2010)

Description: To recognize an outstanding tutorial paper published in any Communications Society Magazine or Journal within the previous 5 calendar years.

Prize: Up to \$500 and Plaque per author (total prize not to exceed \$1,000)

Funding: Funded by the IEEE Communications Society. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.

Eligibility: Authors of original papers published in any IEEE Communications Society Magazine or Journal within the previous 5 calendar years. Author need not be a member of IEEE.

Basis for Judging: Clarity and quality of presentation, timeliness and relevance of topic.

Presentation: Annually at ICC.

9. **Chapter Achievement Award** (established in 1994; title change effective 2003)

Description: To recognize the chapter that is judged to provide the greatest overall contribution and service to its members in the following categories: technical activities; societal activities; membership advancement, fellow nominations and awards; and enlistment of new Communications Society members.

Prize: (Two awards per year): \$1,000, banner, certificates for officers, travel expenses for one officer to attend awards presentation, if required.

Funding: Funded by the IEEE Communications Society.

Eligibility: IEEE Communications Society chapters

Basis for Judging: Demonstrated a high level of performance in previous years, in each of the areas covered by the selection criteria (technical activities; societal activities; membership advancement, fellow nominations and awards; and enlistment of new Communications Society members); initiated a plan for the current year which establishes goals and objectives in each area of the selection criteria; assigned responsibility to implement these plans and achieve results.

Presentation: Twice each year at a major IEEE Communications Society conference.

10. **IEEE Communications Society Joseph LoCicero Award for Exemplary Service to Publications**
(established in 1998) (revised 2003) (renamed 2008)

- Description:* To recognize individuals who have demonstrated exceptional service to Society publications over a sustained period of time.
- Prize:* \$1,000, Plaque and Certificate
- Funding:* To be funded from annual IEEE Communications Society operating expenses until a suitable endowment is established. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.
- Eligibility:* A Society member who has been involved with one or more of the Society's publications (e.g. Journals, Magazines; print or electronic) for a long period of time, and having made notable contributions in areas such as editing, publishing or otherwise facilitating their realization, quality, scope or visibility.
- Basis for Judging:* Factors to be considered in the selection (time of service, impact, specific innovations, etc.)
- Presentation:* The award will be presented at a venue appropriate to the award and the recipient. The award will not be conferred in any given year if a suitable candidate is not identified.

11. **ComSoc/IT Joint Paper Award** (established in 2000)

- Description:* To recognize outstanding papers published in any publication of the IEEE Communications Society or the IEEE Information Theory Society.
- Prize:* \$500 and Plaque for each author (total cost not to exceed \$1,000 for each paper)
- Funding:* Funded evenly by the two sponsoring Societies (Award is funded via IEEE Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation and IEEE Information Theory Society**).
- Eligibility:* Authors of papers published in any publication of the IEEE Communications Society or the IEEE Information Theory Society. The authors do not have to be a member of IEEE. Each year the papers published in the previous three years are considered. Presented annually; first presented in year 2000.
- Basis for Judging:* Quality, originality, utility, timeliness, and presentation. The paper should cover the interests and achieve the values of both the IEEE Communications Society and the IEEE Information Theory Society.
- Presentation:* Annually, at any event sponsored by either of the two sponsoring Societies selected by the recipient.

12. **Harold Sobol Award for Exemplary Service to Meetings & Conferences** (established in 2000) (revised 2005)

Description: To recognize a Society member who has demonstrated exemplary services to the meetings and conferences of the Society over a sustained period of time.

Prize: \$1,000, Plaque and Certificate

Funding: Funded by the IEEE Communications Society unless a suitable endowment is established. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.

Eligibility: IEEE Communications Society members having demonstrated exemplary services to the meetings and conferences of the Society over a sustained period of time.

Basis for Judging: Evaluation of candidates is based on such factors as long-term service, significant contributions, strategic planning and financial success, etc. No more than one award will be given per year. The award will not be conferred in any given year if a suitable candidate is not identified.

Presentation: At Globecom or other venue appropriate to the award and recipient.

13. **IEEE Communications Society Distinguished Industry Leader Award** (established in 2001)

Description: To recognize an industry executive whose leadership resulted in major and outstanding advances and new directions in the information and communications business area.

Prize: \$2,000, Plaque and Certificate. No more than two awards will be given per year.

Funding: Funded by the IEEE Communications Society (unless a suitable endowment is established in the future). Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.

Eligibility: An information or communication industry executive who played a major leadership role in research or development and introduction of systems, devices, applications or services that have significantly impacted the communications and information markets on a global basis and substantially advanced the use of information and communication technologies in industry, commerce, and society. The candidate is not required to be an IEEE member.

Basis for Judging: Evaluation of candidates is based on such factors as global acceptance of the products and services, financial success and growth of the business, ubiquity of the products and services, emulation of the contributions by competition, and degree of global recognition of the candidate.

Presentation: At a major Communications Society annual conference appropriate to the business area of the recipient. The award will not be conferred in any given year if suitable candidates are not identified.

14. **The Guglielmo Marconi Prize Paper Award**, IEEE Communications Society and IEEE Signal Processing Society (established in 2002; revised dates for Nominations 2013) (revised 2005, 2011)

Description: To recognize an original paper in the field of Wireless Communications published in the *IEEE Transactions on Wireless Communications* in the previous 3 calendar years.

Prize: Starting in 2003, a prize allocation of \$5,000 will be used to cover the following annual expenses for the award: Honorarium of up to \$1,000; Travel reimbursement of up to \$3,000; Plaque. In the event of multiple authors, a prize plaque will be given to each recipient and the honorarium and travel reimbursement will be shared equally among the authors. The total honorarium is not to exceed \$1,000 and total travel reimbursement is not to exceed \$3,000.

Funding: **The award (honorarium, travel, plaque) will be managed by the IEEE Foundation and funded by the IEEE Communications Society (75%) and the IEEE Signal Processing Society (25%) from the publication account for the *IEEE Transactions on Wireless Communications*, until an external sponsor is identified. Qualcomm agreed to term of 10 years beginning in 2003 at US\$5,000 per year endowment to the IEEE Foundation. The IEEE Communications Society will be responsible for the administration of the Marconi Prize Paper Award. However, the authority for all aspects of the journal and for the awarding of the prize resides with the Steering Committee.**

Eligibility: Authors of an original paper in the field of Wireless Communications, published in the *IEEE Transactions on Wireless Communications* in the previous 3 calendar years, are eligible for the Marconi Prize Paper Award. The authors need not be members of the IEEE.

Basis for Judging: High quality, original paper composite of originality, utility, timeliness and clarity of presentation. Dates for Nominations are 1 January through 31 January.

Presentation: Annually at the International Conference on Communications by the IEEE Communications Society Awards Committee Chair, in the name of the IEEE Communications Society, the IEEE Signal Processing Society, and the external sponsor of the award (when identified). An award may not be given if a paper of high quality is not uncovered.

15. **The Multimedia Prize Paper Award** IEEE Circuits and Systems Society, IEEE Communications Society, IEEE Computer Society, and IEEE Signal Processing Society (established in 2002)

Description: To recognize an original paper in the field of Multimedia published in the *IEEE Transactions on Multimedia* in the previous calendar year.

Prize: \$500 and Plaque for each author. The total honorarium is not to exceed \$1,000.

Funding: **The award will be funded equally by the four sponsoring societies (IEEE Circuits and Systems, IEEE Communications, IEEE Computer and IEEE Signal Processing Societies) from the publication account for the *IEEE Transactions on Multimedia*, until an external sponsor is identified (will be sought in 2003). The IEEE Signal Processing Society is the managing partner for the *IEEE Transactions on Multimedia*. Accordingly, IEEE Signal Processing Society will be responsible for the administration of the Multimedia Prize Paper Award. However, the authority for all aspects of the journal resides collectively with its Steering Committee.**

Eligibility: Authors of an original paper in the field of Multimedia, published in the *IEEE Transactions on Multimedia* in the previous year are eligible for the Marconi Prize Paper Award. The authors need not be members of the IEEE.

Basis for Judging: High quality, original paper composite of originality, utility, timeliness and clarity of presentation.

Presentation: Annually at the International Conference on Multimedia and Expo (ICME) by the General Chair of the conference, in the name of the four sponsoring societies. An award may not be given if a paper of high quality is not uncovered.

16. **IEEE Communications Society/Korean Information and Communications Society Exemplary Global Service Award** (established in 2007) (revised name 2014)

Description: To IEEE members and member of the IEEE Communications Society Sister Societies who have made outstanding sustained contributions that have significantly enhanced global interactions among communications and information technology engineers and scientists through the efforts of ComSoc and/or its sister societies.

Prize: \$2,000, Plaque and Certificate.

Funding: Funded by the IEEE Communications Society and Korean Information and Communications Societies. The Korean Information and Communications Society (KICS) will provide the honorarium and a travel grant of up to \$1,500 to the recipient to participate in the award presentation ceremony. The IEEE Communications Society (ComSoc) will provide the plaque and certificate.

Eligibility: IEEE Members and Members of IEEE Communications Society Sister Societies.

Basis for Judging: Outstanding sustained contributions that have significantly enhanced global interactions among communications and information technology engineers and scientists through the efforts of ComSoc and/or its sister societies.

Presentation: Annually at a venue to be agreed upon between the awardees and ComSoc staff, but preferably at the awards ceremony held at each IEEE GLOBECOM. First presentation of this award is expected during the Awards Luncheon at GLOBECOM 07 in November.

17. **IEEE Communications Society Award for Advances in Communication** (established in 2008) (renamed 2011)

Description: To recognize an outstanding paper on new communication topics published in an IEEE Communications Society publication within the previous 15 calendar years.

Prize: \$500, and Plaque, per author (up to a maximum total of \$2,000).

Funding: Funded by the IEEE Communications Society. Award is funded via Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation**.

Eligibility: Papers that open new lines of work, envision bold approaches to communication, formulate new problems to solve, and essentially enlarge the field of communications engineering. Given to an outstanding paper published in any IEEE Communications Society (ComSoc) publication in the previous calendar year; author need not be an IEEE member.

Basis for Judging: Quality, originality, novelty and impact. Award will not be given if a paper of high quality is not uncovered

Presentation: Annually at ICC or GLOBECOM.

18. **IEEE Communications Society Industrial Innovation Award** (established in 2009)

- Description:* To annually recognize an individual in industry for major industrial accomplishments, standards, deployment of important processes or products, etc., that substantially benefit the public in the field of communications and information technologies, and that are visible beyond the company or institution where the contribution was made.
- This award responds to our Society's need for an awards portfolio that provides opportunities for our many industry-based members who may have outstanding accomplishments but not be in a favorable position to compete with very high-level executives for our Distinguished Industry Leader Award, or with academics for our Armstrong Achievement Award. This new recognition for accomplishments of industry-based colleagues is an important initiative toward maintaining and building our industry-based membership.
- The ComSoc Board of Governors has committed to continuing sponsorship of this new award.
- Prize:* Plaque, certificate, and honorarium of \$1,000 for each recipient (up to three annually).
- Funding:* Funds will be covered by the annual Communications Society operating budget unless a suitable endowment is established. Each recipient receives an honorarium of \$1,000. Up to \$3,000 (plush the minimal cost of plaques and certificates) will be budgeted annually to cover the cost of up to 3 recipients per year.
- Eligibility:* The award shall be open to individuals at any level who were industry employees at the time of the accomplishment being recognized. Candidate need not be an IEEE member.
- Basis for Judging:* Basis for judging and factors to be considered in the selection are time/length of service, impact in the field of communications, specific innovations benefiting industry, commerce, and society.
- Presentation:* Annually (as soon as possible after recommendation). No more than three awards may be made in any calendar year. The award will not be conferred in any given year if suitable candidates are not identified. The award will be presented at a major Communications Society annual conference or venue appropriate to the business area of the recipient.

19. **IEEE Communications Society Heinrich Hertz Award for Best Communications Letter** (established in 2010; expanded scope in 2010, expanded scope 2013) (revised 2021)

- Description:* To recognize an outstanding Letter published in any letter journal financially sponsored or co-sponsored by the Communications Society which open new lines of research, envision bold approaches to communication, formulate new problems to solve, and essentially enlarge the field of communications engineering are eligible for this annual award.
- This award is named for a great pioneer of the field of electromagnetism, a field that is the foundation for many of the topics appearing in this journal. Heinrich Hertz, in the late 1880's, proved the existence of electromagnetic (radio) waves, which at that point was just a theory predicted by Maxwell and his famous equations. Hertz's experiments were followed in a decade by Marconi's demonstration of an actual wireless telegraph system. Hertz's contribution to the modern field of communications was so profoundly important that the units of frequency (formerly cycles per second) were renamed for him.
- Prize:* Plaque and honorarium of \$500 per author (up to a maximum of \$2,000). Maximum number of awards will be two (up to two papers per year), but only if a suitable number of recipients are identified.
- Funding:* Funding will be covered by the annual IEEE Communications Society operating budget unless a suitable endowment is established. Each recipient receives an honorarium of \$500 up to a maximum of \$2,000 (plus the minimal cost of plaques) and will be budgeted annually to cover the total cost of up to \$2,000 per year.
- Eligibility:* This award is given to an outstanding manuscript published in *IEEE Communications Letters* (or, if renamed, its successor) within the previous 3 calendar years, which opens new lines of research,

envision bold approaches to communication, formulates new problems to solve, and essentially enlarges the field of communications engineering. Recipients need not be IEEE members.

Basis for Judging: Quality, exposition, novelty, and impact. No more than five manuscripts will be submitted to the IEEE Communications Society Awards Committee for final selection by March 1 of each year. Selection will be based on rankings given to each nominated paper by each member of the subcommittee. Each paper submitted to the Awards Committee will be accompanied by a summary statement. The selection process shall comply with the procedures and regulations established in IEEE and ComSoc governing documents, in particular with IEEE Policy 4.4 on Award Limitations. If, in any year, no eligible letter is deemed to be of sufficient quality, no award will be given.

Presentation: Annually at ICC or GLOBECOM. The award and recipients' names will be published in the Awards Luncheon brochure and posted on the ComSoc website.

20. **IEEE Communications Society Charles Kao Award for Best Optical Communications & Networking Paper** (established in 2014)

Description: Award to recognize a best paper award published in *OSA/IEEE Journal on Optical Communications & Networking*.

Prize: Plaque and honorarium of \$500 per author (up to a maximum total of \$2,000). If more than four authors, the maximum of \$2,000 would be split between each author.

Funding: **The IEEE Communications Society will administer the award covered in part by an endowment established by the IEEE Foundation (until those funds are depleted) and the remaining out of annual Society operating expenses.**

Eligibility: This award will be given to papers published in the *OSA/IEEE Journal on Optical Communications & Networking (JOCN)* that open new lines of research, envision bold approaches to optical communication and networking, formulate new problems to solve, and essentially enlarge the field of optical communications and networking. Papers published in the prior three calendar years of JOCN are eligible for the award. Author need not be an IEEE member.

Basis for Judging: Quality, exposition, novelty and impact.

Presentation: Annually, at the OFC Conference.

21. **IEEE Communications Society Education Award** (established in 2014)

Description: To recognize distinguished and significant contributions to education within the Society's technical scope.

Prize: Plaque, certificate, and honorarium of \$1,000.

Funding: Funding will be covered by the annual Society operating budget unless a suitable endowment is established.

Eligibility: A Communications Society member at the time of nomination who is an educator and who has made distinguished and substantial contributions to education within the fields of interest of ComSoc.

Basis for Judging: Nominees shall be judged by a career of meritorious achievement as exemplified by writing of scholarly books and texts, course materials, and papers on education; inspirational and innovative teaching; creativity in the development of new curricula and methodology, etc.

Presentation: Annually presented by the IEEE Communications Society Awards Committee Chair, in the name of the IEEE Communications Society at the Global Communications Conference (GLOBECOM).

22. **IEEE Communications Society Young Author Best Paper Award** (established in 2014) (revised 2021)

Description: The Young Author Best Paper Award honors the author(s) of an especially meritorious paper

dealing with a subject related to the Society's technical scope and who, upon the date of submission of the paper, is less than 30 years of age.

- Prize:** Plaque and honorarium of \$1000. In the event that there is more than one young author, the maximum prize shall be divided equally among all young authors and each shall receive a plaque. Maximum number of awards will be two (up to two papers per year), but only if a suitable number of recipients are identified.
- Funding:** The IEEE Communications Society will administer the award out of annual Society operating budget.
- Eligibility:** Author(s) of an original paper in a subject related to the Society's technical scope and appearing in one of the Society's solely owned or jointly owned transactions or journals in the previous 3 calendar years and who, upon the date of submission of the paper, is(are) less than 30 years of age. There are no restrictions as to IEEE membership, nationality, race, creed, age or gender. The prize is only presented to the young author(s) who are under 30 years of age and have made a substantial contribution to the paper.
- Basis for Judging:** Originality, utility, timeliness, impact, and clarity of presentation.
- Presentation:** Annually presented by the IEEE Communications Society Awards Committee Chair, in the name of the IEEE Communications Society at the International Conference on Communications (ICC).

23. IEEE Communications Society Best Survey Paper Award (established in 2016)

- Description:** The Best Survey Paper Award honors the author(s) of an especially meritorious paper published in a ComSoc owned journal dealing with a subject related to the Society's technical scope.
- A survey paper provides a comprehensive state-of-the-art review of the literature in a selected area, covering its development from its inception to its current state and beyond. It is expected to illustrate the development of the field with the aid of liberal citations of the literature leading to an authoritative and comprehensive bibliography, with an emphasis on thoroughly refereed journal papers.
- There is no other IEEE ComSoc paper award which covers survey papers.
- Prize:** Winners receiving a plaque and a honorarium of \$500 per author (up to a maximum total of \$1,000). If there are more than four authors, the maximum of \$1,000 would be split among the authors.
- Funding:** The IEEE Communications Society will administer the award out of annual Society operating budget.
- Eligibility:** Papers published in any journal owned exclusively by the IEEE Communications Society in the past five years. There are no restrictions as to IEEE membership, nationality, race, creed, age, or gender.
- Basis for Judging:** Originality, utility, timeliness, impact, technical content and clarity of presentation.
- Presentation:** The award will be present every year at the IEEE International Conference on Communications.
- Annually presented by the IEEE Communications Society Awards Committee Chair, in the name of the IEEE Communications Society at the IEEE International Conference on Communications, a flagship ComSoc Conference during which paper awards are given.

23. IEEE Communications Society Robert M. Walp Industry Humanitarian Award (established in 2018)

- Description:** To recognize an industry executive or leader whose leadership has resulted in major and outstanding contributions to humanity through the application or use of information and communications technology.
- Prize:** Plaque, certificate, and honorarium of \$1,000.

Funding: The IEEE Communications Society will administer the award out of annual Society operating budget.

Eligibility: An information or communications industry executive who played a major leadership role in research or development and introduction of systems, devices, applications or services that have significantly impacted humanity through availability and use of such technologies in developing or under-served areas, improving the well-being of people, or enabling their access to emergency and other basic services. The candidate is not required to be an IEEE member.

Basis for Judging: Executive leadership applying advances in information and communications technology so that they have a substantial impact on humanitarian needs and objectives. Evaluation is based on such factors as widespread acceptance of the products and services, meeting humanitarian objectives, ubiquity of the products and services in under-served or underdeveloped regions or communities, emulation of the contributions by others, and degree of global recognition of the candidate by humanitarian and other organizations. Other factors include time of service, impact, specific innovations, etc.

Presentation: The award will be presented at either a major Communications Society annual event or an industry venue appropriate to the recipient, such venue being chosen by mutual agreement of ComSoc and the recipient. The award will not be conferred in any given year if a suitable candidate is not identified. No more than one award will be given in any calendar year (January 1 – December 31).

24. IEEE Internet of Things Journal Best Paper Award (joint award of IEEE Internet of Things Journal Steering Committee cosponsored by IEEE Communications Society, IEEE Computer Society, and IEEE Sensors Council) (established in 2020)

Description: To recognize the best papers published in the IEEE Internet of Things Journal. The award is based on originality, impact, relevance to the IoT-J's scope, and timeliness.

Prize: Up to two awards may be given annually; \$2,000 per award (split equally among the authors) and a Plaque for each winning author. The travel expenses of the lead author of each best paper shall be reimbursed.

Funding: Funds for this award come from the IEEE Internet of Things Journal. The first year, if necessary, the IEEE Sensors Council (the lead administrative cosponsor) may provide the funds (and be reimbursed by the other financial cosponsors).

Eligibility: Author(s) of any paper published in the IEEE Internet of Things Journal during the three calendar years preceding the date of the award is/are eligible.

Basis for Judging: The award is based on originality (unless the paper is a review paper), impact, relevance to the IoT-J's scope, and timeliness. The IoT-J Steering Committee, upon the recommendation of the IoT-J Editorial Board, decides if the nominees meet the standards necessary for the award. The decisions are based on simple majority voting by the voting members of the Steering Committee. Steering Committee members may not be a co-author of any paper considered for the award. The Steering Committee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented at a venue selected by the IoT-J Steering Committee. Travel expenses of one lead author per award shall be reimbursed upon request in accordance with IEEE travel policies.

25. IEEE Internet of Things Journal Outstanding Service Award (joint award of IEEE Internet of Things Journal Steering Committee cosponsored by IEEE Communications Society, IEEE Computer Society, and IEEE Sensors Council) (established in 2020)

Description: To honor long and distinguished service to the IEEE Internet of Things Journal.

Prize: One award is given annually; \$2,000 and a Plaque

Funding: Funds for this award come from the IEEE Internet of Things Journal. The first year, if necessary, the IEEE Sensors Council (the lead administrative cosponsor) may provide the funds (and be reimbursed by the other financial cosponsors).

Eligibility: The award is open to all who have contributed to the IEEE Internet of Things Journal.

Basis for Judging: The IoT-J Steering Committee decides if the nominees meet the standards necessary for the award. The decision is based on simple majority voting by the voting members of the Steering Committee. Steering Committee members may not be considered for the award. The Steering Committee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented at a venue selected by the IoT-J Steering Committee. The winner shall be for travel expenses to the award presentation in accordance with IEEE travel policies.

26. IEEE Communications Society Outstanding Paper Award (established in 2021)

Description: To honor the author(s) of an outstanding technical paper in the areas of interest and scope of the IEEE Communications Society (ComSoc).

Prize: \$1,000 to be split equally among co-authors of the awarded paper. Each author and co-author will receive a Plaque. At most one paper may be selected annually.

Funding: The IEEE Communications Society will administer the award out of its annual Society operating budget.

Eligibility: Author(s) of an impactful technical manuscript in the areas of interest of the Society, which has been published (i.e., assigned to an issue) in the previous 3 calendar years in Transactions or Journals solely/primarily owned/managed by ComSoc where no dedicated award exists at the time of publication of the paper. There are no restrictions for the Authors to be IEEE/ComSoc Members. *Previous recipients of this award are eligible, for a different paper.*

The list of journals and Transactions is provided before the end of each calendar year on the webpage of the Society.

Basis for Judging: Originality, overall impact, and clarity of presentation.

Presentation: Annually, preferably at ICC or GLOBECOM (as soon as possible after recommendation), or at a ComSoc Conference with very high visibility and attendance.

IEEE COMPUTATIONAL INTELLIGENCE SOCIETY

CIS-11 (Division X)

For all Computational Intelligence Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Neural Networks Pioneer Award** (revised 2003, 2004, 2010)

Description: To recognize significant contributions to early concepts and developments in the Neural Networks field.

Prize: \$2,500, Medallion and travel support for recipient and companion to attend presentation. Up to three (3) awards made annually.

Funding: Funded by the IEEE Computational Intelligence Society (IEEE formerly Neural Networks Society).

Eligibility: Open to all.

Basis for Judging: Significance of contribution made at least 15 years prior to award date.

Presentation: At International Joint Conference on Neural Networks.

2. **IEEE Transactions on Neural Networks and Learning Systems Outstanding XXXX (year article was published) Paper Award (Bestowed in XXXX)** (Established in 1997) (revised 2004, 2007) (revised name in 2016)

Description: To recognize annually the outstanding paper published in the *IEEE Transactions on Neural Networks* in the previous two-year period.

Prize: \$1,000 and Certificate to author of selected paper. For a paper with multiple authors, the cash award will be shared by the co-authors and each co-author will receive a certificate.

Funding: Funded by the IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society).

Eligibility: Authors of all papers published in the *IEEE Transactions on Neural Networks* are eligible. The paper must have appeared in the previous two year period. A paper selected for the award is not eligible for a second award in the following year.

Basis for Judging: Overall quality.

Presentation: Awards winners will be announced publicly in the *IEEE Transactions on Neural Networks*. Additional recognition will be given at awards ceremonies at the annual IEEE International Joint Conference on Neural Networks.

3. **IEEE Transactions on Fuzzy Systems Outstanding XXXX (year article was published) Paper Award (Bestowed in XXXX)** (established in 1997) (revised 2004)

Description: To recognize annually the outstanding paper published in the *IEEE Transactions on Fuzzy Systems* in the previous two-year period.

Prize: \$1,000 and Certificate to author of selected paper. For a paper with multiple authors, the cash award will be shared by the co-authors and each co-author will receive a certificate.

Funding: Funded by the Computational Intelligence Society (formerly IEEE Neural Networks Society).

Eligibility: Authors of all papers published in the *IEEE Transactions on Fuzzy Systems* are eligible. The paper must have appeared in the previous two year period. A paper selected for the award is not eligible for a second award in the following year.

Basis for Judging: Overall quality.

Presentation: Awards winners will be announced publicly in the *IEEE Transactions on Fuzzy Systems*. Additional recognition will be given at awards ceremonies at the annual IEEE International Conference on Fuzzy Systems.

4. ***IEEE Transactions on Evolutionary Computation Outstanding XXXX (year article was published) Paper Award (Bestowed in XXXX)*** (established in 1997) (revised 2004, 2007)

Description: To recognize annually the outstanding paper published in the *IEEE Transactions on Evolutionary Computation* in the previous two-year period.

Prize: \$1,000 and Certificate to author of selected paper. For a paper with multiple authors, the cash award will be shared by the co-authors and each co-author will receive a certificate.

Funding: Funded by the IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society).

Eligibility: Authors of all papers published in the *IEEE Transactions on Evolutionary Computation* are eligible. The paper must have appeared in the previous two year period. A paper selected for the award is not eligible for a second award in the following year.

Basis for Judging: Overall quality.

Presentation: Awards winners will be announced publicly in the *IEEE Transactions on Evolutionary Computation*. Additional recognition will be given at awards ceremonies at the annual IEEE International Conference on Evolutionary Computation.

5. ***Evolutionary Computation Pioneer Award*** (established in 1997) (revised 2003, 2004, 2010)

Description: To recognize significant contributions to early concepts and developments in the field of evolutionary computation.

Prize: \$2,500, Medallion and travel grant for the honoree and companion to awards ceremony. Up to three (3) awards made annually.

Funding: Funded by the IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society).

Eligibility: Open to all meeting the contribution requirements: contributions must have been made at least 15 years prior to award date.

Basis for Judging: Overall quality.

Presentation: Awards winners will be presented at the next IEEE International Conference on Evolutionary Computation.

6. ***Fuzzy Systems Pioneer Award*** (established in 2000) (revised 2003, 2004, 2010)

Description: To recognize significant contributions to early concepts and developments in the field of fuzzy systems.

Prize: \$2,500, Medallion and travel grant for the honoree and companion to awards ceremony. Up to two (2) awards made annually. Note: Travel grants will follow IEEE guidelines. A fixed amount is not listed, since some recipients live near presentation sites, but others must travel overseas. The amount will be capped based on individual needs, IEEE guidelines, and the yearly budget allocation by NNC.

Funding: Funded by the IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society).

Eligibility: Open to all meeting the contribution requirements: contributions must have been made at least 15 years prior to award date.

Basis for Judging: Overall quality. The high prestige of this award mandates a full case development for the nominee's achievements, including significant External letters of recommendation for the nominee.

Presentation: Presented at the next IEEE International Conference on Fuzzy Systems.

7. **IEEE Computational Intelligence Society Enrique Ruspini Award for Meritorious Service** (established in 2000) (revised 2004) (revised 2021)

Description: To recognize meritorious service to the IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society). The award is named to honor Enrique Ruspini's decades of service to the IEEE Computational Intelligence Society not only as a volunteer on many levels within IEEE but also as a significant contributor to the field of computational intelligence technologies.

Prize: \$1,500 and Certificate. Up to two (2) awards made annually.

Funding: Funded by the IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society).

Eligibility: Must be or have been a member or associate member of an IEEE Society. No minimum number of years is required.

Basis for Judging: Exceptional administrative, managerial and leadership achievement; proposal and/or implementation of innovative new NNC programs; dedication to the growth and advancement of NNC and its geographic and technical entities.

Presentation: Presented at a major IEEE CIS Conference.

8. **Outstanding Chapter Award** (established in 2004)

Description: To recognize the chapter that is judged to have provided the greatest overall contribution and service to its members; the local scientific, professional, governmental, and educational communities; and the IEEE CIS.

Prize: \$2,000 and Certificate issued in the name of the winning Chapter and each of the Officers.

Funding: Funded by the IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society).

Eligibility: All CIS Chapters are eligible. Chapter Chairs must apply for the award by sending applications to the Chair of the IEEE CIS Awards Committee or his designated representative. The same Chapter will not receive the award for more than two consecutive years.

Basis for Judging: The achievement year is the prior calendar year. Evaluation will be based on the following criteria: 1) List of realized activities – number of activities; their complexity, their variety; number of served members and non-members; categories of served members and non-members and their variety; 2) Innovative ideas to promote CIS and serve the local scientific, professional, governmental, and educational communities – novelty of chapter activity and the impact on society performance; 3) dissemination activities – characteristics and the features/services offered by the chapter web site will be considered; 4) ability of recruiting and retaining members – quality of membership development plan and its effectiveness are considered.

Presentation: Preferred award presentation location and date: IJCNN or FUZZ IEEE or CEC conferences.

9. **Outstanding PhD Dissertation Award** (established in 2004)

- Description:* To recognize the PhD dissertation that is judged to have given the most outstanding contribution to the advancement of theory and/or applications of computational intelligence.
- Prize:* \$1,000 and Certificate
- Funding:* Funded by the IEEE Computational Intelligence Society (formerly IEEE Neural Networks Society).
- Eligibility:* All PhD dissertations in theory and/or applications of computational intelligence for which the PhD degree has been granted up to the fourth year (included) prior to the calendar year when the recipient of the award is selected are eligible. Candidates must apply or be nominated. Applications/nominations may be resubmitted up to three times.
- Basis for Judging:* Evaluation will be based on the following criteria: 1) PhD dissertation – the quality of the dissertation, the originality, and the impact of the achievements from the point of view of theory and/or applications will be considered; 2) Publications and other outcomes – quantity and quality of the publications, quality of the journals and conferences in which the achievements have been published, and quantity and quality of the other outcomes will be considered; 3) Referee letters – relevance of the referee letters and opinions expressed by the referees will be considered.
- Presentation:* Preferred award presentation location and date: IJCNN or FUZZ IEEE or CEC conferences.

10. **IEEE Outstanding Computational Intelligence Society Early Career Award** (established in 2010)

- Description:* To recognize an outstanding young scientist or engineer who contributed to the advancement of theory, technologies, and/or applications of computational intelligence through inventions, new technologies, innovative technical developments, new product implementations, or the management of innovative product design or production processes.
- Prize:* \$1,000 and Certificate
- Funding:* Funded by the IEEE Computational Intelligence Society.
- Eligibility:* Any scientist or engineer who is not over 40 years old in the calendar year when the recipient of the award is selected is eligible. The candidate's achievements will be evaluated comprehensively in light of:
- the basis for the nomination, in which the individual's achievements in computational intelligence are described clearly,
 - outcomes that constitute tangible advancements or applications of computational intelligence used by the scientific and professional communities, as well as by government agencies or people in daily life,
 - reference letters by individuals including scientists, engineers, or government officers.
- Each achievement should be listed in the application/nomination and provided with the application/nomination itself, as follows:
- basis for the nomination,
 - list of outcomes that constitute tangible items,
 - list of reference letters.
- All material submitted for the evaluation must be in English. Members of this Award Sub-Committee are not eligible for this award for which they participate in the selection process.
- Basis for Judging:* The evaluation of each achievement of the overall young engineer will be based on the following criteria:

- *Basis for nomination.*
The amount and the quality of the performed activities, the impact on the industry, economy, government and society, and the impact of the achievements from the point of view of theory, technologies, and/or applications will be considered.

- *Outcomes.*
Quantity and quality of the outcomes will be considered.
- *Reference letters.*
Relevance of the reference letters will be considered.

Presentation: Preferred award presentation location and date: IJCNN, FUZZ-IEEE, IEEE-CEC, IEEE-WCCI, or IEEE-SSCI conferences.

11. **IEEE Outstanding Computational Intelligence Society Organization Award** (established in 2010)

Description: To recognize an outstanding organization that contributed to the advancement of theory, technologies, and/or applications of computational intelligence through inventions, new technologies, innovative technical developments, new product implementations, or the management of innovative product design or production processes.

Prize: Plaque

Funding: Funded by the IEEE Computational Intelligence Society.

Eligibility: Any organizations (e.g., corporations, governmental bodies, industrial laboratories) that have been established prior to the calendar year when the recipient of the award is selected are eligible. The candidate organization's achievements will be evaluated comprehensively in light of:

- a description of the organization's history, activities, and achievements, in which the achievements in computational intelligence are described clearly,
- outcomes that constitute tangible items usable by the scientific and professional communities, as well as by government agencies or people in daily life,
- reference letters by individuals, including scientists, professional engineers, or government officers.

Each achievement should be listed in the application/nomination and provided with the application/nomination itself, as follows:

- description of the organization history, activities, and achievements,
- list of outcomes that constitute tangible items,
- list of reference letters.

All material submitted for the evaluation must be in English. The organizations that employ the members of this Award Sub-Committee are not eligible for this award.

Basis for Judging: The evaluation of achievements of the organization will be based on the following criteria:

- *Description of the organization's history, activities, and achievements.*
The amount and the quality of the activities performed, the impact on industry, the economy, government, and society, and the impact of the achievements from the point of view of theory, technologies, and/or applications.
- *Outcomes.*
Quantity and quality of the outcomes will be considered.
- *Reference letters.*
Relevance of the reference letters will be considered.

Presentation: Preferred award presentation location and date: IJCNN, FUZZ-IEEE, IEEE-CEC, IEEE-WCCI, or IEEE-SSCI conferences.

12. **IEEE Computational Intelligence Magazine Outstanding NNNN Paper Award, (Bestowed in NNNN +3)**
NOTE: Where NNNN is the calendar year that is 2 years prior to the year of the Selection of the award
(established in 2013)

Description: To recognize annually outstanding papers published *IEEE Computational Intelligence Magazine*. Up to three (3) awards made annually.

Prize: \$ 1,000 to be split equally among co-authors and certificates to the author and co-authors of the selected paper (1 paper per year).

Funding: Funded by the IEEE Computational Intelligence Society.

Eligibility: Authors of all papers published in the *IEEE Computational Intelligence Magazine* in the calendar year that is 2 years prior to the selection of the award are eligible. For example, for the next round of competition (to be bestowed in 2014) papers published in 2011 are eligible for consideration.

Basis for Judging: Overall quality.

Presentation: Presentation will be given at awards ceremonies at IEEE World Congress on Computational Intelligence or another major CIS Conference after the award is announced.

13. ***IEEE Transactions on Games Outstanding NNNN Paper Award (Bestowed in NNNN+3) NOTE: Where NNNN is the calendar year that is 2 years prior to the year of the Selection of the award*** (established in 2013) (revised title in 2020)

Description: To recognize annually outstanding papers published in the *IEEE Transactions on Games*.

Prize: \$ 1,000 to be split equally among coauthors and certificates to the author and co-authors of the selected paper (up to 3 papers per year).

Funding: Funded by the IEEE Computational Intelligence Society.

Eligibility: Authors of all papers published in the *IEEE Transactions on Games* in the calendar year that is 2 years prior to the selection of the award are eligible. For example for the next round of competition (to be bestowed in 2014) papers published in the 2011 are eligible for consideration.

Basis for Judging: Overall quality.

Presentation: Presentation will be given at awards ceremonies at IEEE Computational Intelligence in Games or another major CIS Conference after the award is announced.

14. ***IEEE Transactions on Autonomous Mental Development Outstanding NNNN Paper Award, (Bestowed in NNNN+3) NOTE: Where NNNN is the calendar year that is 2 years prior to the year of the Selection of the award*** (established in 2013)

Description: To recognize annually outstanding papers published in the *IEEE Transactions on Autonomous Mental Development*.

Prize: \$ 1,000 to be split equally among coauthors and certificates to the author and co-authors of the selected paper (up to 3 papers per year).

Funding: Funded by the IEEE Computational Intelligence Society.

Eligibility: Authors of all papers published in the *IEEE Transactions Autonomous Mental Development* in the calendar year that is 2 years prior to the selection of the award are eligible. For example for the next round of competition (to be bestowed in 2014) papers published in the 2011 are eligible for consideration.

Basis for Judging: Overall quality.

Presentation: Presentation will be given at awards ceremonies at IEEE International Conference on Development and Learning (ICDL) or another major CIS Conference after the award is announced.

15. ***IEEE Transactions on Emerging Topics in Computational Intelligence Outstanding Paper Award*** (established in 2019)

Description: To recognize annually outstanding papers published in the *IEEE Transactions on Emerging Topics in Computational Intelligence*.

Prize: \$ 1,000 to be split equally among coauthors and certificates to the author and co-authors of the selected paper (up to 3 papers per year).

Funding: Funded by the IEEE Computational Intelligence Society.

Eligibility: Authors of all papers published in the *IEEE Transactions on Emerging Topics in Computational Intelligence* in the calendar year that is 2 years prior to the selection of the award are eligible. For example for the next round of competition (to be bestowed in NNNN+3) Note where NNNN is

the calendar year that is 2 years prior to the year of the selection of the award are eligible for consideration.

Basis for Judging: Overall quality.

Presentation: Presentation will be given at awards ceremonies at an IEEE Computational Intelligence Conference after the award is announced.

16. **IEEE <Conference Name> Best Paper Award** (established in 2019)

Description: To recognize best papers at conferences financially sponsored by the IEEE Computational Intelligence Society.

Prize: Up to \$200 total per award to be split equally among coauthors and certificates to the author and co-authors of the selected paper (for up to 3 best papers per annual conference).

Funding: Up to \$600 as included in conference budget approved by the IEEE CIS Conferences Committee.

Eligibility: Authors of all papers accepted for the conference are eligible for the best paper award for that conference.

Basis for Judging: Overall quality. The conference organizing committee and/or reviewers review the submissions for overall quality. The awards committee then confirms the successful candidates for presentation to the conference organizing committee for formal approval. This could for instance be judged on the merit of highest weighted average reviewer score over multiple reviewers.

Presentation: Presentation will be given at awards ceremonies and/or banquet at the IEEE CIS financially sponsored conference.

17. **IEEE <Conference Name> Best Student Paper Award** (established in 2019)

Description: To recognize best student papers at conferences financially sponsored by the IEEE Computational Intelligence Society.

Prize: Up to \$200 total per award to be split equally among coauthors and certificates to the author and co-authors of the selected paper (for up to 3 best student papers per annual conference).

Funding: Up to \$600 as included in conference budget approved by the IEEE CIS Conferences Committee.

Eligibility: Only student authors of all papers accepted for the conference are eligible for the best student paper award for that conference.

Basis for Judging: Overall quality. The conference organizing committee and/or reviewers review the submissions for overall quality. The awards committee then confirms the successful candidates for presentation to the conference organizing committee for formal approval. This could for instance be judged on the merit of highest weighted average reviewer score over multiple reviewers.

Presentation: Presentation will be given at awards ceremonies and/or banquet at the IEEE CIS financially sponsored conference.

18. **IEEE <Conference Name> Best Poster Paper Award** (established in 2019)

Description: To recognize best poster papers at conferences financially sponsored by the IEEE Computational Intelligence Society.

Prize: Up to \$200 total per award to be split equally among coauthors and certificates to the author and co-authors of the selected paper (for up to 3 best poster papers per annual conference).

Funding: Up to \$600 as included in conference budget approved by the IEEE CIS Conferences Committee.

Eligibility: Authors of all papers accepted for presentation in poster format for the conference are eligible for the best poster paper award for that conference.

Basis for Judging: Overall quality. The conference organizing committee and/or reviewers review the submissions for overall quality and/or poster presentation. The awards committee then confirms the successful candidates for presentation to the conference organizing committee for formal approval. This could for instance be judged on the merit of highest weighted average reviewer score over multiple reviewers and or the consent and presentation of a poster.

Presentation: Presentation will be given at awards ceremonies and/or banquet at the IEEE CIS financially sponsored conference.

19. IEEE Computational Intelligence Society Conference Competition Awards (established in 2020)

Description: Establishment of the following types of Conference Competition Award (CCA) categories for all financially sponsored or financially co-sponsored conferences:

- (1) Competition assessed based on an **Absolute** Measure of Quality;
- (2) Competition assessed based on a **Relative** Measure of Quality;
- (3) Competition assessed based on a **Human** Judging Process.

These categories are defined in greater detail below. The conference organizers may or may not offer one or more competitions with clearly distinct goals within each of the above award categories. The conference organizers may or may not offer competitions in all, some, one, or none of the above three award categories.

Definitions:

1) Based on an **Absolute** measure of quality (which could be either single objective or multi-objective): This includes most optimization and pattern recognition problems, and single-player games and puzzles. Note that “absolute” should not be taken too literally, as it might depend on the dataset used. The critical point is that *each entry is scored independently of every other entry, and then they are ranked according to their scores;*

2) Based on a **Relative** measure of success: This includes games involving two or more [human or virtual] players, and the *performance of an entry is measured by how well it plays against the other entries* (e.g., round robin league, knock out tournament);

3) Based on a **Human** judging process: This includes any category where the *ranking criteria is not automatically measured by a score but rather determined objectively by human judges* (e.g., computer generated art, short o recognize best poster papers at conferences financially sponsored by the IEEE Computational Intelligence Society.

Prize: Within each competition award category, each competition award shall consist of a certificate for each awardee and an optional prize (either in cash or a present whose value does not exceed the prize limit.) The awardee could be a team or an individual. The maximum prize limit for an award is 1000.00 USD for 1st prize, 500.00 USD for 2nd prize and 200.00 USD for 3rd prize. The number of Conference Competition Awards is dictated by the number of IEEE CIS financially sponsored conferences, the choice by the General Chair(s) of those conferences to offer conference competitions, the choice of the General Chair(s) to determine which of the three possible types of competitions to provide and within those types how many competitions to provide, each having their own winners).

Funding: Conference funds and in some cases IEEE CIS society funds.

Eligibility: At least one competitor in each team competing at a conference should be a registered conference participant. If someone is competing in multiple competitions that person is eligible to receive multiple awards from different competitions, but not from multiple entries within the same competition.

Basis for Judging: Given the diversity of conference competitions, competitions will be judged relative to one of three basic types – 1) a measure of absolute quality, 2) a measure of relative quality, and 3) a measure of human objectivity.

Presentation: The conference competition award(s) will be bestowed to the winners at the annual conference associated with each conference competition.

IEEE COMPUTER SOCIETY
COMP-16 (Divisions V & VIII)

For all Computer Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **W. Wallace McDowell Award** (revised 1996)

Description: To recognize outstanding recent theoretical design, educational, practical, or other similar innovative contribution that falls within the scope of the IEEE Computer Society interest.

Prize: \$2,000, Certificate and Bronze Medal, plus subsidized travel expenses for recipient and companion to attend award presentation.

Funding: **Funded by IBM from 1962 to date, managed by the IEEE Foundation.**

Eligibility: Open to all.

Basis for Judging: May be given for a single contribution of great merit or a series of lesser contributions that have had or are expected to have an important influence in the Computer field.

2. **Eckert-Mauchly Award** (revised 1997, 1998)

Description: To recognize outstanding contributions to the field of Computer Architecture.

Prize: \$5,000 and Certificate. Travel expense reimbursement is available if necessary to assure the attendance of the awardee at the presentation ceremony.

Funding: Sponsored jointly by the IEEE Computer Society and ACM.

Eligibility: Open to all.

Presentation: Annually, at the Computer Architecture Symposium.

3. **IEEE Computer Society Women of the ENIAC Computer Pioneer Award**

Description: To recognize significant contributions to concepts and developments in the Electronic Computer field which have clearly advanced the state of the art in computing.

Prize: Bronze medal. Travel funds will be provided if necessary to assure that the awardee(s) and one companion each can travel to the presentation.

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all. Contributions must have taken place 15 or more years prior to eligibility and shall not be approved posthumously.

Presentation: Up to four (4) awards presented annually.

4. **Taylor Booth Education Award** (revised 1996, 1999)

Description: To recognize an outstanding record in computer science and engineering education.

Prize: \$5,000 and Bronze Medal. Travel funds will be provided if necessary to assure that the awardee and one companion can attend the presentation.

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all.

Basis for Judging: Factors for consideration include: achieving recognition as a teacher of renown in a relevant and applicable course; writing an influential text in computer science and engineering; leading, inspiring, or providing significant educational content during the creation of a curriculum in the field; inspiring others to a career in computer sciences and engineering education.

5. **Computer Entrepreneur Award**

Description: To recognize managers and leaders that are responsible for the growth of some segment of the computer industry, or technical managers whose entrepreneurial leadership built the computer industry.

Prize: Museum-quality sterling silver chalice. Travel funds will be provided if necessary to assure that the awardee and one companion can travel to the presentation.

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all. Efforts must have taken place over 15 years earlier.

Basis for Judging: Industry effects of effort must be generally and openly visible.

6. **IEEE Computer Society Edward J. McCluskey Technical Achievement Award** (renamed 2018)

Description: To recognize outstanding and innovative contributions to the fields of computer and information science and engineering or computer technology, usually within the past 10 and not more than 15 years.

Prize: Certificate. Travel funds will be provided if necessary to assure that the awardee and one companion can travel to the presentation.

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all for contributions within the past 15 years, except those who have received major awards in the same technical area.

Basis for Judging: Contributions must have significantly promoted technical progress in the field.

Presentation: Up to two awards may be made annually, plus co-awardees if warranted; to be presented at COMPCON's and COMPSAC, if possible.

7. **IEEE Computer Society/Software Engineering Institute Watts S. Humphrey Software Process Achievement Award** (established in 1994) (renamed 2011)

Description: To recognize outstanding achievement in improving the software process.

Prize: \$1,500, Plaque and invitation to produce a technical report describing the process improvement and results, and to present a paper at the Annual SEI Software Engineering Symposium; (funds provided by Software Engineering Institute.)

Funding: Sponsored jointly by the IEEE Computer Society and the Software Engineering Institute, Funded by the Software Engineering Institute.

Eligibility: Open to all software professionals (individuals or teams) who participate in software development, support, or management, and are employed by and participate in the software work of an organization that produces, supports, enhances or otherwise provides software-intensive products or services.

Basis for Judging: Improvement must be both sustained and measured, and must help to further process improvement in other organizations. For a process improvement to be sustained, it must have

resulted in a broad, documented improvement that will have a positive impact on the organization's current and future projects. This improvement may involve management, support, development, or operational methods or procedures, and may include other activities in addition to software development or enhancement. To be measured, the improvement must be supported by data clearly identifying performance before and after the improvement. In addition, the connection between the improvement and the measured results must be demonstrated.

8. **Hans Karlsson Award** (established in 1993)

Description: To recognize team leadership and achievement through collaboration in the field of computing standards and to honor the memory of Dr. Hans Karlsson.

Prize: Plaque

Funding: Funded by the IEEE Computer Society

Basis for Judging: Criteria include: leadership skills demonstrated, difficulty of the problem, team facilitation skills, recognition by peers.

Presentation: Annually, when criteria are met, at an appropriate meeting.

9. **Periodical Outstanding Paper Awards**

Description: To recognize the most outstanding contribution to the state of the art within the scope of the *Computer Society Magazine* or *IEEE Transactions on Computers*.

Prize: \$500 and Certificate (if multiple authors, each receives a certificate and prorated cash prize).

Funding: Funded by the IEEE Computer Society.

Eligibility: Authors of papers published in *Computer Society Magazine* or *IEEE Transactions on Computers* during a specified period, usually a calendar year.

10. **Conference Outstanding Paper Awards**

Description: To recognize the most outstanding contribution to the state of the art within the scope of an IEEE Computer Society sponsored or cosponsored conference.

Prize: \$500 (as determined by Conference) and Certificate (if multiple authors, each receives a certificate and prorated cash prize).

Funding: Funded by the IEEE Computer Society.

Eligibility: Authors of papers presented at the conference which are published in the conference record or proceedings.

Presentation: Awards should be presented at the next conference in the series if possible, or at one of the sponsoring Society's major conferences.

11. **Software Engineering Best Paper Award**

Description: To recognize the best paper presented at the Software Engineering Annual Conference.

Prize: \$500 and Certificate

Funding: Funded by the IEEE Computer Society.

Eligibility: Authors of original papers included in the conference publication and presented at Software Engineering Annual Conference.

Basis for Judging: Criteria for selection: the most outstanding contribution to the state of the art within the scope of

the conference, originality, quality, presentation.

Presentation: At the Software Engineering Annual Conference.

12. **K. S. Fu Memorial Best Paper Award**

- Description:* To recognize the best paper in the proceedings of the annual conference on pattern recognition.
- Prize:* \$200 and Certificate
- Funding:* Funded by the IEEE Computer Society.
- Eligibility:* Authors of original papers included in the printed proceedings of the annual conference on pattern recognition.
- Basis for Judging:* State-of-the-art subject within the scope of the conference, originality, quality, and presentation.
- Presentation:* At the conference in the following year.

13. **Wing Toy Best Student Paper Award** (established in 1993)

- Description:* To recognize the best student paper presented at the Symposium on Reliable Distributed Systems and to honor the memory of Dr. Wing Toy.
- Prize:* \$500 and Certificate
- Funding:* Initial funds provided by AT&T Bell Laboratories, Naperville, IL and by Mrs. Wing Toy and be held in escrow by the CS Technical Committee on Distribution Processing.
- Eligibility:* Any person who spends the majority of his time being a student at an accredited university, who is selected to present a paper at the Symposium. At least two separate "student" papers must be presented at the Symposium in the year the award is given in order to select the "best."
- Presentation:* At the Symposium on Reliable Distributed Systems.

14. **Sidney Fernbach Memorial Award** (established in 1993)

- Description:* To recognize outstanding contributions in the application of high-performance computers using innovative approaches and to honor the memory of Dr. Sidney Fernbach.
- Prize:* \$2,000, Certificate, and invitation to present the Sid Fernbach Memorial Lecture at one or more conferences sponsored or cosponsored by the Computer Society.
- Funding:* Honorarium and certificate funded by the IEEE Computer Society. Travel funds to be supplied by the Conference(s) at which the lecture is presented.
- Eligibility:* Any person recognized in the field of supercomputing.
- Presentation:* Annually, when eligibility criteria are met, at the Supercomputing Conference.

15. **Lance Stafford Larson Memorial Award** (established in 1983) (revised 1994)

- Prize:* \$500 (to be shared equally if more than one author), and Certificate (per author)
- Funding:* **Funded by small contributions from family and friends of Lance Stafford Larson, managed by the IEEE Foundation.**
- Eligibility:* Student members of the IEEE Computer Society who are authors of papers on computer-related subjects.
- Basis for Judging:* Best student paper judged by technical content, writing skill and overall presentation.
- Presentation:* At an IEEE Computer Society function close to the award winner's home or university.

16. **Richard E. Merwin Award for Distinguished Service** (revised 1996, 1999)

Description: To recognize outstanding service to the profession at large, including significant service to the IEEE Computer Society or its predecessor organization.

Prize: \$5,000, Bronze Medal and Certificate. Travel funds will be provided if necessary to assure that the awardee and one companion can travel to the presentation.

Funding: **Funded by small contributions from family and friends of Richard E. Merwin, managed by the IEEE Foundation.**

Eligibility: Current or past IEEE Computer Society Presidents shall not be eligible until four (4) years after completion of term of office.

Presentation: At any appropriate Society function.

17. **IEEE Computer Society T. Michael Elliot Distinguished Service Certificate** (revised name 2018)

Description: To recognize long and distinguished service to the IEEE Computer Society at a level of dedication and achievement rarely demonstrated.

Prize: Certificate

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all.

Basis for Judging: Often includes service in several capacities and positions of significant Society responsible, with contribution levels justifying multiple Meritorious Service Certificates or higher.

Presentation: At any appropriate Society function.

18. **Outstanding Contribution Certificate**

Description: To recognize an achievement of major value and significance to the IEEE Computer Society.

Prize: Certificate

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all.

Basis for Judging: Achievement should be a specific, concisely characterized accomplishment as opposed to a collection of different efforts; for example, the successful launching of a conference series, publications, standards, etc.

Presentation: At any appropriate Society function.

19. **Meritorious Service Award**

Description: To recognize meritorious and significant service to any Society-sponsored activity.

Prize: Certificate

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all.

Basis for Judging: Qualification is enhanced by the level and number of contributions, excellence, dedication, and tenure of service. Areas of contributions include any editorship, committee or conference support of unusual and/or continuing nature and service as Society officer or committee chair.

Presentation: At any appropriate Society function.

20. **Certificate of Appreciation**

Description: To recognize creditable service to any Society activity or program.

Prize: Certificate

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all.

Presentation: At any appropriate Society function.

21. **Outstanding Chapter Award** (established in 1994)

Description: To recognize the chapter and student branch chapter that perform best during the previous year as compared to all other chapters.

Prize: A Certificate and fully paid Distinguished Visitors Program (DVP) visit to the first place winning chapter and student branch chapter. Four additional certificate awards will be presented consisting of one each to the second place winning chapter and student branch chapter and one each to the third place winning chapter and student branch chapter. In addition, the second and third place winning chapters and student branch chapters will be awarded one IEEE Computer Society publication of choice to aid in the development of their chapter library.

Funding: Funded by the IEEE Computer Society Membership Activities Board (MAB).

Eligibility: IEEE Computer Society Chapters

Basis for Judging: The level of performance will be based on the guidelines for the Outstanding Chapter Award established by the Membership Activities Board.

Presentation: Annually

22. **Richard E. Merwin Scholarships**

Prize: \$3,000 for one academic year (nine months) starting in September and paid in three (3) quarterly installments (September, January, and April).

Funding: Funded by the IEEE Computer Society.

Eligibility: Graduate students, Juniors and Seniors in electrical engineering, computer engineering, computer science, or well-defined computer related field of engineering (e.g., biomedical computer engineering, design automation, etc.) who are active members of the IEEE Computer Society Student Branch Chapter at their institution. There are no restrictions on the receipt of other scholarships or awards in conjunction with receiving this scholarship. Minimum overall grade point average should be 2.5 over 4.0 for all undergraduate course work. The applicant must be enrolled as a full-time student as defined by his or her academic institution during the course of the award.

Basis for Judging: The primary factors considered are: involvement in Chapter activities (counts 40%), academic achievement (counts 30%), other extracurricular activities in college (counts 10%), and letter of evaluation by Branch Chapter Advisor (counts 20%)

23. **Tsutomu Kanai Award** (established in 1995) (revised in 1997)

- Description:* To recognize an individual who has made major contributions to the state of the art of distributed computing systems and their applications.
- Prize:* \$10,000, Trophy and Certificate with an appropriate citation; reimbursement of reasonable related travel expenses for the recipient and one companion to the conference where the award is presented; a travel grant of up to \$5,000 to cover reimbursement of reasonable related travel expenses for attendance of one conference (international or national) with a technical visit scheduled in conjunction with the conference for the recipient to promote or pursue collaborative research in the scope of the award.
- Funding:* Funded by Hitachi, Ltd.
- Eligibility:* No restriction other than to those who have made major contributions to the state of the art of distributed computing systems and their applications.
- Basis for Judging:* Identifiable major contributions in distributed computing systems and their applications.
- Presentation:* Presented by the President, or designated senior representative of the IEEE Computer Society at a major IEEE Computer Society conference in the area related to distributed computing systems and their applications.

24. **IEEE Computer Society Mary Kenneth Keller Computer Science and Engineering Undergraduate Teaching Award** (established in 1996; revised title 2019)

- Description:* To recognize outstanding contributions to undergraduate education through both teaching and service. The award will focus interest on undergraduate education, as well as affirm support for excellence in undergraduate education.
- Prize:* A stipend of \$2,000, a Plaque and Certificate. Travel funds to assure that the awardee and one companion can attend the presentation.
- Funds:* Funded by the IEEE Computer Society.
- Eligibility:* A faculty member in a degree program in computer science, computer engineering, computer information systems, or a similar program.
- Basis for Judging:* 1) Evidence of sustained excellence in undergraduate teaching, documented by input from present and former students and colleagues; 2) documented evidence of excellence in advising and mentoring undergraduate students; 3) development and implementation of undergraduate courses and laboratories; 4) innovative approaches to undergraduate teaching; and 5) dissemination of successful approaches to undergraduate teaching.
- Presentation:* Annually, by the President, or a designated senior representative of the IEEE Computer Society, at a Society conference or activity in the area related to undergraduate education.

25. **Seymour Cray Computer Engineering Award** (effective 1999)

- Description:* For innovative contributions to high performance computing systems that best exemplify the creative spirit demonstrated by Seymour Cray.
- Prize:* Crystal model, illuminated certificate and honorarium of \$10,000. Travel expenses will be provided, if necessary, for the awardee(s) and companion to the presentation site.
- Funding:* Funded from an endowment provided by Silicon Graphics, Inc., in honor of Seymour Cray.
- Eligibility:* Open to all. No restrictions other than those who have made major contributions in the computer science and engineering field.

Basis for Judging: Evidence documenting an outstanding record and/or introducing practical or theoretical advances in the area of computer science and engineering and high performance computing systems, including publications or references to the nominee's published or professional work; Leading or developing significant technological advancements in computer science and engineering and high performance computing systems. (Be sure to identify the contribution in full as well as its significance and scope in advancing this area of computing science); Achieving stature as a practitioner, manager, or researcher of renown in this area, to include involvement in the development of commercial products; If pertinent, list any additional information the selection committee should review that has not already been documented on the nomination form. This information should further identify the outstanding record of the nominee and contribute in elucidating the magnitude of the nominee's accomplishments in the area of computer science and engineering and high performance computing systems.

Presentation: This award will be presented by the IEEE Computer Society president at one of the major conferences.

26. **Harlan D. Mills Award** (established in 2000) (revised description and funding 2016)

Description: Established in memory of Harlan D. Mills to recognize researchers and practitioners who have demonstrated long-standing, sustained, and impactful contributions to software engineering practice and research through the development and application of sound theory.

Prize: \$3,000, museum-quality memento, and invited talk with associated expenses (if necessary).

Funding: Funded by the IEEE Computer Society.

Eligibility: Open to all. Achievements should demonstrate a sustained body of work in software engineering theory and practice.

Basis for Judging: Criteria as stated in award description. The winner would be generally recognized in the software engineering community for achieving the results stated and for encouraging and teaching others to do the same.

Presentation: The nominal venue for the award ceremony and invited talk would be the annual International Conference on Software Engineering. The award would be presented in the name of IEEE/CS with suitable recognition to those funding the award.

27. **The Multimedia Prize Paper Award**, IEEE Circuits and Systems Society, IEEE Communications Society, IEEE Computer Society, and IEEE Signal Processing Society (established in 2002)

Description: To recognize an original paper in the field of Multimedia published in the *IEEE Transactions on Multimedia* in the previous calendar year.

Prize: \$500 and Plaque for each author. The total honorarium is not to exceed \$1,000.

Funding: The award will be funded equally by the four sponsoring societies (IEEE Circuits and Systems, IEEE Communications, IEEE Computer and IEEE Signal Processing Societies) from the publication account for the *IEEE Transactions on Multimedia*, until an external sponsor is identified (will be sought in 2003). The IEEE Signal Processing Society is the managing partner for the *IEEE Transactions on Multimedia*. Accordingly, IEEE Signal Processing Society will be responsible for the administration of the Multimedia Prize Paper Award. However, the authority for all aspects of the journal resides collectively with its Steering Committee.

Eligibility: Authors of an original paper in the field of Multimedia, published in the *IEEE Transactions on Multimedia* in the previous year are eligible for the Marconi Prize Paper Award. The authors need not be members of the IEEE.

Basis for Judging: High quality, original paper composite of originality, utility, timeliness and clarity of presentation.

Presentation: Annually at the International Conference on Multimedia and Expo (ICME) by the General Chair of the conference, in the name of the four sponsoring societies. An award may not be given if a paper of high quality is not uncovered.

28. **IEEE Computer Society 60th Anniversary Award** (established in 2006)

Description: To recognize a key contribution that has made significant impact in computer science and engineering. This one-time award will be announced and awarded in 2006, the Computer Society's 60th anniversary year. Recipient(s) will have been responsible for one of the most fundamental and important computer science and engineering contributions over the past century.

Prize: \$20,000 to be shared amongst recipients. Each recipient will receive a Crystal model. Travel expenses will be provided, if necessary, for the recipient(s) and companion to the presentation site.

Funding: Funded by an anonymous donor.

Eligibility: Open to any individual or two individuals who have made a key contribution in the computer science and engineering fields.

Basis for Judging: Selection will be based on the following: originality of contribution; significance of achievement; impact on computer science and engineering; and impact on society. After an initial ranking of the nominees by subcommittee members, the members will discuss the results of the rankings and consider other attributes and contributions of the nominees that cannot be captured by a point system. No award will be given unless there are at least 3 candidate nominations.

Presentation: Presented during the society's 60th Anniversary celebration in 2006. The IEEE Computer Society President will present this award

29. **IEEE/ACM Ken Kennedy Award** (established in 2009)

Description: To recognize outstanding contributions to programmability or productivity in high performance computing together with significant community service or mentoring contributions.

Prize: The award will be presented annually and consist of a certificate and \$5,000 honorarium. This is intended to be an ACM/IEEE award and the awardee will be invited to present a paper at the SC conference or at an ACM or IEEE Computer Society conference of the winner's choosing during the year following the announcement.

Funding: Travel costs of the recipient and one companion to attend the presentation ceremonies at a conference will be borne by the conference. **The award will be funded out of an endowment with equal contributions from ACM and the IEEE Computer Society. It is expected that the IEEE Foundation will manage the endowment.**

Eligibility: The award is open to contributors at all stages of their careers. There are no restrictions as to IEEE/IEEE society membership, gender, or age. It is awarded when a suitable candidate is available. The winner of the award should be someone who has made an outstanding, innovative contribution or contributions to programming and productivity in computing, and has also contributed to computing through teaching, mentoring, or community service.

Basis for Judging: This award for software for high-end computers in recognition of the important work in promoting and expanding the use of supercomputers and the software required to drive the applications and hardware. This will be an annual award presented "in recognition of outstanding contributions to programmability or productivity in high-performance computing together with significant community service or mentoring contributions."

Presentation: The award would be presented annually with the winner announced at the ACM/IEEE SC Conference and the winner accepting the award and giving a presentation, normally technical, at the SC conference at which it is announced (in November) or at an ACM or IEEE conference of the winner's choosing during the year following the announcement. The SC Conference is the premier international conference for high performance computing (HPC), networking, storage and analysis.

30. **IEEE B. Ramakrishna Rau Award** (established in 2010) (revised 2015)

Description: The IEEE Computer Society would establish an award for recognition of significant contributions in the field of computer microarchitecture and compiler code generation. This award would be announced at the annual ACM/IEEE International Symposium on Microarchitecture.

Prize: The award will consist of a certificate and a \$2K honorarium. This is an IEEE Computer Society award and the winner will be invited to present a paper and/or presentation at the ACM/IEEE International Symposium on Microarchitecture either at the award or in the year following the award. Reasonable general expenses for travel and lodging for the recipient will also be provided.

Funding: **The award will be presented to a single recipient. The award honorarium and certificate expenses will be borne by an endowment managed by the IEEE Foundation. The endowment has been established, approved, and funded in-part by the IEEE-CS TC-uARCH, and corporate sponsors, including Hewlett-Packard Company, and others. These funds have already been approved by the Symposium, the IEEE-CS, individual contributors, and the Hewlett-Packard Company. Additional funding is being solicited from other corporate donors. Travel expenses for the recipient to attend the presentation ceremonies will be borne by the ACM/IEEE International Symposium on Microarchitecture annual conference budget.**

Eligibility: The award is open to contributors at all stages of their careers. The winner of the award will be someone who has made an outstanding, innovative contribution or contributions to microarchitecture, use of novel microarchitectural techniques or compiler/architecture interfacing. It is hoped, but not required, that the winner will have also contributed to the computer microarchitecture community through teaching, mentoring, or community service.

Basis for Judging: This award is in recognition of important work related to microarchitectural technology, including both hardware and compiler optimization. The award will be presented only as determined by the Award Committee, but, at a maximum of once per year. It is anticipated that during some years, no award will be given. The award will be presented for significant contributions in the field of computer microarchitecture and compiler code generation. Scoring and voting procedures will follow IEEE-CS Awards Committee practices.

Presentation: The award will be presented at most annually with the winner announced at the ACM/IEEE International Symposium on Microarchitecture, normally held in December. The winner will be notified at least 3 months prior to the award presentation. It is contemplated that there will be years in which no award is given.

31. **IEEE-CS Charles Babbage Award** (established in 2015)

Description: For recognition of significant contributions in the field of parallel computation. The establishment of this award will recognize the important work of Charles Babbage, an English polymath who was a mathematician, philosopher, inventor, and mechanical engineer who is best remembered now for originating the concept of programmable computer.

Prize: The Award consists of a \$1000 honorarium and Certificate to a single recipient. The winner will be invited to present a paper and/or presentation at the annual conference of IEEE-CS IPDPS either at the time or in the year following the award. Reimbursement of general expenses for travel and lodging for the recipient will also be provided.

Funding: The award would be funded by the IEEE-CS IPDPS through its annual conference budget.

Eligibility: The award is open to contributors at all stages of their careers. The winner of the award will be someone who has made an outstanding, innovative contribution or contributions to parallel computation. It is hoped, but not required, that the winner will have also contributed to the parallel computation community through teaching, mentoring, or community service.

Basis for Judging: This award is in recognition of important work related to parallel computing. The award will be presented only as determined by the Awards Committee, but at a maximum of once per year. It is anticipated that during some years, no award will be given. Basis for judging includes significant contribution in the field of parallel computing. Scoring and voting procedures will follow IEEE-CS Awards Committee practices.

Presentation: The award will be presented at most annually with the winner announced at the IEEE IPDPS, normally held in May. The winner will be notified at least 3 months prior to the award presentation.

32. **IEEE Internet of Things Journal Best Paper Award (joint award of IEEE Internet of Things Journal Steering Committee cosponsored by IEEE Communications Society, IEEE Computer Society, and IEEE Sensors Council) (established in 2020)**

Description: To recognize the best papers published in the IEEE Internet of Things Journal. The award is based on originality, impact, relevance to the IoT-J's scope, and timeliness.

Prize: Up to two awards may be given annually; \$2,000 per award (split equally among the authors) and a Plaque for each winning author. The travel expenses of the lead author of each best paper shall be reimbursed.

Funding: Funds for this award come from the IEEE Internet of Things Journal. The first year, if necessary, the IEEE Sensors Council (the lead administrative cosponsor) may provide the funds (and be reimbursed by the other financial cosponsors).

Eligibility: Author(s) of any paper published in the IEEE Internet of Things Journal during the three calendar years preceding the date of the award is/are eligible.

Basis for Judging: The award is based on originality (unless the paper is a review paper), impact, relevance to the IoT-J's scope, and timeliness. The IoT-J Steering Committee, upon the recommendation of the IoT-J Editorial Board, decides if the nominees meet the standards necessary for the award. The decisions are based on simple majority voting by the voting members of the Steering Committee. Steering Committee members may not be a co-author of any paper considered for the award. The Steering Committee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented at a venue selected by the IoT-J Steering Committee. Travel expenses of one lead author per award shall be reimbursed upon request in accordance with IEEE travel policies.

33. **IEEE Internet of Things Journal Outstanding Service Award (joint award of IEEE Internet of Things Journal Steering Committee cosponsored by IEEE Communications Society, IEEE Computer Society, and IEEE Sensors Council) (established in 2020)**

Description: To honor long and distinguished service to the IEEE Internet of Things Journal.

Prize: One award is given annually; \$2,000 and a Plaque

Funding: Funds for this award come from the IEEE Internet of Things Journal. The first year, if necessary, the IEEE Sensors Council (the lead administrative cosponsor) may provide the funds (and be reimbursed by the other financial cosponsors).

Eligibility: The award is open to all who have contributed to the IEEE Internet of Things Journal.

Basis for Judging: The IoT-J Steering Committee decides if the nominees meet the standards necessary for the award. The decision is based on simple majority voting by the voting members of the Steering Committee. Steering Committee members may not be considered for the award. The Steering Committee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented at a venue selected by the IoT-J Steering Committee. The winner shall be for travel expenses to the award presentation in accordance with IEEE travel policies.

34. **IEEE CS TCCA Young Computer Architect Award** (established in 2021)

- Description:** The IEEE CS TCCA (Technical Committee on Computer Architecture) Young Computer Architect Award recognizes outstanding research contributions by an individual in the field of Computer Architecture. The award is open to any individual who has completed their PhD degree in the current or previous five calendar years when the nomination is submitted and who is under 40 years in the calendar year of the award presentation.
- Prize:** One award is given annually; \$2,500 and a Plaque. Award will be given only if a suitable awardee is identified.
- Funding:** Funds for this award are provided by IEEE CS Technical Committee on Computer Architecture.
- Eligibility:** The award is open to any individual who has completed their PhD degree in the current or previous five calendar years when the nomination is submitted. IEEE or Computer Society membership is not required. Eligibility may be adjusted for documented family-related or medical leaves from employment. An extension by up to 24 months may be granted in case of documented family or medical leave from employment occurred, even partially, inside the eligibility window. The duration of the extension is equal to the duration of the full family-related or medical leave from employment, with a maximum of 24 months.
- Basis for Judging:** The awards committee members will select the most qualified candidate based on impact on computer architecture research through publications in technical journals, presentation of lectures, patents and/or significant technical contributions evidenced in the CV and support letters.
- If the awards committee identifies two or more equally qualified candidates, then the TCCA Executive Committee will vote on a single awardee using the preferential voting method. If no suitable candidates are recommended, the TCCA Executive Committee will be so informed. The TCCA Executive Committee shall approve any selection by the award committee decide that none of the nominees meets the standards necessary and the award will not be given in that year.
- Presentation:** The award will be presented during the International Symposium on Computer Architecture.

IEEE CONSUMER TECHNOLOGY SOCIETY
(name change effective 16 August 2020) (formerly IEEE Consumer Electronics Society)
CT-08 (Division IV)

For all Consumer Electronics Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award

1. IEEE Outstanding Service Award (established in 1993)

Description: To recognize outstanding service to the IEEE Consumer Technology Society.

Prize: Plaque or Certificate

Funding: Funded by the IEEE Consumer Technology Society.

Eligibility: Members of the IEEE Consumer Technology Society.

Basis for Judging: Dedication, effort and contributions.

Presentation: Aperiodically, at a CTS conference or supported event or at a meeting of the CTS Administrative Committee.

2. IEEE Chester Sall Awards (revised 2002, 2007)

Description: To recognize the best papers published in the *IEEE Transactions on Consumer Electronics*.

Prize: \$1,000 for 1st place, \$800 for 2nd place, \$600 for 3rd place, and Plaque

Funding: Funded by the IEEE Consumer Technology Society.

Eligibility: Authors of papers published in the Society Transactions during the preceding calendar year.

Presentation: At International Conference on Consumer Electronics.

3. IEEE Significant Achievement Award (established in 1998)

Description: To recognize outstanding contribution to the consumer electronics industry. The technical achievement for which the award is given shall have been described in a paper published in the *IEEE Transactions on Consumer Electronics* within the previous five years. The award may be presented to an individual, a team or an organization at the discretion of the IEEE Consumer Technology Society.

Prize: Plaque(s) and/or Certificate(s).

Funding: Funded by the IEEE Consumer Technology Society.

Eligibility: Open, with the following exception. A winner of the Masaru Ibuka Award is eligible only for a technical contribution which is unrelated to the contribution for which the Ibuka Award was given.

Basis for Judging: Technical achievement. To be based primarily on the impact on, and the acceptance by, the consumer electronics industry, of either the technology or the product(s) resulting from the technology. Secondarily on technical leadership, innovation/creativity and societal benefit.

Presentation: Annually, at a CTS conference or supported event, if a winner is selected.

4. **IEEE Consumer Technology Society Corporate Innovation & Leadership Award** (established in 2020)

Description: To recognize an organization that has demonstrated outstanding innovation and leadership in consumer technology. The organization had also contributed to the IEEE Consumer Electronics Society's (CTSoc) service to the public and members.

Prize: Only one qualified recipient may be selected annually. Recipient receives recognition Plaque.

Funding: Funded by the IEEE Consumer Technology Society.

Eligibility: The recipient must be a corporate, governmental, or academic entity working within the fields of interest to the IEEE Consumer Technology Society. Any person, including an employee of a particular entity may nominate their organization for this award. The organization had also contributed to the IEEE Consumer Technology Society's (CTSoc) service to the public and members. Members of either the IEEE CTSoc Awards committee, IEEE CTSoc Officers, or IEEE CTSoc Board of Governors are not eligible to be nominators or endorsers of a nominee for this award. Self-nominations for this award will not be accepted.

Basis for Judging: Nominations will be evaluated and scored fairly by the Awards Committee. The award will not be conferred in any given year if a suitable candidate is not identified.

Presentation: Presented at one of the IEEE Consumer Technology Society's annual conference or venue appropriate to the business area of the recipient.

5. **IEEE Consumer Technology Society Distinctive & Exemplary Leader Award** (established in 2020)

Description: This award recognizes a distinctive and exemplary industry executive whose leadership has made a significant impact globally and who has led preminent and extraordinary advancements in consumer technology.

Prize: Only one qualified recipient may be selected annually. Recipient receives recognition Plaque.

Funding: Funded by the IEEE Consumer Technology Society.

Eligibility: An industry executive who has played a major leadership role in advancing R&D and/or deployment of consumer technology that has notably impacted the markets globally. The candidate must show that they have substantially advanced the use of consumer technology broadly in industry, commerce, and society. Ideally, the candidate must be a member of the IEEE or the IEEE Consumer Technology Society. Members of either the IEEE CTSoc Awards Committee, IEEE CTSoc Officers, or IEEE CTSoc Board of Governors are not eligible to be nominators or endorsers of a nominee for this Award. Self-nominations for this awards will not be accepted.

Basis for Judging: Nominations will be evaluated and scored fairly by the Awards Committee. The award will not be conferred in any given year if a suitable candidate is not identified.

Presentation: Presented at one of the IEEE Consumer Technology Society's annual conference or venue appropriate to the business area of the recipient.

IEEE CONTROL SYSTEMS SOCIETY

CS-23 (Division X)

For all Control Systems Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Control Systems Technology Award (revised 2000)

Description: To recognize outstanding contributions to control systems technology either in design and implementation or project management.

Prize: \$2,000, photo-engraved Plaque for each recipient, and travel expenses to the CDC for one recipient (round trip restricted minimal coach air fare, conference registration, and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference) If the prize is awarded to a group, members of the group will equally split the cash portion of the prize.

Funding: Funded by the IEEE Control Systems Society.

Eligibility: Either an individual or a team.

Basis for Judging: The technical merit of the outstanding control systems technology contribution in either design and implementation, or project management. The broader impacts of the contribution towards the benefit of society at large and towards the CSS diversity and inclusiveness goals in terms of geography, gender, and work sector.

Presentation: At the Awards Ceremony of the CSS.

2. IEEE Hendrik W. Bode Lecture Prize (revised 2000, 2001)

Description: To recognize distinguished contributions to control systems science or engineering.

Prize: \$2,000, photo-engraved Plaque, and travel expenses to the CDC (round trip restricted minimal coach air fare, conference registration, and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference) The recipient gives a plenary lecture at the CDC evaluating a significant contribution to control systems science or engineering.

Funding: Funded by the IEEE Control Systems Society.

Basis for Judging: The technical merit of the distinguished contributions to control systems science or engineering. The broader impacts of the contribution towards the benefit of society at large and towards the CSS diversity and inclusiveness goals in terms of geography, gender, and work sector.

Presentation: At the Awards Ceremony of the CSS.

3. IEEE CSS Distinguished Member Award

Description: To recognize significant technical contributions or outstanding long-term service to the IEEE Control Systems Society.

Prize: Plaque

Funding: Funded by the IEEE Control Systems Society.

Eligibility: Must have been a member of the CSS for at least five (5) years.

Basis for Judging: The technical merit of the significant technical contributions and outstanding long-term service. The broader impacts of the contribution towards the benefit of society at large and towards the CSS diversity and inclusiveness goals in terms of geography, gender, and work sector.

Presentation: At the Awards Ceremony of the CSS.

4. **IEEE CSS George S. Axelby Outstanding Paper Award**

Description: To recognize outstanding papers published in the *IEEE Transactions on Automatic Control*.

Prize: A photo-engraved Plaque for each recipient and, for one recipient, travel expenses to the CDC (round trip restricted minimal coach air fare), conference registration, and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference).

Funding: Funded by the IEEE Control Systems Society.

Eligibility: Authors of papers published in the *IEEE Transactions on Automatic Control* during the two calendar years preceding the year of the award. The paper publication date is determined by the journal volume date (not the online publication date).

Basis for Judging: Originality, potential impact on the theoretical foundations of control, importance and practical significance in applications, and clarity.

Presentation: At most one (1) award presented at the Award Ceremony of the CSS.

5. **IEEE CSS Outstanding Chapter Award** (established in 1992)

Description: To recognize an outstanding Chapter of the IEEE Control Systems Society (CSS).

Prize: \$1,000 payable to the Chapter, a Certificate laminated on a plaque, and travel expenses to the CDC (round trip restricted minimal coach air fare, conference registration, and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference) for a Chapter representative to attend the CSS Awards Ceremony.

Funding: Funded by the IEEE Control Systems Society.

Eligibility: Chapter must be active for at least one (1) year prior to consideration.

Basis for Judging: Level of activity, based on the number and types of activities; Innovations, based on developing clever ways to promote new activities or services; Revitalizing an existing Chapter or starting a new one. The broader impacts of the contribution towards the benefit of society at large and towards the CSS diversity and inclusiveness goals in terms of geography, gender, and work sector.

Presentation: At the Awards Ceremony of the CSS.

6. **IEEE Conference on Decision and Control (CDC) Best Student-Paper Award** (established in 1992)

Description: To recognize excellence in a conference paper whose primary contributor(s) is a (are) Student Member(s) of the IEEE.

Prize: Certificate laminated on a plaque, and travel expenses to the CDC for one recipient (round trip restricted minimal coach air fare, conference registration, and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference). The remaining finalists receive Outstanding Student-Paper award certificates and free student conference registrations.

Funding: Funded by the IEEE Control Systems Society.

Eligibility: Primary contributor(s) of a paper, who was a (were) student(s) at the time of original submission.

Basis for Judging: Originality, clarity and potential impact on practical applications or theoretical foundations of control.

Presentation: At the Awards Ceremony of the CSS.

7. IEEE Transactions on Control Systems Technology Outstanding Paper Award (established in 1998)

Description: To recognize an outstanding paper published in the *IEEE Transactions on Control Systems Technology*.

Prize: A photo-engraved plaque for each recipient and, for one recipient of each award, travel expenses to the CDC (round trip restricted minimal coach air fare), conference registration, and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference).

Funding: Funded by the IEEE Control Systems Society.

Eligibility: Authors of papers published in the *IEEE Transactions on Control Systems Technology* during the two calendar years preceding the year of the award. The paper publication date is determined by the journal volume date (not the online publication date).

Basis for Judging: Originality, relevance of the application, clarity of exposition, and demonstrated impact on control systems technology.

Presentation: At most one (1) award presented annually at the Awards Ceremony of the CSS.

8. IEEE Control Systems Magazine Outstanding Paper Award (established in 1998)

Description: To recognize an outstanding article or column published in the *IEEE Control Systems Magazine*.

Prize: Plaque (one for each author).

Funding: Funded by the IEEE Control Systems Society.

Eligibility: Authors of articles or columns published in the *IEEE Control Systems Magazine* during the two calendar years preceding the year of the award. The paper publication date is determined by the journal volume date (not the online publication date).

Basis for Judging: Impact on and benefit to CSS Members.

Presentation: At most one (1) award presented annually at the Awards Ceremony of the CSS.

9. IEEE Conference on Control Technology and Applications (CCTA) Best Student Paper Award (established in 2001; revised name 2017)

Description: To recognize excellence in a CCTA paper whose primary contributor(s) is a (are) student member(s) of the IEEE.

Prize: Certificate laminated on a plaque and travel expenses to the CCTA for one recipient (round trip restricted minimal coach air fare, conference registration, and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference). The remaining finalists for the award receive Outstanding Student-Paper award certificates and free student conference registrations.

Funding: Funded by the IEEE Control Systems Society

Eligibility: Primary contributor(s) of a paper, who was a (were) student(s) at the time of original submission.

Basis for Judging: Originality, clarity, and potential impact on practical applications of control.

Presentation: At a CCTA session or special event.

10. IEEE CSS Antonio Ruberti Young Researcher Prize (established in 2005) (revised 2015)

Description: To recognize outstanding achievement in research in systems and control by a young researcher and to honor the memory of Dr. Antonio Ruberti.

Prize: \$5,000, photo-engraved Plaque, and travel expenses to the CDC (round trip restricted minimal coach air fare), conference registration, and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference).

Funding: Funded annually by the Antonio Ruberti Foundation through a MOU agreement with society.

Eligibility: The nominee must be 40 years old or younger on January 1st of the year nominated. IEEE or CSS membership is not required.

Basis for Judging: Based on the research contributions of the nominee. Contributions to either the theory or applications of systems and control will be considered equally. The determining factor will be the perceived impact of the nominee on the field as evidenced by publications, patents, products, or other tangible items. The broader impacts of the contribution towards the benefit of society at large and towards the CSS diversity and inclusiveness goals in terms of geography, gender, and work sector.

Presentation: At the annual awards ceremony of the IEEE Conference on Decision and Control.

11. IEEE CSS Transition to Practice Award (established in 2009)

Description: This award recognizes outstanding collaborative scientific interactions between industry and/or research laboratories and academic communities that transition basic controls and system theory to practical systems for the benefit of the society at large.

This award will recognize an individual or a team of researchers whose research activity arising from Industry-University collaboration(s) has produced substantive results with demonstrated impact to practice. It will be awarded to the competitor(s) who best demonstrates research with a high-degree of excellence and effective industry-university collaboration with proven record of success in transitioning systems and control theory emanating from their research to practical industrial or commercial systems

Prize: The winner will receive \$2,000 as cash prize, a certificate laminated on a plaque and travel expenses to the IEEE Multi-conference on Systems and Control (MSC) in year (YYYY+1). The travel expenses reimbursement will be the standard IEEE CSS Package (i.e., round trip restricted (minimal) coach air fare, conference registration, and three hotel nights at the conference rate). If the prize is awarded to a group, members of the group will equally split the cash portion of the prize and only one member of the group will receive travel reimbursement. Each group member will receive a certificate.

Funding: Contributions from organizations will be requested that together with a CSS contribution will permanently fund this award. CSS has the financial resources to completely fund the permanent cost of this award while maintaining a positive budget. Nonetheless, CSS plans to solicit contributions for the award from Industrial and University Sponsors. CSS does anticipate partially funding the award.

Eligibility: Faculty and industry partners can be included in the nomination package for consideration by the award committee when their contributions are considered important for the success of transitioning the control research to practice. The word “Industry” is defined broadly to represent all non-academic sectors such as the commercial sector, government research laboratories and military establishments. The word “Practice” is broadly defined to represent “in use” as standard product or service. Researcher(s) cannot receive the award more than once.

The award nominee(s) must be member(s) of IEEE. There are no restrictions on the time period of achievement. The nomination package should demonstrate tangible and visible achievements. While a team can be nominated, only one person will give the lecture and should be identified on the nomination form.

Basis for Judging: The award is given annually.

Essential Factors to be Considered

- Outstanding contribution(s) and demonstrated impact of the resulting control system technology from the nominated Industry-University Collaborations.

Desirable Factors to be Considered

- Promotion and enhancement of industry employment of control engineering graduate students
- Improved products dependent on the nominated research
- Leveraging of current and new systems and control theory for economic advantage
- Summary of broader benefits to the society at large (current and anticipated future benefits)

Voting procedure

- The committee may hold discussion of the nominations at the ACC, by teleconference, or by email. Following discussions, the winner will be selected by secret ballot wherein the winner must attain a majority vote. If multiple rounds of voting are required, then the nomination receiving the lowest number of votes on any round will be eliminated in the subsequent round. The vote may be taken by e-mail.

Presentation: The award winner(s) names will be announced at the IEEE Multi-conference on Systems and Control (MSC) in year YYYY. The winner will receive the award and present a one hour lecture at the MSC in year (YYYY+1). Only one person will give the lecture.

12. IEEE CSS Award for Technical Excellence in Aerospace Control (established in 2009) (revised Prize, Eligibility, Presentation and Administration/Selection 2015; revised 2019)

Description: The award will be given annually to a person or team of people that performed an aerospace control engineering activity during the previous 36 months that demonstrates excellence and significant results with demonstrated impact. Examples of results evidence are either a paper appearing in an IEEE publication that specifically addresses aerospace controls issues, or a patent application or award that significantly advances the state-of-the-art in aerospace controls. Innovative products that have appeared on the marketplace will also be considered. The award is similar to the outstanding paper awards for the CSS transactions and magazine in the sense that it recognizes an outstanding paper or patented idea as opposed to cumulative contributions over a career.

Prize: Certificate laminated on a Plaque, plus up to \$500 towards expenses for travel to accept the award. If the prize is awarded to a group, each group member will receive a certificate and one individual will receive travel reimbursement.

Funding: **The award will be funded by an endowment managed by the IEEE Foundation. The annual income from the fund will be used to fund the award in perpetuity. The total amount of the prize (travel plus plaque) shall not exceed the amount paid out by the endowment in a given year.**

Eligibility: CSS membership is required. Any aerospace control engineering activity and results that occurred in the 36 months previous to the award nomination submittal deadline is eligible. The broader impacts of the contribution towards the benefit of society at large and towards the CSS diversity and inclusiveness goals in terms of geography, gender, and work sector.

Basis for Judging: Contributions (for instance, papers, products, prototypes and /or patents) will be judged on the following criteria:

- Originality of technical innovation,
- Significance/relevance to the aerospace community,
- Clear description of the aerospace application,
- Potential impact on the practice of aerospace engineering,

- The broader impacts of the contribution towards the benefit of society at large and towards the CSS diversity and inclusiveness goals in terms of geography, gender, and work sector.

The award will be given only if a suitable candidate is identified.

Voting procedure

- Selection of winners will be carried out before July 15, by the TEAC award subcommittee, whose members are appointed by April 15 by the committee chair (in consultation with the CSS Awards Chair).

Presentation: The award will be presented at the Society Awards Ceremony held during the annual IEEE Conference on Decision & Control.

13. IEEE *Transactions on Control of Network Systems* Best Paper Award (established in 2015)

Description: To recognize (at most two) outstanding paper(s) published in the *IEEE Transactions on Control of Network Systems*.

Prize: A photo-engrave plaque for each recipient and, for one recipient, travel expenses to the CDC (round trip restricted minimal coach air fare), conference registration and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference).

Funding: Funded by the IEEE Control Systems Society

Eligibility: Papers published in the *IEEE Transactions on Control of Network Systems* during the two calendar years preceding the year of the award. Once a paper receives the *IEEE Transactions on Control of Network Systems* Best Paper Award, it is no longer eligible to be considered for this award in subsequent years. The paper publication date is determined by the journal volume date (not the online publication date).

Basis for Judging: The basis for judging shall be originality, potential impact on the foundations of network systems, importance and practical significance in applications, and clarity.

Presentation: At most one (1) award is presented annually at the Awards Ceremony of the CSS.

14. IEEE Control Systems Society Roberto Tempo Best CDC Paper Award (established in 2017; revised 2019)

Description: The Tempo Award will be given for the best paper (as judged by the Tempo Award Committee) presented at the annual IEEE Conference on Decision and Control. The award is named to honor Roberto Tempo to honor his intellectual contributions and life of service. He was the 44th President of the IEEE Control Systems Society.

Prize: The award consists of a Certificate laminated on a plaque (one for each author) and a cash award in the amount of \$1,000 to be divided among the authors.

Funding: **The cash award will be funded by an endowment jointly provided by the IEEE Control Systems Society and Roberto Tempo's family, and managed by the IEEE Foundation. The plaques will be funded by the IEEE Control Systems Society.**

Eligibility: Authors of papers presented at the IEEE Conference on Decision and Control the year before the presentation of the award.

Basis for Judging: Originality, potential impact on any aspect of control theory, technology, or implementation, and the clarity of the writing.

Presentation: At most one (1) award is presented annually at the Awards Ceremony of the CSS.

15. IEEE *Control Systems Letters* Outstanding Paper Award (established in 2019)

Description: To recognize an outstanding paper published in the *IEEE Control Systems Letters*.

- Prize:* Single annual award (at most 1 paper may be selected) with possibly additional recipients. A photo-engrave plaque for each recipient and, for one recipient, travel expenses to the CDC (round trip restricted minimal coach air fare), conference registration and up to 4 conference-rate hotel nights for a 3-day conference, and up to 5 conference-rate hotel nights for a 4-day conference).
- Funding:* Funded by the IEEE Control Systems Society
- Eligibility:* Papers published in the *IEEE Transactions on Control Systems Letters* during the two calendar years preceding the year of the award. The paper publication date is determined by the journal volume date (not the online publication date). The same paper cannot receive both the Roberto Tempo Best CDC Paper Award and the *IEEE Control Systems Letters* Outstanding Paper Award in the same year.
- Basis for Judging:* Originality, potential impact on the theoretical foundations of control, importance and practical significance in applications, and clarity.
- Presentation:* At most one (1) award is presented annually at the Awards Ceremony of the CSS.

IEEE COUNCIL ON ELECTRONIC DESIGN AUTOMATION
CEDA-044 (Division I)

For all Council on Electronic Design Automation awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Phil Kaufman Award for Distinguished Contributions to Electronic Design Automation** (established in 2006) (Joint sponsorship of this award); (Revised title and sponsorship 2019)

Description: To honor an individual who has demonstrable IMPACT on the field of electronics design through contributions in Electronic Design Automation (EDAC)

Prize: \$2,500, and award dinner. The recipient's name will be listed on a permanent large award plus a smaller individual award that will be presented to the recipient.

Funding: The sponsors of the award are IEEE Council on Electronic Design Automation (CEDA) and the Electronic System Design Alliance, a SEMI Strategic Association Partner (ESDA) and share the cost of the \$2,500 honorarium and the travel expenses of the recipient. In addition, CEDA would contribute \$3000 toward the recognition dinner, in exchange for sending 10 participants.

Eligibility: Open to any individual who has made demonstrable beneficial impact on working electronic designers and engineers.

Basis for Judging: Factors for consideration for honoring an individual who has had demonstrable IMPACT in the field of electronic design through contributions in Electronic Design Automation (EDA) include: Business Impact; Industry Direction and Promotion Impact; Technology and Engineering Impact; Educational and Mentoring Impact. The nominee's contributions are judged by its beneficial impact on working electronic designers and engineers.

Presentation: An award dinner will be located in Silicon Valley preferably in the late October to mid-November on a date agreed by both organizations. Hotel and airline expenses of the recipient and spouse/partner will be included.

2. **IEEE/ACM A. Richard Newton Technical Impact Award in Electronic Design Automation (Joint sponsorship with ACM Special Interest Group on Design Automation)** (established in 2007)

Description: To honor a person or persons for an outstanding technical contribution within the scope of electronic design automation, as evidenced by a paper published at least ten years before the presentation of the award.

Prize: \$1,500 and Plaque for each author. Prize will be shared by all authors. For groups of more than five awardees, there will be a minimum of \$300 honorarium per contributor.

Funding: Funded by the IEEE Council on Electronic Design Automation and ACM Special Interest Group on Design Automation.

Eligibility: Open to authors of a paper in the field of electronic design automation published ten years or more before the award is presented. The paper must have passed through a peer-review process before publication, be an archived conference or journal publication available from or published by either ACM or IEEE, and be a seminal paper where an original idea was first described.

Basis for Judging: Impact of the paper which has made an outstanding technical contribution in the scope of electronic design automation through a paper published at least ten years before the award is presented.

Presentation: The award will be presented annually at the ACM/IEEE Design Automation Conference.

3. **IEEE CEDA Ernest S. Kuh Early Career Award** (established in 2009) (revised name 2015)

Description: To recognize an individual who has made substantial contributions to the area of Electronic Design Automation in the early stages of his or her career.

Prize: \$1,000 and an engraved plaque.

Funding: The IEEE Council on Electronic Design Automation (CEDA) will fund this award starting in 2009. Funds are sufficient to maintain this award.

Eligibility: Full members of the IEEE at any level (regular, senior, or fellow grades) whose highest educational degree has been awarded within 8 years of the date of nomination.

Basis for Judging: The Award Committee will judge nominees according to their contributions to the field of EDA. Contribution will be measured based on technical merit and creativity in performing research, and will be assessed based on the published record of the individual and the references accompanying the nomination. The award is intended to be equally available to contributors from academic and industrial institutions. Some of the specific criteria used will be: current and potential impact of the individual's contributions, as well as contributions to the profession at large.

Presentation: The award will be presented at the ICCAD conference.

4. **IEEE CEDA Distinguished Service Award** (established in 2009)

Description: To recognize an individual who has provided outstanding service to the IEEE Council that has had a significant benefit to the EDA community.

Prize: \$1,000 and an engraved plaque.

Funding: The IEEE Council on Electronic Design Automation (CEDA) will fund this award starting in 2009. Funds are sufficient to maintain this award.

Eligibility: Contributors to the IEEE Council on EDA with outstanding service in one or more of the following areas: Conferences and meetings, publications, editors, administrative committee, council leadership, or other distinguished service and activities.

Basis for Judging: The Award Committee will judge nominees according to their contributions to the IEEE Council on EDA. Factors that will be considered are: impact of service and contributions to the council, leadership, innovation, activity, duration, breadth of participation and cooperation. A Council President shall not be eligible until two years after he/she has completed the term of Past President.

Presentation: The recipient can select one of the CEDA sponsored conferences as the venue where the award will be presented.

5. **IEEE *Transactions on Computer-Aided Design* Donald O. Pederson Best Paper Award** (*Effective 2010 moved to CEDA; previously processed by IEEE CAS Society*)

Description: To recognize the best paper published in the *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*.

Prize: \$500 for each author (maximum of \$2,000 per award) and Certificate

Funding: **Funded by the IEEE Council on Electronic Design Automation (CEDA) through an endowment administered by the IEEE Foundation.**

Eligibility: Authors of papers published in the *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* during the two calendar years preceding the award.

Basis for Judging: General quality, originality, contributions, subject matter, and timeliness.

Presentation: Annually, at the ISCAS or ICCAD or ICCD.

6. **William J. McCalla ICCAD Best Paper Award** (established in 2000)

Description: To recognize the best paper presented at the International Conference on Computer-Aided Design (ICCAD).

Prize: \$2,000 and Certificate(s) (\$2,000 to be prorated if multiple authors)

Funding: The IEEE Council on Electronic Design Automation (CEDA).

Eligibility: Presenters of papers at the International Conference on Computer-Aided Design for the current year. The paper will be selected from all submissions without regard to particular subjects or categories, and without regard to status of the author (student, professional, etc.). All papers submitted to ICCAD are eligible, except those which are authored in whole or in part by either the Technical Program Chair, the Technical Program Vice Chair, or the Chair of ICCAD. Multiple papers may be selected in a particular year if it is determined that all such papers are deserving of the award.

Basis for Judging: General quality, originality, contributions, subject matter, and timeliness.

Presentation: Annually, at the ICCAD. The award may not be given in a particular year if at any point in the decision process it is decided that there are no candidates as a truly outstanding paper.

IEEE COUNCIL ON RFID
RFID-741 (Division IV)

For all Council on RFID awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are not eligible for substantially the same achievements: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE XXXX Emily Sopensky Meritorious Service Award (established in 2021)

- Description:* This service award is given to members who have, exceptionally, served the council on RFID to advance its goals, mission, reaching out to the members, and enhancing the visibility of the Council within IEEE and globally.
- Prize:* \$1,000, Plaque and Certificate to a single recipient. In exceptional years it can be given to two recipients (maximum). In case of more than one winner, each one will receive a separate plaque, certificate, and full honorarium.
- Funding:* Funded by the Council general budget.
- Eligibility:* IEEE members with multiple-years continuous service to the council that has long-lasting impact on the Council on RFID.
- Basis for Judging:* Main criteria are multiple-years continuous service to the council that has long-lasting impact on the council and the area. Selection is made by award committee and the approved through consultation between the president and BoG/AdCom.
- Presentation:* Preferred to present the award at one of the two council-sponsored RFID conferences. The winner may choose to receive the award at one of the member societies conferences.

IEEE DIELECTRICS AND ELECTRICAL INSULATION SOCIETY
DEI-32 (Division II)

For all Dielectrics and Electrical Insulation Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Thomas W. Dakin Award** (first presented in 1978) (revised 1994, revised prize 2019 eff 2020)

Description: To recognize outstanding, original technical contributions, as evidenced by their sustained impact in advancing the science and technology of dielectrics and electrical insulation.

Prize: Presentation of Dakin Lecture at opening session of IEEE Electrical Insulation Conference, \$5,000 honorarium, Plaque, Trophy Lamp, and travel expenses for recipient to attend awards presentation.

Funding: **Honoraria funded by accrued interest from the Dakin Endowment, initially provided by the widow of Dr. Thomas Dakin plus voluntary, unrestricted contributions from individual society members; administered by the IEEE Foundation. If interest accrued is insufficient to fund the award, the society will provide the supplemental amount to achieve the \$1000 honorarium.** Products and travel expenses funded by the IEEE Dielectrics and Electrical Insulation Society.

Eligibility: Open to all.

Presentation: Biennially, at IEEE Electrical Insulation Conference.

2. **Eric O. Forster Distinguished Service Award** (first presented in 1979; Revised 2019)

Description: To recognize outstanding contributions and sustained leadership in the advancement of the field of dielectrics and electrical insulation.

Prize: \$5,000 (eff 2021), Plaque, Certificate, and travel expenses for recipient to attend awards presentation.

Funding: **Funded by the IEEE Dielectrics and Electrical Insulation Society through funds provided to IEEE Foundation. Funds managed by IEEE Foundation**

Eligibility: Open to IEEE Members.

Presentation: Annually, at Conference on Electrical Insulation and Dielectric Phenomena.

3. **Golden Omega Award**

Description: To recognize an outstanding contribution to science and technology.

Prize: Figurine

Funding: Funded by the Electrical Insulation Conference.

Basis for Judging: Quality of contribution to science and technology.

Presentation: At Electrical Insulation Conference.

4. **Insulation Hall of Fame**

Description: To recognize outstanding contributions to the field of electrical insulation.

Prize: Plaque

Funding: Funded by the Electrical Insulation Conference.

Presentation: At Electrical Insulation Conference.

5. **J. B. Whitehead Memorial Lecturer**

Description: To recognize major contributions in the field of dielectrics.

Prize: Certificate

Funding: Funded by the IEEE Dielectrics and Electrical Insulation Society.

Eligibility: Open to all.

Presentation: At opening session of the annual Conference on Electrical Insulation and Dielectric Phenomena.

6. **Hans Tropper Memorial Lecture**

Description: To recognize major contributions in the field of liquid dielectrics.

Prize: Plaque and Certificate

Funding: Funded by the IEEE Dielectrics and Electrical Insulation Society.

Eligibility: Open to all.

Presentation: At the opening session of the International Conference on Liquid Dielectrics.

7. **Graduate Student Fellowships** (revised 2001, 2011)

Description: To support graduate research in the area of insulation or dielectric phenomena of interest to the Society.

Prize: The number of Fellowships to be awarded each year would be in the range of 2-5 per year. Thus the minimum award will be \$5K (distributed in two separate amounts of \$2K + \$3K). The total sum available for these awards would be \$25K per year (amounts for each recipient to be determined by Society based upon situations presented to education committee).

Funding: Funded by the IEEE Dielectrics and Electrical Insulation Society.

Eligibility: Full-time graduate student.

Basis for Judging: Formally submitted research proposal.

8. **The Bernhard Gross Memorial Lecture**, IEEE International IEEE International Symposium on Electrets (ISE) (established in 2002)

ISE is normally held every three years and is sponsored by the IEEE Dielectrics and Electrical Insulation Society and technically co-sponsored by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society

Description: The lecture will be presented by a person, who, in the opinion of the Selection Committee has established an international reputation for sustained high quality research work in the ISE research field. The ISE research field is presently defined as comprising the following topics: (a) molecular electrets, especially those involving composite or novel materials, bioelectrets and photoelectrets; (b) thermally stimulated processes, radiation and field effects; (c) injection, transport and trapping of charge, polarization; (d) non-linear optics and electro-optical effects; (e) piezo-, pyro- and ferroelectric phenomena; (f) ferroelectric ceramics and thin films; (g) applications of electrets. In the future the session topics listed for the last and for the next Symposium in the ISE series may be taken as a broad definition of the ISE research field. Thus the lecture will regularly recognize, reward and stimulate high quality research in this important and constantly-evolving research field.

Prize: \$1,000 and Certificate

Funding: The honorarium and cost of the production of the certificate will be covered by the Symposium

registration fees until a private endowment is established. The symposium is held every three years.

Eligibility: The only requirement for nomination as the lecturer is that the nominee has established an international reputation for sustained high quality research work in the ISE research field. There is no limitation on the time frame over which this reputation has been established, and there is no requirement for membership of learned/professional societies.

Basis for Judging: Sustained high quality research work in the ISE research field.

Presentation: At the Symposium Dinner. The lecture will be presented immediately following the opening ceremony of each Symposium, commencing with ISE12 in 2005.

9. **The Dilip Das-Gupta Memorial Award**, IEEE International IEEE International Symposium on Electrets (ISE) (established in 2002)

ISE is normally held every three years and is sponsored by the IEEE Dielectrics and Electrical Insulation Society and technically co-sponsored by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society

Description: The award will be given for the best oral or poster presentation by a young scientist or engineer during the Symposium. It will regularly recognize and reward high quality research in the ISE research field by a scientist or engineer in the early stages of her/his research career.

Prize: \$1,000 and Certificate

Funding: The honorarium and cost of the production of the certificate will be covered by the Symposium registration fees until a private endowment is established. The symposium is held every three years.

Eligibility: For the purposes of the award, a young scientist or engineer is defined as a scientist or engineer who has not reached the age of 35 years by the ISE commencement date. There is no requirement for membership of learned/professional societies.

Basis for Judging: The quality of the presentation, as well as that of the work on which it is based, will be considered by the selection committee. At any Symposium the award will be made only if the selection committee is satisfied that the best presentation (by a young scientist or engineer) is of a suitably high standard. Before the Symposium closing ceremony, any registered delegate may confidentially propose a winner of the award to the Symposium Chairperson. The proposal must be in writing and include a short justification. The Chairperson will pass on all such proposals to the selection committee. Self-nominations are not allowed.

Presentation: The winner of the award will be announced during the Symposium closing ceremony, commencing with ISE12 in 2005.

10. **IEEE DEIS Eric O. Forster Memorial Lecture** (established 2018)

Description: The 'Eric O. Forster Memorial Lecture' is the opening plenary lecture of the biennial IEEE International Conference on Dielectrics (ICD). The lecture is organized in honor of Eric Forster, of whom a brief résumé is given below.

The lecture is awarded to scientists that are world-leading in terms of the originality, significance and rigor of their research in dielectrics, which is within the scope of the conference. Further, the awardee is recognized as someone with a track record of encouraging young people in the field of dielectrics, in the spirit of Eric Forster.

Prize: Only One Allowable Recipient Selected Biennially. Recipient receives plaque and/or certificate.

Funding: Funding will come from the biennial IEEE International Conference on Dielectrics (ICD) budget.

Eligibility: IEEE membership is not required. The conference is held in Europe, most of the Eric O. Forster lecturers have therefore been European, and 'leading-lights' from the European community may be preferred.

Basis for Judging: The speaker should be recognized as world-leading in terms of the originality, significance and rigor of their research, which is within the scope of the conference. It is expected that the speaker would be able to introduce her/his subject in a way that is amenable, interesting and engaging to students as well as to experienced researchers in the field. They should be able to present ideas well in English.

Presentation: The IEEE E.O. Forster Memorial Lecture will be held at the start of the IEEE International Conference on Dielectrics.

11. **IEEE Caixin Sun and Stanislaw Grzybowski Lifetime Achievement Award** (established 2018)

Description: IEEE Caixin Sun & Stanislaw Grzybowski Lifetime Achievement Award will be addressed to people with outstanding career in research, engineering or innovation with at least 20 year of experience in the field of high voltages or dielectric materials. The award is made biennially (every two years), consisting of an honorarium and a plenary lecture to be given at the IEEE International Conference on High Voltage Engineering and Applications (ICHVE).

Prize: Only One Allowable Recipient Selected Biennially. The award consists of an honorarium of \$5,000 USD and a plaque given at ICHVE. Travel costs to the ICHVE are not covered.

Funding: **Funded by an endowment supported by the Caixin Sun Foundation of Education of Chongqing University and managed through the IEEE Foundation. Unless the sponsor is willing to further fund this Award after the initial funds have been depleted, the Award will still be presented, but without any honorarium.**

Eligibility: IEEE Caixin Sun and Stanislaw Grzybowski Lifetime Achievement Award is addressed to individual people with a minimum of twenty years in research, engineering or innovation certified by publications, patents and/or significant achievements. The prize is open to IEEE members, and to qualified scientists and engineers outside of IEEE. The award will be given only once to a specific individual.

Basis for Judging: For a nominee to be considered by the ICHVE Awards committee, their nomination must be supported by at least two IEEE members, who are required to submit supporting material to the ICHVE Awards Committee. The ICHVE Awards Committee members vote for the candidate most qualified based on publications, patents and/or significant achievements evidenced in the CV and support letters. If the ICHVE Awards committee votes that two or more candidates are equally well-qualified, then the DEIS ARC will vote on a single awardee using the preferential voting method. If no suitable candidates can be found, the DEIS ARC and DEIS AdCom will be so informed.

The award should be given only once to a specific individual.

Presentation: The recipient of the award must present an Award Lecture, which will be presented at the next IEEE ICHVE.

12. **IEEE Caixin Sun and Stanislaw Grzybowski Young Professional Achievement Award** (established 2018)

Description: IEEE Sun & Grzybowski Young-Professional Achievement Award will be addressed to young researchers or engineers who are involved in challenging topics in the field of high voltage- or dielectric materials and reached the first significant results. The award is made biennially (every two years), consisting of a prize and a plenary lecture to be given at each IEEE International Conference on High Voltage Engineering and Applications (ICHVE).

Prize: Only One Allowable Recipient Selected Biennially. The award consists of an honorarium of \$5,000 USD and a plaque given at ICHVE. Travel costs to the ICHVE are not covered.

Funding: **Funded by an endowment supported by the Caixin Sun Foundation of Education of Chongqing University and managed through the IEEE Foundation. Unless the sponsor is willing to further fund this Award after the initial funds have been depleted, the Award will still be presented, but without any honorarium.**

Eligibility: IEEE Caixin Sun and Stanislaw Grzybowski Young-Professional Achievement Award is addressed to individual people with a minimum of three years and up to ten years of career experience in research, engineering or innovation after completing their Bachelor's degree. The prize is open to IEEE members, and to qualified scientists and engineers outside of IEEE. The award will be given only once to a specific individual.

Basis for Judging: For a nominee to be considered by the ICHVE Awards committee, their nomination must be supported by at least two IEEE members, who are required to submit supporting material to the ICHVE Awards Committee. The ICHVE Awards Committee members vote for the candidate most qualified based on publications, patents and/or significant achievements evidenced in the CV and support letters. If the ICHVE Awards committee votes that two or more candidates are equally qualified, then the DEIS ARC will vote on a single awardee using the preferential voting method. If no suitable candidates can be found, the DEIS ARC and DEIS AdCom will be so informed.

The award should be given only once to a specific individual.

Presentation: The recipient of the award must present an Award Lecture, which will be presented at the next IEEE ICHVE.

13. **IEEE Caixin Sun and Stanislaw Grzybowski Best Student Paper Award** (established 2018)

Description: IEEE Caixin Sun and Stanislaw Grzybowski Best Student Paper Awards will be given at each IEEE International Conference on High Voltage Engineering and Applications (ICHVE) fully sponsored by IEEE DEIS. Up to 10 best student paper will be awarded. The Awardees will be selected based on the submitted technical paper only.

Prize: Multiple Awards Given Biennially - Each recipient receives full prize. Each award consists of a subsidy of 500 US\$ for a maximum of 10 awards. Only one person can receive the award per paper.

Funding: **Funded by an endowment supported by the Caixin Sun Foundation of Education of Chongqing University and managed through the IEEE Foundation. Unless the sponsor makes additional donations, the ICHVE IAC can opt to fund the Awards themselves from the conference budget once the original funds are depleted.**

Eligibility: To be eligible for the award, a candidate student paper must be submitted by full time student (bachelor, master, PhD or equivalent). The student should appear as a first author of the paper. Moreover, the paper must be presented by the student at an oral / poster session of the ICHVE.

The award is open to DEIS, IEEE and non-IEEE members.

Basis for Judging: Final selection of the 10 best student papers will be made at the conference by the International Advisory Committee of ICHVE based on the selection made by the ICHVE Awards Committee.

Presentation: The winners will receive their awards at the closing session of the conference.

14. **IEEE DEIS Steven A. Boggs Young Investigator Award** (established 2018)

Description: IEEE DEIS Steven A. Boggs Young-Professional Achievement Award will be addressed to young scientists and engineers who are involved in challenging topics in the field of dielectrics and electrical insulation (new materials, aging of materials or systems, testing, and diagnostics) and have reached the first significant results. The award is made biennially (every two years), consisting of a prize and a plenary lecture to be given at any IEEE DEIS conference.

Prize: The Award will be given to one person every two years. It will include an honorarium of \$5,000 US and a plaque. The awardee is expected to give a plenary lecture at any fully sponsored IEEE DEIS conference the awardee chooses. Should the funds run out, then the Award/plaque will be presented without a cash prize. The awardee will travel to their desired conference at their own cost.

Funding: **Funded by an endowment managed through the IEEE Foundation. If the funds plus accrued interest run out, there will be no monetary prize.**

Eligibility: The IEEE Boggs Award is addressed to individuals with a minimum of three years and up to ten years of career experience in research, engineering or innovation after completing their Bachelor's degree. The Award is open to all IEEE members, and to qualified scientists and engineers outside of IEEE.

Basis for Judging: For a nominee to be considered by the DEIS ARC, their nomination must be supported by a detailed CV and at least three IEEE members, who are required to submit supporting material to the DEIS ARC. The DEIS ARC members vote for the candidate most qualified based on publications, patents and/or significant achievements evidenced in the CV and support letters. If the DEIS ARC committee votes that two or more candidates are equally qualified, then the DEIS Adcom will vote on a single awardee using the preferential voting method. If no suitable candidates can be found, the DEIS AdCom will be so informed. The DEIS Adcom will need to vote to approve any selection by the DEIS ARC.

The award will be given only once to a specific individual.

Presentation: The winners will be given the Award at a conference of his/her choice within one year of notifications.

IEEE EDUCATION SOCIETY
Ed-25 (Division VI)

For all Education Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **IEEE William E. Sayle II Award for Achievement in Education** (renamed in 2010) (*formerly Achievement Award*)

Description: To recognize significant contributions over a period of years in the fields of interest to the IEEE Education Society.

Prize: Plaque and Certificate; paid registration to the Frontiers in Education (FIE) Conference.

Funding: Funded by the IEEE Education Society.

Eligibility: Must be a member of the IEEE Education Society.

Basis for Judging: Quality of contributions.

Presentation: Annually, at Frontiers in Education Conference.

2. **Edwin C. Jones, Jr. Meritorious Service Award** (revised 2006)

Description: To recognize pioneering contributions to the administrative efforts of the IEEE Education Society over a period of years.

Prize: Plaque and Certificate; paid registration to the Frontiers in Education (FIE) Conference.

Funding: Funded by the IEEE Education Society.

Eligibility: Must be a member of the IEEE Education Society.

Basis for Judging: Dedication, effort and contributions.

Presentation: Annually, at Frontiers in Education Conference.

3. **McGraw-Hill Jacob Millman Award** (established in 1992)

Description: To recognize an author of an exceptional textbook relating to the field of Electrical Engineering.

Prize: \$1,000, travel expenses for recipient to attend presentation at Frontiers in Education Conference, complimentary conference registration.

Funding: Funded by McGraw-Hill, Inc. (Up to \$1000 per year for award stipend and up to \$1500 per year for expenses associated with the award, including travel to the conference). The IEEE Education Society will assume responsibility for all expenses in excess of the first \$2500. The McGraw Hill commitment is for 5 years. The IEEE Education Society and McGraw Hill will review their commitment after 5 years.

Eligibility: Must be principal author of textbook in the field of electrical engineering, computer engineering, or other field related to electrical engineering such as systems engineering or bioengineering.

Basis for Judging: Excellence in writing, impact of the textbook on electrical engineering education, and innovative pedagogical features of textbook.

Presentation: Annually, at Frontiers in Education Conference.

4. **IEEE Transactions on Education Theodore E. Batchman Best Paper Award** (revised name 2016)

- Description:* To recognize the best paper published in the *IEEE Transactions on Education*.
- Prize:* Plaque and Certificate; paid registration to the Frontiers in Education (FIE) Conference for one author.
- Funding:* Funded by the IEEE Education Society.
- Eligibility:* Authors of papers published in the *IEEE Transactions on Education* annually during the July-to-June time period.
- Basis for Judging:* Contributions to furthering the objectives of the IEEE Education Society as demonstrated by originality, quality, advancement of the art, and effectiveness of presentation in terms of clarity of exposition and coherence.
- Presentation:* Annually, at Frontiers in Education Conference.

5. **Benjamin J. Dasher Best Conference Paper Award** (revised 2006)

- Description:* To recognize the best paper presented at the annual Frontiers in Education Conference.
- Prize:* Plaque
- Funding:* Funded by each annual Frontiers in Education Conference, which is sponsored jointly by the IEEE Education Society, the IEEE Computer Society and the ASEE Educational Research and Methods Division.
- Eligibility:* Authors of papers presented at the annual Frontiers in Education Conference.
- Basis for Judging:* Contributions as demonstrated by technical originality, technical importance and accuracy, quality of oral presentation, and quality of the written paper appearing in the Conference Proceedings.
- Presentation:* Annually, at Frontiers in Education Conference.

6. **Helen Plants Outstanding Conference Special Session Award** (revised 2006)

- Description:* To recognize the best special session of the annual Frontiers in Education Conference.
- Prize:* Plaque
- Funding:* Funded by each annual Frontiers in Education Conference, which is sponsored jointly by the IEEE Education Society, the IEEE Computer Society, and the ASEE Educational Research and Methods Division.
- Eligibility:* Special (non-traditional) sessions, such as workshops and panel discussions, at the annual Frontiers in Education Conference.
- Basis for Judging:* Contributions as demonstrated by originality, session content and presentation including the use of written materials and visual aids, and participation of session attendees.
- Presentation:* Annually, at Frontiers in Education Conference.

7. **Ronald J. Schmitz Award** (revised 2006)

- Description:* To recognize outstanding and continued service to engineering education through contributions to the Frontiers in Education Conference.
- Prize:* Plaque

Funding: Funded by each annual Frontiers in Education Conference, which is sponsored jointly by the IEEE Education Society, the IEEE Computer Society, and the ASEE Educational Research and Methods Division.

Eligibility: Must be a member of the IEEE Education Society or a member of ASEE Educational Research and Methods Division; both individuals and groups are eligible.

Presentation: Annually, at Frontiers in Education Conference.

8. **Harriett B. Rigas Award** (effective 1995-2000; established in 1995) (revised 2006)

Description: To recognize the outstanding engineering faculty women who have made a significant contribution to undergraduate education.

Prize: A stipend of \$2,000, a Plaque, a Certificate and registration to the Frontiers in Education Conference the year the award is received, and expenses for the recipient to attend the Frontiers in Education Conference to receive the award.

Funding: Funded directly to the recipient by the Hewlett-Packard Company.

Eligibility: A woman must be a tenure or tenure track faculty member of one of the ABET/CSAB accredited engineering programs for which the IEEE has responsibility for the program criteria, and who has demonstrated an outstanding commitment to undergraduate education.

Basis for Judging: Must be a tenure or tenure-track woman faculty member selected on the basis of excellence in undergraduate teaching and a commitment to undergraduate engineering education within an IEEE ABET/CSAB program. Other factors to be considered are demonstrated scholarship, evidence of the development of educational technology which enhances student learning, dedication to increasing under-represented groups in engineering, and service to the engineering profession.

Presentation: Annually, at the Frontiers in Education Conference. The presentation will be made by a representative of the Hewlett-Packard Company.

9. **Mac Van Valkenburg Early Career Teaching Award** (established in 2004) (revised 2006)

Description: To recognize members of the IEEE Education Society who have made outstanding contributions to teaching unusually early in their professional careers.

Prize: \$1,000 honorarium, Plaque and Certificate; paid registration to the Frontiers in Education (FIE) Conference.

Funding: Funded by the IEEE Education Society.

Eligibility: Full-time (or equivalent) faculty who are within the first ten years following receipt of their Ph.D. (or other appropriate terminal degree), and have had a minimum of two academic years of appointment as a faculty member, are eligible to be nominated. Individuals nominated for this award must be members of the IEEE Education Society and members of the IEEE.

Basis for Judging: The award is based upon evidence of distinction in teaching by faculty at an early stage in their careers, including teaching performance, development of new teaching methods, and curricular innovation, in fields of interest to the IEEE Education Society. Nominations must include the candidate's statement of teaching philosophy and practice, a maximum of five letters of support from students and peers, and student evaluative data including comments. The committee counts contributions in three categories as having equal weighting in the final decision: teaching performance, development of new teaching methods, and curricular innovation.

Presentation: Annually, at the Frontiers in Education Conference.

10. **Distinguished Member Award** (established in 2004) (revised 2006)

- Description:* To recognize outstanding long-term service to the IEEE Education Society and significant contributions in fields of interest to the IEEE.
- Prize:* Plaque and Certificate; paid registration to the Frontiers in Education (FIE) Conference.
- Funding:* Funded by the IEEE Education Society.
- Eligibility:* Individuals nominated for this award must have been members of the IEEE Education Society for at least ten (10) years. Multiple awards may be given each year, if suitable candidates are nominated. Individuals nominated must be current IEEE and Education Society members.
- Basis for Judging:* Evidence of distinction in long-term service to the IEEE Education Society and in contributions to the fields of interest to the IEEE. Selection criteria include leadership quality, innovative and important contributions to the IEEE Education Society, service and dedication to the IEEE Education Society, and technical achievements in the fields of interest of the IEEE.
- Presentation:* Annually, at the Frontiers in Education Conference.

11. **Chapter Achievement Award** (established in 2006)

- Description:* To recognize a chapter that provides exemplary technical activities, membership services, and societal activities to its members.
- Prize:* \$1,000 stipend to be used for chapter activities and award certificates for the chapter officers.
- Funding:* Funded by the IEEE Education Society.
- Eligibility:* A nominated chapter must be an active Society chapter in good standing with the IEEE. No chapter may receive this award more than once in a four-year period.
- Basis for Judging:* Selection will be based upon all of the following factors: a) the quality and quantity of activity and programs sponsored by the chapter; b) demonstration of successful outreach programs to the professional/education community; c) growth in chapter membership; and d) interaction with other Chapters/Students Chapters/Affinity Groups/Units within their Section.
- Presentation:* Typically presented at the recipient's annual Section awards ceremony or banquet, but can be presented at another venue that would be agreeable to the awardee and the Chair of the Society's Awards Committee.

12. **Distinguished Chapter Leadership Award** (established in 2006)

- Description:* To recognize a Society member who has, over a sustained period of time, made an exceptional contribution to the Society, which has manifested itself at a local Chapter.
- Prize:* Commemorative Plaque, a Certificate, and paid registration to the next fall's Frontiers in Education (FIE) Conference if the award is to be presented there.
- Funding:* Funded by the IEEE Education Society.
- Eligibility:* Individuals nominated for this award must be a member of the Society and the IEEE.
- Basis for Judging:* Based upon the following factors: leadership roles and leadership quality, which have provided an innovative, inventive, and/or important service/contribution to a local Chapter of the IEEE Education Society over a sustained period of time.
- Presentation:* Typically presented at the recipient's annual Section awards ceremony or banquet, but can be presented at another venue that would be agreeable to the awardee and the Chair of the Society's Awards Committee, such as the FIE Conference.

13. **IEEE Student Leadership Award** (established in 2009)

- Description:* The purpose of the Student Leadership Award is to annually honor an IEEE member who has made an exceptional contribution to the Society while they were an IEEE Graduate Student Member or an IEEE Student Member.
- Prize:* The award consists of a \$500US stipend, and a commemorative plaque.
- Funding:* The funds needed to support this award are minimal, and will be paid directly from the Education Society's account. The only expenses involved will be for the commemorative plaque and the stipend.
- Eligibility:* An individual nominated for this award must be, or must have been, an IEEE Graduate Student Member or an IEEE Student Member at the time he/she was involved in the activity cited in the nomination. The award is based upon evidence of an exceptional contribution to the Education Society. Typically one award recipient will be selected per year, however, at their discretion, the Student Leadership Award Committee may select as many as 2 recipients, or, may choose not to bestow this award.
- Basis for Judging:* As mentioned above, the award is based upon evidence of an exceptional contribution to the Education Society. Selection criteria includes: leadership roles and leadership quality, innovative and important services/contributions to the Education Society.
- Presentation:* This award will be presented at an event that is mutually agreeable to the award recipient and the Chair of the Education Society's Awards Committee.

IEEE ELECTROMAGNETIC COMPATIBILITY SOCIETY

EMC-27 (Division IV)

For all Electromagnetic Compatibility Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Richard R. Stoddart Award for Outstanding Performance (first presented in 1979) (revised in 1999)

Description: To recognize the outstanding performance of an EMC Society member in contributing to the advancement of EMC technology or in contributing to the solution of a socio-technological problem.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be member of EMC Society.

Presentation: Annually, at EMC Symposium.

2. Laurence G. Cumming Award for Outstanding Service (first presented in 1979)

Description: To recognize the outstanding service of an EMC Society member in contributing to the administration and overall success of the Society.

Prize: Plaque

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be member of EMC Society.

Presentation: Annually, at EMC Symposium.

3. EMC Society President's Memorial Scholarship Award (established in 1992) (revised in 1999, 2011)

Description: To honor a deceased, eminent member of the EMC Society through scholarship support for graduate study given in his/her memory.

Prize: \$4,000 and Certificate. Reasonable travel expenses (not to exceed \$1,000) will be provided for the recipient to attend the presentation. A second award of \$2,000 may be made 12 months later providing that the recipient is still a student, that he/she requests the money, that the award account reserves exceed \$20,000, and that the Awards Committee determines that the selection factors are still being met.

Funding: **Honoraria funded through private donations, administered by the IEEE Foundation.** Certificate and travel expenses by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be active EMC Student or Higher Grade Member. Must be enrolled in or be formally accepted for full-time graduate study pursuing an M.S. or Ph.D. degree, with a demonstrated commitment to the field of EMC.

Basis for Judging: Endorsements by at least three (3) individuals (two EMC members and one previous or present college instructor) which address technical proficiency and career intentions. Prioritized criteria are commitment to EMC followed by technical excellence.

Presentation: At EMC Symposium.

4. **IEEE Richard B. Schulz Best Transactions Paper Award** (renamed in 2007)

Description: To recognize the outstanding paper published in the *IEEE Transactions on Electromagnetic Compatibility*.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be member of EMC Society.

Presentation: Annually, at EMC Symposium.

5. **Chapter-of-the-Year Award** (revised 2006)

Description: To recognize the outstanding performance by a Chapter organization in serving its members and in establishing goodwill for the Society.

Prize: \$250 and Certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Any EMC Chapter.

Basis for Judging: Chapter activity reports.

Presentation: Annually, at EMC Symposium.

6. **Society Citation**

Description: To recognize outstanding performance in the application of EMC engineering principles at a crucial point in the Space Program, and also for initiative and dedicated efforts in relieving unemployment among EMC Society members.

Prize: Certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be member of EMC Society.

Presentation: At EMC Symposium.

7. **IEEE EMC Honored Member Award** (renamed in 2010) (*formerly Honorary Life Member Award*)

Description: To recognize outstanding service to the EMC Society over a period of time.

Prize: Certificate and waiver of Society dues.

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be member of EMC Society.

Presentation: At EMC Symposium.

8. **Certificate of Appreciation**

Description: To recognize a significant contribution to the welfare, administration, and overall success of the EMC Society.

Prize: Certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be member of EMC Society.

Presentation: Annually, at EMC Symposium.

9. **Technical Achievement Award** (revised 2003)

Description: To recognize technical accomplishments in the field of Electromagnetic Compatibility.

Prize: Plaque (not to exceed \$250)

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be member of EMC Society.

Presentation: Annually, at EMC Symposium.

10. **Certificate of Acknowledgment**

Description: To acknowledge a special service to the EMC Society.

Prize: Certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Must be member of EMC Society.

Basis for Judging: In the past such services as General Chairman of the EMC Society Symposium, organizer of an IEEE convention session, or liaison with another society or organization have been acknowledged with this certificate.

Presentation: At EMC Symposium.

11. **Certificate of Recognition**

Description: Bestowed as a very special mark of recognition to an individual, not necessarily a member of the Society.

Prize: Certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: EMC Society members and nonmembers.

Basis for Judging: Symposium or banquet speakers usually receive this award.

Presentation: At EMC Symposium.

12. **Most Improved Chapter Award** (established in 2000) (revised in 2006)

Description: To recognize the Chapter demonstrating the greatest improvement over the past year in serving its members and in establishing goodwill for the Society.

Prize: \$250 and Certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society

Eligibility: Any IEEE EMC Chapter

Basis for Judging: Chapter activity reports

Presentation: Annually, at the EMC Symposium

13. **Student Paper Award** (established in 2000)

Description: To encourage and acknowledge superior work of undergraduate and graduate university students presenting papers at the annual IEEE EMC Society Symposium.

Prize: First Place: \$900 and a certificate plus reasonable travel expenses (not to exceed \$2,100) for the recipient to attend the symposium and present the winning paper. Second Place: \$500 and a certificate

Funding: Funded by the IEEE Electromagnetic Compatibility Society

Eligibility: Must be a member of the IEEE EMC Society and a graduate or undergraduate student at an ABET accredited university pursuing a course of study related to electromagnetic compatibility.

Presentation: Annually, at the EMC Symposium

14. **Student Design Awards** (established in 2003)

Description: This annual award will be given to encourage and acknowledge superior work of undergraduate and graduate level university students of Electromagnetic Compatibility through the presentation of awards for the Best Design (First and Second Place) submitted to the annual EMC-Society Symposium.

Prize: First Place: honoraria prize of \$900, plus up to \$2,100 of travel funds to offset costs of attending the symposium and presenting the winning paper; Second Place: honoraria prize of \$500.

Funding: The award will be funded by the IEEE EMC Society Education and Student Activities Committee (ESAC) operating budget approved by the EMC Society Board of Directors.

Eligibility: The recipient of this award must meet the following requirements: IEEE membership; EMC Society membership; Student (Undergraduate or graduate) of an ABET certified university; pursuing a course of study related to electromagnetic compatibility.

Basis for Judging: Evaluation criteria include the following: EMI performance of the design; Technical sophistication and depth of EMI solution used; workmanship and cost impact (if any); Technical Report (readability, clarity, and data completeness); Novelty and originality.

Presentation: The award will be presented at each IEEE EMC-Symposium during its "Awards Luncheon".

15. **EMC Society Best Symposium Paper Award** (established in 2004)

- Description:* To recognize the best paper presented at the annual EMC Society international symposium. Note: more than one symposium may be approved for any one given year, in which case the EMCS Board must approve multiple awards.
- Prize:* \$1,000 and Certificate.
- Funding:* Funded by the IEEE Electromagnetic Compatibility Society.
- Eligibility:* EMC Society members and non-members. Paper must be presented at the EMC symposium.
- Basis for Judging:* Importance and interest of topic; technical depth and sophistication; readability, clarity and appearance; novelty and originality.
- Presentation:* Annually, at the EMC Society international symposium(s).

16. **Leo L. Beranek Student Travel Grant** (established in 2005)

- Description:* To recognize students who are authoring and presenting exceptional papers at the annual IEEE International Symposium on Electromagnetic Compatibility (EMC). The award honors Leo L. Beranek, a pioneer in the area of anechoic chambers. It is intended to reward outstanding students in the area of EMC and support their travel to the annual IEEE International Symposium on EMC so they can present their award-winning papers..
- Prize:* Student Travel Grants in the amount of \$500 to \$1,000 will be presented to the students presenting exceptional papers. The actual cash award will depend on the number of awardees and travel costs of the students. Each student will also receive a Certificate.
- Funding:* **Funded by a donation from Constance Brown and James Beranek, family members Leo L. Beranek. The funds will be managed by the IEEE Foundation.**
- Eligibility:* Must be scheduled to present their papers at the annual IEEE International Symposium on EMC. The students must have been officially registered for the Symposium.
- Basis for Judging:* Criteria will be paper content, its originality, quality, and significance to EMC theory and practice.
- Presentation:* At the EMC Awards function during the annual IEEE International Symposium on EMC.

17. **IEEE EMC Society Chapter Founder's Award** (established in 2006)

- Description:* To recognize individuals who found a new chapter for the EMC Society.
- Prize:* Plaque
- Funding:* Funded by the IEEE Electromagnetic Compatibility Society
- Eligibility:* Must be a member of the IEEE, the EMC Society, and found a new EMC Society chapter.
- Basis for Judging:* Formation of a new chapter. If multiple chapters are founded in a year, then the founder for each chapter will receive the award. If two people found a new chapter together, each will receive the award as a co-founder. If more than two individuals help found a single chapter, then the primary two persons will receive the award as co-founders.
- Presentation:* Presentation will be made at the EMC Society's annual Symposium, during the annual awards ceremony.

18. **IEEE EMC Society Symposium Chair Award** (established in 2007)

- Description:* To recognize individuals who have served as Symposium Chair for a successful IEEE EMC Society symposium.
- Prize:* Certificate
- Funding:* Funded by the IEEE Electromagnetic Compatibility Society.
- Eligibility:* Must be a member of the IEEE and the EMC society.
- Basis for Judging:* Members who have served as Symposium Chair for a successful IEEE EMC Society symposium. A successful symposium is defined as a symposium where the technical program quality was considered good by the attendees and when the feedback from attendees concerning the symposium organization and management is favorable.
- Presentation:* Award will be presented at the EMC Society's annual Symposium, during the annual awards ceremony. The award will be first presented in 2007.

19. **IEEE EMC Society Hall of Fame Award** (established in 2007)

- Description:* To recognize current and past members of the IEEE Electromagnetic Compatibility (EMC) Society for significant accomplishments of a historical and/or enduring nature on behalf of the EMC Society over an extended period of time. The contributions could be in the technical area, administrative area, or a combination of both areas.
- Prize:* Plaque. There may be multiple awards in any given year.
- Funding:* Funded by the IEEE Electromagnetic Compatibility Society.
- Eligibility:* Record of significant achievements, (founders of the EMC Society, presidents of the EMC Society, chairpersons of international symposiums, officers and members of the EMCS board, founders of EMC chapters, chairman of EMC Chapters, significant technical contributions including papers for the Transactions and EMC Symposiums and combinations of those accomplishments), over an extended period of time (typically twenty years). The awardees may be current members of the IEEE and the EMC Society or they may have retired from the IEEE and EMC Society. Members of the EMCS Board and the Awards Committee will be ineligible for the award while they are actively serving on the board. There are no prerequisites for winning the award but a person can only be selected for the Hall of Fame once. The intention of the award is to honor deserving individuals at (or near) the end of their careers for a life-time of outstanding service to the EMCS. The number of people honored every year could range from zero to ten with the final number being recommended by the Task Force.
- Basis for Judging:* The criteria will be administrative achievements, technical achievements, contributions to the EMC Society as a whole, contributions to EMC chapters, and combinations thereof for an extended period of time as evaluated and judged by the Hall of Fame task force of the EMCS Awards Committee.
- Presentation:* Presented to winners and announced at the Awards function during the International Symposium on EMC. The award will be active starting in 2007 at the Society's annual symposium.

20. **IEEE Sustained Service to the Society Award** (established in 2007)

Description: To recognize current members of the IEEE Electromagnetic Compatibility (EMC) Society for significant and sustained service to the administration and the overall success of the EMC Society over an extended period of time.

Prize: Plaque. There may be multiple awards in any given year.

Funding: Funded by the IEEE Electromagnetic Compatibility Society.

Eligibility: Record of significant and sustained service to the society. This may include presidents of the EMC society, chairs of international symposiums, officers and members of the EMCS board, founders of EMC chapters, chairs of EMC Chapters, leaders/contributors to EMCS standing committees, and those responsible for special projects contributing to the success of the society. The services will typically take place over an extended period of time and not typically awarded for a single activity. The awardees may be current members of the IEEE and the EMC Society or they may have concluded their service to the IEEE and the EMC Society. Members of the EMCS Board and the Awards Committee will be ineligible for the award while they are actively serving on the board. The number of people to receive their award every year could range from none to ten with the final number being recommended by the EMCS Awards Committee.

Basis for Judging: The criteria will be administrative achievements, long term contributions to the EMC Society as a whole which could include contributions to EMCS standing committees, EMCS special projects, EMCS chapters, and combinations thereof for a significant period of time.

Presentation: Presented to winners and announced at the Awards function during the International Symposium on EMC. The award will be active starting in 2007 at the Society's annual symposium.

21. **IEEE Special Service to the IEEE EMC Society Award** (established in 2008)

Description: The Special Service to the Society Award is intended to recognize current members of the IEEE Electromagnetic Compatibility (EMC) Society for significant and special service to the administration and the overall success of the EMC Society.

Prize: A plaque honoring the recipient with appropriate written tribute highlighting the recipient's special service.

Funding: The Funds will be provided by the EMC Society and budgeted on an annual basis. The approximate annual cost will be approximately \$400.

Eligibility: The EMC Society Special Service to the Society Award recipients must have performed a special and significant service to the society. This may include any member of the society who contributes to the success of the Society. The service will typically be awarded for a single significant activity. The Awardees may be current members of the IEEE and the EMC Society or they may have concluded their service to the IEEE and the EMC Society. The number of people to receive this award every year could range from none to a maximum of two with the final number being recommended by the EMC Society Awards Committee. *Eligibility and selection process shall comply with procedures and regulations established in IEEE and Society governing documents, particular with IEEE Policy 4.4 on Awards Limitations.*

Basis for Judging: The criteria will be significant and special achievements on EMCS special projects or other activities.

Presentation: The EMCS Special Service to the Society Award will be presented to the winners and announced at the Awards function during the International Symposium on EMC.

22. **IEEE EMCS Award for Excellence in Continuing EMC Engineering Education** (established in 2011)

Description: To recognize an outstanding EMC engineering educator who is a member of the IEEE EMC Society, who has shared technical and professional abilities through teaching in industry, government, or in continuing education institutions other than academia, for excellence in the design, delivery, and support of continuing education courses and programs in the fields of interest to EMC Engineering; for the ability to inspire students; for contributions to education and the publication of books and other writings and for innovations in EMC engineering education. In so doing, he/she has made an outstanding contribution to the EMC Engineering profession and to the EMC engineering education community.

Prize: The award consists of a sum not to exceed US\$1,000 cash award as well as a suitably inscribed brass and walnut plaque, attesting to the accomplishment(s) made by the member.

Funding: The Funds will be provided by the EMC Society and budgeted on an annual basis.

Eligibility: **Nominee:** The nominee must have been a member of the IEEE EMC Society for at least one year as of the date of the nomination; the Nominee must have at least **ten years** of teaching experience in Continuing Education. **Nominator:** Any person, including a non-IEEE Member, is eligible to serve as a nominator of this award, with the exception of current members of the IEEE EMCS E&SAC Awards Subcommittee. Self-nominations are not acceptable.

Basis for Judging: Award consideration is based upon the following contributions and achievements:

1. Importance of educational contribution
2. Level and extent of involvement in EMC engineering education
3. Output of books, papers, technical presentations, and other educational products
4. Service to the EMC Society of the IEEE
5. Service to non-IEEE professional/technical organizations
6. Recognition through other honors

Presentation: The EMCS Award for Excellence in Continuing EMC Engineering Education will be presented to the winners and announced at the Awards function during the International Symposium on EMC.

23. **IEEE James C. Klouda Memorial Scholarship** (established in 2013) (revised 2015)

Description: The IEEE James C. Klouda Memorial Scholarship was established in memory of James C. Klouda and his professional career in the field of electromagnetic compatibility. The Scholarship Fund awards, on an annual basis, a scholarship to a qualified graduate or undergraduate student who seeks an electrical engineering degree with emphasis in the field of electromagnetic compatibility or a related discipline, from an accredited US university or college.

Prize: The Scholarship Fund will be used to fund on an annual basis the following annual expenses:

- A maximum of US\$1,000 for one student for school expenses (tuition, books, student fees)
- EMC-S Student Membership for twelve months for one student.

Funding: **Funded by the IEEE EMC Society through an endowment administered by the IEEE Foundation.**

Eligibility: The Scholarship Candidate must:

- Be a U.S. citizen
- Be enrolled as a full-time student in electrical engineering at an accredited university or college and inside the U.S. (no distance-learning or on-line course students are eligible)
- Have completed freshman year in an electrical engineering program at an accredited university or college residing in the U.S.
- Hold a grade point average of 3.0 or above on a 4.0 scale
- Have completed college coursework in electromagnetic compatibility or in a related discipline

No relatives of current members of the IEEE Board of Directors, the EMC-S Governing Board, the EMC-S Awards and Recognition Committee, the IEEE James C. Klouda Memorial

Scholarship Committee, or IEEE staff may be candidates, nominate or endorse candidates for this Scholarship.

- Basis for Judging:* Selection criteria will be based on evaluation of the following criteria:
- Evidence of maintaining a cumulative GPA of at least 3.0 on a 4.0 scale
 - One referral letter from individual who is qualified to evaluate the applicant's academic accomplishments (e.g., professor, administrator, employer, internship organization)
 - Letter from the nominee explaining his/her educational goals and plans
 - Additional consideration will be afforded to scholarship applicants that reside in IEEE Region 4

Presentation: The IEEE James C. Klouda Memorial Scholarship will be announced/presented at the Awards function during the International Symposium on EMC.

24. **IEEE EMC-S Young Professional Award** (established in 2019)

Description: To recognize a Young Professional member of the IEEE EMC-S for significant service to the administration and the overall success of the EMC-S in first years of their professional career or to recognize and encourage the achievements and potentials of a Young Professionals member of the IEEE EMC-S working in the topical area covered by IEEE EMC-S, in an early period of their career, age up to 38..

Prize: \$1,000 and Plaque. Only one allowable recipient selected annually.

Funding: Funded by the IEEE EMC Society

Eligibility: Member of the IEEE EMC Society, age up to 38.

Basis for Judging: Factors to be considered are (i) service to the administration and the overall success of the EMC-S in first years of their professional career, (ii) achievements and potentials of a Young Professionals member of the IEEE EMC-S working in the topical area covered by IEEE EMC society. Each member of the award committee will review the submission packages. A teleconference will be held during which the committee will discuss the nominees. The nominations are then put to a vote by ballot will of the committee. The committee may conclude that no prize should be awarded if it feels that there is no nomination of sufficiently high quality.

Presentation: The award will be presented at the annual EMC symposium.

IEEE ELECTRON DEVICES SOCIETY

ED-15 (Division I)

For all Electron Devices Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **J. J. Ebers Award** (first presented in 1971) (revised 1997, 1998)

Description: To honor contributions of recognized scientific, economic, or social significance to the broad field of electron devices.

Prize: \$5,000 and Certificate and travel reimbursement (on an as needed basis, at the discretion of the President), a maximum travel support of \$1,500 for a winner residing within the U.S. and a maximum travel support of \$3,000 for a winner residing outside the U.S. to attend the award presentation at the International Electron Devices Meeting.

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: No restrictions. Normally given to an individual.

Basis for Judging: Either a single or a series of contributions will be considered.

Presentation: Annually, at International Electron Devices Meeting.

2. **Distinguished Service Award** (first presented in 1994) (revised 1997, 1998)

Description: To recognize meritorious, significant, and outstanding service to the IEEE Electron Devices Society and its sponsored activities.

Prize: \$2,500, Certificate and travel reimbursement (on an as needed basis, at the discretion of the President), a maximum travel support of \$1,500 for a winner residing within the U.S. and a maximum travel support of \$3,000 for a winner residing outside the U.S. to attend the award presentation at the International Electron Devices Meeting.

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: Open to all active members of the IEEE and the IEEE Electron Devices Society, excluding active members of the Society Executive Committee. Past EDS President is not eligible until two years after the completion of his/her term.

Basis for Judging: Years of service, special noteworthy accomplishments, contributions as a Society Officer, AdCom member, Associate Editor or participant in the management of EDS-sponsored meetings.

Presentation: Annually, at International Electron Devices Meeting.

3. **Paul Rappaport Award** (first presented in 1984) (revised 1997, 1998)

Description: To recognize the best paper appearing in an IEEE Electron Devices Society publication.

Prize: \$2,500 and Certificate and travel reimbursement (on an as needed basis, at the discretion of the President), a maximum travel support of \$1,500 for a winner residing within the U.S. and a maximum travel support of \$3,000 for a winner residing outside the U.S. to attend the award presentation at the International Electron Devices Meeting.

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: Authors of papers appearing in an IEEE Electron Devices Society publication in preceding calendar year.

Presentation: Annually, at International Electron Devices Meeting.

4. **IEEE EDS William R. Cherry Award** (first presented in 1980) (revised name and prize 2015)

Description: To recognize outstanding contributions to the advancement of photovoltaic science and technology.

Prize: \$5,000 and Plaque

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: No restrictions.

Basis for Judging: Numerous publications and presentations in the field; contributions over a long period of time.

Presentation: Approximately every 18 months at the Photovoltaic Specialists Conference.

5. **EDS 'Chapter of the Year' Award** (established in 1998) (revised scope 2013) (revised 2020)

Description: To recognize the quantity and quality of chapter activities (ED only or joint chapter) and programs implemented by a chapter during the prior July 1st - June 30th period. Limited to two awards given per year to an EDS non-student chapter and EDS student chapter.

Prize: Two awards given per year: one award given to an EDS non-student chapter from any Region (ED only or joint chapter) and one award given to an EDS student chapter from any Region (ED only or joint chapter). Each winning chapter will receive \$500, a certificate and choose an EDS conference or chapter meeting for their award presentation. Travel costs are borne by the chapter.

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: Open to all active EDS Chapters.

Basis for Judging: Quantity and quality of activities and programs.

Presentation: Annually, at the EDS conference or chapter meeting of their choice.

6. **Graduate Fellowship Program** (established in 2000)

Description: One year fellowships awarded to promote, recognize, and support graduate level study and research within the IEEE Electron Devices Society's field of interest: Compound Semiconductor Devices and Circuits, Device Reliability Physics, Displays, Electronic Materials, Microelectromechanical Systems, Optoelectronic Devices, Photovoltaic Devices, Power Devices and ICs, Semiconductor Manufacturing, Vacuum Devices, VLSI Technology and Circuits. At least one fellowship will be awarded to students in each of the following geographical regions every year: Americas, Europe/Middle East/Africa, Asia & Pacific.

Prize: \$5,000, and a plaque to the student, \$1,000 grant to the student's department, \$1,000 grant to the student's faculty advisor in support of the student's project, travel subsidy of up to \$3,000 to each student recipient to attend the International Electron Devices Meeting (IEDM) for presentation of award.

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: Candidate must: be an IEEE Electron Devices Society student member at the time of nomination; be pursuing graduate education within the EDS field of interest on a full-time basis; and continue his/her studies at the current institution with the same faculty advisor for twelve months after receipt of award. Sponsor must be an IEEE EDS member. Previous award winners are ineligible.

Basis for Judging: The demonstration of significant ability to perform independent research in the fields of electron devices and proven history of academic excellence in engineering or physics curriculum through awards and prizes.

Presentation: Formal presentation of the awards will take place at the International Electron Devices Meeting (IEDM) Awards Ceremony in December.

7. **EDS George Smith Award** (established in 2002)

Description: Named after the founding editor, this award is to recognize the best paper appearing in a fast turnaround archival publication of the IEEE Electron Devices Society, targeted to IEEE Electron Device Letters.

Prize: \$2,500 and Certificate and travel reimbursement (on an as needed basis, at the discretion of the President), a maximum travel support of \$1,500 for a winner residing within the U.S. and a maximum travel support of \$3,000 for a winner residing outside the U.S. to attend the award presentation at the International Electron Devices Meeting

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: Authors of papers appearing in IEEE Electron Device Letters publication in preceding calendar year.

Basis for Judging: (i) Creativity/Innovation/Novelty; (ii) Convincing (experimental/theoretical basis); (iii) Significance (academic/commercial impact); (iv) Comprehensive enunciation of the contribution in relation to prior art; (v) Clarity

Presentation: Annually, at the International Electron Devices Meeting.

8. **Electron Devices Society Region 9 Annual Outstanding Student Paper Award** (established in 2004) (revised 2013)

Description: To promote EDS activities and increase its number of members in Latin America, specifically by encouraging its student members to pursue a career in the field. Its general objective is to act as a stimulant for meritorious achievement on the part of Latin American students, and their advisors, within the areas of EDS competency, through the public recognition of their published work. To this end, a distinction is to be conferred in the form of an Annual Award certificate bestowed upon the most outstanding Student Paper nominated for the year.

The nominated papers should be written in English and have been published, or formally accepted, in full-feature form during the previous year in an internationally recognized EDS-sponsored journal or conference book of proceedings. In all cases the nomination should be accompanied by two statements: One by the student's faculty advisor under whose guidance the nominated work was carried out. It is to be written in 400 words or less and should unmistakably state the faculty advisor's support of the nomination, and clearly explain the extent of the nominated student's contribution as well as its relevance for the overall success of the reported work. The second statement, written by the nominated student, should explain in less than 1000 words what is the significance and repercussion of the nominated work within the wider scope of the nominee's career plans.

Prize: The prize shall consist of a recognition certificate to be presented at one of the EDS-sponsored or co-sponsored Conferences periodically held within Region 9, preferably in a country other than the recipient's. Under exceptional circumstances the SRC-R9 may choose to confer the distinction at an official EDS conference outside Region 9. In addition to the recognition certificate, the recipient shall receive a travel subsidy of up to \$1,500 for recipient to attend the conference where the award is to be presented. Furthermore, the recipient's conference registration fees shall be waived. It is expected that the organizers of the conference where the award is to be presented will waive the fees as a voluntary contribution to EDS SRC-R9 regional objectives. In case such contribution cannot be obtained, the recipient's registration fees will be included in the Award in addition to the travel allowance, as long as the total amount does not exceed US\$1000. Also, up to three years of complimentary IEEE and EDS student membership,

as long as winner remains eligible for student membership.

Funding: Funded by the annual budget of the EDS Subcommittee for Regions and Chapters – Region 9.

Eligibility: EDS student members currently enrolled at an educational institution located in Region 9. In the case of a co-authored paper, only eligible co-authors may be nominated. Papers should be written in English on an Electron Devices related topic. Papers should have been published, or formally accepted, in full-feature form during the previous year in an internationally recognized EDS-sponsored journal or conference book of proceedings.

Basis for Judging: There shall be clear and concise evaluation criteria and scoring instruments that the Award Committee members should adhere to. Papers will be judged on:

- a) technical content merit
- b) originality
- c) structure
- d) clarity of composition
- e) writing skills
- f) overall presentation.

The above criteria will be weighted by the assessment of the nominee's personal contribution and the linkage of the nominated work to the nominee's future career plans. The Committee will follow well established procedures, and its members will be responsible for the timely evaluation and scoring of the nominations.

The SRC-R9 Chair and Vice-Chair acting in accord and on behalf of the Award Committee, may declare the award to be deserted for a given year, if they were to find that after evaluation by the Committee none of the nominations have totalized a previously established minimum score.

A minimum of five nominations need to be submitted for a given year in order for the award to be administered for that year.

Presentation: The recognition certificate shall be presented at one of the EDS-sponsored or co-sponsored Conferences periodically held within Region 9, preferably in a country other than the recipient's. Under exceptional circumstances the SRC-R9 may decide to confer the distinction at an official EDS conference outside Region 9.

9. **IEEE EDS Graduate Masters Fellowship Program** (established in 2006)

Description: One-year fellowships awarded to promote, recognize, and support Graduate Masters level study and research within the IEEE Electron Devices Society's field of interest: elemental and compound semiconductor devices, organic and other emerging materials based devices, quantum effect devices, optical devices, displays and imaging devices, photovoltaics, solid-state sensors and actuators, solid-state power devices, high frequency devices, micromechanics, tubes and other vacuum devices,

Prize: \$2,000 and a Certificate to the student, to be presented by the Dean or Department Chair of the student's enrolled graduate program. At least one fellowship will be awarded to students in each of the following geographical regions every year: Americas, Europe/Middle East/Africa, Asia & Pacific. Only one candidate per school can be considered. It is planned to grant 5 awards at \$2,000 each

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: Candidates must: be an IEEE EDS student member at the time of nomination; be accepted into a graduate program or within the first year of study in a graduate program in an EDS field of interest on a full-time basis; and continue his/her studies at a graduate education institution. Nominator must be an IEEE EDS member and preferably be serving as the candidate's mentor or faculty advisor. Previous award winners are ineligible.

Basis for Judging: Demonstration of significant ability to perform research in the fields of electron devices and proven history of academic excellence in engineering and/or physics as well as involved in undergraduate research and/or supervised project.

Presentation: Monetary awards will be presented by the Dean or Department Chair of the recipient's graduate program at the beginning of the next academic term).

10. **IEEE Electron Devices Society Education Award** (established in 2006)

Description: To recognize distinguished contributions to education within the fields of interest of the IEEE Electron Devices Society.

Prize: \$2,500 and a Certificate. If needed, travel expenses not to exceed \$1,500 for a recipient residing within the US and not to exceed \$3,000 for a recipient residing outside the US. If multiple awards are given, each recipient will receive the full honorarium.

Funding: Funded by the IEEE Electron Devices Society.

Eligibility: Open to all members of the IEEE Electron Devices Society except members of the Selection Committee for this award. The recipient must be a distinguished educator affiliated with either an academic, industrial or government organization..

Basis for Judging: Factors for consideration include contributions and recognition in such areas as: teaching awards, evaluations by students, curriculum and course development, effectiveness as an educator supported by a list of students who have become recognized for their contributions to electron devices, innovative undergraduate, graduate, industrial and government programs, textbooks, innovative continuing education programs, innovative and industrial government education programs, and participation and contributions to the EDS Distinguished Lecturer Program.

Presentation: At the annual EDS sponsored International Electron Devices Meeting.

11. **IEEE Electron Devices Society Early Career Award** (established in 2008)

Description: Awarded annually to promote, recognize and support Early Career Technical Development within the Electron Devices Society's field of interest.

Prize: Multiple Awards Given Annually: A stipend of US\$1,000, a certificate; and if needed, travel expenses not to exceed US\$1,500 for a recipient residing in the US and not to exceed US\$3,000 for a recipient residing outside the US to attend the award presentation at the International Electron Devices Meeting (IEDM). A maximum of 3 award winners are permitted in a given year. Each winner will receive the \$1,000 stipend, a certificate, and reimbursement of travel expenses (if necessary).

Funding: Funded by IEEE Electron Devices Society.

Eligibility: Candidate(s) must have received their first professional degree (Bachelors) within the tenth year defined by the August 15th nomination deadline and are making contributions in an EDS field of interest area. Nominator(s) must be IEEE EDS members. Previous award winners are ineligible for substantially the same achievement.

Basis for Judging: The nominator(s) will be required to submit a nomination package comprised of the following: Nominating letter by an EDS member(s). This letter should contain, in a maximum of two pages, such technical information as appropriate, the nominee's contributions, accomplishments and impact on the profession or economy; A biographical description of the candidate(s); A minimum of two and a maximum of three letters of recommendation from individuals familiar with the candidate's technical contributions and other credentials, with emphasis on the specific contributions. The basis for judging includes such factors as; the demonstration of field leadership in a specific area; specific technical contribution(s); impact on the profession or economy; originality; breadth; inventive value; publications; honors; and. other appropriate achievements.

Presentation: At the BoG Meeting, which is held in conjunction with the International Electron Devices Meeting (IEDM) in December.

12. **IEEE Robert Bosch Micro and Nano Electro Mechanical Systems Award** (established in 2014)

Description: The IEEE Robert Bosch Micro and Nano Electro Mechanical Systems Award is established to recognize and honor advances in the design and fabrication of microelectromechanical systems and/or devices. The contributions to be honored by this award should be innovative and useful for practical applications.

MEMS are microsystems that contain devices having nonelectrical input or output signals, e.g. devices that are often described as sensors or actuators. In MEMS devices, the signals might, for example, represent variable mechanical forces, fluidic pressures, fluidic composition, magnetic fields, or chemical or biochemical properties. These MEMS devices typically have spatial dimensions measured in micrometers or nanometers. The acronym NEMS is sometimes used to designate systems built with nano-scale dimension components. The outstanding contributions to be honored may, for example, have been made, in MEMS or NEMS, in the areas of micro-optical systems, micro-fluidic systems, micro-biological systems, micro-resonators, or in micro-sensing and micro-actuating systems.

Prize: The recipient will receive a US\$10,000 honorarium (which includes up to \$3,000 of travel expenses for international travel and \$1,500 of travel expenses for domestic travel), a bronze medal, and a certificate. In the event that a team is selected, the cash honorarium will be equally divided among the recipients. Each recipient will receive a bronze medal and a certificate.

At this time, we are expecting industry support from the Bosch Corporation and the name proposed would relate this award to the Bosch Company as well as honoring a productive electrical systems engineer, Robert Bosch who founded the Bosch Company prior to 1900. Robert Bosch was born in 1861 and died in 1942. A Wikipedia profile details his inventive work with automobile ignition systems.

Funding: This award will be annually funded by Bosch (\$5K) and the remaining (\$5K) is to be split between EDS and any co-sponsoring IEEE societies that join us.

If Bosch drops out as a financial sponsor, EDS will continue as the sole financial sponsor at \$5K and the Bosch name will be dropped. Should any other sponsors drop their support of the award, EDS is committed to funding the award on its own.

Eligibility: Open to anyone except members of the Selection Committee for this award. It is not necessary for the recipient(s) to be a member(s) of IEEE. It is intended that the award will be presented annually to an individual or to a group of individuals up to three in number.

Advances that are appropriately eligible for IEEE awards honoring contributions in integrated circuits such as the Kilby Award or the Grove Award are ineligible for consideration as a basis for this Award.

Basis for Judging: Criteria considered by the Selection Committee will include impact on the field of MEMS technology and design, with special emphasis on seminal contributions and innovation. Evidence should include examples of leadership and professional interaction. Tangible supporting evidence in the form of publications, patents, and/or transition(s) to practice should be provided.

The Award Committee will review nominations. Judgment will be based on the submitted nominations, the endorsement letters, and the technical merit of the submission as reviewed by the Selection Committee's expert members. Voting will be under the leadership of the Selection Committee Chair, and the outcome will be based on the majority vote. The Selection Committee may choose not to propose a recipient for the award because none of the nominees meet the evaluation criteria.

The IEEE Robert Bosch Micro and Nano Electro Mechanical Systems Award may be presented to an individual or to as many as three individuals whose achievements and contributions are judged to meet the selection criteria for the award. It is not necessary for the recipient(s) to be a member(s) of IEEE.

Presentation: The award will be presented during the following year at an appropriate conference such as the International Conference on Micro Electro Mechanical Systems (MEMS).

13. **IEEE PVSC Stuart R. Wenham Award** (established in 2018)

Description: The IEEE PVSC Stuart R. Wenham Award recognizes individuals who have made significant contributions to the science and technology of photovoltaic energy conversion, including work on PV materials, devices, modules, and/or systems. The award recipient must also show significant promise as a leader in the field.

Prize: The award consists of a \$2000 monetary award, complimentary conference registration, plaque, and recognition at a PVSC Plenary Ceremony. In addition, the awardee will give an honorary talk during the conference. Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Funding: Funded by conference funds.

Eligibility:

- Nominee must be a young scientist or engineer who has made significant contributions to photovoltaic energy conversion, including work on PV materials, devices, modules, and/or systems.
- Nominee must have received their first post-secondary degree (Bachelor's level) within the past 15 years, relative to the nomination deadline.
- Nominees are not required to be members of IEEE or EDS.
- Nominees from any country and institution are eligible.
- Nominees are expected to have prior contributions to the IEEE PVSC or EU-PVSEC or PVSEC.
- Previous recipients of the Young Professional Award are not eligible.
- Self-nominations will not be accepted.
- Nominations will not automatically roll over to subsequent years, but nominators are allowed to resubmit nominations, provided the nominee is still eligible. Supplements to the original nomination are allowed, and should reflect the nominee's latest work.
- Members of the awards subcommittee in charge of selection are eligible to be nominated, but would recuse themselves of subcommittee duties if they are nominated.
- The award must be received by the winner in person at the PVSC; no award will be made in absentia, except under extraordinary circumstances, as determined by the conference chair.

Basis for Judging: Each Award Committee Member ranks his or her top 3 candidates based on following criteria:

- 1) Innovative and creative nature of the nominee's work
- 2) Significance of the nominee's work with respect to the broader PV community
- 3) Potential shown as a future leader in the PV community.

The Award Chair compiles the votes. At the conclusion of the 1st round if a candidate is ranked #1 by more than 50% of committee members he or she is selected as the winner (last year's case). If not the committee is asked to select a candidate between the top 2 ranked candidates in a 2nd round of voting.

Presentation: The award will be presented at the IEEE PVSC each year which takes place in June/July timeframe.

14. **IEEE EDS Leo Esaki Award** (established in 2019) (revised title 2020)

Description: This award recognizes the best paper appearing in the *IEEE EDS Journal of Electron Devices Society (JEDS)*.

Prize: A \$2,500 prize and a certificate and travel reimbursement for one awardee (on an needed basis, at the discretion of the President), a maximum travel support for one awardee of \$1,500.00 (residing within the U.S.)/\$3,000 (residing outside the U.S.) to attend the award presentation at the International Electron Devices Meeting (IEDM) (total max travel subsidy is \$3K). If more than one awardee, the \$2,500 prize money is divided equally among all authors, certificates for each awardee and travel reimbursement for one awardee is provided.

Funding: Funded by IEEE Electron Devices Society.

Eligibility: Authors of papers appearing in IEEE Journal of Electron Devices Society (JEDS) publication in preceding calendar year

Basis for Judging: The selection of Leo Esaki Award may be summarized as follows:

1. Each associate editor hereafter, called “editor,” of the editorial board assigns rating of each reviewed manuscript from “1” (adequate) to “10” (outstanding) based on the reviews’ comments as well as editor’s assessment on the quality of the manuscript. Typically the rating of an accepted manuscript for publication is “5” (good) and above.
2. For the Leo Esaki Award, at least five top ranked (typically, “8” to “10”) manuscripts that were published in JEDS in the preceding calendar year, would be selected for further review by each member of the editorial board except the Editor-in-Chief and vote. The Vice President (VP) of EDS Publications & Products Committee (PPC) is the chairperson of the selection process (non-voting). The final selection process for the best paper award is as follows:
 - a) The EDS VP of Publications would send an email to each member of the JEDS editorial board to review and rank the top five papers, with the best paper being ranked as “5”, the next best paper “4”, and so on. In order to differentiate the papers, it is advisable that no two papers share the same ranking. Furthermore, to help spread the final ratings of the papers, each editor may skip one or more positions among the five top papers (e.g. papers assigned to rank “5”, “3”, and “2” only skipping ranks “4” and “1”) to ensure that the closest to best paper (that is “5”), is only “3” and not “4”. Each editor would email the ranking to JEDS administrative staff at IEEE publishing operation for tabulation. Finally, the tabulated data are communicated to the selection committee chairperson for final announcement.
 - b) The criteria for best paper recommendations, the editors will emphasize on the following for each paper under consideration:

The major criteria are creativity/innovation/novelty, convincing experimental/theoretical basis, and academic/commercial significance of a paper.

A comprehensive enunciation of the contribution in relation to prior art is an important part of the paper selection criteria. If an editor thinks that, a paper does not cite prior work which is pertinent to the topic being discussed, that may be considered against the rating of the paper. This is especially true if the work not cited belongs to researchers from organizations other than the authors’ own.

Presentation: Annually at the IEEE EDS International Electron Devices Meeting (IEDM).

15. **IEEE EDS Undergraduate Student Scholarships (5)** (established in 2019)

Description: One-year scholarships awarded to promote, recognize, and support undergraduate level study and hands-on experience within the field of interest of IEEE Electron Devices Society (EDS). Five scholarships will be awarded each year with the selection of only one scholarship to eligible student in each of the IEEE geographical Regions 8, 9, and 10 and two scholarships in Regions 1-7 not exceeding one from Region 7.

Prize: Each of the 5 scholarship prizes would be for US\$1,000 each and a plaque to each winning student (max 5) to be presented by the Dean or Department head of the undergraduate program of the student’s resident institution.

Funding Funded by IEEE Electron Devices Society

Eligibility:

- 1) A candidate must be an IEEE EDS student member at the time of nomination;
- 2) A candidate must be a full-time undergraduate student in an engineering program of an accredited academic institution;
- 3) A candidate must have successfully completed at least an undergraduate course on microelectronic devices or fabrication processes with passing grade of at least B or equivalent;
- 4) A candidate must have a strong proven interest (enrolling microelectronic device/process courses and undergraduate research projects) to continue study and research in a graduate program in the EDS field-of-interest at an accredited academic institution;
- 5) Must be a fresh candidate; previous award winners are not eligible;
- 6) Nominator must be an IEEE EDS member and preferably be serving as the candidate’s mentor

of faculty advisor of IEEE EDS Student Branch of the Institute.

Basis for Judging: The EDS Student Fellowship Award Committee will review the nominations. Judgement will be based on the submitted nominations, the endorsement letters, and the technical merit of the submission as reviewed by the committee's expert members. Voting will be under the leadership of the Selection Committee Chair, and the outcome will be based on the majority vote. The Committee may choose not to propose a recipient for the award because none of the nominees meet the evaluation criteria.

Presentation: The awards will be presented by the Dean or Department head of the undergraduate program of the student's resident institution.

16. **IEEE EDS Lester F. Eastman Award** (established in 2019)

Description: For outstanding achievement in high-performance semiconductor devices.

Prize: \$2,000 and Certificate. Also, travel funding for the winner will be covered (\$1.5K max for US recipient and \$3K max for outside US recipient).

Funding **Funded annually \$2K each year by an initial endowment of approx. \$50,000 from cumulated profit of the Lester Eastman Conference on High-Performance Devices since its founding, and managed by IEEE Foundation.**

Eligibility: No restrictions as to IEEE or EDS membership, nationality, race, creed, sex or age.

Basis for Judging: Criteria considered by the Selection Committee will include impact on the field of semiconductor devices. Evidence should include examples of leadership and professional interaction. Tangible supporting evidence in the form of publications, patents, and/or transition(s) to practice should be provided. Award Committee will review nominations. Judgement will be based on the submitted nominations, the endorsement letters, and the technical merit of the submission as reviewed by the Selection Committee's expert members. Voting will be under the leadership of the Selection Committee Chair, and the outcome will be based on the majority vote. The Selection Committee may choose not to propose a recipient for the award because none of the nominees meet the evaluation criteria.

Presentation: The award will be presented during the International Electron Devices Meeting (IEDM).

IEEE ELECTRONICS PACKAGING SOCIETY
*(Formerly Components, Packaging, and Manufacturing Technology Society CPMT-21 -
name change effective 15-August-2017) EP-21 (Division I)*

For all Electronics Packaging Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **David Feldman Outstanding Contribution Award** (first presented in 1962) (revised in 1998, 2001) (revised eligibility and presentation 2014)

Description: To recognize an outstanding contribution to the fields encompassed by the EP Society through executive or managerial directions or through volunteer service.

Prize: \$2,500 and Certificate

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: Recipient must be a current member of IEEE and EPS (current in the year of the Award), and have been a member of IEEE and EPS for at least the prior five years.

Basis for Judging: Contributions to the organizations or enterprises connected with the field; contributions to EPS Chapter or Board of Governors activities; contributions to the fields encompassed by the EP Society.

Presentation: At the Electronic Components and Technology Conference (ECTC).

2. **Outstanding Sustained Technical Contributions Award** (established in 1992) (revised in 2001) (revised prize, eligibility, basis for judging, and presentation 2014)

Description: To recognize outstanding sustained and continuing contributions to the technology in fields encompassed by the EP Society.

Prize: \$3,000 and Certificate

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: Recipient must be a current member of IEEE and EPS (current in the year of the Award), and have been a member of IEEE and EPS for at least the prior five years.

Basis for Judging: Technical contributions must be sustained and continuing over a period of at least 15 and preferably 20 years. One major contribution will not qualify. Must be documented by open literature publications such as papers, patents, books and reports (available to the public).

Presentation: At the Electronic Components and Technology Conference (ECTC).

3. **Electronic Manufacturing Technology Award** (established in 1992) (revised in 2001) (revised prize, eligibility, basis for judging, and presentation 2014)

Description: To recognize major contributions to Electronic Manufacturing Technology in fields encompassed by the EP Society.

Prize: \$3,000 (to be prorated if for multiple recipients) and Certificate

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: IEEE and EP membership is not required.

Basis for Judging: Contributions may include technical development of, or management (directing) of major new electronic manufacturing processes; significantly increasing yield and/or reliability of established manufacturing processes, etc. Contributions must be sustained and continuing over a period of at least 15 and preferably 20 years. Work in the management of EPS Conferences or its BoG may be contributory but not sufficient to receive the award.

Presentation: At the Electronic Components and Technology Conference (ECTC).

4. **ECTC Best Paper Award**

Description: To recognize the best paper presented at the Electronic Components and Technology Conference.

Prize: \$1,000 and Certificate (\$1,000 to be prorated if for multiple authors)

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: Presenters of papers at the Electronic Components and Technology Conference in the previous year.

Basis for Judging: Originality, importance and timeliness, organization of written material, lucidity, conciseness and interest in oral presentation.

Presentation: Annually, at the Electronic Components and Technology Conference.

5. **Outstanding Young Engineer Award** (established in 1996) (revised prize, eligibility, and presentation 2014)

Description: To recognize outstanding contributions to the fields encompassed by the EP Society through invention, technical development, publications or new product implementation.

Prize: \$1,500 and Certificate.

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: Recipient must be a current member of IEEE and EPS (current in the year of the Award), and have been a member of IEEE and EPS for at least the prior three years, and must be 35 years of age, or younger, on 31 December of the year prior to the Award.

Basis for Judging: Technical contributions through patent invention, contributions to technology or product development within the EPS Field of Interest. May encompass management (directing) of significant new product introduction or implementation of major new electronic manufacturing processes; significantly increasing yield and/or reliability of established manufacturing processes. Contributions to the Society, through the BoG, Conferences, Chapters, etc., will also be considered. Proof of contributions may consist of open literature publications (preferred) such as papers, patents, books, and reports (available to the public). At least three letters from peers and management at the nominee's place of employment attesting to the accomplishment(s) can be accepted in lieu of publications.

Presentation: At the Electronic Components and Technology Conference (ECTC).

6. **ECTC Best Poster Session Paper Award** (established in 1998)

Description: To recognize the best paper presented in the Poster Session at the Electronic Components and Technology Conference.

Prize: \$1,000 and Certificate (\$1,000 to be prorated if for multiple authors).

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: Presenters of papers in the Poster Session at the Electronic Components and Technology

Conference in the previous year.

Basis for Judging: Originality, importance and timeliness, organization of written material, lucidity, conciseness and interest in oral presentation.

Presentation: Annually, at the Electronic Components and Technology Conference.

7. IEEE EPS Chapter of the Year Award (established in 1999)

Description: To recognize outstanding activities of a local EP Society Chapter.

Prize: Banner; Certificates for Officers

Funding: Funded by IEEE Electronics Packaging Society

Eligibility: Any EP Society Chapter (or Joint Chapter) that has not won the EP Society Chapter of the Year Award in the three years immediately preceding the current year of selection.

Basis for Judging: Evaluation of performance in the areas of technical, educational, membership advancement and membership recruitment via nominations report submitted by Chapters; points and weighting assigned based on activity within each category.

Presentation: At any major EP sponsored conference.

8. IEEE EPS Exceptional Technical Achievement Award (established in 2001) (revised eligibility and presentation 2014)

Description: To recognize an individual, or group of individuals (no more than three), for exceptional technical achievement in the fields encompassed by the EP Society.

Prize: \$2,500 (prorated for multiple recipients) and Certificate

Funding: Funded by the IEEE Electronics Packaging Society

Eligibility: Recipient(s) must be a current member(s) of IEEE and EPS (current in the year of the Award), and have been a member(s) of IEEE and EPS for at least the prior three years.

Basis for Judging: Technical contributions of the nominee(s) must be such that they are considered to be exceptional, not achieved by most members. A single major contribution will qualify for this award. The contribution could be a significant invention, introduction of a significantly new and important technology or product (in which case, the nominee may be a team leader), or significant work that advances the state-of-the-art in EPS's field of interest. The technical contributions must be documented by open literature publications such as papers, patents, books, and reports (available to the public). Technical recognition and awards from the organization employing the individual as well as awards from other IEEE and non-IEEE technical societies may also be contributory.

Presentation: At the Electronic Components and Technology Conference (ECTC).

9. IEEE EPS Regional Contributions Award (established in 2008)

Description: To recognize significant and outstanding leadership and contributions to the growth and impact of EPS programs and activities at the Region level. Maximum of one award annually for each Region/Groups of Regions (3 awards): Regions 1-7 & 9, Region 8, Region 10.

Prize: For each Award – \$1000 (equivalent in local currency) and a Certificate for each recipient.

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: Must be current Member of IEEE and EPS and have been a member for at least 3 years.

Basis for Judging: Demonstrated service and leadership in areas that may include but are not limited to Chapter activities, Conference/Workshop activities, Membership Development, Student Programs and

Technical Activities.

Presentation: Presented at EPS meeting within Region of the Award (e.g. Region 8 Award – at ESTC in Europe; Region 10 Award – at EPTC in Singapore).

10. **IEEE Transactions on Components, Packaging, and Manufacturing Technology Prize Paper Award** (established in 2014) (replaces *IEEE Transactions on Components and Packaging Technologies Prize Paper Award*, *IEEE Transactions on Advanced Packaging Prize Paper Award*, and *IEEE Transactions on Electronics Packaging Manufacturing Prize Paper Award*, which were dissolved 2014)

Description: To recognize the best papers – one paper from each defined technical category – published in the *IEEE Transactions on Components, Packaging and Manufacturing Technology*.

Prize: \$1,000 per Award (to be prorated if for multiple authors) and Certificate

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: Authors of papers published in the *IEEE Transactions on Components, Packaging and Manufacturing Technology* during the previous calendar year.

Basis for Judging: Originality of concept, skill in analysis, importance and timeliness of the subject, organization and lucidity of presentation.

Presentation: Annually, at the Electronic Components and Technology Conference.

11. **IEEE EPS PhD Fellowship** (established in 2018)

Description: To promote, recognize, and support PhD level study and research within the Electronic Packaging Society's field of interest.

Prize: US\$5,000 and Plaque – One fellowship awarded annually.

Funding: Funded by the IEEE Electronics Packaging Society.

Eligibility: Candidate must be an IEEE EPS student member at the time of nomination; be pursuing a doctorate degree within the EPS field of interest on a full-time basis from an accredited graduate school institution; the candidate must have studied with their advisor for at least 1 year to be eligible.

Previous award winners are ineligible. Student cannot receive an award from another IEEE Society within the same year.

Basis for Judging: Demonstration of his/her significant ability to perform independent research in the fields of electronic packaging and a proven history of academic excellence. Proof of contributions may consist of open literature publications (preferred) such as papers, patents, books, and conference presentations and reports (available to the public). At least one letter of recommendation, the student resume, and two-page (maximum) statement by the student describing his or her education and research interests, accomplishments, and impact on the electronics package industry.

Presentation: Award to be presented at Society luncheon held in conjunction with their flagship conference, ECTC (May/June).

12. **IEEE EPS Corning Leadership in Glass Award** (established in 2019)

Description: The IEEE EPS Corning Leadership in Glass Award is given to authors of the Electronic Components and Technology Conference (ECTC) paper that demonstrates the viability of glass for semiconductor packaging applications. The paper's supporting data makes the case for glass reliability and performance – identifying pathways for glass deployment that deliver significant value to the industry. Special judging consideration is given to papers that demonstrate clarity of thought and technical integrity.

- Prize:* The winning author(s) will receive a Steuben crystal Euclidean Award and share a check for US\$1,000. Single Annual Award with Multiple Recipients; Prize to be split equally among multiple recipients.
- Funding:* Funding for this award is provided by Corning Incorporated. The award will be limited to one paper per year, but multiple authors per paper may be selected as winners. In the event of multiple authors, the prize money will be split among the winning authors.
- Eligibility:* This award is open to all authors of relevant papers accepted for presentation at IEEE's Electronic Components and Technology Conference (ECTC) within the past two years. In accordance with IEEE requirements, all papers must be original, free of commercial content, and non-confidential.
- Basis for Judging:* Papers from the previous two years accepted for ECTC will be reviewed by the Corning committee annually. These papers will be provided by IEEE ECTC and reviewed internally. The Award Committee will look for relevancy to the application – glass for semiconductor packaging – and strong supporting data on glass reliability and performance. Other considerations will include clarity of thought and technical integrity. Once the committee has identified a winner, the selection will be reviewed with a member of the board of ECTC. The ECTC ExCom will be notified of their selection and have the opportunity to comment.
- Presentation:* The presentation will take place onsite during ECTC.

IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY

EMB-18 (Division X)

For all Engineering in Medicine and Biology Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Academic Career Achievement Award (renamed 2008)

Description: To recognize outstanding contribution and achievement in the field of Biomedical Engineering as an educator, researcher, developer, or administrator who had a distinguished career of 20 years or more in the field of biomedical engineering. Accomplishments may be technological or theoretical and need not have proceeded the award date by any specific period of time

Prize: \$2,500, and travel expenses not to exceed \$1,500.

Funding: Funded by the IEEE Engineering in Medicine and Biology Society.

Eligibility: Past or present member of IEEE and EMBS or their predecessors who has not been a voting member of AdCom for a minimum of two (2) years.

Basis for Judging: Contributions over a career of 20 years or more in the field of Biomedical Engineering, either as an educator, researcher, developer or administrator. Contributions must represent meritorious achievements and exemplary technical, educational, or administrative accomplishments in the field.

Presentation: Annually, at International EMBS Conference.

2. Early Career Achievement Award (revised 2013)

Description: To recognize outstanding contribution and achievement in the field of Biomedical Engineering within 10 years of completion of highest degree.

Prize: \$1,000, Plaque, and travel expenses not to exceed \$1,500 for travel to attend presentation, complimentary Conference registration and hotel accommodations.

Funding: Funded by the IEEE Engineering in Medicine and Biology Society.

Eligibility: IEEE and EMBS member who is within 10 years of completion of his/her highest degree at the time of nomination.

Basis for Judging: Significant contributions technologically or theoretically to the field of Biomedical Engineering. Contributions must represent meritorious achievements, exemplary technical contribution, or educational contribution as evidenced by innovative research, design, product development, patents, and/or publications.

Presentation: Annually, at International EMBS Conference.

3. Service Award (established in 1991)

Description: To recognize significant service contributions to the EMB Society.

Prize: \$1,000, Plaque, and travel expenses not to exceed \$1,500 for travel to attend presentation, complimentary Conference registration and hotel accommodations.

Funding: Funded by the IEEE Engineering in Medicine and Biology Society.

Eligibility: Must be a current member of IEEE and EMBS.

Basis for Judging: Contributions must represent uncommon dedication and a record of exemplary service to the EMBS in the form of service as an EMBS Officer, AdCom member, Editor, Associate Editor or Society Member.

Presentation: At International EMBS Conference.

4. **IEEE EMBS Student Paper Competition Region Finalist Awards** (renamed/revised criteria in 2013)

Description: To recognize outstanding student achievements in the field of Biomedical Engineering.

Prize: Certificate, complimentary Conference registration, Proceedings and ticket to Awards dinner, and reimbursement of travel expense up to \$1,000 for winners from each of the five (5) EMBS geographical areas: (North America (US and Canada), Latin America (Mexico & South America), Europe (as defined by WHO), Middle East & Africa, and Asia-Pacific).

Funding: Funded by the IEEE Engineering in Medicine and Biology Society.

Eligibility: Must be a current Student Member of IEEE and EMBS.

Basis for Judging: Significant contributions technologically or theoretically as evidenced by a paper submitted to the Annual International EMBS Conference. A maximum of one recipient will be selected from each EMBS geographical region represented by at least five (5) papers. Regions represented by fewer than five papers will be combined with another Region in the selection process.

Presentation: Annually, at International EMBS Conference.

5. **IEEE EMBS Student Paper Competition Open Finalist Awards** (renamed/revised criteria in 2013)

Description: To recognize outstanding student achievements in the field of Biomedical Engineering.

Prize: Certificate, complimentary Conference registration, Proceedings and ticket to Awards dinner, and reimbursement of travel expense up to \$500.

Funding: Funded by the IEEE Engineering in Medicine and Biology Society.

Eligibility: Must be a current Student Member of IEEE and EMBS.

Basis for Judging: Significant contributions technologically or theoretically as evidenced by a paper submitted to the Annual International EMBS Conference. Following selection of the Geographic Finalists, 10 students from the remaining field of competitors will be selected as Open Competition Finalists on the basis of submitted papers.

Presentation: Annually, at International EMBS Conference.

6. **IEEE EMBS Student Paper Competition 1st, 2nd, and 3rd Awards** (renamed/revised criteria in 2013)

Description: To recognize outstanding student achievements in the field of Biomedical Engineering.

Prize: \$1,000 for 1st place, \$750 for 2nd place, \$500 for 3rd place and Plaque for each.

Funding: Funded by the IEEE Engineering in Medicine and Biology Society.

Eligibility: Must be a current Student Member of IEEE and EMBS.

Basis for Judging: Most outstanding student competitors among Geographic and Open Competition Finalists on the basis of paper quality and presentation at the Annual International EMBS Conference.

Presentation: Annually, at International EMBS Conference.

7. **EMBS Whitaker Foundation Student Design Competition Awards** (established in 1995)

Description: To recognize outstanding undergraduate student achievements in the field of biomedical engineering design; accomplishments as demonstrated by the submission of a design report.

Prize Five awards will be presented annually. Each award will consist of Certificate, EMBS conference registration, ticket to opening reception, ticket to awards dinner and reimbursement for travel, lodging and meals of up to \$500. The awardees' design will be published in the EMBS Student Newsletter. Maximum estimated cost per year for these supplementary prize items for all 5 student awardees is \$4,200 (\$800 per student awardee) for travel stipends, conference registration and tickets to all appropriate social functions; plus approximately (\$40 per student awardee) for cost of certificates/plaques.

Funding: Funded by the Whitaker Foundation.

Eligibility: Individual must be a current undergraduate student member of IEEE and the EMB Society.

Basis for Judging: Students who have made significant design contributions to the field of biomedical engineering as evidenced by excellence of design of a submitted design report, supported by submitted audio-visual material. Five students from the field of competitors will be selected as the awardees by the Student Activities Committee of the EMB Society.

Presentation: At the Annual International Conference of the EMB Society.

8. **Paralyzed Veterans of America Best Paper Award - *IEEE Transactions on Rehabilitation Engineering*** (established in 1996)

Description: To recognize the best manuscript published in the *IEEE Transactions on Rehabilitation Engineering* during the previous three calendar years.

Prize: \$300 (to be shared equally among all authors), a plaque for each author, and reimbursement of up to \$500 for travel, registration and accommodation expenses for one of the authors to attend an awards presentation ceremony.

Funding: Funding will be provided by the Paralyzed Veterans of America. Award funds will be administered by the PVA.

Eligibility: Author(s) of any manuscript (paper, review, commentary, communication, or technical note) published in the *IEEE Transactions on Rehabilitation Engineering* during the previous three calendar years are automatically eligible. Award is presented in sum to all the authors of the paper selected. The individual(s) selected need not be a current member of IEEE or the EMB Society.

Basis for Judging: Each manuscript will be randomly assigned to three editors for scoring; conflicts of interest will be avoided. Each manuscript will be scored by the following screen: Rehabilitation potential - 25%; Scientific or engineering foundation - 25%; Innovation or Insight - 20%; Clarity of thought - 15%; Clarity of presentation - 15%. The scores from the three editors will be combined. The scores that an individual editor assigns across all manuscripts will be compared to those of other editors, and appropriate adjustments made for rater bias. The top three manuscripts scoring above a specified screening value (initially 90%) will be submitted to an approval votes of the Editors of the Transactions (Editor-in-Chief, Associate Editors and Assistant Editors), and to endorsement of the EMBS Publications Committee.

Presentation: Annually, at EMBS Annual International Conference jointly by the Editor of the Transactions and a representative of the Paralyzed Veterans of America.

9. **IEEE EMBS Outstanding Performance Award for an EMBS Student Club or Chapter** (established in 2007)

Description: To recognize outstanding performance in promoting interest and involvement in biomedical engineering in an EMBS Student Club or Branch Chapter during the previous calendar year.

Prize: \$500 and reimbursement of up to \$1,000 for transportation and hotel accommodations at the EMBS Annual International Conference.

Funding: Funded by IEEE Engineering in Medicine and Biology Society.

Eligibility: Active EMBS Student Branch Chapters or Clubs during the calendar year from January - December.

Basis for Judging: A single EMBS Student Club or Branch Chapter will be selected each year, based on the following: activities demonstrating initiative, innovation and creativity; areas of progress and improvement; significant impact in biomedical engineering education; and contributions to the profession. Among the documentation considered in selecting the winning Student Club or Branch Chapter will be website, meeting reports and newsletters. The award is presented to the Student Club or Branch Chapter whose Executive Committee determines which individual member of the Student Club or Branch Chapter will travel to the Society's Annual International Conference to receive the award on behalf of the Student Club or Branch Chapter.

Presentation: The Student Club or Branch Chapter will be recognized at the conference's awards presentation ceremony at the Annual International Conference of the IEEE Engineering in Medicine and Biology Society.

10. **IEEE EMBS Best New Chapter Award** (established in 2007)

Description: To recognize outstanding activities performed by a new EMBS Chapter within the first 12 months of Chapter formation.

Prize: \$500 and reimbursement of up to \$1,000 for transportation and hotel accommodations at the EMBS Annual International Conference.

Funding: Funded by IEEE Engineering in Medicine and Biology Society.

Eligibility: Active EMBS Chapters during the calendar year from January - December.

Basis for Judging: A single EMBS Chapter will be selected each year, based on the following: activities demonstrating initiative, innovation and creativity; areas of progress and improvement; member development; and contributions to the profession. Among the documentation considered in selecting the winning Chapter Award will be website, meeting reports and newsletters. The award is presented to the Chapter whose Executive Committee determines which individual member of the Chapter will travel to the Society's Annual International Conference to receive the award on behalf of the Chapter.

Presentation: The Chapter will be recognized at the conference's awards presentation ceremony at the Annual International Conference of the IEEE Engineering in Medicine and Biology Society.

11. **IEEE EMBS Best New Student Chapter/Club** (established in 2007)

- Description:* To recognize outstanding activities performed by a new EMBS Student Chapter/Club during the first 12 months of Chapter formation.
- Prize:* \$300 and reimbursement of up to \$1,000 for transportation and hotel accommodations at the EMBS Annual International Conference.
- Funding:* Funded by IEEE Engineering in Medicine and Biology Society.
- Eligibility:* Active EMBS Chapters/Clubs during the calendar year from January - December.
- Basis for Judging:* A single EMBS Chapter/Club will be selected each year, based on the following: activities demonstrating initiative, innovation and creativity; areas of progress and improvement; significant impact in biomedical engineering education; and contributions to the profession. Among the documentation considered in selecting the winning Chapter/Club will be website, meeting reports and newsletters. The award is presented to the Chapter/Club whose Executive Committee determines which individual member of the Chapter/Club will travel to the Society's Annual International Conference to receive the award on behalf of the Chapter/Club.
- Presentation:* The Student Chapter/Club will be recognized at the conference's awards presentation ceremony at the Annual International Conference of the IEEE Engineering in Medicine and Biology Society.

12. **IEEE EMBS Professional Career Achievement Award** (established in 2008)

- Description:* For outstanding contributions advancing Biomedical Engineering and its professional practices as a practicing biomedical engineer working in industry, government or other applied areas who has had a distinguished career of twenty years or more related to biomedical engineering. Accomplishments include, but are not limited to, technological advances, improvements in processes, or development of new products or procedures, and need not have preceded the award date by any specified period of time. This Award is being established to compliment the EMBS Academic Career Achievement Award.
- Prize:* Honorarium \$2,500 USD, Travel Reimbursement up to \$1,500 USD.
- Funding:* Annually scheduled in the Society's Budget for Awards.
- Eligibility:* Nominees should be a member in good standing of the IEEE Engineering in Medicine and Biology Society. Only individual nominations are accepted. Any past or present member of the IEEE and EMBS who has not been a voting member of AdCom in the past two years is eligible.
- Basis for Judging:* Practicing biomedical engineer working in industry, government or other applied areas who has had a distinguished career of twenty years or more related to biomedical engineering.
- Presentation:* The presentation venue for the Society Award is at the Society's Annual International Conference, which is generally held late August/early September. Accomplishments include, but are not limited to, technological advances, improvements in processes, or development of new products or procedures, and need not have preceded the award date by any specified period of time.

13. **IEEE EMBS Award for Excellence in Biomedical Technology in Memoriam of William J. Morlock** (re-established in 2008)

Description: The William J. Morlock Award was established in 1960 by the family of William J. Morlock to give recognition to a qualified person with an original contribution involving important application of electronics techniques and concepts to the solution of biomedical problems. In previous years, the Award was coupled with the EMBS Career Achievement Award.

Prize: The recipient will receive a US\$3,000 honorarium and US\$2,000 in travel funds to attend the EMBS Awards Presentation and commemorative plaque.

Funding: **A fund is already established for the William J. Morlock Award (Fund#67R).**

Eligibility: In addition to members of the IEEE Engineering in Medicine and Biology Society, IEEE members and Non-Members would be eligible to qualify for this award. There are no restrictions as to IEEE membership, gender, or age. The IEEE William J. Morlock Technical Field Award will be awarded biennially and to an individual recipient. Criteria considered by the EMBS Awards Committee shall be based on one or more of the following achievements: Over an extended period, adding recognized worthwhile increments to the field, the total of which represents an outstanding contribution to biomedical engineering; A single contribution of theory, instrument design or technique of outstanding significance; Contribution in education toward biomedical electronics or biomedical engineering, through academic activities or a series of tutorial writings; Publications of outstanding papers on theory or practice or as an editor of material that has had an important influence on the development of some field of biomedical electronics or biomedical engineering; Important application of electronics techniques and concepts to the solution of biomedical problems. This should be an original contribution involving electronics

Basis for Judging: The IEEE EMBS Awards Committee shall review nominations. Judgment will be based on the nominator's write-up, the endorsement letters, and personal knowledge of the EMBS Award Committee's expert members. Voting will be under the leadership of the EMBS Award committee Chair, and the outcome will be based on the majority consensus.

Presentation: All EMBS Awards are presentation at the Society's Annual International Conference.

14. **IEEE Engineering in Medicine and Biology (EMBS) Technical Award** (established in 2009)

Description: To recognize an individual(s) for outstanding achievement, contribution(s), and/or innovation in a technical area of biomedical engineering.

Prize: Honorarium \$1,500 (shared equally if awarded to a team) USD/Travel Reimbursement up to \$1,500 USD. Travel funding of \$1,500 will similarly be distributed equally among the team if they wish to receive the award as a group or they may select one team member to use the travel funds to attend the EMBS Awards Presentation on behalf of the team.

Funding: Funded by the Engineering in Medicine and Biology Society.

Eligibility: The IEEE Engineering in Medicine and Biology Technical Award may be awarded to an individual or a team. The maximum amount of members eligible in a team award is limited to five individuals. There are no restrictions as to IEEE Membership, gender or age.

This achievement can be demonstrated by the advancement of technology through a publication and/or the development of a product, device or service. The areas of technology that would be eligible for recognition of this award include (but is not limited to) bio-signal processing, biomedical image and image processing, bio-instrumentation, bio-sensors, bio-micro/nano technologies, bio-informatics, computational biology and systems biology, cardio-vascular and respiratory systems engineering, neural and rehabilitation engineering, cellular and tissue engineering, bio-materials, bio-robotics, bio-mechanics, therapeutic and diagnostic systems, medical device design and development, healthcare information systems, telemedicine, and emerging technologies in biomedicine.

Each year up to five awardees from the various technical areas of EMBS will be selected based on nominations.

Basis for Judging: The IEEE EMBS Awards Committee shall review nominations. Judgment will be based on the nominator's write-up, the endorsement letters, and personal knowledge of the EMBS Award Committee's expert members. Voting will be under the leadership of the EMBS Award committee Chair, and the outcome will be based on the majority consensus.

Presentation: All EMBS Awards are presentation at the Society's Annual International Conference.

15. **IEEE EMBS Outstanding Chapter Award** (established in 2013)

Description: For demonstrating outstanding performance in promoting interest and involvement in biomedical engineering in an EMBS Chapter during the previous calendar year.

Prize: The awardee will receive an Honorarium of \$1,000 and reimbursement of up to \$1,000 for a representative's transportation and hotel accommodations to attend the EMBS Annual International Conference.

Funding: Funded by the Engineering in Medicine and Biology Society.

Eligibility: Active EMBS Chapters during the previous calendar year from January – December.

Basis for Judging: A single EMBS Chapter will be selected each year, based on the following:

- activities demonstrating initiative, innovation and creativity
- areas of progress and improvement
- member development
- contributions to the profession

Among the documentation considered in selecting the winning Chapter Award will be website, meeting reports and newsletters. The award is presented to the Chapter, whose Executive Committee determines which individual member of the Chapter will travel to the Society's Annual International Conference to receive the award on behalf of the Chapter.

Presentation: The Chapter will be recognized at the conference's awards presentation ceremony at the Annual International Conference of the IEEE Engineering in Medicine and Biology Society.

IEEE GEOSCIENCE AND REMOTE SENSING SOCIETY
GRS-29 (Division IX)

For all Geoscience and Remote Sensing Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

MAJOR AWARDS:

1. IEEE GRSS Fawaz Ulaby Distinguished Achievement Award (revised title 2019)_

Description: To recognize technical contributions to the field of geoscience and remote sensing.

Prize: Plaque and Certificate

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: IEEE membership not required but recommended. Individuals who receive this major GRSS award are not eligible to receive another GRSS major award within 5 years.

Basis for Judging: Quality, significance and impact of contributions; quantity, duration of contributions which may include archival papers, symposia papers, patents, advancement of profession.

Presentation: At Geoscience and Remote Sensing Symposium (IGARSS).

2. IEEE GRSS Outstanding Service Award

Description: To recognize outstanding service for the benefit and advancement of the GRS-S.

Prize: Certificate

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: Must be a member of GRS-S. Individuals who receive this major GRSS award are not eligible to receive another GRSS major award within 5 years.

Basis for Judging: Leadership, innovation, activity, service, duration, breadth of participation, cooperation.

Presentation: At Geoscience and Remote Sensing Symposium.

3. IEEE GRS-S Education Award (established in 2000)

Description: To recognize educational contributions to the field of remote sensing.

Prize: Certificate

Funding: Funded by the IEEE Geoscience and Remote Sensing Society

Eligibility: Must be a member or affiliate of IEEE GRSS. Individuals who receive this major GRSS award are not eligible to receive another GRSS major award within 5 years

Basis for Judging: Significance of the educational contribution in terms of the innovation and the extent of its overall impact. The contribution can be at any level, including K-12, undergraduate and graduate teaching, professional development, and public outreach. It can also be in any form (e.g. textbooks, curriculum development, educational program initiatives).

Presentation: Presented at the banquet of the IGARSS meeting.

4. **IEEE GRSS Industry Leader Award** (established in 2015)

Description: To recognize an individual who has made significant contributions over a sustained period of time in industrial and/or commercial remote sensing discipline.

Prize: Plaque and Certificate.

Funding: Funded award would be funded by the annual budget of the IEEE Geoscience and Remote Sensing Society.

Eligibility: Preference may be given to an individual who: is an IEEE GRSS member; has made significant contributions to remote sensing system engineering, science, and/or technology; has made significant contributions to dissemination and commercialization of remote sensing products; has demonstrated leadership to promote remote sensing science and technology. Individuals who receive this major GRSS award are not eligible to receive another GRSS major award within 5 years.

Basis for Judging: Significance, quality and impact of activities and contributions and achievements.

Presentation: At an awards ceremony during the International Geoscience and Remote Sensing Symposium, IGARSS, together with other IEEE GRSS awards.

SPECIAL AWARDS

5. **IEEE GRSS Early Career Award** (established in 2014)

Description: The GRSS Early Career Award is established to promote, recognize and support young scientists and engineers within the Geoscience and Remote Sensing Society who have shown great potential in their fields of expertise and demonstrated promise for significant contributions in the future.

Prize: \$ 1,500 honoraria and certificate.

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: The candidate must be a member of IEEE GRSS for at least 5 years and be less than 35 years old at the time of nomination. The nomination clearly identifies candidate's outstanding contributions in one or more GRSS field(s) of interest.

Basis for Judging: Criteria for the candidate selection are quality, significance and impact of contributions, papers published in archival journals - papers presented at conferences and symposia, patents, demonstration of leadership, and advancement of profession.

Presentation: The award shall be presented at an awards ceremony during the International Geoscience and Remote Sensing Symposium, IGARSS, together with other IEEE GRSS awards.

6. **IEEE GRSS Regional Leader Award** (established in 2014)

Description: The IEEE GRSS established the Regional Leader Award to promote, recognize and support members within the Geoscience and Remote Sensing Society who have made significant technical, scientific and/or organizational achievements in the areas of interest to the IEEE Geoscience and Remote Sensing community. The award shall be considered annually and presented if an outstanding candidate is identified.

Prize: \$ 1,500 honoraria and certificate.

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: The Special Awards Committee may give preference to candidates who:
- are an IEEE GRSS member with the Grade of Senior Member or Fellow

- have been a member of GRSS and IEEE for at least 5 years
- are pivotal and have performed significant contributions in a region where the GRSS membership and local activities have substantially increased in recent years.

Basis for Judging: Quality, significance and impact of the candidate activities; quantity of contributions; duration of significant activity; regional organizational achievements; presence in the GRSS community. The award is presented only once to an individual.

Presentation: The award shall be presented at an awards ceremony during the International Geoscience and Remote Sensing Symposium, IGARSS, together with other IEEE GRSS awards.

7. **GRS-S Chapter Excellence Award** (established in 2004)

Description: The award is to recognize excellence in a Geoscience and Remote Sensing Society Chapter or Joint Local Chapter demonstrated by exemplary local GRS-S activities during the previous year. The award shall be considered annually and presented only when a deserving Chapter is identified.

Prize: Certificate and honorarium for \$1,000 to be used *only* for Chapter activities.

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: IEEE Geoscience and Remote Sensing Society Chapters and combined IEEE Chapters.

Basis for Judging: For each Chapter to be considered, the Chapter Chair is required to submit a copy of the previous year's annual Chapter Report to the AdCom Chapters Committee Chair before January 15. The AdCom Chapters Chair then will compile a synopsis of all Chapter Reports received and may provide a recommendation to the Awards Chair before January 31. The AdCom Chapters Committee Chair may provide recommendations but does not have a vote in the Awards selection. The Awards Chair determines if a suitable Chapter is found for this award. Selection is based on the following: quantity, quality, breadth and significance of activities and technical meetings during the previous calendar year, active participation of members in IGARSS and other GRS-S sponsored activities. The award is approved by the GRS-S AdCom.

Presentation: The award shall be presented at an awards ceremony during the International Geoscience and Remote Sensing Symposium, IGARSS, together with other IEEE GRS-S awards.

8. **IEEE GRSS David Landgrebe Award** (established in 2014)

Description: The IEEE GRSS David Landgrebe Award is a GRSS career award, which is awarded for outstanding contributions in the field of remote sensing image analysis. The contributions shall be related to at least one of the following fields: classification, image analysis, feature extraction, change detection, data fusion, data mining, etc.

Prize: Certificate.

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: The Special Awards Committee may give preference to candidates who:

- are an IEEE GRSS member
- are pivotal and have performed significant contributions to the analysis of remote sensing images in recent years
- published their results in IEEE GRSS journals or conferences.

Basis for Judging: Quality, significance and impact of the candidate activities; quantity of contributions; duration of significant activity; presence in the GRSS community. The award is presented only once to an individual.

Presentation: The award shall be presented at IGARSS or a GRSS co-sponsored specialty symposium in the field of analysis of remote sensing images such as Whispers, Multitemp or JURSE.

9. **Honorary Life Member**

- Prize:* Certificate, feature publication in *GRS-S Transactions*, ex-officio membership on GRS-S Administrative Committee, and GRS-S dues paid for life.
- Funding:* Funded by IEEE Geoscience and Remote Sensing Society.
- Eligibility:* Must have made significant technical contributions in the field of interest of Society; performed outstanding service to IEEE and profession; been an elected member of GRS-S Administrative Committee; and member of GRS-S for at least five (5) years.
- Basis for Judging:* Significance, quality, duration, prominence, and sustained leadership.
- Presentation:* At Geoscience and Remote Sensing Symposium.

PUBLICATIONS AWARDS

10. IEEE GRS-S Highest Impact Paper Award (established in 2011)

- Description:* To recognize the author(s) who have published during the past five years in an IEEE GRS-S Journal the scientific paper that has received the highest number of citations and impact over the past five years as measured by the Thomson Reuters Web of Science citation index. A previously selected paper shall not be eligible for this award in the following years.
- Prize:* Certificate and \$3,000 honorarium. In case of multiple authors, each will receive a certificate, and the cash award will be shared among the co-authors.
- Funding:* Funded by the IEEE Geoscience and Remote Sensing Society.
- Eligibility:* Technical/scientific papers published in an IEEE GRSS Journal by author(s) who are a GRSS member at the time of publication.
- Basis for Judging:* Papers published up to five calendar years previous are screened for their number of citations. The screening is performed with Thomson Reuters Web of Science for the IEEE GRSS Journals:
- IEEE Transactions on Geoscience and Remote Sensing
 - IEEE Geoscience and Remote Sensing Letters
 - IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- Presentation:* The award shall be presented at an awards ceremony during the next IGARSS.

11. Transactions Prize Paper Award (revised 1998, 2009, 2010)

- Description:* To recognize the best papers published in the *IEEE Transactions on Geoscience and Remote Sensing*.
- Prize:* \$3,000 and Certificate
- Funding:* Funded by the IEEE Geoscience and Remote Sensing Society.
- Eligibility:* Authors of papers published in *IEEE Transactions on Geoscience and Remote Sensing* in prior year; an earlier paper may be considered.
- Basis for Judging:* Content, impact, timeliness, clarity, and comprehensiveness.
- Presentation:* At Geoscience and Remote Sensing Symposium.

12. Letters Prize Paper Award (revised 2004, 2009, 2010)

- Description:* To recognize the best papers published in the *IEEE Geoscience and Remote Sensing Letters*.

Prize: \$1,500 and Certificate

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: Authors of papers published in *IEEE Geoscience and Remote Sensing Letters* in prior year; an earlier paper may be considered.

Basis for Judging: Content, impact, timeliness, clarity, and comprehensiveness.

Presentation: At Geoscience and Remote Sensing Symposium.

13. IEEE GRS-S J-STARS Prize Paper Award (established in 2010)

Description: To recognize the author(s) who has published in the IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing during the calendar year an exceptional paper in terms of content and impact on the GRS-Society.

Prize: \$1,500 and Certificate. In case of multiple authors, each will receive a certificate, and the cash award will be shared among the co-authors.

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: Papers published in the IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing.

Basis for Judging: Factors considered are originality, clarity and timeliness of the paper. IEEE membership is preferable. Nominations for the J-STARS Prize Paper Award shall be made by: Reviewers of the GRS-S J-STARS papers. Associate Editors of the GRS-S J-STARS, Editor in Chief of GRS-S J-STARS, Society members. EIC will compile the list of nominated papers and forward to GRS-S Publications Awards Committee for consideration.

Presentation: The award shall be presented at an awards ceremony during the International Geoscience and Remote Sensing Symposium, IGARSS, of the year following the publication period.

SYMPOSIUM AWARDS:

14. Symposium Prize Paper Award (revised 1998, 2009)

Description: To recognize the best papers presented at the International Geoscience and Remote Sensing Symposium.

Prize: \$1,250 and Certificate

Funding: Funded by the IEEE Geoscience and Remote Sensing Society.

Eligibility: Presenters of papers at Geoscience and Remote Sensing Symposium in prior year.

Basis for Judging: Content, impact, timeliness, clarity, and comprehensiveness.

Presentation: At Geoscience and Remote Sensing Symposium.

15. Interactive Session Prize Paper Award (established in 1993) (revised 1998, 2009)

Description: To recognize an exceptional paper posted in an Interactive Session of the International Geoscience and Remote Sensing Symposium (IGARSS).

Prize: \$1,250 and Certificate

Funding: Funded by IEEE Geoscience and Remote Sensing Society.

Eligibility: Authors of papers posted in Interactive Sessions of IGARSS.

Basis for Judging: Readability ease, comprehension ease, clarity, background adequacy, content adequacy, originality, significance, impact, timeliness, etc.

Presentation: At Geoscience and Remote Sensing Symposium.

16. **GRS-S Student Prize Paper Award** (established in 1998) (revised 1998, 2010)

Description: To recognize the best student paper(s) 2nd and 3rd place papers presented at the IEEE International Geoscience and Remote Sensing Symposium (IGARSS). The award shall be considered annually.

Prize: A maximum of two awards (2nd and 3rd place) in rank order will be presented after awarding the 1st place best student paper with the IEEE Mikio Takagi Student Prize of \$1,000. Second and Third place prize winners of this award will receive \$750 and \$500, respectively, and each awardee will receive a Certificate. If there are multiple eligible authors, the honoraria will be shared.

Funding: Funded by the IEEE Geoscience and Remote Sensing Society. The award will be implemented for an initial period of five years.

Eligibility: The (first) author must: a) be a student, b) be under 33 years of age, c) be a candidate for a graduate degree, d) be an IEEE member, e) publish the paper in the IGARSS Digest, f) be registered at IGARSS, g) personally present the paper at IGARSS, and h) be present at the IGARSS Banquet to receive the award, but not required to attend the entire Banquet which includes a meal. Multiple eligible authors are allowed. An ineligible co-author, or an advisor, must verify on university letterhead that the candidate is a student, under 33 years of age, a candidate for a graduate degree, and an IEEE member on the submittal date of the paper.

Basis for Judging: Factors considered include: significance, innovation, quality of presentation, and quality of the paper in the Digest.

Presentation: Awards will be presented at the Banquet of IGARSS at which the paper is presented, and publicized in the GRS-S Newsletter and IEEE Transactions on Geoscience and Remote Sensing.

17. **IEEE Mikio Takagi Student Prize** (established in 2006) (revised 2010)

Description: To recognize a student who has presented an exceptional paper at the IEEE Geoscience and Remote Sensing Symposium (IGARSS).

Prize: \$1,000 and Certificate; 1st place prize for best student paper presented at IGARSS. (Second and Third Place papers will receive the GRS-S Student Prize Paper Award of \$750 and \$500, respectively, funded separately by the society).

Funding: **The first \$500 is to be funded by an endowment provided by the family and friends of Professor Mikio Takagi, and managed by the IEEE Foundation**, the balance of the prize, in excess of the original \$500, is to be funded by the Geoscience and Remote Sensing Society.

Eligibility: The prize recipient must be a student, be registered at the Symposium and have presented the paper.

Basis for Judging: Selection will be based on the following: paper content, originality, significance and quality of presentation.

Presentation: Presented to the winner in the name of GRSS, and announced at a function during IGARSS.

IEEE INDUSTRIAL ELECTRONICS SOCIETY

IE-13 (Division X)

For all Industrial Electronics Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Dr.-Ing. Eugene Mittelman Achievement Award** (first presented as Achievement Award in 1975; revised prize 2015) (revised 1997, 2005)

Description: To recognize outstanding contributions to the field of Industrial Electronics.

Prize: \$6,000 and Certificate; Provide Travel Support up to but not more than \$3,000. Travel support is in the form of reimbursement based on the actual expense.

Funding: Funded by IEEE Industrial Electronics Society.

Eligibility: Must be member of IES.

Basis for Judging: May be given for a single major accomplishment or for a career of recognized achievements. Awarded only when suitable candidates are identified. Not necessarily awarded yearly.

Presentation: This is the IE Society's major award and is awarded at the Society's major international conference.

2. **Anthony J. Hornfeck Service Awards** (first presented as Meritorious Award in 1979) (revised 1997, 2003, 2005, 2008) (revised prize 2015)

Description: To recognize outstanding, meritorious services to the IEEE Industrial Electronics Society.

Prize: \$4,000 and Certificate (more than one award may be given); Provide Travel Support up to but not more than \$3,000. Travel support is in the form of reimbursement based on the actual expense

Funding: Funded by IEEE Industrial Electronics Society.

Eligibility: IES members

Basis for Judging: For exceptional service to the IE Society. Awarded only when a suitable candidate can be identified. Not necessarily awarded yearly.

Presentation: At the Society's major international conference.

3. **IEEE Outstanding Paper Award for the IEEE Transactions on Industrial Electronics** (formerly Transactions Paper Award) (revised 1997, 2005) (revised prize 2015) (revised title 2021)

Description: To recognize outstanding paper(s) paper published in the *IEEE Transactions on Industrial Electronics*.

Prize: \$2,000 and Certificate(s), plus reimbursement for IES-approved travel expenses to receive the award up to but not more than \$3,000. Co-authors may divide the \$2,000 prize. Up to 3 awards may be given. Reimbursements of travel should follow IEEE Policies and Procedures.

Funding: Funded by IEEE Industrial Electronics Society.

Eligibility: Author(s) of papers published in the Transactions during the year specified for the award.

- Basis for Judging:* The prize paper will be selected by the IE Transactions Editorial Board on the basis of the value of the contribution, subject matter, originality, and composition, and recommends the selected candidate(s) to the AdCom for approval.
- Presentation:* At one of the Society's major international conferences IECON, ISIE, ICIT, and INDIN.
4. **AdCom Life Member Award** (Established in 1982) (revised 1997)
- Description:* To recognize outstanding dedication and service to the IE Society over a sustained period of time.
- Prize:* Certificate
- Funding:* Funded by IEEE Industrial Electronics Society.
- Eligibility:* IES members 1) who are Senior Members of the Society's AdCom, and 2) who have had 30 years of membership in IEEE.
- Presentation:* Aperiodically at IES Conferences or AdCom meetings.
5. **Best Conference Paper Award** (Established in 2005) (revised prize 2015)
- Description:* To recognize the best paper in the Industrial Electronics Society's major conference proceedings.
- Prize:* \$2,000 and Certificate; Provide Travel Support up to but not more than \$3,000. Travel support is in the form of reimbursement based on the actual expense.
- Funding:* Funded by IEEE Industrial Electronics Society.
- Eligibility:* Author(s) of papers in the Industrial Electronics Society's major conference proceedings during the year specified for the award. Must be a member of the IEEE.
- Basis for Judging:* The Best Conference Paper will be selected based upon its originality and its contribution to the field of industrial electronics. Awarded only when suitable candidates are identified. Not necessarily awarded annually.
- Presentation:* At the Society's annual conference
6. **IEEE J. David Irwin Early Career Award** (established in 2005 as Young Researcher Award; renamed in 2010 *formerly Early Career Award*) (revised prize 2015)
- Description:* To recognize a young researcher who has made significant contributions to the advancement of the field of industrial electronics.
- Prize:* \$2,000 and Certificate; Provide Travel Support up to but not more than \$3,000. Travel support is in the form of reimbursement based on the actual expense.
- Funding:* Funded by IEEE Industrial Electronics Society.
- Eligibility:* Must be a member of IES who, on the date of nomination, is within his/her first 10 years of professional experience from the date of his/her last academic degree.
- Basis for Judging:* Technical importance of the contribution, subject matter, originality, and prospects for future success. Awarded only when suitable candidates are identified. Not necessarily awarded annually.
- Presentation:* At the Society's annual conference.

7. **Student Best Paper Award** (established in 2005; revised prize and eligibility 2015)

Description: To recognize the student best paper in the IEEE Industrial Electronics Society publications and to encourage the student or graduate student author to contribute further in the field of industrial electronics.

Prize: \$2,000 and Certificate; Provide Travel Support up to but not more than \$3,000. Travel support is in the form of reimbursement based on the actual expense.

Funding: Funded by IEEE Industrial Electronics Society.

Eligibility: Author(s) of papers in the IEEE Industrial Electronics Society publications during the year specified for the award, where the first author must be a graduate student IEEE member.

Basis for Judging: Value of the contribution, subject matter, originality, and composition. Awarded only when suitable candidates are identified. Not necessarily awarded annually.

Presentation: At the Society's annual conference.

8. **IEEE Best Paper Award for the *IEEE Industrial Electronics Magazine*** (established in 2007; revised prize 2015)

Description: To recognize the best paper published in the *IEEE Industrial Electronics Magazine*.

Prize: \$2,000 and Certificate(s) (multiple authors will divide the prize); Provide Travel Support up to but not more than \$3,000. Travel support is in the form of reimbursement based on the actual expense.

Funding: Funded by the IEEE Industrial Electronics Society

Eligibility: Author(s) of papers published in the Magazine during the year specified for the award.

Basis for Judging: Criteria include tutorial service provided to IES membership, industrial interest, reference value and capability of expressing theoretical content in layman language terms with effective illustrations, tables and graphs.

Presentation: At a major international conference of the Society.

9. **IEEE Outstanding Paper Award for the *IEEE Transactions on Industrial Informatics*** (established in 2007; revised prize 2015) (revised title 2021)

Description: To recognize outstanding paper(s) published in the *IEEE Transactions on Industrial Informatics (TII)*.

Prize: \$2,000 and Certificate(s), plus reimbursement for IES-approved travel expenses to receive the award up to but not more than \$3,000. Co-authors may divide the \$2,000 prize. Up to 3 awards may be given. Reimbursements of travel should follow IEEE Policies and Procedures.

Funding: Funded by IEEE Industrial Electronics Society.

Eligibility: Author(s) of papers published in the Transactions during the year specified for the award.

Basis for Judging: The prize paper will be selected by the IE Transactions Editorial Board on the basis of the value of the contribution, subject matter, originality, and composition, and recommends the selected candidate(s) to the AdCom for approval.

Presentation: At one of the Society's major international conferences *IECON, ISIE, ICIT, and INDIN*.

10. **IEEE IES Best Chapter Award** (established in 2007; revised prize 2015)

Description: To recognize IES chapter(s) (individual or joint) which has/have demonstrated an outstanding performance, evaluated based on the quality and quantity of organized technical activities relevant to IES areas of interest and contributions to IES membership development.

Prize: \$1,000 to the IES chapter, or shared among the chapters in case of more than one deserving chapter, and Certificate. Provide Travel Support up to but not more than \$3,000. Travel support is in the form of reimbursement based on the actual expense. Also provide membership drive support up to but not more than \$1,000.

Funding: Funded by the IEEE Industrial Electronics Society

Eligibility: Only IES chapters, individual or joint, of which the chapter chairs are members of IES in the award period, are eligible for this award. Award achievement period starts on January 1st and end December 31st of each year, for which the evaluation, decision, and announcement will be done in the year to follow; i.e. performance in 2006 is evaluated in 2007 resulting in Best Chapter Award of 2007 to be announced and presented in 2007.

Basis for Judging: Criteria include chapter performance over a one-year period in technical activities, social, professional, educational activities, website content, and contributions to membership development.

Presentation: Presented annually at the banquet during the society's flagship conference, IECON.

11. **IEEE Rudolf Chope Research & Development Award** (established in 2008)

Description: To recognize distinguished research and development accomplishment in quantum and industrial electronics for industrial electrical engineering.

Prize: \$1,000 and Certificate(s). Multiple authors will divide the prize.

Funding: **Funded by the Rudolf Chope Award Fund, provided by Chope Family Bypass Trust, and IES, administered by the IEEE Foundation**

Eligibility: Member of IEEE Industrial Electronics Society.

Basis for Judging: Selected for distinguished R&D achievement in industrial and/or quantum electronics.

Presentation: Annually, beginning in 2008 and every even year afterwards at a major international conference of the Society.

12. **IEEE Bimal Bose Award for Industrial Electronics Applications in Energy Systems** (established in 2013)

Description: To recognize a young researcher who has made significant contributions to the advancement of energy systems through industrial electronics applications. It also serves as a vehicle to further encourage young industrial electronics engineers to be more involved in this important area of technology.

Prize: \$3,000, a certificate, and travel support to attend the award ceremony limited up to \$2,000. The award is annual and limited to a single recipient.

Funding: **The award will be administered by the IEEE Foundation and "seeded" by a contribution by Dr. Bimal Kumar Bose and annual contribution by the Industrial Electronics Society in order to help cover annual award expenses and not to build up the fund balance. The award fund will be meant to provide long-term support for the award**

Eligibility: The candidate must be a member of IES who, on the date of nomination, is within his/her 25 years of professional experience from the date of his/her last academic degree.

Basis for Judging: The award is selected based on the technical importance of the contribution, subject matter, originality, and future prospects.

The candidate is selected by The Industrial Electronics Society's Awards and Honors Committee. An initial "1-5" scoring is taken based on the submitted nomination materials followed by selection discussions and voting. The IES A&H Committee recommends a candidate to the Industrial Electronics Society Administrative Committee for the final approval.

Presentation: The award will be presented annually (if a qualified candidate is selected), at the Society's annual conference which is usually held in November each year.

13. **IEEE/ASME *Transactions on Mechatronics* Best Paper Award** (established in 2017)

Description: Established in 2008 and jointly administered by the co-sponsors IEEE-IES, IEE-RAS, and ASME-DSCD, through the *Transactions on Mechatronics* Management Committee, the purpose of this award is to recognize the best refereed paper published in the volume year of the IEEE/ASME *Transactions on Mechatronics*.

Prize: The award is given annually to all of the authors of the selected best paper published in the previous calendar year in the Transaction. Multiple recipients are allowed and there is no limit on the number recipient (authors). Each recipient will receive a printed certificate, a plaque and a share of the \$1000 award. With multiple recipients (authors), the authors can decide how to share prize money. The default approach is to share the prize equally among the authors. In the case of two papers sharing the award, the \$1000 award will be equally shared by the two papers, i.e. \$500 for each paper. The prize does not include travel expense.

Funding: The fund for the award has been provided by the TMech operating budget approved annually by the Management Committee jointly appointed by the three co-sponsors (IEEE/RAS, IEEE/IES and ASME/DSCD).

Eligibility: Published original refereed paper in the IEEE/ASME *Transactions on Mechatronics* in the previous calendar year; the authors need not be a member of IEEE or ASME.

Basis for Judging: Professional Merit (40%)

- Creativity and originality, as reflected in new insights, interpretations, facts, innovations, methods, applications, etc. (stimulating, informative, enlightening, etc.);
- Scientific and professional quality of the research, review, development work, methods of inquiry, etc. (competent, valid, replicable, etc.); and
- Scholarship embodied in the presentation, explanations, interpretations, and discussions (researched, documented, balanced, critical, etc.).

Contribution (40%)

- Societal or scientific/technical significance of the topic or problem investigated or expounded (universality, urgency, impact, etc.);
- Usefulness of the paper to practicing information professionals (applicability, timeliness, scope, problem-solving value, etc.); and
- Relevance of the topic or problem to the interests of Mechatronics.

Presentation Quality (20%)

- Readability, effective organization and presentation of concepts, facts, arguments, etc. (structure, logic, persuasiveness, etc.);
- Use of clear, concise, comprehensible, and jargon-free language (ease and pleasure of reading); and
- Adherence to "Instructions for Contributors" found in the IEEE/ASME *Transactions Mechatronics* for format, graphics, citations, etc.

Presentation: The award will be presented annually at the annual IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM) conference.

14. **IEEE IES Best Student Branch Chapter Award** (established in 2021)

Description: To recognize the activities of the Industrial Electronics Society Student Branch Chapter (IES SBC). Through this, the most IES SBC is selected and is given the opportunity to nominate one or more active student(s) to receive travel support for participating in one of the major

conferences of the Industrial Electronics Society (IES): either the IEEE International Symposium on Industrial Electronics (ISIE) or the IEEE Industrial Electronics Conference (IECON). Both conferences are held annually and the latter is the society's flagship conference. A student (or a group of students) nominated by the winning SBC is encouraged to be actively engaged in the conference activities. For example, can opt to support events held by the IES Students and Young Professionals Activity Committee (SYP-AC).

Prize: A certificate for the IES SBC and travel support to attend the conference: ISIE or IECON. The travel support is in the form of reimbursement limited to \$2,000. If multiple recipients, it is shared among them. The conference fee is waived for each recipient(s).

Funding: Funded by the IEEE Industrial Electronics Society

Eligibility: Any IES SBC is eligible for nomination. Any IES SBC cannot receive more than one award in 3 years. Previous winners are not eligible for substantially the same achievements.

Basis for Judging: The award is accorded based on the activity in the IES SBC during the previous calendar year. This would include, but not limited to, conducting seminars/workshops, Distinguished Lecturers Program (DLP) participation, meeting/contest organization, promotion of IES Student Membership/attracting new student members.

Presentation: The award will be presented at one of the two major conferences that is usually held either in the summer (ISIE) or autumn (IECON) each year.

IEEE INDUSTRY APPLICATIONS SOCIETY

IA-34 (Division II)

For all Industry Applications Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Outstanding Achievement Award** (first presented in 1969) (revised 1994, 2003, 2007)

Description: To honor an individual who has made an outstanding contribution in the application of electricity to industry in accordance with the scope of the IEEE Industry Applications Society.

Prize: \$5,000 and engraved statuette

Funding: Funded by the IEEE Industry Applications Society.

Basis for Judging: Any of the following criteria apply: invention in the field as exemplified by issued patents; contribution to the general engineering or scientific basis of the technologies found within the scope of the IAS; executive or managerial contribution in the organization or operation of enterprises as associated with the scope of the IAS.

Presentation: At IAS Annual Meeting.

2. **Distinguished Service Award** (first presented in 1988) (revised prize 1994, 2003, 2007, 2015)

Description: To recognize an individual for dedication and service to the IEEE Industry Applications Society.

Prize: \$5,000 and Plaque

Funding: Funded by the IEEE Industry Applications Society.

Basis for Judging: Exceptional administrative, managerial and leadership achievement; proposal and/or implementation of innovative new Society programs; dedication to the growth and advancement of the Society and/or its geographic and technical entities.

Presentation: At IAS Annual Meeting.

3. **Society Prize Paper Awards** (Established in 1988) (revised 1994, 2008)

Description: To recognize the best papers published in the *IEEE Transactions on Industry Applications*.

Prize: \$1,000 for 1st place, \$750 for 2nd place, \$500 for 3rd place and Certificates; plus up to five (5) honorable mention certificates.

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of papers published in *IAS Transactions* during preceding year, July 1 to June 30.

Basis for Judging: Originality, timeliness, contribution, and clarity.

Presentation: At IAS Annual Meeting.

4. **Society Chapter Awards** (Established in 1988)

Description: To recognize achievements by IEEE Industry Applications Society Chapters.

Prize: Framed certificates

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: IAS Chapters with over 70 members and IAS Chapters with under 70 members.

Basis for Judging: Greatest Chapter attendance, increase in membership, number of meetings, participation in technical conferences, Chapter presentation at IAS Council meetings.

Presentation: At IAS Annual Meeting.

5. Industrial and Commercial Power Systems Department (I&CPS) Achievement Award (revised prize 2015)

Description: To recognize contributions of significant value to the activities of the Committees in the I&CPS Department through leadership and long service.

Prize: \$1,000 USD and a Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Members of I&CPS Committees.

Presentation: Annually, at I&CPS Technical Conference Luncheon.

6. Pulp and Paper Industry Technical Conference Award for Meritorious Service

Description: To recognize contributions of significant value and service to the electrical engineering of pulp and paper.

Prize: Certificate or Plaque

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Members of the Pulp and Paper Industry Committee.

Presentation: Annually, at Pulp and Paper Industry Technical Conference.

7. Industrial and Commercial Power Systems Department (I&CPS) Prize Paper Award (revised prize 2000, 2015)

Description: To recognize the best paper presented in technical sessions sponsored by the I&CPS Department.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of papers presented at any technical session sponsored by I&CPS Technical Committees in the previous year.

Basis for Judging: Originality, timeliness, contribution, and clarity.

Presentation: Annually, at I&CPS Technical Conference Luncheon.

8. Petroleum and Chemical Industry Technical Conference Prize Paper Awards

Description: To recognize the best papers presented at the Petroleum and Chemical Industry Technical Conference.

Prize: Certificate and honorarium for the 1st, 2nd, and 3rd prize papers; honorable mention awards for 4th, 5th, and 6th prize papers.

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of papers presented at the Petroleum and Chemical Industry Technical Conference in the previous year.

Basis for Judging: Originality, timeliness, content, and presentation.

Presentation: Annually, at Petroleum and Chemical Industry Committee Technical Conference Luncheon.

9. **Cement Industry Technical Conference Prize Paper Awards**

Description: To recognize the best papers presented at the Cement Industry Technical Conference.

Prize: \$300 for 1st place, \$200 for 2nd place, \$100 for 3rd place plus certificates for each paper presented at the conference.

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of papers presented at the Cement Industry Technical Conference.

Basis for Judging: Presentation, audience reception, general quality, and contribution.

Presentation: Annually, at Cement Industry Technical Conference Banquet.

10. **Rural Electrification Conference Paper Award** (established in 1995)

Description: To recognize the best paper on some phase of rural electrification or related activity presented at the Rural Electrification Conference.

Prize: \$300 (to be split equally among authors of multi-authored papers) and Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Open to members and nonmembers, except members of Rural Electrification Subcommittee.

Basis for Judging: Originality, conciseness, clarity, and unity.

Presentation: Annually, at Rural Electrification Conference Banquet.

11. **Electric Machines Prize Paper Awards** (established in 1995) (revised prize 2015)

Description: To recognize the best Electric Machines Committee papers published in the *IEEE Transactions on Industry Applications*.

Prize: 1st place: \$500; 2nd place: \$300; 3rd place: \$200; (award for each paper to be split equally among authors of multi-authored papers) and Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of Electric Machines Committee papers published in *IAS Transactions* in the preceding year, January through December.

Basis for Judging: Paper technical content, importance, reference value, originality, and clarity of presentation.

Presentation: Annually, at committee meeting or papers presentation session.

12. **James Melcher Prize Paper Awards** (established in 1995)

Description: To recognize the best Electrostatic Processes Committee (EPC) papers published in the *IEEE Transactions on Industry Applications*.

Prize: Three awards, \$150 each paper (split equally among authors of multi-authored papers) and Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of EPC papers published in the *IAS Transactions* in the preceding year, January through December.

Basis for Judging: Paper technical content, importance, reference value, originality, and clarity of presentation.

Presentation: Annually, at committee meeting or papers presentation session.

13. **Industrial Drives Prize Paper Awards (IPCSD)** (established in 1995) (revised prize 2015)

Description: To recognize the best Industrial Drives Committee (IDC) papers published in the *IEEE Transactions on Industry Applications*.

Prize: 1st place: \$500; 2nd place: \$300; 3rd place: \$200; (award for each paper to be split equally among authors of multi-authored papers) and Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of IDC papers published in the *IAS Transactions* in the preceding year, January through December.

Basis for Judging: Paper technical content, importance, reference value, originality, and clarity of presentation.

Presentation: Annually, at committee meeting or papers presentation session.

14. **Industrial Power Converter Prize Paper Awards (IPCSD)** (established in 1995) (revised prize 2006, 2015)

Description: To recognize the best Industrial Power Converter Committee (IPCC) papers published in the *IEEE Transactions on Industry Applications*.

Prize: Three awards: \$500 first prize; \$300 second prize; \$200 third prize. (Prizes to be split equally among authors of multi-authored papers) and Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of IPCC papers published in the *IAS Transactions* in the preceding year, January through December.

Basis for Judging: Paper technical content, importance, reference value, originality, and clarity of presentation.

Presentation: Annually, at committee meeting or papers presentation session.

15. **IEEE Manufacturing Systems Development and Applications Award of Merit** (established in 1995)

Description: To recognize an individual whose professional or technical contributions have resulted in a significant advance in the area represented by the Manufacturing Systems Development and Applications Department (MSDAD).

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: IEEE member active in the MSDAD.

Basis for Judging: Papers, reports, patents, and contribution in the technical committees within the MSDAD.

Presentation: Annually, at the IAS Annual Meeting or IAS Executive Board Meeting.

16. **IEEE IAS Andrew W. Smith Outstanding Young Member Achievement Award** (established in 1996) (renamed 2009; revised name & prize increase 2015) (prize increase 2019)

Description: To recognize outstanding achievement and contribution to the profession through involvement in IEEE IAS activities by an IAS member less than 35 years of age.

Prize: \$3,000, Plaque and travel expenses to attend the IAS Annual Meeting.

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Nominees must be less than age 35 at the specified award nomination due date. To be considered as a nominee, a one page form must be completed describing IAS activities and associated contributions made by the nominee. The form must be submitted and received by the IAS President before the specified due date of April 1.

Basis for Judging: Outstanding contribution to the profession in the form of IEEE/IAS activities such as (but not limited to) authorship of technical papers, IAS chapter leadership, IAS committee work, conference leadership, and standards working groups.

Presentation: The selected recipient is notified by June 1 and arrangements for receiving the award are made. Presentation of the award is at IEEE Industry Applications Society Annual Meeting, usually held in October.

17. **IEEE Power Systems Engineering Prize Paper Awards (I&CPS)** (established in 1996)(revised prize 2015)

Description: To recognize the best technical paper presented in conference technical sessions sponsored by the IAS Power Systems Engineering Committee of the Industrial and Commercial Power Systems Department (I&CPS).

Prize: \$300 and Certificate (split equally among authors of multi-authored papers).

Funding: Funded by the IEEE Industry Applications Society I&CPS PSEC.

Eligibility: Author(s) of PSEC papers presented the previous year at PSEC technical sessions at the I&CPS and IAS Annual Meetings.

Basis for Judging: Point score based on paper technical content, importance, reference value, originality, and clarity. Selection by PSEC Administrative Group.

Presentation: At I&CPS Annual Meeting in the year following the original presentation.

18. **R. W. Mills Award** (established in 1995)

Description: To recognize extraordinary contributions toward the betterment of the Petroleum and Chemical Industry Committee (PCIC).

Prize: Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Members of PCIC.

Basis for Judging: Exceptional leadership, innovation and dedication that results in the growth and advancement of the PCIC as determined by the PCIC advisory and awards subcommittee.

Presentation: Annually, at PCIC Conference Awards Luncheon.

19. **IEEE Power Electronics Devices and Components Prize Paper Awards (IPCSD)** (established in 1995) (revised prize 2015)

Description: To recognize the best Power Electronics Devices and Components Committee (PEDCC) papers published in the *IEEE Transactions on Industry Applications*.

Prize: 1st place: \$500; 2nd place: \$300; 3rd place: \$200; (award for each paper to be split equally

among authors of multi-authored papers) and Certificate

- Funding:* Funded by the IEEE Industry Applications Society.
- Eligibility:* Authors of PEDCC papers published in the IAS *Transactions* in the preceding year, January through December.
- Basis for Judging:* Paper technical content, importance, reference value, originality, and clarity of presentation.
- Presentation:* Annually, at committee meeting or papers presentation session.

20. **IEEE Power Systems Protection Prize Paper Awards** (established in 1995) (revised prize 2015)

- Description:* To recognize the best technical paper presented in conference technical sessions sponsored by the IAS Power Systems Protection Committee of the Industrial and Commercial Power Systems Department (I&CPS).
- Prize:* 1st place: \$500; 2nd place: \$300; 3rd place: \$200; (award for each paper to be split equally among authors of multi-authored papers) and Certificate.
- Funding:* Funded by the IEEE Industry Applications Society I&CPS PSPC.
- Eligibility:* Author(s) of PSPC papers presented the previous year at PSPC technical sessions at the I&CPS and IAS Annual Meetings.
- Basis for Judging:* Point score based on paper technical content, importance, reference value, originality, and clarity. Selection by PSPC Administrative Group.
- Presentation:* At I&CPS Annual Meeting in the year following the original presentation.

21. **Myron Zucker Undergraduate Student Design Awards** (established in 1995)

- Description:* To recognize three separate individual students or student teams and the students' associated electrical engineering department. It is primarily for students enrolled in a Bachelor's program in Electrical Engineering, or its equivalent, who receive the highest rankings and approvals of a submitted engineering design project within the scope of the IEEE Industry Applications Society.
- Prize:* (awards will be divided equally among team members)
- | | |
|------------------|---|
| 1st award prize: | \$800 cash honorarium for students and certificates |
| | \$500 cash honorarium for students' Academic Department and certificate |
| 2nd award prize: | \$600 cash honorarium for students and certificates |
| | \$400 cash honorarium for students' Academic Department and certificate |
| 3rd award prize: | \$400 cash honorarium for students and certificates |
| | \$300 cash honorarium for students' Academic Department and certificate |

In addition, travel for student(s) to attend IAS Annual Meeting: \$6,000 (\$2,000 maximum per award - travel funds will be split equally among team members traveling to the meeting). Other associated expenses: ad in various magazines; printing and mailing of brochures; preparation of award certificates: approx. \$2,400.

- Funding:* **Funded by the Myron Zucker Endowment managed by the IEEE Foundation.**
- Eligibility:* I) a project report, written by the students involved in the design project, must be submitted. This report must not exceed 25 pages including figures, diagrams, a 1-2 page executive summary, appendices, etc.; ii) design projects must have been completed during the time period of September 1 to May 15 of the following year, e.g. 9/1/95-5/15/96. iii) a letter of nomination from a faculty member involved in the project must be submitted. Students must also submit addresses, phone numbers and E-mail addresses. U.S. students must also submit their social security number; iv) at least one student involved in the design project must be a member of the IEEE; v) students must receive academic credit for the project work; vi) the design project must fall within the scope of the IEEE Industry Applications Society; vii) one or more undergraduate,

or the equivalent, Electrical Engineering students involved in the design project.

Basis for Judging: The IAS Education Department Myron Zucker Grant Committee will determine award selection based upon: I) the extent to which the solution of the design problem demonstrates the practical application of engineering fundamentals and engineering judgment; ii) the quality of the written report presentation; iii) the extent to which an industrial entity, if any, provides appropriate guidance and access to an applications environment. The IAS Executive Board will make the final approval based upon the recommendations/rankings of the Myron Zucker Grant Committee.

Presentation: At the next Annual IAS Annual Meeting following the submission of the report (design projects must have been completed during the time period of September 1 to May 15 of the following year, e.g. 9/1/95-5/15/96. The awards will be presented at the next IAS Annual Meeting following the submission of the report, e.g. 10/1/96)

22. **Myron Zucker Graduate Student Design Award** (established in 1995)

Description: To recognize an individual student or student team and the students' associated electrical engineering department. It is primarily for students enrolled in a Master's program in Electrical Engineering, or its equivalent, in IEEE Regions 1-10, who receive the highest rankings and approvals of a submitted engineering design project within the scope of the IEEE Industry Applications Society. Students in Regions 7-10 who attend schools that do not have the equivalent of Bachelor's program, but based on educational background qualify for this award, will participate in this contest.

Prize: (awards will be divided equally among team members) 1st award prize: \$800 cash honorarium for students and certificates \$500 cash honorarium for students' Academic Department and certificate In addition, travel for student(s) to attend IAS Annual Meeting: \$2,000 maximum per award - travel funds will be split equally among team members traveling to the meeting). Other associated expenses: ad in various magazines; printing and mailing of brochures; preparation of award certificates: approx. \$800.

Funding: **Funded by the Myron Zucker Endowment managed by the IEEE Foundation.**

Eligibility: See above (same as Myron Zucker Undergraduate Student Design Awards, *with the exception of the following*): vii) one or more M.S., or the equivalent, Electrical Engineering students involved in the design project.

Basis for Judging: See above (same as Myron Zucker Undergraduate Student Design Awards)

Presentation: See above (same as Myron Zucker Undergraduate Student Design Awards)

23. **Industry Applications Magazine Prize Article Award** (established in 1996) (revised 2005, 2008)

Description: To honor the author(s) of the best technical article published each year in the *Industry Applications Magazine*.

Prize: \$750 First Prize; \$500 Second Prize; and Certificate. For articles with multiple authors, the monetary award for the first and second place prizes will be split equally among the co-authors. Each author will receive a certificate.

Funding: Funding will be provided by the IEEE Industry Applications Society through funds allocated annually to the Awards Department of the IAS.

Eligibility: Author(s) of all technical articles published in a calendar year in the *Industry Applications Magazine* are eligible for that year's award. Neither nominators nor members of the Selection/Evaluation Committee shall be eligible for this award.

Basis for Judging: 1) the degree to which the article describes an application topic of current interest to a broad cross-section of IAS members; 2) the degree to which the article content is presented in a manner that is readable by a broad cross-section of IAS members; 3) reviewer score sheets for each article when available; 4) the degree to which the article is consistent with the scope of the IAS.

Presentation: Annually, at the IAS Annual Meeting in October of each calendar year.

24. **Industrial Automation and Control Conference Award** (established in 1999)

Description: To recognize the best Industrial Automation and Control paper presented at the IAS Annual Meeting.

Prize: One award of \$100 (split equally among authors of multi-authored papers) and Certificate

Funding: Funded by the IEEE Industry Applications Society

Eligibility: Authors and presenters of papers organized by the Industrial Automation and Control Committee at the IAS Annual Meeting.

Basis for Judging: Paper technical content, importance, reference value, originality, and clarity of presentation. It should merit publication in the IEEE IAS Transactions.

Presentation: Annually, at the committee meeting or papers presentation sessions.

25. **Industrial Power Conversion Systems Department Gerald Kliman Innovator Award** (established in 2005) (revised 2011)

Description: To recognize meritorious contributions to the advancement of power conversion technologies through innovations and their application to Industry. The technical field for this award includes, but is not limited to Electric Machines, Electrical Drives, Power Electronic Systems and Power Electronic Devices. Award established to honor Dr. Gerald Kliman's contributions to the technical areas of this department.

Prize: Plaque and honorarium of \$1,000 through 2014, increasing to \$2,500 effective 2015 through 2024.

Funding: **For the years 2005-2014, General Electric Company will fund the award. GE Global has extended support for an additional 10 years, starting in 2015 and ending in 2024. The funding will be managed by the IEEE Foundation.**

Eligibility: No restrictions as to IEEE membership, age, or gender.

Basis for Judging: Examples of demonstrated innovation include: patents; inventions that are widely adapted by the industry; generation of innovative body of knowledge disseminated through technical papers; breadth of interest and contribution to a body of knowledge; depth of engagement and technical contributions to that body of knowledge; an overall body of work which exemplifies the spirit of technical excellence and broad scope of knowledge. Other selection criteria include: quality of technical achievement; enhancement of technology; impact on the relevant technical community and the profession; benefit to society; quality of the nomination. Judgment will be based on the nominator's write-up, the endorsement letters, and personal knowledge of the selection committee's expert members. If suitable candidates are not available, the committee can recommend to forfeit the award for that year.

Presentation: The presentation venue for the award is approved by the recipient(s) and usually occurs at an IEEE IAS conference, relevant to the technical field being honored by the award.

26. **IEEE Cement Industry Meritorious Service Award** (established in 2006)

Description: To recognize distinguished service and outstanding contribution to the Institute and the IEEE IAS Cement Industry Committee.

Prize: Plaque

Funding: Funded by the IEEE Industry Applications Society

Eligibility: The recipient must be a member of IEEE and IAS and will have served at least 10 years on the IEEE IAS Cement Industry Committee.

Basis for Judging: Factors to be considered include: years of service in the IEEE IAS Cement Industry Committee (minimum 10 years); Positions held on the committee; Technical involvement (Technical papers presented and tutorials).

Presentation: Presented at the conference which takes place in a different city each year, normally in North America.

27. **IEEE IAS Production and Application of Light Committee Prize Paper Awards (MSDAD)** (revised prize 2015)

Description: To recognize the best Production and Application of Light Committee paper presented at the IAS PALC Conference.

Prize: 1st place: \$500; 2nd place: \$300; 3rd place: \$200; (award for each paper to be split equally among authors of multi-authored papers) and Certificate

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: Authors of Production and Application of Light Committee papers presented at the Annual Technical Conference

Basis for Judging: Presentation, audience reception, general quality, and contribution.

Presentation: Annually, at Production and Application of Light Committee Conference.

28. **IEEE James A. Rooks Memorial Student Intern Program** (established in 2008)

Description: To support registration, travel and living expenses for up to four student interns who are working for user and consulting companies participating in the industry committee to attend the annual IEEE IAS Pulp and Paper Industry Technical Conference. The intent is to bring new industry engineers into the industry technical community before graduation so that they see the value of participation in the conference and in IEEE Industry Applications Society.

Prize: A Grant in the amount of a maximum \$2,000 for reimbursement of expenses to attend the annual conference; a Certificate of Recognition to each award winner. Up to four travel grants will be awarded. Must be identified and selected by the Pulp & Paper Industry Committee prior to the annual conference.

Funding: **Funded by the James A. Rooks Memorial Fund, administered by the IEEE Foundation**

Eligibility: Must be a student member of the IEEE and must be registered to attend the full conference. Active members of the committee from users and consultants will be asked to serve up candidates.

Basis for Judging: Criteria include employment as an intern in support of the Pulp and Paper Industry.

Presentation: Presented during PPITC.

29. **IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award** (established in 2008)

Description: To recognize exceptional power engineers who have worked, implemented or innovated better and cheaper electrification technologies for the rural sector.

Prize: \$500, sculpture, certificate, and a travel stipend of up to \$1,500 for recipient to attend the presentation ceremony. It is anticipated to have only one recipient; however if a team is chosen, the award would be shared equally.

Funding: **The award will be co-funded by the IEEE Power & Energy Society and the IEEE Industry Applications Society. This funding was already endorsed by the IEEE Foundation. A matching donation will also be provided by the family of A.P. Seethapathy.**

Eligibility: Candidate must be active in the field of rural electrification for at least 5 years. No current member of the IEEE Board of Directors, the IEEE-PES Governing Board, IAS Executive Board, the IEEE-PES Awards and Recognition Committee, the IAS Awards Department, the Rural Electrification Excellence Award Committee, or IEEE staff may be candidates, or nominate or endorse candidates for this award.

Basis for Judging: Selection will be based on evaluation of accomplishments as revealed by published works, documented testimonials from industry colleagues, or other objective demonstrations of accomplishments over an extended period of time. Of particular importance is evidence of the candidate's innovative content and societal impact; lower cost solution; originality and practicality; and evidence of implementation.

Presentation: Presentation of the award shall be made by the PES President, IAS President or the Rural Electrification Excellence Award Chair or their designated representative.

30. IEEE IAS Graduate Student Thesis Contest (established in 2013)

Description: To recognize annually outstanding graduate theses in topics related to the Scope of the Industry Applications Society.

Prize:

- i. First Prize: Plaque, certificate, \$500 honorarium and up to \$1500 travel expenses to attend the IAS Annual Meeting.
- ii. Second Prize: Plaque, certificate, \$500 honorarium and up to \$1000 travel expenses to attend the IAS Annual Meeting.
- iii. Third Prize: Plaque, certificate, \$500 honorarium and up to \$500 travel expenses to attend the IAS Annual Meeting.

Funding: Funded by the IEEE Industry Applications Society.

Eligibility: To be considered for the recipient of the IAS Graduate Student Thesis Contest Award, the candidate's thesis must have successfully defended within two calendar years prior to the submission date and be relevant to the scope of the IA-Society. The candidate should be IEEE IAS student or higher grade member for at least one year before the contest submission.

Basis for Judging: Overall quality.

Presentation: Presentation will be given at awards ceremonies at IEEE IAS Annual Meeting.

31. IEEE IAS Outstanding Young Member Service Award (established in 2015) (prize increase 2019)

Description: To recognize an individual under age 35, through dedication and service, distinguished him/herself to IAS.

Prize: The Award consists of a \$3,000 honorarium, Plaque, and travel reimbursement to an IAS conference for recognition.

Funding: The award would be funded by the IEEE Industry Applications Society.

Eligibility: Members of the IEEE Industry Applications Society are eligible.

Basis for Judging: The basis for judging shall be based on: 1) administrative and leadership contributions; 2) contributions through section or chapter activities; 3) contributions through technical committee and conference activities; 4) Technical paper reviews for conferences/transactions; and 5) Contributions through new/revised programs that impact IAS growth globally.

Presentation: The award will be presented annually at an IAS financially sponsored conference.

32. IEEE Industry Applications Society Electrical Safety Committee (IPCS) Prize Paper Awards (established in 2015)

Description: To recognize the best Electrical Safety, Industrial Power Conversion Systems Department, papers published in the IEEE Transactions on Industry Applications.

- Prize:* 1st place: \$500; 2nd place: \$300, 3rd place \$200 (award for each paper to be split equally among authors of multi-authored papers) and certificates. If the prize is to be split any other way, or if one author is to receive all of the prize money, then all authors must agree to this in writing and must submit their approval to the IAS Executive Office.
- Funding:* The award would be funded by the IEEE Industry Applications Society.
- Eligibility:* Authors of Electrical Safety Committee papers published in IAS Transactions in the preceding year, January through December of the prior year.
- Basis for Judging:* The basis for judging shall be based on: Paper technical content, importance, reference values, originality, and clarity of presentation.
- Presentation:* The award will be presented annually at committee meeting or papers presentation session. If the author cannot attend the session – the certificates will be mailed to the author. IAS does not reimburse the author for travel expenses. Monetary awards are sent directly to the author provided he or she submits the necessary tax paperwork.

33. IEEE Industry Applications Society Renewable and Sustainable Energy Committee (IPCSD) Prize Paper Awards (established in 2015)

- Description:* To recognize the best Renewable and Sustainable Energy Committee, Industrial Power Conversion Systems Department, papers published in the IEEE Transactions on Industry Applications.
- Prize:* 1st place: \$500; 2nd place: \$300, 3rd place \$200 (award for each paper to be split equally among authors of multi-authored papers) and certificates. If the prize is to be split any other way, or if one author is to receive all of the prize money, then all authors must agree to this in writing and must submit their approval to the IAS Executive Office.
- Funding:* The award would be funded by the IEEE Industry Applications Society.
- Eligibility:* Authors of Renewable and Sustainable Energy Committee papers published in IAS Transactions in the preceding year, January through December of the prior year.
- Basis for Judging:* The basis for judging shall be based on: Paper technical content, importance, reference values, originality, and clarity of presentation.
- Presentation:* The award will be presented annually at committee meeting or papers presentation session. If the author cannot attend the session – the certificates will be mailed to the author. IAS does not reimburse the author for travel expenses. Monetary awards are sent directly to the author provided he or she submits the necessary tax paperwork.

34. IEEE Industry Applications Society Transportation Systems Committee Prize Paper Awards (established in 2015)

- Description:* To recognize the best Transportation Systems Committee, Industrial Power Conversion Systems Department, papers published in the IEEE Transactions on Industry Applications.
- Prize:* 1st place: \$500; 2nd place: \$300, 3rd place \$200 (award for each paper to be split equally among authors of multi-authored papers) and certificates. If the prize is to be split any other way, or if one author is to receive all of the prize money, then all authors must agree to this in writing and must submit their approval to the IAS Executive Office.
- Funding:* The award would be funded by the IEEE Industry Applications Society.
- Eligibility:* Authors of Transportation Systems Committee papers published in IAS Transactions in the preceding year, January through December of the prior year.
- Basis for Judging:* The basis for judging shall be based on: Paper technical content, importance, reference values, originality, and clarity of presentation.

Presentation: The award will be presented annually at committee meeting or papers presentation session. If the author cannot attend the session – the certificates will be mailed to the author. IAS does not reimburse the author for travel expenses. Monetary awards are sent directly to the author provided he or she submits the necessary tax paperwork.

35. IEEE IAS Outstanding Educator/Mentor Award (established in 2018)

Description: The purpose of the Society Outstanding Educator/Mentor Award is to honor an individual who has made outstanding contributions to education and mentorship of students and young engineers within the fields of interest of the IEEE Industry Applications Society.

Prize: \$3,000 Prize money, plaque to be presented at the IAS Annual Meeting and reimbursement of reasonable travel expenses to accept the award. Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Funding: The award would be funded by the IEEE Industry Applications Society.

Eligibility: Outstanding Educator/Mentor Award is presented annually by the Industry Applications Society (IAS). In selecting a recipient, the committee considers contributions and service, which may have been through education, mentorship, teaching and stimulation of students and young professionals within the field of the society. Any IEEE or non-IEEE member will be eligible for the award. The Award Committee will recommend a mention as Outstanding Educator or Outstanding Mentor.

Basis for Judging:

- Development of educational materials: books, course materials, papers on education, audiovisual teaching materials, on-line courses, etc.
- Relevant teaching/mentorship activities and stimulation of students and young professionals: bachelor, master and doctorate courses and supervision activities, conference tutorials, webinars, on-line tutorials, etc.
- Mentoring of students or professionals within the industry to help further their understanding of technology and market dynamics, aiming to enhance their career.
- Innovations in teaching/mentoring: development of new teaching methodologies and materials, courses, teaching laboratory equipment development, industry training, etc.
- Research activities relevant to excellence in teaching and training of students and young professionals: inventions, patents, utility models, etc. and description on how these activities increase teaching/mentoring excellence.
- Excellence in teaching/mentorship: awards and recognitions received by the candidate and former students/young co-workers, relevant positions held by former students/young co-workers, etc.
- Development/presentation of tutorials at IAS conferences and content at the IAS Resource Center.
- Creation/participation of/in university/industry training actions for students and young professionals.
- Tutoring university master/doctorate students in enterprise internship training

Presentation: The award will be presented at the IAS Annual Meeting.

36. IEEE IAS Petroleum and Chemical Industry Committee Outstanding Young Professional Achievement Award (established in 2019)

Description: To recognize the services and contributions of a young professional, age thirty-five years and younger, to the IEEE – IAS - Petroleum and Chemical Industry Committee. The award will be based on participation and contributions through any of the following IAS-PCIC activities:

- Authoring or sponsoring PCIC papers for presentation
- Presenting PCIC tutorials
- Serving as a PCIC Technical or Administrative subcommittee officer
- Completing PCIC paper reviews
- Contributions to PCIC standards development

- Contributions to Transactions and IAS Magazine publications
- Contributions to a local PCIC conference committee
- Other noteworthy contributions to the PCIC industry

Prize: The recipient shall receive an engraved plaque provided by Awards Nominating Subcommittee along with:

1. One complimentary PCIC Conference registration to be used within two years of the award.
2. Two complimentary PCIC Conference half day tutorials to be used within two years of the award.

Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Funding: Funded by PCIC Annual Conference.

Eligibility:

- Recipients shall be thirty-five years old or younger as of July 1 in the year of the award.
- Previous IEEE-IAS-PCIC Outstanding Young Professional Achievement Award recipients are not eligible
- Person shall be a member of IEEE of any grade.
- Person shall be a member of IAS.

Basis for Judging:

- Authoring or sponsoring PCIC papers for presentation
- Presenting PCIC tutorials
- Serving as a PCIC Technical or Administrative subcommittee officer
- Completing PCIC paper reviews
- Contributions to PCIC standards development
- Contributions to Transactions and IAS Magazine publications
- Contributions to a local PCIC conference committee
- Other noteworthy contributions to the PCIC industry

Presentation: The award will be presented at the annual IAS PCIC Conference Awards Luncheon.

37. **IEEE International Future Energy Challenge Award** (established in 2010; revised presentation 2014; revised prize 2017)

Description: The awards will be given to the best performing teams in the IEEE International Future Energy Challenge design competition. Topics for each Competition will change. The award structure will remain the same. The prizes provided to schools are intended to benefit the team members and student team design project activities.

Prize: The award would be annual with one topic per year, and consist of a certificate and honorarium for winning teams paid to their university or IEEE Section or Chapter. See tiers and description below.

IEEE International Future Energy Challenge

1 st Prize:	US\$10,000
2 nd Prize:	US\$5,000
3 rd Prize:	US\$3,000
Potential 4 th Prize:	US\$1,000 (if budget allows) of up to 3

Fourth prize is intended to acknowledge remarkable solutions in detail, proposed by teams not winning the 1st to 3rd Prizes. While a 1st, 2nd, and 3rd Prize will always be awarded, the 4th Prize is only applicable if the budget allows.

Funding: IEEE Power Electronics Society US\$40,000/Competition; IEEE Industry Applications Society, US\$25,000; IEEE Power & Energy Society, US\$20,000; Power Source Manufacturers Association, US\$10,000.

The amounts indicated above might be renegotiated on a yearly basis prior to the announcement

of the next competition, depending on the financial situation of the involved societies and the location of the competition, influencing accountable travel cost; however prior to announcing the competition, funds of in total at least US\$75,000 must be guaranteed for it by the funding societies. A society must provide funds of at least US\$10,000 to be mentioned as a sponsor of the competition.

Eligibility: Any University Student Team participating in the IEEE International Future Energy Challenge. Visit Society website for more details.

Basis for Judging: During the final competition event, the participating teams need to demonstrate their design that meets the specification. The team with highest score will receive the award.

Awards titles for Prizes 1, 2 and 3 will be declared by the judging team based upon the finalist submissions. (Flexibility may be necessary here to award achievements in detailed areas).

Presentation: The awards will be presented after the decision during the IEEE International Future Energy Challenge final competition.

IEEE INFORMATION THEORY SOCIETY

IT-12 (Division X)

For all Information Theory Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Claude E. Shannon Award** (established in 1992) (revised 1998, 2000)

Description: To honor consistent and profound contributions to the field of Information Theory.

Prize: \$10,000 (to be split equally among multiple authors of the paper), Plaque, and travel expenses to attend Symposium. The recipient shall present the Shannon Lecture at International Symposium on Information Theory.

Funding: Funded by the IEEE Information Theory Society.

Eligibility: Open to all.

Basis for Judging: Distinguished career in Information Theory.

Presentation: Award to be given annually (at most one per year); award winner shall present a Shannon Lecture at the first IEEE International Symposium on Information Theory following January 1 of the year of the award (symposia held twice every 3 years). Note the society may also choose not to give the award.

2. **Society Prize Paper Award** (Established in 1980) (revised 2003)

Description: To recognize outstanding papers in the field of Information Theory, which stimulate interest and encourage contributions to the field.

Prize: \$1,000 for a paper with a single author; an honorarium of \$2,000 to be split equally among multiple authors of the paper; and Certificate

Funding: Funded by the IEEE Information Theory Society.

Eligibility: Authors of papers published during the two years preceding the award. It is not required that the paper be published in an IEEE publication or that recipient be an IEEE or IT member.

Presentation: Annually, to be announced in *IT Transactions*.

3. **ComSoc/IT Joint Paper Award** (established in 2000)

Description: To recognize outstanding papers published in any publication of the IEEE Communications Society or the IEEE Information Theory Society.

Prize: \$500 and Plaque for each author (total cost not to exceed \$1,000 for each paper)

Funding: Funded evenly by the two sponsoring Societies (Award is funded via IEEE Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation and IEEE Information Theory Society**).

Eligibility: Authors of papers published in any publication of the IEEE Communications Society or the IEEE Information Theory Society. The authors do not have to be a member of IEEE. Each year the papers published in the previous three years are considered. Presented annually; first presented in year 2000.

Basis for Judging: Quality, originality, utility, timeliness, and presentation. The paper should cover the interests and achieve the values of both the IEEE Communications Society and the IEEE Information Theory Society.

Presentation: Annually, at any event sponsored by either of the two sponsoring Societies selected by the recipient. The Societies may also choose not to give the award, if it is determined no suitable paper has been nominated.

4. **IEEE Information Theory Society Chapter of the Year Award** (established in 2001)

Description: To recognize annually a chapter that has provided their membership with the best overall set of programs and activities.

Prize: \$1,000 to support local chapter activities. Additionally, the winning chapter may publish an article in IEEE Information Theory Newsletter.

Funding: Funded by the IEEE Information Theory Society

Eligibility: Any chapter who has had a successful year is eligible. Chapter Officers must submit 6 copies of an entry article nominating the chapter for the award. The article should be suitable for publishing in the newsletter and should contain a summary of the chapter's exemplary service to its members in the areas of technical and society activities; and presentation of the chapter in the web home pages of the IT Society.

Basis for Judging: Success in the categories of technical and society activities and presentation of the chapter in the web home pages of the IT Society.

5. **IEEE Aaron Wyner Distinguished Service Award** (established in 2003, renamed in 2007) (revised 2010)

Description: To honor individuals who have shown outstanding leadership in- and provided long-standing exceptional service to the Information Theory Community.

Prize: An ISIT or ITW participation fee waiver, a specially engraved Plaque and Certificate.

Funding: The award would be funded by the IEEE Information Theory Society.

Eligibility: Current officers and members of the Society Board of Governors are ineligible.

Basis for Judging: Individuals who have shown outstanding leadership in- and provided long-standing exceptional service to- the Information Theory Community. The selection subcommittee is charged with deciding whether to name a Distinguished Service Award winner. The president of the Society shall serve as Chairperson of the Distinguished Service Award Selection Subcommittee.

Presentation: Ordinarily, the decision of the Subcommittee shall be made public at the IEEE International Symposium on Information Theory and the award shall be presented at the ISIT meeting held during the summer following selection of the winner or at an appropriate IEEE IT Society activity selected by the recipient. The Society may also choose not to give the award.

6. **IEEE Jack Keil Wolf ISIT Student Paper Award** (established in 2010) (renamed 2013)

Description: To recognize annually up to three outstanding papers at the International Symposium on Information Theory for which a student is the principal author and presenter.

Prize: A \$500 honorarium to be divided equally among all student authors of the paper, and a plaque for each such author.

Funding: The award would be funded by the IEEE Information Theory Society.

Eligibility: The author must be a registered student at the time of paper submission to be eligible for this award.

Basis for Judging: The criteria for the award shall include both content and presentation.

Presentation: Annually at the ISIT banquet (or other suitable occasion).

7. **IEEE Information Theory Society Padovani Distinguished Lecturer Program Fund**

Description: To defray the economy class travel expenses and accommodation to a lecturer selected to speak at the IT-S North American Summer School of Information Theory.

Prize: Economy class travel expenses and accommodation up to \$2,000USD will be provided to one guest lecturer.

Funding: **The award would be funded by the endowment by Dr. Roberto Padovani, administered by the IEEE Foundation.**

Eligibility: Candidates are normally Society members and must not have been previously recognized as Padovani Lecturer. Candidates may be from any geographic region and any organization, e.g. academic, industry, or government.

Basis for Judging:

- Padovani Lecturer is an outstanding member of the Information Theory research community.
- Quality of the candidate's contributions to the research in Information Theory and related areas
- Ability of the candidate to deliver an excellent lecture to a broad audience
- Ability of the candidate to provide instruction at the Summer School and to interact meaningfully with the junior members of the IT-S.

Presentation: Annually at the ISIT banquet.

8. **IEEE Information Theory Society Thomas M. Cover Dissertation Award** (established in 2013)

Description: The Thomas M. Cover award will be given annually to the author of an outstanding doctoral dissertation contributing to the mathematical foundations of any of the information sciences within the purview of the Society, including but not limited to Shannon theory, coding theory, learning theory, quantum information and computing, complexity theory, and applications of information theory in probability and statistics.

Prize: The award consists of a plaque and \$1000 honorarium.

Funding: The award would be funded by the IEEE Information Theory Society.

Eligibility: Each nominated dissertation must have been successfully defended during the two calendar years prior to the award year. Only English language versions will be accepted.

Basis for Judging: Dissertations will be reviewed for technical depth and significance of the research contribution, potential and realized impact on theory and practice, and quality of presentation. The selection must be approved by a unanimous vote of the award subcommittee.

Presentation: The award will be presented at the International Symposium on Information Theory (ISIT) of the award year. The Society may also choose not to give the award.

9. **IEEE Information Theory Society James L. Massey Research & Teaching Award for Young Scholars** (established in 2015)

Description: The Award is targeted at IEEE Information Theory Society members who are 40 years old or younger. The Award should stimulate outstanding achievement in research & teaching. Currently, the IEEE Information Theory Society has no award for its outstanding young members during their early career stages. The Society further has no award for teaching. This award will help to fill these gaps.

Prize: The Award consists of a plaque and a \$1000 honorarium, in accordance with the IEEE Hierarchy of Awards. The award shall be given to a single individual, multiple recipients are not allowed.

- Funding:* The award would be funded by the IEEE Information Theory Society.
- Eligibility:* The award winner must be 40 years old or younger and a member of the Information Theory Society on January 1st of the year nominated.
- Basis for Judging:* The basis for judging shall be the research & teaching contributions of the nominee. Contributions to research will be judged by the perceived impact of the nominee on the field of Information Theory as evidenced by publications, patents, product development, research awards, and other tangible items. Contributions to teaching will be judged by evidence of new and innovative teaching methods, curriculum development with inclusion of current research, teaching/learning tools made available to students and faculty worldwide, textbook authorship, university teaching awards, and innovative short courses and tutorials in fields of interest to the Information Theory Society. The nominator should submit a nomination package that includes a description (maximum three pages) of the nominee's contributions, accomplishments, and impact on research & teaching in the field of Information Theory, a brief biography of the nominee, and a maximum of three letters of recommendation. The nomination package should also include a summary of student teaching evaluations if available. In evaluating nominees, equal weight will be given to research & teaching accomplishments.
- Presentation:* The award will be presented annually at the awards luncheon of the IEEE International Symposium on Information Theory. The Society may also choose not to give the award.

IEEE INSTRUMENTATION AND MEASUREMENT SOCIETY

IM-09 (Division II)

For all Instrumentation and Measurement Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **IEEE Instrumentation and Measurement Society Technical Award** (established in 1975) (revise name and prize 2015) (revised Eligibility 2018) (revised 2020)

Description: To recognize outstanding contribution to or leadership in advancing instrumentation design or measurement technique.

Prize: \$2,000 (\$4,000 total for shared awards), Plaque, and travel allowance of up to \$1,000 (\$2,000 total for shared awards) is granted on a need basis for the recipient(s) to attend the awards ceremony

Funding: Funded by the IEEE Instrumentation and Measurement Society.

Eligibility: Open to all, either individuals or groups. Must be a member of IEEE and the Instrumentation and Measurement Society at the time of nomination and presentation. Voting members of the Society Standing Awards Committee are not eligible. Nominees must exhibit actions that reflect positively on and enhance the reputation of the I&M Society. *Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous award winners are not eligible.*

Basis for Judging: Recognizes an individual or group of individuals for outstanding contributions or leadership in advancing instrumentation design or measurement technique. The nomination must clearly indicate the achievements that define the excellence of the candidate and must reference/provide relevant documentation that is in/or not in/ the public domain. At least 2, but no more than 4 endorsements must be provided by individuals with close knowledge of a candidate's activities that led to the achievements cited.

Presentation: Awarded annually at the discretion of the I&M Society Awards Committee at the following year's I2MTC awards ceremony.

2. **IEEE Instrumentation and Measurement Society Andy Chi Best Paper Award** (established in 1975; revised 2011 – name, description, prize, eligibility, basis for judging, and presentation)

Description: To recognize the best paper published in the *IEEE Transactions on Instrumentation and Measurement*. The purposes of this award are: to emphasize the importance or good authorship and timeliness of subject matter, and to stimulate interest in the *Transactions*.

Prize: \$1,000 for one author, or \$2,000 shared among multiple authors, divided equally among them; and Plaque. An additional \$1,000 travel allowance to be granted on a need basis by the Awards Chair on request of recipient. The honorarium and travel expenses are shared pro rata if there are multiple recipients and attendees.

Funding: Funded by the IEEE Instrumentation and Measurement Society.

Eligibility: An author or authors of a paper published in I&M Society *Transactions* in a given calendar year (n-1) and will be presented at the I2MTC Awards Luncheon in the following year (n+1). For example, the 2010 award was based on papers published in 2009 and the award will be presented in 2011.

Basis for Judging: Timeliness of subject matter and the importance of good authorship are emphasized. with the following selection criteria: Communication of paper's subject matter to non-experts; Organization and logical structure; Balance detail versus brevity; Writing style, language usage,

etc.; Utilization of illustrative materials, tables and figures; Bibliography adequate references to the key work in the subject field; Timeliness of the paper's subject matter; Potential impact on the subject area; Degree of originality; Relative importance of the subject area in the total field of instrumentation and measurement.

Presentation: Presented at the I2MTC Awards Luncheon in the following year. For example, the 2010 award will be presented at the 2011 I2MTC.

3. IEEE Instrumentation and Measurement Society Distinguished Service Award (established in 1985) (revised 2000) (revised name and prize 2015) (revised 2020)

Description: To recognize distinguished service to the IEEE Instrumentation and Measurement Society.

Prize: \$2,000, Plaque and travel expenses of up to \$1,000 is granted on a need basis for the recipient to attend the awards ceremony.

Funding: Funded by the IEEE Instrumentation and Measurement Society.

Eligibility: Must be a member of IEEE and the Instrumentation and Measurement Society at the time of nomination and presentation. Nominees must exhibit actions that reflect positively on and enhance the reputation of the I&M Society. Voting members of the Society Standing Awards Committee are not eligible. *Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous award winners are not eligible.*

Basis for Judging: Recognizes an individual who has given outstanding service to the Instrumentation and Measurement Society and to the profession. The nomination must clearly indicate the achievements that define the excellence of the candidate and must reference/provide relevant documentation that is in/or not in/ the public domain. At least 2, but no more than 4 endorsements must be provided by individuals with close knowledge of a candidate's activities that led to the achievements cited.

Presentation: Awarded annually at the discretion of the I&M Society Awards Committee at the following year's I2MTC awards ceremony.

4. IEEE Instrumentation and Measurement Society Career Excellence Award (established in 2003) (revised name 2015) (revised 2020)

Description: To recognize a career of meritorious achievement and outstanding technical contribution by an individual in the field of instrumentation and measurement.

Prize: \$5,000, Plaque and travel allowance of up to \$1,000 is granted on a need basis for the recipient to attend the awards ceremony.

Funding: Funded by the IEEE Instrumentation and Measurement Society.

Eligibility: Must be a member of IEEE and the Instrumentation and Measurement Society at the time of nomination and presentation. Voting members of the Society Standing Awards Committee are not eligible. Nominees must exhibit actions that reflect positively on and enhance the reputation of the I&M Society. *Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous award winners are not eligible.*

Basis for Judging: Recognizes a lifetime career of meritorious achievement and outstanding technical contributions by an individual in the field of instrumentation and measurement. The nomination must clearly indicate the achievements that define the excellence of the candidate and must reference/provide relevant documentation that is in/or not in/ the public domain. At least 2, but no more than 4 endorsements must be provided by individuals with close knowledge of a candidate's activities that led to the achievements cited.

Presentation: Awarded annually at the discretion of the I&M Society Awards Committee at the following year's I2MTC awards ceremony.

5. IEEE Instrumentation and Measurement Society Outstanding Young Engineer Award (established in

2003) (revised name 2015) (revised 2020)

Description: To recognize an outstanding young I&M member who has distinguished himself/herself through achievement(s), which may be technical (within the I&M field of interest), may be exemplary service to the I&M Society, or may be a combination of both. What distinguishes this award from other I&M achievement-based awards is that by its title, this award's focus is on a person, not an achievement, and the Society implicitly recognizes the person who was responsible for the success of the cited achievement(s) during his/her early career.

Prize: \$2,000, Plaque and travel allowance of up to \$1,000 is granted on a need basis for the recipient to attend the awards ceremony.

Funding: Funded by the IEEE Instrumentation and Measurement Society.

Eligibility: Nominee must be no more than 38 years of age (must not have reached the 39th birthday) by the nomination deadline. Must be a member of IEEE and the Instrumentation and Measurement Society at the time of nomination and presentation. Nominator must certify the eligibility of the nominee at the time of nomination. Voting members of the Society Standing Awards Committee are not eligible. Nominees must exhibit actions that reflect positively on and enhance the reputation of the I&M Society. Membership in the I&M Society at the time of nomination is required. Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous award winners are not eligible.

Basis for Judging: Recognizes an outstanding young I&M member who has distinguished him/herself through achievements, which are technical, of exemplary service to the I&M Society, or a combination of both, early in their career. The nomination must clearly indicate the achievements that define the excellence of the candidate and must reference/provide relevant documentation that is in/or not in/ the public domain. At least 2, but no more than 4 endorsements must be provided by individuals with close knowledge of a candidate's activities that led to the achievements cited.

Presentation: Awarded annually at the discretion of the I&M Society Awards Committee at the following year's I2MTC awards ceremony.

6. **IEEE Instrumentation and Measurement Faculty Course Development Award (Grant)** (established in 2011) (revised 2016)

Description: To support and encourage faculty members to develop a new course or significantly revise an existing course with specific focus on Instrumentation and/or Measurement, taught in an accredited (in accordance to the accepted rules of the country of applicant) engineering/physics/science curriculum.

Prize: Two annual grants of up to \$10,000USD each. Award certificate to each selected applicant.

Funding: The awards would be funded by the IEEE Instrumentation and Measurement Society

Eligibility:

- The faculty applicant must be a member of the IEEE and the Instrumentation and Measurement Society.
- The recipient must submit a short (no more than 2 single-spaced pages) progress report by February 1 of the following year.
- The faculty recipient must submit a final report (not to exceed 20 single-spaced pages, additional documents may be added as Appendices), by no later than December 1 (following year). The report must at minimum include: details of the developed course, summarizing all textbooks, audio-visual materials, etc., used, any "Lessons Learned" or course modifications that will be implemented the next time the course is offered, and a brief summary of the expenditures from the grant. The report must be submitted to the I & M Society Course Development Grant Selection Committee Chair. The Chair may request further information, if necessary, and such information must be provided by the faculty recipient within 6 weeks of receiving request. Upon approval of the report by the selection committee, the recipient will be notified by the committee chair.
- Within 3 months of having received the final report approval notice, the faculty recipient

must submit an article to the IEEE Instrumentation and Measurement Society describing the course development, success metrics (if any), etc. The recipient must work closely with the EIC of the I & M Magazine regarding the format of the article.

- The faculty winner will submit a tutorial, commensurate with the requirements for the I & M Website tutorials, outlining the course.
- No more than 1 proposal, per institution, per year may be funded. Previous grantees are not eligible for another grant for a full 2 years after the completion of the previous course development and the satisfactory submission of its final report.
- Nominees must exhibit actions that reflect positively on and enhance the reputation of the I&M Society.

Basis for Judging: Program/Course Proposal, no more than 5 single-spaced pages, that specifically provides the following information (Application Template available):

- Title page containing the title, University name, contact information of the faculty member submitting the proposal and other pertinent University officials. Include email addresses and phone numbers, and the faculty member's IEEE membership number.
- Program/Course Proposal outlining a program for the development of a new course directly related to and addressing subjects in the instrumentation and measurement fields. If the proposal outlines modifications to an existing course, significant changes to the existing course must be clearly documented.
- Budget – Detailed breakdown of how the funds will be used. Funds cannot be used for travel to meetings/conferences, etc., and must only be used for course development activities. If travel is required as a necessary element of the proposed course development (such as visiting another institution, receiving training, etc.), it must be explicitly stated in the proposal. Funds must be used for purchasing and developing instructional materials, student assistance payment, faculty course release or salary, etc., Cost-sharing by the faculty member's institution is strongly encouraged, but not required. No institutional Indirect Cost is allowed.

A letter of support from the faculty member's department/institution administrator must be submitted (not to be counted as part of the 5-page proposal). This letter must include an explicit statement about the fact that no institutional indirect cost (of any type) will be assessed by the recipient's institution.

Presentation: Grant recipients will be announced at the annual P2MTC Conference Awards Banquet. Formal notification of the grant will be sent to the recipients, department and university administrators by May 15 (grant year).

7. IEEE Instrumentation and Measurement Graduate Fellowship Award (established in 2011) (revised 2016)

Description: To support and encourage graduate-level research in the area of Instrumentation and Measurement.

Prize: Total yearly grant budget of \$45,000USD; Maximum of \$15,000USD per grant winner. Award certificate to each selected applicant. Complimentary Instrumentation and Measurement (I&M) Student Membership, starting in September of the Grant year and including 2 subsequent years.

Funding: The awards would be funded by the IEEE Instrumentation and Measurement Society. The duration of this award is annual (unlimited). The number of awards per year may change depending on requested funding and allocation of funds by the Selection Committee. Each awardee receives a funding amount that is specific to their application, and depends on what is requested and how the Selection Committee allocates funds based on the application. The maximum amount per award is \$15,000 USD, with a total annual award budget not to exceed \$45,000.00 USD.

Eligibility:

- Candidate must be at minimum, a student member of the IEEE. Candidate's advisor must be a member of the IEEE and the I&M Society.
- Previous grant recipients are not eligible for a period of two years after receiving the grant.
- No more than one nomination per graduate advisor will be considered.
- Both candidate and Advisor must exhibit actions that reflect positively on and enhance the reputation of the I&M Society.

Basis for Judging:

- Nominating letter from candidate's graduate advisor.
- Two letters of recommendation from someone (other than the nominator) familiar with the candidate's research and education qualifications.
- One page biographical summary of the candidate. Include the student's IEEE membership number.
- 2 page maximum professional/academic summary CV of the graduate advisor. Include the advisor's IEEE membership number.
- Unofficial copy of the candidate's transcript. Include an explanation if the grading system differs from the A to F format.
- One page (single-spaced) statement, written by the candidate, outlining the education and research goals and accomplishments. This can include summer internship experience, undergraduate, and graduate work.
- Research proposal, no more than 5 single-spaced pages, that specifically provides the following information:
 - Title page containing the title, University name, and contact information of the faculty member submitting the nominating package and the candidate. Include email addresses and phone numbers.
 - Research proposal describing the work to be completed by the application. Objectives, approach, and estimated start and completion dates should be included.
 - The anticipated type of paper (short or full) for the final report must be identified. Any variation during the timeframe of the grant support should be discussed/approved by the committee chair.
 - Budget for the project. Explicitly outline how the funds from this Fellowship will be allocated.
- A letter of support from the faculty member's department/institution administrator must be submitted (not to be counted as part of the 5-page proposal). This letter must include an explicit statement about the fact that no institutional indirect cost (of any type) will be assessed by the recipient's institution.

Presentation: Grant recipients will be announced at the annual I2MTC Conference Awards Banquet. Formal notification of the grant will be sent to the recipients, department and university administrators by May 15 (grant year).

8. **IEEE J. Barry Oakes Advancement Award** (established in 2013) (revised Description, Prize, Eligibility, Presentation/Lecture 2015) (revised 2016) (revised Eligibility 2018) (revised 2020)

Description: To recognize the professional achievements of an individual engaged in the fields of I&M including technical contributions to I&M science and engineering, and leadership/project management, role-model or mentorship skills. (This award does not overlap with any existing award in the I&M portfolio and consequently avoids the potential for an awardee to receive two awards for the same recognition).

Prize: \$2,000, Plaque and up to \$1,000 is granted on a need basis to a single recipient to attend either a technical workshop of the recipient's choice or I2MTC in the year the award is presented. If the recipient chooses to attend I2MTC, a lecture by the recipient will be given and registration will be provided at I2MTC for the year in which the lecture is presented.

Funding: Funded by the IEEE Instrumentation and Measurement Society.

Eligibility: 38 years of age or younger at the time of the nominations. Must be a member of the IEEE and the Instrumentation and Measurement Society at the time of nomination and presentation. Voting members of the Society Standing Awards Committee are not eligible. Nominees must exhibit actions that reflect positively on and enhance the reputation of the I&M Society.

Basis for Judging: Qualifications include the following demonstrated achievements:

- Technical contributions to I&M science and engineering
- Leadership/project management skills or service as a role model or mentor for other engineers.

Nominations Package to include at least 1 but no more than 3 additional letters of endorsement

Presentation: Awarded annually at the discretion of the I&M Society Awards Committee at the following year's I2MTC awards ceremony.

Lecture: If recipient chooses to attend IEEE I2MTC:

- A 35-minute lecture on current instrumentation and measurement work conducted by the award recipient will be given during the annual IEEE I2MTC
- Approximately 15 minutes will be reserved for a question-and-answer session
- Lecture will be recorded and made available on the IEEE I&M Society website.

9. IEEE Instrumentation & Measurement Society Best Application in I&M Award (established in 2014) (revised Eligibility 2015) (revised 2021)

Description: This annual award is in recognition of an individual whose idea applies measurement concepts or instrumentation technology in a novel way to benefit society. The application must be a working solution to an engineering need or problem.

Prize: \$1,000, Plaque, up to \$1,000 costs reimbursed (on a needs basis) associated with recipient attending I2MTC in the year the award is presented, and publication of the idea in the I&M Magazine.

Funding: This award will be funded by the IEEE Instrumentation & Measurement Society.

Eligibility: All levels of Membership, including Student Members. Nominees must exhibit actions that reflect positively on and enhance the reputation of the I&M Society.

Basis for Judging: It must be an application that best applies I&M principles in an innovative way and delivers impact for the society membership.

Presentation: Award will be given at the annual I2MTC conference.

10. IEEE Instrumentation & Measurement Society Outstanding Chapter Award (established in 2015) (revised 2021)

Description: To recognize the best chapter in a given calendar year based on activity.

Prize: Certificate.

Funding: This award will be funded by the IEEE Instrumentation & Measurement Society.

Eligibility: All Chapters of the Instrumentation and Measurement Society are eligible; Starting 2016 only Chapters that submitted regularly the annual activity report to the society are eligible; Chapters not selected for this award may apply each year; chapters selected for this award must wait two years after receiving the award to reapply.

Basis for Judging:

- Pre-requisite: a minimum of two L31 forms have to be submitted to IEEE database for the application year and the previous one.
- Composition and structure (10%): Adequate number of members with a balanced grade distribution (Regular Member, Senior, Fellow Life). At least three officers (i.e. Chair, Vice Chair and Secretary) with specified terms and succession plans.
- Membership Increase (20%): Identify total number of members in each category of members (Regular Member, Senior, Fellow, Life) in previous two years and current year.
- Membership Advancement/Senior Member Increase (30%): Significant achievements and awards received by chapter members should be included here.
- Activities – Technical, Societal/Social, or Student/Industry (40%): Information can be provided on Technical Activities/Meetings, Societal/Social Activities involving the local community or that work towards membership development, and activities that include interfacing with local student branches or with local industries.

Presentation: The best chapter will be recognized annually at the IEEE I2MTC.

11. IEEE Instrumentation & Measurement Society Best Student Chapter Award (established in 2015) (revised 2021)

Description: To recognize the best student chapter in a given calendar year based on activity.

Prize: Certificate.

Funding: This award will be funded by the IEEE Instrumentation & Measurement Society.

Eligibility: All Student Chapters of the Instrumentation and Measurement Society are eligible; Starting 2016 only Student Chapters that submitted regularly the annual activity report to the society are eligible; Student Chapters not selected for this award may apply each year; Student Chapters selected for this award must wait two years after receiving the award to reapply.

Basis for Judging:

- Pre-requisite: The student chapter must have been submitting its annual report regularly.
- Composition and structure (10%): Adequate number of student members with at least three officers (i.e. Chair, Vice Chair and Secretary) with specified terms and succession plans.
- Membership Increase (20%): Identify total number of members in previous two years and current year.
- Membership Advancement/Increase (10%): Significant achievements and awards received by chapter members should be included here.
- Activities – Technical, Societal/Social, or Student/Industry (40%): Information can be provided on Technical Activities/Meetings, hosting job fairs or student/industry networking sessions, social activities involving students and the local community, student mentoring services, work towards student membership development, and activities that include interfacing with local industries.

Presentation: The best chapter will be recognized annually at the IEEE I2MTC.

12. IEEE Instrumentation & Measurement Society Outstanding Technical Committee Award (established in 2015)

Description: To recognize the best technical committee of the IEEE Instrumentation and Measurement Society.

Prize: \$1, 500 to the TC and a Certificate for each member.

Funding: This award will be funded by the IEEE Instrumentation & Measurement Society.

Eligibility: All active technical committees of the IEEE Instrumentation and Measurement Society are eligible for this award.

Basis for Judging: For the TC that best participates in I&M activities in an innovative way and delivers impact for the society.

Presentation: The award will be presented at the IEEE I2MTC. A certificate will be sent to each member of the winning TC according to the TC membership presented in the activity report submitted for the award year.

13. IEEE Instrumentation & Measurement Society Student Best Paper Technical Conference Award (established in 2016)

Description: To support and encourage participation in the IEEE International Instrumentation & Measurement Technology Conference (I2MTC), IEEE AUTOTESTCON, IEEE Sensors Application Symposium (SAS), and IEEE International Symposium on Medical Measurements and Applications (MeMeA) conferences of the Society.

Prize: The Best Paper Award has a monetary award, a certificate, and a free I&M Society membership. The award will be given to multiple recipients, not to exceed the total funds allocated to each conference as listed below. The reason for the different amounts is the size of the conference. The larger conferences are allocated a higher amount. Awards are given to the best graduate student paper, maximum amount of \$1,000 and an undergraduate student paper, maximum amount \$500.
IEEE International Instrumentation & Measurement Technology Conference (I2MTC): \$2,000
IEEE AUTOTESTCON: \$2,000
IEEE Sensors Application Symposium (SAS): \$1,000
IEEE International Symposium on Medical Measurements and Applications (MeMeA): \$1,000.

Funding: The IEEE Instrumentation & Measurement Society allocates the respective funds indicated above to the Conference and the monetary prize, certificate, and free I & M Society Membership is paid by the sponsoring Conference.

Eligibility: Eligible candidates need not be a member of IEEE or the Instrumentation & Measurement Society. The recipient must be a student and must have an accepted paper at the conference. The student must attend the conference and present the paper in order to receive the award.

Basis for Judging: The Best Paper Award is selected based on technical merit of the accepted paper.

Presentation: The award will be presented at the respective conferences.

14. IEEE Instrumentation & Measurement Society Student Travel Technical Conference Grants (established in 2016)

Description: To support and encourage participation in the IEEE International Instrumentation & Measurement Technology Conference (I2MTC), IEEE AUTOTESTCON, IEEE Sensors Application Symposium (SAS), and IEEE International Symposium on Medical Measurements and Applications (MeMeA) conferences of the Society.

Prize: The travel grant recipient will also receive a free I&M Society membership. The amount of each travel reimbursement will be based on distance of the travel involved. The reimbursements will be given to multiple recipients, not to exceed the total funds allocated to each conference as listed below. The reason for the different amounts is the size of the conference. The larger conferences are allocated a higher amount.
IEEE International Instrumentation & Measurement Technology Conference (I2MTC): \$6,000
IEEE AUTOTESTCON: \$6,000
IEEE Sensors Application Symposium (SAS): \$3,000
IEEE International Symposium on Medical Measurements and Applications (MeMeA): \$3,000.

Funding: The IEEE Instrumentation & Measurement Society allocates the respective funds indicated above to the Conference and the travel grant is paid by the sponsoring Conference.

Eligibility: Eligible candidates need not be a member of IEEE or the Instrumentation & Measurement Society. The recipient must be a student and must have an accepted paper at the conference. The student must attend the conference and present the paper in order to receive the reimbursement. Recipients of the Travel Reimbursement need not be recipients of the Instrumentation and Measurement Society Student Best Paper Award.

Basis for Judging: The Travel Grant amount is based on geographic location of the conference site and the distance of the travel involved for the students.

Presentation: The reimbursement will be presented at the respective conferences.

15. IEEE Instrumentation & Measurement Society Best Dissertation Award (established in 2020)

Description: Recognizes the author of an outstanding PhD dissertation in terms of technical significance and creativity in the field of Instrumentation and Measurement.

Prize: \$1,000 USD, a certificate, and publication of the dissertation abstract in the IEEE IMS Magazine. Only one recipient selected annually if a suitable awardee is identified.

Funding: Funded by the IEEE Instrumentation & Measurement Society.

Eligibility:

- Candidate must be a Member (or higher-grade Member) or a Student Member of the IEEE and of I&M Society at the time of application.
- The candidate must have a nominating sponsor (PhD advisor or PhD committee member) that is a Member (or higher-grade Member) of the IEEE and of I&M Society at the time of application.
- The Degree must have been conferred within 2 years prior to submission deadline from an accredited (in accordance to the accepted rules of the country of applicant) institution.
- The original dissertation can be in any language. The nominated dissertation and all other application material should be written in English.
- No more than one nomination per nominating sponsor per award year will be considered.

Basis for Judging: The committee will take in account at least the following criteria in the evaluation:

- Relevance for I&M field
- Potential impact on theory and practice
- Technical depth and significance of the research contribution
- Quality of preparation: is the dissertation well written and organized
- Clarity: does the dissertation clearly state the contribution of the work
- Completeness of the review of relevant literature
- Originality and creativity

Presentation: Presentation will take place at the IMS flagship conference I2MTC or another IMS conference chosen by the recipient.

IEEE INTELLIGENT TRANSPORTATION SYSTEMS SOCIETY
ITSS-038 (Division IX)

For all Intelligent Transportation Systems Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Outstanding ITS Application Award (established in 2010)

Description: For those who have made significant and outstanding contributions to the application of ITS related technologies in practical fields. This award is established to recognize, promote, stimulate and publicize major research contributions and outstanding achievement in ITS related fields.

Prize: \$1,000 and certificate of award.

Funding: Funded by the IEEE Intelligent Transportation Systems Society.

Eligibility: Candidates should be active members of IEEE as well as IEEE ITSS Society. For group nominations, the lead member of the group should be an active member of IEEE as well as IEEE ITSS Society.

Basis for Judging: Significance, impact, innovation, and quality of ITS applications in practical systems. Each factor will be ranked on a scoring scale of 1 to 10, with 1 being the best and 10 being the worst. The scores from each selection committee member are collected and the candidate receiving the lowest average score is the winner.

Presentation: ITSS annual ITS conference.

2. IEEE Outstanding ITS Research Award (established in 2010)

Description: For those who have made significant and outstanding contributions to research in ITS related fields. This award is established to recognize, promote, stimulate and publicize major research contributions and outstanding achievement in ITS related fields.

Prize: \$1,000 and certificate of award.

Funding: Funded by the IEEE Intelligent Transportation Systems Society.

Eligibility: Candidates should be active members of IEEE as well as IEEE ITSS Society. For group nominations, the lead member of the group should be an active member of IEEE as well as IEEE ITSS Society.

Basis for Judging: Significance, impact, innovation, and quality of research work. Each factor will be ranked on a scoring scale of 1 to 10, with 1 being the best and 10 being the worst. The scores from each selection committee member are collected and the candidate receiving the lowest average score is the winner.

Presentation: ITSS annual ITS conference.

3. **IEEE ITS Institutional Lead Award** (established in 2010)

Description: For those who have made significant and outstanding contributions to the research and applications of ITS related technologies. This award is established to recognize, promote, stimulate and publicize major research contributions and outstanding achievement in ITS related fields.

Prize: \$1,000 and certificate of award.

Funding: Funded by the IEEE Intelligent Transportation Systems Society.

Eligibility: For group nominations, the lead member of the group should be an active member of IEEE as well as IEEE ITSS Society.

Basis for Judging: Significance, impact, innovation, and quality of ITS applications in practical systems. Each factor will be ranked on a scoring scale of 1 to 10, with 1 being the best and 10 being the worst. The scores from each selection committee member are collected and the candidate receiving the lowest average score is the winner.

Presentation: ITSS annual ITS conference.

4. **IEEE ITS Lifetime Achievement Award** (established in 2017)

Description: To recognize the exemplary contributions to Intelligent Transportation Systems over a career.

Prize: The honoraria prize of \$5,000 is intended to cover all travel expenses and plaque for the award. Single annual award with only one allowable recipient selected annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Funding: Funded by the IEEE Intelligent Transportation Systems Society.

Eligibility: The applicant should be at least 65 years of age.

Basis for Judging: Submissions are evaluated based on 1) technical contributions, 2) significance to ITS field, and 3) the quality of recommendation letters. Each category is scored on a 1-10 scale and summed for a total score averaged among committee members during the first round. The second round of scoring ranks the top submissions for final award after committee discussion.

Presentation: The award is presented during the banquet during the society's flagship meeting, the Intelligent Transportation Systems Conference.

5. **IEEE ITSS Best Dissertation Award** (established in 2017)

Description: The IEEE ITSS Best Dissertation Award is given annually for the best dissertation in any ITS area that is innovative and relevant to practice. This award is established to encourage doctoral research that combines theory and practice, makes in-depth technical contributions, or is interdisciplinary in nature, having the potential to contribute to the ITSS and broaden the ITS topic areas from either the methodological or application perspectives.

Prize: Three awards to be given annually for first, second and third place - Each recipient receives the full prize based on ranking. First Place receives \$2000, Second Place \$1000, and Third Place \$500. In case of a two- or three-way tie, the prize awards for the two or three prizes at issue will be summed and divided equally among the winning candidates. No travel allowances are made for the award.

Funding: Funded by the IEEE Intelligent Transportation Systems Society.

Eligibility: Eligible applicants must have written a doctoral dissertation and received a Ph.D. no more than 18 months prior to the submission. Students of sitting selection committee members should be excluded from eligibility.

Basis for Judging: Submissions are evaluated based on the dissertation's 1) technical contributions, 2) significance,

3) the quality of publication record, and 4) the quality of recommendation letters. Each category is scored on a 1-10 scale and summed for a total score averaged among committee members during the first round. The second round of scoring ranks the top submissions for final award after committee discussion.

Presentation: The award is presented during the banquet during the society's flagship meeting, the Intelligent Transportation Systems Conference.

6. **IEEE ITSS Young Researcher/Engineer Award** (established in 2017)

Description: To recognize early career contributions and leadership in research and/or application in ITS related fields.

Prize: The honoraria prize \$1,000. No travel allowances are made for this award. Single annual award with only one allowable recipient selected annually. Recipient receives full prize.

Funding: Funded by the IEEE Intelligent Transportation Systems Society.

Eligibility: The applicant should be, by the end of the year when the nomination is submitted, not older than 40 years.

Basis for Judging: Submissions are evaluated based on 1) technical contributions and significance, 2) leadership in ITS field, and 3) the quality of recommendation letters. Each category is scored on a 1-10 scale and summed for a total score averaged among committee members during the first round. The second round of scoring ranks the top submissions for final award after committee discussion.

Presentation: The award is presented during the banquet during the society's flagship meeting, the Intelligent Transportation Systems Conference.

IEEE MAGNETICS SOCIETY

Mag-33 (Division IV)

For all Magnetics Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Achievement Award (Established in 1994) (revised 2006)

Description: To recognize exceptional accomplishments and contributions to the field of Magnetics.

Prize: \$3,000, with an additional travel reimbursement up to a maximum of \$500 for recipient to attend awards presentation, Certificate, and Society Life Membership

Funding: **Funded by the IEEE Magnetics Society through an endowment administered by the IEEE Foundation effective 2010.**

Eligibility: Must be member of IEEE Magnetics Society.

Basis for Judging: Outstanding achievement in magnetics, service to the Society and/or the magnetics community.

Presentation: At Intermag Conference.

2. IEEE Student Prize Paper Award

Description: To recognize the best paper authored by a student.

Prize: \$250 and consideration for publication in *IEEE Transactions on Magnetics*.

Funding: **Funded by the IEEE Magnetics Society through an endowment administered by the IEEE Foundation effective 2010.**

Eligibility: Undergraduate and graduate students; the student must not receive or expect to receive the doctoral degree prior to January 31 of the year in which the award is made

Presentation: Irregular intervals (approximately every three years).

3. IEEE Magnetics Society Distinguished Service Award (established in 2016)

Description: To recognize outstanding service to the IEEE Magnetics Society and magnetics community.

Prize: A single annual award of \$2,000, plus up to \$500 for travel to the award ceremony, and life membership in the IEEE Magnetics Society. If more than one recipient, the prize would be split equally among up to three recipients, and each recipient would receive \$500 travel award.

Funding: **Funded by the IEEE Magnetics Society through an existing endowment administered by the IEEE Foundation which should be sufficient to fund in perpetuity.** If these funds are not sufficient, the IEEE Magnetics Society will directly fund the difference.

Eligibility: Members of the IEEE Magnetics Society are eligible

Basis for Judging: Evaluation of the candidates regarding their service contributions pertinent to the Award. The committee discusses each candidate whether the contribution is significant and merits consideration for the award.

Presentation: At the INTERMAG conference during the Plenary Session in the year following the selection of the awardee.

4. **IEEE Magnetics Society Early Career Award** (established in 2016)

Description: To recognize an individual, nominated not more than 5 years after completion of his or her PhD, and who has already shown outstanding scientific or technical achievements which have been significantly beyond the average performance of a person at that career level.

Prize: A single annual award of \$1,500 to a single recipient, plus up to \$500 for travel to the award ceremony, and life membership in the IEEE Magnetics Society.

Funding: **Funded by the IEEE Magnetics Society through an existing endowment administered by the IEEE Foundation which should be sufficient to fund in perpetuity.** If these funds are not sufficient, the IEEE Magnetics Society will directly fund the difference.

Eligibility: Members of the IEEE Magnetics Society are eligible

Basis for Judging: Evaluation of the candidates regarding their service contributions pertinent to the Award. The committee discusses each candidate whether the contribution is significant and merits consideration for the award.

Presentation: At the INTERMAG conference during the Plenary Session in the year following the selection of the awardee.

5. **IEEE Magnetics Society Mid-Career Award** (established in 2020)

Description: To recognize an scientists and engineers at the mid-stages of their career for outstanding research and technological contributions in a field represented by the IEEE Magnetics Society. This award fills a void between the Society's Early Career, limited to a nominee within 5 years of completion of PhD, and the Achievement Award, which recognizes a nominee for research that has demonstrated unusually high impact, regardless of stage in career.

Prize: A single annual award of \$2,000 to a single recipient, plus up to \$500 for travel to the award ceremony, Certificate, and life membership in the IEEE Magnetics Society.

Funding: **Funded by the IEEE Magnetics Society through an existing endowment administered by the IEEE Foundation which should be sufficient to fund in perpetuity.** If these funds are not sufficient, the IEEE Magnetics Society will directly fund the difference.

Eligibility: Members of the IEEE Magnetics Society in the mid-stages of their career (between 10 to 20 years after completion of the PhD, except in the case of significant career interruptions due to family or military service) are eligible.

Basis for Judging: The selection committee, which is a subcommittee of the Honors and Awards Committee of the IEEE Magnetics Society, evaluates the candidates regarding their scientific achievements with respect to a field represented by the IEEE Magnetics Society. It discusses for each candidate whether the contribution is significant and merits consideration for the award. Discussion and decision can be made either by a conference call or by email.

Presentation: At the INTERMAG conference during the Plenary Session in the year following the selection of the awardee.

IEEE MICROWAVE THEORY AND TECHNIQUES SOCIETY
MTT-17 (Division IV)

For all Microwave Theory and Techniques Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Honorary Life Member of Society (revised 1995)

Prize: Plaque and MTT Society Fees paid by Society.

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Eligibility: Important technical contributions, MTT-S AdCom Member (six years minimum), MTT-S AdCom President, MTT-S member for 15 years minimum and IEEE Fellow.

Basis for Judging: Peer review.

Presentation: When presented - at the annual IEEE MTT-S International Microwave Symposium.

2. Microwave Career Award (revised 1999)

Description: To recognize a career of meritorious achievement and outstanding technical contribution by an individual in the field of microwave theory and techniques.

Prize: \$5,000, Plaque, and Certificate. Travel support of up to \$1,000 is granted on a need basis for travel to the symposium.

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Eligibility: Must be a member of IEEE.

Basis for Judging: Publication in technical journals, presentation of lectures, contributions to the advancement of microwave technology, and other technical contributions considered in conjunction with any or all of these areas of contribution.

Presentation: When presented - at the annual IEEE MTT-S International Microwave Symposium.

3. Distinguished Service Award

Description: To recognize significant contributions and outstanding service to the IEEE Microwave Theory and Techniques Society and the microwave profession over a sustained period of time.

Prize: Plaque and Certificate

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Basis for Judging: Service to MTT-S AdCom and IEEE.

Presentation: When presented - at the annual IEEE MTT-S International Microwave Symposium.

4. Distinguished Educator Award (established in 1992) (revised 1995, 1999)

Description: To recognize a distinguished educator in the field of Microwave Engineering and Science who exemplifies the special human qualities of the late Fred J. Rosenbaum, who considered teaching a high calling and demonstrated his dedication to MTT-S through tireless service.

Prize: \$2,500 and Plaque. Travel support of up to \$1000 is granted on a need basis for travel to the symposium.

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Eligibility: Must be a member of IEEE and MTT-S.

Basis for Judging: Awardee must be a distinguished educator recognized in general by an academic career; documentation of having received other teaching awards; effectiveness as educator supported by list of graduates in the field of microwave science who have become recognized in the field; letters of support; outstanding record of research contributions documented in archival publications; many years of service to MTT-S.

Presentation: When presented - at the annual IEEE MTT-S International Microwave Symposium.

5. **Microwave Pioneer Award** (revised 1995, 1999)

Description: To recognize a major, lasting contribution in the field of interest to IEEE Microwave Theory and Techniques Society at least 20 years prior to the year of the award.

Prize: \$2,500 (shared if for multiple recipients) and Plaque. Travel support of up to \$1000 is granted on a need basis for travel to the symposium.

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Eligibility: Preference may be given to IEEE members; individuals or teams of up to three (3).

Basis for Judging: Publication of contribution in archival journal.

Presentation: When presented - at the annual IEEE MTT-S International Microwave Symposium.

6. **Microwave Application Award** (revised 1995, 1999)

Description: To recognize the most outstanding application of microwave theory and techniques by an individual or a team of individuals.

Prize: \$1,500 and Plaque

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Basis for Judging: The award shall be made to an individual for an outstanding application of microwave theory and techniques. The eligibility requirements are creation of a new device, component or technique; novel use of a device or component or a combination of any or all of the above. Publication of a paper is not required. As a further guideline, this application shall be reduced to practice nominally 10 years before the award

Presentation: When presented - at the annual IEEE MTT-S International Microwave Symposium.

7. **Microwave Prize** (1995, 1999, 2004)

Description: To recognize the most significant contribution by a published paper to the field of interest of IEEE Microwave Theory and Techniques Society.

Prize: \$1,500 and Plaque. If the paper has more than one author, a certificate will be presented to each author and the cash sum of \$750 will be presented to each up to a total of \$3,750. If more than five authors are involved, \$3,750 will be split equally among the authors.

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Eligibility: Authors of papers of significant contribution to the MTT-S field of interest published in any IEEE publication during year ending June 30th preceding the award. The author need not be a member of IEEE.

Presentation: At the annual IEEE MTT-S International Microwave Symposium.

8. **N. Walter Cox Award** (established in 1992)

Description: To recognize an individual who has given exemplary service to the Society in a spirit of selfless dedication and cooperation. The award is given in memory of N. Walter Cox, longstanding MTT-S volunteer, who had demonstrated technical, administrative, and interpersonal leadership skills before passing away early in his career.

Prize: Plaque and feature publication in MTT-S *Transactions*

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Eligibility: Must be a member of IEEE and of the MTT-S. Nominations may be made by any elected member of the Administrative Committee or by a petition signed by, at least, 25 members of the Society. Preference may be given to mid-career candidates.

Basis for Judging: Service in one or more of the following: AdCom, Society publications, meetings and symposia, Chapter activities, committees, lectures or other distinguished service. Factors to be considered include: maintaining a positive and enthusiastic attitude, demonstrating courage, exhibiting a diversity of interests and capabilities, serving as a role model, motivating and inspiring others.

Presentation: At the annual IEEE MTT-S International Microwave Symposium.

9. **IEEE Distinguished Microwave Lecturer**

Prize: Plaque

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Eligibility: Subject of lecture must be of current interest and lecturer must be prominent contributor in the field of his/her lecture.

Basis for Judging: Subject and lecture.

Presentation: At the annual IEEE MTT-S International Microwave Symposium.

10. **IEEE MTT-S Graduate Fellowships/IEEE MTT-S Tom Brazil Graduate Fellowship (highest ranked winner)** (Revised 2019)

Description: To support graduate research studies in Microwave Engineering on a full-time basis. The highest ranked winner of the ten IEEE MTT-S Graduate Fellowships will be titled "IEEE MTT-S Tom Brazil Graduate Fellowship".

Prize: \$6,000 each and Certificate. Travel grants up to \$1,000 for recipients of Graduate Fellowships; Travel grant up to \$2,000 for recipient of MTT-S Tom Brazil Graduate Fellowship.

Funding: Funded by the IEEE Microwave Theory and Techniques Society.

Eligibility: Graduate student wishing to pursue graduate degree in microwave engineering on a full-time basis; Faculty Advisor must be member of MTT-S.

Basis for Judging: High academic achievement in approved engineering or physics curriculum; two (2) letters of recommendation from undergraduate faculty; interest in microwave engineering graduate studies; and personal interview with the candidate.

Presentation: At the annual IEEE MTT-S International Microwave Symposium.

11. **IEEE MTT-S Undergraduate/Pre-graduate Scholarships** (established in 2000) (revised 2004, 2006)

Description: To encourage undergraduates in electrical engineering (or a related field) to pursue a graduate degree and career in RF and Microwaves field because many universities find it difficult to attract undergraduate students to the microwave and RF discipline.

- Prize:* Up to ten \$1,500 scholarships awarded annually. The money may be used to purchase materials for a microwave/RF-related project, or as a student stipend. In addition, awardees are encouraged to attend an MTT-S sponsored microwave conference. Awardees will be reimbursed for airfare and lodging expenses up to \$1,000.
- Funding:* Funded by the IEEE Microwave Theory and Techniques Society
- Eligibility:* Applicant must be an undergraduate student in electrical engineering (or related field) at the time of application, and should be enrolled in full-time in his/her final year of the undergraduate program, first year of graduate studies, or combined B.S./M.S. program during the award period. The applicant must be a student member of the IEEE, and the faculty mentor must be a member of the IEEE MTT Society. There are no citizenship requirements.
- Basis for Judging:* Factors to be considered: a) the academic merit of the candidate, based on transcripts; b) the merit of the proposal; c) the recommendation of the faculty mentor. The major criterion is how the proposal will help the student pursue graduate studies and a career in microwaves and RF. Scholarships will be awarded in a manner consistent with improving globalization of the MTT-S. The percentage of MTT-S membership in Regions 1-6, Region 7, Region 8, Region 9, and Region 10 will be calculated. Scholarships will be allocated per that ratio but with a minimum of one scholarship guaranteed for each of Regions 7, 8, 9, and 10, provided that a suitable number and quality of applications are received from these regions.
- Presentation:* Awards will be sent to the student via the faculty mentor. Awardees will be recognized at a student luncheon at the IEEE MTT-S International Microwave Symposium.

12. **IEEE MTT-S Outstanding Young Engineer Award** (established in 2001) (revised 2004)

- Description:* To recognize an outstanding young MTT-S member, who has distinguished himself/herself through achievements, which may be technical (within the MTT-S field of interest), may be exemplary service to the MTT-S, or may be a combination of both. Each year up to two awards will be made, recognizing not more than one (1) MTT-S Member from the industrial community and not more than one (1) MTT-S Member from the academic community. The eligibility category will be determined by the status of the candidate when the activity being recognized was performed. This award focuses on recognizing a person no more than 38 years of age who was responsible for the success of the cited achievements during this part of his/her career. Examples of achievements are: Technical contributions from patents, publications, such as journal articles, digests of papers, books, reports, and product releases; Service/organizational contributions to the Society, such as results demonstrated in the Local Chapter, Section, or Regional activities, as well as to Publications, Membership Services, or other Technical or Administrative Committees of the Society.
- Prize:* \$1,500, Certificate, Plaque, and up to \$1,000 travel allowance (depending on need). In the unlikely event that there are multiple recipients, the cash award is shared, a plaque is presented to each, and each may apply for a travel allowance. Each year up to two awards will be made, recognizing not more than one (1) MTT-S Member from the industrial community and not more than one (1) MTT-S Member from the academic community
- Funding:* Funded by the IEEE Microwave Theory and Techniques Society
- Eligibility:* The nominee must be no more than 38 years of age and an MTT member at time of nomination. The nominator must certify the eligibility of the nominee at the time of nomination.
- Basis for Judging:* The nomination must clearly indicate the achievements that define the excellence of the candidate, and must reference documentation. At least 3, but not more than 5, endorsements must be provided, written by individuals who have detailed knowledge of the candidate's activities that lead to the achievements in the nomination. The endorsement letters should objectively expand the details of the achievements in the nomination.
- Presentation:* At the International Microwave Symposium

13. **Harold Sobol Travel Grant** (established in 2005) (revised 2010)

Description: To recognize a student who has presented an exceptional paper at the IEEE International Microwave Symposium.

Prize: One Travel Grant in the amount of \$1,000 and Certificate.

Funding: **Established by the family and friends of Harold Sobol. The funding will be managed by the IEEE Foundation.**

Eligibility: The recipient must have presented the paper at the IMS conference. The student must be registered at the symposium.

Basis for Judging: The criteria will be paper content, its originality, significance and quality of presentation.

Presentation: The Grant will be presented to the winner and announced at a special function during IMS.

14. **IEEE Microwave Magazine Best Paper Award** (established in 2009)

Description: This award will recognize the best feature article published in the *IEEE Microwave Magazine* in the year preceding the award. Currently, no award is specifically targeted to authors in *IEEE Microwave Magazine*, and no author of an *IEEE Microwave Magazine* feature article has been recognized with an award for their publication in *IEEE Microwave Magazine*.

Prize: The *IEEE Microwave Magazine* Best Paper Award shall consist of a plaque and an honorarium in the amount of \$1,000 for a single author recipient, not to exceed \$2,000 for multiple author recipients. In the case of multiple recipients \$2,000 will be divided equally between the authors.

Funding: The award funds will be provided from the IEEE Microwave Theory and Techniques Society operating funds. Multiple recipients of the award are permitted for papers with multiple authors. However, in the case of multiple recipients the total award is limited to \$2,000, shared equally between the author recipients.

Eligibility: The *IEEE Microwave Magazine* Best Paper Award will be presented to the authors of the best feature article published in *IEEE Microwave Magazine* during the preceding year of the award.

Basis for Judging: The *IEEE Microwave Magazine* Best Paper Award will be selected based upon the review and evaluation of the Selection Committee. Technical excellence, importance of the contribution, and presentation will be the fundamental bases for evaluation.

Presentation: The *IEEE Microwave Magazine* Best Paper Award will be presented during the MTT Society ADCOM Awards Banquet held during the annual IMS.

15. **IEEE Microwave and Wireless Components Letters Tatsuo Itoh Prize** (established in 2009) (renamed 2010)

Description: This award will recognize the best letter published in the IEEE Microwave and Wireless Components Letters in the year preceding the award. Currently, no award is specifically targeted to authors in IEEE MWCL, and no author of an IEEE MWCL letter has been recognized with an award for their publication in IEEE MWCL.

Prize: The IEEE MWCL Best Paper Award shall consist of a plaque and an honorarium in the amount of \$1,000 for a single author recipient, not to exceed \$2,000 for multiple author recipients. In the case of multiple recipients \$2,000 will be divided equally between the authors.

Funding: The award funds will be provided from the IEEE Microwave Theory and Techniques Society operating funds. Multiple recipients of the award are permitted for papers with multiple authors. However, in the case of multiple recipients the total award is limited to \$2,000, shared equally between the author recipients.

Eligibility: The IEEE MWCL Best Paper Award will be presented to the authors of the best feature article published in IEEE MWCL during the preceding year of the award.

Basis for Judging: The IEEE MWCL Best Paper Award will be selected based upon the review and evaluation of the Selection Committee. Technical excellence, importance of the contribution, and presentation will be the fundamental bases for evaluation.

Presentation: The IEEE MWCL Best Paper Award will be presented during the MTT Society ADCOM Awards Banquet held during the annual IMS.

16. IEEE MTT Society Outstanding Chapter Award (established in 2013)

Description: To annually recognize up to 5% of the MTT-Society Chapters worldwide that have (i) exhibited noteworthy performance by providing their members with outstanding technical activities, societal activities, membership advancement, fellow and award nominations - and (ii) successfully recruited new MTT-Society members. The award will recognize the chapter's contributions with special consideration for the local constraints and chapter size.

Prize: Selected Chapters will be awarded a plaque. Travel and lodging reimbursement will be provided for a chapter representative of each awarded chapter to attend the Chapter Chair meeting where the award will be presented.

Funding: The costs associated with providing the award will be the responsibility of the IEEE MTT-Society. Estimated annual cost to administer the awards to the maximum number of chapter recipients with the current number of MTT chapters is \$8,200. That funding is expected to provide travel reimbursement for up to 7 chapter representatives to one of our regional Chapter Chair meetings as well as purchase award plaques for each recipient chapter.

Eligibility: Any MTT Society Chapter (or Joint Chapter) including Student Branch Chapters that has not won the IEEE MTT-Society Outstanding Chapter Award in the two years immediately preceding the current year of selection.

Basis for Judging: Selection of the IEEE MTT-Society Outstanding Chapters will be based on chapter performance during the previous calendar year. Performance evaluation will be based on how chapters provided their members with outstanding technical activities, societal activities, membership advancement, fellow and award nominations. Evaluations will also consider successful MTT-Society membership recruitment. The award will evaluate the chapter's contributions with special consideration for the local constraints and chapter size. Chapter nominations should also include photographs of chapter activities during the previous year and materials that can be used in publicity articles in the Society magazine and web site.

Presentation: Selected chapters will be allowed to select the MTT-S Chapter Chair meeting where the award will be presented. MTT-S Chapter Chair meetings are held in conjunction with several major conferences each year.

17. IEEE Transactions on THz Science and Technology Best Paper Award (established in 2013)

Description: This award is given to the author(s) of the paper judged as 'best paper' published in the *IEEE Transactions on THz Science and Technology* in the year preceding the year of the award.

Prize: The award shall consist of a plaque and an honorarium of \$1000. In the case of multiple recipients, the maximum amount for the award is increased to \$2000. Each recipient shall receive a plaque and the \$2000 honorarium will be shared equally among the recipients. In no case will the total award amount exceed \$2000.

Funding: The award will be funded from the MTT Society budget. The amount of the award will be \$1000 for a single author. For the case of multiple authors, the total award amount is increased to \$2000, which is shared equally among the award recipients. The number of recipients is determined by the number of authors of the winning paper.

Eligibility: The award is given to the author(s) of the paper judged as the 'best paper' published in the *IEEE Transactions on THz Science and Technology*, independent of society or IEEE membership.

Basis for Judging: The winning paper will be selected from the papers published in IEEE Transactions on THz Science and Technology in the year preceding the year of the award. The committee will consider factors such as overall paper quality, scientific importance, scientific and technical relevance, timeliness of the scientific contribution, and potential for further scientific advances.

Presentation: The award will be presented during the Awards Banquet at the annual International Microwave Symposium (IMS).

18. **IEEE MTT-S Student Design Competition (SDC) Award** (established in 2017)

Description: The Student Design Competition will be sponsored by MTT-S Technical Committees. Teams from Universities may compete at the annual International Microwave Symposium (IMS). Hardware, Software, Systems, Devices and Components will be designed and fabricated and demonstrated/tested in the Technical Areas of sponsoring Technical Committees. The IMS will provide space and set schedules for each contest. Representatives of each Technical Committee Sponsor will judge each contest during a period set up by IMS.

Prize: Multiple Awards Given Annually - Each recipient receives full prize. The TCC will provide a cash Award of \$2,000 for each SDC Winner at each IMS in which a Technical Committee sponsors a SDC. In recent years there has been 10 to 15 Awards per year. The \$2,000 Award may be split into the following:

- A single 1st Prize of \$2000 to a University Team
- A 1st and 2nd Prizes splitting the \$ 2,000 between 2 University Teams
- A 1st, 2nd, and 3 Prizes splitting the \$ 2000 between 3 University Teams
- In some cases Industry desires to provide some Prize Money. In such a case the TCC \$2,000 will be 1st Prize to University Team. Industry money may be used for 2nd and 3rd Prize Winners. Industry funds are administered by IMS Treasurer.

Funding: The MTT-S provides the Budget for the SDCs. The TCC Chair requests funds as a line item in the MTT-S Technical Committee Budget. The Budget is based on the recent history of the awards but may not exceed the number of \$2000 X the number of participating Technical Committees.

Eligibility: Teams from Universities working in the Technical areas covered by the MTT-S are eligible. The Individual Technical Committees will determine which Proposed SDCs are allowable.

Basis for Judging: Judges representing Individual Sponsoring Technical Committees will evaluate which University SDC Team's design best represents their Technical area.

Presentation: SDC Prize Winners are announced during Student Luncheon of IMS. SDC Winners invited to submit a magazine Article for *Microwave Magazine*, which describes their design. The timing of publication is determined by Magazine Editor.

19. **IEEE MTT-S Graduate Student Challenge Award** (established in 2017)

Description: The Graduate Student Challenge encourages students who attend the MTT-S Flagship Conference, The International Microwave Symposium (IMS) to form teams, conduct brain storming meetings, develop new ideas and propose applications based on two papers presented at the IMS and on themes indicated by the jury. During the IMS, each team will prepare a poster to summarize its results and major achievements. On the last day of the IMS, student teams will compete by presenting their posters and detailing their ideas in a special Poster Session, in front of judges from industry and academia.

Prize: Single Annual Award with Multiple Recipients – Prize to be split among multiple recipients. There is no travel allowance with this award. Prize amount of \$2,000 will be presented to the winning team, shared in equal parts among the team.

Funding: The award will be funded from the MTT Society budget.

Eligibility: Applicant must be a BS, BS/MS, MS or PhD student registered at the IMS. There are no citizenship requirements. There is no limit to the number of applicants from an institution. Applicants are permitted to compete for the award more than once.

Basis for Judging: The selection basis for judging is strictly on Merit: originality, feasibility, and clarity of the poster and the presentation.

Presentation: At MTT-S International Microwave Symposium (IMS) (May/June) every year.

IEEE NANOTECHNOLOGY COUNCIL

NANO- 042 (Division I)

For all Nanotechnology Council awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Pioneer Award in Nanotechnology (established in 2005)

Description: To recognize individuals who by virtue of initiating new areas of research, development or engineering have had a significant impact on the field of nanotechnology. The award is intended for people who are in the mid or late portions of their careers, i.e. at least 10 years beyond his or her highest earned academic degree.

Prize: \$1,000 (\$500 each if two awards are made), commemorative Plaque, and Certificate.

Funding: Funded by the IEEE Nanotechnology Council.

Eligibility: Any current member of the IEEE working in the Nanotechnology field who is at least 10 years beyond his or her highest earned academic degree.

Basis for Judging: Factors that will be considered: Distinction in long-term technical achievement, leadership, innovation breadth, and impact to nanotechnology and engineering.

Presentation: The awards will be presented at the annual Nanotechnology Council Conference banquet.

2. Early Career Award in Nanotechnology (established in 2005)

Description: To recognize individuals who have made contributions with major impact on the field of nanotechnology.

Prize: \$1,000 (\$500 each if two awards are made), commemorative Plaque, and Certificate.

Funding: Funded by the IEEE Nanotechnology Council.

Eligibility: Any current member of the IEEE who is in the early stage of his or her career in the Nanotechnology field, i.e., less than 7 years after being granted his or her highest earned academic degree.

Basis for Judging: Factors that will be considered: Distinction in technical innovation and achievement, and impact to nanotechnology and engineering.

Presentation: The awards will be presented at the annual Nanotechnology Council Conference banquet.

3. Distinguished Service Award (established in 2005)

Description: To recognize an individual who has performed outstanding service for the benefit and advancement of Nanotechnology Council.

Prize: \$1,000, commemorative Plaque, and Certificate.

Funding: Funded by the IEEE Nanotechnology Council.

Eligibility: Any current member or former member of the IEEE Nanotechnology Council with outstanding service in one or more of the following areas: conferences and meetings, publications, editors, administrative committee, chapter leadership, or other distinguished services and activities for the Nanotechnology Council.

Basis for Judging: Factors that will be considered: Impact of service and contributions to the Council, leadership, innovation, activity, duration, breadth or participation and cooperation.

Presentation: The awards will be presented at the annual Nanotechnology Council Conference banquet.

4. IEEE Best Paper Award for the *IEEE Transactions on Nanotechnology* (established in 2009)

Description: An annual best paper award to recognize a paper published in the IEEE Transactions on Nanotechnology that is remarkable by his novelty, scientific merit and potential impact. This award will encourage submission of excellent papers to the journal, and reward outstanding submissions.

Prize: The award will consist of a certificate and a \$1,000 honorarium. In case a winning paper has several co-authors, the honorarium will be divided equally by all authors.

Funding: From the NTC funds budgeted for the Transactions.

Eligibility: The authors are not required to be members of the IEEE, although they will be encouraged to join. The Editor-in-Chief of the Transactions, the President of the NTC and the NTC Vice President for Publications are ineligible. All other authors are eligible, unless they fall within the limitations spelled out in the IEEE Policy 4.4 cited below.

Basis for Judging: The primary criteria are novelty, scientific merit, and potential impact.

Presentation: At the annual IEEE International Conference on Nanotechnology by the NTC President or his/her delegate.

5. IEEE Nanotechnology Council (NTC) Chapter of the Year Award (established in 2012)

Description: An award intended to encourage a successful and effective overall performance of the Exemplary Chapter in terms of its activities. The Exemplary Chapter must have a high number of activities and creativity. The Chapter must consistently be active in organizing activities throughout the year.

Prize: The IEEE Nanotechnology Council (NTC) Chapter of the Year Award Certificate and \$500.

Funding: IEEE-NTC funds will be used for the award. The award is given to one Chapter on an annual basis. The NTC budget will include the award.

Eligibility: All the existing/established IEEE-NTC Chapters are eligible for this award.

Basis for Judging: The NTC awards Committee will review the proposed candidates for selection, based upon the Committee's voting procedure. The award is based on best yearly activities in the categories of Chapter-sponsored technical activities, seminars, workshops, conferences, visits etc. Other key requirements of the award are:

- Timely updates and reporting of Chapter officers and activities
- Minimum of (4) meetings/programs per year
- Maintain an up-to-date Chapter Web site

Other activities may include:

- engagement with student activities
- joint activities with other member society chapters
- chapter visits to local industry/institutions
- member advancement/recognition
- membership growth efforts

Presentation: The award will be announced by May 31st for the prior year, and will be presented at a mutually agreed venue.

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY
NPS-05 (Division IV)

For more information on NPSS awards, please visit: www.ieee.org/npss

For all Nuclear and Plasma Sciences Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Merit Award** (revised 2008)

Description: To recognize outstanding technical contributions to the fields of Nuclear and Plasma Sciences.

Prize: \$5,000, Plaque, and Certificate

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: Any individual who has made technical contributions to the fields of Nuclear and Plasma Sciences.

Basis for Judging: Selection criteria, in order of importance are: 1) importance of individual technical contributions; 2) importance of technical contributions made by teams led by the candidate; 3) quality and significance of publications and patents; 4) years of technical distinction; 5) leadership and service within the fields of nuclear and plasma sciences and related disciplines.

Presentation: One award presented annually at an NPSS sponsored meeting chosen by the Awardee.

2. **Richard F. Shea Distinguished Member Award** (revised 2001, 2008)

Description: To recognize outstanding contributions through leadership and service to the NPSS and to the fields of Nuclear and Plasma Sciences.

Prize: \$5,000, Plaque, and Certificate

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: Any member of the IEEE and NPSS who has contributed to the fields of nuclear and plasma sciences through leadership and service.

Basis for Judging: Selection criteria are: leadership roles and leadership quality; innovative and important contributions to Society activities; service and dedication to the NPSS; technical achievements.

Presentation: One award presented annually at an NPSS sponsored meeting chosen by the Awardee.

3. **Radiation Effects Award** (revised in 1993, 1998, 2000, 2009)

Description: To recognize members of the Radiation Effects Technical Community who have demonstrated outstanding and innovative technical contributions or leadership.

Prize: \$3,000 and Plaque

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society

Basis for Judging: Technical contributions with major impact may include: benchmark work that initiated a major research and development activity; a major body of work that provided a solution to a widely recognized problem in radiation effects. Leadership may include: initiation or development of innovative approaches for promoting cooperation and exchange of technical information among members; outstanding leadership in support of the professional development of members of the

Radiation Effects Community.

Presentation: At Nuclear and Space Radiation Effects Conference.

4. **Particle Accelerator Science and Technology Award** (revised in 1998, 2000, 2009)

Description: To recognize outstanding contributions to the development of Particle Accelerator Technology.

Prize: \$3,000 and Plaque

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society

Presentation: At Particle Accelerator Conference.

5. **Computer Applications in Nuclear and Plasma Sciences Award** (revised 1999, 2000) (revised Prize and Funding 2018)

Description: To recognize individuals who have made an outstanding achievement in the application of computers in nuclear and plasma sciences. The research fields of nuclear and plasma physics have especially been enhanced by computers.

Prize: \$3,000 and a plaque.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: Any person, regardless of nationality, is eligible for the award, with the exception that no member of the CANPS Technical Committee can be considered. Nonmembers of IEEE or NPSS are also eligible.

Basis for Judging: Evidence of outstanding professional contributions to the profession of utilizing computers in nuclear and/or plasma sciences research. Supporting information can include significant technical contributions, publications and patents, and contributions to the NPSS and its associated fields.

Presentation: At the Real-Time Conference which is held approx. every two years in the spring or early summer.

6. **Plasma Science and Applications Award** (first presented in 1988, established in 1993) (revised prize and funding in 2009) (revised description, eligibility, and basis for judging 2014)

Description: To recognize outstanding contributions to the field of Plasma Science.

Prize: \$3,000, Plaque, and invitation to deliver an address to the Conference on Plasma Science in the year of the award and to submit the text of his talk for inclusion as an invited paper in the *Transactions on Plasma Science*.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society

Eligibility: Open to all, excluding current members of the NPSS Plasma Science and Applications Executive Committee.

Basis for Judging: Primary consideration will be given to the impact of the research or new applications. Other factors can include research contributions over a career, the influence on plasma science through teaching, and professional service to the NPSS Plasma Science and Applications Committee and the plasma science community. The nominee is not required to be a member of the NPSS or IEEE but, where candidates have otherwise equal qualifications, preference shall be given to the candidate who is a member of the IEEE.

Presentation: At the Conference on Plasma Science.

7. **Early Achievement Award** (established in 1993) (revised 2008)

Description: To recognize outstanding contributions to any of the fields making up Nuclear and Plasma Sciences, within the first ten (10) years of an individual's career.

Prize: \$3,000, Plaque, and Certificate

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: Member of the IEEE NPSS who at the time of the nomination is within the first ten (10) years of his or her career within the field of interest of NPSS.

Basis for Judging: Three (3) letters of recommendation, publications and/or reports, patents, etc. which demonstrate outstanding contributions early in the nominee's career.

Presentation: At any major NPSS sponsored conference chosen by the Awardee.

8. **Graduate Scholarship Award** (revised 2008)

Description: To recognize contributions to the fields of Nuclear and Plasma Sciences.

Prize: \$1,500, Certificate, and one-year paid membership in the NPSS.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: Any graduate student in the fields of Nuclear and Plasma Sciences.

Basis for Judging: Evidence of scholarship such as academic record, reports, presentations, publications, research plans, related projects and related work experience. Participation in IEEE activities through presentations, publications, student Chapter involvement, etc., will also be considered.

Presentation: Up to four (4) awards presented annually. Check and certificates sent to nominator to be presented at a special occasion at the winner's institution.

9. **The Edward J. Hoffman Medical Imaging Scientist Award** (established in 1995; revised in 2009)

Description: To recognize outstanding technical contributions to the field of medical imaging science.

Prize: \$3,000, Plaque and Certificate

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society

Eligibility: Any individual who has made outstanding technical contributions to the field of medical imaging science.

Basis for Judging: Primary consideration will be given to the impact and innovativeness of the research. Other factors can include, for example, research contributions over a career and the influence on Medical Imaging Science through education. The nominee is not required to be a member of the NPSS or IEEE but, where candidates have otherwise equal qualifications, preference shall be given to the candidate who is a member of the IEEE.

Presentation: Presented annually at the NPSS Medical Imaging Conference, which takes place in October/November of each year. The activities to obtain nominations, selection, etc. of the Technical Committee/Awards Committee will be initiated at least 8 months before that Conference.

10. **Bruce H. Hasegawa Young Investigator Medical Imaging Science Award** (established in 1995; revised in 2000, 2007, 2009)

Description: To recognize young investigators in the medical imaging science community who have made significant and/or innovative technical contributions.

Prize: \$1,500, Plaque and Certificate

Funding: Funded by the Nuclear Medical Imaging and Sciences Technical Committee of the IEEE Nuclear and Plasma Sciences Society

Eligibility: Graduate students, or other individuals, whose highest degree was awarded within six years prior to the date of nomination.

Basis for Judging: Exceptional contributions to the field of Medical Imaging Science, demonstrated technical merit, proficiency, career intentions and worthiness of the candidate.

Presentation: Presented annually at the NPSS Medical Imaging Conference, which takes place in October/November of each year. The activities to obtain nominations, selection, etc. of the Technical Committee/Awards Committee will be initiated at least 8 months before that Conference.

11. **Paul Phelps Continuing Education Grant** (revised prize 2000, 2008, 2014)

Description: To promote continuing education and encourage membership in NPSS.

Prize: Maximum of \$15K per year as follows: To provide up to \$3,000/year to each NPSS conference sponsoring Short Courses, up to a maximum of \$15,000 per year for all grants. Funds are to be used to cover tuition costs and/or travel costs to attend Short Courses. Actual award amounts for individual grants and use of funds for applicable travel expenses are decided by each NPSS Conference.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: Outstanding Student Members of NPSS and unemployed Members of NPSS who need assistance in changing career direction.

Basis for Judging: Exceptional promise as a Graduate Student in any of the fields of the NPSS, exceptionally good work in those fields for currently unemployed NPSS members and an expectation that attendance to one or more of the Short Courses will result in improved possibility of obtaining a job in the NPSS fields.

Presentation: Presented each year at the NPS sponsored conference in which the Short Courses are given. The awards will be handled prior to the dates of the Conference, so that award recipients can apply the corresponding funds towards covering tuition and/or traveling costs to the Short Courses.

12. **Erwin Marx Award** (established in 1997; revised in 2000, 2007, 2009)

Description: To recognize outstanding technical achievements in pulsed power engineering, science and technology by an individual over an extended period of time.

Prize: \$3,000 and Plaque

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society

Eligibility: Individuals who have made outstanding technical contributions to pulsed power technology for at least ten years.

Basis for Judging: 1. Importance of technical contributions to pulsed power research or development over at least a ten year period. (50 points); 2. Importance of technical contributions made by teams led by the candidate. (20 points); 3. Quality and significance of publications and patents (20 points); 4. Years of technical distinction (10 points). The award is in consideration for outstanding

technical accomplishments. The nominee is not required to be a member of the NPSS or IEEE but, where candidates have otherwise equal qualifications, preference shall be given to the candidate who is a member of the IEEE.

Presentation: Biennially, with presentation in odd numbered years at the IEEE International Pulsed Power Conference Awards Banquet.

13. **Peter Haas Pulsed Power Award** (established in 1997; revised in 2000, 2007, 2009)

Description: To recognize individuals whose efforts, over an extended period, have greatly benefited the pulsed power field through the development of important applications or areas of activity including research, education, and information exchange.

Prize: \$3,000 and Plaque

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society

Eligibility: Any individual who has demonstrated sustained contributions to developing, managing or influencing programs, education or information exchange that has led to important advances in the field of pulsed power.

Basis for Judging: 1. Importance of contributions to pulsed power through developing, managing or influencing programs, education, or information exchange (40 points); 2. Demonstrated leadership and service to the field of pulsed power (30 points); 3. Importance of the technical contributions to pulsed power research or development (20 points); 4. Years of service advancing or enlarging the field of pulsed power (10 points). The award will consider the total benefit conferred on pulsed power by the individual. The nominee is not required to be a member of the NPSS or IEEE, but where candidates have otherwise equal qualifications, preference shall be given to the candidate who is a member of the IEEE.

Presentation: Biennially, with presentation in odd numbered years at the IEEE International Pulsed Power Conference Awards Banquet.

14. **Arthur H. Guenther Pulsed Power Student Award** (established in 1997) (revised 2000, 2007)

Description: To recognize outstanding contributions as a student in pulsed power engineering, science or technology.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society's International Pulsed Power Conference budget.

Eligibility: Any full time undergraduate or graduate university student in pulsed power engineering or science. The nominee must be a student when nominated.

Basis for Judging: 1. Quality of research contributions (40 points); 2. Quality of educational accomplishments (30 points); 3. Quality and significance of publications and patents (20 points).

Presentation: Awarded annually, with presentation at the biennial IEEE International Pulsed Power Conference Awards Banquet.

15. **Fusion Technology Award** (established in 1989; revised in 2000, 2009 and 2012)

Description: To recognize outstanding contributions to research and development in the field of Fusion Technology. Two awards are presented at each biennial Symposium on Fusion Engineering (SOFE), one for each calendar year of the two year cycle with the first year corresponding to the year between SOFE conferences and the second year corresponding to the year of the SOFE conference at which the presentation is made.

Prize: \$3,000 and a plaque. Each award recipient will have SOFE conference registration fees waived for the conference year in which the award is presented and will be reimbursed reasonable travel expenses for conference attendance upon presentation of a travel report, not to exceed \$1,500.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society

Eligibility: Any person, regardless of nationality or Society affiliation, is eligible for the award, with the exception that no current member of the IEEE/NPSS Standing Committee on Fusion Technology may be considered.

Basis for Judging: The recipient shall be selected for one of two categories as determined by the IEEE/NPSS Standing Committee on Fusion Technology that year: (a) outstanding and innovative technical contributions which are widely recognized and have a major impact in the Fusion Technology Community; or (b) outstanding and innovative technical leadership in or service to the Fusion Technology Community. The nominee is not required to be a member of IEEE or NPSS but, where candidates have otherwise equal qualifications, preference shall be given to the candidate who is a member of IEEE.

Presentation: By the Chairperson of the IEEE/NPSS Standing Committee on Fusion Technology or his/her representative, on behalf of the NPSS, during the Symposium on Fusion Engineering.

16. **IEEE Glenn F. Knoll Radiation Instrumentation Outstanding Achievement Award** (established in 2001; revised in 2009) (revised name 2014)

Description: To recognize outstanding contributions to the fields of radiation instrumentation and measurement techniques for ionizing radiation.

Prize: \$3,000, plaque and certificate

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society

Eligibility: Any individual who has made outstanding technical contributions to the field of radiation instrumentation.

Basis for Judging: The principal criteria will be the originality and impact of the contributions to the field. Other factors can include the cumulative research contributions over a career and the influence on the field through education. The schedule to submit nominations, selection of awardees, and other aspects of the award shall be the responsibility of the Awards Committee of the Radiation Instrumentation Technical Committee.

Presentation: Presented annually at the IEEE/NPSS Nuclear Science Symposium.

17. **Radiation Instrumentation Early Career Award** (established in 2001; revised in 2009)

- Description:* To recognize an individual, early in their career, who has made significant and/or innovative technical contributions to the fields of radiation instrumentation and measurement techniques for ionizing radiation.
- Prize:* \$1,500, Plaque and Certificate.
- Funding:* Funded by the Radiation Instrumentation Technical Committee of the IEEE Nuclear and Plasma Sciences Society
- Eligibility:* Graduate students, or other individuals whose highest degree was awarded within ten years of the date of nomination.
- Basis for Judging:* Exceptional contributions to the field of Radiation Instrumentation, demonstrated technical merit, proficiency, career intentions and worthiness of the candidate. The schedule to submit nominations, selection of awardees, and other aspects of the award shall be the responsibility of the Awards Committee of the Radiation Instrumentation Technical Committee.
- Presentation:* Presented annually at the IEEE/NPSS Nuclear Science Symposium.

18. **IEEE NPSS Student Paper Awards** (established in 2005; revised name 2018)

- Description:* For outstanding student poster or oral papers as desired by each of the technical committees of NPSS that organizes a conference. The purpose of these awards is to encourage both outstanding student contributions and greater student participation as principal or sole authors of papers as well as to acknowledge the importance of student contributions to the fields embraced by the NPSS umbrella. These conferences include the Real Time Conference; the International Conference on Plasma Sciences; the Radiation Effects Conference; the Pulsed Power Conference; the Medical Imaging Conference; the Particle Accelerator Conference; the Symposium on Fusion Engineering; and the Nuclear Science Symposium as well as any other conferences that may in the future come under IEEE NPSS sponsorship. The award presented at the Medical Imaging Conference will be titled "IEEE NPSS Christopher J. Thompson Student Paper Award".
- Prize:* The two best papers (two awards) will receive cash awards of \$500 each and a Certificate. The two runners-up will receive a certificate only.
- Funding:* Funded by each conference's budget, as determined by each of the individual conferences sponsored by IEEE NPSS.
- Eligibility:* Any student who is the principal or sole author/researcher and the presenter or either a poster or oral paper at an IEEE Nuclear and Plasma Sciences Society conference that has chosen to provide outstanding student awards and who has been identified as an eligible student author will be eligible. If there is a tie, preference will be given 1) to IEEE NPSS members; 2) to IEEE members; 3) to non-IEEE members.
- Basis for Judging:* All candidates for selection must have identified themselves either at the time of abstract submittal or no later than registration. The on-site awards committee will rank the papers for technical content and originality first. Other criteria such as graphic display and clarity of data presentation may be considered.
- Presentation:* When possible, awards will be presented at the closeout session of the conference. If this is not possible, the recipients will be notified by mail or e-mail.

19. **IEEE Igor Alexeff Outstanding Student in Plasma Science Award** (established in 2008) (renamed 2013 - formerly *IEEE Outstanding Student in Plasma Science Award*)

- Description:* To recognize outstanding contributions to the field of plasma science and technology.
- Prize:* \$1,000 and Certificate.
- Funding:* Funded by the IEEE Nuclear and Plasma Sciences Society's International Conference on Plasma Science (ICOPS) conference budget.
- Eligibility:* Any full time undergraduate or graduate university student in plasma science. The nominee must be a student when nominated.
- Basis for Judging:* Nominees will be judged according to their contributions to plasma science. The judgment will be based on quality of research contributions, quality of educational accomplishments, and quality and significance of publications and patents.
- Presentation:* This award will be presented annually at the IEEE International Conference on Plasma Science.

20. **IEEE Particle Accelerator Science and Technology Doctoral Student Award** (established in 2008)

- Description:* To recognize significant and innovative technical contributions to the field of particle accelerator science and technology as demonstrated in a student's doctoral thesis.
- Prize:* \$2,000 and Plaque.
- Funding:* Funded by the IEEE Nuclear and Plasma Sciences Society's Particle Accelerator Conference (PAC) budget.
- Eligibility:* Nominations can be submitted only by IEEE members. Nominees must pass their thesis defense not more than 24 months before the nomination deadline from any university world-wide. An individual should be nominated once; however, an unsuccessful candidate will be carried over for one PAC cycle.
- Basis for Judging:* Nominees will be judged according to their contributions to particle accelerator science and technology as demonstrated by the technical merit and creativity of their research. Priority will be given to nominees whose research has been published in peer-reviewed journals, especially if the nominee is the first author.
- Presentation:* This award is given in the same year as the Particle Accelerator Conference. The recipient will be invited to present the work as an invited talk in an appropriate session of the meeting.

21. **IEEE Charles K. Birdsall Award for Contributions to Computational Nuclear and Plasma Sciences** (established in 2013)

- Description:* To recognize outstanding contributions in computational nuclear and plasma science, with preference given to areas within the broadest scope of plasma physics encompassing the interaction of charged particles and electromagnetic fields.
- Prize:* \$2,000 and Plaque. Multiple recipients not allowed.
- Funding:* **The Award Fund will reside in the IEEE Foundation and is intended to provide long-term support via a contribution from Ginger Birdsall to the IEEE Foundation, and matched by a contribution from NPSS.** Multiple recipients are not allowed. Should the cumulative fund balance grow or decrease significantly, the NPSS may revisit the award amount and/or additional funding.
- Eligibility:* All members in good standing of the IEEE NPSS are eligible.
- Basis for Judging:* Judging based on outstanding contributions to computational nuclear and plasma science, with preference given to areas within the broadest scope of plasma physics encompassing the interaction of charged particles and electromagnetic fields. The NPSS Awards Committee will

vote on nominees based on the nomination materials submitted.

Presentation: Presentation of the Award will occur at an IEEE NPSS conference specified by the recipient.

22. **IEEE Ronald J. Jaszczak Graduate Award** (established in 2013) (revised Prize, Funding, Eligibility, Basis for Judging, and Presentation 2018)

Description: To recognize and enable an outstanding graduate student enrolled in an accredited Ph.D. curriculum, Post-doctoral Fellow or Ph.D. level Research Associate in the field of nuclear and medical imaging sciences to advance his/her research activities.

Prize: The Graduate Award will be used to provide support for one (1) year to one (1) individual recipient for expenses as follows:

- Up to a maximum of U.S. \$5,000 one (1) year to be used to support, for example, the following academic and/or research activities:
- attendance at appropriate scientific workshops;
- visit appropriate colleague research laboratories;
- travel to make presentations during the annual IEEE NPSS Medical Imaging Conference (MIC) or IEEE Nuclear Science Symposium (NSS);
- annual IEEE and NPSS membership fees;
- purchase of appropriate specialized research publications, software or hardware when traditional institutional or grant support is unavailable;
- Other similarly related educational expenses are acceptable.

At the time of the initial award period, a plaque designating the individual as the recipient of the IEEE Ronald J. Jaszczak Award.

Funding: **The award will be administered by the IEEE Foundation and funded by a contribution from Ronald Jaszczak and matched by a contribution from NPSS. The award fund will be meant to provide long-term support for the award. In the future, the IEEE Foundation may increase the maximum allowable amount for this type of Award. In that case IEEE Nuclear and Plasma Sciences Society (NPSS) AdCom may increase the maximum amount of the Ronald J. Jaszczak Graduate Award to be equal to the IEEE Foundation's then current maximum amount. Such revisions will require IEEE approvals in accordance with Student Recognition guidelines.**

Eligibility: Award nominee must:

- Be 35 years of age or younger at the date that the application form is submitted
- Be a graduate student that has completed at least one year of graduate studies at a University and is working to obtain a Ph.D. degree, or be a Post-Doctoral Fellow or Ph.D. level Research Associate at a University or at a Non-profit Research Institute
- Be actively engaged in Engineering or Physics research related to the field of Nuclear and Medical Imaging Sciences
- The applicant must be a regular or student member of IEEE NPSS, or have applied for NPSS membership, by the Deadline date for the receipt of the Nomination Package.

Preference will be given to nominees of Western Slavic heritage that use the Latin alphabet, for example, Polish-American, Czech-American, Croatian - American, Slovak-American, Slovenian-American.

No relatives of current members of the IEEE Board of Directors, the IEEE NPSS Administrative Committee (AdCom) or IEEE staff may be nominees or nominate or endorse nominees for this Award.

The donor and his family may not be nominees, nominate or endorse nominees for this Award.

Basis for Judging: The NPSS Awards Committee will select the awardee. The NPSS Award's Committee may at its discretion, appoint an Awards Sub-committee to select the Awardee subject to confirmation by the NPSS Awards Committee of the Sub-committee's selection. The following criteria will be used for judging:

- Demonstrated contribution to the field of nuclear and medical imaging sciences via quality of scientific publications, proposed innovative nuclear medical imaging approaches (including hardware or software technologies), patents and/or high-quality recognition of the nominee's scientific and engineering skills by her or his colleagues;
- Potential leadership skills;
- Potential to serve as role model for other Ph.D. level graduate students, or Post-doctoral Fellows or Ph.D. level Research Associates.

Presentation: No specific presentation is necessary; however, award presentation may be made at an NPSS Meeting selected by the recipient if the recipient intends to attend that meeting. A letter will be sent to the recipient's supervisor/mentor.

23. **IEEE Valentin T. Jordanov Radiation Instrumentation Travel Grant** (established in 2014)

Description: To promote graduate level study and research on radiation instrumentation and to promote membership in IEEE.

Prize: Awardees will be reimbursed for expenses associated with traveling to and participating in the IEEE Nuclear Science Symposium and Medical Imaging Conference up to a maximum of \$1,500 for each awardee. Awards to multiple individuals can be given each year, but a maximum of \$12,000 can be distributed annually.

Funding: **The grants are funded through a gift from Valentin T. Jordanov and managed through the IEEE Foundation.**

Eligibility: Recipients must be graduate students or individuals who have obtained their highest degree less than five years prior to the start of the Nuclear Science Symposium and Medical Imaging Conference in the year the grant is awarded. Candidates should show exceptional promise in the field of Radiation Instrumentation.

Basis for Judging: Academic Advisors/Supervisors are asked to submit a letter of recommendation along with the grant application. Recommendations should address financial need, demonstration of technical merit, career intentions and worthiness of the candidate. The Travel Grant Recipient Committee may seek additional information to clarify how candidates meet these requirements. Preference will be given to applicants in the field of Nuclear Electronics with accepted abstracts for the NSS/MIC. At least one grant should be given each year to an applicant in the field of Nuclear Electronics, provided that a suitable number and quality of applications from this group are received.

Presentation: At the annual IEEE Nuclear Science Symposium and Medical Imaging Conference.

24. **IEEE Glenn F. Knoll Post-Doctoral Educational Grant in Nuclear Science and Instrumentation** (established in 2016)

Description: For outstanding post-doctoral researchers in the field of nuclear science instrumentation, medical instrumentation, or instrumentation for security applications. The grant is intended to support travel and attendance to conferences, workshops or summer schools, or special research projects.

Prize: A single annual grant of \$5,000 to a single individual, and Plaque. Multiple recipients are not allowed.

Funding: **Funded by an endowment through gifts from Gladys H. Knoll and Valentin T. Jordanov, and funds provided by the IEEE Nuclear and Plasma Sciences Society, and managed by the IEEE Foundation.**

Eligibility: Any post-doctoral researcher who is a member in good standing of the IEEE and NPSS and is within 10 years of having received their doctoral degree.

Basis for Judging: Judging will be based on the accomplishments of the candidate in the field of study and will include number of publications, talks, and presentations at conferences, other awards and recognitions, quality of research and potential for future accomplishment. Up to three letters of recommendation may also be submitted with the nomination that will be used in the selection

process.

Presentation: At an IEEE NPSS conference mutually agreed upon by the recipient and NPSS.

25. **IEEE Glenn F. Knoll Graduate Educational Grant in Nuclear Science and Instrumentation** (established in 2016)

Description: For outstanding graduate students in the field of nuclear science instrumentation, medical instrumentation, or instrumentation for security applications. The grant is intended to support travel and attendance to conferences, workshops or summer schools, or special research projects.

Prize: A single annual grant of \$5,000 to a single individual, and Plaque. Multiple recipients are not allowed.

Funding: **Funded by an endowment through gifts from Gladys H. Knoll and Valentin T. Jordanov, and funds provided by the IEEE Nuclear and Plasma Sciences Society, and managed by the IEEE Foundation.**

Eligibility: Any graduate student who is a member in good standing of the IEEE and NPSS.

Basis for Judging: Judging will be based on the accomplishments of the candidate in the field of study and will include number of publications, talks, and presentations at conferences, other awards and recognitions, quality of research and potential for future accomplishment. Up to three letters of recommendation may also be submitted with the nomination that will be used in the selection process.

Presentation: At an IEEE NPSS conference mutually agreed upon by the recipient and NPSS.

26. **IEEE Magne “Kris” Kristiansen Award for Contributions to Experimental Nuclear and Plasma Science** (established in 2017)

Description: To recognize individuals for outstanding contributions in experimental nuclear and plasma science with preference given to areas within the broadest scope of plasma sciences encompassing the generation of strong pulsed electromagnetic fields including their interaction with plasmas and other pulsed power applications.

Prize: US\$2,000 and a plaque. Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Funding: **Funded by an endowment through a gift from Aud Kristiansen, and funds provided by the IEEE Nuclear and Plasma Sciences Society, and managed by the IEEE Foundation.**

Eligibility: All members in good standing of the IEEE NPSS are eligible.

Basis for Judging: Judging will be based on outstanding contributions to experimental nuclear and plasma science with preference given to areas within the broadest scope of plasma sciences encompassing the generation of strong pulsed electromagnetic fields including their interaction with plasmas and other pulsed power applications.

Presentation: At an IEEE NPSS conference specified by the recipient and NPSS.

27. **IEEE Emilio Gatti Radiation Instrumentation Technical Achievement Award** (established in 2017)

Description: To recognize a mid-career individual who has made significant and innovative technical contributions in the field of radiation detectors, radiation instrumentation, and/or nuclear electronics, and/or measurement techniques for ionizing radiation.

Prize: US\$2,000 and a plaque. Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society’s Nuclear Science Symposium (NSS) and Medical Imaging Conference (MIC) budget.

- Eligibility:* At least ten years of professional experience and contributions in the areas of radiation detectors, radiation instrumentation, and/or nuclear electronics, and/or measurement techniques for ionizing radiation.
- Basis for Judging:* The committee will use a nomination package as the basis for evaluating the significance and degree of innovation. The principal criteria will be the contribution to the field and the impact on the state-of-the-art. Other factors are cumulative research contributions over the first part of the career, internationally recognized leadership, and mentorship.
- Presentation:* At the annual IEEE Nuclear and Sciences Symposium (NSS) and Medical Imaging Conference (MIC) during the NSS awards ceremony.

28. **IEEE Radiation Effects Early Achievement Award** (established in 2018)

- Description:* To recognize an individual early in his/her career whose technical contributions and leadership have had a significant impact on the field of radiation effects.
- Prize:* US\$1,500 and a plaque. Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.
- Funding:* Funded by the IEEE NPS Society's Nuclear and Space Radiation Effects (NSRE) Conference budget.
- Eligibility:* Any individual who at the time of the nomination is within the first ten (10) years of his or her career and has contributed to the field of radiation effects. It is the intent of the RESG to give special consideration for this award to members of the community who are IEEE/NPS Society members.
- Basis for Judging:* The committee will use a nomination package as the basis for evaluating the significance of the technical contributions. Examples include work that provides a solution to important technical problems in radiation effects or work that identifies significant new issues in the field. Other factors are cumulative research contributions over the first part of the career, internationally recognized leadership, and mentorship.
- Presentation:* At the opening of the annual IEEE NSRE Conference during the awards ceremony.

29. **IEEE Nuclear and Plasma Sciences Society Medical Imaging Technical Achievement Award** (established in 2018)

- Description:* To recognize a mid-career individual who has made significant and innovative technical contributions in the field of medical imaging science.
- Prize:* The recipient will receive US\$2,000, a plaque, and a certificate. Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate..
- Funding:* Funded by the IEEE Nuclear and Plasma Sciences Society's Nuclear Science Symposium (NSS) and Medical Imaging Conference (MIC) budget.
- Eligibility:* At least eight years and no more than 25 years of professional experience and contributions in the field of medical imaging science after obtaining the highest degree, at the time of nomination. The award is open to all active members of the medical imaging community.
- Basis for Judging:* The committee will use a nomination package as the basis for evaluating the significance and degree of innovation. The principal criteria will be the contribution to the field and the impact on the state-of-the-art. Other factors are cumulative research contributions over the first part of the career, internationally recognized leadership, and mentorship. Membership in the IEEE and NPS Society can be used as a factor in the case that the award committee has candidates that they deem equally qualified.

Presentation: The the annual IEEE Nuclear and Sciences Symposium (NSS) and Medical Imaging Conference (MIC) during the MIC awards ceremony.

30. **IEEE Nuclear and Plasma Sciences Society Robert J Barker Graduate Student Award for Excellence in Pulsed Power Applications** (established in 2018)

Description: To recognize and enable outstanding graduate students enrolled in an accredited MS or Ph.D. level research program in the field of nuclear and plasma sciences, in pulsed power applications with preference given to medical and environmental applications and to compact pulsed power research and applications.

Prize: The recipient will receive US\$3000, a travel allocation not to exceed US\$500, and a plaque. Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Funding: **Funded by an endowment through a gift from Karl and Gisela Schoenbach and Fran Barker, and funds provided by the IEEE Nuclear and Plasma Sciences Society, and managed by the IEEE Foundation.**

Eligibility: Graduate students enrolled in an accredited MS or Ph.D. level research program in the field of nuclear and plasma sciences, in pulsed power applications with preference given to medical and environmental applications and to compact pulsed power research and applications. Nominees must be a student when nominated and be members in good standing of the IEEE NPSS.

Basis for Judging: Judging will be based on outstanding contributions to nuclear and plasma sciences, with the preference given to areas within the broadest scope of plasma sciences encompassing medical and environmental pulsed power applications, compact pulsed power research and applications, and high power microwaves.

- Quality of research contributions (40 points);
- Quality of educational accomplishments (30 points);
- Quality and significance of publications and patents (30 points)..

Presentation: At an IEEE NPS Society Conference specified by the recipient, preferably at the IEEE Pulsed Power Conference.

31. **IEEE Transactions on Plasma Science Best Paper Award** (established in 2018)

Description: The *IEEE Transactions on Plasma Science* Best Paper Award is an annual award to recognize the best paper published in the *Transactions on Plasma Science* in a given year. The selection of this paper will be heavily weighted by its quantifiable usefulness to the community.

Prize: The award will be a plaque, a certificate for each of the paper authors and a money prize. The money prize is \$500 for each author, up to a maximum award of \$1500; if the paper has more than 3 authors, the maximum award will be divided equally among all authors.

Note: For authors subject to sanctions from OFAC, no monetary award will be given.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: The authors of papers published in the *Transactions on Plasma Science* in the year 3 prior to the year of the award are eligible for consideration. For example, to be considered for the award presented in 2019, a paper must have been published in 2016.

Basis for Judging: The primary consideration in determining the best paper will be its quantifiable usefulness to the community. The primary factor in this assessment will be the number of downloads of the paper from Xplore. Supplemental factors, which will be examined, are literature citations to the paper, quality, clarity of presentation, originality, significance, and contributions to the field. To minimize any risk that unethical manipulation could influence the winning paper selection, all of the factors mentioned (number of citations, quality, clarity of presentation, originality, significance, and contributions to the field) will be considered during final evaluation of the top-ranked paper to insure that it deserves to be selected as the award winner.

Presentation: The award will be presented annually at the NPS Society conference most relevant to the topical area of the selected paper.

32. ***IEEE Transactions on Radiation and Plasma Medical Sciences Best Paper Award*** (established in 2018)

Description: The *IEEE Transactions on Radiation and Plasma Medical Sciences Best Paper Award* is an annual award to recognize the best paper published in the *IEEE Transactions on Radiation and Plasma Medical Sciences* in a given year. The selection of this paper will be heavily weighted by its quantifiable usefulness to the community.

Prize: The award will be a plaque, a certificate for each of the paper authors and a money prize. The money prize is \$500 for each author, up to a maximum award of \$1500; if the paper has more than 3 authors, the maximum award will be divided equally among all authors.

Note: For authors subject to sanctions from OFAC, no monetary award will be given.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: The authors of papers published in the *IEEE Transactions on Radiation and Plasma Medical Sciences* in the year 3 prior to the year of the award are eligible for consideration. For example, to be considered for the award presented in 2019, a paper must have been published in 2016.

Basis for Judging: The primary consideration in determining the best paper will be its quantifiable usefulness to the community. The primary factor in this assessment will be the number of downloads of the paper from Xplore. Supplemental factors, which will be examined, are literature citations to the paper, quality, clarity of presentation, originality, significance, and contributions to the field. To minimize any risk that unethical manipulation could influence the winning paper selection, all of the factors mentioned (number of citations, quality, clarity of presentation, originality, significance, and contributions to the field) will be considered during final evaluation of the top-ranked paper to insure that it deserves to be selected as the award winner.

Presentation: The award will be presented annually at the NPS Society conference most relevant to the topical area of the selected paper.

33. ***IEEE Transactions on Nuclear Science Best Paper Award*** (established in 2018)

Description: The *IEEE Transactions on Nuclear Science Best Paper Award* is an annual award to recognize the best paper published in the *Transactions on Nuclear Science* in a given year. The selection of this paper will be heavily weighted by its quantifiable usefulness to the community.

Prize: The award will be a plaque, a certificate for each of the paper authors and a money prize. The money prize is \$500 for each author, up to a maximum award of \$1500; if the paper has more than 3 authors, the maximum award will be divided equally among all authors.

Note: For authors subject to sanctions from OFAC, no monetary award will be given.

Funding: Funded by the IEEE Nuclear and Plasma Sciences Society.

Eligibility: The authors of papers published in the *Transactions on Nuclear Science* in the year 3 prior to the year of the award are eligible for consideration. For example, to be considered for the award presented in 2019, a paper must have been published in 2016.

Basis for Judging: The primary consideration in determining the best paper will be its quantifiable usefulness to the community. The primary factor in this assessment will be the number of downloads of the paper from Xplore. Supplemental factors, which will be examined, are literature citations to the paper, quality, clarity of presentation, originality, significance, and contributions to the field. To minimize any risk that unethical manipulation could influence the winning paper selection, all of the factors mentioned (number of citations, quality, clarity of presentation, originality, significance, and contributions to the field) will be considered during final evaluation of the top-ranked paper to insure that it deserves to be selected as the award winner.

Presentation: The award will be presented annually at the NPS Society conference most relevant to the topical area of the selected paper.

34. IEEE NPSS Edward J. Hoffman Early Career Development Grant (established in 2020)

- Description:* For outstanding early career researchers who have the potential to transform the field of medical imaging. The grant is intended to support the career development of the awardee. This may include, but is not limited to, the funding of a pilot project, purchase of laboratory equipment, or funding to support a short term visit to another institution/lab for the purpose of additional training.
- Prize:* The prize is \$10,000 and a plaque. Preference is for a single recipient in any given year. However, up to 2 recipients per annum are allowable in the case of a tie (based on separate achievements and contributions), with the cash prize to be shared equally among recipients and a plaque given to each recipient. The award shall be paid into an account of the awardee's current academic employer and administered by the academic institution on their behalf.
- Funding:* [Funded by the IEEE NPSS Edward J. Hoffman Memorial Fund, managed by the IEEE Foundation, and is intended to continue in perpetuity.](#)
- Eligibility:*
- 1) Researchers currently working at an academic institution, who received their highest degree within the last 10 years. An academic institution means an institution that confers bachelors and/or postgraduate research degrees, which may include research laboratories affiliated with such an institution.
 - 2) The nominee's primary field of research shall be medical imaging.
 - 3) Nominees to have presented their research at the IEEE Medical Imaging Conference at least out of the last 5 years.
 - 4) Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations.
 - 5) Previous Award winners are not eligible.
- Basis for Judging:* Detailed criteria for judging shall be established by the Award Committee but shall include: (i) novelty and (ii) significance of the nominee's research since their highest degree, (iii) it's scientific rigour and (iv) the potential of the nominee to have a lasting impact on the field of medical imaging. Scoring shall be conducted independently by Committee members based on the submitted nominations alone and aggregated by the Chair to produce a ranked list, with the highest ranked nominee being selected as the awardee. In the event of a tie, the Committee may either decide to split the award or take a vote to select a single awardee from among the tied nominees. In the event of a vote, voting shall be conducted by secret ballot. In the event that the vote is tied the award shall be split).
- Presentation:* The award shall be presented at the next available IEEE Medical Imaging Conference or another IEEE NPSS conference mutually agreed upon by the recipient and NPSS.

IEEE OCEANIC ENGINEERING SOCIETY
OE-22 (Division IX)

For all Oceanic Engineering Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE OES Distinguished Technical Achievement Award

Description: To recognize outstanding technical contributions to electrical engineering in the ocean, having a demonstrable influence on the course of oceanic engineering.

Prize: Plaque and Certificate

Funding: Funded by the IEEE Oceanic Engineering Society.

Eligibility: Not restricted to IEEE members.

Presentation: Annually, at Oceans Conference.

2. IEEE OES Distinguished Service Award

Description: To recognize sustained support and contributions to the advancement of oceanic engineering.

Prize: Plaque and Certificate

Funding: Funded by the IEEE Oceanic Engineering Society.

Eligibility: Any IEEE member.

Presentation: Annually, at Oceans Conference.

3. IEEE OES Scholarship Award (established in 2015)

Description: The Award will be presented to undergraduate or graduate IEEE OES student members in order to fulfill their financial needs.

Prize: Multiple undergraduate and graduate scholarships of \$5,000 each are available annually. A maximum of 8 scholarships per year will be delivered in two cycles (maximum of 4 scholarships per cycle). Funding is for academic tuition and fees, and is not intended to fund research.

Funding: Funded by the IEEE Oceanic Engineering Society.

Eligibility: Requirements include:

- Students must be enrolled full-time at an accredited college or university in a field of study that will lead to a career in ocean engineering or a related ocean science field and must have demonstrated excellence in academics.
- Students must be IEEE Oceanic Engineering Society student or regular IEEE member in good standing, there is no waiting period
- Undergraduate students must have completed (at least) the second year of study.
- Graduate students must be currently enrolled, or have been accepted, in a graduate program of ocean engineering or a related ocean science field and must have demonstrated the ability to perform independent research through professional and/or academic recognition programs.

Basis for Judging:

- The scholarship application form must be filled out completely, and signed. Once signed, this form may be scanned to PDF format and emailed.
- An official copy of the student's transcript mailed or emailed by the academic institution at which the applicant is enrolled.
- Letters of recommendation must be one page, signed letters on institution letterhead, dated within the past year, and emailed by the author; Undergraduate student applications must be accompanied by recommendations from two faculty members and Graduate student applications must be accompanied by a recommendation from their advisor or member of their graduate committee.
- A Curriculum Vitae
- 2 page personal statement (using word template available on the IEEE OES website) providing information about the personal goals, the interests and or experiences in ocean engineering.

Presentation: No Presentation. A check or wire transfer will be issued by IEEE.

4. **IEEE OES Presidential Award** (established in 2015)

Description: The Award will be presented to an OES member giving volunteer time on a regular basis. This award allows the Society to recognize the work done by an individual at a more basic level, i.e. not in the Administration of the Society. The purpose is to fill in a gap between a simple thanks and a Distinguished Service Award.

Prize: Medallion Plaque. The award will be given only if a suitable awardee is identified.

Funding: Potential cost of a conference registration, lodging and travel for the recipient if not already a registrant of the conference where the award is presented. The award has no cash prize. Funded by the IEEE Oceanic Engineering Society.

Eligibility: The recipient shall be a member of the IEEE in good standing of at least the grade of Graduate Student Member, and a member of the IEEE Oceanic Engineering Society.

Basis for Judging: The President will make the selection based on returns from the Awards Committee and input from the Executive Committee. The selection will be based on the merit and the level of involvement into Society activities.

Presentation: The award will be presented annually at the Fall OCEANS conference.

5. **IEEE OES Company/Institution Award** (established in 2015)

Description: The Award will be presented to a corporation or institution that has significantly support the activity and goals of OES through such areas as conference participation, patronage, technical innovation and technical or administrative participation.

Prize: The Award consists of a Plaque (laminated certificate on plaque).

Funding: Potential cost of a conference registration, lodging and travel for the recipient if not already a registrant of the conference where the award is presented. Funded by the IEEE Oceanic Engineering Society.

Eligibility: No criteria other than the ones listed in the description section.

Basis for Judging: The Awards Committee requests a nomination form providing the listing of qualifications of the nominee relevant to the award criteria.

Presentation: The award will be presented annually at the Fall OCEANS conference.

6. **IEEE OES Emeritus Award** (established in 2015)

- Description:* The Award will be presented to an OES member having been particularly important for the Society and who is no longer in any position of society governance.
- Prize:* The Award consists of a photo-engraved plaque.
- Funding:* Potential cost of a conference registration, lodging and travel for the recipient if not already a registrant of the conference where the award is presented. Funded by the IEEE Oceanic Engineering Society.
- Eligibility:* The recipients shall be a member of the IEEE in good standing of at least the grade of Senior Member, and member of the IEEE Oceanic Engineering Society.
- Basis for Judging:* The Awards Committee requests a nomination form providing the listing of qualifications of the nominee relevant to the awards criteria.
- Presentation:* The award will be presented annually at the Fall OCEANS conference.

7. **IEEE OES Award for Most Innovative Engineering in a Competition System** (established in 2019)

- Description:* This award is to the team of students in an autonomous marine systems (AMS) competition who have been selected as demonstrating innovation in their engineered system. The OES society and several of its chapters are currently involved/sponsoring annual robotics competitions around the globe, focused on predominantly graduate students but not exclusively thus allowing a broader range of individuals to participate. These competitions are an active part of our outreach programs and are used to make our society better known to potential new members and demonstrate the IEEE-OES is interested in young engineers and developing careers. To that end we have selected 3 competitions to present this award at annually; one in Asia, one in the United States and one in Europe.
- Prize:* The award is intended to be given 3 times a year, each year. For each of the 3 competitions the awardee receives \$300 USD and a Plaque commemorating the achievement. There is a total of 3 plaques and a total of \$900.00 annually. The funds are nominal and intended to go to the team to further their competition efforts, enhancing their education and expanding their experience base resulting out of involvement in the selected robotic competitions.
- Funding:* The funds are already included in our student support budget, no additional funding is required. The same is true for the plaques, the budget line item is already in place, this is a redirection of existing funds to be more effective on behalf of OES and our student outreach efforts. This has a net zero impact on the OES Budget and will not cause a negative budget result.
- Eligibility:* To be considered a team of actively enrolled students at a recognized educational institution must be entered in the regional competition. Each must present their design and functional hardware at the competition to be considered. A formal application is not allowed. A stand out individual on a team maybe recognized for their contribution but the competitions are team based and so the award is for teams only.
- Basis for Judging:* We are looking for the team that best demonstrates:
- Creativity - A judgment on how inventive the solution to a given problem
 - Build vs buy (how much)
 - Aesthetic
 - Uniqueness
 - Practicality - Is the innovation safe and a concept that could be reproduced and mass manufactured with proper development
 - Does the innovation have a future or one off for a single solution (think multi-function arm versus a single ball drop)
 - Can the innovation be developed or modified to make it more cost effective
 - Does the innovation solve a specific challenge or several
 - Simplicity - Slightly different than practicality, there are any number of solutions to a problem
 - Is the functionality single action or multi-step process

- Is the innovation easily maintained (reset for each mission, repairable)
- Is the innovation a module or deeply integrated into the AUV
- Robustness - Is the innovation reliable and repeatable
- Is the innovation on the edge of working in either strength or weight ability
- What is the range of capabilities referring to size, weight, types of actions
- Cost Effective - Could other teams easily replicate the solution
- Are the components able to be obtained at a reasonable price
- Are the man hours involved sensible

These are the basic criteria but are all judgements and not necessarily directly measured or scored based on performance. These criteria also depend on the challenges at any given year's competition because the tasks in the competitions change frequently. A team cannot win this award twice in the same year or for the same innovation at a different competition.

Presentation:

The award is presented at the conclusion of the competition event as part of the awards program each event already holds. The regional representative (or an OES colleague) announces the winner and presents the plaque (which is incomplete with the name missing at this point) and a representative check (the real one is sent by the OES treasurer once the W8 or W9 paperwork has been received). The award is presented as the "IEEE-OES Award for Most Innovation in a Competition System." The team is also photographed with the presenting representative for publication(s).

IEEE PHOTONICS SOCIETY
(formerly Laser and Electro-Optics Society)
PHO-36 (Division I)

For all Photonics Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Quantum Electronics Award (revised 1984, 1990, and 2000)

Description: To honor outstanding technical contributions in quantum electronics, in fundamentals, applications, or in both.

Prize: \$4,000 (to be divided equally if more than one recipient is selected), Bronze Medallion.

Funding: Funded by the IEEE Photonics Society.

Eligibility: Not restricted to IEEE members. Previous winners of major IEEE Medals or Field Awards for the same work are not eligible; in the case of a group award, at least one candidate must not have received a major IEEE Award for the same work

Basis for Judging: The award may be given either for a single contribution, or for a distinguished series of contributions over a long period of time, recognized as a seminal or fundamental contribution to a broad and important field.

Presentation: At a major conference sponsored or co-sponsored by PHOS.

2. IEEE PHOS Award for Engineering Achievement (established in 1991; revised prize 2017)

Description: To recognize an exceptional engineering contribution which has had significant recent impact on the development of laser or electro-optic technology or the commercial application of technology.

Prize: \$2,000 (to be divided equally if more than one recipient is selected), Bronze Medallion, and Certificate

Funding: Funded by the IEEE Photonics Society.

Eligibility: Individuals, several individuals or a team, for contributions made in the 10-year period preceding the award. Must be original work for which no other major PHOS award has been given.

Presentation: At PHOS Annual Meeting.

3. IEEE Distinguished Service Award (established in 1991)

Description: To recognize an exceptional individual contribution of service which has had recent significant benefit to the membership of the IEEE Photonics Society as a whole.

Prize: \$500 and Plaque

Funding: Funded by the IEEE Photonics Society.

Eligibility: Must be a member of PHOS.

Presentation: At PHOS Annual Meeting.

4. IEEE William Streifer Award for Scientific Achievement (established in 1990; renamed 1991; revised

prize 2017)

Description: To recognize an exceptional scientific contribution which has had significant recent impact in the field of lasers and electro-optics.

Prize: \$2,500 (to be divided equally if more than one recipient is selected), Bronze Medallion, and Certificate

Funding: **Funded by Xerox, Spectra Diode Labs, and administered by the IEEE Foundation.**

Eligibility: Individuals, several individuals or a team, for contributions made in the 10-year period preceding the award. Must be original work for which no other major PHOS award has been given.

Presentation: At LEOS Annual Meeting.

5. **IEEE PHOS Distinguished Lecturer Awards** (established in 1984)

Prize: Plaque and travel expenses not to exceed \$5,000 per lecturer

Funding: Funded by the IEEE Photonics Society.

Eligibility: Not restricted to IEEE members.

Presentation: At a conference sponsored or co-sponsored by PHOS.

6. **IEEE Outstanding Chapter Service Award** (established in 1992)

Description: To recognize the exceptional contribution of an individual to the success of programs at the Chapter level and to promote recognition at the Society level of outstanding service to the Society through important contributions to the activities of local sections.

Prize: Certificate

Funding: Funded by the IEEE Photonics Society.

Eligibility: Open to any individual nominated by a PHOS Chapter.

Basis for Judging: Exceptional service to the support, promotion, and organization of Chapter activities.

Presentation: At PHOS Annual Meeting.

7. **IEEE Best Student Paper Award** (established in 1993)

Description: To recognize the best student paper to be presented at the annual International Conference on Indium Phosphide and Related Materials (IPRM).

Prize: \$300 and Certificate

Funding: Funded by the IEEE Photonics Society.

Eligibility: All students submitting a paper will be eligible for consideration. Student status will be verified prior to selection of the recipient. Student need not be an IEEE or PHOS member.

Basis for Judging: Significance of the contribution to the field, originality, and clarity, based on written summary of presentation, and when possible, view of oral presentation.

8. **IEEE Best Student Paper Award, PHOS' xx** (established in 1994)

Description: To encourage participation of students in the PHOS Annual meeting and to recognize an outstanding student paper

Prize: \$500 and Certificate

- Funding:* Funded by the IEEE Photonics Society.
- Eligibility:* All students submitting a paper will be eligible for consideration. Student must be the presenter of the paper to be the recipient. Student status will be verified prior to selection of the recipient. Student need not be an IEEE or PHOS member.
- Basis for Judging:* Significance of the contribution to the field, originality, and clarity.
- Presentation:* Honorarium will be given to the recipient shortly after the conclusion of the Annual Meeting. The award certificate will be presented at the following year's PHOS Annual Meeting. Travel funds for the awardee will not be provided for attendance at the following year's PHOS Annual Meeting.

9. **IEEE John Tyndall Award** (established in 1996)

- Description:* To recognize outstanding contributions in any area of fiber-optics technology including optical fibers themselves, the optical components employed in fiber systems, as well as electro-optic transmission systems employing fibers.
- Prize:* \$2700 starting in 1997 (representing an amount equivalent of \$100 for each year since the discovery of optical fibers in 1970 (27 years), with an annual increase equivalent of \$100 through the year 2008 (honorarium of \$3800, commemorating the 38th anniversary of optical fibers); a specially commissioned Steuben crystal sculpture, and a scroll.
- Funds:* Funded by Corning, Inc. The award is jointly sponsored by the IEEE Photonics Society and the Optical Society of America.
- Eligibility:* A single individual who has made outstanding contributions in any area of fiber-optics technology including optical fibers themselves, the optical components employed in fiber systems, as well as electro-optic transmission systems employing fibers. The recipient need not be a member of the sponsoring Societies.
- Basis for Judging:* The contributions which the award recognizes should have met the test of time and should have been of proven benefit to science, technology, or Society. The contributions may be experimental or theoretical. The scope of the award is international.
- Presentation:* Annually, at a suitable conference, selected by the award committee, whose major them is fiber-optic technology; e.g., Optical Fiber Communications Conference, Integrated Optics and Optical Communications Conference.

10. **IEEE PHOS Graduate Student Scholarship Program** (established in 1998) (revised 2019)

- Description:* To provide Graduate Scholarships to outstanding PHOS student members pursuing graduate education within the PHOS field of interest – electro-optics, lasers, photonics, optics, or closely related fields.
- Prize:* Up to \$10,000 in scholarships awarded annually, and Certificate. A \$1,000 travel grant will be available to each Scholarship recipient to attend the PHOS Annual Meeting for the award presentation.
- Funding:* Funded by source will be either the operating surplus generated by PHOS in a given year or the PHOS reserves.
- Eligibility:* Scholarship candidates must be an IEEE PHOS student member pursuing a graduate education within the PHOS field of interest.
- Basis for Judging:* Scholarship nomination packages will include a nominating letter by a PHOS member, a one page statement of purpose by the student describing his/her education and research interests and accomplishments, a one page biographical sketch of the student, a copy of the student's educational transcripts, and two reference letters from individuals familiar with the student's research and educational credentials. The PHOS Membership Committee will evaluate the

nomination packages. The committee's selection will be based on the nominee's education and research record, grades, references, and accomplishments and potential.

Presentation: The scholarships will be presented at the PHOS Annual Meeting, which is held in the fall of each year. It will also be suggested that scholarship winners present their results at the PHOS annual meeting, and that they publish the results in a PHOS Journal. When the results are published, a statement that the work was partially supported by a PHOS Scholarship Grant will be required.

11. **IEEE Aron Kressel PHOS Award** (established in 2000)

Description: To recognize outstanding achievements in Opto-Electronic device technology.

Prize: \$1,000 and Certificate. Awarded annually to an individual or group, up to three in number, when in the judgment of the Awards Committee, suitable candidates have been identified. In the case of co-recipients, each recipient will receive a certificate and a prorata share of the honorarium.

Funding: **Funded by an endowment, provided by Henry Kressel, first president of PHOS, through the IEEE Foundation.**

Eligibility: No restriction other than those specified by the IEEE Board of Directors.

Basis for Judging: Individuals who have made contributions to Opto-Electronic device technology that have had a major impact on their applications in major practical systems. The intent is to recognize key contributors to the field for developments of critical components, which lead to the development of systems enabling major new services or capabilities. These achievements should have been accomplished in a prior time frame sufficient to permit evaluation of their lasting impact. The work cited could have appeared in the form of publications, patents, products, or simply general recognition by the professional community that the individual cited is the agreed upon originator of the advance upon which the award decision is based.

Presentation: Annually, at an appropriate IEEE Technical Conference.

12. **IEEE PHOS Young Investigator Award** (established in 2006; revised prize 2017)

Description: To honor an individual for outstanding technical contributions to photonics, defined as: Photonics is the science and technology of generating and harnessing light and other forms of radiant energy whose quantum unit is the photon.

Prize: \$2,000 and Certificate

Funding: Funded by General Photonics Corporation.

Eligibility: Candidates must be under 35 years of age on Sept. 30th of the year in which the nomination is made. The candidates need not be members of the IEEE or PHOS.

Basis for Judging: Candidates are rank-ordered by their qualifications and accomplishments, then discussed by recognized experts on the committee in order to arrive at a final decision.

Presentation: To be presented at either the annual Optical Fiber Communications Conference (OFC) or the annual Conference on Photonics (CLEO), to be selected by the recipient. Both are major PHOS-sponsored meetings.

13. **IEEE Photonics Society Laser Instrumentation Award** (established in 2018)

Description: To recognize individuals that have made important innovative contributions to the field of applied Laser Instrumentation, with significant impact on their applications in major practical systems.

Prize: The award consists of an honorarium of US \$1,000 and a certificate. The award may be given to an individual or group, up to three in number. Honorarium to be divided equally if more than one recipient is selected, each member or group recipients will receive a certificate, and complimentary registration to IPC for presentation.

Funding: **Funded by an endowment managed through the IEEE Foundation.**

Eligibility: Candidate must be an active IEEE / Photonics Society member. Previous winners of major IEEE Medals or Field Awards for the same work are not eligible; in the case of a group award, at least one candidate must not have received a major IEEE Award for the same work.

Basis for Judging: The field to be considered covers: classical and self-mixing Laser Interferometry, Optical Coherence Tomography, Digital Holography, and interference-based measuring devices like Gyroscopes, Laser Doppler Velocimeters. Measurements of distance and kinematic quantities, both in free space propagation and through optical fiber, and realized in either bulk-optics or integrated optics technologies. Measurements for the sole characterization of optical devices or fibers are not eligible.

The intent of the award is to recognize key contributors to the field for developments of instruments, which lead to the development of innovative systems enabling major new measurements or process capabilities of relevance to applications in industrial, biomedical avionic and metrology fields. These achievements should have been accomplished in a prior time frame sufficient to permit evaluation of their lasting impact.

The work cited could have appeared in the form of publications, preferably on IEEE Journals, patents, products, or simply general recognition by the professional community that the individual cited is the agreed upon originator of the advance upon which the award decision is based.

Presentation: At the annual PHO sponsored IEEE Photonics Conference.

12. **IEEE Photonics Society Technical Skills Educator Award** (established in 2018)

Description: To establish an annual Photonics Society (PHO) award to recognize educators specializing in bringing technician and technical skills training within the PHO field of interest to traditionally underserved communities. It does not conflict with any existing PHO awards.

Prize: A certificate of recognition and honorarium equaling \$1,500.00, with an additional \$1,000.00 towards travel to attend the IEEE Photonics Conference for the presentation. Single Annual Award - Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate

Funding: Funded by the IEEE Photonics Society.

Eligibility: Open to all members, non-members and potential members of the Photonics Society except members of the Selection Committee for this award.

Basis for Judging: The recipient must be an educator dedicated to training the next generation of photonics technicians, with a special emphasis placed on those bringing such training to traditionally underserved communities. While candidates teaching at the technical skills level, such as at US community colleges, are targeted, we also welcome applicants from any accredited, degree- or certificate-granting institution.

The award will recognize effective, impactful, and innovative educators who bring specialized training to communities for whom photonics is not typically viewed as a common educational and career path. Contributions to curriculum and course development, industrial and governmental education programs, textbook development, and educator appreciation in evaluations by students, etc. will all be considered in the award evaluation.

Presentation: At the annual PHO sponsored IEEE Photonics Conference.

IEEE POWER ELECTRONICS SOCIETY

PEL-35 (Division II)

For all Power Electronics Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Richard M. Bass Outstanding Young Power Electronics Engineer Award** (established in 1994) (revised 2003) (revised Presentation 2013) (revised Nomination Process, Selection Committee, and Presentation 2014) (revised in 2021)

Description: To recognize outstanding achievement in the field of Power Electronics by an engineer less than 35 years of age.

Prize: \$1,500, a Certificate. In addition, up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Funding: Funded by the IEEE Power Electronics Society.

Eligibility: Open to all IEEE members of any grade active in the field of Power Electronics and less than 35 years of age as of January 1 of the year of the award.

Basis for Judging: Outstanding contribution in the multidisciplinary field of power electronics. Outstanding contribution encompass a broad range of activities including research, innovative product design, teaching, and project management. The technical disciplines which encompass the field of power electronics include the analysis, design, development, simulation and application of electronics devices, magnetics, controls and power circuits for inverters, converters and motor drives ranging in power levels from fractions of a watt to megawatts.

Presentation: Annually, the award will be presented at any of the PELS conferences in the ECCE series.

2. **IEEE PELS Harry A. Owen, Jr. Distinguished Service Award** (established in 1996) (revised 2003) (renamed in 2011) (revised Presentation 2013) (revised Prize, Selection Committee, and Presentation 2014) (revised in 2021)

Description: To honor long and distinguished service to the welfare of the IEEE Power Electronics Society at a level of dedication and achievement rarely demonstrated.

Prize: \$3,500 and a suitably engraved Plaque. In addition, up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Funds: Funded by the IEEE Power Electronics Society.

Eligibility: Open to all members of the IEEE Power Electronics Society.

Basis for Judging: Outstanding contributions over a substantial time period encompassing creative and invigorating leadership of the Society, exceptional administrative and managerial accomplishments on behalf of the Society, identification of new technologies within the scope of the Society and nurturing activities to support these emerging technologies, initiation of innovative programs to encourage wider participation in the full spectrum of Society activities, and the general communication and advocacy of power electronics technology to the technical community as a whole.

Presentation: Annually, the award will be presented at any of the PELS conferences in the ECCE series.

3. **IEEE Power Electronics Society Transactions Prize Paper Award** (established in 1997) (revised prize and presentation 2013) (revised prize 2014) (revised prize 2020)

Description: To recognize annually the three best papers published in the *IEEE Transactions on Power Electronics*.

Prize: First Prize: \$1,000 (to be shared equally among the paper's authors) and Certificate for each author awarded to 0.5% of the number of published papers (in 2020 result is 4); Second Prize: \$500 (to be shared equally among the paper's authors) and Certificate for each author awarded to 1% of the number of published papers (in 2020 result is 9)

Funding: Funded by the IEEE Power Electronics Society.

Eligibility: Authors of papers published in the *PELS Transactions* during the calendar year preceding the award.

Basis for Judging: Originality, contribution to the field, value to practicing engineers, extent to which paper is supported by analysis and experimental evidence, quality of presentation including effectiveness of illustrations and tables.

Presentation: Annually, the award will be presented at PELS Award Ceremony each year.

Prize: \$1,000 prize (to be shared equally among the paper's authors) and Certificate presented to each author. Number of Awards to be given is 1% of the number of published papers (in 2020 number is 1)

4. **IEEE Power Electronics Society Best Chapter & Best Student Branch Chapter Awards** (established in 2001) (revised in 2014; revised prize and funding 2017; revised name and category for Eligibility 2018) (revised in 2021)

Description: To recognize excellent service by a PELS Chapter and Student Branch Chapter to its members and to the power electronics community. The award is intended to be presented annually, to recognize accomplishments and to encourage additional activities.

Prize: \$1,500 to support activities of the Chapter, \$1,000 to support activities of the Student Branch Chapter, and Certificate that contains the names of the Chapter Chair, Secretary and Treasurer. In addition, one representative of the Best Chapter Award and one representative of the Best Student Branch Chapter Award each receive up to \$1,000 towards reimbursing necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Funding: Funded by the IEEE Power Electronics Society. The total annual expenses that can be incurred for this award shall be no more than \$2,500 and shall be included in the society's annual budget.

Eligibility: All IEEE PELS Chapters, including Chapters sponsored jointly with other IEEE entities. All IEEE PELS Student Branch Chapters, including Student Branch Chapters sponsored jointly with other IEEE entities.

Basis for Judging: Chapter accomplishments as judged by the Best Chapter Award Subcommittee

Presentation: The award will be presented at PELS Awards Ceremony each year.

5. **IEEE International Future Energy Challenge Award** (established in 2010; revised presentation 2014; revised prize 2017)

Description: The awards will be given to the best performing teams in the IEEE International Future Energy Challenge design competition. Topics for each Competition will change. The award structure will remain the same. The prizes provided to schools are intended to benefit the team members and student team design project activities.

Prize: The award would be annual with one topic per year, and consist of a certificate and honorarium for winning teams paid to their university or IEEE Section or Chapter. See tiers and description below.

IEEE International Future Energy Challenge
 1st Prize: US\$10,000
 2nd Prize: US\$5,000

3rd Prize: US\$3,000
Potential 4th Prize: US\$1,000 (if budget allows) of up to 3
Fourth prize is intended to acknowledge remarkable solutions in detail, proposed by teams not winning the 1st to 3rd Prizes. While a 1st, 2nd, and 3rd Prize will always be awarded, the 4th Prize is only applicable if the budget allows.

Funding: IEEE Power Electronics Society US\$40,000/Competition; IEEE Industry Applications Society, US\$25,000; IEEE Power & Energy Society, US\$20,000; Power Source Manufacturers Association, US\$10,000.

The amounts indicated above might be renegotiated on a yearly basis prior to the announcement of the next competition, depending on the financial situation of the involved societies and the location of the competition, influencing accountable travel cost; however prior to announcing the competition, funds of in total at least US\$75,000 must be guaranteed for it by the funding societies. A society must provide funds of at least US\$10,000 to be mentioned as a sponsor of the competition.

Eligibility: Any University Student Team participating in the IEEE International Future Energy Challenge. Visit Society website for more details.

Basis for Judging: During the final competition event, the participating teams need to demonstrate their design that meets the specification. The team with highest score will receive the award.

Awards titles for Prizes 1, 2 and 3 will be declared by the judging team based upon the finalist submissions. (Flexibility may be necessary here to award achievements in detailed areas).

Presentation: The awards will be presented after the decision during the IEEE International Future Energy Challenge final competition

6. **IEEE PELS R. David Middlebrook Achievement Award** (established in 2011)

Description: To recognize outstanding technical contributions in power electronics. The award is dedicated to the memory of Dr. R. David Middlebrook, Emeritus Professor, California Institute of Technology, Pasadena, California.

Prize: A bronze medal, a certificate and an honorarium of \$5,000. Complimentary registration for the conference to accept the award, paid for by PELS upon request.

6. **IEEE PELS R. David Middlebrook Achievement Award** (established in 2011) (revised in 2021)

Description: To recognize outstanding technical contributions in power electronics. The award is dedicated to the memory of Dr. R. David Middlebrook, Emeritus Professor, California Institute of Technology, Pasadena, California.

Prize: A bronze medal, a certificate and an honorarium of \$5,000. In addition, up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Funding: Funded by the IEEE Power Electronics Society

Eligibility: A member of the IEEE with good standing and of any grade.

Basis for Judging: Award to an individual who is judged to have accomplished outstanding contribution in the technical field of power electronics, within one or more subfields such as modeling & control, design-oriented analysis, development, simulation and application of electronic devices, passive components, analog sensing, and power circuits for inverters, converters and motor drives in all power levels. The award may recognize a single significant contribution such as a seminal paper or analysis method, or a series of accomplishments that together represent outstanding technical contribution.

It is dedicated to the memory of Dr. R. David Middlebrook, Professor, California Institute of Technology, Pasadena, California.

Presentation: PELS annual awards ceremony at ECCE in September of the year of the award.

7. **IEEE Joseph John Suozzi INTELEC Fellowship Award in Power Electronics** (established in 2011; revised eligibility 2017)

Description: For recognize outstanding graduate study in power electronics.

Prize: A fellowship award certificate and a one-time honorarium of \$15,000USD.

Funding: IEEE INTELEC conference fund and PELS annual operating fund.

Eligibility: A graduate student member of the IEEE Power Electronics Society in electrical engineering across the globe, specializing in an area of power electronics applicable to information and communication technology and energy systems.

Basis for Judging:

- Nomination package includes
 - an essay not exceeding one page in length that explains how his/her proposed project can be applied to powering of communications systems
 - a transcript of his/her grades
 - a letter of support from his/her Faculty Advisor.
- Each Award Committee member evaluates the material and documentation submitted by the applicants and assigns scores to the three top applications
- After receiving the scores from each Committee member, the chair adds them up. The winner is the application that receives the highest combined score.
- In case of tie, the Award Committee Chair breaks the tie by selecting the winner from the applications tied with the highest score
- Applications are evaluated both based on the technical merit and novelty of the proposed study topic and based on the applicant's performance as a student

Presentation: The award will be presented at the IEEE INTELEC annual awards ceremony.

8. **IEEE Power Electronics Society Prize Letter Award** (established in 2012) (revised prize 2013) (revised prize 2014) (revised prize 2020)

Description: Beginning in 2007, the PELS Letters Editor and Associate Editors of the *IEEE Transactions on Power Electronics* recognized one letter deemed best among those published in the Transactions during the preceding calendar year. The established letters review criteria is used as the basis for the Prize Letter selection. Specific emphasis is placed on originality, contribution to the field; and the quality of presentation, including the effective use of illustrations. A particular emphasis is placed on contributions with high value for rapid publication.

Prize: \$1,000 prize (to be shared equally among the paper's authors) and Certificate for each author. Number of Awards to be given is 1% of the number of published papers (in 2020 number is 1)

Funding: This is a society funded award which is accounted for in the society operating budget.

Eligibility: Letters published during the preceding calendar year.

Basis for Judging:

- The Letters Associate Editors make nominations from letters published in the preceding year. Each Associate Editor (and the EIC) can nominate up to two letters. The established review criteria are used as the basis for the nomination, with particular emphasis on originality, contribution to the field, and overall quality of the letter.
- The EIC assembles the nominations and distributes them to Letters AE for voting. Each AE can vote for one letter. The letter that receives the most votes is selected as the Prize Letter.
- The EIC can cast a vote, or reserve his/her vote for tiebreaking, should it occur.

Presentation: This award will be presented at ECCE every year.

9. **IEEE Modeling and Control Technical Achievement Award** (established in 2013) (revised prize and funding 2014) (revised prize 2015) (revised in 2021)

- Description:* The **IEEE Modeling and Control Technical Achievement Award** of the IEEE Power Electronics Society is established to honor innovators and researchers who have made outstanding and sustained technical contributions to the advancement of power electronics in the area of modeling and control.
- Prize:* \$1,500. Additional specs include an engraved suitable plaque, and an award certificate; the award can only be given if the respective budget remains net positive. In addition, up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.
- Funding:* This award is a Power Electronics Society funded award. The total annual expenses that can be incurred for this award shall be no more than \$1,500 and shall be included in the Society's annual budget for the Technical Committee. The expenses include: honorarium as above, engraving of suitable plaque, and award certificate.
- Eligibility:* The award recipient has to be an active IEEE member; there are no other restrictions as to nationality, age, gender, or IEEE member grade. The criteria considered by the Award Committee include:
- Quality of technical achievement and contribution to the field;
 - Enhancement of technology;
 - Impact on the relevant technical community and the profession;
 - Benefit to society;
 - The quality of the nomination.
- Basis for Judging:* Judgment of the award recipient will be based on the nominator's recommendation, the endorsement letters, and knowledge of the Award Committee members. Voting will be under the leadership of the Award Chair and the outcome will be based on the majority consensus. Once awardee will be selected each year. If suitable candidates are not available for that year, the Award Committee can decide not to make an award for that year.
- Presentation:* The award will be presented once a year at the IEEE Workshop on Control and Modeling for Power Electronics (COMPEL). The first award was presented in 2012, at COMPEL 2012 and the second award will be presented at COMPEL 2013 in June 2013.

10. **IEEE PELS Energy Storage Innovation Award** (established in 2014)

- Description:* The award is given to an individual or a group of up to three individuals for innovation in energy storage technology that significantly exceeds contemporary performance limits and has practical application in communications energy systems. The innovation may be in the form of an adequately-described new design or practicable concept, an invention, or a verified manufacturing step or product.
- Prize:* The Award consists of an award certificate and a one-time honorarium of \$2,500 USD. In the case of multiple Award recipients, each recipient will receive an award certificate naming all the co-recipients and an equal share of the honorarium. A maximum and total amount of \$1,000 USD will be available to recipient(s) to share as reimbursement of travel and accommodation costs incurred to attend the place of presentation of the Award. Any conference registration fees that the Award recipient would have to pay to attend the award ceremony will be waived.
- Funding:* **The honorarium of the Award and any associated travel reimbursement will be initially funded through the IEEE PELS operating budget. Any conference registration fees payable for the recipient to attend the award ceremony will be funded from the TC7 budget. IEEE PELS will work with the IEEE Foundation and its development office staff to identify an external industry sponsor to secure multi-year funding support for the Award. PELS will seek approval for establishment of a dedicated Award Fund through the IEEE Foundation Board.**
- Eligibility:* This is an open award. Nominees for the Award should have a record of activity in the research or product development of energy storage for communications energy systems.

The award is not to be made to a company.

The Award may not be given more frequently than annually nor does it need to be given each and every year, i.e. the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements. The reason for the potentially occasional nature of the award is that breakthroughs in the complex field of energy storage technology can't be expected to be achieved regularly each year. The INTELEC Executive Committee will be responsible for ensuring that the potentially occasional nature of the Award does not breach IEEE Policy.

Basis for Judging: Assessment will be based on the contents of the application, including supplied supporting documentation. Assessment process has three specific areas of focus (Description of Innovation, Merit of Innovation, and Past Activities) and uses a points-scheme to help rate the elements.

Presentation: If an Award is given, it will be identified by the next number in the sequence reflecting the number of times the award has been previously given (i.e. 1st, 2nd, etc.) Presentation of the Award will normally occur during the Conference Dinner at an INTELEC event.

11. **IEEE JESTPE (*IEEE Journal of Emerging and Selected Topics in Power Electronics*) Prize Paper Award** (established in 2014) (revised in 2021)

Description: Beginning in 2015, the editorial committee of IEEE JESTPE (*IEEE Journal of Emerging and Selected Topics in Power Electronics*) will recognize one (1) first prize paper and a maximum of six (6) second prize papers that were deemed the best papers among those published in JESTPE during the preceding calendar year. The selection criteria are: Originality, Contribution to the field, Extent to which the paper is supported by analysis and experimental evidence and Quality of the presentation, including effective use of illustrations.

Prize: In addition to a certificate presented to each author, an honorarium of \$1,000 is shared equally among the authors of the first prize paper. An honorarium of \$500 will be shared equally among the authors of each of the second prize papers (up to six).

Funding: This is a society funded award which is accounted for in the society operating budget. The society budget is net positive including the funding for this award. The estimated total budget is \$3,000, with \$2,500 as honorarium and \$500 for certificate preparation. The total budget is equally shared between PELS and IAS.

Eligibility: All papers published in IEEE JESTPE during the preceding calendar year are eligible for nomination. For 2015 award papers, all the papers published in 2013 and 2014 will be eligible for nomination.

Basis for Judging:

- The EIC, Editors and Associate Editors of JESTPE, Guest Editors and Guest Associate Editors of JESTPE for that year, and chairs of each Technical Committee of PELS and IAS make nominations from papers published in the preceding year. Each person (and the EIC) can nominate up to two papers. The established review criteria are used as the basis for the nomination, with particular emphasis on originality, contribution to the field, analysis and experimental evidence, and quality of the presentation of the papers.
- The EIC assembles the nominations and distributes them to the members of JESTPE editorial board for voting. Each member can vote for up to three papers. EIC will decide the winner of the first prize paper and second prize papers based on the vote.
- The EIC can cast a vote, or reserve his/her vote for tiebreaking, should it occur. In case of tie (with EIC's vote), EIC will appoint an ad hoc committee to resolve the tie.

Presentation: This award will be presented at ECCE every year.

12. **IEEE PELS Sustainable Energy Systems Technical Achievement Award** (established in 2016) (revised in 2021)

Description: To recognize and honor individuals who have contributed scholarly and original technical and scientific contributions towards the advancement of power electronics in the area of sustainable energy systems.

Prize: A single annual award of \$1,500, an engraved Plaque, and Certificate. In addition, up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Funding: Funded by the IEEE Power Electronics Society.

Eligibility: Active IEEE membership. There are no restrictions on nationality, age, gender, or IEEE member grade.

Basis for Judging: Judgment based on the nominator's recommendation, the endorsement letters, and evidence collected by awards selection committee members. The criteria established includes: contributions of the candidate to power electronics in the field of sustainable energy systems; specific intellectual merit of the original contributions and innovations; broader societal impact of the contribution(s) on sustainable energy systems and applications; list of related significant publications; candidate's stature in the area of sustainable energy systems, in particular, and power electronics, in general; professional activities or involvements; the quality of the nominations.

Presentation: At IEEE PEDG.

13. **IEEE Award for Achievement in Power Electronics Standards** (established in 2016) (revised in 2021)

Description: To recognize and honor individuals who have made outstanding and sustained contributions or services in IEEE standards relevant to the field of power electronics.

Prize: A single annual award of \$1,500 and engraved suitable plaque to a single recipient.

Funding: Funded by the IEEE Power Electronics Society.

Eligibility: Active IEEE member. There are no restrictions on nationality, age, gender, or IEEE member grade.

Basis for Judging: Judgment based on the nominator's recommendation, the endorsement letters, and evaluation of selection committee members. The criteria established includes: sustained contributions of the candidate to the advancement of IEEE standards in the field of power electronics; sustained services of the candidate to the IEEE standards in the field of power electronics; dissemination of knowledge by the candidate of the IEEE standards in the field of power electronics; candidate's stature in the area of IEEE standards in the field of power electronics; the quality of the nominations.

Presentation: At a PELS sponsored conference.

14. **IEEE PELS Vehicle and Transportation Systems Achievement Award** (established in 2018) (revised in 2021)

Description: To recognize innovators and researchers who have made outstanding technical contributions to the advancement of power electronics in the area of vehicle and transportation systems.

Prize: The Award consists of an award plaque and a one-time honorarium of \$1,500 USD. In addition, up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Funding: Funded by the IEEE Power Electronics Society.

Eligibility: Active IEEE member. There are no restrictions on nationality, age, gender, or IEEE member grade.

The award is not to be made to a company.

The award may not be given more frequently than annually nor does it need to be given each and every year, i.e. the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

The criteria considered by the Award Committee include:

- Quality of technical achievement and contribution to the field;
- Advancement of the technology;
- Sustained impact on the relevant technical community and the profession;
- Benefit to the society;
- The quality of the nomination

Basis for Judging: Judgment based on the nominator's recommendation, the endorsement letters, and supplied supporting documents. Assessment process has three specific areas of focus (Description of Innovation, the Impact/Merit of the Innovation, and Past relevant activities to the field and technical committee). Voting will be under the leadership of the Award Chair, Award Co-chair, and Technical Committee Chair. Outcome will be based on the majority consensus. One awardee will be selected each year. If there is no suitable candidate for that year, the Award Committee can decide not to make an award for that year.

Presentation: If an award is given, it will be presented once a year at the IEEE Transportation Electrification Conference and Expo (ITEC).

15. **IEEE Power Electronics Emerging Technology Award** (established in 2019) (revised in 2021)

Description: The IEEE Power Electronics Emerging Technology Award of the IEEE Power Electronics Society is established to recognize engineers and researchers who have made outstanding technical contributions to one or more emerging research topics in power electronics. The emerging areas in power electronics are evolving. At least three emerging research topics will be announced each year with the call for nominations, which are decided annually by PELS High Performance and Emerging Technologies Technical Committee (TC6).

Prize: The award consists of an award plaque and a one-time honorarium of 1500USD. In addition, up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Funding: Funded by the IEEE Power Electronics Society.

Eligibility: The award recipient must be an active member of IEEE. There are no other restrictions as to nationality, age, gender, or IEEE member grade. An award will be given to a single person only.

Basis for Judging: Criteria: Judgment of the award recipient will be based on the nomination. The criteria considered by the award selection committee include:

- quality of technical achievement and contribution to the field
- advancement of the technology
- sustained impact on the relevant technical community and the profession
- benefit to the society – past relevant activities to the field and technical committee

Frequency:

- The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

Process:

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of award selection committee vote this way, the awardee is the nominee with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary. If at least half of the members of selection committee however abstain, no award will be presented in the current year.

- If less than three applications of eligible candidates would be received, the process may be appropriately simplified..

Presentation: As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

16. IEEE McMurray Award for Industry Achievements in Power Electronics (established in 2019) (revised in 2021)

Description: The IEEE McMurray Award for Industry Achievements in Power Electronics recognizes the work of engineers working in the field of power electronics which has shown or is likely to show a major impact on industry, and the resulting products possibly on society.

Prize: The award consists of an award plaque and a one-time honorarium of 3,500USD. In addition, up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Funding: Funded by the IEEE Power Electronics Society.

Eligibility: The award recipient must be an active member of IEEE. There are no other restrictions as to nationality, age, gender, or IEEE member grade. An award will be given to a single person only.

Basis for Judging: Criteria: Judgment of the award recipient will be based on the nomination. The criteria considered by the award selection committee include:

- quality of technical achievement and contribution to the field
- advancement of the technology
- impact on the relevant technical community and the profession
- benefit to the society
- past relevant activities to the field
- the quality of the nomination
- patents, inventions, products, and design
- validated impact on products is paramount

Frequency:

- The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

Process:

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of award selection committee vote this way, the awardee is the nominee with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary. If at least half of the members of selection committee however abstain, no award will be presented in the current year.
- If less than three applications of eligible candidates would be received, the process may be appropriately simplified..

Presentation: As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

17. IEEE PELS Award for Achievements in Power Electronics Education (established in 2020) (revised 2021)

Description: The IEEE PELS Award for Achievements in Power Electronics Education is established to recognize the work of engineers which has shown a major impact on education in the area of power electronics, or which is groundbreaking for the education in the area of power electronics.

Prize: The award consists a \$3,500 honorarium (for a single awardee or shared equally between multiple awardees) and an award plaque (one per awardee). In addition, irrespective of the number of awardees (1, up to a maximum of 3), a total available budget of up to \$1,000 is available towards equal reimbursement of necessary conference registration, travel and accommodation costs incurred to attend the award ceremony. Reimbursement will follow the IEEE Policies & Procedures.

Funding: Funded by IEEE Power Electronics Society. The expenses that can be incurred for this award shall be no more than \$5,500 per year. The award can only be given if the PELS operating budget remains net positive.

Eligibility: Any award recipient must be an active member of the IEEE Power Electronics Society at the time of nomination and presentation of award. There are no other restrictions as to nationality, age, gender, IEEE member grade, or affiliation. The selection committee will take care that the awardees will appropriately reflect the different aspects as above over the years. Taking into account the international character of PELS and its members. An award will normally be given to a single person; in case of collective merits (e.g. a team of coworkers having equally contributed to an impactful oeuvre), it may be shared between up to three persons. Previous recipients of the award are not eligible to participate.

Basis for Judging: Judgment of the award recipient(s) will be based on the nomination. The work of the respective nominee(s) which has shown a major impact on education in the area of power electronics, or which is groundbreaking for the education in the area of power electronics will be considered, which may comprise:

- material and tools for power electronics education, e. g. textbooks, software for simulation or visualization, videos, webinars, and teaching activities-all languages are allowed. Criteria for their impact may be the widespread use of a textbook or educational software tool, a remarkable outreach of teaching via electronic media or the novelty of a promising new approach for power electronics teaching.
- teaching activities
Criteria may be the long-lasting service as a teacher, having laid the base for the career of a remarkable number of graduates, having established major education programs or having left a novel imprint on widely applied teaching methods or curricula.

Selection committee will take care that the awardees will appropriately reflect the different aspects as above over the years. The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection criteria.

Presentation: The award will be presented at a PELS conference.

18. IEEE PELS Ph.D. Thesis Talk Award (P3 Talk) (established in 2020) (revised in 2021)

Description: The goal of the IEEE PELS Ph.D. Thesis Talk Award (P3 Talk) competition is to showcase Ph.D. projects to the entire power electronics community-both in academia and industry: Up to five P3 (3-minute presentation) Talks will be awarded each year.

Prize: The award consists a \$1,000 honorarium and Certificate. Up to five persons may be awarded each year. In addition up to \$1,000 will be reimbursed to each of the up to five awardees towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony. reimbursement for travel expenses up to \$500 to attend awards ceremony upon request and free entrance to the award ceremony when not registered for the conference; Reimbursement will follow the IEEE Policies & Procedures.

Funding: Funded by IEEE Power Electronics Society. The expenses that can be incurred for this award shall be no more than \$8,000 per year, including honorarium, certificates, and travel refund and conference fees. The award can only be given if the PELS operating budget remains net positive.

Eligibility: All Ph.D. graduates who are IEEE PELS members at the time of nomination and presentation of the award, who defended their thesis and have received their Ph.D. or doctoral certificate or have a proof of final thesis defense after March 31st of the year preceding the award are eligible. The topic of the Ph.D. thesis should be in one of the focus areas of IEEE Power Electronics Society. Previous recipients are not eligible.

There are no other restrictions as to nationality, gender, age or IEEE member grade of the applicant. Each award will be given to a single person only.

Only videos not exceeding a specified length, in English language and in an appropriate file format can be considered. Details may be specified in separate instructions accessible via PELS website.

As a prerequisite for eligibility, the applicant with the submission of a video expresses the consent that the video may be published by IEEE PELS, and assures that it does not contain otherwise copyrighted or confidential material.

Basis for Judging: Each submission will be reviewed by the members of selection committee. They are asked to score the video submissions according to the judging rubrics given below:

Problem definition

10% Clear research objectives, problems, and hypothesis

10% Rich in engineering judgement and insight

Design methodology

10% Methods are technically and mathematically accurate

10% Well supported with analysis and experimental evidence (Are there any prototype/application demonstrations?)

Achieved outcomes

10% Contribution to the field (e.g., interesting to readers, stimulates new ideas, publications/result dissemination)

10% Valuable for practicing engineers or researchers

Quality of video and presentation

10% Present within 3 minutes, personally appear in the video, and use of English (clear, concise, and correct)

10% Present the material in a well-organized way | from framing the problem to presenting the proposed solution

10% Effective use of visual aids (figures, tables, charts, layout, etc.) improves effectiveness of video and presentation

10% Video and audio quality (e.g., resolution, clear audio, design)

Each criterion is rated on a scale of 1 to 5 with:

1 Not satisfactory

2 Satisfactory

3 Good

4 Very good

5 Excellent

Presentation: As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

19. IEEE Transactions on Transportation Electrification Prize Paper Awards (established in 2021)

Description: To annually recognize the best papers published in the *IEEE Transactions on Transportation Electrification* in the previous year.

Prize: To secure equal opportunities when the number of published papers evolves over the years, the number of awarded papers shall represent: 0.5% of the published papers for a first prize; 1% of

them for a second prize. The number of published papers, as determined at the end of a calendar year and appropriately rounded to the closest integer number, will be the basis for budget planning and selection in the following year. The award for each selected paper comprises: \$1,000 for a first prize or \$500 for a second prize, shared equally among the paper's authors; a Certificate for each author.

Funding: Funded by the publication budget with the societies sharing financial responsibility for the *IEEE Transactions on Transportation Electrification* as regulated in the respective inter-society agreement. The actual budget is determined by the number of awards as above multiplied.

Eligibility: All the papers that were published in the *IEEE Transactions on Transportation Electrification* in the previous calendar year are eligible. Exception is made for the first award which will include all the papers published in the two previous calendar years. Previous recipients are not eligible. However authors who won the award for a different paper are eligible.

Basis for Judging: Originality; Contribution and impact to the field; extent to which the paper is supported by analysis and experimental evidence; quality of presentation, including the effective use of illustrations. Award will be given only if a suitable prize paper is identified (i.e. less awards than allowable)

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Presentation: As a rule, the presentation of the *IEEE Transactions on Transportation Electrification* Prize Paper Award will be made each year in the IEEE Transportation Electrification Conference (ITEC) North America.

20. IEEE PELS Technical Achievement Award for Integration and Miniaturization of Switching Power Converters (established in 2021)

Description: To annually recognize innovators and researchers who have made outstanding technical contributions to the advancement of power electronic circuits, components, devices, and/or systems toward a higher level of integration and/or miniaturization of switching power converters.

Prize: \$1,500 and Plaque. In addition up to \$1,000 will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony. Awarded to a single person only.

Funding: Funded by the IEEE Power Electronics Society included in the society's annual TC2 budget.

Eligibility: Active IEEE Members only.

Basis for Judging: Quality of the technical achievement or innovation; sustained impact on the relevant technical community and the profession, benefit to the society; past relevant activities to the field and technical committee; the quality of the nomination.

Presentation: As a rule, the award is presented during the International Workshop on Power-Supply-on Chip (PwrSoC) or during the IEEE Energy Conversion Congress and Exposition (ECCE) America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

IEEE POWER & ENERGY SOCIETY

PE-31 (Division VII)

For all Power & Energy Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE PES Uno Lamm HVDC Award (first presented in 1981)

Description: To recognize outstanding contributions to High Voltage Direct Current Technology.

Prize: \$1,000, Medallion, Plaque, and travel expenses of up to \$1,000 for recipient to attend presentation ceremony with Uno Lamm HVDC Award Committee approval based on need.

Funding: **Funded by contributions from the IEEE Power & Energy Society, Hydro-Quebec, ABB Power Systems and General Electric, managed by the IEEE Foundation.**

Eligibility: Individuals in the electric power engineering international community who have been or are intensely involved in the development and advancement of the HVDC technology.

Presentation: Annually, at PES General Meeting or other PES Conference.

2. IEEE PES Meritorious Service Award (first presented in 1972)

Description: To recognize outstanding contributions in leadership, technical activities, and educational activities of the IEEE Power & Energy Society.

Prize: Plaque and travel subsidy of up to \$1,000 for recipient to attend presentation ceremony.

Funding: Funded by the IEEE Power & Energy Society.

Eligibility: PES members.

Basis for Judging: Outstanding and meritorious service to the IEEE Power & Energy Society.

Presentation: Not awarded each year and no fixed frequency, but when presented, will be at an IEEE Power & Energy Society Conference.

3. IEEE PES Award for Excellence in Power Distribution Engineering (revised 2001; revised Eligibility 2017)

Description: To recognize engineering contributions that have enhanced the quality and economy of electric power distribution.

Prize: \$1,000, Plaque and travel subsidy for recipient of \$1,000 (with review by the PES Executive Director for extenuating circumstances) to attend the PES award meeting.

Funding: **Funded by the following 8 Power Companies: Asplunch Tree, Kearney, A B Chance Co., Commonwealth Edison, Philadelphia Electric, Pacific Gas & Electric, S&C Electric, and Georgia Power, managed by the IEEE Foundation.**

Eligibility: Must have Bachelor's degree in engineering from an accredited institution, minimum of 15-years' experience in industry and/or academia, and have been a member of IEEE/PES for a minimum of five (5) years.

Presentation: One (1) annually at PES General Meeting or other PES Conference.

4. IEEE PES Outstanding Power Engineering Educator Award

Description: To recognize outstanding contributions and leadership in power engineering education.

Prize: \$1,000, Plaque, and travel subsidy for recipient to attend presentation ceremony.

Funding: **Funded by the IEEE Power & Energy Society through an endowment administered by the IEEE Foundation.**

Eligibility: Members of PES for at least one (1) year who have conducted classroom instruction in electrical engineering at a college or university with an accredited program in electrical engineering or equivalent.

Basis for Judging: Excellence in classroom teaching and course development, promotion of student, local, transnational, and technical activities.

Presentation: One (1) annually at PES General Meeting or other PES Conference.

5. **IEEE PES Outstanding Young Engineer Award**

Description: To recognize outstanding contributions in the leadership of technical activities.

Prize: Plaque and travel subsidy (up to \$1,000) for recipient to attend presentation ceremony. Recipient will designate a college or university to receive a \$2000 scholarship fund for electrical engineering.

Funding: Funded by IEEE Power & Energy Society

Eligibility: Must be no more than 35 years of age as of January 1 of presentation year; must be member of PES for at least one (1) year.

Basis for Judging: Leadership in technical activities including local and/or transnational PES and other Societies, leadership in community and humanitarian activities, evidence of technical competence through significant engineering achievements.

Presentation: One (1) annually at PES General Meeting or other PES Conference.

6. **IEEE PES Chapter Outstanding Engineer Award** (established in 1993 revised 2015)

Description: To recognize outstanding technical, professional, and Society contributions on behalf of the power engineering profession. (Up to two awards to be given annually by each chapter.)

Prize: Plaques

Funding: Funded by IEEE Power & Energy Society's Chapter Budget.

Basis for Judging: Chapters are free to establish their own priorities for selection criteria. The following areas are suggested for comparison of award nominees: 1) outstanding technical contributions to the power engineering profession; 2) outstanding professional and leadership contributions to the power engineering profession; 3) significant contributions to the local community representing the power engineering profession; 4) outstanding contributions in the area of power engineering education; 5) service to the IEEE Power & Energy Society and/or IEEE; 6) PES and/or IEEE membership. It is encouraged for each chapter to select up to two individuals to recognize each year, one for "young professionals" and one for the "more experienced" engineer who are active in the PES Chapter

Presentation: At appropriate Chapter event.

7. **IEEE PES Prize Paper Award**

Description: To recognize the most outstanding papers from among those nominated by each Technical Committee.

Prize: \$200 for a single author; \$100 each for two (2) or more authors, and mounted Certificate

Funding: **Funded by the IEEE Power & Energy Society through an endowment administered by the IEEE Foundation.**

Eligibility: Authors of papers published within the previous three (3) years (September-October).

Presentation: Two (2) annually at PES General Meeting or other PES Conference.

8. IEEE PES Technical Committee Prize Paper Award

Description: To recognize the outstanding paper published within the scope of each Technical Committee.

Prize: Plaque

Funding: Funded by the IEEE Power & Energy Society.

Eligibility: Authors of papers published within the previous three (3) years (September-October).

Presentation: One (1) annually per Technical Committee at PES General Meeting or other PES Conference.

9. IEEE PES Chapters Council Award

Description: To recognize outstanding contributions made by Chapters Council members to the success of Council Operations.

Prize: Plaque

Funding: Funded by the IEEE Power & Energy Society.

Eligibility: Members of Chapters Council.

Presentation: At PES General Meeting or other PES Conference.

10. IEEE PES Technical Committee Distinguished Individual Service Award

Description: To recognize the efforts by individuals whose sustained performance over many years has contributed to the advancement of the Committee technology.

Prize: Plaque

Funding: Funded by the IEEE Power & Energy Society.

Eligibility: Individuals with sustained performance over many years.

Presentation: At PES General Meeting or other PES Conference (Presented by each Technical Committee).

11. IEEE PES Working Group Recognition Award (first presented in 1973)

Description: To recognize achievements and contributions to electric power by duly constituted PES Working Groups.

Prize: Plaque for Chairman; Certificate for each member.

Funding: Funded by the IEEE Power & Energy Society.

Eligibility: Duly constituted Working Groups of PES.

Basis for Judging: One award from each of two categories: 1) technical reports, 2) Standards/guides.

Presentation: May be presented annually, at an IEEE Power & Energy Society Conference.

12. **IEEE PES Outstanding Chapters Award** (first presented in 1973-1974) (revised description/scope, prize, and basis for judging 2013)

Description: To recognize outstanding performance by an IEEE Power & Energy Society Chapter. Multiple winning chapters will be awarded.

Prize: Both winning chapters (one in the large chapter category and one in the small chapter category) will receive a banner, \$1,000 and plaques (one for each officer). Both runner-up chapters (one in the large chapter category and one in the small chapter category) will receive certificates (one for each officer) and \$250.00. Note that runner-up chapters (in both categories) that meet the minimum award criteria will each receive \$250 and certificates for the chapter chair and chapter representative.

Funding: **Funded by the IEEE Power & Energy Society through an endowment administered by the IEEE Foundation.**

Eligibility: Any IEEE Power & Energy Society Chapter in good standing.

Basis for Judging: Technical Activities, Societal/Affinity group activities, membership advancement, nominations and recognition, membership growth, and member support activities.

Presentation: Annually, at an IEEE Power & Energy Society Conference.

13. **IEEE PES Nari Hingorani FACTS Award** (established in 1998) (revised 2003) (revised prize and funding 2016)

Description: To recognize individuals who have made a major contribution to the state of the art of FACTS (Flexible AC Transmission System) technology and its applications. The IEEE definition of FACTS is: Alternating Current Transmission Systems incorporating power electronics-based and other static controllers to enhance controllability and power transfer capability. By this definition, the FACTS concept, in addition to the hardware, software and applications work carried out since its introduction, incorporates considerable prior work done on Static Var Compensators and other static Controllers.

Prize: \$2,000, Medal, and Plaque. Travel expenses for the recipient to attend the PES General Meeting to receive the award will be covered by the recipient unless strongly justified. The Award Selection Committee should approve any requests for travel expenses.

Funding: **Funded by contributions from the following supporters: Hingorani Power Electronics, Electric Power Research Institute, Westinghouse, GEC-UK, Siemens-Germany, GE Power Systems, and Joyce Hingorani, and administered by the IEEE Foundation.**

Eligibility: Individuals who have made a major contribution to the state-of-the-art of FACTS technology and its applications.

Basis for Judging: Factors to be considered in the selection: Candidate's contribution(s) to FACTS technology; Originality or innovative nature of the contribution(s); Impact of the contribution(s) on FACTS technology; Publications in FACTS; Candidate's stature in FACTS; Candidate's period of dominance in FACTS; Achievements in other fields or technologies; Professional activities or involvements. One individual per year selected from nominations for individual accomplishments in the FACTS area.

Presentation: Award will be presented annually at PES General Meeting or other PES Conference - to be decided by the Awards Committee.

14. **IEEE PES Cyril Veinott Electromechanical Energy Conversion Award** (established in 2001)

Description: To recognize outstanding contributions in the field of electromechanical energy conversion.

Prize: \$5,000 and Plaque

Funding: **Funded by an endowment provided by Dr. Veinott and administered by the IEEE Foundation.**

Eligibility: Restricted to the power engineering area of electromechanical energy conversion

Basis for Judging: Career dedication to the power engineering profession; career contributions to the development of electromechanical energy conversion design, analysis, or manufacturing.

Presentation: At a PES-sponsored meeting.

15. **IEEE PES Nari Hingorani Custom Power Award** (established in 2002) (revised prize and presentation 2016)

Description: To recognize an individual who has made a major contribution to the state-of-the-art in Custom Power technologies and their applications. The IEEE definition of Custom Power is: “The concept of employing power electronic (static) controllers in 1 kV through 38 kV distribution systems for supplying a compatible level of power quality necessary for adequate performance of selected facilities and processes.” By this definition, the Custom Power concept, in addition to the hardware, software and applications work carried out since its introduction, incorporates considerable prior work done on Static VAR Compensators and other static Controllers.

Prize: \$2,000, Medal, and Plaque

Funding: **Funded by the same contributions made to fund the PES FACTS Award and administered by the IEEE Foundation.**

Eligibility: Individuals, who have made a major contribution to the state-of-the-art of Custom Power technologies and their applications, will be considered.

Basis for Judging: Factors to be considered in selecting the Custom Power Award include: the candidate’s contribution(s) to Custom Power technology; originality or innovative nature of the contribution(s); impact of the contribution(s) on Custom Power technology and its applications; list of significant publications in Custom Power; candidate’s stature in Custom Power; achievements in other fields or power electronics technologies; and professional activities or involvements. Nominators are encouraged to format the nomination package in sections addressing each of the factors itemized above.

Presentation: Presented an IEEE sponsored meeting relevant to the field of custom power.

16. **IEEE PES Charles Concordia Power Systems Engineering Award** (established in 2002)

Description: To recognize outstanding contributions in the high-voltage electric power system-engineering field. This field encompasses Operations, Planning, Control, Modeling, and Analysis of high-voltage power systems and includes the system’s interaction with turbine generators. This award is named for Charles Concordia, the most prestigious power system engineer, who received the Power Life Award in 1992 and the IEEE Medal of Honor in 1999 for “outstanding contributions in the area of power system dynamics.”

Prize: \$5,000 and plaque

Funding: **Funded by contributions from General Electric Co. and administered by the IEEE Foundation.**

Eligibility: IEEE PES member for at least 10 years with tangible and visible achievements in one of the following areas of high-voltage power system engineering: operations, planning, control, modeling, analysis, and interaction with turbine-generators.

Basis for Judging: Selection will be based on tangible and visible achievements in one of the following areas of high-voltage power system engineering: operations, planning, control, modeling, analysis, and interaction with turbine-generators. Each member of the PSE Award Committee will rank the nominees and the chair will determine the recipient. However for the selection to be finalized, four of the five PSE Award Committee members must be agreeable to the final selection.

Presentation: Presented at the annual PES General Meeting in the name of IEEE PES.

17. **IEEE PES Robert Noberini Distinguished Contributions to Power Engineering Professionalism Award**
(established in 2006) (revised 2007)

Description: To honor members of the power engineering profession for long-term dedicated effort and outstanding accomplishments in advancing the aims of IEEE professional activities in the IEEE Power & Energy Society (PES).

Prize: Specially engraved Plaque or Sculpture. Financing of travel cost up to \$1,500 to participate in the PES General Meeting Awards Luncheon where the award is presented.

Funding: Funded by the IEEE Power & Energy Society.

Eligibility: Candidates shall be IEEE Senior Members and professionals of engineering, inside and outside the United States. No current member of the IEEE Board of Directors, IEEE PES Board of Directors, IEEE PES Awards and Recognition Committee, IEEE USA Board of Directors, IEEE USA Awards and Recognition, or IEEE staff may be candidates or nominate or endorse candidates for this award.

Basis for Judging: Based on the dedication, effort, quality, and most particularly on clearly successful accomplishment and achievement in advancing the social, economic, legal, and ethical aims of the IEEE professional activities. Factors to be considered shall include at least the following: Time as IEEE volunteer, Contributions to Power Engineering Activities; Contributions to IEEE Activities; IEEE member grade (shall be senior member); PES membership (recommended).

Presentation: Presentation of the award shall be made by the President, IEEE PES at the PES General Meeting Awards Luncheon.

18. **IEEE Power & Energy Society Leadership in Power Award** (established in 2007)

Description: To recognize industry leaders for exceptional contributions to the promotion of the electric power engineering profession. The award is intended to highlight actions which encouraged the development and growth of electric power engineering practitioners and recognized the contributions electric power engineers make to society.

Prize: \$2,000, Sculpture, and a travel stipend of up to \$2,000 for recipient to attend the presentation ceremony.

Funding: **Funded by the IEEE PES Awards Endowment Fund through the IEEE Foundation.**

Eligibility: Not restricted to IEEE members but must have been active in the electric power industry. No current members of the IEEE BoD, IEEE PES Governing Board, PES ARC, the Leadership in Power Award Committee, or IEEE staff may be candidates or nominate or endorse candidates for this award.

Basis for Judging: Selection will be based on evaluation of accomplishments as revealed by documented testimonials from industry members. Of particular importance is evidence of the candidate's promotion of the importance of the power engineering profession and the people practicing it. Work in encouraging industry involvement with university power engineering programs, encouraging young engineers through mentoring and career development programs, recognition programs for power engineers, encouragement of professional activities by practitioners, etc. will also be considered.

Presentation: Presentation of the award shall be made by the PES President

19. **IEEE Power & Energy Society Lifetime Achievement Award** (established in 2007)

- Description:* To recognize exceptional power engineers for outstanding career-long contributions to the art and science of electric power engineering.
- Prize:* \$2,000, Sculpture, Certificate, and a travel stipend of up to \$2,000 for recipient to attend the presentation ceremony.
- Funding:* **Funded by the IEEE PES Awards Endowment Fund through the IEEE Foundation.**
- Eligibility:* Candidate must have been an IEEE Power & Energy Society member in good standing for a least 10 years. No current members of the IEEE BoD, IEEE PES Governing Board, PES ARC, the Leadership in Power Award Committee, or IEEE staff may be candidates or nominate or endorse candidates for this award.
- Basis for Judging:* Selection will be based on evaluation of accomplishments as revealed by published works, documented testimonials from industry colleagues, or other objective demonstrations of accomplishments over an extended period of work. Of particular importance is evidence of the candidate's contributions to the knowledge base of power engineering profession, whether in research, teaching, product development, electric system design, or electric utility operations.
- Presentation:* Presentation of the award shall be made by the PES President

20. **IEEE PES Douglas M. Staszkesy Distribution Automation Award** (established in 2008)

- Description:* To recognize those in the industry who have made a significant contribution to making the automation of electric utility distribution systems a practical reality. Doug Staszkesy worked with a great deal of energy and passion to bring new technologies and new concepts to the field of distribution automation and to promote the value of investments in such systems to electric utility decision makers. This award is established to recognize people in the industry that have displayed that same energy and passion to the field of distribution automation and who have demonstrated success in the implementation of systems that provide real benefits for electric utilities and their customers.
- Prize:* \$2000 scholarship to the engineering school of the recipient's choice, plaque, and a travel stipend of up to \$1500 to attend the presentation ceremony
- Funding:* **Funded by S&C Electric Company intended to produce enough revenue to fund the basis award on an annual basis for perpetuity through an endowment administered by the IEEE Foundation.**
- Eligibility:* Recipient must be an IEEE PES member in good standing. No current member of the IEEE BoD, PES Governing Board, PES ARC, PES Douglas M. Staszkesy Award Committee, or PES staff may be candidates or nominate or endorse candidates for this award.
- Basis for Judging:* Selection will be based on evaluation of accomplishments as revealed by documented testimonials from industry members. Recipients may be electric utility practitioners, consulting engineers, design engineers or application experts at a manufacturer, or educators. Emphasis will be on the creation of practical solutions that produce real improvement in terms of system reliability and availability to the benefit of an electric utility and its customers. It is possible for collaborators to receive the award jointly in which case the monetary portions of the award will be divided among the recipients. A Committee majority vote will determine the recipient.
- Presentation:* May be presented annually at a regularly scheduled PES meeting of the recipient's choice. The PES General Meeting Luncheon is the highest profile event and would generally be preferred. To ensure the award is presented to appropriately qualified recipients and to maintain the prestigious nature of the award, it may not be presented every year. Presentation shall be preferably made by the PES President.

21. **IEEE PES Roy Billinton Power System Reliability Award** (established in 2008)

Description: To recognize outstanding individuals for their contributions to reliability of electric power systems.

Prize: An honorarium of \$3,000 and a plaque. It is anticipated to have only one recipient; however if a team is chosen, the award would be shared equally.

Funding: **The award will be funded by the past students and other associates of Professor Roy Billinton and selected organizations. The award will be in honor of Professor Roy Billinton, Professor Emeritus at University of Saskatchewan, Canada. Dr. Billinton is an IEEE Life Fellow, Foreign Associate of U.S. National Academy of Engineering, Fellow of Royal Society of Canada, and Fellow of Canadian Academy of Engineering. He has published over 850 papers and 8 books, gave tutorials, presentations and seminars in over thirty countries and delivered over one hundred short courses on system reliability, and served IEEE-PES committees and other industry committees. He supervised more than 120 Ph.D. and Master Degree candidates who are spread out in US, Canada and other countries. Management of the funds was approved by the IEEE Foundation.**

Eligibility: Candidate must have been an IEEE Power & Energy Society member in good standing for at least 5 years. No current member of the IEEE Board of Directors, the IEEE-PES Governing Board, the IEEE-PES Awards and Recognition Committee, the Roy Billinton Power System Reliability Award Committee, or IEEE staff may be candidates, or nominate or endorse candidates for this award.

Basis for Judging: The scope of contributions for the award includes modeling, analysis and data development to quantify power system reliability and assessments to plan and operate reliable electric utility generation, transmission, distribution systems, or interconnected power system grids. Selection will be based on evaluation of accomplishments as revealed by technical publications, testimonials from industry colleagues, professional and industry activities, and development of standards and operating guides.

Presentation: Presentation of the award shall be made by the PES President.

22. **IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award** (established in 2008)

Description: To recognize exceptional power engineers who have worked, implemented or innovated better and cheaper electrification technologies for the rural sector.

Prize: \$500, sculpture, certificate, and a travel stipend of up to \$1,500 for recipient to attend the presentation ceremony. It is anticipated to have only one recipient; however if a team is chosen, the award would be shared equally.

Funding: **The award will be co-funded by the IEEE Power & Energy Society and the IEEE Industry Applications Society. This funding was already endorsed by the IEEE Foundation. A matching donation will also be provided by the family of A.P. Seethapathy.**

Eligibility: Candidate must be active in the field of rural electrification for at least 5 years. No current member of the IEEE Board of Directors, the IEEE-PES Governing Board, IAS Executive Board, the IEEE-PES Awards and Recognition Committee, the IAS Awards Department, the Rural Electrification Excellence Award Committee, or IEEE staff may be candidates, or nominate or endorse candidates for this award.

Basis for Judging: Selection will be based on evaluation of accomplishments as revealed by published works, documented testimonials from industry colleagues, or other objective demonstrations of accomplishments over an extended period of time. Of particular importance is evidence of the candidate's innovative content and societal impact; lower cost solution; originality and practicality; and evidence of implementation.

Presentation: Presentation of the award shall be made by the PES President, IAS President or the Rural Electrification Excellence Award Chair or their designated representative.

23. **IEEE PES G. Ray Ekenstam Memorial Scholarship** (established in 2009) (revised prize 2013; revised Eligibility, Submission Schedule, and Selection Process 2013)

Description: The G. Ray Ekenstam Memorial Scholarship, established in memory of G. Ray Ekenstam and his professional career in the fields of power engineering and industry applications. The Scholarship Fund awards, on an annual basis, a scholarship to a qualified undergraduate student who seeks an electrical engineering degree in the field of power or a related discipline, from an accredited US university or college. The annual selection of scholarship recipients will be administered by IEEE Power and Energy Society (PES).

Prize: The Scholarship Fund will be used to fund on an annual basis the following annual expenses for one recipient:

- A maximum of US\$5,000 for one student for school expenses (tuition, books, student fees)
- IEEE Student Membership for twelve months for one student
- Travel stipend up to US\$500 for recipient to travel to and participate in the IEEE PES General Meeting

Funding: **A gift from Elizabeth Moore was used for the establishment of the G. Ray Ekenstam Memorial Scholarship Fund. The Scholarship Fund is administered by the IEEE Foundation.**

Eligibility: Scholarship Candidate must:

- Be a U.S. citizen or permanent resident and reside in IEEE Region 1 through 6;
- Be considering a career in electric power and energy engineering;
- Be working toward an electrical engineering bachelor's degree;
- Be a full-time student at a U.S. university or college that offers undergraduate courses in power engineering;
- Be willing to take at least three of the power engineering courses for a total of nine or more credits;
- Be currently enrolled full-time at a university/college or community college;
- Have a current GPA of 3.0 or higher on a 4.0 scale (or equivalent);
- Be an honorably discharged U.S. veteran or a disable U.S. veteran.

No relatives of current members of the IEEE Board of Directors, the IEEE-PES Governing Board, the IEEE-PES Awards and Recognition Committee, the G. Ray Ekenstam Memorial Scholarship Committee, or IEEE staff may be candidates or nominate or endorse candidates for this Scholarship.

Basis for Judging: Selection criteria will be based on evaluation of the following criteria:

- Evidence of maintaining a cumulative GPA of at least 3.0 on a 4.0 scale;
- One referral letter from an individual who is qualified to evaluate the applicant's academic accomplishments (e.g., professor, administrator, employer, internship organization).

Each IEEE PES Scholarship Plus Initiative Regional Review Committee will forward recommended candidates to the G. Ray Ekenstam Memorial Scholarship Committee who will make the final selection.

Presentation: No specific presentation is necessary, however, award presentation may be made at PES General Meeting if recipient indicates intention to attend.

24. **IEEE PES CSEE Yu-Hsiu Ku Electrical Engineering Award**, IEEE Power & Energy Society and Chinese Society for Electrical Engineers (CSEE) (established in 2009)

Description: Award specifications include the recognition of a professional who has demonstrated excellent performance in the fields of electricity, electrical machinery, power system engineering and/or related fields. The recognized contributions in electrical engineering must have a lasting beneficial impact on the Chinese society. The recipient's contribution in electrical engineering shall be evaluated based on technical innovations and well recognized contributions in electrical power engineering and

associated fields. The award is aimed at stimulating outstanding achievements in successful industrial practices.

The award is in memory of Dr Yu-Hsiu KU (1902~2002), who has made great contributions in mathematics, electrical machinery and modern control theory during his longstanding career in the US and China. Prof. Ku was the recipient of the IEEE Lamme Medal (1972) and the IEEE Millennium Medal (1999). He was also the founding member of CSEE.

Prize: An honorarium of US\$2,000, and a non-gold medal/plaque and certificate. No multiple recipients will be awarded.

Funding: **The source of funding will be provided by NARi-Relays Electric CO. LTD. and Beijing Sifang Automation Co. Ltd. The two companies are leading providers of high-performance protective relaying control, monitoring, substation automation and control equipment for power transmission, distribution and generation applications by electric power utilities and related industries. It is very likely that there will be other corporations in China providing a portion of this funding. An award fund will be established through the IEEE Foundation.**

Eligibility: Candidates should be working in China, for the past 5 years, preferably living or working in China at the time of nomination.

Basis for Judging: The candidate dossier will consist of the nomination form and supporting letters. Materials in excess of the specified required nominations information will not be forwarded to the Selection Committee. The candidate dossier will be emailed to Selection Committee members for review and submission of rankings. In the final selection of a recommended award recipient, Selection Committee members will rank the nominees in descending rank order. Results will be tabulated and distributed to Selection Committee members for use in the selection process. The Selection Committee will meet via teleconference to review the tabulated rankings and discuss the nominees.

The Selection Committee shall designate an alternate candidate in order for additional candidate be recommended for reconsideration. No award shall be given if there are fewer than three candidate nominations (new, plus carry-over), unless special permission is granted by the CSEE Executive Council or the PES Governing Board.

Presentation: If the IEEE PES Governing Board and the Executive Council of CSEE concur with the recommendation of the Selection Committee, the award will be presented at the CSEE Annual Meetings or IEEE PES General Meeting awards luncheons, as preferred by the recipient(s) of the award. The presentation of the award shall be made by the CSEE president or the IEEE PES president, depending on the presentation venue. Regardless of the venue, high-level representatives of both CSEE and IEEE PES are to be present.

25. **IEEE Power & Energy Society Ramakumar Family Renewable Energy Excellence Award** (established in 2011)

Description: The objective is to recognize outstanding contributions in the field of developing, utilizing and integrating renewable energy resources in the national and global energy scenarios. As the world transitions into increasing use of energy technologies that have minimal carbon footprint, IEEE Power & Energy Society (PES) should play a leading role to enable this transition. The need to stimulate and encourage activity towards this goal is the primary objective of this award.

Prize: Plaque, formal certificate, honorarium of \$1,000.00 and a maximum of \$750.00 towards travel and other expenses.

Funding: **Funded through a quasi-endowment fund established through the IEEE Foundation and provided by an External Source/Donor. A corpus will be endowed by the Ramakumar family for this award. With proper management according to the rules and procedures formulated and adopted by PES, the fund balance is expected to grow over the years.**

Eligibility: Nominees must be members of IEEE and PES with clearly identifiable and valuable contributions in the field of renewable energy.

Basis for Judging: Renewable energy is a vast field. It involves different manifestations of solar energy – solar radiation, solar heat, wind, hydro and biomass. Other resources include geothermal, tides, waves. Each of these resources requires special conversion and utilization technologies. Large-scale hydro and ancient sun (coal, oil, and natural gas) are considered mature technologies and are excluded from this group. Development of innovative conversion technologies can increase collection efficiencies and improve reliability. Feeding the electrical energy generated from these resources into conventional utility grids and operating the combined system satisfactorily involves a long list of issues. Effective use of locally available renewable energy resources in remote and rural areas to improve the human living environment is a major component in this mix.

It is expected that the honoree would have valuable and sustained contributions in one or more of the areas listed above and in associated areas that specifically enable the utilization of renewable energy resources. Successful establishment and operation of renewable energy systems and their promotion to the public at large is also a worthwhile activity. All of these should be clearly documented in the nomination form and should be validated by 3 or 4 colleagues/professionals.

It is hoped that the selection by the committee will be unanimous or at least a majority of the members will agree with the decision. The committee will formulate the scoring, voting and categories of factors to be considered in making the decision.

Presentation: The award will be presented during the Awards Banquet at the PES General Meeting, typically held during the last week of July. It will be a PES award, presented on behalf of the Power and Energy Society.

26. **IEEE PES Prabha S. Kundur Power System Dynamics and Control Award** (established in 2012)

Description: As the development of the complex system known as the interconnected bulk power system unfolded around the world, it became critical to understand its nonlinear behavior as well as develop and deploy system controls vital to manage dynamic system behavior to ensure reliability. Even today, as the bulk power system evolves to accommodate an unprecedented change in resource mix and technology innovation, it is critical to manage integration of new and emergent technologies. Without this ability to model the general dynamic behavior of the bulk power system and devise suitable coordinated systems controls, the modernization of the bulk power system would be inhibited. These developments come from the work of dedicated engineers who devote their careers to the deep understanding of bulk power system dynamic behavior, including transient, small-signal, voltage, and frequency stability, along with the development of controls vital to support bulk power system security and quality of power supply.

Prize: The award consists of an appropriate memento and an honorarium of \$3,000.

Funding: **The award fund will reside in the IEEE Foundation and will be ‘seeded’ from donations by select manufacturers, vendors and individuals. The PES budget will include the amount for this award AND will be net positive with the inclusion of the award. The IEEE Development Office staff will work with IEEE PES to establish a fundraising plan and assist in coordination of donor appeals and messaging to industry prospects as well as past students of Dr. Kundur.**

Eligibility: Nominees for the award must have been an IEEE PES member for at least 10 years with tangible and visible achievements in one or more of the areas listed below. Selection factors include contributions to:

- Bulk power system dynamics and control, including transient, small-signal, voltage, and frequency stability;
- Modern system analysis tools;
- Dynamic system modeling including non-linearities, and interconnection-wide dynamic behavior and control;
- Originality and impact of technical publications;
- Professional and industry activities;
- Development of standards and operating guides;
- Achievements in other fields.

Basis for Judging: The award recognizes outstanding individuals based on their contributions to modern bulk power system dynamics and control. The scope of contributions are as listed in the Eligibility Section, above.

Presentation: The award may be presented annually, after receipt of suitable nominations, at the Power & Energy Society's General Meeting of the following year.

27. **IEEE PES Scholarship Plus Initiative** (established in 2010)

Description: The IEEE PES Scholarship Plus Initiative was established to help address the crucial challenge facing the field of power and energy – the impending shortage of power engineers needed to sustain and transform electric energy systems. For qualifying undergraduates in the USA and Canada, the program provides scholarship and industry internships/coop experience, mentoring opportunities and special recognition as a PES Scholar. The program offers up to \$7,000 and career experience support opportunities to all PES Scholars. The annual selection of scholarship recipients is administered by IEEE Power and Energy Society (PES).

Prize: The fund for the IEEE PES Scholarship Plus Initiative will be used to fund the following: A student may receive up to three years of financial support. The scholarship levels will be \$2,000, \$2,000 and \$3,000 for first, second and third years respectively. All first year recipients receive complimentary IEEE & PES Student membership.

All recipients of the IEEE PES Scholarship Plus Initiative are eligible for the John W. Estey Outstanding Scholar Award (Estey Award). The Estey Award is given annually to the top PES Scholar in each region 1-7. The John W. Estey Outstanding Scholar Award includes:

- US\$5,000 for school expenses (tuition, books, student fees, etc.);
- Twelve months of IEEE and IEEE PES Student Membership;
- Up to US \$1,000 in travel honorarium to attend the IEEE PES Annual General Meeting.

Funding: **A gift from IEEE Power & Energy Society was used to establish of the IEEE PES Scholarship Plus Initiative Fund. Additionally, an endowment was provided from the S&C Foundation to support the establishment of the PES Scholarship Plus Initiative John W. Estey Outstanding Scholar Award. These funds are administered and held by the IEEE Foundation.**

Eligibility: Scholarship Candidate must:

- Be a citizen or permanent resident of the USA or Canada and reside in IEEE Regions 1 through 7;
- Be considering a career in electric power and energy engineering;
- Be working toward an electrical engineering bachelor's degree;
- Be a full-time student at a U.S. or Canadian university or college that offers undergraduate courses in power engineering;
- Be willing to take at least three of the power engineering courses for a total of nine or more credits;
- Be currently enrolled full-time at a university/college or community college;
- Have a current GPA of 3.0 or higher on a 4.0 scale (or equivalent).

Basis for Judging: The criteria that the Regional Committees use for scoring students are the following:

- Academic preparation (GPA, reference letter from faculty member or instructor, electrical engineering major, planned courses, etc.);
- Extra-curricular activities and leadership (volunteer activities, achievements, etc.);
- Interest in engineering in general, and power and energy engineering in particular (statements from candidate, reference letter from faculty member or instructor, etc.);
- Technical quality of application (clarity and quality of writing, responses consistent with what was asked, satisfaction of eligibility criteria, etc.);
- Overall assessment of student's potential for a successful power and energy engineering career.

Renewals are based on satisfaction of renewal criteria. The following criteria are used:

- Continues to meet the eligibility criteria;
- Making academic progress as evidenced by taking courses in power and energy engineering toward an education foundation for a power and energy engineering career;
- Maintained a minimum of a B overall grade average across all courses taken at the university;
- Obtained career experience, such as with a power engineering internship, cooperative, or equivalent;
- Demonstrated interest in learning more about power engineering careers, such as through mentoring, field trips, attendance of information seminars, attendance of PES events, research projects in power engineering, short courses or on-line courses on power-related subjects, and participation in a PES chapter if one is available.

Presentation: All scholarship recipients receive a certificate which is sent to contact at their school for presentation at a suitable occasion.

28. **IEEE PES Wanda Reder Pioneer in Power Award** (established in 2013) (revised 2015)

Description: The IEEE PES Women in Power Committee is created to foster a more diverse leadership by supporting career advancement, networking and education of women in the electric power and energy industry. One important way this mission is supported is through the formal recognition of a worthy female member of this community.

The IEEE PES Wanda Reder Pioneer in Power Award seeks to recognize a deserving female in the field of power engineering. The Award is intended to provide visibility to the awardee's efforts, accomplishments and future potential while empowering her to be an inspiration and role model for other women in the industry.

The recipient shall have demonstrated a high level of influence in technical development, infrastructure enhancement, entrepreneurial/management practices or education within the field of electric power and energy engineering.

In addition to recognizing the recipient, the Award brings attention to the value of fostering a diverse talent pool. It further empowers the recipient to have a greater influence on the growth and development of others in the industry.

The award will be in honor of the first female president of IEEE PES, Ms. Wanda Reder.

Prize: The awardee will receive a plaque and a monetary prize/honorarium of US\$1,500.

Funding: **The award will be funded from an endowment seeded from a commitment that has been secured by an US-based industry supporter, managed through the IEEE Foundation.**

Eligibility: Nominees for the award must be female and at least senior members of the IEEE PES.

Basis for Judging: Tangible and visible achievements in one or more of the following:

- Innovation and technology development;
- Entrepreneurship and innovative business models;
- Education and mentorship;
- Related achievements.

Presentation: The award will be presented annually (if a qualified candidate is nominated) at the PES General Meeting in July, in recognition of achievements during the previous calendar year.

29. **IEEE PES Outstanding Chapter Volunteer Award** (established in 2015)

- Description:* To recognize outstanding service by an individual to a local PES Chapter (one award to be given annually by each Chapter).
- Prize:* One Plaque for each winning individual (one per chapter, per year if qualified candidates are received).
- Funding:* The award would be funded by the PES budget for Chapters which can support this award.
- Eligibility:* Must be an active PES member.
- Basis for Judging:* Recipient shall have demonstrated notable volunteer support of PES Chapter activities, broader PES activities, or other volunteer activities related to the Power and Energy community. Exact details shall be at the discretion of the local chapter to identify factors to be considered, scoring, committee voting procedure, etc.
- Presentation:* At the discretion of the local chapter.

30. **IEEE Power & Energy Society Erich Gunther Future Power Innovator Scholarship** (established in 2016; revised Fund Category, Prize, Schedule 2018)

- Description:* To recognize those students in a power engineering discipline that are dedicating their education to the power engineering sector and pushing the bounds of current thought to make the power and energy industry better. This award is established to recognize the future of our industry through the young people who will propel a vision beyond the one we can now see for ourselves and will help strive to drive the lifeblood of our current world, electricity, to a new, and even more brilliant, future.
- Prize:* One award for both undergraduates and graduates consisting of: US\$2,500 scholarship payable to the recipients' school to assist the student with school expenses, plaque, and a travel stipend of up to \$750 to attend the presentation ceremony.
- Funding:* **The award would be funded by an endowment managed through the IEEE Foundation.**
- Eligibility:* Must be a full time student attending a U.S. university or college that offers courses in power engineering. Individuals must be in their final two years of receiving their Bachelor's degree or working towards achieving their Master's degree in Electrical Engineering.
- No current member of the IEEE Board of Directors, the IEEE PES Governing Board, the IEEE PES Awards and Recognition Committee, the IEEE PES Erich Gunther Future Power Innovator Scholarship Committee, or IEEE staff may be candidates, or endorse candidates.
- Basis for Judging:* Selection will be based on evaluation of accomplishments as revealed by documented testimonials from peers, teachers or industry members. Recipients must be electric power utility students enrolled and in good standing and have a dedicated focus in electric power sector. Emphasis will be on the creativity and dedication to the electric power industry and a demonstrated passion for the betterment of electricity for mankind. It is possible for collaborators to receive the award jointly in which case the monetary portions of the award will be divided among the recipients. A Committee majority vote will determine the recipient.
- Presentation:* The award will be presented annually at a regularly scheduled PES meeting of the recipient's choice. The presentation of the award shall be preferably made by the PES President.

31. **IEEE International Future Energy Challenge Award** (established in 2010; revised presentation 2014; revised prize 2017)

- Description:* The awards will be given to the best performing teams in the IEEE International Future Energy Challenge design competition. Topics for each Competition will change. The award structure will remain the same. The prizes provided to schools are intended to benefit the team members and student team design project activities.

Prize: The award would be annual with one topic per year, and consist of a certificate and honorarium for winning teams paid to their university or IEEE Section or Chapter. See tiers and description below.

IEEE International Future Energy Challenge

1st Prize: US\$10,000

2nd Prize: US\$5,000

3rd Prize: US\$3,000

Potential 4th Prize: US\$1,000 (if budget allows) of up to 3

Fourth prize is intended to acknowledge remarkable solutions in detail, proposed by teams not winning the 1st to 3rd Prizes. While a 1st, 2nd, and 3rd Prize will always be awarded, the 4th Prize is only applicable if the budget allows.

Funding: IEEE Power Electronics Society US\$40,000/Competition; IEEE Industry Applications Society, US\$25,000; IEEE Power & Energy Society, US\$20,000; Power Source Manufacturers Association, US\$10,000.

The amounts indicated above might be renegotiated on a yearly basis prior to the announcement of the next competition, depending on the financial situation of the involved societies and the location of the competition, influencing accountable travel cost; however prior to announcing the competition, funds of in total at least US\$75,000 must be guaranteed for it by the funding societies. A society must provide funds of at least US\$10,000 to be mentioned as a sponsor of the competition.

Eligibility: Any University Student Team participating in the IEEE International Future Energy Challenge. Visit Society website for more details.

Basis for Judging: During the final competition event, the participating teams need to demonstrate their design that meets the specification. The team with highest score will receive the award.

Awards titles for Prizes 1, 2 and 3 will be declared by the judging team based upon the finalist submissions. (Flexibility may be necessary here to award achievements in detailed areas).

Presentation: The awards will be presented after the decision during the IEEE International Future Energy Challenge final competition.

32. **IEEE Power & Energy Society Outstanding Student Scholarship** (established in 2018) (revised 2020)

Description: To recognize PES student members from around the world who have chosen an academic path leading to an electric power and energy engineering career. Recipients will be chosen based on their academic achievements, contributions to meeting community and humanitarian needs, and leadership in advancing student engagement within PES.

Prize: Multiple Scholarships Given Annually – Each recipient received a full prize

- Each recipient (up to Twenty (20)) will receive a plaque and a prize amount of US\$10,000. The prize funds will be distributed directly to the student.
- Each recipient will also receive complimentary housing and conference registration if they are able to participate & attend their corresponding PES Regional meeting.
 1. The housing and conference registration fee will come from the PES Budget if they are being recognized at the corresponding events within their Region – PES General Meeting (Regions 1-7), PES Transmission & Distribution Conference & Exposition (Region 1 – 7), PES ISGT Latin America (Region 9), PES ISGT Europe (Region 8) and PES ISGT Asia (Region 10)..

Funding: **The award would be funded by an endowment managed through the IEEE Foundation.** Funds already allocated in the annual PES budget will be used to cover the complimentary housing and conference registration expenses for the recipients at their corresponding PES Regional meeting.

Eligibility: To be eligible, a student must be:

- An IEEE PES Student Member or a PES member of any grade in good standing

- A full-time student who is pursuing a Master's of Science degree in Electrical Engineering (MSEE)/Masters of Engineering (M.Eng) or an equivalent designation with a focus in electrical power engineering
- Must be attending a university or college that has an active IEEE Student Branch which offers a substantive educational program in electrical power engineering
- Committed to working in the power and energy engineering career field

No current member of the IEEE Board of Directors, the IEEE PES Governing Board, the IEEE PES Awards and Recognition Committee, the IEEE PES Outstanding Student Scholarship Selection Committee, or IEEE staff may be candidates, or endorse candidates.

Basis for Judging: Selection will be based on the evaluation of submitted material that will include, in part, testimonials from peers, teachers or industry members. Emphasis will be on academic achievements, contributions to meeting community and humanitarian needs, and leadership in advancing student engagement with PES.

- Description of degree program with emphasis on the degree requirements, power and energy engineering courses offered, number of students, and faculty
- Transcript of academic record with minimum requirement of weighted average grade (or equivalent) in courses to date greater than 90%
- Description of courses taken related to power and energy engineering and description of the student's academic plan for the remaining courses to be taken
- Academic presentations such as student posters or academic papers/articles
- Internships and student research projects
- Awards/recognitions received for academic performance or for service to the academic or broader community.
- Activities and accomplishments in local PES activities particularly in promoting student engagement with PES
- Community and humanitarian activities and accomplishments, particularly those relevant to energy and society challenges
- At least two but no more than four letters of references/recommendation from IEEE Members. It is preferred that one recommendation letter come from the head of the degree-granting department or college.

For the purposes of this scholarship, power and energy education and research topics underlying this award focus on electric power engineering associated with grid operations, planning and maintenance. Power electronics is included. Other engineering topics, such as communications and IT, are included to the extent they address power engineering challenges.

Presentation: Recipients will be recognized at a regularly scheduled PES meeting (Conference, Chapter, Student Branch meeting, etc). The recipients will be announced during the PES General Meeting Awards Ceremony.

IEEE PRODUCT SAFETY ENGINEERING SOCIETY
PSE-43 (Division VI)

For all Product Safety Engineering Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Service Acknowledgement Award – IEEE PSES Certificate of Appreciation Award (established in 2013)

Description: To recognize members of the Society for performing a service to the Society in a given calendar year.

Prize: Certificate of Appreciation.

Funding: Funded by the IEEE Product Safety Engineering Society.

Eligibility: Member of the IEEE Product Safety Engineering Society.

Basis for Judging: Service to the IEEE Product Safety Engineering Society.

Presentation: IEEE PSES awards are presented at the annual ISPCE.

2. Service Acknowledgement Award – IEEE PSES Certificate of Recognition Award (established in 2013)

Description: To recognize non-members of the IEEE Product Safety Engineering Society for contributions to the Society in a given calendar year.

Prize: Certificate of Recognition.

Funding: Funded by the IEEE Product Safety Engineering Society.

Eligibility: Non-member of the IEEE Product Safety Engineering Society.

Basis for Judging: Contributions to the IEEE Product Safety Engineering Society.

Presentation: IEEE PSES awards are presented at the annual ISPCE.

3. IEEE PSES Chapter-of-the-Year Award (established in 2013)

Description: To recognize the most outstanding IEEE Product Safety Engineering Society chapter in recognition of their contributions to and promotion of the Society through its meetings, programs, and member services. This award is to be provided for activities in the previous calendar year.

Prize: Certificate and \$250 – Given to the Society chapter recognized for promotion of PSES through meetings, programs, and services. The name of the Society shall appear prominently on the certificate associated with the award.

Funding: Funded by the IEEE Product Safety Engineering Society.

Eligibility: This award is given to the most outstanding Society chapter in recognition of its contributions to and promotion of the Society through its meetings, programs, and member services. A Chapter-of-the-Year winner in one year shall not be eligible in the subsequent year.

Basis for Judging: The awards program shall be coordinated by the Chapter-of-the-Year Administrator under the oversight of the Awards Committee and responsibility of the VP – Member Services. This award is given to the most outstanding Society chapter in recognition of its contributions to and

promotion of the Society through its meetings, programs, and member services. The award is for the year immediately prior to the award presentation.

Presentation: IEEE PSES awards are presented at the annual ISPCE.

4. **IEEE Product Safety Engineering Society Sustained Service Award** (established in 2018)

Description: The IEEE PSES Sustained Service Award is presented to recipient that have for an extended period of time (ie, >10 years) dedicated their time and efforts to support the development of the PSES.

Prize: The prize for the single eligible recipient per year is a plaque and a monetary gift of US\$500 (or equivalent in other currencies). The award ceremony is conducted at the annual PSES symposium. Should there be a year where there is no annual PSES symposium, but still a qualified recipient for the award, the plaque/monetary gift will be awarded via correspondence and shipped to the recipient. There is no travel allowance for recipient to travel to the award ceremony; if the recipient cannot accept the award in person, the plaque/monetary gift will be awarded at the award ceremony, and then shipped to the recipient. Single Annual Award - Only One Allowable Recipient Selected Annually.

Funding: Funded by the IEEE Product Safety Engineering Society.

Eligibility: A recipient must have, for a minimum of 10 years, dedicated their time and efforts to support the development of the PSES. The recipient must be a minimum Senior member (ie, Senior, Life or Fellow) in good standing with IEEE and a member of PSES. The recipient must have served at least one term on the Board of Directors/Board of Governors of the PSES since the inception (including the time as a technical society within the EMCS) or served at least one term as part of the executive team.

Basis for Judging: The IEEE Sustained Service Award is presented to recipient(s) that have for an extended period of time (ie, >10 years) dedicated their time and efforts to support the development of the PSES. The definition of “dedicated their time and efforts to support the development of the PSES” is not 100% defined per se, however with the competence and experience of the awards committee members and the nomination details that have been provided, it is expected that the final judgment and outcome will be clear, and with 3 committee members, a simple majority is used to decide if a unanimous outcome is not achieved.

Presentation: The award is presented at the annual PSES symposium, generally in the month of May. The award committee chair, or his designate, makes the award presentations at the annual PSES symposium.

IEEE PROFESSIONAL COMMUNICATION SOCIETY

PC-26 (Division VI)

For all Professional Communication Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Alfred N. Goldsmith Award for Distinguished Contributions to Engineering Communication (revised 1999, 2001)

Description: To recognize outstanding contributions to the field of technical communication and thus the goals of the IEEE Professional Communication Society.

Prize: Plaque

Funding: Funded by the IEEE Professional Communication Society.

Eligibility: Open to all.

Basis for Judging: Meritorious service, originality, continuity, and outstanding achievement.

Presentation: Annually, at PCS Conference or at a suitable Section meeting.

2. Emily K. Schlesinger Award for Distinguished Service to the Professional Communication Society (established in 1994) (revised 2001)

Description: To recognize outstanding service to the Society by individuals who have actively furthered technical and professional communication through their continued contribution to the IEEE Professional Communication Society.

Prize: Plaque

Funding: Funded by the IEEE Professional Communication Society.

Eligibility: Must be a member of IEEE and PCS or PCS Affiliate member.

Basis for Judging: Exceptional service to the PCS.

Presentation: At the Annual Meeting.

3. The Rudolph J. Joenk, Jr. Award for the Best Paper in the *IEEE Transactions on Professional Communication*

Description: To recognize outstanding papers published in the *IEEE Transactions on Professional Communication*.

Prize: Plaque

Funding: Funded by the IEEE Professional Communication Society.

Eligibility: Authors of original papers published in the *IEEE Transactions on Professional Communication* or in the PCS Conference Record.

Basis for Judging: Quality, originality, and significance.

Presentation: May be awarded annually at PCS Conference or at a suitable Section meeting.

4. **Ronald S. Blicq Award For Distinction In Technical Communication Education** (established in 2001)

Description: To recognize exemplary contributions to the profession of technical communication, to IEEE and PCS, and to the Transactions. To acknowledge innovative educators who have made a difference in the ways that technical communication is taught and has helped engineers to improve their communication skills through their teaching and curricular design. Such education goes on at many levels, including pre-college settings, in undergraduate and graduate university degree programs, and in professional life through workshops and seminars.

Prize: Plaque

Funding: Funded by the IEEE Professional Communication Society

Eligibility: Open to all educators, including K-12, university, and industry-focused consultants, who have made an impact on the teaching of engineering communication through innovative methodology or curriculum.

Basis for Judging: Meritorious service, outstanding achievement

Presentation: Annually, at PCS Conference.

5. **IEEE James M. Lufkin Award for Best Paper at International Professional Communication Conference** (established in 2008)

Description: To recognize innovative and relevant research, as well as outstanding presentation of ideas, in a paper published in the *Proceedings* of the PCS International Professional Communication Conference (IPCC).

Prize: Plaque

Funding: Funded by the IEEE Professional Communication Society

Eligibility: Awardee (or awardees in the case of jointly-authored projects) must write proposal to IPCC Committee and, when proposal is accepted, submit written paper for conference *Proceedings* in accordance with provided guidelines and specifications.

Basis for Judging: Originality of research, relevance of research to practitioners of engineering communication, and excellence of writing

Presentation: Presented at the annual awards banquet, held in conjunction with IPCC.

IEEE RELIABILITY SOCIETY

R-07 (Division VI)

For all Reliability Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Annual Reliability Society Award (revised 1997)

Description: To recognize outstanding contributions to the Reliability discipline.

Prize: \$1,500 and Plaque, plus up to \$1,000 for travel expenses for recipient to attend the January IEEE Reliability Society AdCom Awards Banquet.

Funding: Funded by the IEEE Reliability Society.

Basis for Judging: Primary consideration: impact of contribution on the advancement of reliability theory, education, engineering or its management.

Presentation: Annually, at an IEEE Reliability Society AdCom Meeting with an Awards Ceremony.

2. Chapters Awards (revised 1994)

Prize: \$800 and Citation for 1st place, \$600 and Citation for 2nd place, \$400 and Citation for 3rd place; and \$200 for all other Chapters submitting complete entries.

Funding: Funded by the IEEE Reliability Society.

Eligibility: IEEE Reliability Society Chapters in operation August 1st prior to award period (August 1 - July 30).

Basis for Judging: Membership; meeting attendance; number of meetings, workshops or conferences; training sessions; written papers; technical tours; and other pertinent activities.

Presentation: Annually, at the IEEE Reliability Society Fall AdCom meeting.

3. Education Award (established in 1997)

Description: To recognize outstanding contributions in the area of reliability education. (Note: this includes areas such as availability, maintainability, system safety and quality).

Prize: \$250 and Plaque

Funds: Funded by the IEEE Reliability Society.

Eligibility: Open to all members of the IEEE Reliability Society.

Basis for Judging: The Vice President - Membership along with the Chairpersons of the Professional Development and Education Committees recommend candidates (e.g., new text books; new courses or programs developed by universities, industry or government; new short courses or tutorials developed). The AdCom votes on the proposed candidates. No more than one award may be given in a year, unsuccessful candidates may be resubmitted in a following year. The AdCom may elect not to give an award in this area in a particular year.

Presentation: At any IEEE Reliability Society AdCom Meeting with an Awards Ceremony.

4. Best Paper Award - IEEE Transactions on Reliability (established in 1997)

Description: To recognize the best paper as published in the *IEEE Transactions on Reliability*.

Prize: \$250 (to be shared equally among all authors) and framed Certificate for each author

Funds: Funded by the IEEE Reliability Society.

Eligibility: All authors with papers published in the *IEEE Transactions on Reliability* in the calendar year for which the award is being made.

Basis for Judging: Each editor and associate editor may nominate one paper for the award each year. Each editor and associate editor votes for three papers from the list (scored 4, 2, and 1). The paper with the highest score is the winner if it is four points (one first place vote) higher than the next paper. Otherwise a second vote is taken among all papers within six points of the leader. Each editor and associate editor votes for one paper from the list. The highest score wins; in the event of a tie, the editor may select a winner or divide the prize money and issue certificates to each winner.

Presentation: At any IEEE Reliability Society AdCom Meeting with an Awards Ceremony.

5. **Certificate of Achievement - Chapter Chairperson** (established in 1997)

Description: To recognize the Chapter Chairperson's effort and to enhance the Chapter's relationship with the AdCom.

Prize: Framed Certificate and token gift such as a pen and pencil set with the IEEE Reliability Society logo and/or the IEEE logo on it.

Funds: Funded by the IEEE Reliability Society.

Eligibility: All IEEE Reliability Society Chapter Chairpersons for the year in question who conducted programs acceptable to the Vice President - Membership and the AdCom Chapter Chairperson and submit a completed entry for the Reliability Chapters Award.

Presentation: At any IEEE Reliability Society AdCom Meeting with an Awards Ceremony.

6. **Company Recognition Award** (established in 1997)

Description: To recognize a Company's support to an IEEE Reliability Society Chapter during the year. Any Chapter may nominate a Company that has performed an outstanding service for them during the year for this award. The AdCom may present several awards in a year but the maximum number per Chapter is one per year.

Prize: Plaque

Funds: Funded by the IEEE Reliability Society.

Eligibility: All Companies nominated to AdCom for the award by the IEEE Reliability Society Chapters (no more than one nomination per year per Chapter).

Presentation: The AdCom will make the plaque available to the Chapter to present to the Company at either a Chapter Meeting or at a Chapter Tour of the Company's facility.

7. **IEEE Reliability Society Lifetime Achievement Award** (established in 2003) (revised 2004)

Description: To recognize sustained outstanding contributions to the field of Reliability Engineering. Typically the contributions will span the career of the individual, usually in excess of 25 years.

Prize: \$1,500 and suitably engraved brass Plaque, plus up to \$1,000 for travel expenses for recipient to attend the January IEEE Reliability Society AdCom Awards Banquet.

Funds: Funded by the IEEE Reliability Society.

Eligibility: Open to all members of the IEEE Reliability Society.

Basis for Judging: The contributions meriting this award must clearly be within the area of Reliability Engineering or a closely related field; Nominations must come from a peer or supervisor of the nominee; Self nominations or nominations from a member of the IEEE Reliability Society Nominations and Awards Committee will not be accepted; Voting members of the IEEE Reliability Society ADCOM are ineligible; A candidate nominated for this award may not serve as a nominator for another candidate for the year the candidate is being considered; The Nominations and Awards Committee will make a recommendation for endorsement by the full voting ADCOM; No more than one award may be given in a calendar year; Unsuccessful candidates may be resubmitted in a following year; The ADCOM may elect not to give an award in a particular year.

Presentation: Annually, at the IEEE Reliability Society Awards Dinner at the RAMS Symposium.

8. **IEEE Reliability Society Student Achievement Award** (established in 2021)

Description: To recognize outstanding undergraduate and graduate students who have shown interests in a career and profession in reliability related disciplines.

Prize: Each recipient receives a \$1,000 USD prize and a certificate signed by the Reliability Society President. Multiple Awards given annually; up to 5 student achievement awards in one year.

Funds: Funded by the IEEE Reliability Society.

Eligibility: Full-time students pursuing a bachelors or higher degree in STEM fields with a focus on reliability engineering or related concentrations. An academic advisor or professor of the nominee (e.g. department head, academic supervisor, or local RS chapter chair) should make and submit the nomination. IEEE or society membership is not required. The nomination package should consist of: (1) a resume of the nominee with concise descriptions of the accomplishments and services of the student in the area of reliability and related field. (2) a list of courses taken in reliability or related topics, and any leadership and service activities in promoting reliability society or general STEM disciplines, (3) transcripts showing the student is a full-time student.

Basis for Judging: Merit-based selection, achievement in reliability field and relevant services to the field in reliability. For example: (1) evidence of student's interests in reliability and related engineering career pursuit; (2) technical contributions to the field of reliability engineering; (3) leadership and services to IEEE RS or local reliability society chapters.

Presentation: The names of the award recipients will be posted to the RS website and newsletters.

IEEE ROBOTICS AND AUTOMATION SOCIETY

RA-24 (Division X)

For all Robotics and Automation Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval

1. **IEEE Transactions on Robotics King-Sun Fu Memorial Best Paper Award** (established in 1993) (revised 2005)

Description: To recognize the best paper published annually in the *IEEE Transactions on Robotics*.

Prize: \$1,000 and Certificate

Funding: **Funded by the IEEE Robotics and Automation Society through an endowment managed by the IEEE Foundation.**

Eligibility: Authors of papers published in the *IEEE Transactions on Robotics* during the calendar year preceding the award.

Basis for Judging: Technical merit, originality, potential impact on the field, clarity of presentation, and practical significance for applications.

Presentation: At annual IEEE International Conference on Robotics and Automation, normally held in May of each year.

2. **IEEE ICRA Best Conference Paper Award** (established in 1994; revised name and criteria 2017)

Description: To recognize the best conference paper presented at the IEEE International Conference on Robotics and Automation (ICRA).

Prize: A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.

Funding: Funded by the IEEE Robotics and Automation Society.

Eligibility: All papers presented at the annual ICRA conference are eligible. There are no restrictions as to organization, nationality, race, creed, sex, or age. There is no requirement for IEEE membership.

Basis for Judging: A selection committee will be appointed by the ICRA Awards Committee. Papers are judged based on technical merit, originality, potential impact on the field, clarity of the written paper, and quality of the conference presentation.

Presentation: The award will be announced and presented at the same annual IEEE ICRA conference.

3. **IEEE ICRA Best Student Paper Award** (established in 1993; revised name and criteria 2017)

Description: The award recognizes the best paper authored primarily by a student and presented by the student at the IEEE International Conference on Robotics and Automation (ICRA).

Prize: A single award of \$1,000 to the student first-author and certificates for all individual authors. In the exceptional case that two papers are deemed worthy, the student first-author of each paper will receive a \$500 prize.

Funding: The award is funded by the IEEE Robotics and Automation Society.

Eligibility: All student papers presented at the annual ICRA conference are eligible. There is no requirement for IEEE membership. There are no restrictions as to organization, nationality, race, creed, sex, or age.

Basis for Judging: A selection committee will be appointed by the ICRA Awards Committee. Papers are judged based on technical merit, originality, potential impact on the field, clarity of the written paper, and quality of the conference presentation.

Presentation: The award will be announced and presented at the same annual IEEE ICRA conference.

4. IEEE Early Academic Career Award in Robotics and Automation (established in 1996)(revised Eligibility 2018)

Description: To recognize academics who have made an identifiable contribution or contributions which have had a major impact on the robotics and/or automation fields.

Prize: \$1,000, Plaque and Certificate

Funds: **Funded by the IEEE Robotics and Automation Society through an endowment managed by the IEEE Foundation.**

Eligibility: Any current member of the IEEE Robotics and Automation Society who is in the early stage of his/her career in the robotics and/or automation field, i.e., less than 7 years after being granted his or her highest earned academic degree up to a doctorate degree.

Basis for Judging: 1) Current and potential impact of the submitted contribution (or contributions) on the fields of robotics and/or automation; 2) Contributions to the Society and the profession; 3) Educational contributions. Nominations for the award will be solicited by the Awards Committee; a nomination may be made by someone familiar with the individual's work. Three references will be required. The nominator and the references must be Society members. Scoring by the Awards Committee will be on a scale of 1 to 10 with 10 being the highest; the overall score for a nominee will be obtained by summing the scores determined by each Committee member for that nominee; awardees will be those nominees receiving the top scores in each of the two categories; the Committee may modify the scoring method.

Presentation: At the annual IEEE ICRA held in the spring of each year.

5. IEEE Early Government or Industry Career Award in Robotics and Automation (established in 1996) (revised Eligibility 2018)

Description: To recognize individuals working in government or industry who have made an identifiable contribution or contributions which have had a major impact on the robotics and/or automation fields.

Prize: \$1,000, Plaque and Certificate

Funds: **Funded by the IEEE Robotics and Automation Society through an endowment managed by the IEEE Foundation.**

Eligibility: Any current member of the IEEE Robotics and Automation Society who is in the early stage of his/her career in the robotics and/or automation field, i.e., less than 7 years after being granted his or her highest earned academic degree up to a doctorate degree.

Basis for Judging: 1) Current and potential impact of the submitted contribution (or contributions) on the fields of robotics and/or automation; 2) Contributions to the Society and the profession; 3) Educational contributions. Nominations for the award will be solicited by the Awards Committee; a nomination may be made by someone familiar with the individual's work. Three references will be required. The nominator and the references must be Society members. Scoring by the Awards Committee will be on a scale of 1 to 10 with 10 being the highest; the overall score for a nominee will be obtained by summing the scores determined by each Committee member for that nominee; awardees will be those nominees receiving the top scores in each of the two categories; the Committee may modify the scoring method..

Presentation: At the annual IEEE ICRA held in the spring of each year.

6. **Pioneer in Robotics and Automation Award** (established in 1998) (revised 2008, 2010)

Description: To recognize individuals who by virtue of initiating new areas of research, development or engineering have had a significant impact on development of the robotics and/or automation fields. The award is intended for people who are in the mid or late portions of their careers.

Prize: \$2,000, a plaque and a certificate. Up to two awards will be given each year, and no award will be given if no qualified candidate is identified.

Funding: **Funded by the IEEE Robotics and Automation Society through an endowment managed by the IEEE Foundation.**

Eligibility: Any person active in the fields of robotics and/or automation, whether or not they are members of IEEE Robotics and Automation Society, are eligible for the award. Members of the Society who have worked as part of a team will also be eligible provided their contributions can be clearly identified by the Awards Committee.

Basis for Judging: Factors include: the pioneering nature of the contribution, whether academic or industrial; the impact or the accumulated impact of the candidate's contribution or contributions on the fields of robotics and/or automation.

Presentation: Annually, at the International Conference on Robotics and Automation (ICRA), which is normally held in the mid-April to mid-May period.

7. **IEEE RAS Distinguished Service Award** (established in 2001; revised Name, Prize, Eligibility, and Basis for Judging 2017)

Description: To recognize an individual who has performed outstanding service for the benefit and advancement of the IEEE Robotics and Automation Society (RAS).

Prize: \$1,000 and Plaque

Funding: Funded by the IEEE Robotics and Automation Society

Eligibility: RAS members with outstanding service in one or more of the following areas: Conferences and meetings, publications, editors, administrative committee, Chapter service, or other distinguished service and activities for the RA Society.

Basis for Judging: Factors that will be considered: impact of service and contributions to the Society, activity, duration, breadth of participation and cooperation.

Presentation: At most 3 awards will be given per year. The awards will be announced and presented at the annual IEEE International Conference on Robotics and Automation. (No award will be given if no qualified candidate is nominated).

8. **IEEE Transactions on Automation Science and Engineering Best Paper Award** (established in 2005)

Description: To recognize the best paper of the *IEEE Transactions on Automation Science and Engineering* (T-ASE) published in the previous calendar year.

Prize: \$1,000 to be shared by all authors and certificates for individual authors.

Funding: **Funded by the IEEE Robotics and Automation Society through an endowment managed by the IEEE Foundation.**

Eligibility: All papers published in the T-ASE during the previous calendar year.

Basis for Judging: Factors to be considered: Technical merit, originality, potential impact on the field, clarity of presentation, and practical significance for applications.

Presentation: The awards will be announced and presented at the annual IEEE Conference on Robotics and Automation or the IEEE Conference on Automation Science and Engineering (no award will be given if no qualified candidate is nominated).

9. **IEEE Transactions on Automation Science and Engineering Googol Best New Application Paper Award** (established in 2005)

Description: To recognize the Best New Application Paper of the *IEEE Transactions on Automation Science and Engineering* (T-ASE) published in the previous calendar year.

Prize: \$1,000 to be shared by all authors and certificates for individual authors.

Funding: Funded by the Googol Technology (HK) Ltd. with a five-year commitment (2004-2008).

Eligibility: All papers published in the T-ASE during the previous calendar year.

Basis for Judging: Factors to be considered: The significance of new applications, technical merit, originality, potential impact on the field, and clarity of presentation.

Presentation: At the annual IEEE International Conference on Robotics and Automation or the IEEE Conference on Automation Science and Engineering (no award will be given if no qualified candidate is nominated).

10. **IEEE Inaba Technical Award for Innovation Leading to Production** (established in 2006)

Description: To recognize original innovative research and concept.

Prize: \$1,000 and Plaque. In case there are multiple winners, each recipient will receive a plaque and the honorarium will be split equally between the recipients. Up to one award will be given annually to the researcher (or team of researchers) whose conceptual innovation has been evolved into a commercialized product based on the fundamental robotics and automation technology introduced by the researcher(s).

Funding: **Funded by a gift from Dr. Seiueemon Inaba for an initial period of up to 10 years, managed by the IEEE Foundation.**

Eligibility: There is no requirement for IEEE membership. There are no restrictions as to organization, nationality, race, creed, sex or age. In order to be eligible for the award, the initial conceptual innovation must have been described in a paper presented at a RAS sponsored/co-sponsored conference or have appeared in an RAS sponsored/co-sponsored publication; typically the appearance of the initial concept will be substantially before the time of the award..

Basis for Judging: Conceptual innovation has been evolved into a commercialized product based on the fundamental robotics and automation technology introduced by the researcher(s). Nominations should cite and describe the original work that has been translated into commercial application as well as the commercial product and its success. The current and future impact of the commercial product is a fundamental element of the merit for selection.

Presentation: Presented at the annual ICRA.

11. **IEEE/IFR Invention and Entrepreneurship Award** (established in 2006) (revised 2008)

Description: To recognize the entrepreneurial commercialization of ideas into actual products.

Prize: \$2,000 and Plaque. In case there are multiple winners, each recipient will receive a plaque and the honorarium will be split equally between the recipients. Up to one award will be given annually to the individual or individuals in a company whose entrepreneurial efforts have taken an earlier conceptual innovation and evolved it into a commercialized product. The winner(s) are expected to present the underlying principles of the concept, how they transformed this into the product, and demonstrate the commercial product realized from the concept at the conference at which the award is given. Just a prototype is not acceptable.

Funding: Sponsored by RAS and IFR (International Federation of Robotics). Financial responsibility for the award will be shared between RAS and IFR, each organization responsible for \$1,000 annually. RAS will provide funding for the first five awards it funds. Effort will be undertaken to attract sponsorship from commercial companies.

Eligibility: There is no requirement for IEEE membership. There are no restrictions as to organization, nationality, race, creed, sex or age.

Basis for Judging: Entrepreneurial commercialization of ideas into actual products. Nominations should cite and describe the original work that has been translated into commercial application as well as the commercial product and its success and novelty. The nomination must also describe the unique characteristics of the transformation into the commercialized product that justify the award. The current and future impact of the commercial product/application and its sustained competitive advantage is a fundamental element of the merit for selection. The presentation of the application has to be clear and is considered as well.

Presentation: Presented at an annual ICRA conference.

12. IEEE Robotics and Automation Most Active Technical Committee Award (established in 2006)

Description: To encourage efforts among IEEE Robotics and Automation Society (RAS) Technical Committees and to annually recognize outstanding performance by a TC.

Prize: \$1,000 and a Certificate.

Funding: Funded by the IEEE Robotics and Automation Society to a co-chair of the winning TC with the understanding that the funds will be used to support a TC related event.

Eligibility: The TC must have been active at least one year when the nomination is made.

Basis for Judging: Factors for consideration are: breadth and quality of TC activities in recruiting members, arranging workshops, tutorials, special issues, and other events, and participating in conferences, reviewing, and organizing sessions. No award will be given if no qualified candidate is identified.

Presentation: One award will be given per year, i.e., in year “N” for activity occurring in year “N-1”. The award will be announced and presented at the annual IEEE International Conference on Robotics and Automation.

13. IEEE Robotics and Automation Chapter-of-the Year Award (established in 2001) (revised 2006)

Description: To encourage IEEE Robotics and Automation Society (RAS) Chapters to serve their members, and to recognize the outstanding performance by a Chapter in serving its members.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Robotics and Automation Society.

Eligibility: The chapter must have been active at least one year when the nomination is made. The eligibility requirements are outstanding activities and services to its local RAS members in one or more of the following areas: technical meetings, tours and conferences, seminars and/or tutorials, other services and activities for the local members of the RA Society.

Basis for Judging: Factors for consideration are: services to its members both in the technical area and in the educational area, membership advancements, senior member and fellow nominations, and membership development. No award will be given if no qualified candidate is identified.

Presentation: One award will be given per year. The award will be given in year “N” for activity in year in year “N-1”. The award will be announced and presented at the annual IEEE International Conference on Robotics and Automation.

14. IROS Harashima Award for Innovative Technologies (established in 2007)

Description: To honor Professor Fumio Harashima, founding chair of the IROS conferences, by recognizing contributions of an individual of the IROS community who has pioneered activities in robotics and intelligent systems.

- Prize:* \$2,000 and Plaque.
- Funding:* The cost to maintain this award will be covered by surplus funds that result from each IROS conference (IEEE-RAS, IEEE-IES, Robotics Society of Japan, SICE). In case the surplus is smaller than \$2000, the award will not be presented at that conference. The candidate will be awarded at the next earliest conference that will have a surplus of more than \$2000.
- Eligibility:* The recipient must have created a new research area and/or technology for intelligent robots and systems. The recipient must have presented his or her contribution in one or more past IROS conferences
- Basis for Judging:* Factors that will be considered are: a created area and/or technology for intelligent robots and systems, achievements for the advancement of the field of intelligent robots and systems, and activities in robotics and intelligent systems.
- Presentation:* Up to one award will be given annually at the IEEE/RSJ International Conference on Intelligent Robots and Systems.

15. **IEEE ICRA Best Paper Award in Service Robotics** (established in 2008; revised name and criteria 2017)

- Description:* The award recognizes the best paper in Service Robotics presented at the IEEE International Conference on Robotics and Automation (ICRA).
- Prize:* A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.
- Funding:* The award is sponsored by KUKA Roboter GmbH for a period of 5 years (2015-2019). If funding becomes unavailable, the award will not be given.
- Eligibility:* All papers presented at the annual ICRA conference are eligible. There is no requirement for IEEE membership. There are no restrictions as to organization, nationality, race, creed, sex or age. Authors of service robotics papers are encouraged to include keywords related to service robotics in their keyword list to help the ICRA Awards Committee identify papers to consider for the award.
- Basis for Judging:* A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of service robotics. Papers are judged based on technical merit, originality, relevance and potential impact on the service robotics field, clarity of the written paper, and quality of the conference presentation.
- Presentation:* The award will be announced and presented at the same annual IEEE ICRA conference.

16. **IEEE CASE Best Student Paper Award** (established in 2008) (revised Title, Description, Prize, Funding, Eligibility, Basis for Judging, and Presentation 2018)

- Description:* This award recognizes the best paper authored primarily by a student and presented by the student at the IEEE International Conference on Automation Science and Engineering (CASE). The award is supported by his academic family to honor Professor Yu-Chi (Larry) Ho, a Past President of the IEEE Robotics and Automation Council, which later became the IEEE Robotics and Automation Society.
- Prize:* A single award of \$1,000 to the student first-author and Certificates for all individual authors. In the exceptional case that two papers are deemed worthy, the student first-author of each paper will receive a \$500 prize.
- Funding:* The award is sponsored by the academic family of Prof. Yu-Chi (Larry) Ho for a period of 5 years (2017-2021).

Eligibility: All student papers presented at the annual CASE conference are eligible. There are no restrictions as to IEEE, organization, nationality, race, creed, sex, or age.

Basis for Judging: A selection committee will be appointed by the CASE Awards Committee. Papers are judged based on technical merit, originality, relevance and potential impact on the field of automation science and engineering, clarity of the written paper, and quality of the conference presentation.

Presentation: The award will announced and presented at the same annual IEEE-CASE conference.

17. IEEE RAS George Saridis Leadership Award in Robotics and Automation (established in 2008; revised Description and Basis for Judging 2017)

Description: To recognize outstanding contributions of an individual for his/her exceptional leadership and dedication that benefits the Robotics and Automation Society. The award is named in honor of Professor George Saridis, the Founding President of the IEEE Robotics and Automation Council, which later became the IEEE Robotics and Automation Society, who exemplified the characteristics sought in nominees for this award.

Prize: \$1,000 and Plaque. Up to two awards will be given each year, and no award will be given if no qualified candidate is identified.

Funding: **Funded by the IEEE Robotics and Automation Society through an endowment managed by the IEEE Foundation.**

Eligibility: Only IEEE Robotics and Automation Society members are eligible.

Basis for Judging: Factors to be considered are: exceptional leadership and dedication that result in the professional growth of the IEEE Robotics and Automation Society. Quality and significance of leadership that benefits the Robotics and Automation community.

Presentation: At the next IEEE International Conference on Robotics and Automation after a finalist has been selected.

18. IEEE ICRA Best Paper Award in Automation (established in 2008; revised name and criteria 2017)

Description: To recognize the best paper in Automation presented at the IEEE International Conference on Robotics and Automation (ICRA).

Prize: A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.

Funding: Funded by the IEEE International Conference on Robotics and Automation (ICRA).

Eligibility: All papers presented at the annual ICRA conference are eligible. There are no restrictions as to organization, nationality, race, creed, sex, or age. There is no requirement for IEEE membership. Authors of automation papers are encouraged to include keywords related to automation in their keyword list to help the ICRA Awards Committee identify papers to consider for the award

Basis for Judging: A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of automation. Papers are judged based on technical merit, originality, relevance and potential impact on the automation field (in terms of efficiency, productivity, quality, and reliability), clarity of the written paper, and quality of the conference presentation.

Presentation: The award will be announced and presented at the same annual IEEE ICRA conference.

19. IEEE CASE Best Conference Paper Award (established in 2009; revised name and criteria 2017)

Description: The award is given annually to the author(s) of a paper presented at the IEEE International Conference on Automation Science and Engineering (CASE) that contributed to the notable

advancement in automation research: abstractions, algorithms, theory, methodologies, and models that improve efficiency, productivity, quality, and reliability of machines and systems operating in structured environments over extended periods, or that improve the explicit structuring of environments where machines and systems operate.

Prize: A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.

Funding: Funded by IEEE CASE conference.

Eligibility: There are no restrictions as to organization, nationality, race, creed, sex, or age, except for the acceptance of a paper and its presentation at IEEE CASE. There is no requirement for IEEE membership.

Basis for Judging: The award is given annually to the author(s) of a paper presented in IEEE CASE that contributed to the notable advancement in automation research: abstractions, algorithms, theory, methodologies, and models that improve efficiency, productivity, quality, and reliability of machines and systems operating in structured environments over extended periods, or that improve the explicit structuring of environments where machines and systems operate. About 4 – 6 finalists are selected from all the accepted papers by the Conference Awards Committee and are notified prior to the conference. The finalists will present their works in the conference plenary best paper award session that is attended by the selection committee. The committee listens to the presentations, the questions from the audience and the authors' answers. The committee also invites comments after each presentation and considers them in the evaluation. The selection committee then decides upon the winner.

Presentation: The award will be presented during the conference. No award will be given if no qualified candidate is identified.

20. **IEEE ICRA Best Paper Award in Robot Vision** (established in 2009; revised name and criteria 2017)

Description: The award recognizes the best paper in Robot Vision presented at the IEEE International Conference on Robotics and Automation (ICRA).

Prize: A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.

Funding: The award is sponsored by Ben Wegbreit. If funding becomes unavailable, the award will not be given.

Eligibility: All papers presented at the annual ICRA conference are eligible. There are no restrictions as to organization, nationality, race, creed, sex, or age. There is no requirement for IEEE membership. Authors of robot vision papers are encouraged to include keywords related to robot vision in their keyword list to help the ICRA Awards Committee identify papers to consider for the award.

Basis for Judging: A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of robot vision. Papers are judged based on technical merit, originality, relevance and potential impact on the robot vision field, clarity of the written paper, and quality of the conference presentation.

Presentation: The award will be announced and presented at the same annual IEEE ICRA conference.

21. **IEEE ICRA Best Paper Award in Robot Manipulation** (established in 2009; revised name and criteria 2017)

Description: The award recognizes the best paper in Robot Manipulation presented at the IEEE International Conference on Robotics and Automation (ICRA).

- Prize:* A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.
- Funding:* The award is sponsored by Ben Wegbreit. If funding becomes unavailable, the award will not be given.
- Eligibility:* All papers presented at the annual ICRA conference are eligible. There are no restrictions as to organization, nationality, race, creed, sex, or age. There is no requirement for IEEE membership. Authors of robot manipulation papers are encouraged to include keywords related to robot manipulation in their keyword list to help the ICRA Awards Committee identify papers to consider for the award.
- Basis for Judging:* A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of robot manipulation. Papers are judged based on technical merit, originality, relevance and potential impact on the robot manipulation field, clarity of the written paper, and quality of the conference presentation.
- Presentation:* The award will be announced and presented at the same annual IEEE ICRA conference.

22. **IEEE Conference on Automation Science and Engineering Best Application Paper Award** (established in 2009)

- Description:* The award is given annually to the author(s) of a paper presented in IEEE-CASE that best contributed to the notable advancement in automation applications.
- Prize:* \$1,000 and a certificate. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. If two papers are deemed worthy, the authors of each paper will share \$500 prize equally.
- Funding:* Funds will be provided annually by Qualtech Systems, Inc through 2012. Effort will be undertaken to seek additional funding from QSI, or seek funds from other sources to sponsor the award. During the period when external funding is not available, funds will be provided by the IEEE-CASE.
- Eligibility:* There is no requirement for IEEE membership. There are no restrictions as to organization, nationality, race, creed, sex or age, except for the acceptance of a paper and its presentation at IEEE-CASE.
- Basis for Judging:* Factors that will be considered are the significance and novelty of applications, technical merit, potential impact on the field, and clarity of presentation at IEEE-CASE.
- Presentation:* The award will be presented at the annual IEEE Conference on Automation Science and Engineering.

23. **IEEE Robotics and Automation Award for Product Innovation** (established in 2010)

- Description:* The award is established to identify a company which made an innovative commercial product using Robotics and Automation Science and Technology.
- Prize:* A Plaque for the company.
- Funding:* Funded by the IEEE Robotics and Automation Society.
- Eligibility:* Companies which make innovative commercial products using Robotics and Automation Science and Technology are eligible. The commercial products must have been commercialized within two years from the nomination due date. Examples of appropriate products include home appliances, vehicles, houses, robots, and any other commercially available products that use robotics and automation technology.
- Basis for Judging:* Factors that will be considered are the significance of the innovation, creativity, technical merits,

originality, and potential impact in the field of the product.

Presentation: The award will be presented at the annual IEEE ICRA.

24. **IEEE ICRA Best Paper Award in Cognitive Robotics** (established in 2010; revised 2015; revised name and criteria 2017)

Description: The award recognizes the best paper in Cognitive Robotics presented at the IEEE International Conference on Robotics and Automation (ICRA).

Prize: A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.

Funding: **The award is sponsored by the Korea Robotics Society for a period of 20 years (2015-2034). If funding becomes unavailable, the award will not be given.**

Eligibility: All papers presented at the annual ICRA conference are eligible. There are no restrictions as to organization, nationality, race, creed, sex, or age. There is no requirement for IEEE membership. Authors of cognitive robotics papers are encouraged to include keywords related to cognitive robotics in their keyword list to help the ICRA Awards Committee identify papers to consider for the award.

Basis for Judging: A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of cognitive robotics. Papers are judged based on technical merit, originality, relevance and potential impact on the cognitive robotics field, clarity of the written paper, and quality of the conference presentation.

Presentation: The award will be announced and presented at the same annual IEEE ICRA conference.

25. **IEEE ICRA Best Paper Award in Medical Robotics** (established in 2010; revised criteria 2017)

Description: The award recognizes the best paper in Medical Robotics presented at the IEEE International Conference on Robotics and Automation (ICRA).

Prize: A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.

Funding: **The award is sponsored by Intuitive Surgical, Inc. for a period of 5 years (2018-2022). If funding becomes unavailable, the award will not be given.**

Eligibility: All papers presented at the annual ICRA conference are eligible. There are no restrictions as to organization, nationality, race, creed, sex, or age. There is no requirement for IEEE membership. Authors of medical robotics papers are encouraged to include keywords related to medical robotics in their keyword list to help the ICRA Awards Committee identify papers to consider for the award.

Basis for Judging: A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of medical robotics. Papers are judged based on technical merit, originality, relevance and potential impact on the medical robotics field, possible clinical efficacy, clarity of the written paper, and quality of the conference presentation.

Presentation: The award will be announced and presented at the same annual IEEE ICRA conference.

26. **IEEE ICRA Best Paper Award on Human-Robot Interaction** (established in 2015; revised criteria 2017)

Description: This award recognizes the best paper on Human-Robot Interaction (HRI) presented at the IEEE International Conference on Robotics and Automation (ICRA).

- Prize:* A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.
- Funding:* **The award is sponsored by ABB for a period of 5 years (2016-2020). If funding becomes unavailable, the award will not be given.**
- Eligibility:* All papers presented at the annual ICRA conference are eligible. There is no requirement for IEEE membership. There are no restrictions as to organization, nationality, race, creed, sex or age. Authors of human-robot interaction papers are encouraged to include keywords related to human-robot interaction in their keyword list to help the ICRA Awards Committee identify papers to consider for the award.
- Basis for Judging:* A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of human-robot interaction. Papers are judged based on technical merit, originality, relevance and potential impact on the human-robot interaction field, clarity of the written paper, and quality of the conference presentation.
- Presentation:* The award will be announced and presented at the same annual IEEE ICRA conference.

27. **IEEE Robotics and Automation Letters Best Paper Award** (established in 2016)

- Description:* To recognize the best paper of the *IEEE Robotics and Automation Letters* (RA-L) published in the previous calendar year.
- Prize:* A single award of \$1,000 to be shared equally by all authors and Certificates for individual authors. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.
- Funding:* Funded by the IEEE Robotics and Automation Society.
- Eligibility:* Authorship or co-authorship of all papers published in the *IEEE Robotics and Automation Letters* in the previous calendar year.
- Basis for Judging:* The RA-L Senior Editorial Board selects the final candidate papers, and the Editor-in-Chief makes the final selection of the winner paper. Scientific and technological excellence will be the unique criterion for judging the papers.
- Presentation:* At the annual IEEE International Conference on Robotics and Automation (ICRA) in the calendar year following publication of the paper.

28. **IEEE Robotics and Automation Magazine Best Paper Award** (established in 2016)

- Description:* To recognize the best peer-reviewed paper of the *IEEE Robotics and Automation Magazine* (RAM) published in the previous calendar year.
- Prize:* A single award of \$1,000 to be shared equally by all authors and Certificates for individual authors. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.
- Funding:* Funded by the IEEE Robotics and Automation Society.
- Eligibility:* Authorship or co-authorship of all papers published in the *IEEE Robotics and Automation Magazine* in the previous calendar year.
- Basis for Judging:* The RAM Editorial Board selects the final candidate papers, and the Editor-in-Chief makes the final selection of the winner paper. Scientific and technological excellence will be the unique criterion for judging the papers.
- Presentation:* At the annual IEEE International Conference on Robotics and Automation (ICRA) in the calendar year following publication of the paper.

29. **IEEE ICRA Best Paper Award on Multi-Robot Systems** (established in 2016)

- Description:* This award recognizes the best paper on Multi-Robot Systems presented at the IEEE International Conference on Robotics and Automation (ICRA).
- Prize:* A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.
- Funding:* The award is sponsored by Amazon Robotics for a period of 5 years (2017-2021). If funding becomes unavailable, the award will not be given.
- Eligibility:* All papers presented at the annual ICRA conference are eligible. There is no requirement for IEEE membership. There are no restrictions as to organization, nationality, race, creed, sex or age. Authors of multi-robot systems papers are encouraged to include keywords related to multi-robot systems in their keyword list to help the ICRA Awards Committee identify papers to consider for the award.
- Basis for Judging:* A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of multi-robot systems. The RAS Technical Committee on Multi-Robot Systems is the technical cosponsor for this award and is available to assist in recommending members for the selection committee. Papers are judged based on technical merit, originality, relevance to multi-robot systems, potential impact on the field, clarity of the written paper, and quality of the conference presentation.
- Presentation:* The award will be announced and presented at the same annual IEEE ICRA conference.

30. **IEEE/ASME *Transactions on Mechatronics* Best Paper Award** (established in 2017)

- Description:* Established in 2008 and jointly administered by the co-sponsors IEEE-IES, IEE-RAS, and ASME-DSCD, through the *Transactions on Mechatronics* Management Committee, the purpose of this award is to recognize the best refereed paper published in the volume year of the IEEE/ASME *Transactions on Mechatronics*.
- Prize:* The award is given annually to all of the authors of the selected best paper published in the previous calendar year in the Transaction. Multiple recipients are allowed and there is no limit on the number recipient (authors). Each recipient will receive a printed certificate, a plaque and a share of the \$1000 award. With multiple recipients (authors), the authors can decide how to share prize money. The default approach is to share the prize equally among the authors. In the case of two papers sharing the award, the \$1000 award will be equally shared by the two papers, i.e. \$500 for each paper. The prize does not include travel expense.
- Funding:* The fund for the award has been provided by the TMech operating budget approved annually by the Management Committee jointly appointed by the three co-sponsors (IEEE/RAS, IEEE/IES and ASME/DSCD).
- Eligibility:* Published original refereed paper in the IEEE/ASME *Transactions on Mechatronics* in the previous calendar year; the authors need not be a member of IEEE or ASME.
- Basis for Judging:* Professional Merit (40%)
- Creativity and originality, as reflected in new insights, interpretations, facts, innovations, methods, applications, etc. (stimulating, informative, enlightening, etc.);
 - Scientific and professional quality of the research, review, development work, methods of inquiry, etc. (competent, valid, replicable, etc.); and
 - Scholarship embodied in the presentation, explanations, interpretations, and discussions (researched, documented, balanced, critical, etc.).
- Contribution (40%)
- Societal or scientific/technical significance of the topic or problem investigated or expounded (universality, urgency, impact, etc.);
 - Usefulness of the paper to practicing information professionals (applicability, timeliness, scope, problem-solving value, etc.); and

- Relevance of the topic or problem to the interests of Mechatronics.

Presentation Quality (20%)

- Readability, effective organization and presentation of concepts, facts, arguments, etc. (structure, logic, persuasiveness, etc.);
- Use of clear, concise, comprehensible, and jargon-free language (ease and pleasure of reading); and
- Adherence to "Instructions for Contributors" found in the IEEE/ASME Transactions Mechatronics for format, graphics, citations, etc.

Presentation: The award will be presented annually at the annual IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM) conference.

31. **IEEE Transactions on Haptics Best Application Paper Award** (established in 2017)

Description: To recognize the best application paper of the *IEEE Transactions on Haptics* (ToH) published in the previous calendar year.

Prize: A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.

Funding: The award is sponsored by Alps Electric Co. for a period of 10 years (2018-2027). If funding becomes unavailable, the award will not be given.

Eligibility: Authorship or co-authorship of all papers published in the *IEEE Transactions on Haptics* in the previous calendar year.

Basis for Judging: The ToH Senior Editorial Board selects the final candidate papers, and the EiC makes the final selection of the winning paper. Criteria for judging the papers are significance of the new applications, scientific and technological excellence, originality, and clarity of presentation.

Presentation: In the calendar year following publication of the paper at either the biennial World Haptics Conference or the IEEE Haptics Symposium which takes place in the intervening year.

32. **IEEE Transactions on Haptics Best Paper Award** (established in 2017)

Description: To recognize the best paper of the *IEEE Transactions on Haptics* (ToH) published in the previous calendar year.

Prize: A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.

Funding: Funded by the IEEE Robotics and Automation Society.

Eligibility: Authorship or co-authorship of all papers published in the *IEEE Transactions on Haptics* in the previous calendar year.

Basis for Judging: The ToH Senior Editorial Board selects the final candidate papers, and the EiC makes the final selection of the winning paper. Scientific and technological excellence will be the unique criterion for judging the papers.

Presentation: In the calendar year following publication of the paper at either the biennial World Haptics Conference or the IEEE Haptics Symposium which takes place in the intervening year.

33. **IEEE ICRA Best Paper Award on Unmanned Aerial Vehicles** (established in 2018)

Description: This award recognizes the best paper on Unmanned Aerial Vehicles (UAVs) presented at the IEEE International Conference on Robotics and Automation (ICRA).

- Prize:* A single award of \$1,000 to be shared by all authors and certificates for individual authors. If there are multiple authors of a winning paper, they will share the \$1,000 prize equally. In the exceptional case that two papers are deemed worthy, the authors of each paper will share a \$500 prize equally.
- Funding:* The award is sponsored by Cooperative Research Centre for Trusted Autonomous Systems for a period of 5 years (2018-2022). If funding becomes unavailable, the award will not be given.
- Eligibility:* All papers presented at the annual ICRA conference are eligible. There is no restrictions as to IEEE membership, organization, nationality, race, creed, sex or age. Authors of UAV papers are encouraged to include keywords related to UAVs in their keyword list to help the ICRA Awards Committee identify papers to consider for the award.
- Basis for Judging:* A selection committee will be appointed by the ICRA Awards Committee with members who have appropriate expertise in the field of UAVs. Papers are judged based on technical merit, originality, relevance and potential impact on the UAV field, clarity of the written paper, and quality of the conference presentation.
- Presentation:* The award will be announced and presented at the same annual IEEE ICRA conference.

34. **IEEE International Conference on Robotics and Automation Most Influential Paper Award** (established in 2021)

- Description:* This award recognizes the most influential paper in the *Proceedings of the IEEE International Conference on Robotics and Automation* (ICRA) that was published in the five-years window ranging from 22 to 18 years ago. ICRA has had major contributions in the technical field of robotics and automation from an early stage. Unlike the other RAS best paper awards that attempt to predict the future potential impact of a paper, this award looks back at the actual impact a paper has had.
- Prize:* A laminated certificate for all individual authors, plus one ICRA registration and up to \$1,000 in travel reimbursement in total to be invited to ICRA to receive the award. In the exceptional case that two papers are deemed worthy, the authors of each paper will receive laminated certificates, and one author from each paper will be eligible for ICRA registration and travel reimbursement up to \$1,000. Travel reimbursement will follow IEEE Policies and Procedures.
- Funding:* Funded by the IEEE Robotics and Automation Society.
- Eligibility:* All the ICRA Proceedings papers on IEEE Xplore that were published in the five-years window ranging from 22 to 18 years ago are eligible.
- Basis for Judging:* Papers are judged based on strong impact within or outside of the field, such as: Has been highly cited, Pioneered a research area, Led to important applications.
- Presentation:* The winner will be announced and presented at the annual IEEE ICRA conference.

IEEE SENSORS COUNCIL
SEN-039 (Division X)

For all Sensors Council awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Sensors Journal Best Paper Award (established in 2007)

Description: To recognize the best paper published in the IEEE Sensors Journal. The award is based on general quality, originality, contributions, subject matter and timeliness.

Prize: \$2,000 (split equally among authors) and Plaque

Funding: Funded by the IEEE Sensors Council.

Eligibility: Author of a paper published in the *IEEE Sensors Journal* during the past calendar year preceding the award is eligible.

Basis for Judging: The subcommittee decides if the nominees meet the high standards necessary for a given award. The decisions are based on voting of the members of the subcommittees. Subcommittee members may not nominate or endorse candidates for the award their subcommittee is adjudicating, nor may they be considered for that award. If a subcommittee decides that none of the nominees meets the high standards necessary for a given award, the award will not be given in that year.

Presentation: The awards will be presented at an appropriate event in conjunction with the annual IEEE Sensors Conference.

2. IEEE Sensors Council Meritorious Service Award (established in 2007)

Description: To honor a person with outstanding long-term service to the welfare of the IEEE Sensors Council. The award is based on dedication, effort and contributions. The award may be given to any member of the IEEE who has performed significant service in support of the IEEE Sensors Council.

Prize: \$2,000 and Plaque

Funding: Funded by the IEEE Sensors Council.

Eligibility: IEEE member.

Basis for Judging: The subcommittee decides if the nominees meet the high standards necessary for a given award. The decisions are based on voting of the members of the subcommittees. Subcommittee members may not nominate or endorse candidates for the award their subcommittee is adjudicating, nor may they be considered for that award. If a subcommittee decides that none of the nominees meets the high standards necessary for a given award, the award will not be given in that year.

Presentation: The awards will be presented at an appropriate event in conjunction with the annual IEEE Sensors Conference

3. **IEEE Sensors Council Technical Achievement Award** (established in 2007) (revised 2015)

Description: To honor a person with outstanding technical contributions within the scope of the IEEE Sensors Council as documented by publications (including patents). The award is based on the general quality and originality of contributions. Allows for four (4) possible awards each year, one for each two career stages (early career and advanced career) in each of two technical areas: 1) Sensors; and 2) Sensor Systems or Networks Early career awards for individuals within 15 years of receiving the first degree; and Advanced career awards – for individuals beyond 15 year.

Prize: \$2,000 and Plaque

Funding: Funded by the IEEE Sensors Council.

Eligibility: IEEE member.

Basis for Judging: The subcommittee decides if the nominees meet the high standards necessary for a given award. The decisions are based on voting of the members of the subcommittees. Subcommittee members may not nominate or endorse candidates for the award their subcommittee is adjudicating, nor may they be considered for that award. If a subcommittee decides that none of the nominees meets the high standards necessary for a given award, the award will not be given in that year.

Presentation: The awards will be presented at an appropriate event in conjunction with the annual IEEE Sensors Conference

4. **IEEE Sensors Council Young Professional Award** (established in 2010) (revised 2015)

Description: To promote, recognize, and support outstanding contributions by young Young Professional members within the fields of interest of the IEEE Sensors Council. Young Professional is a professional membership group within the IEEE, whose goal is to ease the transition of young graduates from college to professional life. The Young Professional membership applies to both industry professionals and graduate students. Upon completion of their first engineering degree, IEEE student members automatically become Young Professional members upon membership renewal.

Prize: \$2,000 and Plaque

Funding: Funded by the IEEE Sensors Council.

Eligibility: Must be an IEEE member in good standing and must be a Young Professional member at nomination time, as per IEEE Young Professional member definition.

Basis for Judging: Candidates credentials and technical contributions, with the emphasis on specifics: technical contributions, publications, leadership in a specific area, impact on the profession or economy, originality, breadth, honors, professional service, etc., as identified in nomination package. The nominator will be required to submit a nomination packaged comprised of the following:

- Nomination form: a maximum 300 word statement of the nominee’s accomplishments and impact on the profession or economy;
- Two to three letters of reference from individuals familiar with the candidate’s credentials.

Presentation: At the annual International IEEE Sensors Conference Awards Banquet (held in late October or early November).

5. **IEEE Sensors Council Outstanding Chapter Award** (established in 2017)

Description: This award will be given to the best chapter in a given calendar year based on activity.

Prize: \$1,000 and Certificate. Single annual award with only one allowable recipient selected annually. Recipient receives full prize including honoraria and certificate.

Funding: Funded by the IEEE Sensors Council.

Eligibility: All Chapters of the IEEE Sensors Council.

- Chapters not selected for the award may apply each year.
- Chapters selected for this award must wait two years after receiving the award to reapply.

Basis for Judging:

- Pre-requisite: a minimum of two L31 forms have to have been submitted to IEEE for two consecutive years including the application year and the preceding year.
- New Volunteer Engagement (30%): Demonstration of succession planning over the past four years by involving new volunteers as Chapter Officers (Chair, Vice Chair, Secretary, and Treasurer).
- Technical Meetings (30%): Number of technical meetings held for the application year and the previous year.
- Industry Participation (20%): Activities to interface with local industries.
- Student Involvement (20%): Activities that engage local students.

Presentation: The Best Chapter will be recognized annually at the IEEE Sensors Conference.

6. **IEEE Sensors Council Lifetime Contribution Award** (established in 2019)

Description: To recognize extraordinary contributions to the Council, in duration and magnitude of impact.

Prize: Up to two awards given annually – Each recipient receives full prize and Plaque.

Recipients will be eligible to receive meals and lodging associated with attendance at IEEE Sensors Council AdCom meetings (this will follow standard Council guidelines for AdCom members; this covers hotel for one night and one night after meetings, plus meals are already included in meeting costs) if they choose to travel to the meeting site (airfare or other transportation costs will not be covered). Recipients will be eligible for complimentary registration for all IEEE SENSORS conferences. *An established limit of 20 living, active Life Members has been set. Living awardees that no longer intend to be active will have the option to become “Emeritus” to retain the honor but forgo the travel privileges.*

Funding: Funded by the IEEE Sensors Council.

Eligibility: Candidates must have contributed to Council activities over a period of more than ten years and must have served in multiple elected leadership roles within the Council. Each candidate must be an IEEE member and a member of at least one of the member societies of the Council.

Basis for Judging: Nominations will include: (a) 300-word summary of the candidate’s contributions and their impact on the Council, accompanied by a CV/resume (b) two letters of support attesting to the candidate’s initiative, leadership, and commitment to the Council. The committee shall consider the overall impact by scoring both breadth of the candidate’s contributions as well as the depth of their impact.

Presentation: The award will be presented as part of the ceremony at the annual conference.

7. **IEEE Sensors Letters Best Paper Award** (established in 2019)

Description: To recognize the best paper published in the IEEE Sensors Letters. The award is based on general quality, originality, contributions subject matter and timeliness.

Prize: \$2,000 (prize split equally among authors) and Plaque. One award annually.

Funding: Funded by the IEEE Sensors Council.

Eligibility: Any paper published in the IEEE Sensors Letters during the past calendar year preceding the award is eligible.

Basis for Judging: General quality, originality, contributions subject matter and timeliness. The Best Paper Award subcommittee decides if the nominees meet the standards necessary for the award. The decisions are based on simple majority voting members by the members of the subcommittee. The

subcommittee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented as part of the ceremony at the yearly annual conference IEEE SENSORS 20XX.

8. IEEE Internet of Things Journal Best Paper Award (joint award of IEEE Internet of Things Journal Steering Committee cosponsored by IEEE Communications Society, IEEE Computer Society, and IEEE Sensors Council) (established in 2020)

Description: To recognize the best papers published in the IEEE Internet of Things Journal. The award is based on originality, impact, relevance to the IoT-J's scope, and timeliness.

Prize: Up to two awards may be given annually; \$2,000 per award (split equally among the authors) and a Plaque for each winning author. The travel expenses of the lead author of each best paper shall be reimbursed.

Funding: Funds for this award come from the IEEE Internet of Things Journal. The first year, if necessary, the IEEE Sensors Council (the lead administrative cosponsor) may provide the funds (and be reimbursed by the other financial cosponsors).

Eligibility: Author(s) of any paper published in the IEEE Internet of Things Journal during the three calendar years preceding the date of the award is/are eligible.

Basis for Judging: The award is based on originality (unless the paper is a review paper), impact, relevance to the IoT-J's scope, and timeliness. The IoT-J Steering Committee, upon the recommendation of the IoT-J Editorial Board, decides if the nominees meet the standards necessary for the award. The decisions are based on simple majority voting by the voting members of the Steering Committee. Steering Committee members may not be a co-author of any paper considered for the award. The Steering Committee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented at a venue selected by the IoT-J Steering Committee. Travel expenses of one lead author per award shall be reimbursed upon request in accordance with IEEE travel policies.

9. IEEE Internet of Things Journal Outstanding Service Award (joint award of IEEE Internet of Things Journal Steering Committee cosponsored by IEEE Communications Society, IEEE Computer Society, and IEEE Sensors Council) (established in 2020)

Description: To honor long and distinguished service to the IEEE Internet of Things Journal.

Prize: One award is given annually; \$2,000 and a Plaque

Funding: Funds for this award come from the IEEE Internet of Things Journal. The first year, if necessary, the IEEE Sensors Council (the lead administrative cosponsor) may provide the funds (and be reimbursed by the other financial cosponsors).

Eligibility: The award is open to all who have contributed to the IEEE Internet of Things Journal.

Basis for Judging: The IoT-J Steering Committee decides if the nominees meet the standards necessary for the award. The decision is based on simple majority voting by the voting members of the Steering Committee. Steering Committee members may not be considered for the award. The Steering Committee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented at a venue selected by the IoT-J Steering Committee. The winner shall be for travel expenses to the award presentation in accordance with IEEE travel policies.

IEEE SIGNAL PROCESSING SOCIETY

SP-01 (Division IX)

For all Signal Processing Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE SPS Norbert Wiener Society Award (June 2000; revised Description 2017; revised name 2018)

Description: To honor outstanding technical contributions in a field within the scope of the Signal Processing Society and outstanding leadership in that field. Each Society award recipient is expected to present a Norbert Wiener Lecture at the upcoming IEEE International Conference on Acoustics, Speech, and Signal Processing. This lecture is one of the plenary lectures given on the day of the banquet of ICASSP but it is not a banquet speech

Prize: \$2,500, Plaque and Certificate

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Please note: boards or committees who submit nominations, but having voting Board of Governors members sitting on their boards or committees must ensure that Board of Governors voting members do not participate in the board/committee award nomination or selection process. Current officers and members of the Society Board of Governors are ineligible. Previous recipients of the SP Society Award are ineligible. Self-nominations are not accepted or considered. Members of the Awards Board and voting members of the Board of Governors are not permitted to submit nominations. Non-voting Board of Governors members are permitted to submit nominations.

Basis for Judging: Outstanding technical contributions and leadership in a field within the scope of the Society as evidenced by publications, patents, books, lectures, etc.

Presentation: At ICASSP in spring of following year.

2. IEEE SPS Claude Shannon-Harry Nyquist Technical Achievement Award (revised 1995, 2000; revised name 2018)

Description: To honor a person, who over a period of years, has made outstanding technical contributions to theory and/or practice in technical areas within the scope of the Society, as demonstrated by publications, patents, or recognized impact on the field.

Prize: \$1,500, Plaque and Certificate

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Please note: boards or committees who submit nominations, but having voting Board of Governors members sitting on their boards or committees must ensure that Board of Governors voting members do not participate in the board/committee award nomination or selection process. Current officers and members of the Society Board of Governors are ineligible. Previous recipients of the SP Society Award are ineligible. Self-nominations are not accepted or considered. Members of the Awards Board and voting members of the Board of Governors are not permitted to submit nominations. Non-voting Board of Governors members are permitted to submit nominations.

Basis for Judging: Outstanding technical contributions to theory and/or practice in technical areas within the scope of the Society, as demonstrated by publications, patents, or recognized impact on the field.

Presentation: Up to two (2) awards at ICASSP in spring of following year.

3. **IEEE Best Paper Award** (formerly Senior Award) (revised 2020)

Description: To honor a paper of exceptional merit dealing with a subject related to the technical scope of the IEEE Signal Processing Society and appearing in one of the Society's solely owned Transactions, the Journal of Selected Topics in Signal Processing, the Transactions on Computational Imaging, or the Transactions on Signal and Information Processing over Networks.

Prize: \$500 per author (a maximum of \$1,500 for award) and Certificate. In the event that there are more than three authors, the maximum prize shall be divided equally among all authors and each shall receive a certificate.

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: Authors of papers published in one of the Society Transactions within a six-year window (e.g., for the 2020 award, the paper must have appeared in one of the Society's Transactions between January 1, 2014 and December 31, 2019.) A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Current members of the Society Awards Board are ineligible. Self-nominations are not accepted or considered.

Basis for Judging: General ability, originality, contributions, continuity of efforts, subject matter, and timeliness.

Presentation: Up to six (6) awards, at ICASSP in Spring of at ICIP in the Fall of the following year.

4. **IEEE SPS Leo L. Beranek Meritorious Service Award** (revised Basis for Judging 2017; revised name 2018)

Description: To honor contributions to the IEEE Signal Processing Society.

Prize: Plaque and Certificate

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: Current Society President and previous recipients of the Meritorious Service Award are ineligible. A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Please note: boards or committees who submit nominations, but having voting Board of Governors members sitting on their boards or committees must ensure that Board of Governors voting members do not participate in the board/committee award nomination or selection process. Current members of the Awards Board and the Board of Governors are ineligible. Self-nominations are not accepted or considered. Members of the Awards Board and voting members of the Board of Governors are not permitted to submit nominations. Non-voting Board of Governors members are permitted to submit nominations

Basis for Judging: Judging shall be based on recognizing outstanding efforts and contributions aimed at promoting the technical and educational activities of the entire Signal Processing Society, i.e., that benefits the membership of the SPS at large.

Presentation: Up to two (2) awards, at ICASSP in spring of the following year.

5. **IEEE SPS Signal Processing Magazine Best Paper Award** (established in 1993) (revised 2019)

Description: To honor the author(s) of a paper dealing of exceptional merit and broad interest dealing with a subject relating to the scope of the IEEE Signal Processing Society and appearing in the Society Magazine.

Prize: \$500 per author (a maximum of \$1,500 for award) and Certificate. In the event that there are more than three authors, the maximum prize shall be divided equally among all authors and each shall receive a certificate.

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: A paper must have appeared in *IEEE Signal Processing Magazine* in any issue predating the Spring Awards Board meeting of the current year (typically held in conjunction with ICASSP) for example, for the 2016 Award, the paper must have appeared in an issue of the *IEEE Signal Processing Magazine* before March 2016. A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Current members of the Signal Processing Society's Awards Board are ineligible. Self-nominations are not accepted or considered.

Basis for Judging: Quality and effectiveness in presenting subjects of broad interest to the Society members.

Presentation: Presentation shall be made either at the Society's Awards Ceremonies, normally held during ICASSP in the Spring or at ICIP in the Fall following selection of the winner.

6. **IEEE SPS Young Author Best Paper Award** (formerly Paper Award) (revised 2020)

Description: To honor an especially meritorious paper dealing with a subject related to the technical scope of the IEEE Signal Processing Society appearing in one of the Society's solely owned Transactions, the Journal of Selected Topics in Signal Processing, the Transactions on Computational Imaging, or the Transactions on Signal and Information Processing over Networks, whose author upon date of submission of the paper is less than 30 years of age.

Prize: \$500 per author (a maximum of \$1,500 for award) and Certificate. In the event that there are more than three young authors, the maximum prize shall be divided equally among all young authors and each shall receive a certificate.

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: Authors of papers appearing in one of the Society Transactions within a four-year window (e.g., for the 2020 Award, the paper must have appeared in one of the Society's Transactions between January 1, 2016 and December 31, 2019); must be less than 30 years of age on the date of submission of the paper for publication. A board or committee cannot nominate one of its members for the award. Please note: this includes nominating an author of a paper where a member of a nominating board or committee is also an author on the paper, even though this member is not the "young author" being considered for the award. However, a member of a board or committee cannot be nominated by another board or committee. Current members of the Society Awards Board are ineligible. Self-nominations are not accepted or considered.

Basis for Judging: General quality, originality, contributions, subject matter, and timeliness.

Presentation: Up to six (6) awards, at ICASSP in Spring or at ICIP in the Fall of the following year.

7. **IEEE SPS Carl Friedrich Gauss Education Award** (established in 2000; revised name 2018)

Description: To honor educators who have made pioneering and significant contributions to signal processing education.

Prize: \$1,500, Plaque, and Certificate

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: Any member of the IEEE Signal Processing Society may nominate a candidate for this award; nominees need not be members of the IEEE or any IEEE Society. Current officers and members of the IEEE Signal Processing Society Board of Governors are ineligible, as well as the SPS Awards Board members. A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Please note: boards or committees who submit nominations but have voting Board of Governors members sitting on their boards or committees must ensure that Board of Governors voting members do not participate in the board/committee award nomination or selection process. Self-nominations are not accepted or considered. The award may or may not

be given annually based on nominations received.

Basis for Judging: Nominees will be judged by a career of meritorious achievement in signal processing education as exemplified by writing of scholarly books and texts, course materials, and papers on education, inspirational and innovative teaching, creativity in the development of new curricular and methodology.

Presentation: The award will be presented at ICASSP each year.

8. **The Guglielmo Marconi Prize Paper Award**, IEEE Communications Society and IEEE Signal Processing Society (established in 2002)

Description: To recognize an original paper in the field of Wireless Communications published in the *IEEE Transactions on Wireless Communications* in the previous 3 calendar years.

Prize: Starting in 2003, a prize allocation of \$5,000 will be used to cover the following annual expenses for the award: Honorarium of up to \$1,000; Travel reimbursement of up to \$3,000; Plaque. In the event of multiple authors, a prize plaque will be given to each recipient and the honorarium and travel reimbursement will be shared equally among the authors. The total honorarium is not to exceed \$1,000 and total travel reimbursement is not to exceed \$3,000.

Funding: **The award (honorarium, travel, plaque) will be managed by the IEEE Foundation and funded by the IEEE Communications Society (75%) and the IEEE Signal Processing Society (25%) from the publication account for the *IEEE Transactions on Wireless Communications*, until an external sponsor is identified. Qualcomm agreed to term of 10 years beginning in 2003 at US\$5,000 per year endowment to the IEEE Foundation. The IEEE Communications Society will be responsible for the administration of the Marconi Prize Paper Award. However, the authority for all aspects of the journal and for the awarding of the prize resides with the Steering Committee.**

Eligibility: Authors of an original paper in the field of Wireless Communications, published in the *IEEE Transactions on Wireless Communications* in the previous 3 calendar years, are eligible for the Marconi Prize Paper Award. The authors need not be members of the IEEE.

Basis for Judging: High quality, original paper composite of originality, utility, timeliness and clarity of presentation.

Presentation: Annually at the International Conference on Communications by the IEEE Communications Society Awards Committee Chair, in the name of the IEEE Communications Society, the IEEE Signal Processing Society, and the external sponsor of the award (when identified). An award may not be given if a paper of high quality is not uncovered.

9. **The Multimedia Prize Paper Award**, IEEE Circuits and Systems Society, IEEE Communications Society, IEEE Computer Society, and IEEE Signal Processing Society (established in 2002)

Description: To recognize an original paper in the field of Multimedia published in the *IEEE Transactions on Multimedia* in the previous calendar year.

Prize: \$500 and Plaque for each author. The total honorarium is not to exceed \$1,000. In the event that there are more than two authors, the maximum prize shall be divided equally among all authors and each shall receive a certificate.

Funding: The award will be funded equally by the four sponsoring societies (IEEE Circuits and Systems, IEEE Communications, IEEE Computer and IEEE Signal Processing Societies) from the publication account for the *IEEE Transactions on Multimedia*, until an external sponsor is identified (will be sought in 2003). The IEEE Signal Processing Society is the managing partner for the *IEEE Transactions on Multimedia*. Accordingly, IEEE Signal Processing Society will be responsible for the administration of the Multimedia Prize Paper Award. However, the authority for all aspects of the journal resides collectively with its Steering Committee.

Eligibility: Authors of an original paper in the field of Multimedia, published in the *IEEE Transactions on Multimedia* in the previous year are eligible for the Marconi Prize Paper Award. The authors

need not be members of the IEEE. Authors of a single paper cannot receive the Multimedia Prize Paper Award in three consecutive years.

Basis for Judging: High quality, original paper composite of originality, utility, timeliness and clarity of presentation.

Presentation: Annually at the International Conference on Multimedia and Expo (ICME) by the General Chair of the conference, in the name of the four sponsoring societies. An award may not be given if a paper of high quality is not uncovered.

10. **IEEE Signal Processing Magazine Best Column Award** (established in 2008)

Description: To recognize author(s) of a column of exceptional merit and broad interest on a subject related to the Society's technical scope and appearing in the Society's magazine.

Prize: \$500 per author (up to a maximum of \$1,500 per award) and a certificate. In the event that there are more than three authors, the maximum prize shall be divided equally among all authors and each shall receive a certificate.

Funding: Funded by the IEEE Signal Processing Society

Eligibility: To be eligible for consideration, an article must have appeared in the Columns and Forums Section of the IEEE Signal Processing Magazine in any issue predating the Spring Awards Board Meeting. A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another Board or committee. Current members of the Signal Processing Society's Awards Board are ineligible. Self-nominations are not accepted or considered.

Basis for Judging: Selection shall be on the basis of quality of effectiveness in presenting subjects of broad interest to the Society's members.

Presentation: Presentation of the award shall be made either at the Society's Awards Ceremonies, normally held during ICASSP in the Spring or at ICIP in the Fall following selection of the winner.

11. **IEEE Signal Processing Letters Best Paper Award** (established in 2013)

Description: To honor the author(s) of a letter article of exceptional merit and broad interest on a subject related to the Society's technical scope and appearing in the *IEEE Signal Processing Letters*.

Prize: \$500 per author (up to a maximum of \$1500 per award) and a certificate. In the event that there are more than three authors, the maximum prize shall be divided equally among all authors and each shall receive a certificate.

Funding: Funded by the IEEE Signal Processing Society

Eligibility: To be eligible for consideration, an article must have appeared in the IEEE Signal Processing Letters in an issue predating the Spring Awards Board meeting by no more than five years. Evaluation of the articles shall be on the basis of quality and effectiveness in presenting subjects of high impact to the Society's members. A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Current members of the Signal Processing Society's Awards Board are ineligible. Self-nominations are not accepted or considered.

Basis for Judging: Judging shall be on the basis of technical novelty, the research significance of the work, quality and effectiveness in presenting subjects in an area of high impact to the Society's members.

Presentation: Presentation of the award shall be made at either the Society's Awards Ceremonies, normally held during ICASSP in the Spring or at ICIP in the Fall.

12. **IEEE Signal Processing Society Donald G. Fink Overview Paper Award** (established in 2013; revised Name 2017)

- Description:* The IEEE Signal Processing Society Donald G. Fink Overview Paper Award shall honor the author(s) of a journal article of broad interest that has had substantial impact over several years on a subject related to the Society's technical scope. A paper considered for the award should present an overview of a method or theory with technical depth and application perspective. It should have a multi-year record of impact and also be relevant to current researchers and/or practitioners.
- Prize:* \$500 per author (up to a maximum of \$1,500 per award) and a certificate. In the event that there are more than three authors, the maximum prize shall be divided equally among all authors and each shall receive a certificate.
- Funding:* Funded by the IEEE Signal Processing Society
- Eligibility:* To be eligible for consideration, an article must have appeared in one of the IEEE Signal Processing Society Transactions, the Journal of Selected Topics in Signal Processing, the Transactions on Computational Imaging, the Transactions on Signal and Information Processing over Networks, or the IEEE Proceedings, in an issue that is three years old or more from the current award year. Nominations may arise from any individual or committee/board, but a board or committee cannot nominate one of its own members for the award. However, a member of a board or committee can be nominated by another board or committee. Current members of the Signal Processing Society's Awards Board are ineligible. Self-nominations are not accepted or considered. Papers that have already been recognized with another SPS Paper Award are not eligible.
- Basis for Judging:* Judging shall be on the basis of effectiveness in presenting subjects of high impact and broad interest to the Society's members. The nominated paper should be an overview with technical depth, not a tutorial. The paper should have a record of broad and/or long-term impact and be of current importance, e.g. it is still frequently cited and/or is incorporated in widely used commercial technology. Work that was particularly important 20 years ago, but has since been superseded by other methods would not be appropriate unless the new methods clearly leverage the original work in some way. The paper should have a sustained citation record. Ideally, the paper will have had commercial impact.
- Presentation:* Presentation of the award shall be made at either the Society's Awards Ceremonies, normally held during ICASSP in the Spring or at ICIP in the Fall.

13. **IEEE Signal Processing Society Sustained Impact Paper Award** (established in 2013)

- Description:* The IEEE Signal Processing Society Sustained Impact Paper Award shall honor the author(s) of a journal article of broad interest that has had sustained impact over many years on a subject related to the Society's technical scope. A paper considered for the award should be relevant to current researchers and/or practitioners and represent at least one of the following:
- The paper resulted in a paradigm shift in how a particular problem is solved.
 - The work forms the theoretical basis for much of the contemporary work in a particular field.
 - The work introduced methods that are now broadly adopted in industry.
- Prize:* \$500 per author (up to a maximum of \$1,500 per award) and a certificate. In the event that there are more than three authors, the maximum prize shall be divided equally among all authors and each shall receive a certificate.
- Funding:* Funded by the IEEE Signal Processing Society
- Eligibility:* To be eligible for consideration, an article must have appeared in any of the IEEE Signal Processing Society financial sponsored periodicals in an issue that is 10 years old or more from the current year. Nominations may arise from any individual or committee/board, but a board or committee cannot nominate one of its own members for the award. However, a member of a board or committee can be nominated by another board or committee. Current members of the Signal Processing Society's Awards Board are ineligible. Self-nominations are not accepted or considered. Papers that have already been recognized with another SPS Paper Award are not eligible.

Basis for Judging: Judging shall be on the basis of novelty and effectiveness in presenting subjects of high impact and long-term interest to the Society's members. The nominated paper should have a record of sustained impact and be of current importance, e.g. it is still frequently cited and/or is incorporated in widely used commercial technology. Work that was particularly important 20 years ago, but has since been superseded by other methods would not be appropriate unless the new methods clearly leverage the original work in some way. The paper should also be an original contribution rather than an overview or tutorial.

Presentation: Presentation of the award shall be made at either the Society's Awards Ceremonies, normally held during ICASSP in the Spring or at ICIP in the Fall.

14. IEEE SPS Conference Best Paper Award for Industry (established in 2015) (revised 2020)

Description: To recognize the author(s) of an ICIP and ICASSP paper of exceptional industrial merit and industrial impact dealing with a subject related to the Society's technical scope.

Prize: \$500 honorarium per author (up to a maximum of \$1,500 per award) and Certificate. In the event that there are more than three authors, the maximum prize shall be divided equally among all authors and each shall receive a certificate.

Funding: The award would be funded by the annual budget of the IEEE Signal Processing Society.

Eligibility: To be eligible for consideration, the paper must have been submitted to the ICIP or ICASSP. The candidate(s) are not required to be IEEE members. Candidates are not required to be working in industry at the time of nomination or when the paper was written. Current members of the Conference Award Evaluation Committee are ineligible. Self-nominations are accepted.

Basis for Judging: Judging shall be based on general quality, novelty, maturity of the technology and industrial impact of the described work Prototype, demo or video of prototype/demo presented at these conferences can also be considered for the Award.

Presentation: One (1) award may be presented annually at ICIP's Opening Ceremony and one (1) award may be presented annually at ICASSP's Opening Ceremony. The award will not be conferred in any given year for which there are not suitable candidates identified.

15. IEEE SPS Industrial Innovation Award (established in 2015)

Description: To recognize an individual or team at any level who were industry employees whose technical contributions have resulted in significant advances using signal processing technologies within the scope of the society.

Prize: \$1,500 per awardee (up to a maximum of \$4,500 per award) and a plaque and certificate. In the event that there are more than three awardees, the maximum prize shall be divided equally among all awardees and each shall receive a plaque and certificate.

Funding: The award would be funded by the annual budget of the IEEE Signal Processing Society.

Eligibility: The award shall be open to individuals at any level who were industry employees and played a significant role in the technical contribution at the time of the accomplishments being recognized. Candidate need not be an IEEE SPS member. It is preferred that recipients of the IEEE SPS Industrial Innovation Award be members of IEEE. However the IEEE Board of Governors may approve the presentation to a non-member upon the recommendation of the IEEE SPS Awards Board. Nominations may arise from any individual or committee/board, but a board or committee cannot nominate one of its own members for the award. However, a member of a board or committee can be nominated by another board or committee. Please note: boards or committees who submit nominations, but having voting Board or Governors members sitting on their boards or committees must ensure that Board of Governors voting members do not participate in the board/committee award nomination or selection process. Current officers and members of the Signal Processing Society Board of Governors and Awards Board are ineligible. Self-nominations are not accepted or considered. Members of the Awards Board and Board of Governors are not permitted to submit nominations. Non-voting Board of Governors are permitted to submit nominations. Previous recipients of the Industrial Innovation

Award are ineligible.

Basis for Judging: Selection will be based on major industrial accomplishments, standards, deployment of important processes or products, etc. that are of substantial benefit to the public, which use signal processing technologies and are visible beyond the company or institution where the contribution was made.

Presentation: One (1) award may be presented annually at either the Society's Awards Ceremonies, normally held during ICASSP in the Spring or at ICIP in the Fall, following the selection of the winner. The award will not be conferred in any given year for which there are no suitable candidates identified.

16. IEEE SPS Amar G. Bose Industrial Leader Award (established in 2015) (revised title in 2020)

Description: To recognize an industry business or technical leader whose leadership has resulted in major and outstanding advances or new directions using signal processing technologies within the scope of the Society.

Prize: \$1, 500, Plaque, and Certificate.

Funding: The award would be funded by the annual budget of the IEEE Signal Processing Society.

Eligibility: An industry leader who played a major leadership role in research or development and introduction of systems, devices, applications or services that have significantly impacted society on a global basis or has substantially advanced the use of signal processing technologies in industry, commerce, or society. The candidate is not required to be an IEEE member. Nominations may arise from any individual or committee/board, but a board or committee cannot nominate one of its own members for the award. However, a member of a board or committee can be nominated by another board or committee. Please note: boards or committees who submit nominations, but have voting Board of Governors members sitting on their boards or committees must ensure that Board of Governors voting members do not participate in the board/committee award nomination or selection process. However, a Current officers and members of the Signal Processing Society Board of Governors and Awards Board are ineligible. Self-nominations are not accepted or considered. Members of the Awards Board and Board of Governors are not permitted to submit nominations. Non-voting Board of Governors members are permitted to submit nominations. Previous recipients of the Industrial Leader Award are ineligible.

Basis for Judging: This award is for executive leadership resulting in major advances and new directions using signal processing in a business area. Evaluation is based on such factors as global acceptance of the products and services, financial success and growth of the business, ubiquity of the products and services, emulation of the contributions by competition, and degree of global recognition of the candidate. Other factors include time of service, impact, specific innovations, etc.

Presentation: One (1) award may be presented annually at either the Society's Awards Ceremonies, normally held during ICASSP in the Spring or at ICIP in the Fall, following the selection of the winner. The award will not be conferred in any given year for which there are no suitable candidates identified.

17. IEEE SPS Meritorious Regional/Chapter Service Award (established in 2017)

Description: To honor the outstanding contributions of any member of the Society to regional activities of the IEEE Signal Processing Society.

Prize: Plaque and Certificate.

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: Members of the IEEE Signal Processing Society. A board or committee member cannot nominate one of its members for the award. However a member of a board or a member of a committee can be nominated by another board or committee. Please note: boards or committees who submit nominations, but have voting Board of Governors members sitting on their boards or

committees must ensure that Board of Governors voting members do not participate in the board/committee award nomination or selection process. Current President is ineligible. Previous recipients of the Signal Processing Meritorious Regional/Chapter Service Award are ineligible. Self-nominations are not accepted or considered. Members of the Awards Board and Board of Governors members are not permitted to submit nominations. However, non-voting Board of Governors members are permitted to submit nominations.

Basis for Judging: Judging shall be based on dedication, effort, and contributions made to activities aimed at promoting the technical and educational activities of the IEEE Signal Processing Society in one specific region/chapter, as well as its local membership participation.

Presentation: Up to two (2) awards may be presented annually. The award will be presented at the Society's Awards Ceremony, normally held during ICASSP, following the selection of the winner. The award will not be conferred in any given year for which there are not suitable candidates identified.

18. IEEE SPS Pierre-Simon Laplace Early Career Technical Achievement Award (established in 2018) (revised title in 2020)

Description: To honor an individual who, over a period of years in his/her early career, has made significant technical contributions to theory and/or practice in technical areas within the scope of the Society, as demonstrated by publications, patents, or recognized impact on the field, including but not limited to, a standard, a product, or a technology trend.

Prize: \$1,500 a Plaque and Certificate.

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: This is an early career award and is not intended for individuals who are IEEE Fellows. The candidate is required to be an IEEE Signal Processing Society member. A board or committee cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Note: boards or committees who submit nominations, but have voting Board of Governors members and/or Signal Processing Society Awards Board members sitting on their boards or committees must ensure that those members do not participate in the board/committee award nomination or selection process. Current officers and members of the Signal Processing Society Board of Governors and Awards Board are ineligible. Previous recipients of the IEEE SPS Early Career Technical Achievement Award are ineligible. Self-nominations are not accepted or considered. Members of the Awards Board and voting members of the Board of Governors are not permitted to submit nominations. Non-voting Board of Governors members are permitted to submit nominations. Nominees should be less than 40 years of age or 10 years from highest degree at the time of nomination.

Basis for Judging: Nominees shall be judged on the basis of their significant technical contributions to theory and/or practice in technical areas within the scope of the Society, as demonstrated by publications, patents, or recognized impact on the field, including but not limited to, a standard, a product, or a technology trend.

Presentation: Up to two (2) awards may be presented annually; each recipient receives full prize amount. Presentation shall be made at the Society's Awards Ceremonies, normally held during ICASSP in the spring or at ICIP in the fall following selection of the winner.

19. IEEE SPS Regional Distinguished Teacher Award (established in 2019)

Description: To recognize individuals who have excelled in the teaching of Signal Processing.

Prize: The prize shall consist of \$1500, a plaque, a certificate, and for non-member recipients a complimentary one-year Society membership. The Society may also support the participation of the awardee in a Society sponsored Seasonal School as an instructor for a short course on the winning material. This course would be recorded and posted on the Society's e-learning/Resource Center. Multiple Awards Given Annually - Each recipient receives full prize.

Up to three (3) awards may be presented annually. The award will not be conferred in any given

year for which there are no suitable candidates identified. The award can be presented to up to three recipients, and each recipient receives the full prize amount as noted above

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: The candidate need not be an IEEE SPS member. It is preferred that recipients of the IEEE SPS Regional Distinguished Teacher Award be members of IEEE. However, the IEEE SPS Board of Governors may approve the presentation to a non-member upon the recommendation of the IEEE SPS Awards Board. A board or committee member cannot nominate one of its members for the award. However, a member of a board or committee can be nominated by another board or committee. Note: boards or committees who submit nominations, but have voting Signal Processing Society Awards Board members or Regional Directors-at-Large sitting on their boards or committees must ensure that those voting members do not participate in the board/committee award nomination or selection process. Previous recipients of the Signal Processing Society Regional Distinguished Teacher Award are ineligible. Current members of the Awards Board and the Regional Directors-at-Large are ineligible and are not permitted to submit nominations. Self-nominations are not accepted or considered.

Basis for Judging: Preference should be given to nominees whose educational material covers areas of heightened and timely interest. The award is not intended for educators who qualify for the Society's Education Award. Supporting material submitted with the nomination can include the awardees developed teaching material, which should be of high educational value in the signal processing discipline, related to basics and fundamentals, applications or emerging topics of heightened interest. The emphasis is on both the delivery and quality of the educational material. Contributions of online or video material for educational purposes are welcome, in order to promote new modes of delivery. Copies or links to the material, if available, should be submitted for evaluation. The educational or teaching material developed by the nominee and submitted for evaluation does not need to be in English. The Society acknowledges the diversity of its members and wishes to recognize their efforts irrespective of the language of instruction. If desired by the winner, and if approved by the winner's institution and barring any copyright issues, the educational material generated by the winner can be considered for posting on the Society's Resource Center and can be promoted in the Society's SP Magazine and at the Society's Award ceremony. Supporting letters from undergraduate students is also encouraged. The Society's Awards Board will determine the award recipient(s).

Presentation: Presentation shall be made at the Society's Awards Ceremonies, normally held during ICASSP in the spring or at ICIP in the fall following selection of the winner.

20. IEEE SPS PhD Dissertation Award (established in 2019)

Description: To recognize PhD relevant work in signal processing while stimulating further research in the field.

Prize: The prize shall consist of \$1500, and a certificate. Up to three (3) awards may be presented annually and each recipient shall receive the full prize amount. The award will not be conferred in any given year for which there are no suitable candidates identified.

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: Eligibility is based on having earned the PhD in electrical engineering or a related field at an accredited institution of higher learning within the past three-years: for example, for the 2018 Award, the window is between January 1, 2015 and December 31, 2017. The nominee must be a member of the IEEE Signal Processing Society at the time of nomination and must have carried out a PhD thesis on a signal processing subject. The PhD dissertation must have been accepted in final form within the above noted window.

Nominations must be submitted by SPS members, either the applicant's advisor (preferred), or other SPS member with detailed knowledge of the applicant and the dissertation. The below noted items must be included with the nomination to be considered for review. All nomination materials must be written in English.

1. Contact information of the nominee and the advisor/nominator of the PhD, including their IEEE membership numbers;
2. Copy of the PhD Dissertation in pdf format; the dissertation should be publicly available, e.g., through the nominee's University repository;
3. A complete curriculum vitae or resume of the applicant that includes a list of published and submitted journal and conference papers;
4. A nomination letter from the PhD advisor, explaining why the dissertation is worthy of the IEEE SPS Best PhD Dissertation Award;
5. Two reference letters from domain experts familiar with the dissertation work, and not serving in the same institution as the nominee or nominator, as independent corroborating evidence of the quality of the dissertation.

Previous recipients of the Signal Processing Society *Best PhD Dissertation Award* are ineligible. Current members of the Awards Board and Regional Directors-at-Large are ineligible and are not permitted to submit nominations. Self-nominations are not accepted or considered.

Basis for Judging: The criteria for evaluation are:

- Scientific impact (50%): impact on the scientific discipline and practice as evidenced by citations, downloads, journal papers published from the dissertation, conference paper published from the dissertation, other awards received, patents, or adoption into practice.
- Overall quality of dissertation (50%): Creativity, quality of writing, relevance, significance and timeliness of the research questions addressed, level of novelty compared to the state of the art, quality and rigor of scientific method, quality of critical thinking in discussion and conclusions, quality and scope of the bibliography.

Presentation: Presentation shall be made at the Society's Awards Ceremonies, normally held during ICASSP in the spring or at ICIP in the fall following selection of the winner.

21. IEEE Signal Processing Cup Competition (established in 2019)

Description: The objective of the competition is to provide undergraduate students with an opportunity to form teams and work together to solve a challenging and interesting real-world problem using signal-processing techniques and methods. Topics for each competition will change annually as determined by SPS Technical Committees.

Prize: Prizes will be awarded to the final three teams annually. Each recipient will receive a certificate and prizes for the winning teams are noted below. The prize amounts will be divided equally among the recipients in the individual prize tiers.

A maximum of three members from each of the three teams selected will be provided travel support up to \$1,200 for continental travel or \$1,700 for intercontinental travel to attend ICASSP for the final competition. The participants will claim their travel expenses on a reimbursement basis. All team members are welcome to attend the competition, but will not be provided with any travel grant. In addition, those team members who will not be presenting a paper at the conference will be offered a complimentary ICASSP registration.

The finalist team will also be invited to join the Conference Banquet as well as the Student Career Luncheon, so that they can meet and talk to SPS leaders and global experts.

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: Each team participating should be composed of one faculty member or someone with a PhD degree employed by the university (the Supervisor), at most one graduate student (the Tutor), and at least three, but no more than ten undergraduate students. At least three of the undergraduate team members must hold either regular or student memberships of the IEEE Signal Processing Society. Undergraduate students who are in the first two years of their college studies, as well as high school students who are capable to contribute are welcome to participate in a team. A participant cannot be on more than one team.

Basis for Judging: Each submission should include a report, in the form of an IEEE conference paper, on the technical details of the methods used and the results, as well as the programs developed. The TC who is hosting the competition will evaluate the submissions. The top three teams will be identified to participate in final competition. A maximum of three members from each of the three teams selected will provided limited travel support to attend the competition.

During the final competition event, the participating teams need to present their work to the specification of the competition outline. The winner will be selected by a judging panel based on the obtained results during the final competition, the quality of the final presentation, and the capability to address questions. The teams are judged and placed as the grand prize, first runner-up, and second runner-up winners of the prize money.

Presentation: The competition takes place at ICASSP and the results are announced at the end of the competition and the certificates are presented during the SPS Student Career Luncheon event.

22. IEEE Signal Processing Video and Image Processing Competition (established in 2019)

Description: The objective of the competition is to provide undergraduate students with an opportunity to form teams and work together to solve a challenging and interesting real-world problem using signal-processing techniques and methods. Topics for each competition will change annually as determined by SPS Technical Committees.

Prize: Prizes will be awarded to the final three teams annually. Each recipient will receive a certificate and prizes for the winning teams are noted below. The prize amounts will be divided equally among the recipients in the individual prize tiers.

A maximum of three members from each of the three teams selected will be provided travel support up to \$1,200 for continental travel or \$1,700 for intercontinental travel to attend ICIP for the final competition. The participants will claim their travel expenses on a reimbursement basis. All team members are welcome to attend the competition, but will not be provided with any travel grant. In addition, those team members who will not be presenting a paper at the conference will be offered a complimentary ICIP registration.

The finalist team will also be invited to join the Conference Banquet as well as the Student Career Luncheon, so that they can meet and talk to SPS leaders and global experts.

Funding: Funded by the IEEE Signal Processing Society.

Eligibility: Each team participating should be composed of one faculty member or someone with a PhD degree employed by the university (the Supervisor), at most one graduate student (the Tutor), and at least three, but no more than ten undergraduate students. At least three of the undergraduate team members must hold either regular or student memberships of the IEEE Signal Processing Society. Undergraduate students who are in the first two years of their college studies, as well as high school students who are capable to contribute are welcome to participate in a team. A participant cannot be on more than one team.

Basis for Judging: Each submission should include a report, in the form of an IEEE conference paper, on the technical details of the methods used and the results, as well as the programs developed. The TC who is hosting the competition will evaluate the submissions. The top three teams will be identified to participate in final competition. A maximum of three members from each of the three teams selected will provided limited travel support to attend the competition.

During the final competition event, the participating teams need to present their work to the specification of the competition outline. The winner will be selected by a judging panel based on the obtained results during the final competition, the quality of the final presentation, and the capability to address questions. The teams are judged and placed as the grand prize, first runner-up, and second runner-up winners of the prize money.

Presentation: The competition takes place at ICIP and the results are announced at the end of the competition and the certificates are presented during the SPS Student Career Luncheon event.

23. IEEE Signal Processing Society 5-Minute Video Clip Contest (5-MICC) (established in 2020)

Description: The Society will hold IEEE Signal Processing Society 5-Minute Video Clip Contest (5-MICC) which is held at ICASSP and ICIP annually. The objective of the competition is to create video clips that highlight and convey excitement about signal processing in the broad sense – including fundamentals, image, video, audio, speech, communication, radar, language, knowledge, human and machine learning and other forms of information bearing data and signals.

Submitted videos will focus on a particular topic that will be selected on a yearly basis among proposals received from IEEE SPS members and endorsed by one or more SP Technical Committees, with the expectation that the video promotes the field in a compelling and effective manner. The video competition will also accept “open topic” video submissions, even if they are not related to the yearly selected topic. The rationale for this is to engage the broad Signal Processing community to come up with creative ideas. Open topic submissions will compete together with all yearly topic submissions.

Prize: Prizes will be awarded to the final three teams annually. The specific topic for each contest will change annually, but it will always be possible to submit a video for the “open” topic. The prize amounts will be divided equally among the recipients in the individual prize tiers.

A maximum of three members from each of the three teams selected will be provided travel support up to \$1,200 for continental travel or \$1,700 for intercontinental travel to attend ICASSP/ICIP for the final contest. The three team members may not include any faculty members. The participants will claim their travel expenses on a reimbursement basis. All team members are welcome to attend the contest, but will not be provided with any travel grant. In addition, those team members who will not be presenting a paper at the conference will be offered a complimentary ICASSP/ICIP registration.

The finalist teams will also be invited to join the Conference Banquet as well as the Student Career Luncheon, so that they can meet and talk to SPS leaders and global experts.

Funding: Funded by the IEEE Signal Processing Society operating budget. However the Society may at times receive support from outside sponsors for the contests.

Eligibility: Each team participating should be composed of one faculty member or someone with a PhD degree employed by the university (the Supervisor), at most one graduate student (the Tutor), and at least three, but no more than five undergraduate students. At least three of the undergraduate team members must be either IEEE Signal Processing Society (SPS) student members or SPS members. Undergraduate students who are in the first two years of their college studies, as well as high school students are welcome to participate in a team. A participant cannot be on more than one team.

Basis for Judging: Each submission should include a report, in the form of an IEEE conference paper, up to 2 pages, on the main idea/concept of the full video that will be submitted with the related written script. A judging panel, whose composition will be decided by the IEEE SPS Student Services Committee Chair, will evaluate all of the submissions and identify the top 10 teams to send their final 5-minute video. The judging panel will review the top 10 teams’ videos and determine the three finalist teams to present their videos at ICASSP/ICIP.

The three finalist videos will be available on the ICASSP/ICIP website and voted on by the conference participants. The judging panel will finalize the ranking and select the best video also taking into account the conference participants votes. The teams are placed as the grand prize, first runner-up, and second runner-up winners of the prize money.

Presentation: The IEEE Signal Processing Society 5-MICC takes place at ICASSP/ICIP. The contest results are announced at the end of the contest and the certificates are presented during the SPS Student Job Fair and Luncheon event.

IEEE SOCIETY ON SOCIAL IMPLICATIONS OF TECHNOLOGY
SIT-30 (Division VI)

For all Society on Social Implications of Technology awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Carl Barus Award for Outstanding Service in the Public Interest (first presented in 1978) (revised prize and funding 2015)

Description: To recognize in a timely manner the engineer, technical person, or group thereof who acted within the scope of interest of the IEEE to protect the public health, safety, and/or welfare despite a risk to their professional reputation and/or career.

Prize: \$2,500 and Plaque

Funding: Funded by the IEEE Society on Social Implications of Technology.

Eligibility: Any engineer or technical person, member or nonmember of IEEE.

Presentation: Aperiodically at an appropriate conference or meeting.

2. IEEE Brian O’Connell SSIT Distinguished Service Award (established in 2006) (revised 2009)

Description: To recognize at most one SSIT member who has served the Society with distinction as a board member, contributor to publications, conference organizer, or any combination of these or other activities. This award is intended both to recognize and to stimulate outstanding service.

Prize: Plaque

Funding: Funded by the IEEE Social on Social Implications of Technology

Eligibility: Any full member of SSIT who has served the society in an exemplary way for a period of years.

Basis for Judging: Candidates will be judged on length, breadth, and impact of service. The committee will vote on all candidates deemed eligible for the award. If no suitable candidates are nominated, the award will not be presented.

Presentation: The award will be given at the SSIT’s annual conference by the president of SSIT in the name of the society. Funding to attend the conference will be considered.

3. IEEE SSIT Norbert Wiener Award for Social and Professional Responsibility (established in 2017)

Description: The IEEE SSIT Norbert Wiener Award for Social and Professional Responsibility is given annually (if a qualified candidate is nominated) to recognize an exceptional contribution or outstanding career by an individual or team of up to three members in the field of the social implications of technology..

Prize: Plaque.

Funding: Funded by the IEEE Social on Social Implications of Technology

Eligibility: The Award may be given to anyone, regardless of IEEE membership or profession. The Award is given to a living individual or a team of up to three.

The Award may be based on scholarly contributions (papers, books, and presentations), educational contributions (outstanding teaching, curriculum development, co-curricular

activities), contributions to the welfare of society involving engineering, science and/or technology, or other contributions to the understanding of the interaction of technology and society.

Basis for Judging: Criteria for selection of a recipient includes the magnitude, impact, duration and relevance of the nominee's work to the aims of the Society and the quality of the supporting endorsement letters. A proposed recipient will be selected if appropriate by an initial screening of the Awards Committee.

Final approval of the recipient(s) will be done by the SSIT Board of Governors.

Presentation: The award presentation will be made at the annual ISTAS conference if practical. If the recipient prefers another venue, it also will be considered. Typically, the SSIT ISTAS conference is in late spring or early summer.

The award presentation may include a lecture by the recipient if practical. This might take the form of a special session at ISTAS or other conference, or a lecture/presentation at a university, IEEE chapter or other venue convenient to the recipient. Expenses of the recipient for this event may be covered if the SSIT budget allows for it.

IEEE SOLID-STATE CIRCUITS SOCIETY
SSC-37 (Division I)

For all Solid-State Circuits Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Journal of Solid-State Circuits Best Paper Award (revised 1999)

Description: To recognize the best paper published in the *IEEE Journal of Solid-State Circuits*.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Solid-State Circuits Society.

Eligibility: Authors of papers published in the *IEEE Journal of Solid-State Circuits* in the previous year.

Basis for Judging: Outstanding achievement, significance, clarity of presentation, timeliness.

Presentation: Annually, at ISSCC.

2. Lewis Winner Award for Outstanding Conference Paper

Description: To recognize the outstanding paper presented at the International Solid-State Circuits Conference (ISSCC).

Prize: Plaque

Funding: Funded by the IEEE Solid-State Circuits Society.

Eligibility: Authors of papers presented at the ISSCC.

Basis for Judging: Quality of contribution.

Presentation: Annually, at ISSCC.

3. Beatrice Winner Award for Editorial Excellence

Description: To recognize excellence in editorial quality of material accepted for publication in the International Solid-State Circuits Conference Digest of Technical Papers.

Prize: Plaque

Funding: Funded by the IEEE Solid-State Circuits Society.

Basis for Judging: Quality in conciseness, clarity, organization, efficacy of tables, accuracy and adequacy of references.

Presentation: Annually, at ISSCC.

4. ISSCC Evening Session Award (established in 1992)

Description: To recognize best evening panel session at the International Solid-State Circuits Conference.

Prize: Mounted Certificate for organizer/moderator and Certificate for each panel member.

Funding: Funded by the IEEE Solid-State Circuits Society.

Eligibility: Organizers, moderators and panelists of International Solid-State Circuits Conference evening panel sessions in the preceding year.

Basis for Judging: Overall quality of evening session, organization, presentation, topic, and audience response.

Presentation: Annually, at ISSCC.

5. **Jack Kilby Outstanding Student Paper Award** (established in 1995)

Description: Presented to the author(s) of a paper presented at the IEEE International Solid-State Circuits Conference (ISSCC). The paper is one judged to represent particularly outstanding accomplishment by a student(s). The principal author(s) of the paper must have been students at the time that the work described in the paper was carried out. The Award will be presented on an annual basis at the ISSCC, but may not be presented in the event that no paper is judged to qualify.

Prize: \$200 and Plaque. In the event of multiple student authors, the honorarium will be shared among them. Funding will be provided by the IEEE Solid-State Circuits Society. Administration of the award will be the responsibility of the ISSCC Executive Committee.

Funding: Funded by the IEEE Solid-State Circuits Society.

Eligibility: The award recipient(s) must have carried out the work described in the paper as students in the course of their studies. There are no requirements for IEEE membership for award recipients.

Basis for Judging: Some factors to be considered include the creativity, innovation, usefulness, impact on the field, and professionalism of the work described. Award nominees will be selected from among the papers submitted to the ISSCC in the year immediately preceding the Conference at which the award is presented; the recipient will be notified prior to the conference.

Presentation: At the International Solid-State Circuits Conference normally held in February of each year on behalf of the ISSCC and IEEE Solid-State Circuits Society.

6. **ISSCC Jack Raper Award** (established in 2001)

Description: To recognize authors of an outstanding paper in the area of new Technology Directions presented at the annual International Solid-State Circuits Conference (ISSCC), as evaluated by the attendees of the Conference. This award is intended to stimulate the continuing high quality of Conference presentations.

Prize: Plaque, one per paper, to the presenter. In the event of multiple authors, a second plaque is provided for display within the research group.

Funding: The plaque for the outstanding Technology Directions paper of the previous year is financed out of the revenues of the current year. The SSCS provides a sizeable loan to the Conference each year to initiate a successful management cycle.

Eligibility: Each presentation of a regular paper in the area of Technology Directions at the annual Conference is eligible. IEEE or Society membership is not a criterion.

Basis for Judging: The Award is based on the ratings/results of evaluation forms made available to each Conference attendee of each regular technical session.

Presentation: Annually, during the Awards section of the IEEE International Solid-State Circuits Conference Plenary Session held in February.

7. **SSCS Outstanding Chapter Of The Year Award** (established in 2001)

Description: To recognize a chapter that has constantly shown outstanding leadership and initiative in organizing activities. The award will be based on programs organized during the period of 1 July to 30 June with the award to be presented during the week of ISSCC.

- Prize:* \$1,000 to be used for chapter activities and a Certificate of Recognition for display. As a general rule, one award will be granted each year, though the chapters committee will have the discretionary power to recommend 2 awards in an exceptional year, or forego the presentation of an award if no qualified candidate is available.
- Funding:* Funded by the IEEE Solid-State Circuits Society
- Eligibility:* Open to all active SSCS Chapters. A chapter cannot receive an award more than once every three years.
- Basis for Judging:* The selection will be based on several factors: a) the quality and quantity of activities and programs sponsored by the chapter; b) the accrual of practical benefits for local chapter members; c) demonstrations of successful outreach programs to the professional community; d) growth of chapter membership
- Presentation:* Annually, at the IEEE International Solid-State Circuits Conference held in February

8. **IEEE SSCS Pre-Doctoral Achievement Award** (established in 2011) (*replaces Pre-Doctoral Fellowship*)

- Description:* To recognize outstanding Ph.D. candidates in the field of Solid-State Circuits.
- Prize:* \$1,000 honorarium, certificate, cost of the student's attendance at ISSCC (travel, registration fee, and hotel).
- Funding:* Funded by the IEEE Solid-State Circuits Society. The plan of the Society is to award up to five of these annually, but financial health of the Society or the quality of the applications received may limit the number in some years. In other years we may wish to award more than five
- Eligibility:* IEEE and SSCS membership. Must be Ph.D. candidate in the field of Solid-State Circuits who has completed at least one year of graduate study and has chosen a dissertation topic.
- Basis for Judging:* Based on the following application kit, the committee will judge the most qualified from among the applicants. The awards will be made on the basis of academic record and promise, quality of publications, and a graduate study program well matched to the charter of SSCS. Consideration will be given to geographical diversity and other interests of balanced representation of membership without any application of quotas. Consensus after discussion is the preferred form of agreement for the committee, but voting will be used if decision making becomes difficult.
- IEEE Member Number
 - Biography (1 page)
 - A copy of all relevant undergraduate and graduate transcripts
 - Essay on Graduate Study Plans (about 2 pages)
 - Summarize what you have completed and what is planned.
 - List authored and co-authored publications and include a copy of each.
 - Describe work that must be done to complete your graduate program of study -- explain its importance and what is novel about its approach.
 - Letters of Recommendation: At least two letters, one from the principal advisor, addressing academic record, accomplishments, and promise, and graduate research program.
- Presentation:* ISSCC held in San Francisco each February. Presented in the name of SSCS.

9. **IEEE Brokaw Award for Circuit Elegance** (established in 2018)

- Description:* Integrated circuits have evolved into very complex systems, which can contain many millions of small elementary circuits constructed using a handful of transistors. Many of these circuits utilize known basic circuit techniques, often invented decades ago such as “bandgap” reference, AB amplifier bias stages, analog multipliers, various oscillators and even simple switches with bootstrap or charge cancelling techniques. Each of these circuits exhibit an “elegancy” wherein several critical functions are combined in just a few components resulting from a highly creative process. One could compare these “elegancy” to a short yet beautiful poem, in the world of books or even movies.

While the focus in IC design has shifted to complexity and functionality, the goal of the *IEEE Brokaw Award for Circuit Elegance* is to capture the idea to stimulate and celebrate the invention of elegant small circuits,

The *IEEE Brokaw Award for Circuit Elegance* is created to enhance appreciation and encourage innovation of simple, smart and elegant circuit design. The Award will be presented in recognition of a unique, innovative, simple, smart and elegant circuit design, which was created during the past decade and has demonstrated its viability.

Up to three designs may be recognized in a single year.

Prize: Each design will receive \$10,000 cash prize and up to \$5,000 for the designers to travel to attend ISSCC in year of the award presentation. If more than one individual is responsible for the design, the cash prize will be split evenly among the designers.

Funding: **Funding for the prize items will be provided by the Paul and Sonja Brokaw Foundation and administered by the IEEE Foundation.**

Eligibility: Eligible candidates for this award must be SSCS members in good standing. Self-nominations are permitted and encouraged.

Basis for Judging: Nominations will be judged based on the ingenuity, engineering creativity, and elegance of the submitted circuit designs. Preference will be given to circuits supported by measurement results from a fabricated prototype.

Presentation: This award will be presented at appropriate award event at ISSCC (a flagship conference of the Society) held in January/February each year.

10. **IEEE Solid-State Circuits Society Distinguished Service Award** (established in 2018)

Description: This award is to recognize exceptional and distinguished service to the Solid-State Circuits Society.

Prize: Recipient will receive \$5000 prize and plaque. The recipient will also receive lifetime IEEE and SSCS memberships. Only One Allowable Recipient Selected periodically and as appropriate. Recipient receives full prize.

Funding: Funded by the IEEE Solid-State Circuits Society.

Eligibility: Those who receive this award must be a current SSCS Member in good standing. Past society presidents cannot be nominated prior than 4 years after the end of their term as president.

Basis for Judging: The SSCS Award Committee or its appointed sub-committee shall evaluate nominations as to whether the nominee's contribution is significant and merits consideration for the Award. A slate of selected nominees will be presented by the Awards Chair to the SSCS Administrative Committee and the winner will be selected by the SSCS Administrative Committee by vote.

Presentation: The award will be given during the IEEE International Solid-State Circuits Conference (ISSCC), for each year a recipient is chosen by the Awards Committee.

11. **IEEE Solid-State Circuits Society New Frontier Award** (established in 2019)

Description: This award will recognize and honor SSCS members in their early career who are exploring innovative and visionary technical work within the field of solid-state circuits. The award aims to emphasize pioneering developments that are at the frontiers of IC design or possess an imminent potential to expand the field through new categories of circuit technologies, system design, and/or emerging applications.

Prize: Recipient will receive \$5000 prize and plaque.

Funding: Funded by the IEEE Solid-State Circuits Society.

Eligibility: Those who receive this award must be a current SSCS Member in good standing and have received their highest degree (Bachelor or higher) within ten years of the award's application deadline.

Basis for Judging: The SSCS Awards Committee or its appointed sub-committee shall evaluate nominations as to whether the nominee's contribution is significant and merits consideration for the Award. A slate of selected nominees will be presented by the Awards Chair to the SSCS Administrative Committee and the winner will be selected by the SSCS Administrative Committee by vote.

Presentation: The award will be presented at the plenary session of one of the SSCS financially sponsored conferences, at the choice of the recipient.

12. **IEEE Solid-State Circuits Society Innovative Education Award** (established in 2019)

Description: This award will recognize and honor SSCS members in their early/mid-career who are making significant contributions to education in the field of solid-state circuits using innovative approaches. The award aims to highlight distinguished and unique educational methods or programs that have a broad impact on education of our community. Some examples include, but are not limited to, education within outreach beyond the candidate's institution, unique teaching methods via a variety of media more appealing to the current and future generations of students, motivational lab development, open source textbooks or lectures, open-source software development, instruction that reaches out to high-school student and teachers, and programs geared toward a diverse group of students, among others.

Prize: Recipient will receive \$5000 prize and plaque.

Funding: Funded by the IEEE Solid-State Circuits Society.

Eligibility: Those who receive this award must be a current SSCS Member in good standing.

Basis for Judging: The SSCS Awards Committee or its appointed sub-committee shall evaluate nominations as to whether the nominee's contribution is significant and merits consideration for the Award. A slate of selected nominees will be presented by the Awards Chair to the SSCS Administrative Committee and the winner will be selected by the SSCS Administrative Committee by vote.

Presentation: The award will be presented at the plenary session of one of the SSCS financially sponsored conferences, at the choice of the recipient.

13. **IEEE Solid-State Circuits Society Industry Impact Award** (established in 2019)

Description: This award will recognize and honor SSCS members who have had seminal impact and made distinctive contributions to the field of solid-state circuits and the integrated circuits industry. The award recognizes extraordinary accomplishments in entrepreneurship, leadership and/or technical excellence that led to significant breakthroughs and paradigm shifts in the IC business, thereby enabling new products and services within the ten year period prior to the application deadline.

Prize: Recipient will receive \$5000 prize and plaque.

Funding: Funded by the IEEE Solid-State Circuits Society.

Eligibility: Those who receive this award must be a current SSCS Member in good standing.

Basis for Judging: The SSCS Awards Committee or its appointed sub-committee shall evaluate nominations as to whether the nominee's contribution is significant and merits consideration for the Award. A slate of selected nominees will be presented by the Awards Chair to the SSCS Administrative Committee and the winner will be selected by the SSCS Administrative Committee by vote.

Presentation: The award will be presented at the plenary session of one of the SSCS financially sponsored conferences, at the choice of the recipient.

13. **IEEE Silkroad Award Program of the International Solid-State Circuits Conference (ISSCC)**

(established in 2021)

Description: This award is intended to promote design of integrated circuits and systems by students at a quality level appropriate for submission to ISSCC, the foremost global forum for presentation of advances in solid-state circuits and systems-on-a-chip. It is intended for students from universities within IEEE Region 10. Particular emphasis is placed on diversity and inclusion.

Prize: Up to three awards are given annually at ISSCC. Each winner receives a \$1,000 honorarium and a certificate. In the event that a single paper has multiple authors, the authors will share the \$1,000 honorarium.

Funding: Funded by revenue generated by the International Solid-State Circuits Conference. The maximum annual expense of this award is \$3,000.

Eligibility: To be eligible for a Silkroad award, an author must be a full-time Region 10 student, an ISSCC registrant, and a first-time speaker/co-author at ISSCC.

Basis for Judging: Since the award places a particular emphasis on diversity and inclusion, and at the same time seeks to recognize excellent work, both “freshness of the group” and “excellence of the paper” are considered. Paper excellence is according to how the paper was ranked in the paper-selection meeting. The “freshness” criteria, from high to low, are:

1. Countries that do not yet have a Silkroad Award winner
2. Universities that do not yet have a Silkroad Award winner, even if the university is in a country that already has Silkroad Award winner.
3. Laboratories/research groups that do not yet have a Silkroad Award winner, even if affiliated with a University that already has a Silkroad Award winner.

If only one paper has the highest freshness, only one winner is selected. If more than one paper has the same level of freshness (e.g., multiple papers meeting one or more of the same criteria noted above), a winner is selected based on ranking. If the second-ranked paper is within 20% ranking of the first, two winners are selected. Otherwise, only one winner is selected. The SCS Awards Committee or its appointed sub-committee shall evaluate nominations as to whether the nominee’s contribution is significant and merits consideration for the Award. A slate of selected nominees will be presented by the Awards Chair to the SCS Administrative Committee and the winner will be selected by the SCS Administrative Committee by vote.

Presentation: The Silkroad award winners are recognized in the ISSCC Awards Digest, at the ISSCC Awards Luncheon, and on the ISSCC and SCS website.

IEEE COUNCIL ON SUPERCONDUCTIVITY
SCC-41 (Division IV)

For all Council on Superconductivity awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Award For Continuing And Significant Contributions In The Field Of Applied Superconductivity
(established in 2000) (revised 2012)

Description: To recognize a career of meritorious achievements and outstanding technical contributions by a living individual in the field of applied superconductivity

Prize: \$5,000, a medallion suitably engraved and waiving of registration fee at the ASC where the award is given.

Funding: **Funded by the IEEE Council on Superconductivity. Award is funded via Council on Superconductivity Award Fund in the IEEE Foundation.**

Eligibility: Must have been active in the field of applied superconductivity for at least twenty years; must have attended at least three Applied Superconductivity Conferences and must be able to attend the Applied Superconductivity Conference at which award will be made. Land and email submissions accepted.

Presentation: At a plenary session of the Applied Superconductivity Conference after selection has been made. Awardee shall be encouraged to make a presentation at that plenary session on a topic of his/her choice in the field of applied superconductivity.

2. Van Duzer Prize Award (established in 2001)

Description: To recognize the best contributed paper published in the *IEEE Transactions on Applied Superconductivity* during one volume year. The award is named in honor of Professor Ted Van Duzer, first Editor-in-Chief of *IEEE Transactions on Applied Superconductivity*

Prize: \$1,000 and Certificate. For papers with multiple authors, the honorarium shall be divided equally.

Funding: Funded by the IEEE Council on Superconductivity

Eligibility: All papers published as regular contributions during a volume year (March-December issues) are eligible. The award is restricted to regular submissions to encourage authors to prepare well-written and comprehensive contributions, which may have archival value and are likely to be cited frequently by other authors. Papers submitted for publication through scientific conferences such as the Applied Superconductivity and the International Conference on Magnet Technology are not eligible.

Basis for Judging: Papers will be scored on the following criteria: 1) Expectation that the paper will be highly cited by future authors (40 points); 2) Technical excellence of the work described (35 points), and 3) Completeness of the paper as an archival record of a finished body of research (25 points). The winner must be approved by a majority vote of the Award Committee.

Presentation: At a scientific conference, such as the Applied Superconductivity Conference, during an award ceremony sponsored by the IEEE Council on Superconductivity. There are other conferences during the odd numbered years. They are smaller. Different specialties attend different conferences. The award will be presented at a conference, which the author would normally attend.

3. **IEEE Max Swerdlow Award for Sustained Service to the Applied Superconductivity Community** (established in 2002) (revised 2012)

Description: To recognize sustained service to the applied superconductivity community that has had a lasting influence on the advancement of the technology either through the demonstration of exceptional service to and leadership within the community, the formulation and promotion of major programs in applied superconductivity or through leadership and management roles in major research organization. Named after the late Max Swerdlow who, starting in the 1960's and continuing for more than 20 years, served as Program Manager for Superconductivity at the US Air Force Office of Scientific Research (AFOSR). His office funded the majority of the programs in the US on superconducting materials and large-scale applications of superconductivity other than those funded by the Department of Energy. Max Swerdlow's dedication and perseverance in the support of these activities played a crucial role in the maturing of applied superconductivity.

Prize: \$5,000, Plaque suitably inscribed, and a medallion fabricated from niobium metal, at least ten centimeters in diameter and suitably engraved. Multiple awards are allowable.

Funding: **Funded by the IEEE Council on Superconductivity. In any given year, none, one or more awards may be made depending on the qualifications of the nominees and the availability of funds from the IEEE Council on Superconductivity. Award is funded via Council on Superconductivity Award Fund in the IEEE Foundation.**

Eligibility: Sustained activity in the field of applied superconductivity for a minimum of about 20 years, irrespective, of the field of discipline or functions performed to advance or promote the field of applied superconductivity. Candidates must be living, but can be retired at the time of the Award. The recipient is also expected to attend the international conference at which the Award would be presented. No individual can receive this award more than one time. Land and email submissions accepted.

Basis for Judging: Individual's professional activities in the field of applied superconductivity and the perceived contribution of the individual to the advancement of the field of applied superconductivity.

Presentation: During an opening or plenary session of an appropriate international conference on applied superconductivity affiliated with the IEEE Council on Superconductivity.

4. **IEEE Council on Superconductivity Carl H. Rosner Entrepreneurship Award** (established in 2009)

Description: To recognize the potential impact of superconductivity on the fields of electrical engineering, physics, medicine and energy by rewarding entrepreneurs who have established a successful business or had the primary responsibility within a commercial organization to commercialize a device or service based on a property of superconductivity. The award will recognize young entrepreneurs while they are still growing their businesses to encourage others to follow their path. This award is named for Mr. Carl H. Rosner, whose career is an excellent example of a successful entrepreneur in the commercialization of superconductivity.

Prize: The recipient of the IEEE Council on Superconductivity Carl H. Rosner Entrepreneurship Award will receive a suitably inscribed plaque and an honorarium of 2,500 US dollars.

Funding: The initial increment of funding for this Award has been provided by Mr. Carl H. Rosner, for whom this Award is named and whose career is an example of a successful entrepreneur in the commercialization of superconductivity. Once these funds are expended, the IEEE Council on Superconductivity will provide funding for additional IEEE Council on Superconductivity Carl H. Rosner Entrepreneurship Awards. When this Award is funded directly by the IEEE Council on Superconductivity, the Treasurer of the IEEE Council on Superconductivity shall guarantee that the awarding of the honorarium associated with the Award during any given calendar year shall not cause the Council's financial balance sheet for that year to go negative.

Eligibility: The Award will generally be made to an individual, independent of nationality, country of residence, race, or gender, who, in early or mid-career started a new company or who joined an existing small business and assumed principal responsibility for the development and eventual commercialization (either in the commercial marketplace, or to the military or scientific

communities) of a new and innovative superconducting product or service. At the time of the Award, the recipient would have exercised leadership over his/her company or business activity for a period of time of (approximately) five years and the company or business activity appears to have become a sustaining entity and is deemed to be on the path toward developing a potential commercial product. The recipient does not have to be a member of the IEEE. An individual may receive the IEEE Council on Superconductivity Carl H. Rosner Entrepreneurship Award only one time.

Basis for Judging: Nomination for this Award shall be made by submitting a (nominal) two-page letter to the Executive Secretary of the Selection Panel describing the educational background and early professional career of the candidate and the accomplishments of the individual in his/her entrepreneurial role that may qualify the nominee for consideration for this Award.

Once the nomination letter(s) have been received, they will be distributed to all members of the Selection Panel and each member will have the opportunity to evaluate these letters and make comments, either pro or con, on each nomination. Once these evaluations forms with comments have been circulated among the members of the Selection Panel, there will be balloting (by e-mail, if most convenient) for selection of a recipient. To be selected, a recipient must receive at least three-quarters of the votes cast by members of the Selection Panel during a given ballot. A quorum shall consist of at least two-thirds of the total membership of the Selection Committee voting during any given ballot. If, after two ballots, no nominee has received the required number of votes, no Award shall be made during that year.

The evaluation of nomination letters shall be completed no later than eight weeks prior to the opening session of the international conference on applied superconductivity, or at a time designated by the President of the IEEE Council on Superconductivity where the Award will be presented. The Award will be made not more than once per calendar year, but only in those years when the Selection Panel makes a selection.

Presentation: This Award will be presented not more than once per calendar year at a suitable international conference on applied superconductivity that is associated with the IEEE Council on Superconductivity, such as the Applied Superconductivity Conference, or at a time and place designated by the President of the IEEE Council on Superconductivity. The Award will be made only in those years when the Selection Panel has made a selection.

5. **IEEE CSC Graduate Study Fellowship in Applied Superconductivity** (established in 2010)

Description: The fellowship is awarded annually to a full-time graduate student pursuing a PhD (or equivalent) degree in the area of applied superconductivity, at an accredited college or university of recognized standing worldwide. The intention of the award is to encourage students to enter and contribute to the field of applied superconductivity.

Prize: Each IEEE CSC Graduate Study Fellowship in Applied Superconductivity will consist of an honorarium of US\$ 5,000 and a suitably inscribed certificate.

Funding: IEEE Council on Superconductivity will provide the funding for these awards:

- Each Award will have an associated honorarium of US \$5,000.
- Funds for this award will be provided by the IEEE Council on Superconductivity.
- The maximum number of awards in a given year will be determined by the number of highly qualified candidates and the total Fellowship budget provided by the Council on Superconductivity for that year.

Eligibility: To be eligible, the recipient must be pursuing full-time graduate work at an accredited college/university and pursuing or planning to pursue research activities in applied superconductivity. The applicant must have majored in engineering, materials, chemistry, physics or a related area and have received a Bachelor's Degree, or equivalent, from an accredited college of recognized standing worldwide. Applicants are required to submit certified transcripts from all colleges/universities attended and three letters of recommendation from college/university professors familiar with the applicant's work. Award recipients will be selected based upon the quality of their prior work, the impact of their current research or the impact of their potential research in superconductivity, and their financial need. We expect to distribute the Awards

equally across the electronics, materials and large-scale areas of superconductivity. In addition, the awards will be distributed across a diverse range of universities or colleges in terms of applications and geographical location. The CSC Graduate Fellowship in Applied Superconductivity can be awarded to an individual not more than two times.

Basis for Judging: Award recipients will be selected based upon, in rank order: the quality of their prior work, the impact of their current research, impact of their potential research in superconductivity and their financial need. If a conflict of interest for any voting member or ex-officio member is identified with respect to an application for award, such as an application from a student with institutional or familial ties to the member, the member shall recuse themselves from the selection process for the application.

Presentation: Awards may be announced at the Applied Superconductivity Conference, at the Magnet Technology conference, or at other events designated by the President of the IEEE Council on Superconductivity.

6. **IEEE Dr. James Wong Award for Continuing and Significant Contributions to Applied Superconductor Materials Technology** (established in 2013)

Description: Recognize a living individual for a career of meritorious achievements and outstanding technical contributions in the field of applied superconductor material technology, over a period of time (nominally more than twenty years) based on novel and innovative concepts and theories proposed by the individual, the authorship or co-authorship of many publications of major significance to the field of applied superconductor materials technology, and the impact that the candidate's contributions have had on the development and maturing of applied superconductivity.

This Award is named for Dr. James Wong who received the IEEE Award for Continuing and Significant Contributions in the Field of Applied Superconductivity in 2011 for his pioneering work in producing commercial grade superconductor cables and conductors. In 1962, Dr. Wong founded Supercon, Inc. which has produced a variety of niobium-titanium and niobium-tin superconducting wires, cables and conductors for many commercial and research application, and has supplied production quantities of high-quality superconducting wire for a longer time than any other company in the world.

Prize: Honorarium of \$5,000 USD, a suitably inscribed plaque and a medallion fabricated from niobium.

Funding: **The first award will be funded from an endowment by the Wong family, managed through the IEEE Foundation.** If more than one award, a second award of \$5,000 USD will be funded by the Council on Superconductivity. No more than two awards shall be presented during any budget year.

Eligibility: The recipient must have been active in the field of applied superconductivity for at least twenty years; and must be able to attend the international conference related to applied superconductivity at which the Award will be made. The recipient does not have to be a member of the IEEE and there shall be no restrictions based on nationality, country of residence, age or gender. An individual may receive only one IEEE Council on SuperConductivity sponsored Award for his/her contributions to superconductor materials science and technology.

Basis for Judging: For contribution to the field of applied superconductivity over a period of time (nominally, more than twenty years) based on novel and innovative concepts proposed by the individual, the authorship or co-authorship of a number of publications of major significance to the field of applied superconductivity and the presentation of a number of invited and plenary talks at major national and international conferences and meetings in applied superconductivity, and the impact that the candidate's accomplishments have had on the development and maturing of applied superconductivity.

Presentation: During an Award Ceremony at the Applied Superconductivity Conference or at other international conferences related to applied superconductivity that are designated by the President of the IEEE Council on SuperConductivity.

IEEE SYSTEMS COUNCIL
SYS-45 (Division X)

For all Systems Council awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. IEEE Systems Council Outstanding Service Award (established in 2016)

Description: To honor long and distinguished service to the IEEE Systems Council at a level of dedication and achievement rarely demonstrated.

Prize: \$1,000 and a Plaque

Funding: Funded by the IEEE Systems Council.

Eligibility: This award is open to all IEEE members that support the Systems Council.

Basis for Judging: Outstanding contributions over a substantial time period encompassing creative and invigorating leadership, exceptional administrative and managerial accomplishments, initiation of new programs to encourage wider participation in the full spectrum of Systems Council activities, and the general communication and advocacy of System Engineering to the technical community as a whole.

Presentation: The award will be presented at the IEEE International Systems Conference.

2. IEEE Systems Journal Best Paper Award (established in 2016)

Description: The Systems Journal Best Paper Award of the IEEE Systems Council will be given annually to the papers deemed the best among those published in the IEEE Systems Journal during the preceding calendar year.

Prize: The prize items for each best paper include a certificate presented to each author and \$500 to be shared among the authors.

Funding: Funded by the IEEE Systems Council.

Eligibility: All papers published in the IEEE Systems Journal during the preceding calendar year are eligible for the award.

Basis for Judging: The established paper review criteria are used as the basis for the selection of the award.

Presentation: The award will be presented at the IEEE International Systems Conference.

3. IEEE Systems Council James O. Gray Scholarship (established in 2016; revised Prize 2018)

Description: Named in memory of James O. Gray, the scholarship recognizes students pursuing studies in process control systems engineering, plant automation or instrumentation & measurement.

Prize: \$5,000 and a certificate for Graduate student; \$5,000 and a certificate for Undergraduate student. Funds will be paid to the school on behalf of the student.

Funding: **Graduate level scholarship is funded by a donation from the James O. Gray Fieldbus Foundation Scholarship Fund to establish the James O. Gray Scholarship Fund managed by the IEEE Foundation;** first professional degree scholarship (undergraduate) is funded by the IEEE Systems Council.

- Eligibility:* IEEE student members studying process control systems engineering, plant automation or instrumentation & measurement at the graduate and/or first professional degree from an accredited university, with no other scholarships and a cumulative Grade Point Average of 2.8 or above.
No relatives of current members of the IEEE Board of Directors, the Systems Council Governing Board, the James O. Gray Scholarship Committee, or IEEE staff may be candidates, nominate or endorse candidates for this Scholarship.
- Basis for Judging:* Evaluations will be based on the application and stated financial need. The application shall include an essay on why these fields of study are important and how the applicant could have impact in these fields. At least three letters of recommendation shall be provided, two of which shall be from current or former university professors who taught the applicant or know him personally.
- Presentation:* The award will be presented at the IEEE International Systems Conference held each spring in North America.

IEEE SYSTEMS, MAN, AND CYBERNETICS SOCIETY
SMC-28 (Division X)

For all Systems, Man, and Cybernetics Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **Norbert Wiener Award** (revised 2014)

Description: To recognize significant contributions to research in systems science and engineering, human-machine systems, and/or cybernetics.

Prize: \$2,500 and a Plaque

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: No restriction

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

2. **Joseph G. Wohl Outstanding Career Award** (established in 1991, revised prize 2014)

Description: To recognize outstanding professional service and/or contributions to systems engineering concepts, methodology, design, education, or management.

Prize: \$2,500 and a Plaque. Travel expense reimbursement for recipient to attend the IEEE International Conference on Systems, Man, and Cybernetics for presentation of the award.

Funding: **Funded by Alphatech, Inc., and the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: IEEE members.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

3. **Outstanding Contribution Award**

Description: To recognize significant contributions and outstanding service to the IEEE Systems, Man, and Cybernetics Society.

Prize: Plaque

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: Members of the IEEE Systems, Man, and Cybernetics Society.

Basis for Judging: Contributions, service, dedication and effort.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

4. **Franklin V. Taylor Memorial Award** (revised 2009)

Description: To recognize the best oral presentation and paper at the IEEE Systems, Man, and Cybernetics Society Conference.

Prize: \$500 and a Plaque

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: No restriction. Presentation by the author of an accepted paper at the annual SMC conference.

Basis for Judging: Effective oral presentation, quality, and technical merit of papers at the IEEE International Conference on Systems, Man, and Cybernetics of the previous calendar year.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

5. **Andrew P. Sage Best Transactions Paper Award** (established in 1998)

Description: To recognize the authors of the best paper published annually in the *IEEE Transactions on Systems, Man and Cybernetics (SMC)*.

Prize: \$500 for each author up to a maximum of \$2,500 for multiple authors, and a Plaque for each author.

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: Authors of papers published in the *IEEE Transactions on Systems, Man, and Cybernetics* during the previous calendar year.

Basis for Judging: Originality, technical merit, potential impact to the SMCS Field of Interest, and presentation quality.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

6. **IEEE International Conference on Systems, Man, And Cybernetics Best Student Paper Award** (established in 1998) (revised 2008)

Description: To recognize the best oral presentation and paper by a student at the IEEE Systems, Man, and Cybernetics Society Conference.

Prize: \$500 and a Plaque. The honorarium is split among multiple student coauthors who also receive a Plaque and a ticket to attend the Awards Banquet at the IEEE International Conference on Systems, Man, and Cybernetics.

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: The presenter must be a major contributor to both the written paper and the results described in the paper, and a student when the paper was completed.

Basis for Judging: Technical quality, presentation quality, and ability to communicate and respond to questions concerning the topic of the paper.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

7. **IEEE SMC Best Associate Editor Award** (established in 2007) (revised 2014)

Description: To recognize the best Associate Editor of the SMC Transactions. At most one Associate Editor will be chosen from each of the SMC Society's Transactions.

Prize: Plaque

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: Associate editors of journals published by the SMC Society.

Basis for Judging: Exceptional contributions in managing reviews and delivering timely and accurate decisions for the *IEEE Transactions on Systems, Man, and Cybernetics*.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

8. **IEEE Most Active SMC Technical Committee Award** (established in 2007) (revised 2014)

Description: To recognize the most active SMC Technical Committee. Up to three awards per year with a maximum of one Technical Committee each chosen from Cybernetics, Human-Machine Systems, and Systems Science and Engineering.

Prize: \$1,000 for use in Technical Committee activities and a Plaque

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: SMCS Technical Committees that have not received the award during the past three years.

Basis for Judging: Recruiting of new members, involvement in workshops and SMCS sponsored conferences, special issues, tutorials, senior member and fellow nominations, and encouraging emerging areas in the SMCS Field of Interest.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

9. **IEEE Outstanding SMCS Chapter Award** (established in 2007) (revised 2014)

Description: To recognize the best SMC Chapter that has consistently shown outstanding leadership and service to its member. Up to three awards with at most one Chapter chosen from Regions 1-7 and 9, at most one Chapter chosen from Region 8, and at most one Chapter chosen from Region 10.

Prize: \$1,000 to be used for Chapter activities and a Plaque.

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: SMCS Chapters that have not received this award during the past three years.

Basis for Judging: Services to members, membership development, quality of activities, and involvement with SMCS sponsored conferences.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

10. **IEEE Outstanding SMCS Student Branch Chapter Award** (established in 2009) (revised Funding 2016)

Description: To recognize the SMC Student Branch Chapter that has consistently shown outstanding leadership and service to its members.

Prize: \$500 to be used for Student Branch Chapter activities and a plaque for display by the chapter.

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation. Multiple recipients, if selected, will share the award.**

Eligibility: Open to all SMC Student Branch Chapters that have not received an award within the past three years.

Basis for Judging: Services to the chapter's student members, membership development, and quality and quantity of activities.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics and in the name of the

11. **IEEE SMC Lotfi A. Zadeh Pioneer Award** (established in 2014)

Description: To honor a person or persons with outstanding and pioneering contributions to academic and/or industrial research in systems science and engineering, human-machine systems, and/or cybernetics.

Prize: \$5,000 and a Plaque. Up to two (2) awards made annually. No award will be given if no qualified candidate is identified. Multiple recipients will each receive a Plaque and equally share the award prize.

Funding: **The award will be administered by the IEEE Foundation and funded by a donation from Norm Zadeh managed by the IEEE Foundation.**

Eligibility: No restriction. An awardee may be a non-IEEE member. The Award may be granted only to nominee(s) who has, or have, pioneered and developed innovative research, executed in either academe or industry, and has resulted in major scientific advances that are widely recognized in systems science and engineering, human-machine systems, and/or cybernetics. Contributions must have been made at least 15 years prior to the award date.

Basis for Judging: Quality, originality, and significance of contribution in systems science and engineering, human-machine systems, and/or cybernetics.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

12. **IEEE SMC Early Career Award** (established in 2014) (revised Funding 2016)

Description: To recognize outstanding scientists or engineers who, early in their career, contributed to major advancements of theory, technologies, and/or applications of systems science & engineering, human-machine systems, and/or cybernetics.

Prize: \$1,000 and a Plaque. Up to two (2) awards made annually. No award will be given if no qualified candidate is identified. Multiple recipients will each receive a Plaque and equally share the award prize.

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: Any scientist or engineer in systems science and engineering, human-machine systems, and/or cybernetics who is an IEEE Young Professional member, or who is not over 35 years old in the calendar year when the recipient of the award is selected, is eligible.

Basis for Judging: Quality, originality, and significance of research and/or industrial contributions. Contributions to either the theory or applications of systems science and engineering, human-machine systems, and/or cybernetics will be considered equally. The impact of the nominee(s) on the field as evidenced by publications, patents, products, or other tangible items will also be evaluated and must be highly significant and widely recognized.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

13. **IEEE SMC Meritorious Service Award** (established in 2014) (revised Funding 2016)

Description: To recognize meritorious and significant service to any SMC Society-sponsored activity.

Prize: Certificate. Up to six (6) awards made annually. No award will be given if no qualified candidate is identified.

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: Open to any person who has contributed to any SMC sponsored activity.

Basis for Judging: Exceptional administrative, managerial and leadership achievement by anyone in any SMCS sponsored activity. Includes contributions as a Society officer, BoG member, associate editor or participant in the management of SMCS-sponsored events.

Presentation: At any appropriate SMC Society function.

14. IEEE SMC Outstanding Service to Humanity Award (established in 2014) (revised Funding 2016)

Description: To recognize technical and professional achievements or endeavors of an engineer or scientist in systems science and engineering, human-machine systems, and/or cybernetics that have resulted in a significant impact on humanity.

Prize: \$2,000 and a Plaque. Up to two (2) awards made annually. No award will be given if no qualified candidate is identified. Multiple recipients will each receive a Plaque and equally share the award prize.

Funding: **Funded by the IEEE Systems, Man, and Cybernetics Society through an endowment administered by the IEEE Foundation.**

Eligibility: Any engineer or scientist in the field of systems science and engineering, human-machine systems, and/or cybernetics is eligible.

Basis for Judging: Conferred upon an engineer or scientist in systems science and engineering, human-machine systems, and/or cybernetics who has made significant humanitarian contributions to the advancement of the well-being of humanity. Factors include: the nature, value, and importance of the contribution, the accumulated impact of the candidate's contribution, and how much the contribution increases the overall quality of life in society. Consideration will also be given as to the particulars of the application of the engineer's or scientist's expertise and skills in systems science and engineering, human-machine systems, and/or cybernetics to their contribution. External letters of recommendations will be required.

Presentation: At the IEEE International Conference on Systems, Man, and Cybernetics.

IEEE TECHNOLOGY AND ENGINEERING MANAGEMENT SOCIETY
(formerly IEEE Technology Management Council TMC-14/IEEE Engineering Management Society EM-14)
TEM-14 (Division VI)

For all Technology and Engineering Management Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Engineering Manager of the Year Award (first presented in 1983) (revised 2000)

Description: To recognize outstanding executive or managerial contributions to the operation of organizations connected with the field of Electrical and Electronics Engineering.

Prize: \$1,000, Plaque or Certificate, and travel expense reimbursement for attendance at awards presentation.

Funding: Funded by the IEEE Technology and Engineering Management Society.

Eligibility: Must be a Senior Member or Fellow of IEEE, member of TEMS for three (3) years and an Engineering Manager for at least 10 years.

Presentation: Annually, at IEEE Engineering Management Conference, or other authorized meeting in the year following the award.

2. Transactions Publication Award (revised 2000)

Description: To recognize the best papers published in the *IEEE Transactions on Engineering Management*.

Prize: \$1,000 (divided equally among multiple recipients)

Funding: Funded by the IEEE Technology and Engineering Management Society.

Eligibility: Authors of papers published in the TEMS *Transactions* by IEEE members, TEMS members, or TEMS Affiliates within the year preceding the award.

Presentation: Annually, at IEEE Engineering Management Conference, or other authorized meeting.

3. Honorary Life Member Award (established in 1993)

Description: To recognize distinctive service to the engineering profession, contribution to the growth and management of the IEEE Technology and Engineering Management Society (TEMS), exceptional service to the IEEE, and a reputation above reproach.

Prize: Honorary Life Member of TEMS, Plaque, ex-officio member of TEMS Board of Governors, exemption from payment of Society annual fee.

Funding: Funded by the IEEE Technology and Engineering Management Society.

Basis for Judging: Degree of contribution to the areas of service to the profession, contribution to the TEMS, service to the IEEE, and reputation.

Presentation: At an TEMS conference or other meeting authorized by the Society, whenever a candidate has been determined worthy of the Award.

4. Certificate of Appreciation for Chapter Chairs (offered by EM Society)

Description: To recognize an outgoing TEMS Chapter Chairman.

Prize: Certificate

Funding: Funded by the IEEE Technology and Engineering Management Society.

Eligibility: TEMS Chapter Chairmen at end of term of office.

Basis for Judging: Chapters that have met the current requirements for meetings and the reporting thereof.

Presentation: TEMS Chapters Committee Chair shall send certificate to the Chapter Chair for an appropriate presentation.

5. Engineering Management Educator of the Year Award (established in 2005)

Description: To recognize an individual for outstanding education or Education Administration contributions to the field of Engineering Management or a closely related discipline.

Prize: \$1,000, Plaque and one-year TEMS Membership. If the awardee is not a member of IEEE, that individual shall be supported as a one –year TEMS affiliate. If no appropriate award recipient is chosen, no award will be given for that year.

Funding: Funded by the IEEE Technology and Engineering Management Society.

Eligibility: Active or retired Educator or Education Administrator in the field of Engineering Management or a closely related discipline. TEMS members who have been awarded IEEE Fellow Grade within the year shall, with others, also be considered candidates for the award.

Basis for Judging: Outstanding Education or Education Administration contributions to the field of Engineering Management or a closely related discipline as evidenced by publications, curricula and/or course development, demonstrated success in teaching or administration of academic programs, and other criteria as may be deemed appropriate.

Presentation: Annually, to the recipient the year following selection at the IEEE Technology and Engineering Management Society Conference. If no appropriate award recipient is chosen, no award will be given for that year.

6. Engineering Management Innovation Award (established in 2005)

Description: To recognize outstanding management of an engineering project, or series of related projects, where the success of the project(s) is tied clearly to the use of innovative engineering management techniques.

Prize: \$1,000, Plaque and one-year TEMS Membership. If the awardee is not a member of IEEE, that individual shall be supported as a one –year TEMS affiliate. In the case of a multiple person team, the \$1,000 award shall be split evenly among the team members and a single TEMS membership or affiliate status shall be awarded to whomever the team designates but each individual shall receive a plaque. If no appropriate award recipient is chosen, no award will be given for that year.

Funding: Funded by the IEEE Technology and Engineering Management Society.

Eligibility: No restrictions. The award may be given to one individual or a small, focused, team of not more than six individuals in the engineering management community whose work meets the “basis for judging” below. TEMS members who have been awarded IEEE Fellow grade within the year shall, with others, also be considered candidates for the award.

Basis for Judging: For outstanding management of an engineering project, or series of related projects, where the success of the project(s) is tied clearly to the use of innovative engineering management techniques. The work for which the nomination is being made shall have been completed with the last 10 years.

Presentation: Annually, to the recipient the year following selection at the IEEE Technology and Engineering

Management Society Conference. If no appropriate award recipient is chosen, no award will be given for that year.

IEEE ULTRASONICS, FERROELECTRICS, AND FREQUENCY CONTROL SOCIETY
UFFC-20 (Division IX)

For all Ultrasonics, Ferroelectrics, and Frequency Control Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Achievement Award (first presented in 1980) (revised 1998)

Description: To recognize outstanding contributions to or technical achievements in the field of ultrasonics, ferroelectrics, and frequency control.

Prize: \$2,000, Plaque and Certificate. Travel expenses may be covered (up to \$2,000) at the discretion of the Awards Chair.

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Must be past or present member of UFFC.

Basis for Judging: Publications in technical journals; contributions to the advancement of ultrasonics, ferroelectrics or frequency control; presentation of lectures; and/or service to the Society.

Presentation: Presented aperiodically at major Symposium sponsored by the Society.

2. Walter G. Cady Award (named after Walter Guyton Cady, first presented in 1983) (revised 1998)

Description: To recognize technical contributions in the area of piezoelectric frequency control devices.

Prize: \$1,000, Certificate and engraved display item of quartz

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Should preferably be a member of IEEE and UFFC.

Basis for Judging: Significant contributions of a technical nature as measured in part by: the degree of initiative, ingenuity, and creativity displayed; the quality of work and degree of success attained; and the overall importance of the work and impact on frequency control and associated communities.

Presentation: At Annual Symposium on Frequency Control.

3. I. I. Rabi Award (named after Professor I. I. Rabi, first presented in 1983) (revised 1998)

Description: To recognize technical contributions in the fields of atomic and molecular frequency standards, time transfer, and frequency and time metrology.

Prize: \$1,000, Certificate and "limited edition" original print

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Should preferably be a member of IEEE and UFFC.

Basis for Judging: Significant contribution of a technical nature as measured in part by: the degree of initiative, ingenuity and creativity displayed; the quality of the work and degree of success attained; and the overall importance of the work and the impact on frequency control and associated communities.

Presentation: At Annual Symposium on Frequency Control.

4. **IEEE Ferroelectrics Recognition Award** (first presented in 1983) (revised title and eligibility 2017)

Description: To recognize meritorious achievement in the field of Ferroelectricity or related sciences.

Prize: \$2,000 and Plaque

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Must be an IEEE UFFC member upon conferring of the award.

Basis for Judging: Publications in technical journals, contributions to the field of Ferroelectricity.

Presentation: At the International Symposium on the Applications of Ferroelectrics (ISAF). May be presented at other IEEE sponsored Ferroelectrics-related Symposia in those years ISAF is not held.

5. **Outstanding Paper Award** (first presented in 1956)

Description: To recognize the outstanding paper published in the *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*.

Prize: Plaque and Certificate

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Authors of papers published in *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control* from January 1 through December 31.

Basis for Judging: Originality, interest to membership, contribution to field, clarity of writing, and timeliness.

Presentation: Annually, at a major Symposium sponsored by the Society.

6. **Distinguished Lecturer Award** (first presented in 1980)

Prize: Certificate and reimbursement for international lecture tour.

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Must be a member of IEEE and UFFC, and a prominent contributor in the field of Ultrasonics, Ferroelectrics, or Frequency Control.

Basis for Judging: Good speaking style, a prominent contributor to topic of lecture, willingness to commit significant time and energy to preparation/travel/lectures. Lecture topic must be of current interest to IEEE audience.

Presentation: At a major Symposium sponsored by the Society.

7. **C. B. Sawyer Memorial Award** (established in 1996) (revised 1998, 2011)

Description: To recognize entrepreneurship or leadership in the frequency control community; or outstanding contributions in the development, production, or characterization of resonator materials or structure.

Prize: \$1,000, and Plaque or physical tribute. In the event of multiple recipients, the honorarium shall be shared equally

Funding: **Funding will be provided by Sawyer Research Products, Inc. (SRP). SRP agrees to provide support for five (5) years from the date of signing. Annually, at each anniversary date, the agreement shall renew automatically for a subsequent five years, unless either party objects in writing to the other party no less than thirty (30) days prior to the anniversary date. SRP will provide funds from its operating budget, and no IEEE trust shall be established for the award.**

Eligibility: Any worker in the field of the Sawyer Award as given in the award description may be nominated. The award will be given to one or more specific individuals rather than to laboratories or groups. The time span over which the contributions have occurred is not limited. No posthumous awards will be made. No restriction of age, committee membership, or Society membership will apply.

Basis for Judging: The significance of contributions of nominees shall be measured in part by: the degree of initiative, ingenuity, and creativity displayed; the quality of the work and degree of success attained; and the overall importance of the work and its impact on frequency control and associated communities.

Presentation: At the Frequency Control Symposium, held usually in the spring of each year.

8. **Distinguished Service Award** (established in 1998)

Description: To recognize meritorious service to the UFFC Society over a sustained period of time. Typically, this service is sustained support of the UFFC Society activities in an essential capacity, for example, as Editor-in-Chief of the Transactions, or as manager of the Society's finances, or as Chair of a major Committee, among others.

Prize: \$2,000, Plaque and Certificate. Travel expenses may be covered (up to \$2,000) at the discretion of the Awards Chair.

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Nominees shall be a past or current member of IEEE and the UFFC Society.

Basis for Judging: Exceptional service, carrying responsibilities over a sustained period in administrative and leadership of the Society. Consideration is given to innovation of new Society programs, administration of major Committees, management of Society functions, and advocacy of the Society's areas of interest to the larger community.

Presentation: Award will be presented at one of the International Symposia of the Society, or at another appropriate occasion. Presentation will be aperiodic as deemed appropriate. Up to two (2) awards may be presented per year.

9. **The Rayleigh Award** (established in 2001)

Description: To recognize meritorious achievement in the field of Ultrasonics. The achievement may be in technical innovations, in research, in education, in publications, and related professional endeavors. Typically, the recipient will have demonstrated these accomplishments over a sustained period of time.

Prize: \$1,000, Plaque or similar engraved item, and Certificate

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society, usually within the budget of the annual International Ultrasonics Symposium

Eligibility: Preferably, the recipient shall be a member of IEEE and UFFC Society.

Basis for Judging: Meritorious achievements and contributions to the field of Ultrasonics. Examples of areas of specialty are Medical Ultrasonics, Physical Acoustics, Non-Destructive Evaluation, Surface Acoustic Wave devices, among others. Also included in the field of interest are the underlying technologies, e.g., transducers and related electronics.

Presentation: At the annual International Ultrasonics Symposium. Presentation will be aperiodic as deemed appropriate. Up to two (2) awards may be presented per year.

10. **The Bernhard Gross Memorial Lecture**, IEEE International IEEE International Symposium on Electrets (ISE) (established in 2002)

ISE is normally held every three years and is sponsored by the IEEE Dielectrics and Electrical Insulation Society and technically co-sponsored by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society

Description: The lecture will be presented by a person, who, in the opinion of the Selection Committee has established an international reputation for sustained high quality research work in the ISE research field. The ISE research field is presently defined as comprising the following topics: (a) molecular electrets, especially those involving composite or novel materials, bioelectrets and photoelectrets; (b) thermally stimulated processes, radiation and field effects; (c) injection, transport and trapping of charge, polarization; (d) non-linear optics and electro-optical effects; (e) piezo-, pyro- and ferroelectric phenomena; (f) ferroelectric ceramics and thin films; (g) applications of electrets. In the future the session topics listed for the last and for the next Symposium in the ISE series may be taken as a broad definition of the ISE research field. Thus the lecture will regularly recognize, reward and stimulate high quality research in this important and constantly-evolving research field.

Prize: \$1,000 and Certificate

Funding: The honorarium and cost of the production of the certificate will be covered by the Symposium registration fees until a private endowment is established. The symposium is held every three years.

Eligibility: The only requirement for nomination as the lecturer is that the nominee has established an international reputation for sustained high quality research work in the ISE research field. There is no limitation on the time frame over which this reputation has been established, and there is no requirement for membership of learned/professional societies.

Basis for Judging: Sustained high quality research work in the ISE research field.

Presentation: At the Symposium Dinner. The lecture will be presented immediately following the opening ceremony of each Symposium, commencing with ISE12 in 2005.

11. **The Dilip Das-Gupta Memorial Award**, IEEE International IEEE International Symposium on Electrets (ISE) (established in 2002)

ISE is normally held every three years and is sponsored by the IEEE Dielectrics and Electrical Insulation Society and technically co-sponsored by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society

Description: The award will be given for the best oral or poster presentation by a young scientist or engineer during the Symposium. It will regularly recognize and reward high quality research in the ISE research field by a scientist or engineer in the early stages of her/his research career.

Prize: \$1,000 and Certificate

Funding: The honorarium and cost of the production of the certificate will be covered by the Symposium registration fees until a private endowment is established. The symposium is held every three years.

Eligibility: For the purposes of the award, a young scientist or engineer is defined as a scientist or engineer who has not reached the age of 35 years by the ISE commencement date. There is no requirement for membership of learned/professional societies.

Basis for Judging: The quality of the presentation, as well as that of the work on which it is based, will be considered by the selection committee. At any Symposium the award will be made only if the selection committee is satisfied that the best presentation (by a young scientist or engineer) is of a suitably high standard. Before the Symposium closing ceremony, any registered delegate may confidentially propose a winner of the award to the Symposium Chairperson. The proposal must be in writing and include a short justification. The Chairperson will pass on all such proposals to the selection committee. Self-nominations are not allowed.

Presentation: The winner of the award will be announced during the Symposium closing ceremony, commencing with ISE12 in 2005.

12. IEEE Ultrasonics, Ferroelectrics, And Frequency Control Society Ferroelectrics Young Investigator Award (established in 2006) (revised title, eligibility and basis for judging 2017)

Description: To recognize the important contributions of young scientists/engineers in reference to their contributions to fundamental research, integration, application, or education.

Prize: \$2,000 and a Plaque

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Must be an IEEE UFFC member upon conferring of the award, and must be 40 years or younger, at the time of nomination.

Basis for Judging: The award recipient will be chosen according to the following criteria: (i) contribution of the publication record (including patents) to the ferroelectrics community, (ii) impact of industrial research and development of ferroelectric applications, and (iii) educational contributions to the ferroelectrics community, and (iv) participation in UFFC-S activities. Votes will be solicited by the Ferroelectrics Committee by email balloting.

Presentation: Award will be presented at International Symposium on the Applications of Ferroelectrics

13. IEEE Ultrasonics Early Career Investigator Award (established in 2013) (revised name and eligibility 2016)

Description: To recognize the achievements of a young researcher in the area of ultrasonics and its applications. The award is specific to those researchers in the early stages of their career.

Prize: The following items will be given to the awardee:

- Plaque
- Certificate
- 1,000 USD honorarium

This award is intended for a single recipient each year. However, in unusual circumstances if two recipients are selected, each recipient will receive a plaque and certificate, and the awardees will evenly share the honorarium.

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Awardees are required to be individuals who meet the following criteria:

- IEEE member
- UFFC Society member
- 1 to 10 years of research after obtaining the highest degree (Bachelor; Master; PhD)
- Remarkable contributions to the field/publication record

Members of the UFFC Society Ultrasonics Committee are ineligible for consideration for this award during their term of service on this committee

Basis for Judging: Nominations will be considered based their contributions to the field of ultrasonics, and their publication record. The selection of the recipient for this award will be made by vote of the Ultrasonics Committee during its first annual meeting. The decision of the committee is final. If, in the opinion of the Committee, no suitable nominee exists, no award will be given.

Presentation: Award will be presented annually at the IEEE International Ultrasonics Symposium, unless extenuating circumstances prevent an awardee for attending to accept the award. In such an event, an alternate UFFC Society event will be selected that is mutually agreeable to the awardee and the Society.

14. IEEE Carl Hellmuth Hertz Ultrasonics Award (established in 2013) (revised name and eligibility 2016)

Description: To recognize primary investigators that have contributed to the field of ultrasonics. The award candidate has an excellent track record in terms of scholarly publications, technical reports and/or inventions/patents. The award is intended to recognize the investigators for their outstanding mid-career achievements and for promoting the field of Ultrasonics. This award was named for Carl Hellmuth Hertz to honor his pivotal role as both a researcher and as an advisor to others working in the field of medical diagnostic ultrasound imaging.

Prize: The following items will be given to the awardee:

- Plaque
- Certificate
- 1,000 USD honorarium

This award is intended for a single recipient each year. However, in unusual circumstances if two recipients are selected, each recipient will receive a plaque and certificate, and the awardees will evenly share the honorarium.

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Awardees are required to be individuals who meet the following criteria:

- IEEE member
 - UFFC Society member
 - Mid-career – defined as no less than 10 years and no more than 25 years of research after obtaining the highest degree (Bachelor; Master; PhD)
 - Remarkable contributions to the field resulting in measurable innovation and impact
- Members of the UFFC Society Ultrasonics Committee are ineligible for consideration for this award during their term of service on this committee

Basis for Judging: Nominations will be considered based their contributions to the field of ultrasonics, and how those contributions have resulted in measurable innovation and impact.. The selection of the recipient for this award will be made by vote of the Ultrasonics Committee during its first annual meeting. The decision of the committee is final. If, in the opinion of the Committee, no suitable nominee exists, no award will be given.

Presentation: Award will be presented annually at the IEEE International Ultrasonics Symposium, unless extenuating circumstances prevent an awardee for attending to accept the award. In such an event, an alternate UFFC Society event will be selected that is mutually agreeable to the awardee and the Society.

15. IEEE Robert E. Newnham Ferroelectrics Award (established in 2016) (revised eligibility 2017)

Description: To recognize investigators in the field of dielectric, piezoelectric and ferroic materials that have contributed significantly to the understanding of structure-property relations. Given at any stage of the career for an outstanding contribution or for overall contribution to the field during the career. The award is named in honor of Robert E. Newnham to recognize his leading role in understanding the relationships between structure and properties of materials and to honor him as a scientist, teacher and an advisor to numerous researchers and engineers.

Prize: A single annual award of \$2,000 to a single recipient, Plaque and Certificate. In unusual circumstances if two recipients are selected, each recipient will receive a plaque and certificate, and the awardees will evenly share the honorarium.

Funding: Funded by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society.

Eligibility: Must be an IEEE UFFC member upon conferring of the award.

Basis for Judging: Contributions to the field covered by the award, and how those contributions have resulted in measurable impact.

Presentation: At the annual IEEE International Symposium on Application of Ferroelectrics.

IEEE VEHICULAR TECHNOLOGY SOCIETY

VT-06 (Division IX)

For all Vehicular Technology Society awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. **IEEE Jack Neubauer Memorial Award** (established in 2007) (revised title and eligibility 2017; revised prize 2019)

Description: To recognize the best systems paper published in the *IEEE Transactions on Vehicular Technology*.

Prize: \$1,000 (divided equally for multiple authors) and Certificate

Funding: **Funded by an endowment from Panasonic - Matsushita Communications Industrial Corp, and administered by the IEEE Foundation.**

Eligibility: Authors of papers published in the *IEEE Transactions on Vehicular Technology* for the preceding 5 years in the field of Systems Engineering. If none of the authors is a member of IEEE, then the lead awardee author shall be supported as a one-year VTS affiliate.

Basis for Judging: Uniqueness, quality, readability, archivable, etc.

Presentation: At a designated Conference.

2. **IEEE Honorary Membership Award**

Description: To recognize significant technical contribution and outstanding service to the IEEE Vehicular Technology Society.

Prize: Certificate, Pin and Life Membership in the VTS.

Funding: Funded by the IEEE Vehicular Technology Society.

Eligibility: Must be a member of the Society for at least five (5) years, with recognized service to the profession and the IEEE.

3. **IEEE VTS Outstanding Service Award** (revised 2001; title and prize 2017)

Description: To recognize outstanding service to the VTS Board of Governors.

Prize: \$1,000 and Plaque

Funding: Funded by the IEEE Vehicular Technology Society.

Eligibility: Must be a member of IEEE and VTS.

4. **IEEE James Evans Avant Garde Award** (established in 1993) (revised 2001; title and prize 2017)

Description: To recognize leadership and continuing contributions in promoting new technology in the field of Vehicular Communications and Electronics.

Prize: \$1,000 and Plaque

Funding: Funded by the IEEE Vehicular Technology Society.

Eligibility: IEEE VTS member.

Basis for Judging: Demonstrated pioneering leadership and continuing contributions in promoting new technology in the field of Vehicular Communications and Electronics.

Presentation: At annual VTS Conference or other VTS activity (including Chapter meetings as appropriate.)

5. **IEEE Neal Shepherd Memorial Best Propagation Paper Award** (established in 1993) (revised title, prize & eligibility 2017)

Description: To recognize the best paper relating to Propagation published in the *Transactions on Vehicular Technology*.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Vehicular Technology Society.

Eligibility: Authors of papers relating to Propagation published in the VTS *Transactions* during the 5 years preceding the award.

Basis for Judging: Uniqueness, quality, readability, archivability.

Presentation: At annual VTS Conference.

6. **IEEE VTS Chapter-of-the-Year Award** (revised 2002)(revised Eligibility and Basis for Judging 2015)

Description: To recognize the outstanding Chapter of the IEEE Vehicular Technology Society.

Prize: Plaque

Funding: Funded by the IEEE Vehicular Technology Society.

Eligibility: All active VTS Chapters who have not received this award in the past 3 years.

Basis for Judging: Nominations (including self-nominations) of VTS Chapters will be submitted to the Chapters Committee Chair for consideration of this award. Nominations will be evaluated according to the following criteria: (i) service to chapter membership in terms of technical activities, (ii) service to chapter membership in terms of societal activities, (iii) chapter membership advancement, fellow nominations, and awards, (iv) chapter membership growth.

Presentation: Annually, at one of the VTS Conferences.

7. **IEEE Daniel E. Noble Fellowship Award** (revised Prize, Eligibility, Basis for Judging 2018)

Description: To promote graduate-level study in Vehicular Technology.

Prize: \$5,000 and Plaque

Funding: **Funded partially by an endowment from Motorola, Inc. and partially by the IEEE Vehicular Technology Society, and administered by the IEEE Foundation.**

Eligibility: Candidate must be an IEEE Student Member and a full-time graduate student pursuing a degree within the Vehicular Technology Society fields of interest.

Basis for Judging: Contribution to the profession of electrical engineering in mobile radio communications, with preference for public safety communications.

Presentation: At annual VTS Conference.

8. **IEEE Transportation Electronics Fellowship** (revised 2001, 2005, 2006; revised title, prize, eligibility, frequency and presentation 2017)

Description: To promote graduate-level study in Transportation Electronics Technology.

Prize: \$5,000 and Plaque

Funding: **Funded by an endowment from the IEEE Vehicular Technology Society in 1988 from the Convergence Conference, and administered by the IEEE Foundation.**

Eligibility: Candidate must be an IEEE student member and a full-time graduate student pursuing a degree within the Vehicular Technology Society fields of interest.

Basis for Judging: Academic performance as an undergraduate; collegiate activities and professional accomplishments; relation of applicant's interest to Transportation Electronics.

Presentation: Annually at a Vehicular Technology Conference (VTS) or VTS related meeting as appropriate.

9. **IEEE Stuart Meyer Memorial Award** (established in 1996) (revised title and prize 2017)

Description: To recognize those members of the IEEE Vehicular Technology Society who have both served their Society and also have contributed to the development of radio technology and science in an outstanding and exemplary manner.

Prize: \$3,000 and Plaque. The plaque shall include the words "The Stuart Meyer Memorial Award" jointly presented by Ericsson and the IEEE Vehicular Technology Society.

Funds: **Funded by an endowment fund provided by both Ericsson (50%) and the IEEE Vehicular Technology Society (50%), and administered by the IEEE Foundation.**

Eligibility: Candidates must be a member of IEEE and a member of the IEEE Vehicular Technology Society. Currently elected Board members and appointed members of the award selection committee will not be eligible for this award.

Basis for Judging: The Stuart Meyer Memorial Award Committee shall accumulate and rank the list of candidates based upon the following criteria: 1) years of IEEE membership as a member, a senior member or as a Fellow; 2) years of VTS membership; 3) years of elected office held in the IEEE Vehicular Technology Society; 4) years of appointed office held in the IEEE Vehicular Technology Society; 5) papers published in the Vehicular Technology Transactions or the NEWS; 6) contributions to the development of radio communication technology and science; 7) patents that have been issued in the Society's field of interest. Candidates must exhibit a level of service approaching what Stuart Meyer had provided before they will be considered. Furthermore, the selection criteria must be verified with documentation for the potential candidate (i.e., by checking IEEE records for years of membership, reviewing past VTS minutes for service, accumulation of published papers, past awards, etc.). The awards committee shall submit a candidate (or a list of candidates in the case where two or more are qualified) to the Society's BoG for approval. This approval process may take place either at a regularly scheduled board meeting, or via mail ballot.

Presentation: At the Society's annual conference by the Society President, by the Society's Awards Chairman, or by the Stuart Meyer Memorial Awards Chairman if so designated by the President.

10. **IEEE Best Vehicular Electronics Paper Award** (established in 2001) (revised title, prize, and eligibility 2017)

Description: To recognize the best paper relating to Vehicular Electronics published in the *IEEE Transactions on Vehicular Technology*.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Vehicular Technology Society

Eligibility: Authors of papers relating to Vehicular Electronics published in the *VTS Transactions* during the 5 years preceding the award.

Basis for Judging: Uniqueness, quality, readability & archivability

Presentation: At Spring or Fall annual VTS Conference.

11. **IEEE Best Land Transportation Paper Award** (established in 2001) (revised title, prize, and eligibility 2017)

Description: To recognize the best paper relating to Land Transportation published in the *IEEE Transactions on Vehicular Technology*.

Prize: \$1,000 and Certificate

Funding: Funded by the IEEE Vehicular Technology Society

Eligibility: Authors of papers relating to Land Transportation published in the *VTS Transactions* during the 5 years preceding the award.

Basis for Judging: Uniqueness, quality, readability & archivability

Presentation: At Spring or Fall annual VTS Conference.

12. **IEEE Vehicular Technology Society Hall of Fame Award** (established in 2017)

Description: To better recognize those individuals whose outstanding and lasting contributions that have had a significant impact on the technologies represented by the fields of interest of the IEEE VTS.

Prize: Plaque and Life Membership in the VTS. Reimbursement of travel expenses to accept the award, not to exceed \$2,500.

Funding: Funded by the IEEE Vehicular Technology Society

Eligibility: The candidate's contributions must relate to one of the IEEE Vehicular Technology Society fields of interest. Nominees from any country are eligible. Previous award winners, currently elected Board members and appointed members of the award selection committee are ineligible.

Basis for Judging: Demonstrated pioneering contributions in promoting new technology in the field of the Vehicular Technology Society. Scoring by the Awards Committee will be on a scale of 1 to 10 with 10 being the highest. The overall score for a nominee will be obtained by summing the scores determined by each Committee member for that nominee. In the case of an equal score, the Committee will debate on the nominees with equal higher scores. If no agreement can be reached, the vote of the awards chair will determine the final awardee. The Committee may modify the scoring method.

Presentation: The Vehicular Technology Society awards ceremony takes place at the fall edition of our flagship conference, the IEEE Vehicular Technology Conference. This is the preferred venue for presenting this award, and the location and date will hence depend on the location and date of the conference. Alternatively, the award can be presented at any other Vehicular Technology Society events that include the spring edition of the IEEE Vehicular Technology Conference and the IEEE Vehicle Power and Propulsion Conference.

13. **IEEE Vehicular Technology Society Early Career Award** (established in 2017)

Description: To recognize outstanding young scientists or engineers who have made relevant contributions to the theoretical, experimental and operational aspects of electrical and electronics engineering in the IEEE Vehicular Technology Society fields of interest that include mobile radio, motor vehicles and land transportation.

Prize: \$1,500 and Plaque. Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Funding: Funded by the IEEE Vehicular Technology Society

Eligibility: The candidate must be a member of the IEEE Vehicular Technology Society at the time of the nomination and must not be over 35 years old at any time during the calendar year when the recipient of the award is eligible. The candidate contributions must relate to one of the IEEE Vehicular Technology Society fields of interest. Nominees from any country are eligible. Previous award winners are ineligible.

Basis for Judging: Quality, originality, and significance of the contributions of the candidate as evidenced by publications, patents, products, or other tangible items, leadership, contributions to the Society and the profession. Scoring by the Awards Committee will be on a scale of 1 to 10 with 10 being the highest. The overall score for a nominee will be obtained by summing the scores determined by each Committee member for that nominee. In the case of an equal score, the committee will debate on the nominees with equal higher scores. If no agreement can be reached, the vote of the awards chair will determine the final awardee. The Committee may modify the scoring method.

Presentation: The Vehicular Technology Society awards ceremony takes place at the fall edition of our flagship conference, the IEEE Vehicular Technology Conference. This is the preferred venue for presenting this award, and the location and date will hence depend on the location and date of the conference. Alternatively, the award can be presented at any other Vehicular Technology Society events that include the spring edition of the IEEE Vehicular Technology Conference and the IEEE Vehicle Power and Propulsion Conference.

14. IEEE Vehicular Technology Society Women’s Distinguished Career Award (established in 2019)

Description: To recognize outstanding women engineers who have made significant contributions relevant to the theoretical, experimental, and operational aspects of electrical and electronics engineering in the IEEE Vehicular Technology Society fields of interest.

Prize: \$1,000 and Plaque. Only one allowable recipient selected annually.

Funding: **Funded by the IEEE Vehicular Technology Society Endowment managed by the IEEE Foundation.**

Eligibility: The candidate must be a member of the IEEE Vehicular Technology Society at the time of the nomination and for at least 5 years. The candidate contributions must be related to one of the IEEE Vehicular Technology Society fields of interest. Previous recipients of this award, even if the award was for different achievements, are ineligible.

Basis for Judging: Quality, originality, and significance of the contributions of the candidate as evidenced by publications, patents, products, or other tangible items, leadership, contributions to the society and the profession.

Presentation: The VTS awards ceremony takes place at the fall edition of our main conference, the IEEE Vehicular Technology Conference. This is the preferred venue for presenting this award, and the location and date will hence depend on the location and date of the conference. Alternatively, the award may be presented at any other VTS events that include the spring edition of the IEEE Vehicular Technology Conference and the IEEE Vehicle Power and Propulsion Conference.

15. IEEE Vehicular Technology Society Student Travel Awards (established in 2019)

Description: To provide travel grants to IEEE VTS Student Members that present high ranking papers at conferences that VTS financially sponsors at greater than 50%.

Prize: A travel grant to the conference to present the paper. The travel grant is administered in reimbursement-mode, with a maximum budget of \$1,000 USD. All travel expenses must comply with IEEE and VTS travel policies and reimbursement procedures, and conference registration fees cannot be claimed as a travel expense. The claim for travel expenses must be submitted no later than 3 weeks after the end of the conference.

Funding: **Funded by the IEEE Vehicular Technology Society Endowment Fund managed by the IEEE Foundation.**

- 1. the travel grant budget is yearly assigned by the VP for conferences**
- 2. the unused budget is returned to the VP for conferences**

3. the VTS Endowment Fund is possibly replenished to guarantee to cover at least 12 travel grants per year

- Eligibility:* Grantees must have a paper(s) selected for presentation at a conference that VTS financially sponsors at greater than 50%, and
- The grantee must be an undergraduate or graduate student and he/she must be an IEEE VTS member.
 - The grantee must be the first author of the paper.
 - The grantee must attend the conference and present the paper.
 - The grantee may be a conference best paper winner.
 - The grantee cannot have received a VTS student travel grant in the past 18 months.
- Basis for Judging:* The conference Technical Program Committee ranks the received travel grant applications based on their paper review score. The conference Awards Committee then selects winners from the ranked list of applicants using paper review score and possibly other means, and gives travel grants within their allotted budget.
- Presentation:* Travel grants will be recognized at the conference, during the conference award presentations, and each will receive a travel grant certificate.

16. IEEE VTS Motor Vehicles Challenge Award (established in 2019)

- Description:* The Motor Vehicles Challenge Award will be given to the best performing team in the IEEE VTS Motor Vehicles Challenge held in conjunction with the annual IEEE Vehicle Power and Propulsion Conference (VPPC).
- Prize:* Single annual award with multiple recipients with one topic per year. The award consists in a plaque, and a certificate, and travel reimbursement to attend the IEEE VPPC conference. All travel expenses must comply with IEEE and VTS travel policies and reimbursement procedures, and conference registration fees cannot be claimed as a travel expense. The claim for travel expenses must be submitted no later than 3 weeks after the end of the conference.
- Funding:* Funded by the IEEE Vehicular Technology Society operational budget. The total budget is yearly assigned by the Board of Governors of the Society. The amount of the award will be yearly assigned by the VP Motor Vehicles. Unused budget will be returned to the operational budget of the Society.
- Eligibility:* Any team composed of up to three IEEE Vehicular Technology Society members at the time of challenge registration.
- Basis for Judging:* Each solution submitted will be scored by the challenge organizing committee. The team with the highest ranking solution will receive the award.
- Presentation:* The award will be presented to the winning team during the annual IEEE VPPC conference. Alternatively, the award may be presented at the spring and fall editions of the IEEE Vehicular Technology Conference.

17. IEEE Vehicular Technology Society Best Magazine Paper Award (established in 2020)

- Description:* To recognize the best magazine paper published in the IEEE Vehicular Technology Magazine.
- Prize:* \$1,000 USD and Certificate(s). Prize to be split evenly among multiple authors of the best paper.
- Funding:* Funded by the IEEE Vehicular Technology Society.
- Eligibility:* Authors of papers published in the IEEE Vehicular Technology Magazine. Previous recipients of the award are not eligible to receive another award for another paper.
- Basis for Judging:* Novelty, quality, impact, and readability.
- Presentation:* The preferred venue for presenting the award is the VTS awards ceremony, which takes place at

the fall edition of the VTS main conference, the IEEE Vehicular Technology Conference. Alternatively, the VTS President may decide that the award is presented at another VTS event.

INTER-ENTITY AWARDS
Awards jointly sponsored by multiple IEEE Entities

For all Inter-Entity awards: Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous recipients are ineligible: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.

Awards Committee Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

1. Autotestcon Frank McGinnis Professional Achievement Award

Description: To recognize a career of outstanding leadership, individual initiative and technical contributions in the field of automated test technology and to perpetuate the memory of Frank McGinnis.

Prize: \$1,000, a perpetual Crystal Trophy (retained by recipient for one year following the presentation) and Crystal Bowl.

Eligibility: Active professionals in the automated test technology community. Winners of a predecessor award and sitting members of the Board of Directors are ineligible.

Basis for Judging: Professional achievement, leadership and initiative in the field of automated testing over a career span.

Presentation: At International Automatic Testing Conference (Autotestcon).

2. Autotestcon Walter E. Peterson Best Paper Award for New Technology

Description: To recognize the best paper on automatic testing and to honor the memory of Walter E. Peterson for his leadership, interest and inspiration in encouraging the introduction of new technology and applications at Autotestcon.

Prize: \$500 and Certificate

Eligibility: Presenters of papers at Autotestcon during the year of the award.

Basis for Judging: Coverage of new technology and/or applications.

Presentation: Annually, at International Automatic Testing Conference (Autotestcon).

3. Autotestcon David M. Goodman Best Paper Award for Management Topics

Description: To recognize the best paper on management topics and to honor the memory of David M. Goodman for his initiative and inspiration in the establishment of Autotestcon.

Prize: \$500 and Certificate

Eligibility: Presenters of papers at Autotestcon during the year of the award.

Basis for Judging: Coverage of management theory, concepts, techniques, implementation, and applications.

Presentation: Annually, at International Automatic Testing Conference (Autotestcon).

****Autotestcon (International Automatic Testing Conference) is jointly sponsored by the IEEE Aerospace and Electronic Systems Society and the IEEE Instrumentation and Measurement Society.****

4. **Transactions on Semiconductor Manufacturing Best Paper Award**

Description: To recognize the best paper appearing in the *IEEE Transactions on Semiconductor Manufacturing*.

Prize: \$500 and Certificate

Eligibility: Authors of papers appearing in the *IEEE Transactions on Semiconductor Manufacturing* during the preceding calendar year.

Presentation: Annually, at International Semiconductor Manufacturing Science Symposium.

****The IEEE Transactions on Semiconductor Manufacturing is jointly sponsored by the IEEE Components, Packaging, and Manufacturing Technology Society, IEEE Electron Devices Society, and IEEE Reliability Society.****

5. **ComSoc/IT Joint Paper Award** (established in 2000)

Description: To recognize outstanding papers published in any publication of the IEEE Communications Society or the IEEE Information Theory Society.

Prize: \$500 and Plaque for each author (total cost not to exceed \$1,000 for each paper)

Funding: Funded evenly by the two sponsoring Societies (Award is funded via IEEE Communications Society Awards and **Student Travel Grants Fund in the IEEE Foundation and IEEE Information Theory Society**).

Eligibility: Authors of papers published in any publication of the IEEE Communications Society or the IEEE Information Theory Society. The authors do not have to be a member of IEEE. Each year the papers published in the previous three years are considered. Presented annually; first presented in year 2000.

Basis for Judging: Quality, originality, utility, timeliness, and presentation. The paper should cover the interests and achieve the values of both the IEEE Communications Society and the IEEE Information Theory Society.

Presentation: Annually, at any event sponsored by either of the two sponsoring Societies selected by the recipient.

6. **The Bernhard Gross Memorial Lecture**, IEEE International IEEE International Symposium on Electrets (ISE) (established in 2002)

ISE is normally held every three years and is sponsored by the IEEE Dielectrics and Electrical Insulation Society and technically co-sponsored by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society

Description: The lecture will be presented by a person, who, in the opinion of the Selection Committee has established an international reputation for sustained high quality research work in the ISE research field. The ISE research field is presently defined as comprising the following topics: (a) molecular electrets, especially those involving composite or novel materials, bioelectrets and photoelectrets; (b) thermally stimulated processes, radiation and field effects; (c) injection, transport and trapping of charge, polarization; (d) non-linear optics and electro-optical effects; (e) piezo-, pyro- and ferroelectric phenomena; (f) ferroelectric ceramics and thin films; (g) applications of electrets. In the future the session topics listed for the last and for the next Symposium in the ISE series may be taken as a broad definition of the ISE research field. Thus the lecture will regularly recognize, reward and stimulate high quality research in this important and constantly-evolving research field.

Prize: \$1,000 and Certificate

Funding: The honorarium and cost of the production of the certificate will be covered by the Symposium

registration fees until a private endowment is established. The symposium is held every three years.

Eligibility: The only requirement for nomination as the lecturer is that the nominee has established an international reputation for sustained high quality research work in the ISE research field. There is no limitation on the time frame over which this reputation has been established, and there is no requirement for membership of learned/professional societies.

Basis for Judging: Sustained high quality research work in the ISE research field.

Presentation: At the Symposium Dinner. The lecture will be presented immediately following the opening ceremony of each Symposium, commencing with ISE12 in 2005.

7. **The Dilip Das-Gupta Memorial Award**, IEEE International IEEE International Symposium on Electrets (ISE) (established in 2002)

ISE is normally held every three years and is sponsored by the IEEE Dielectrics and Electrical Insulation Society and technically co-sponsored by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society

Description: The award will be given for the best oral or poster presentation by a young scientist or engineer during the Symposium. It will regularly recognize and reward high quality research in the ISE research field by a scientist or engineer in the early stages of her/his research career.

Prize: \$1,000 and Certificate

Funding: The honorarium and cost of the production of the certificate will be covered by the Symposium registration fees until a private endowment is established. The symposium is held every three years.

Eligibility: For the purposes of the award, a young scientist or engineer is defined as a scientist or engineer who has not reached the age of 35 years by the ISE commencement date. There is no requirement for membership of learned/professional societies.

Basis for Judging: The quality of the presentation, as well as that of the work on which it is based, will be considered by the selection committee. At any Symposium the award will be made only if the selection committee is satisfied that the best presentation (by a young scientist or engineer) is of a suitably high standard. Before the Symposium closing ceremony, any registered delegate may confidentially propose a winner of the award to the Symposium Chairperson. The proposal must be in writing and include a short justification. The Chairperson will pass on all such proposals to the selection committee. Self-nominations are not allowed.

Presentation: The winner of the award will be announced during the Symposium closing ceremony, commencing with ISE12 in 2005.

8. **The Guglielmo Marconi Prize Paper Award**, IEEE Communications Society and IEEE Signal Processing Society (established in 2002)

Description: To recognize an original paper in the field of Wireless Communications published in the *IEEE Transactions on Wireless Communications* in the previous calendar year.

Prize: Starting in 2003, a prize allocation of \$5,000 will be used to cover the following annual expenses for the award: Honorarium of up to \$1,000; Travel reimbursement of up to \$3,000; Plaque. In the event of multiple authors, a prize plaque will be given to each recipient and the honorarium and travel reimbursement will be shared equally among the authors. The total honorarium is not to exceed \$1,000 and total travel reimbursement is not to exceed \$3,000..

Funding: **The award (honorarium, travel, plaque) will be managed by the IEEE Foundation and funded by the IEEE Communications Society (75%) and the IEEE Signal Processing Society (25%) from the publication account for the *IEEE Transactions on Wireless Communications*, until an external sponsor is identified. Qualcomm agreed to term of 10 years beginning in 2003 at US\$5,000 per year endowment through the IEEE Foundation. The IEEE Communications Society will be responsible for the administration of the**

Marconi Prize Paper Award. However, the authority for all aspects of the journal and for the awarding of the prize resides with the Steering Committee.

Eligibility: Authors of an original paper in the field of Wireless Communications, published in the *IEEE Transactions on Wireless Communications* in the previous year, are eligible for the Marconi Prize Paper Award. The authors need not be members of the IEEE.

Basis for Judging: High quality, original paper composite of originality, utility, timeliness and clarity of presentation.

Presentation: Annually at the International Conference on Communications by the IEEE Communications Society Awards Committee Chair, in the name of the IEEE Communications Society, the IEEE Signal Processing Society, and the external sponsor of the award (when identified). An award may not be given if a paper of high quality is not uncovered.

9. **The Multimedia Prize Paper Award**, IEEE Circuits and Systems Society, IEEE Communications Society, IEEE Computer Society, and IEEE Signal Processing Society (established in 2002)

Description: To recognize an original paper in the field of Multimedia published in the *IEEE Transactions on Multimedia* in the previous calendar year.

Prize: \$500 and Plaque for each author. The total honorarium is not to exceed \$1,000.

Funding: **The award will be funded equally by the four sponsoring societies (IEEE Circuits and Systems, IEEE Communications, IEEE Computer and IEEE Signal Processing Societies) from the publication account for the *IEEE Transactions on Multimedia*, until an external sponsor is identified (will be sought in 2003). The IEEE Signal Processing Society is the managing partner for the *IEEE Transactions on Multimedia*. Accordingly, IEEE Signal Processing Society will be responsible for the administration of the Multimedia Prize Paper Award. However, the authority for all aspects of the journal resides collectively with its Steering Committee.**

Eligibility: Authors of an original paper in the field of Multimedia, published in the *IEEE Transactions on Multimedia* in the previous year are eligible for the Marconi Prize Paper Award. The authors need not be members of the IEEE.

Basis for Judging: High quality, original paper composite of originality, utility, timeliness and clarity of presentation.

Presentation: Annually at the International Conference on Multimedia and Expo (ICME) by the General Chair of the conference, in the name of the four sponsoring societies. An award may not be given if a paper of high quality is not uncovered.

10. **IEEE Communications Society/Korean Institute of Communication Sciences Exemplary Global Service Award** (established in 2007)

Description: To IEEE members and member of the IEEE Communications Society Sister Societies who have made outstanding sustained contributions that have significantly enhanced global interactions among communications and information technology engineers and scientists through the efforts of ComSoc and/or its sister societies.

Prize: \$2,000, Plaque and Certificate.

Funding: Funded by the IEEE Communications Society and Korean Institute of Communication Services. The Korean Institute of Communication Sciences (KICS) will provide the honorarium and a travel grant of up to \$1,500 to the recipient to participate in the award presentation ceremony. The IEEE Communications Society (ComSoc) will provide the plaque and certificate.

Eligibility: IEEE Members and Members of IEEE Communications Society Sister Societies.

Basis for Judging: Outstanding sustained contributions that have significantly enhanced global interactions among communications and information technology engineers and scientists through the efforts of

ComSoc and/or its sister societies.

Presentation: Annually at a venue to be agreed upon between the awardees and ComSoc staff, but preferably at the awards ceremony held at each IEEE GLOBECOM. First presentation of this award is expected during the Awards Luncheon at GLOBECOM 07 in November

11. **IEEE/ACM A. Richard Newton Technical Impact Award in Electronic Design Automation (Joint sponsorship with ACM Special Interest Group on Design Automation)** (established in 2007)

Description: To honor a person or persons for an outstanding technical contribution within the scope of electronic design automation, as evidenced by a paper published at least ten years before the presentation of the award.

Prize: \$1,500 and Plaque for each author. Prize will be shared by all authors. For groups of more than five awardees, there will be a minimum of \$300 honorarium per contributor.

Funding: Funded by the IEEE Council on Electronic Design Automation and ACM Special Interest Group on Design Automation.

Eligibility: Open to authors of a paper in the field of electronic design automation published ten years or more before the award is presented. The paper must have passed through a peer-review process before publication, be an archived conference or journal publication available from or published by either ACM or IEEE, and be a seminal paper where an original idea was first described.

Basis for Judging: Impact of the paper which has made an outstanding technical contribution in the scope of electronic design automation through a paper published at least ten years before the award is presented.

Presentation: The award will be presented annually at the ACM/IEEE Design Automation Conference.

12. **IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award** (established in 2008)

Description: To recognize exceptional power engineers who have worked, implemented or innovated better and cheaper electrification technologies for the rural sector.

Prize: \$500, sculpture, certificate, and a travel stipend of up to \$1,500 for recipient to attend the presentation ceremony.

Funding: **The award will be co-funded by the IEEE Power & Energy Society and the IEEE Industry Applications Society. This funding was already endorsed by the IEEE Foundation. A matching donation will also be provided by the family of A.P. Seethapathy.**

Eligibility: Candidate must be active in the field of rural electrification for at least 5 years. No current member of the IEEE Board of Directors, the IEEE-PES Governing Board, IAS Executive Board, the IEEE-PES Awards and Recognition Committee, the IAS Awards Department, the Rural Electrification Excellence Award Committee, or IEEE staff may be candidates, or nominate or endorse candidates for this award.

Basis for Judging: Selection will be based on evaluation of accomplishments as revealed by published works, documented testimonials from industry colleagues, or other objective demonstrations of accomplishments over an extended period of time. Of particular importance is evidence of the candidate's innovative content and societal impact; lower cost solution; originality and practicality; and evidence of implementation.

Presentation: Presentation of the award shall be made by the PES President, IAS President or the Rural Electrification Excellence Award Chair or their designated representative.

13. **IEEE/ACM Ken Kennedy Award** (established in 2009)

- Description:* To recognize outstanding contributions to programmability or productivity in high performance computing together with significant community service or mentoring contributions.
- Prize:* The award will be presented annually and consist of a certificate and \$5,000 honorarium. This is intended to be an ACM/IEEE award and the awardee will be invited to present a paper at the SC conference or at an ACM or IEEE Computer Society conference of the winner's choosing during the year following the announcement.
- Funding:* Travel costs of the recipient and one companion to attend the presentation ceremonies at a conference will be borne by the conference. **The award will be funded out of an endowment with equal contributions from ACM and the IEEE Computer Society. It is expected that the IEEE Foundation will manage the endowment.**
- Eligibility:* The award is open to contributors at all stages of their careers. There are no restrictions as to IEEE/IEEE society membership, gender, or age. It is awarded when a suitable candidate is available. The winner of the award should be someone who has made an outstanding, innovative contribution or contributions to programming and productivity in computing, and has also contributed to computing through teaching, mentoring, or community service.
- Basis for Judging:* This award for software for high-end computers in recognition of the important work in promoting and expanding the use of supercomputers and the software required to drive the applications and hardware. This will be an annual award presented "in recognition of outstanding contributions to programmability or productivity in high-performance computing together with significant community service or mentoring contributions."
- Presentation:* The award would be presented annually with the winner announced at the ACM/IEEE SC Conference and the winner accepting the award and giving a presentation, normally technical, at the SC conference at which it is announced (in November) or at an ACM or IEEE conference of the winner's choosing during the year following the announcement. The SC Conference is the premier international conference for high performance computing (HPC), networking, storage and analysis.

14. **IEEE PES CSEE Yu-Hsiu Ku Electrical Engineering Award**, IEEE Power & Energy Society and Chinese Society for Electrical Engineers (CSEE) (established in 2009)

- Description:* Award specifications include the recognition of a professional who has demonstrated excellent performance in the fields of electricity, electrical machinery, power system engineering and/or related fields. The recognized contributions in electrical engineering must have a lasting beneficial impact on the Chinese society. The recipient's contribution in electrical engineering shall be evaluated based on technical innovations and well recognized contributions in electrical power engineering and associated fields. The award is aimed at stimulating outstanding achievements in successful industrial practices.
- The award is in memory of Dr Yu-Hsiu KU (1902~2002), who has made great contributions in mathematics, electrical machinery and modern control theory during his longstanding career in the US and China. Prof. Ku was the recipient of the IEEE Lamme Medal (1972) and the IEEE Millennium Medal (1999). He was also the founding member of CSEE.
- Prize:* An honorarium of US\$2,000, and a non-gold medal/plaque and certificate. No multiple recipients will be awarded.
- Funding:* **The source of funding will be provided by NARi-Relays Electric CO. LTD. and Beijing Sifang Automation Co. Ltd. The two companies are leading providers of high-performance protective relaying control, monitoring, substation automation and control equipment for power transmission, distribution and generation applications by electric power utilities and related industries. It is very likely that there will be other corporations in China providing a portion of this funding. An award fund will be established through the IEEE Foundation.**

Eligibility: Candidates should be working in China, for the past 5 years, preferably living or working in China at the time of nomination.

Basis for Judging: The candidate dossier will consist of the nomination form and supporting letters. Materials in excess of the specified required nominations information will not be forwarded to the Selection Committee. The candidate dossier will be emailed to Selection Committee members for review and submission of rankings. In the final selection of a recommended award recipient, Selection Committee members will rank the nominees in descending rank order. Results will be tabulated and distributed to Selection Committee members for use in the selection process. The Selection Committee will meet via teleconference to review the tabulated rankings and discuss the nominees.

The Selection Committee shall designate an alternate candidate in order for additional candidate be recommended for reconsideration. No award shall be given if there are fewer than three candidate nominations (new, plus carry-over), unless special permission is granted by the CSEE Executive Council or the PES Governing Board.

Presentation: If the IEEE PES Governing Board and the Executive Council of CSEE concur with the recommendation of the Selection Committee, the award will be presented at the CSEE Annual Meetings or IEEE PES General Meeting awards luncheons, as preferred by the recipient(s) of the award. The presentation of the award shall be made by the CSEE president or the IEEE PES president, depending on the presentation venue. Regardless of the venue, high-level representatives of both CSEE and IEEE PES are to be present.

15. IEEE International Future Energy Challenge Award (established in 2010; revised presentation 2014; revised prize 2017)

Description: The awards will be given to the best performing teams in the IEEE International Future Energy Challenge design competition. Topics for each Competition will change. The award structure will remain the same. The prizes provided to schools are intended to benefit the team members and student team design project activities.

Prize: The award would be annual with one topic per year, and consist of a certificate and honorarium for winning teams paid to their university or IEEE Section or Chapter. See tiers and description below.

IEEE International Future Energy Challenge Topic A

1st Prize: US\$10,000

2nd Prize: US\$5,000

3rd Prize: US\$3,000

Potential 4th Prize: US\$1,000 (if budget allows) of up to 3 (impact could be an additional \$2,000 per year)

Fourth prize is intended to acknowledge remarkable solutions in detail, proposed by teams not winning the 1st to 3rd Prizes. While a 1st, 2nd, and 3rd Prize will always be awarded, the 4th Prize is only applicable if the budget allows.

IEEE International Future Energy Challenge Topic B

1st Prize: US\$10,000

2nd Prize: US\$5,000

3rd Prize: US\$3,000

Potential 4th Prize: US\$1,000 (if budget allows) of up to 3 (impact could be an additional \$2,000 per year)

Fourth prize is intended to acknowledge remarkable solutions in detail, proposed by teams not winning the 1st to 3rd Prizes. While a 1st, 2nd, and 3rd Prize will always be awarded, the 4th Prize is only applicable if the budget allows.

Funding: IEEE Power Electronics Society US\$40,000/Competition; IEEE Industry Applications Society, US\$25,000; IEEE Power & Energy Society, US\$20,000; Power Source Manufacturers Association, US\$10,000.

The amounts indicated above might be renegotiated on a yearly basis prior to the announcement

of the next competition, depending on the financial situation of the involved societies and the location of the competition, influencing accountable travel cost; however prior to announcing the competition, funds of in total at least US\$75,000 must be guaranteed for it by the funding societies. A society must provide funds of at least US\$10,000 to be mentioned as a sponsor of the competition.

Eligibility: Any University Student Team participating in the IEEE International Future Energy Challenge. Visit Society website for more details.

Basis for Judging: During the final competition event, the participating teams need to demonstrate their design that meets the specification. The team with highest score will receive the award.

Awards titles for Prizes 1, 2 and 3 will be declared by the judging team based upon the finalist submissions. (Flexibility may be necessary here to award achievements in detailed areas).

Presentation: The awards will be presented after the decision during the IEEE International Future Energy Challenge final competition.

16. **IEEE/ASME *Transactions on Mechatronics* Best Paper Award** (established in 2017)

Description: Established in 2008 and jointly administered by the co-sponsors IEEE-IES, IEE-RAS, and ASME-DSCD, through the *Transactions on Mechatronics* Management Committee, the purpose of this award is to recognize the best refereed paper published in the volume year of the IEEE/ASME *Transactions on Mechatronics*.

Prize: The award is given annually to all of the authors of the selected best paper published in the previous calendar year in the Transaction. Multiple recipients are allowed and there is no limit on the number recipient (authors). Each recipient will receive a printed certificate, a plaque and a share of the \$1000 award. With multiple recipients (authors), the authors can decide how to share prize money. The default approach is to share the prize equally among the authors. In the case of two papers sharing the award, the \$1000 award will be equally shared by the two papers, i.e. \$500 for each paper. The prize does not include travel expense.

Funding: The fund for the award has been provided by the TMech operating budget approved annually by the Management Committee jointly appointed by the three co-sponsors (IEEE/RAS, IEEE/IES and ASME/DSCD).

Eligibility: Published original refereed paper in the IEEE/ASME *Transactions on Mechatronics* in the previous calendar year; the authors need not be a member of IEEE or ASME.

Basis for Judging:

Professional Merit (40%)

- Creativity and originality, as reflected in new insights, interpretations, facts, innovations, methods, applications, etc. (stimulating, informative, enlightening, etc.);
- Scientific and professional quality of the research, review, development work, methods of inquiry, etc. (competent, valid, replicable, etc.); and
- Scholarship embodied in the presentation, explanations, interpretations, and discussions (researched, documented, balanced, critical, etc.).

Contribution (40%)

- Societal or scientific/technical significance of the topic or problem investigated or expounded (universality, urgency, impact, etc.);
- Usefulness of the paper to practicing information professionals (applicability, timeliness, scope, problem-solving value, etc.); and
- Relevance of the topic or problem to the interests of Mechatronics.

Presentation Quality (20%)

- Readability, effective organization and presentation of concepts, facts, arguments, etc. (structure, logic, persuasiveness, etc.);
- Use of clear, concise, comprehensible, and jargon-free language (ease and pleasure of reading); and
- Adherence to "Instructions for Contributors" found in the IEEE/ASME *Transactions Mechatronics* for format, graphics, citations, etc.

Presentation: The award will be presented annually at the annual IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM) conference.

17. **IEEE Internet of Things Journal Best Paper Award (joint award of IEEE Internet of Things Journal Steering Committee cosponsored by IEEE Communications Society, IEEE Computer Society, and IEEE Sensors Council)** (established in 2020)

Description: To recognize the best papers published in the IEEE Internet of Things Journal. The award is based on originality, impact, relevance to the IoT-J's scope, and timeliness.

Prize: Up to two awards may be given annually; \$2,000 per award (split equally among the authors) and a Plaque for each winning author. The travel expenses of the lead author of each best paper shall be reimbursed.

Funding: Funds for this award come from the IEEE Internet of Things Journal. The first year, if necessary, the IEEE Sensors Council (the lead administrative cosponsor) may provide the funds (and be reimbursed by the other financial cosponsors).

Eligibility: Author(s) of any paper published in the IEEE Internet of Things Journal during the three calendar years preceding the date of the award is/are eligible.

Basis for Judging: The award is based on originality (unless the paper is a review paper), impact, relevance to the IoT-J's scope, and timeliness. The IoT-J Steering Committee, upon the recommendation of the IoT-J Editorial Board, decides if the nominees meet the standards necessary for the award. The decisions are based on simple majority voting by the voting members of the Steering Committee. Steering Committee members may not be a co-author of any paper considered for the award. The Steering Committee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented at a venue selected by the IoT-J Steering Committee. Travel expenses of one lead author per award shall be reimbursed upon request in accordance with IEEE travel policies.

18. **IEEE Internet of Things Journal Outstanding Service Award (joint award of IEEE Internet of Things Journal Steering Committee cosponsored by IEEE Communications Society, IEEE Computer Society, and IEEE Sensors Council)** (established in 2020)

Description: To honor long and distinguished service to the IEEE Internet of Things Journal.

Prize: One award is given annually; \$2,000 and a Plaque

Funding: Funds for this award come from the IEEE Internet of Things Journal. The first year, if necessary, the IEEE Sensors Council (the lead administrative cosponsor) may provide the funds (and be reimbursed by the other financial cosponsors).

Eligibility: The award is open to all who have contributed to the IEEE Internet of Things Journal.

Basis for Judging: The IoT-J Steering Committee decides if the nominees meet the standards necessary for the award. The decision is based on simple majority voting by the voting members of the Steering Committee. Steering Committee members may not be considered for the award. The Steering Committee may decide that none of the nominees meets the standards necessary and the award will not be given in that year.

Presentation: The award will be presented at a venue selected by the IoT-J Steering Committee. The winner shall be for travel expenses to the award presentation in accordance with IEEE travel policies.

REFERENCE

MATERIAL

AWARDS AND RECOGNITION PRODUCTS

A variety of plaques and certificates are available for use in conjunction with Society/Council awards programs. Shown below are some of the most commonly requested items. Arrangements can be made for creating customized products to suit special needs.

For additional information on ordering, pricing, and customized products, please contact:

Society Member & Committee Services
IEEE Technical Activities
445 Hoes Lane
Piscataway, NJ 08854
Phone: +1 732 562 5357
Fax: +1 732 867 9952
e-mail: society-awards@ieee.org

CERTIFICATES

A basic certificate is available, printed on heavy cream-colored stock, and preprinted with the Institute name and logo as a heading, and the IEEE Gold Seal at the bottom left corner. Certificates can be personalized, as described below, or provided blank for personalization by the requestor.

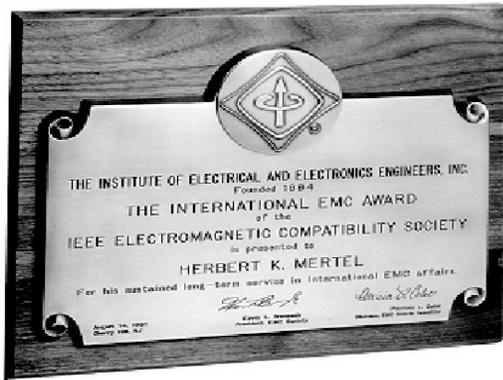
The **#9 Certificate** (8½ x 11") is blank (other than the IEEE logo, name and Gold Seal), allowing for more personalized text to be provided by the requester. Society/Council logos and signatures can be added.



Several options for presentation of certificates are available. These include Gold Colonial Frame, Leatherette Folder, Paper Folder, and Lamination.

PLAQUES

The plaques shown below can be fully personalized, making them suitable for presenting in conjunction with almost any award.



The **Galvano Plaque** consists of an 8 x 10" bronze plate with the Institute name and logo, mounted on a 10½ x 13" walnut board. All remaining text is personalized as provided by the requester. *(Deep engraving with dark colorfill)*



The **Photo-Engraved Medallion Plaque** consists of a 4 x 10" bronze plate of photo-engraved lettering mounted on a 9 x 12 walnut board with the IEEE logo medallion centered above the plate. All text is personalized as provided by the requester. *(Engraved lettering chemically oxidized to produce dark colorfill)*

The **Photo-Engraved Plaque** consists of an 8 ½" x 11" bronze plate of photo-engraved lettering of text as provided by requester, mounted on a 12 x 15 walnut board (full-size). *(Engraved lettering chemically oxidized to produce dark colorfill.)* Also available as a 5 ½" x 8" bronze plate mounted on a 9 x 12 walnut board (half-size).



The **Laminated Certificate** consists of a #9 certificate laminated onto an 11 x 12" wood base, with a gold beveled edge on the base and gold border around the certificate. Personalization is provided by the requester, according to type of certificate selected.



TEMPLATE TO ESTABLISH A NEW SOCIETY/COUNCIL AWARD

Title: Desired title of award. All new award proposal titles (or revisions to existing award titles) should begin with "IEEE", may contain the name of an individual*, *must* contain the general area of coverage, *which can be satisfied by either including society/council name or the technical area of coverage in title*, (unless approval to omit it is granted by the Awards Board), and may contain a phrase such as "sponsored by a funding entity(ies)".

Note: When an award is named after a person, the sponsoring entity obtain written consent from the individual or immediate family that they agree to having an IEEE award named in his or her honor. **The written consent from the individual or family must be accompany the award proposal. Once established, the sponsoring entity bears the responsibility of notifying the individual of said approval. In addition, an explanation as to the reason why the award is to be named after an individual (e.g. accomplishments, etc.) should also be provided.*

Description. Award specifications should be unambiguous and non-conflicting with existing awards. The award should stimulate outstanding achievement; need for continuity should be shown.

Note: Please include a statement to confirm this proposed new award does not overlap with any existing award in your awards portfolio and consequently avoids the potential for an awardee to receive two awards for the same recognition.

Administration. Indicate Society, Committee, etc. (e.g. Administered by the XXX)

Eligibility.

1) State the requirements for eligibility including IEEE membership, Society membership, individual or group, tangible and visible achievements, achievement time period, restrictions, age, committee member, global diversity, etc.

(Please state the minimum number of years of active (Society or IEEE) membership that is required for eligibility. For example "Active Member since at least XXXX or for at least X number of years")

2) Include the following statement: *Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations.*

3) Include the following statement: *Previous award winners are not eligible for substantially the same achievements (per IEEE Policies 4.4: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.)*

Prize: (Select Type of Award)

1) For each type of award, identify prize items: honorarium (full or split) or plaque and/or certificate.

2) Identify how to handle prize sharing, if applicable, for multiple recipients.

3) Identify travel allowances or conference registration fees, where applicable for single and multiple recipient awards.

Single Annual Award - Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Single Annual Award with Multiple Recipients – Prize to be split among multiple recipients. (e.g. Multiple Authors or Multiple People/Team that collaborated on the achievement and contribution). Indicate that multiple recipients are allowable and specify if each will share the prize. Specify the number of allowable recipients and if a maximum number of recipients applies. Specify how to handle prizes for multiple recipients (e.g. should prize be split evenly for multiple recipients?) Is there a limit on the prize amount if multiple recipients? If award includes travel, specify who is entitled to travel allowance (e.g. perhaps only one of the awardees is entitled to travel allowance). Need to ensure financial commitments are maintained. Also need to ensure splitting the prize amongst many recipients will not diminish the value of the award. *(Note: please ensure prize amounts are in accordance with Hierarchy of Awards*

allowable limits provided with this template.)



Multiple Awards Given Annually - Each recipient receives full prize (e.g. 3 Awards to be given each year; each recipient receives full prize amount) If multiple awards are allowable indicate how many will be given in one year. Is there a maximum amount of awards that can be given? For example, up to 5 awards/scholarships can be given annually. If award includes travel, identify if all awardees receive travel allowance since each recipient is entitled to full award. Note: Consider budget implications if multiple awards will be given annually; ensure multiple awards will not negatively impact budget.

Frequency:

- 1) Specify frequency of award (annual, biennial?) Ensure frequency is consistent with Prize type (single/multiple, etc.)
- 2) *Include the following statement in this section: Award will be given only if a suitable awardee is identified.*

Funds.

- 1) State source of funds, assurance of fund continuity, duration.
- 2) For S/C funded awards funded, include the following statement: *The society/council's budget includes the amount for this award AND the budget is net positive with the inclusion of the award.*
- 3) *Any reimbursements of travel or conference fees to be provided as part of the award, should clearly specify that the reimbursements will follow IEEE Policies and Procedures.*

For awards funded through an Endowment to be provided by an External Source/Donor:

If an award is to be funded by a contribution from an external source/donor and deposited into IEEE for endowment purposes, approval of the IEEE Foundation Board will also be necessary. The IEEE Foundation is the unit that will accept the contribution and handle the management of the funds. Please contact the IEEE Development Office (m.deering@ieee.org) to initiate the process and provide confirmation and status in this section of the template.

Nominee Solicitation.

- 1) State mechanism to solicit nominations.
- 2) Include the following statements in the section: *Nominations should comply with IEEE Policies and restrictions on awards. Incidents of misconduct including, but not limited to, violations of IEEE's publication policies, will be strongly considered by the awards committee and may be grounds for denial of an award or leadership position.*

Award Committee.

- 1) Identify composition of awards committee (how many, who, chair, etc). Define Quorum for Committee and specify *Voting shall be conducted in accordance with Robert's Rules of Order. The Committee Chair shall have no vote except if the vote is by secret ballot or unless the Chair's vote can change the outcome of the vote.*
- 2) Indicate how chair and members are appointed to the committee. Who appoints?
- 3) Specify terms for chair and members of Awards Committee.
- 4) Specify process for approval of recipient...Who approves? Awards Committee, BoG, President, etc?
- 5) Specify *Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B. and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating.*
- 6) Specify *Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.*

Schedule. State schedule for submission of nominees and selection, notification of recipient, annual or a periodic award, etc. **Note:** For a paper nomination, state paper nomination schedule and deadline for receipt; when the award will be decided; and the winners notified.

Selection/Basis for Judging. Identify factors to be considered, scoring, committee voting procedure, etc.

Presentation. State preferred location and date of award presentation, presented in the name of entity, etc.

Publicity. Feature publication, archival record, home town paper, etc.

HIERARCHY OF AWARDS
(approved by BoD November 2018)

Society/Council Awards: (includes S/C Contests and Competitions)	\$10,000 maximum
Technical Conference Awards: (includes TC Contests and Competitions)	\$ 5,000 maximum
Society/Council Chapter Awards:	\$ 2,000 maximum
Student Branch Chapter Awards:	\$ 1,000 maximum

STUDENT RECOGNITION AND SUPPORT:
(approved by BoD November 2018)

	<u>Minimum Amount</u>	<u>Maximum Amount</u>
Undergraduate Award: (Curriculum with IEEE Relevance)	Certificate	\$2,500
Undergraduate Scholarship: (Breadth of sponsoring organizational unit)	\$500*	\$15,000 annually
Graduate Award: (Breadth of sponsoring organizational unit)	\$1,000*	\$5,000
Graduate Scholarship: (Breadth of sponsoring organizational unit)	\$2,500*	\$25,000 annually
Graduate Fellowship: (Breadth of sponsoring organizational unit)	\$5,000*	\$30,000 annually

Undergraduate Scholarships: for eligible students pursuing an Undergraduate Degree (Associates or Bachelor's degree or equivalent)

Graduate Scholarships: for eligible undergraduate students with a Bachelor's degree (or equivalent) pursuing a higher level graduate degree (e.g. Master's degree or equivalent)

Graduate Fellowships: for eligible graduate students with a Master's degree (or equivalent) pursuing an advanced doctoral Ph.D. graduate degree (or equivalent)

There shall be no primary award evaluation constraints except educational level and geographical location, although financial need can be used as a secondary criterion.

** The amounts are given in U.S. dollars. These limits should be modified in other geographical areas as appropriate to account for differences in the cost of education, availability of comparable non-IEEE sponsored support, and the impact of the recognition.*

TEMPLATE FOR ESTABLISHING A NEW IEEE TECHNICAL CONFERENCE AWARD

(hierarchical limit increase to \$5,000 approved by BoD November 2018)

Proposals for the establishment of new IEEE Technical Conference Awards or revisions of existing awards by a Technical Conference shall be forwarded to the Awards Committee of the Societies/Councils sponsoring the conference for approval.

Title: Desired title of award. All new award proposal titles (or revisions to existing award titles) should begin with "IEEE", may contain the name of an individual, *must* contain the general area of coverage, *which can be satisfied by either including society name or the technical area of coverage in title*, (unless approval to omit it is granted by the Awards Board), and may contain a phrase such as "sponsored by a funding entity(ies)".

Note: When an award is named after a person, the sponsoring entity must obtain written consent from the individual or immediate family member that they agree to having an IEEE award named in his or her honor. The written consent must accompany the award. Once established, the sponsoring entity bears the responsibility of notifying the individual of said approval. In addition, an explanation as to the reason why the award is to be named after an individual (e.g. accomplishments, etc.) should also be provided.

Description. Award specifications should be unambiguous and non-conflicting with existing awards.

Note: Please include a statement to confirm this proposed new award does not overlap with any existing award in your awards portfolio and consequently avoids the potential for an awardee to receive two awards for the same recognition.

Administration. Indicate Society Conference, etc. (e.g. Administered by the XXX)

Eligibility.

1) State the requirements for eligibility including IEEE membership, Society membership, individual or group, tangible and visible achievements, achievement time period, restrictions, age, committee member, global diversity, etc.

(Please state the minimum number of years of active (Society or IEEE) membership that is required for eligibility (if applicable). For example "Active Member since at least XXXX or for at least X number of years")

2) Include the following statement: *Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations.*

3) Include the following statement: *Previous award winners are not eligible for substantially the same achievements (per IEEE Policies 4.4: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.)*

Prize Items. Need to Specify Type of Award: For each type of award, identify prize items, such as recipients eligible to receive honorarium (full or split); recipients eligible to receive plaque and/or certificate. Identify how to handle prize sharing, if applicable, for multiple recipients. Identify travel allowances, where applicable for single and multiple recipient awards. These are general guidelines TABARC would like you to consider when considering the allowance of single and/or multiple recipient awards. Consider budget implications when allowing multiple awards annually. *(Note: there is a \$5,000 maximum allowable limit for IEEE Technical Conference Awards.)*

Single Annual Award - Only One Allowable Recipient Selected Annually. Recipient receives full prize including honoraria, and, if applicable, plaque and/or certificate.

Single Annual Award with Multiple Recipients – Prize to be split among multiple recipients. (e.g. Multiple Authors or Multiple People/Team that collaborated on the achievement and contribution). Indicate that multiple recipients are allowable and specify if each will share the prize. Specify the number of allowable recipients and if a maximum number of recipients applies. Specify how to handle prizes for multiple recipients (e.g. should prize be split evenly for multiple recipients?) Is there a limit on the prize amount if multiple

recipients? If award includes travel, specify who is entitled to travel allowance (e.g. perhaps only one of the awardees is entitled to travel allowance). Need to ensure financial commitments are maintained. Also need to ensure splitting the prize amongst many recipients will not diminish the value of the award. *(Note: please ensure prize amounts are in accordance with Hierarchy of Awards allowable limits provided with this template.)*

- Multiple Awards Given Annually - Each recipient receives full prize** (e.g. 3 Awards to be given each year; each recipient receives full prize amount) If multiple awards are allowable indicate how many will be given in one year. Is there a maximum amount of awards that can be given? For example, up to 5 awards/scholarships can be given annually. If award includes travel, identify if all awardees receive travel allowance since each recipient is entitled to full award. Note: Consider budget implications if multiple awards will be given annually; ensure multiple awards will not negatively impact budget.

Frequency:

- 1) Specify frequency of award (annual, biennial?) Ensure frequency is consistent with Prize type (single/multiple, etc.)
- 2) *Include the following statement in this section: Award will be given only if a suitable awardee is identified.*

Funds. State source of funds, assurance of fund continuity, duration.

Note: **IEEE Technical Conference Awards can only be funded with:**

- a) **Conference Funds**
- b) **External Sponsors.** External sponsors should not be burdened with excessive IEEE constraints. External sponsors may fund conference awards directly or through funding arrangements with S/C's, e.g. funds could be held in S/C reserves
- c) **IEEE Technical Conference Awards may not be funded with S/C funds, except as an expedient of handling funds from an external source as described in (b) above.**
- d) **Any reimbursements of travel or conference fees to be provided as part of the award, should clearly specify that the reimbursements will follow IEEE Policies and Procedures**

Nominee Solicitation.

- 1) State mechanism to solicit nominations.
- 2) Include the following statements in the section: *Nominations should comply with IEEE Policies and restrictions on awards. Incidents of misconduct including, but not limited to, violations of IEEE's publication policies, will be strongly considered by the awards committee and may be grounds for denial of an award or leadership position.*

Award Committee.

- 1) Identify composition of awards committee (how many, who, chair, etc). Define Quorum for Committee and specify *Voting shall be conducted in accordance with Robert's Rules of Order. The Committee Chair shall have no vote except if the vote is by secret ballot or unless the Chair's vote can change the outcome of the vote.*
- 2) Indicate how chair and members are appointed to the committee. Who appoints?
- 3) Specify terms for chair and members of Awards Committee.
- 4) Specify process for approval of recipient...Who approves? Conference Awards Committee, BoG, President, etc?
- 5) Specify *Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B. and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating.*
- 6) Specify *Individuals serving on any board or committee involved at any stage of the recipient selection or approval process*

Schedule. State schedule for submission of nominees and selection, notification of recipient, annual or a periodic award, etc.

Selection/Basis for Judging. Identify factors to be considered, scoring, committee voting procedure, conference guidelines, etc.

Presentation. State preferred location and date of award presentation, presented in the name of entity, conference, etc.

Publicity. Feature publication, archival record, home town paper, conference, etc.

GUIDELINES FOR TECHNICAL CONFERENCE AWARDS

Definition: IEEE “Technical Conference Awards” can be defined (or described) as IEEE awards for which the Conference Committee has obtained IEEE Society/Council approval.”

Approvals Needed: Proposals for the establishment of new IEEE Technical Conference Awards or revisions of existing awards by a Technical Conference shall be forwarded to the Awards Committee of the Societies/Councils sponsoring the conference. The authority of approval of IEEE Technical Conference Awards is delegated from TAB to the individual Societies/Councils. The S/Cs will ensure the administration and associated accounting procedures of these awards follow IEEE policies and procedures.

S/C Reporting: The sponsoring societies/councils must separately report all new IEEE Technical Conference awards and award revisions to the TABARC Chair in care of the Manager, Society General Activities in IEEE Technical Activities. This will ensure proper recording of IEEE Technical Conference awards in the TAB Awards and Recognition Manual. Although these awards need to be reported, they will not require TABARC/TAB approval.

Funding: IEEE Technical Conference Awards can be funded with:

- a) Conference Funds
- b) External Sponsors Funds: External sponsors can fund conference awards through arrangements with S/C's (e.g. funds could be held in S/C reserves). It is recommended that sponsors provide IEEE with the funds, including the funds for the award honorarium, and that IEEE should be responsible for all administrative details and paperwork for IEEE Technical Conference Awards. If an external award sponsor wanted to contribute the funds directly to an award recipient and did not contribute the funds directly to IEEE, the sponsor should be notified in writing of the following:
 - The sponsor will not receive a charitable tax deduction for the contribution
 - The sponsor (and not IEEE) is responsible for obtaining and filing the necessary IRS forms (e.g. W-8 and W-9 forms)
 - Any failure of the sponsor to file the necessary forms would reflect poorly on the IEEE for an IEEE award. The sponsor should agree to indemnify IEEE for any claims, including but not limited to, tax liability that might result from such failure. Although indemnification provision would provide some protection to IEEE, unfortunately, an indemnification provision cannot protect IEEE against bad publicity that could result from the failure to file the necessary forms.
- c) IEEE Technical Conference Awards may not be funded with S/C funds, except as an expedient of handling funds from an external source as described in (b) above.

All other awards presented at a Technical Conference fall into one of the following categories 1) IEEE level awards (e.g., Technical Field Awards or Fellow)

- 2) Society/Council awards
- 3) non-IEEE awards*

Note: The above awards cannot be considered IEEE Technical Conference Awards and consequently cannot be funded with conference funds. Similarly, S/C-level awards may not be funded with conference awards.

*** Non-IEEE awards presented at Conferences Co-Sponsored by non-IEEE Entities:**

Many conferences are co-sponsored by non-IEEE entities who may want to present their own awards at the conference. Such awards would not be considered IEEE awards. Although there is no issue with the co-sponsor presenting a non-IEEE award at the IEEE co-sponsored conference, it needs to be made clear that the award being presented is the co-sponsor's award from its organization, rather than an IEEE award.

Technical Conference Reporting: Technical Conferences shall report all awards presented at the conference, including any non-IEEE awards (awards that have not been approved by any IEEE entity) as part of the conference reporting process. Non-IEEE awards may be presented at the conference only if the following conditions are met:

- a) IEEE funds may not be used for non-IEEE awards
- b) The name "IEEE" must not be used in the name or description of non-IEEE awards
- c) The conference name must not be used in the "name" of non-IEEE awards, as this implies "IEEE" since the conference is sponsored by IEEE. An exception can be made when non-IEEE awards are funded by a non-IEEE co-sponsor of the Technical Conference
- d) The conference name may be used in the "description" of a non-IEEE award, e.g., an award named "Best Paper Award in Subject X", may have its description include the name of the conference, as in "This award is for the best paper in Subject X at the XYZ conference"
- e) A clear distinction of which awards are IEEE and which are non-IEEE must be made in all places in which the awards are listed, e.g. conference web site, award presentation materials, etc. Please note that omitting "IEEE" from the name of a non-IEEE award is insufficient to distinguish it from IEEE awards.

DONATING AWARD HONORARIUM TO IEEE FOUNDATION

Those choosing to donate their Award Honorarium to the IEEE Foundation for providing philanthropic services in support of the IEEE core purpose to foster technological innovation and excellence for the benefit of humanity, may do so by completing the form provided via the link below.

<https://www.ieeefoundation.org/donate>

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AWARDS BY TYPE

TECHNICAL ACHIEVEMENT/CONTRIBUTIONS TO FIELD OF SOCIETY/SERVICE TO PROFESSION

IEEE Division VI Distinguished Leadership Award
IEEE Entrepreneurship Impact Award
AES Autotestcon Frank McGinnis Professional Achievement Award (Joint with IM)
AES Fred Nathanson Memorial Radar Award
AES Warren D. White Award for Excellence in Radar Engineering
AES IEEE AESS Organizational Leadership Award
AES IEEE AESS Judith A. Resnik Space Award
AES IEEE AESS Robert T. Hill Best Dissertation Award
AES IEEE AESS Early Career Award
AP Distinguished Achievement Award
AP Honorary Life Member of AdCom
AP Outstanding Service Award
AP John Kraus Antenna Award
AP IEEE Lot Shafai Mid-Career Distinguished Achievement Award
AP IEEE Harrington-Mitra Award in Computational Electromagnetics
AP IEEE Ulrich L. Rohde Humanitarian Technical Field Project Award
BIO IEEE Biometrics Council Meritorious Service Award
BIO IEEE Biometrics Council Leadership Award
BIO IEEE Biometrics Council Best Doctoral Dissertation Award
BT IEEE Jules Cohen Award for Outstanding Broadcast Engineering
CAS Circuits and Systems Society Mac Van Valkenburg Award
CAS IEEE Circuits and Systems Society Charles A. Desoer Technical Achievement Award
CAS Vitold Belevitch Circuits and Systems Award
CE IEEE Consumer Electronics Society Corporate Innovation & Leadership
CE IEEE Consumer Electronics Society Distinctive & Exemplary Industry Leader Award
COMM Edwin Howard Armstrong Achievement Award
COMM Award for Public Service in the Field of Telecommunications
COMM IEEE Communications Society Distinguished Industry Leader Award
COMM IEEE Communications Society/ Korean Information and Communications Society Exemplary Global Service Award
COMM IEEE Communications Society Industrial Innovation Award
COMM IEEE Communications Society Robert M. Walp Industry Humanitarian Award
CIS Outstanding PhD Dissertation Award
CIS IEEE Outstanding Computational Intelligence Society Early Career Award
CIS IEEE Outstanding Computational Intelligence Society Organization Award
COMP W. Wallace McDowellDol Award
COMP Eckert-Mauchly Award
COMP Computer Entrepreneur Award
COMP IEEE Computer Society Edward J. McCluskey Technical Achievement Award
COMP IEEE Computer Society/Software Engineering Institute Watts S. Humphrey Software Process Achievement Award
COMP Hans Karlsson Award
COMP Sidney Fernbach Memorial Award
COMP Richard E. Merwin Award for Distinguished Service
COMP Tsutomu Kanai Award
COMP Seymour Cray Computer Engineering Award
COMP Harlan D. Mills Award
COMP Computer Society 60th Anniversary Award
COMP IEEE/ACM Ken Kennedy Award
COMP IEEE B. Ramakrishna Rau Award
COMP IEEE-CS Charles Babbage Award
COMP IEEE CS TCCA Young Computer Architect Award
CE Significant Achievement Award
CS IEEE Control Systems Technology Award
CS IEEE CSS Hendrik W. Bode Lecture Prize
CS Antonio Ruberti Young Researcher Prize
CS IEEE/CSS Transition to Practice Award
CS IEEE CSS Award for Technical Excellence in Aerospace Control

CEDA Phil Kaufman Award for Distinguished Contributions to Electronic Design Automation
CEDA IEEE/ACM A. Richard Newton Technical Impact Award in Electronic Design Automation
CEDA IEEE CEDA Ernest S. Kuh Early Career Award
CEDA IEEE CEDA Distinguished Service Award
DEI Thomas W. Dakin Award
DEI Eric O. Forster Distinguished Service Award
DEI Golden Omega Award
DEI Insulation Hall of Fame
DEI J.B. Whitehead Memorial Lecturer
DEI Hans Tropper Memorial Lecture
DEI IEEE DEIS Eric O. Forster Memorial Lecture
DEI IEEE Caixin Sun and Stanislaw Grzybowski Lifetime Achievement Award
DEI IEEE Caixin Sun and Stanislaw Grzybowski Young Professional Achievement Award
Ed IEEE William E. Sayle II Award for Achievement in Education
EMC Richard R. Stoddart Award for Outstanding Performance
EMC Society Citation
EMC Technical Achievement Award
EMC Society Hall of Fame Award
EMC IEEE EMC-S Young Professional Award
ED J.J. Ebers Award
ED William R. Cherry Award
ED IEEE Electron Devices Society Early Career Award
ED IEEE Robert Bosch Micor and Nano Electro Mechanical Systems Award
ED IEEE EDS Lester F. Eastman Award
EP David Feldman Outstanding Contribution Award
EP Outstanding Sustained Technical Contributions Award
EP Electronic Manufacturing Technology Award
EP Outstanding Young Engineer Award
EP IEEE EPS Exceptional Technical Achievement Award
EMB Academic Career Achievement Award
EMB Early Career Achievement Award
EMB Professional Career Achievement Award
EMB Award for Excellence in Biomedical Technology in Memoriam of William J. Morlock
EMB IEEE Engineering in Medicine and Biology (EMBS) Technical Award
GRS IEEE GRSS Fawaz Ulaby Distinguished Achievement Award
GRS Honorary Life Member
GRS IEEE GRSS David Landgrebe Award
GRS IEEE GRSS Early Career Award
GRS IEEE GRSS Industry Leader Award
IE Dr.-Ing. Eugene Mittelmann Achievement Award
IE IEEE J. David Irwin Early Career Award
IE IEEE Rudolf Chope Research & Development Award
IE IEEE Bimal Bose Award for Industrial Electronics Applications in Energy Systems
IA Outstanding Achievement Award
IA IEEE Industrial and Commercial Power Systems Department (I&CPS) Achievement Award
IA IEEE IAS Andrew W. Smith Outstanding Young Member Achievement Award
IAS Industrial Power Conversion Systems Department Gerald Kliman Innovator Award
IAS IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award (Joint with PES)
IT Claude E. Shannon Award
IT Aaron Wyner Distinguished Service Award
IT IEEE Information Theory Society Padovani Distinguished Lecturer Program Fund
IT IEEE Information Theory Society Thomas M. Cover Dissertation Award
IM Autotestcon Frank McGinnis Professional Achievement Award (Joint with AES)
IM IEEE Instrumentation and Measurement Society Technical Award
IM IEEE Instrumentation and Measurements Career Excellence Award
IM IEEE Instrumentation and Measurement Society Outstanding Young Engineer Award
IM IEEE Instrumentation & Measurement Society Best Application in I & M Award
IM IEEE Instrumentation and Measurement Society Best Dissertation Award
ITSS IEEE Outstanding ITS Application Award
ITSS IEEE Outstanding ITS Research Award
ITSS IEEE ITS Institutional Lead Award
ITSS IEEE ITS Lifetime Achievement Award
ITSS IEEE ITSS Best Dissertation Award
ITSS IEEE ITSS Young Researcher/Engineer Award
MAG Achievement Award

MAG IEEE Magnetics Society Distinguished Service Award
MAG IEEE Magnetics Society Early Career Award
MAG IEEE Magnetics Society Mid-Career Award
MTT Microwave Career Award
MTT Distinguished Educator Award
MTT Microwave Application Award
MTT Distinguished Microwave Lecturer
MTT MTT-S Outstanding Young Engineer Award
NANO Early Career Award in Nanotechnology
NPS Merit Award
NPS Radiation Effects Award
NPS Particle Accelerator Science and Technology Award
NPS Computer Applications in Nuclear and Plasma Sciences Award
NPS Plasma Science and Applications Award
NPS Early Achievement Award
NPS The Edward J. Hoffman Medical Imaging Scientist Award
NPS Bruce H. Hasegawa Young Investigator Medical Imaging Science Award
NPS Erwin Marx Award
NPS Peter Haas Pulsed Power Award
NPS Fusion Technology Award
NPS IEEE Glenn F. Knoll Radiation Instrumentation Outstanding Achievement Award
NPS Radiation Instrumentation Early Career Award
NPS IEEE Charles K. Birdsall Award for Contributions to Computational Nuclear and Plasma Sciences
NPS IEEE Magne "Kris" Kristiansen Award for Contributions to Experimental Nuclear and Plasma Science
NPS IEEE Emilio Gatti Radiation Instrumentation Technical Achievement Award
NPS IEEE Radiation Effects Early Achievement Award
NPS IEEE Nuclear and Plasma Sciences Society Medical Imaging Technical Achievement Award
NPS IEEE NPSS Edward J. Hoffman Early Career Development Grant
OE Distinguished Technical Achievement Award
PHO Quantum Electronics Award
PHO Award for Engineering Achievement
PHO William Streifer Award for Scientific Achievement
PHO Distinguished Lecturer Awards
PHO John Tyndall Award
PHO Aron Kressel PHOS Award
PHOS Young Investigator Award
PHOS IEEE Photonics Society Laser Instrumentation Award
PEL Outstanding Young Power Electronics Engineer Award
PEL IEEE PELS R. David Middlebrook Achievement Award
PEL IEEE Modeling and Control Technical Achievement Award
PEL IEEE PELS Energy Storage Innovation Award
PEL IEEE PELS Sustained Energy Systems Technical Achievement Award
PEL IEEE Award for Achievement in Power Electronics Standards
PEL IEEE PELS Vehicle and Transportation Systems Achievement Award
PEL IEEE Power Electronics Emerging Technology Award
PEL IEEE McMurray Award for Industry Achievements in Power Electronics Award
PEL IEEE PELS Technical Achievement Award for Integration and Miniaturization of Switching Power Converters
PE IEEE PES Uno Lamm HVDC Award
PE IEEE PES Award for Excellence in Power Distribution Engineering
PE IEEE PES Outstanding Young Engineer Award
PE IEEE PES Technical Committee Distinguished Individual Service Award
PE IEEE PES Working Group Recognition Award
PE IEEE PES Nari Hingorani FACTS Award
PE IEEE PES Cyril Veinott Electromechanical Energy Conversion Award
PE IEEE PES Nari Hingorani Custom Power Award
PE IEEE PES Charles Concordia Power Systems Engineering Award
PE IEEE PES Robert Noberini Distinguished Contributions to Power Engineering Professionalism Award
PE IEEE Power & Energy Society Leadership in Power Award
PE IEEE Power & Energy Society Lifetime Achievement Award
PE IEEE PES Douglas M. Staszky Distribution Automation Award
PE IEEE PES Roy Billinton Power System Reliability Award
PE IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award (Joint with IAS)
PE IEEE PES CSEE Yu-Hsui Ku Electrical Engineering Award
PE IEEE Power & Energy Society Ramakumar Family Renewable Energy Excellence Award
PE IEEE PES Prabha S. Kundur Power System Dynamics and Control Award

PC Alfred N. Goldsmith Award for Distinguished Contributions to Engineering Communication
RL Annual Reliability Society Award
RL Lifetime Achievement Award
RA Early Academic Career Award in Robotics and Automation
RA Early Government or Industry Award in Robotics and Automation
RA IEEE Inaba Technical Award for Innovation Leading to Production
RA IEEE/IFR Invention and Entrepreneurship Award
RA Most Active Technical Committee Award
RA IROS Harashima Award for Innovative Technologies
RA IEEE RAS George Saridis Leadership Award in Robotics and Automation
RA IEEE Robotics and Automation Award for Product Innovation
RFID IEEE XXXX Emily Sopensky Meritorious Service Award
SEN IEEE Sensors Council Meritorious Service Award
SEN IEEE Sensors Council Technical Achievement Award
SEN IEEE Sensors Council Young Professional Award
SP IEEE SPS Norbert Wiener Society Award
SP IEEE SPS Claude Shannon-Harry Nyquist Technical Achievement Award
SP IEEE SPS Industrial Innovation Award
SP IEEE SPS Amar G. Bose Industrial Leader Award
SP IEEE SPS Pierre-Simon Laplace Early Career Technical Achievement Award
SP IEEE SPS Best PhD Dissertation Award
SSIT IEEE Brian O'Connell SSIT Distinguished Service Award
SSIT IEEE SSIT Norbert Wiener Award for Social and Professional Responsibility
SSC IEEE SSCS Pre-Doctoral Achievement Award
SSC IEEE Brokaw Award for Circuit Elegance
SSC IEEE Solid-State Circuits Society Distinguished Service Award
SSC IEEE Solid-State Circuits Society New Frontier Award
SSC IEEE Solid-State Circuits Society Industry Impact Award
SCC Award for Continuing and Significant Contributions in the Field of Applied Superconductivity
SCC Max Swerdlow Award for Sustained Service to the Applied Superconductivity Community
SCC IEEE Council on Superconductivity Carl H. Rosner Entrepreneurship Award
SCC IEEE Dr. James Wong Award for Continuing and Significant Contributions to Applied Superconductor Materials Technology
SYS IEEE Systems Council Outstanding Service Award
SMC Norbert Wiener Award
SMC Joseph G. Wohl Outstanding Career Award
SMC Outstanding Contribution Award
SMC IEEE SMC Early Career Award
SMC IEEE Outstanding Service to Humanity Award
TM Engineering Manager of the Year Award
TM Honorary Life Member Award
TM Engineering Management Educator of the Year Award
TM Engineering Management Innovation Award
UFFC Achievement Award
UFFC Walter G. Cady Award
UFFC I.I. Rabi Award
UFFC IEEE Ferroelectrics Recognition Award
UFFC Distinguished Lecturer Award
UFFC C.B. Sawyer Memorial Award
UFFC The Rayleigh Award
UFFC IEEE Ferroelectrics Young Investigator Award
UFFC IEEE Ultrasonics Early Career Investigator Award
UFFC IEEE Carl Hellmuth Hertz Ultrasonics Award
UFFC IEEE Robert E. Newnham Ferroelectrics Award
VT Honorary Membership Award
VT IEEE James Evans Avant Garde Award
VT IEEE Stuart Meyer Memorial Award
VT IEEE Vehicular Technology Society Hall of Fame Award
VT IEEE Vehicular Technology Society Early Career Award
VT IEEE Vehicular Technology Society Women's Distinguished Career Award

PIONEER

AES IEEE AESS Pioneer Award
CAS Industrial Pioneer Award

CIS Neural Networks Pioneer Award
CIS Evolutionary Computation Pioneer Award
CIS Fuzzy Systems Pioneer Award
COMP IEEE Computer Society Women of the ENIAC Computer Pioneer Award
MTT Microwave Pioneer Award
NANO Pioneer Award in Nanotechnology
PE IEEE PES Wanda Reder Pioneer in Power Award
RA Pioneer in Robotics and Automation Award
SMC IEEE SMC Lotfi A. Zadeh Pioneer Award

PUBLISHED PAPER

AES M. Barry Carlton Award
AES Harry Rowe Mimno Award
AP Sergei A. Schelkunoff Transactions Prize Paper Award
AP Harold A. Wheeler Applications Prize Paper Award
AP R.W.P. King Award
AP IEEE Piergiorgio L.E. Uslenghi Prize Paper Award
AP IEEE Antennas and Propagation Edward E. Altshuler Prize Paper Award
BT Scott Helt Memorial Award
CAS Outstanding Young Author Award
CAS Guillemin-Cauer Award
CAS *CAD Transactions* Best Paper Award
CAS Darlington Award
CAS *CSVT Transactions* Best Paper Award
CAS *Transactions on VLSI Systems* Prize Paper Award
CAS Multimedia Prize Paper Award (Joint with ComSoc, Computer, SP)
CAS *IEEE Transactions on Biomedical Circuits and Systems* Best Paper Award
COMM Leonard G. Abraham Prize
COMM Stephen O. Rice Prize
COMM William R. Bennett Prize in the Field of Communications Networking
COMM Fred W. Ellersick Prize
COMM Best Tutorial Paper Award
COMM Joint Paper Award (Joint with IT)
COMM Guglielmo Marconi Prize Paper Award (Joint with SP)
COMM Multimedia Prize Paper Award (Joint with CAS, Computer, SP)
COMM IEEE Communications Society Award for Advances in Communication
COMM IEEE Communications Society Heinrich Hertz Award for Best Communications Letter
COMM IEEE Communications Society Charles Kao Award for Best Optical Communications & Networking Paper
COMM IEEE Communications Society Young Author Best Paper Award
COMM IEEE Communications Society Best Survey Paper Award
COMM *IEEE Internet of Things Journal* Best Paper Award
COMM *IEEE Internet of Things Journal* Outstanding Service Award
COM IEEE Communications Society Outstanding Paper Award
CIS *IEEE Transactions on Neural Networks and Learning Systems* Outstanding XXXX (published year) Paper Award (Bestowed in XXXX)
CIS *IEEE Transactions on Fuzzy Systems* Outstanding XXXX (published year) Paper Award (Bestowed in XXXX)
CIS *IEEE Transactions on Evolutionary Computation* Outstanding XXXX (published year) Paper Award (Bestowed in XXXX)
CIS *IEEE Computational Intelligence Magazine* Outstanding NNNN Paper Award
CIS *IEEE Transactions on Games* Outstanding NNNN Paper Award
CIS *IEEE Transactions on Autonomous Mental Development* Outstanding NNNN Paper Award
CIS *IEEE Transactions on Emerging Topics in Computational Intelligence* Outstanding Paper Award
COMP Periodical Outstanding Paper Awards
COMP Multimedia Prize Paper Award (Joint with CAS, ComSoc, SP)
COMP *IEEE Internet of Things Journal* Best Paper Award
COMP *IEEE Internet of Things Journal* Outstanding Service Award
CE Chester Sall Awards
CS IEEE CSS George S. Axelby Outstanding Paper Award
CS *IEEE Transactions on Control Systems Technology* Outstanding Paper Award
CS *IEEE Control Systems Magazine* Outstanding Paper Award
CS *IEEE Transactions on Control of Network Systems* Best Paper Award
CS *IEEE Control Systems Letters* Outstanding Paper Award
CEDA *IEEE Transactions on ElectComputer-Aided Design* Donald O. Pederson Best Paper Award
Ed *IEEE Transactions on Education* Theodore E. Batchman Best Paper Award
EMC Richard B. Schulz Best Transactions Paper Award

ED Paul Rappaport Award
 ED George E. Smith Award
 ED *Transactions on Semiconductor Manufacturing* Best Paper Award (Joint with EP & RL)
 ED *IEEE EDS Journal of Electron Devices Society (JEDS)* Best Paper Award
 EP *Transactions on Semiconductor Manufacturing* Best Paper Award (Joint with ED & RL)
 EP *Transactions on Components, Packaging, and Manufacturing Technology* Prize Paper Award
 EMB Paralyzed Veterans of America Best Paper Award -*IEEE Transactions on Rehabilitation Engineering*
 GRS *Transactions* Prize Paper Award
 GRS Letters Prize Paper Award
 GRS IEEE GRS-S *J-STARs* Prize Paper Award
 GRS IEEE GRS-S Highest Impact Paper Award
 IE Outstanding Paper Award for the *IEEE Transactions on Industrial Electronics*
 IE IEEE Best Paper Award for the *IEEE Industrial Electronics Magazine*
 IE IEEE Outstanding Paper Award for the *IEEE Transactions on Industrial Informatics*
 IE IEEE/ASME *Transactions on Mechatronics* Best Paper Award (Joint with RA)
 IA Society Prize Paper Awards
 IA IEEE Electric Machines Prize Paper Awards (IPCSD)
 IA James Melcher Prize Paper Awards
 IA IEEE Industrial Drives (IPCSD) Prize Paper Awards
 IA IEEE Industrial Power Converter Prize Paper Awards (IPCSD)
 IA IEEE Power Systems Engineering Prize Paper Awards (I&CPS)
 IA IEEE Power Electronics Devices and Components Prize Paper Awards (IPCSD)
 IA *Industry Applications Magazine* Prize Article Award
 IA IEEE Industry Applications Society Electrical Safety Committee (IPCSD) Prize Paper Awards
 IA IEEE Industry Applications Society Renewable and Sustainable Energy Committee (IPCSD) Prize Paper Awards
 IA IEEE Industry Applications Society Transportation Systems Committee Prize Paper Awards (IPCSD)
 IT Paper Award
 IT Joint Paper Award (Joint with ComSoc)
 IM IEEE Instrumentation and Measurement Society Andy Chi Best Paper Award
 MTT Microwave Prize
 MTT *IEEE Microwave Magazine* Best Paper Award
 MTT *IEEE Microwave and Wireless Components Letters* Tatsuo Itoh Prize
 MTT *IEEE Transactions on THz Science and Technology* Best Paper Award
 NANO IEEE Best Paper Award for the *IEEE Transactions on Nanotechnology*
 NPS *IEEE Transactions on Plasma Science* Best Paper Award
 NPS *IEEE Transactions on Radiation and Plasma Medical Sciences* Best Paper Award
 NPS *IEEE Transactions on Nuclear Science* Best Paper Award
 PEL Power Electronics Society *Transactions* Prize Paper Award
 PEL IEEE Power Electronics Society Prize Letter Award
 PEL IEEE JESTPE (*IEEE Journal of Emerging and Selected Topics in Power Electronics*) Prize Paper Award
 PEL *IEEE Transactions on Transportation Electrification* Prize Paper Awards
 PE IEEE PES Prize Paper Award
 PE IEEE PES Technical Committee Prize Paper Award
 PC The Rudolph J. Joenk, Jr. Award for Best Paper in the *IEEE Transactions on Professional Communication*
 RL Best Paper Award - *IEEE Transactions on Reliability*
 RL *Transactions on Semiconductor Manufacturing* Best Paper Award (Joint with ED & EP)
 RA *IEEE Transactions on Robotics* King-Sun Fu Memorial Best Paper Award
 RA *IEEE Transactions on Automation Science and Engineering* Best Paper Award
 RA *IEEE Transactions on Automation Science and Engineering* Googol Best New Application Paper Award
 RA *IEEE Robotics and Automation Letters* Best Paper Award
 RA *IEEE Robotics and Automation Magazine* Best Paper Award
 RA IEEE/ASME *Transactions on Mechatronics* Best Paper Award (Joint with IE)
 RA *IEEE Transactions on Haptics* Best Application Paper Award
 RA *IEEE Transactions on Haptics* Best Paper Award
 SEN IEEE Sensors Journal Best Paper Award
 SEN IEEE Sensors Letters Best Paper Award
 SEN *IEEE Internet of Things Journal* Best Paper Award
 SEN *IEEE Internet of Things Journal* Outstanding Service Award
 SP Best Paper Award
 SP IEEE SPS Signal Processing Magazine Best Paper Award
 SP Young Author Best Paper Award
 SP Guglielmo Marconi Prize Paper Award (Joint with ComSoc)
 SP Multimedia Prize Paper Award (Joint with CAS, ComSoc, Computer)
 SP *IEEE Signal Processing Magazine* Best Column Award
 SP *IEEE Signal Processing Letters* Best Paper Award

SP IEEE Signal Processing Society Donald G. Fink Overview Paper Award
SP IEEE Signal Processing Society Sustained Impact Award
SSC *Journal of Solid-State Circuits* Best Paper Award
SSC Beatrice Winner Award for Editorial Excellence
SCC Van Duzer Prize Award
SYS IEEE Systems Journal Best Paper Award
SMC Andrew P. Sage Best Transactions Paper Award
TM Transactions Publication Awards
UFFC Outstanding Paper Award
VT IEEE Neal Shepherd Memorial Best Propagation Paper Award
VT IEEE Best Vehicular Electronics Paper Award
VT IEEE Best Land Transportation Paper Award
VT IEEE Vehicular Technology Society Best Magazine Paper Award

CONFERENCE PAPER/SESSION/SERVICE

AES Walter R. Fried "PLANS" Best Paper Award in Navigation
AES Autotestcon Walter E. Peterson Best Paper Award for New Technology (Joint with IM)
AES Autotestcon David M. Goodman Best Paper Award for Management Topics (Joint with IM)
AP IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Antenna Measurements and Applications
AP IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Computational Techniques in Electromagnetics
BT Matti S. Siukola Memorial Award
BT IEEE Broadband Multimedia Symposium – Best Paper Award
COMM Harold Sobol Award for Exemplary Service to Meetings & Conferences
COMP IEEE Computer Society/Software Engineering Institute Watts S. Humphrey Software Engineering Best Paper Award
COMP Conference Outstanding Paper Award
COMP Software Engineering Best Paper Award
COMP K.S. Fu Memorial Best Paper Award
COMP Wing Toy Best Student Paper Award
IEEE <Conference Name> Best Paper Award
IEEE <Conference Name> Best Student Paper Award
IEEE <Conference Name> Best Poster Paper Award
CIS Computational Intelligence Society Conference Competition Awards
CS IEEE Conference on Decision and Control (CDC) Best Student Paper Award
CS IEEE Conference on Control Applications (CCA) Best Student Paper Award
CS IEEE Control Systems Society Roberto Tempo Best CDC Paper Award
CEDA William J. McCalla ICCAD Best Paper Award
DEI ISE Bernhard Gross Memorial Lecture (Joint with UFFC)
DEI ISE Dilip Das-Gupta Memorial Award (Joint with UFFC)
Ed Benjamin J. Dasher Best Conference Paper Award
Ed Helen Plants Outstanding Conference Special Session Award
Ed Ronald J. Schmitz Award
EMC Certificate of Recognition
EMC Best Symposium Paper Award
ED IEEE PVSC Stuart R. Wenham Award
EP ECTC Best Paper Award
EP ECTC Best Poster Session Paper Award
EP IEEE EPS Corning Leadership in Glass Award
GRS Symposium Prize Paper Award
GRS Interactive Session Prize Paper Award
GRS GRS-S Student Prize Paper Award
IE Best Conference Paper Award
IA IEEE Industrial and Commercial Power Systems Department (I&CPS) Prize Paper Award
IA Petroleum and Chemical Industry Technical Conference Prize Paper Awards
IA Cement Industry Technical Conference Prize Paper Awards
IA Rural Electrification Conference Paper Award
IA IEEE Power Systems Protection Prize Paper Awards (I&CPS)
IA Industrial Automation and Control Conference Award
IA IEEE IAS Production and Application of Light Committee Prize Paper Awards (MSDAD)
IA IEEE IAS Petroleum and Chemical Industry Committee Outstanding Young Professional Achievement Award
IT IEEE Jack Keil Wolf ISIT Student Paper Award
IM Autotestcon Walter E. Peterson Best Paper Award for New Technology (Joint with AES)
IM Autotestcon David M. Goodman Best Paper Award for Management Topics (Joint with AES)
IM IEEE Instrumentation & Measurement Society Student Best Paper Technical Conference Award
MTT Harold Sobol Travel Grant

NPSS Student Paper Awards
PHO Best Student Paper Award
PHO Best Student Paper Award, PHOS'xx
PC IEEE James M. Lufkin Award for Best Paper at International Professional Communication Conference
RA IEEE ICRA Best Conference Paper Award
RA IEEE ICRA Best Student Paper Award
RA IEEE ICRA Best Paper Award in Service Robotics
RA IEEE ICRA Best Paper Award in Automation
RA IEEE CASE Best Conference Paper Award
RA IEEE ICRA Best Paper Award in Robot Vision
RA IEEE ICRA Best Paper Award in Robot Manipulation
RA IEEE Conference on Automation Science and Engineering Best Application Paper Award
RA IEEE ICRA Best Paper Award in Cognitive Robotics
RA IEEE ICRA Best Paper Award in Medical Robotics
RA IEEE ICRA Best Paper Award on Human-Robot Interaction
RA IEEE ICRA Best Paper Award on Multi-Robot Systems
RA IEEE ICRA Best Paper Award on Unmanned Aerial Vehicles
RA IEEE International Conference on Robotics and Automation (ICRA) Most Influential Paper Award
SP IEEE SPS Conference Best Paper Award for Industry
SSC Lewis Winner Award for Outstanding Conference Paper
SSC ISSCC Evening Session Award
SSC Jack Kilby Outstanding Student Paper Award
SSC ISSCC Jack Raper Award
SSC IEEE Silkroad Award Program of the International Solid-State Circuits Conference (ISSCC)
SMC Franklin V. Taylor Memorial Award
SMC IEEE International Conference on Systems, Man, and Cybernetics Best Student Paper Award
UFFC ISE Bernhard Gross Memorial Lecture (Joint with DEI)
UFFC ISE Dilip Das-Gupta Memorial Award (Joint with DEI)
VT IEEE Jack Neubauer Memorial Award
VT IEEE VTS Motor Vehicles Challenge Award

SERVICE TO SOCIETY/COUNCIL

AES IEEE AESS Technical Panel of the Year Award
BT Special Service Award
CAS Meritorious Service Award
COMM Donald W. McLellan Meritorious Service Award
COMM Society Joseph LoCicero Award for Exemplary Service to Publications
CIS IEEE Computational Intelligence Society Enrique Ruspini Award Meritorious Service
COMP IEEE Computer Society T. Michael Elliot Distinguished Service Certificate
COMP Outstanding Contribution Certificate
COMP Meritorious Service Award
COMP Certificate of Appreciation
CE Outstanding Service Award
CS IEEE CSS Distinguished Member Award
Ed Edwin C. Jones, Jr. Meritorious Service Award
Ed Distinguished Member Award
EMC Laurence G. Cumming Award for Outstanding Service
EMC IEEE EMC Honored Member Award
EMC Certificate of Appreciation
EMC Certificate of Acknowledgment
EMC Society Symposium Chair Award
EMC Sustained Service to the Society Award
EMC IEEE Special Service to the IEEE EMC Society Award
ED Distinguished Service Award
EP IEEE EPS Regional Contributions Award
EMB Service Award
GRS Outstanding Service Award
GRS IEEE GRSS Regional Leader Award
IE Anthony J. Hornfeck Service Awards
IE AdCom Life Member Award
IA IEEE IAS Distinguished Service Award
IA Industrial and Commercial Power Systems Department Achievement Award
IA Pulp and Paper Industry Technical Conference Award for Meritorious Service
IA IEEE Manufacturing Systems Development and Applications Award of Merit
IA R. W. Mills Award

IA Cement Industry Meritorious Service Award
IA IEEE IAS Outstanding Young Member Service Award
IM IEEE Instrumentation & Measurement Society Distinguished Service Award
MTT Honorary Life Member of Society
MTT Distinguished Service Award
MTT N. Walter Cox Award
NANO Distinguished Service Award
NPS Richard F. Shea Distinguished Member Award
OE Distinguished Service Award
OE IEEE OES Presidential Award
OE IEEE OES Company/Institution Award
OE IEEE OES Emeritus Award
PHO Distinguished Service Award
PEL IEEE PELS Harry A. Owen, Jr. Distinguished Service Award
PE IEEE PES Meritorious Service Award
PE IEEE PES Chapters Council Award
PSE Service Acknowledgement Award - IEEE PSES Certificate of Appreciation Award
PSE Service Acknowledgement Award - IEEE PSES Certificate of Recognition Award
PSE IEEE Product Safety Engineering Society Sustained Service Award
PC Emily K. Schlesinger Award for Distinguished Service to the IEEE Professional Communication Society
RL Company Recognition Award
RAS IEEE RAS Distinguished Service Award
SEN IEEE Sensors Council Lifetime Contribution Award
SP IEEE SPS Leo L. Beranek Meritorious Service Award
SIT IEEE Carl Barus Award for Outstanding Service in the Public Interest
SMC Best Associate Editor Award
SMC IEEE Most Active SMC Technical Committee Award
SMC IEEE SMC Meritorious Service Award
TM Honorary Life Member Award
TM Certificate of Appreciation for Chapter Chairs
UFFC Distinguished Service Award
VT IEEE VTS Outstanding Service Award
VT IEEE Stuart Meyer Memorial Award

EDUCATION

AP Raj Mitra Travel Grant
AP Chen-To Tai Distinguished Educator Award
AP IEEE Donald G. Dudley, Jr. Undergraduate Teaching Award
CAS IEEE CAS John Choma Education Award
COMM IEEE Communications Society Education Award
COMP Taylor Booth Education Award
COMP IEEE Computer Society Mary Kenneth Keller Computer Science and Engineering Undergraduate Teaching Award
Ed McGraw-Hill Jacob Millman Award
Ed Harriett B. Rigas Award
Ed Mac Van Valkenburg Early Career Teaching Award
EMC IEEE EMCS Award for Excellence in Continuing EMC Engineering Education
ED IEEE Electron Devices Society Education Award
GRS Education Award
IA IEEE IAS Outstanding Educator/Mentor Award
IT IEEE Information Theory Society James L. Massey Research & Teaching Award for Young Scholars
IM IEEE Instrumentation & Measurement Faculty Course Development Award (Grant)
IM IEEE J. Barry Oakes Advancement Award
NPS Paul Phelps Continuing Education Grant
NPS IEEE Valentin T. Jordanov Radiation Instrumentation Travel Grant
PHOS IEEE Photonics Society Technical Skills Educator Award
PE IEEE PES Outstanding Power Engineering Educator Award
PELS IEEE PELS Award for Achievements in Power Electronics Education
PELS IEEE PELS Ph.D. Thesis Talk Award (P3 Talk)
PC Ronald S. Blicq Award for Distinction in Technical Communication Education
RL Education Award
SP IEEE SPS Carl Friedrich Gauss Education Award
SP IEEE SPS Regional Distinguished Teacher Award
SSC IEEE Solid-State Circuits Society Innovative Education Award

CHAPTER

AES IEEE AESS Chapter of the Year Award
AP-S Chapter Award
CAS Chapter-of-the-Year Award
CAS Regional Chapter-of-the-Year Awards: Regions 1-7, Region 8, Region 9, and Region 10
COMM Chapter Achievement Award
CIS Outstanding Chapter Award
COMP Outstanding Chapter Award
CS IEEE CSS Outstanding Chapter Award
Ed Chapter Achievement Award
Ed Distinguished Chapter Leadership Award
EMC Chapter-of-the-Year Award
EMC Most Improved Chapter Award
EMC Chapter Founder's Award
EDS Chapter of the Year Award
EP IEEE EPS Chapter of the Year Award
EMBS Outstanding Performance Award for an EMBS Student Club or Chapter
EMBS Best New Chapter Award
EMBS Best New Student Chapter/Club
EMB IEEE EMBS Outstanding Chapter Award
GRS-S Chapter Excellence Award
IE Best Chapter Award
IE IEEE IES Best Student Branch Chapter Award
IA Society Chapter Awards
IT Society Chapter of the Year Award
IM IEEE Instrumentation & Measurement Society Outstanding Chapter Award
IM IEEE Instrumentation & Measurement Society Best Student Chapter Award
MTT IEEE MTT Society Outstanding Chapter Award
NANO IEEE Nanotechnology Council (NTC) Chapter of the Year Award
PHO Outstanding Chapter Service Award
PEL IEEE Power Electronics Society Best Chapter Award
PE IEEE PES Chapter Outstanding Engineer Award
PE IEEE PES Outstanding Chapters Award
PE IEEE PES Outstanding Chapter Volunteer Award
PE IEEE PES Chapters Council Award
PSE IEEE PSES Chapter-of-the-Year Award
RL Chapters Award
RL Certificate of Achievement - Chapter Chairperson
RAS Chapter-of-the-Year Award
SEN IEEE Sensors Council Outstanding Chapter Award
SP IEEE SPS Meritorious Regional/Chapter Service Award
SSC Outstanding Chapter of the Year Award
SMC IEEE Outstanding SMC Chapter Award
SMC IEEE Outstanding SMCS Student Branch Chapter Award
TM Certificate of Appreciation for Chapter Chairs
VT IEEE VTS Chapter-of-the-Year Award

STUDENT (also see Fellowships/Scholarships)

AESS Michael C. Wicks Radar Student Travel Grant
AP Best Student Paper Award
AP IEEE AP-S Student Design Contest
AP IEEE AP-S C.J. Reddy Travel Grant for Graduate Students
BT Clyde M. Hunt Memorial Student Paper Award
CAS ISCAS Student Best Paper Award
CAS IEEE CAS Student Travel Grants
COMP Wing Toy Best Student Paper Award
COMP Lance Stafford Larson Memorial Award
CS IEEE Conference on Decision and Control (CDC) Best Student Paper Award
CS IEEE Conference on Control Technology and Applications (CCTA) Best Student Paper Award
DEI IEEE Caixin Sun and Stanislaw Grzybowski Best Student Paper Awards
Ed IEEE Student Leadership Award
EMC Student Paper Award
EMC Student Design Awards
EMC Leo L. Beranek Student Travel Grant
ED Region 9 Annual Outstanding Student Paper Award

EMB IEEE EMBS Student Paper Competition Geographic Finalist Awards
 EMB IEEE EMBS Student Paper Competition Open Finalist Awards
 EMB IEEE EMBS Student Paper Competition 1st, 2nd, and 3rd Awards
 EMB Whitaker Foundation Student Design Competition Awards
 GRS Student Prize Paper Award
 GRS Mikio Takagi Student Prize
 IE Student Best Paper Award
 IA Myron Zucker Undergraduate Student Design Awards
 IA Myron Zucker Graduate Student Design Award
 IA IEEE James A. Rooks Memorial Student Intern Program
 IA IEEE IAS Graduate Student Thesis Contest
 IA IEEE International Future Energy Challenge Award (Joint with PEL & PES)
 IM IEEE Instrumentation & Measurement Society Student Travel Technical Conference Grants
 MAG Student Prize Paper Award
 MTT Harold Sobol Travel Grant
 MTT IEEE MTT-S Student Design Competition (SDC) Award
 MTT IEEE MTT-S Graduate Student Challenge Award
 OE IEEE OES Award for Most Innovative Engineering in a Competition System
 NPS Paul Phelps Continuing Education Grant
 NPS IEEE Arthur H. Guenther Pulsed Power Student Award
 NPS IEEE NPSS Christopher J. Thompson Student Paper Awards
 NPS IEEE Igor Alexeff Outstanding Student in Plasma Science Award
 NPS Particle Accelerator Science and Technology Doctoral Student Award
 NPS IEEE Ronald J. Jaszczak Graduate Award
 NPS IEEE Nuclear and Plasma Sciences Society Robert J Barker Graduate Student Award for Excellence in Pulsed Power Applications
 NPSS Student Paper Awards
 PHO Best Student Paper Award
 PHO Best Student Paper Award, PHOS'xx
 PEL IEEE International Future Energy Challenge Award (Joint with IAS & PES)
 PES IEEE International Future Energy Challenge Award (Joint with IAS & PEL)
 RA IEEE CASE Best Student Paper Award
 RL IEEE Reliability Society Student Achievement Award
 SP IEEE Signal Processing Cup Competition
 SP IEEE Signal Processing Video and Image Processing Cup Competition
 SP IEEE Signal Processing 5-Minute Video Clip Contest (5-MICC)
 SSC Jack Kilby Outstanding Student Paper Award
 VT IEEE Vehicular Technology Society Student Travel Awards

FELLOWSHIP/SCHOLARSHIP

AES IEEE AESS Engineering Scholarship
 AP IEEE AP-S Eugene F. Knott Memorial Pre-Doctoral Research Grants
 AP IEEE AP-S Doctoral Research Grants
 BT IEEE Broadcast Technology Society/AFCCE Jules Cohen Memorial Scholarship (JCMS)
 CAS IEEE CASS Pre-Doctoral Grants
 COMP Richard E. Merwin Scholarships
 DEI Graduate Student Fellowships
 EMC Society President's Memorial Award
 EMC IEEE James C. Klouda Memorial Scholarship Award
 ED Graduate Fellowship Program
 ED Graduate Masters Fellowship Program
 ED IEEE EDS Undergraduate Student Scholarships (5)
 EP IEEE EPS PhD Fellowship
 IM IEEE Instrumentation and Measurement Graduate Fellowship Award
 MTT IEEE MTT-S Graduate Fellowships/IEEE MTT-S Tom Brazil Graduate Fellowship
 MTT Undergraduate/Pre-Graduate Scholarships
 NPS Graduate Scholarship Award
 NPS IEEE Ronald J. Jaszczak Graduate Scholarship Award
 NPS IEEE Glenn F. Knoll Post-Doctoral Educational Grant in Nuclear Science and Instrumentation
 NPS IEEE Glenn F. Knoll Graduate Educational Grant in Nuclear Science and Instrumentation
 OE IEEE OES Scholarship Award
 PHOS Graduate Student Fellowship Program
 PEL IEEE Joseph John Suozzi INTELEC Fellowship Award in Power Electronics
 PE IEEE PES G. Ray Ekenstam Memorial Scholarship
 PE IEEE PES Scholarship Plus Initiative

PE IEEE Power & Energy Society Erich Gunther Future Power Innovator Scholarship
PE IEEE Power & Energy Society Outstanding Student Scholarship
SCC IEEE CSC Graduate Study Fellowship in Applied Superconductivity
SYS IEEE Systems Council James O. Gray Scholarship
VT Daniel E. Noble Fellowship Award
VT IEEE Transportation Electronics Fellowship

Of the previously listed awards, the following are managed through the IEEE FOUNDATION

AES Fred Nathanson Memorial Radar Education Grant
AES Warren D. White Award for Excellence in Radar Engineering
AES Walter R. Fried "PLANS" Best Paper Award in Navigation
AP Distinguished Achievement Award
AP Raj Mitra Travel Grant
AP Chen-To Tai Distinguished Educator Award
AP John Kraus Antenna Award
AP IEEE Donald G. Dudley, Jr. Undergraduate Teaching Award
AP IEEE Lot Shafai Mid-Career Distinguished Achievement Award
AP IEEE Harrington-Mitra Award in Computational Electromagnetics
AP IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Antenna Measurements and Applications
AP IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Computational Techniques in Electromagnetics
AP IEEE Ulrich L. Rohde Humanitarian Technical Field Project Award
BT Clyde M. Hunt Memorial Student Paper Award
CAS Circuits and Systems Society Mac Van Valkenburg Award
CAS IEEE Circuits and Systems Society Charles A. Desoer Technical Achievement Award
CAS Meritorious Service Award
CAS Chapter-of-the-Year Award
CAS IEEE CAS John Choma Education Award
CAS Outstanding Young Author Award
CAS *IEEE Transactions on Circuits and Systems* Guillemin-Cauer Best Paper Award
CAS *IEEE Transactions on Circuits and Systems* Darlington Best Paper Award
CAS CSVT Transactions Best Paper Award
CAS *Transactions on VLSI Systems* Prize Paper Award
CAS Industrial Pioneer Award
CAS/COMM/CS/SP Multimedia Prize Paper Award
CAS Vitold Belevitch Circuits and Systems Award
CAS ISCAS Student Best Paper Award
CAS IEEE CAS Student Travel Grants
CAS Regional Chapter-of-the-Year Awards: Regions 1-7, Region 8, Region 9, and Region 10
CAS *IEEE Transactions on Biomedical Circuits and Systems* Best Paper Award
COMM Edwin Howard Armstrong Achievement Award
COMM Award for Public Service in the Field of Telecommunications
COMM Donald W. McLellan Meritorious Service Award
COMM Leonard G. Abraham Prize
COMM Stephen O. Rice Prize
COMM William R. Bennett Prize in the Field of Communications Networking
COMM Fred W. Ellersick Prize
COMM Best Tutorial Paper Award
COMM Society Joseph LoCicero Award for Exemplary Service to Publications
COMM/IT Joint Paper Award
COMM Harold Sobol Award for Exemplary Service to Meetings & Conferences
COMM IEEE Communications Society Distinguished Industry Leader Award
COMM/SP Guglielmo Marconi Prize Paper Award
COMM IEEE Communications Society Award for Advances in Communication
COMM IEEE Communications Society Charles Kao Award for Best Optical Communications & Networking Paper
COMP W. Wallace McDowell Award
COMP Lance Stafford Larson Memorial Award
COMP Richard E. Merwin Award for Distinguished Service
COMP IEEE/ACM Ken Kennedy Award
COMP IEEE B. Ramakrishna Rau Award
CS IEEE CSS Award for Technical Excellence in Aerospace Control
CS IEEE Control Systems Society Roberto Tempo Best CDC Paper Award
CEDA *IEEE Transactions on Computer-Aided Design* Donald O. Pederson Best Paper Award
DEI Thomas W. Dakin Award

DEI Eric O. Forster Distinguished Service Award
DEI IEEE Caixin Sun and Stanislaw Grzybowski Lifetime Achievement Award
DEI IEEE Caixin Sun and Stanislaw Grzybowski Young Professional Achievement Award
DEI IEEE Caixin Sun and Stanislaw Grzybowski Best Student Paper Awards
DEI IEEE DEIS Steven A. Boggs Young Investigator Award
ED IEEE Lester F. Eastman Award
EMC Society President's Memorial Award
EMC Leo L. Beranek Student Travel Grant
EMC IEEE James C. Klouda Memorial Scholarship Award
EMB IEEE EMBS Award for Excellence in Biomedical Technology in Memoriam of William J. Morlock
GRS Mikio Takagi Student Prize
GRS GRS-S Student Prize Paper Award
IE IEEE Rudolf Chope Research & Development Award
IE IEEE Bimal Bose Award for Industrial Electronics Applications in Energy Systems
IA IEEE James A. Rooks Memorial Student Intern Program
IA Myron Zucker Graduate Student Design Award
IA Myron Zucker Undergraduate Student Design Awards
IAS Industrial Power Conversion Systems Department Gerald Kliman Innovator Award
IAS/PES IEEE PES/IAS A. P. Seethapathy Rural Electrification Excellence Award
IT IEEE Information Theory Society Padovani Distinguished Lecturer Program Fund
IM IEEE J. Barry Oakes Advancement Award
MAG Achievement Award
MAG Student Prize Paper Award
MAG IEEE Magnetics Society Distinguished Service Award
MAG IEEE Magnetics Society Early Career Award
MAG IEEE Magnetics Society Mid-Career Award
MTT Harold Sobol Travel Grant
NPS IEEE Charles K. Birdsall Award for Contributions to Computational Nuclear and Plasma Sciences
NPS IEEE Glenn F. Knoll Graduate Educational Grant in Nuclear Science and Instrumentation
NPS IEEE Glenn F. Knoll Post-Doctoral Educational Grant in Nuclear Science and Instrumentation
NPS IEEE Magne "Kris" Kristiansen Award for Contributions to Experimental Nuclear and Plasma Science
NPS IEEE Ronald J. Jaszczak Graduate Award
NPS IEEE Valentin T. Jordanov Radiation Instrumentation Travel Grant
NPS IEEE Nuclear and Plasma Sciences Society Robert J. Barker Graduate Student Award for Excellence in Pulsed Power Applications
NPS IEEE NPSS Edward J. Hoffman Early Career Development Grant
PHO Aron Kressel PHOS Award
PHO William Streifer Award for Scientific Achievement
PHO IEEE Photonics Society Laser Instrumentation Award
PEL IEEE PELS Energy Storage Innovation Award
PE IEEE PES Award for Excellence in Power Distribution Engineering
PE IEEE PES Charles Concordia Power Systems Engineering Award
PE IEEE PES CSEE Yu-Hsui Ku Electrical Engineering Award
PE IEEE PES Cyril Veinott Electromechanical Energy Conversion Award
PE IEEE PES Douglas M. Staszkesy Distribution Automation Award
PE IEEE PES G. Ray Ekenstam Memorial Scholarship
PE IEEE PES Nari Hingorani Custom Power Award
PE IEEE PES Nari Hingorani FACTS Award
PE IEEE PES Outstanding Chapters Award
PE IEEE PES Outstanding Power Engineering Educator Award
PE IEEE PES Prabha S. Kundur Power System Dynamics and Control Award
PE IEEE PES Prize Paper Award
PE IEEE PES Roy Billinton Power System Reliability Award
PE IEEE PES Scholarship Plus Initiative
PE IEEE PES Uno Lamm HVDC Award
PE IEEE PES Wanda Reder Pioneer in Power Award
PE IEEE Power & Energy Society Erich Gunther Future Power Innovator Scholarship
PE IEEE Power & Energy Society Leadership in Power Award
PE IEEE Power & Energy Society Lifetime Achievement Award
PE IEEE Power & Energy Society Ramakumar Family Renewable Energy Excellence Award
PE IEEE Power & Energy Society Outstanding Student Scholarship
RA Early Academic Career Award in Robotics and Automation
RA Early Government or Industry Award in Robotics and Automation
RA IEEE Inaba Technical Award for Innovation Leading to Production
RA IEEE RAS George Saridis Leadership Award in Robotics and Automation

RA IEEE Transactions on Automation Science and Engineering Best Paper Award
RA IEEE Transactions on Robotics King-Sun Fu Memorial Best Paper Award
RA Pioneer in Robotics and Automation Award
RA IEEE ICRA Best Paper Award in Cognitive Robotics
RA IEEE ICRA Best Paper Award in Medical Robotics
RA IEEE ICRA Best Paper Award on Human-Robot Interaction
SSC IEEE Brokaw Award for Circuit Elegance
SCC Award for Continuing and Significant Contributions in the Field of Applied Superconductivity
SCC Max Swerdlow Award for Sustained Service to the Applied Superconductivity Community
SCC IEEE Dr. James Wong Award for Continuing and Significant Contributions to Applied Superconductor Materials Technology
SYS IEEE Systems Council James O. Gray Scholarship
SMC Norbert Wiener Award
SMC Joseph G. Wohl Outstanding Career Award
SMC Outstanding Contribution Award
SMC Franklin V. Taylor Memorial Award
SMC Andrew P. Sage Best Transactions Paper Award
SMC IEEE International Conference on Systems, Man, and Cybernetics Best Student Paper Award
SMC Best Associate Editor Award
SMC IEEE Most Active SMC Technical Committee Award
SMC IEEE Outstanding SMC Chapter Award
SMC IEEE Outstanding SMCS Student Branch Chapter Award
SMC IEEE SMC Lotfi A. Zadeh Pioneer Award
SMC IEEE SMC Early Career Award
SMC IEEE SMC Meritorious Service Award
SMC IEEE Outstanding Service to Humanity Award
UFFC C.B. Sawyer Memorial Award
VT IEEE Jack Neubauer Memorial Award
VT Daniel E. Noble Fellowship Award
VT IEEE Transportation Electronics Fellowship
VT IEEE Stuart Meyer Memorial Award