2017 IEEE
Symposium on Antennas and Propagation
and
USNC-URSI Radio Science Meeting

July 9–14, 2017 · San Diego, California

Awards Presentation
July 12, 2017

Gold Patrons

Altair

QUALCOMM

HUAWEI

Program

6:00 PM	IEEE Awards Presentation Introductions: Ahmed A. Kishk, AP-S President Weng Cho Chew, AP-S President-Elect Magdy F. Iskander, Awards Committee Chair
6:00 PM	IEEE Awards *Presenter 2016 IEEE President Barry L. Shoop*
6:05 PM	IEEE Fellows
6:15 PM	AP-S Field Awards
6:30 PM	Paper Awards
6:40 PM	AP Society Recognition
6:45 PM	AP-S Best Chapter Award *Presenter Ajay K. Poddar*
6:50 PM	Raj Mittra Travel Grant Awards *Presenter Raj Mittra*
6:55 PM	AP-S Student Paper Competition *Presenter Jennifer Bernhard*
7:05 PM	AP-S Student Design Contest *Presenter Sean Hum*
7:10 PM	TICRA Foundation Travel Grants *Presenter Miguel Fullana*
7:15 PM	Concluding Remarks

2017 IEEE Awards

Presenter: 2016 IEEE President Barry L. Shoop

2017 IEEE ELECTROMAGNETICS AWARD

Sponsored by the IEEE Antennas and Propagation Society, IEEE Electromagnetic Compatibility Society, IEEE Microwave Theory and Techniques Society, and IEEE Geoscience and Remote Sensing Society

WENG CHO CHEW

For contributions to electromagnetic solutions of complex multiphysics problems and inverse scattering methods

Weng Cho Chew's pioneering contributions to computational electromagnetics have made solutions to large real-world problems possible, greatly impacting a diverse range of fields including device design, antennas, and photonics. Among Chew's fast solvers that make it possible to simulate the electromagnetic behavior of structures of unprecedented size, his multilevel fast multipole algorithm (MLFMA) changed the size of problems that can be solved by six orders of magnitude, permitting the solution of problems of enormous geometrical complexity. Chew's numerical mode matching method has become the standard technology in electromagnetic well logging tools for the oil industry and is also used to solve microwave and optical waveguide problems. His distorted Born iterative method for multiple scattering inverse problems and multiphysics methods are impacting disciplines beyond electromagnetics.

An IEEE Fellow, Chew is a Fisher Distinguished Professor of Engineering with the University of Illinois, Urbana-Champaign, Urbana, IL, USA.

2017 IEEE Fellows

Nader Behdad
for contributions to sub-wavelength electromagnetic periodic structures

Filiberto Bilotti
for contributions to metamaterials for electromagnetic and antenna applications

Debatosh Guha
for contributions to microstrip and wideband dielectric resonator antennas

Mahbub Hoque
for leadership in developing innovative antennas and advanced tactical communication technologies

Ronghong Jin
for development of high efficiency planar antenna arrays and miniaturized antennas for wireless systems

Kenichi Kagoshima
for contributions to antennas for satellite communication and mobile wireless access systems

Cyril Luxey
for the development of small antennas, multi-antenna system integration, and high performance mm-wave systems

Marta Martínez-Vázquez
for leadership in integrated signal-aware technologies for antennas and global navigation satellite system arrays

Charles Rhoads
for leadership in low cost and high performance array antenna technologies

Zhongxiang Shen
for contributions to 3D frequency selective structures and slot antennas

Antennas and Propagation Society 2017 Field Awards

Distinguished Achievement Award

Ulrich L. Rohde

For pioneering work and contribution to the field of Antennas and Propagation, leading to development of wireless communication systems for industrial, military and space applications.

Ulrich L. Rohde is the partner of Rohde & Schwarz, Munich Germany, Chairman of Synergy Microwave Corp., Paterson, New Jersey; President of Communications Consulting Corporation, serving as an honorary member of the Senate of the Armed Forces University Munich, honorary member of the Senate of the Brandenburg University of Technology Cottbus–Senftenberg, past member of the Board of Directors of Ansoft Corporation, Pittsburgh, Pennsylvania. Dr. Rohde is serving as a honorary professor at IIT Delhi, professor at Oradea University, Romania, and visiting professor at Technical University Munich, Germany.

Dr. Rohde is a IEEE life Fellow, published more than 350 scientific papers in professional journals and conferences, co-authored of 15 technical books and book chapters, and over 4 dozen patents. Dr. Rohde is recipient of prestigious 2014 IFCS C. B. Sawyer Award, 2015 IFCS I. I. Rabi Award, 2015 IEEE Region 1 scientific Innovation award, prestigious 2016 IEEE MTT-S Microwave application award, 2017 IEEE IFCS W. G. Cady award.

Dr. Rohde is a member of the following: Life Fellow Member of the IEEE, Member of the IEEE Technical Committee for HF, VHF, and UHF Technology MTT-17, Member of the IEEE Signal Generation and Frequency Conversion MTT-22, Member of the Board of Trustees Fraunhofer Gesellchaft (EMFT) for Modular Solid State Technology, Member of the Board of Trustees of the Bavarian Academy of Science, and Honorary Member of the Academy of Science, all in Munich, ETA KAPPA NU Honor Society, Executive Association of the Graduate School of Business-Columbia University, New York, The Armed Forces Communications & Electronics Association, Fellow of the Radio Club of America, former Chairman of the Electrical and Computer Engineering Advisory Board at New Jersey Institute of Technology.

In 2006, Dr. Rohde was honored as Microwave Legend by Microwave & RF Magazine; the selection was based on global voting. In 2009, Dr. Rohde was selected in the list of Divine Innovators of November 2011, Microwave Journal. Based on Dr. Rohde's 5-decade of scientific creativity and pioneer contributions in the field of microwave and antenna, IEEE has established 2 awards on his name "IEEE Ulrich L. Rohde Innovative Conference Paper Awards on Antenna Measurements and Applications" and I"EEE Ulrich L. Rohde Innovative Conference Paper Awards on Computational Techniques in Electromagnetics".

His hobbies are sailing, U.S. Merchant Marine Officer, Master of Steam or Motor Vessels, photography and ham radio (N1UL).

Chen-To Tai Distinguished Educator Award

Yahia M. M. Antar

For dedicating his professional career to the education and training of highly qualified personnel.

Yahia M. M. Antar (S'73–M'76–SM'85–LF'00) received the B.Sc. (Hons.) degree in 1966 from Alexandria University, Alexandria, Egypt, and the M.Sc. and Ph.D. degrees from the University of Manitoba, MB, Canada, in 1971 and 1975, respectively, all in electrical engineering. In 1977, he held a Government of Canada Visiting Fellowship at the Communications Research Centre in Ottawa, and in May 1979 he joined the Division of Electrical Engineering, National Research Council of Canada. In November 1987, he joined the Department of Electrical and Computer Engineering, Royal Military College of Canada, Kingston, where he has held the position of professor since 1990 . He has authored or coauthored over 200 journal papers, several books and chapters in books, over 450 refereed conference papers, holds several patents, chaired several national and international conferences, and has given plenary talks at many conferences . He has supervised and co-supervised over 90 Ph.D. and M.Sc. theses at the Royal Military College and at Queen's University, of which several have received the Governor General of Canada Gold Medal, the outstanding Ph.D. thesis of the Division of Applied Science, as well as many best paper awards in major international symposia. He served as the Chair of CNC, URSI (1999–2008), Commission B (1993–1999), and has a cross appointment at Queen's University in Kingston.

Dr. Antar is a Life Fellow of the IEEE (Institute of Electrical and Electronic Engineers), a Fellow of the Engineering Institute of Canada (FEIC), a Fellow of the Electromagnetic Academy, and an URSI Fellow. He serves as an Associate Editor of many IEEE and IET Journals and as an IEEE-APS Distinguished Lecturer.. In May 2002, he was awarded a Tier 1 Canada Research Chair in Electromagnetic Engineering which has been renewed in 2016. In 2003, he was awarded the Royal Military College of Canada "Excellence in Research" Prize, and the RMCC Class of 1965 Teaching Excellence award in 2012. He was elected by the to the URSI to the Board as Vice President in August 2008 and in 2014, and to the IEEE AP AdCom. in 2009. On January 31, 2011, he was appointed Member of the Canadian Defence Science Advisory Board (DSAB) . In October 2012, he received the Queen's Diamond Jubilee Medal from the Governor General of Canada in recognition for his contribution to Canada. He is the recipient of the 2014 IEEE Canada RA Fessenden Silver Medal, and the 2015 IEEE Canada J. M. Ham outstanding Engineering Education Award. In May 2015, he received the RMC Cowan Prize for excellence in research.

John Kraus Antenna Award

Kwai-Man Luk

For contributions to the invention of the L-probe fed patch antenna and the magneto-electric dipole antenna for wireless communications.

Professor Kwai-Man Luk received his bachelor's and Ph.D. degrees in Electrical Engineering from the University of Hong Kong in 1981 and 1985, respectively. Since joining City University of Hong Kong in 1990, he was Head of Department of Electronic Engineering from 2004-2010 and Director of State Key Laboratory of Millimeter Waves from 2008-2013 and has been Chair Professor of Electronic Engineering since 1999. His research interests are mainly on antenna theory and design. Over the years, he has developed many novel antennas including the U-slot patch antenna, L-probe patch antenna, magnetoelectric dipole, dense dielectric patch antenna and the open resonator antenna. He has published over 339 journal papers, 250 conference papers and 3 authoritative books in the antenna field. He received the 2nd honor of State Technological Invention Award of China in 2012 and the Croucher Award of Hong Kong in 2001. He won best paper awards in APMC 1994, ISAP 2008 and APCAP 2015. He was Chief Guest Editor of a Centennial Special Issue on: "Antennas in Wireless Communications" for the Proceedings of IEEE in 2012 and Chairman of Best Paper Award Committee of IEEE Antenna and Propagation Society from 2013 - 2015. He is currently Chairman of the Fellow Nomination Committee of Electromagnetic Academy and a Deputy Editor-in-Chief of all PIERS journals. He has been General Co-Chairman or Vice-Chairman of many international conferences such as APMC, ISAP, IWAT, IWEM, CAMA, TENCON, IRMMW-THz etc. He is a fellow of the IEEE, IET, HKIE, CIE and Electromagnetic Academy.

Lot Shafai Mid-Career Distinguished Achievement Award

Francesca Vipiana

For contributions to computational electromagnetics, and in particular to the analysis of multi-scale problems.

Francesca Vipiana (M'07–SM'13) received the Laurea and Ph.D. (Dottorato di Ricerca) degrees in electronic engineering from the Politecnico di Torino, Turin, Italy, in 2000 and 2004, respectively, with doctoral research carried out partly at the European Space Research Technology Center, Noordwijk, The Netherlands. From 2005 to 2008, she was a Research Fellow with the Department of Electronics, Politecnico di Torino. From 2009 to 2012, she was the Head of the Antenna and EMC Laboratory at the Istituto Superiore Mario Boella, Turin. Since 2008, she has been a frequent visitor to the Applied Electromagnetics Laboratory, University of Houston, Houston, TX, USA. Since 2012, she has been an Assistant Professor with the Department of Electronics and Telecommunications, Politecnico di Torino, where she has been an Associate Professor since 2014.

Her current research interests include numerical techniques based on the integral equation and method of moment approaches, with a focus on multiresolution and hierarchical schemes, domain decomposition, preconditioning and fast solution methods, Green's function regularization, and advanced quadrature integration schemes. She is involved in the analysis, synthesis, and optimization of multiband reconfigurable compact antennas, and, more recently, in the modeling and design of microwave imaging systems for medical applications.

Prof. Vipiana received the Young Scientist Award at the Union of Radio Science General Assembly in 2005, the first prize in the poster competition at the First IEEE Women in Electromagnetics Workshop in 2009, the ISMB Best Paper Award in 2011.

Harrington-Mittra Award in Computational Electromagnetics

Jian-Ming Jin

For outstanding contributions to the research and development of the finite element method for computational electromagnetics.

Jian-Ming Jin (F'01) is currently the Y. T. Lo Chair Professor of Electrical and Computer Engineering and Director of the Electromagnetics Laboratory and Center for Computational Electromagnetics at the University of Illinois at Urbana-Champaign. He has authored and co-authored 265 papers in refereed journals and 22 book chapters, and presented 362 conference papers and 142 invited talks. He has also authored The Finite Element Method in Electromagnetics, Electromagnetic Analysis and Design in Magnetic Resonance Imaging, and Theory and Computation of Electromagnetic Fields, and co-authored Computation of Special Functions, Fast and Efficient Algorithms in Computational Electromagnetics, and Finite Element Analysis of Antennas and Arrays. He was elected by ISI as one of the world's most cited authors in 2002 and a Fellow of IEEE in 2001. He is also a Fellow of Applied Computational Electromagnetics Society (ACES) and Electromagnetics Academy.

Dr. Jin was a recipient of a 1994 NSF Young Investigator Award, a 1995 ONR Young Investigator Award, the 1999 ACES Valued Service Award, the 2014 ACES Technical Achievement Award, the 2015 IEEE AP-S Chen-To Tai Distinguished Educator Award, and the 2016 ACES Computational Electromagnetics Award. He also received the 1997 and 2000 Xerox Research Awards and was appointed as the first Henry Magnuski Outstanding Young Scholar in 1998 and a Sony Scholar in 2005 at the University of Illinois at Urbana-Champaign. His name appeared 23 times in the university's List of Excellent Instructors. He was awarded Adjunct, Visiting, Guest, or Chair Professorship by 14 institutions around the world and was appointed an IEEE AP-S Distinguished Lecturer in 2015.

Antennas and Propagation Society 2017 Best Paper Awards

Sergei A. Schelkunoff Transactions Prize Paper Award

N. Chahat, R. E. Hodges, J. Sauder, M. Thomson, E. Peral and Y. Rahmat-Samii
"CubeSat Deployable Ka-Band Mesh Reflector Antenna Development for Earth Science Missions," IEEE TAP, vol. 64, no. 6, 2083-2093, 2016

Harold A. Wheeler Applications Prize Paper Award

D. J. Bisharat, S. Liao, and Q. Xue
"High Gain and Low Cost Differentially Fed Circularly Polarized Planar Aperture Antenna for Broadband Millimeter-Wave Applications ," IEEE TAP, vol. 64, no. 1, 33-42, 2016

R. W. P. King Paper Award

L. Liang and S. Victor Hum
"Design of a UWB Reflectarray as an Impedance Surface Using Bessel Filters," IEEE TAP, vol. 64, no. 10, 4242-4255, 2016

Piergiorgio L. E. Uslenghi Letters Prize Paper Award

M. Tamagnone and J. Mosig
"Theoretical Limits on the Efficiency of Reconfigurable and Non-Reciprocal Graphene Antennas," IEEE AWPL, Vol. 15, 1579, 2016

Edward E. Altschuler AP-S Magazine Prize Paper Award

A. Thain, J. P. Estienne, J. Robert, A. Herve, A. Piche, G. Peres, B. Pasquier, A. Jaber, L. Evain, F. Harly, B. Gutierres, H. Lenquette, B. Sinigaglia, and B. Spitz
"Stealth Buildings at Airbus Group Innovations: Low-cost solutions to radio perturbations," IEEE Antennas Propagat. Magazine, issue 58, no. 1, pp. 16-27, February 2016

2017 Society Recognitions

2016 President
Michael A. Jensen

Outgoing ADCOM
Steven R. Best (2012 President)
Gianluca Lazzi
J. Scott Tyo

2017 Symposium General Chairs
Dan Sievenpiper
Gabriel Rebeiz

2017 Technical Program Chairs
Vitaliy Lomakin
Filippo Capolino

Antennas and Propagation Society Volunteers Completing Their Terms

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Yang Hao, EiC of AWPL

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2017 Outstanding Chapter Award

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Vice Chair: Dr. Oksana P. Hoholyuk
Chapter Secretary: Dr. Olha F. Zamorska

IEEE Region 10 IEEE Harbin EMC/ MTT/AP-S Joint Chapter
Chapter Chair: Dr. Qun Wu
Vice Chair: Dr. Fan-Yi Meng
Chapter Secretary: Dr. Kuang Zhang

IEEE Region 1 North Jersey AP03/ MTT17 Joint Chapter
Chapter Chair: Dr. Ing. habil Ajay K. Poddar
Vice Chair: Dr. Edip Niver
Chapter Secretary: Ms. Anisha M. Apte

2017 Raj Mittra Travel Grant Award

Dr. Francesco Monticone, Cornell University.

2017 AP-S Student Paper Awards

The Student Paper Competition Semi-Finalists and Winners will be announced during this Awards Presentation.

2017 AP-S Student Antenna Design Awards

The Student Design Contest Semi-Finalists and Winners will be announced during this Awards Presentation.

2017 TICRA Foundation Travel Grants

Simon Adrian
Jie Li
Kátia Urata