2016 IEEE
Symposium on Antennas and Propagation
and
USNC-URSI Radio Science Meeting

June 26–July 1, 2016 · Fajardo, Puerto Rico

Awards Presentation
June 29, 2016

Gold Patron

Altair

Program

5:30 PM	IEEE Awards Presentation Introductions: Michael Jensen, AP-S President Ahmed A. Kishk, AP-S President-Elect Ronald J. Marhefka, Awards Coordinator
5:30 PM	IEEE Awards *presenter IEEE Past President Howard Michel*
5:35 PM	IEEE Fellows
5:45 PM	AP-S Field Awards
6:00 PM	AP-S Paper Awards
6:10 PM	AP Society Recognitions
6:15 PM	AP-S Best Chapter Award *presenter Ajay K. Poddar*
6:20 PM	Raj Mittra Travel Grant Awards *presenters Raj Mittra and Chi-Hou Chan*
6:25 PM	AP-S Student Paper Competition *presenter Zhen Peng and Christos Argyropoulos*
6:35 PM	AP-S Student Design Contest *presenter Sean Victor Hum*
6:45 PM	Concluding Remarks

2016 IEEE Awards

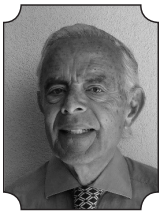
Presenter: IEEE Past President Howard Michel

2016 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

GIORGIO FRANCESCHETTI

For leadership in the academic world, teaching, research, and scientific activities in advanced electromagnetics



Giorgio Franceschetti has helped advance the field of electromagnetics through innovative research and high-level teaching covering diverse areas ranging from electromagnetic propagation in complex environments to wireless transmission power. Franceschetti introduced the study of electromagnetic fields and waves to Italian universities in 1965 and established an outstanding research community. His contributions to synthetic aperture radar technologies have been successfully used for imaging the Earth's surface from space. His work on the degrees of freedom involving scattering fields has enabled more accurate sampling, which has impacted electromagnetic imaging. As recognition of his long-lasting impact on electromagnetics, the November/December 2014 issue of the *Forum for Electromagnetic Research Methods and Application Technologies* (Vol. 6, http://www.e-fermat.org/, NEWS&VIEWS) was dedicated to Franceschetti and contains a salute, and a tribute to his accomplishments.

An IEEE Life Fellow, Franceschetti is a Professor Emeritus with the University Federico II, Naples, Italy.

TAGLINE: Expert in many areas of electromagnetics has helped advance the field through long-lasting innovative research and high-level teaching.

2016 IEEE Fellows

Evaluated By AP-S

Ian Craddock
for leadership in imaging for healthcare applications

Danilo Erricolo
for contributions to electromagnetic scattering and associated computational algorithms

Karu Esselle
for contributions to resonance-based antennas

Vincenzo Galdi
for contributions to modeling the interaction between electromagnetic waves and complex materials

Anthony Grbic
for contributions to the theory and design of electromagnetic metamaterials

Dan Jiao
for contributions to computational electromagnetics

Akhlesh Lakhtakia
for contributions to isotropic chiral, bianisotropic materials, and metamaterials

Andrea Neto
for contributions to dielectric lens antennas and wideband arrays

Branislav Notaros
for contributions to higher order methods in computational electromagnetics

Claude Oestges
for contributions to channel characterization and modeling for multiple-input multiple-output wireless

Evaluated By Other Societies

Tzyy-Sheng Horng
for contributions to system-in-package modeling and design

Luca Perregrini
for contributions to numerical techniques for electromagnetic modeling

Ajay Kumar Poddar
for contributions to microwave oscillators

Lorenz-Peter Schmidt
for contributions to millimeter-wave and terahertz imaging systems

Antennas and Propagation Society 2016 Field Awards

Distinguished Achievement Award

Hisamatsu Nakano

For in-depth electromagnetic analyses of antennas and for innovative antenna designs and their novel realizations for modern communication systems

Hisamatsu Nakano received a Dr. E. degree from Hosei University, Tokyo, Japan, in 1974. Since 1973, he has been with Hosei University, where he is now a professor emeritus and a special-appointment researcher at the *Electromagnetic Wave Engineering Research Institute* attached to the graduate school of the same university. He has been an IEEE Life Fellow since 2011.

Professor Nakano has published over 300 articles in major refereed journals, more than 400 international symposium papers, more than 1,550 national symposium papers and 10 books/book-chapters, including "*Helical and Spiral Antennas* (Research Studies Press and Wiley)" and "*Analysis Methods of Electromagnetic Wave Problems, Volume Two* (Artech House)." He is also the author of a forthcoming book "*Low-profile Natural and Metamaterial Antennas* (Wiley and IEEE Press)."

His significant contributions are the development of five integral equations for line antennas and the realization of numerous wideband antennas, including curl, spiral, helical, and cross-wire antennas. His low-profile helical array antenna has been used as a primary feed for radio astronomy Cassegrain reflectors. It has also been adopted as a high-gain antenna for the Mercury Magnetospheric Orbiter. His other accomplishments include antennas for GPS, personal handy phone systems, space radio, electronic toll collection systems, RFID systems, UWB systems, and radar systems. He has been awarded 78 patents, including *A Curl Antenna Element and its Array* (Japan). He has held the positions of Visiting Associate Professor at Syracuse University (March to September, 1981), and Visiting Professor at the University of Manitoba (March to September, 1986) and University of California, Los Angeles (September, 1986 to March, 1987). He has been invited to become a Visiting Professor at Swansea University, UK in 2016.

Professor Nakano received the IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION H. A. Wheeler Award in 1994. He was also the recipient of the IEEE Antennas and Propagation Society Chen-To Tai Distinguished Educator Award in 2006 and the recipient of the Prize for Science and Technology (from Japan's Minister of Education, Culture, Sports, Science, and Technology) in 2010. He is an associate editor of several journals and magazines, such as Electromagnetics and the IEEE Antennas and Propagation Magazine. Professor Nakano has served as a member of the IEEE APS administrative committee (2000-2002), a Region 10 representative (2001-2010), and an IEEE APS short course lecturer (2007-present).

Chen-To Tai Distinguished Educator Award

Stefano Maci

For extraordinary impact in high-level education in the Antennas and Propagation community through the European School of Antennas

Stefano Maci is Professor at the University of Siena, and Director of the PhD School of Information Engineering and Science.

Since 2000 he was member the Technical Advisory Board of 11 international conferences, member of the Review Board of 6 International Journals. He organized 25 special sessions in international conferences, and he held 10 short courses in the IEEE Antennas and Propagation Society (AP-S) Symposia about metamaterials, antennas and computational electromagnetics.

Since 2004 he was responsible of 5 projects funded by the European Union (EU). In 2004-2007 he was WP leader of the Antenna Center of Excellence (ACE, FP6-EU) and in 2007-2010 he was International Coordinator of a 24-institution consortium of a Marie Curie Action (FP6). He has been Principal Investigator of 6 projects financed by European Space Agency.

He was the founder of the European School of Antennas (ESoA), a post graduate school that presently comprises 30 courses on Antennas, Propagation, Electromagnetic Theory, and Computational Electromagnetics and 150 teachers coming from 15 countries. He has been a former member of the AdCom of IEEE Antennas and Propagation Society (AP-S), associate editor of AP-Transaction, Chair of the Award Committee of IEEE AP-S, and member of the Board of Directors of the European Association on Antennas and Propagation (EuRAAP). He has been also a member of the Governing Board of the European Science Foundation Project "NewFocus", a member of the Italian Committee for Professor Promotion, a Distinguished Lecturer of the IEEE Antennas and Propagation Society (AP-S), and a member of the Antennas and Propagation Executive Board of the Institution of Engineering and Technology (IET, UK). He is the director of the consortium FORESEEN, presently involving 40 European Institutions. He was co-founder of 2 Spin-off Company. He is IEEE Fellow since 2004, and recipient of the EurAAP Carrier Award 2014.

His research activity is documented in 10 book chapters, 140 papers published in international journals, (among which 90 on IEEE journals), and about 300 papers in proceedings of international conferences on high-frequency and beam representation methods, computational electromagnetics, large phased arrays, planar antennas, reflector antennas and feeds, metamaterials and metasurfaces. These papers have received around 4000 citations.

John Kraus Antenna Award

Yahya Rahmat-Samii

For significant contributions in advancing the analysis, design and measurement of modern reflector antennas for ground and space applications

Yahya Rahmat-Samii is a Distinguished Professor, holder of the Northrop-Grumman Chair in electromagnetics, member of the US National Academy of Engineering (NAE), winner of the 2011 IEEE Electromagnetics Field Award and the former chairman of the Electrical Engineering Department at the University of California, Los Angeles (UCLA). Before joining UCLA, he was a Senior Research Scientist at Caltech/NASA's Jet Propulsion Laboratory. Dr. Rahmat-Samii was the 1995 President of the IEEE Antennas and Propagation Society and 2009-2011 President of the United States National Committee (USNC) of the International Union of Radio Science (URSI). He has also served as an IEEE Distinguished Lecturer presenting lectures internationally. Dr. Rahmat-Samii is a Fellow of the IEEE, AMTA and ACES. Dr. Rahmat-Samii has authored or co-authored nearly 1000 technical journal articles and conference papers and has written over 35 book chapters and five books. He has over fifteen cover-page IEEE publication papers. In 1984, he received the Henry Booker Award from URSI, which is given triennially to the most outstanding young radio scientist in North America. In 1992 and 1995, he received the Best Application Paper Prize Award (Wheeler Award) of the IEEE Transactions on Antennas and Propagation. In 1999, he received the University of Illinois ECE Distinguished Alumni Award. In 2000, Prof. Rahmat-Samii received the IEEE Third Millennium Medal and the AMTA Distinguished Achievement Award. In 2001, Rahmat-Samii received an Honorary Doctorate Causa from the University of Santiago de Compostela, Spain. In 2001, he became a Foreign Member of the Royal Flemish Academy of Belgium for Science and the Arts. In 2002, he received the Technical Excellence Award from JPL. In 2004, he received the 70th Anniversary of the Faculty of Engineering of University of Tehran Distinguished Alumni Award. He received the 2005 URSI Booker Gold Medal presented at the URSI General Assembly. He is the recipient of the 2007 Chen-To Tai Distinguished Educator Award and the 2009 Distinguished Achievement Award of the IEEE Antennas and Propagation Society. He is the recipient of the 2010 UCLA School of Engineering Lockheed Martin Excellence in Teaching Award and the 2011 campus-wide UCLA Distinguished Teaching Award. In 2015, he received the Distinguished Engineering Educator Award from The Engineer's Council. Prof. Rahmat-Samii has had pioneering research contributions in diverse areas of electromagnetics, antennas, measurement and diagnostics techniques, numerical and asymptotic methods, satellite and personal communications, human/antenna interactions, RFID and implanted antennas in medical applications, frequency selective surfaces, electromagnetic band-gap structures, applications of the genetic algorithms and particle swarm optimizations, etc., His original antenna designs are on many NASA/JPL spacecrafts for planetary, remote sensing and Cubesat missions (visit http://www. antlab.ee.ucla.edu/). Prof. Rahmat-Samii is the designer of the IEEE AP-S logo which is displayed on all IEEE AP-S publications.

Lot Shafai Mid-Career Distinguished Achievement Award

Mojgan Daneshmand

For pioneering contribution to microwave-to-millimeter-wave microsystem-based antenna and microwave technologies for Communication and Sensing, and being a role model for women in Engineering

Mojgan Daneshmand an associate professor at the University of Alberta is acknowledged as one of Canada's most accomplished and promising minds. An Associate Professor and Canada Research Chair, Tier II in Radio Frequency (RF) Microsystems for Communication and Sensing, she applies RF and nanotechnology to mobile and satellite communication, energy, and biomedical applications. Dr. Daneshmand's group combines unique characteristics of nanotechnology with Electromagnetics to solve existing problems and enable new applications. To date, her research outcomes include her pioneering work on high resolution non-contact microwave sensing for biomedical and chemical analyzing, as well as reconfigurable waveguides and apertures for satellite communication. Dr. Daneshmand holds Ph.D degree and M.Sc degree from the University of Waterloo (2006 Canada) and the University of Manitoba (2002 Canada) respectively.

Dr. Daneshmand has published more than 100 papers and has been cited more than 650 times. Her publications include many in IEEE Transactions on Antennas and Propagation and IEEE Transactions on Microwave theory and technique. She has been also advocating application of Electromagnetics in other journals such as Nanoscale, the Journal of Physical Chemistry and Applied Physics. She has established an ambitious research program with a team of students and postdocs, with 31 positions either completed or in progress. An early-career researcher, Dr. Daneshmand's graduated students have joined communication industries such as Ciena and Testforce. Her graduate students have garnered a range of awards from IEEE AP-S and IEEE IMS societies and CMC microsystems Canada.

Dr. Daneshmand has been a member and co chair of Technical Program Review Committee of the IEEE IMS 2012-2016 subcommittee 31, Co-chair of IEEE AP-S 2015 Volunteer Student Committee, Co chair of ANTEM 2014 Student Award and Competition Committee, and steering committee member of ANTEM 2016. She is co chairing IEEE Northern Canada Section Antennas & Propagation Society and the Microwave Theory & Techniques Society (IEEE NCS AP-S/MTT-S) joint chapter, which received 2012 outstanding chapter recognition from IEEE MTT society. She is currently an associate editor of the IEEE Canadian Journal of Electrical and Computer Engineering.

Harrington-Mittra Award in Computational Electromagnetics

Jin-Fa Lee

For introducing innovative numerical methods to solve practical radiation and scattering problems in electromagnetics

Jin-Fa Lee received the B.S. degree from National Taiwan University, in 1982 and the M.S. and Ph.D. degrees from Carnegie-Mellon University in 1986 and 1989, respectively, all in electrical engineering. Under Prof. Zoltan Cendes' supervisions, his Ph.D thesis work resulted in the first commercial full-wave FEM software for solving Maxwell equations, the High Frequency Structure Simulator (HFSS). From 1988 to 1990, he was with ANSOFT Corp. (currently a subsidiary of ANSYS Inc.), where he developed several CAD/CAE finite element method (FEM) programs for modeling three-dimensional microwave and millimeter-wave circuits. From 1990 to 1991, he was a post-doctoral fellow at the University of Illinois at Urbana-Champaign, mentored by Prof. Raj Mittra. From 1991 to 2000, he was with Department of Electrical and Computer Engineering, Worcester Polytechnic Institute. Currently, he is a Professor at ElectroScience Lab., Dept. of Electrical and Computer Engineering, the Ohio State University. Prof. Lee becomes an IEEE Fellow on year 2005 and serves as an associate editor 2007-2013 for IEEE Transaction on Antenna Propagation. Moreover, he is serving as a distinguished lecturer, term 2011-2013, for IEEE Antenna Propagation Society. Also, he is a member of the Board of Directors for Applied Computational Electromagnetic Society (ACES).

Among the honors and awards that Dr. Lee received over the years are: a fellow of Electromagnetic Academy; a Yuan-Zhe Specially-Appointed Professor, Yuan-Zhe University, Taiwan; the recipient of 1992 Joseph Samuel Satin Distinguished Fellow Award, WPI; the 1st International Famous Professor to Beijing Institute of Technology (BIT), 2007; the recipient of the College Engineering Lumley Research Award, Ohio State University, 2006 and 2011; the recipient of the Distinguished Scholar award, the Ohio State University, 2012; a MINDEF visiting scientist Singapore, 2010; co-author of ACES 2009 best paper award; Co-recipient of the IEEE Antenna and Propagation Sergei A. Schelkunoff Transactions Prize Paper Award, 2014; and the supervisor of many best student papers of international symposiums and conferences.

Antennas and Propagation Society 2016 Paper Awards

Sergei A. Schelkunoff Transactions Prize Paper Award
Gabriele Minatti, Marco Faenzi, Enrica Martini, Francesco Caminita, Paolo De Vita, David González-Ovejero, Marco Sabbadini, Stefano Maci

"Modulated Metasurface Antennas for Space: Synthesis, Analysis and Realizations," IEEE Transactions on Antennas and Propagation, Vol. 63, No. 4, pages 1288-1300, April 2015

Harold A. Wheeler Applications Prize Paper Award
Matthew A. Morgan and Tod A. Boyd

"A 10-100 GHz Double-Ridged Horn Antenna and Coax Launcher," IEEE Transactions on Antennas and Propagation, Vol 63, No. 8, pages 3417-3422, August 2015

R. W. P. King Paper Award
Lei Guo and Amin M. Abbosh

"Optimization-Based Confocal Microwave Imaging in Medical Applications," Transactions on Antennas and Propagation, Vol. 63, No. 8, August 2015, pages 3531-3539, August 2015

Piergiorgio L. E. Uslenghi Letters Prize Paper Award
Mathew W.Lukacs, Angela J. Zeqollari, Peter J. Collins, Michael A. Temple

"RF-DNA Fingerprinting for Antenna Classification," IEEE Antennas and Wireless Propagation Letters, Vol. 14, pages 1455-1458, 2015

Edward E. Altschuler AP-S Magazine Prize Paper Award
Simon Henault and Yahia M. M. Antar

"Unifying the Theory of Mutual Coupling Compensation in Antenna Arrays," IEEE Antenna & Propagation Magazine, Volume 57, No. 2, pages 104-122, April 2015

2016 Society Recognitions

2015 President
Roberto D. Graglia

ADCOM
Magdalena Salazar-Palma
Ahmed A. Kishk
Dirk Manteuffel
Levent Sevgi
Leena Ukkonen

2016 Symposium General Chairs
J. Scott Tyo
Rick Ziolkoswki
Rafael Rodriguez-Solis

2016 Technical Program Chairs
Andrea Alu

Field Awards Chair
Ahmed Kishk

Paper Awards Committee Chair
Kwai-Man Luk

Chapter Activities Committee Chair
Zhongxian Shen

Constitution and Bylaws Committee Chair
Magdalena Salazar-Palma

Industrial Initiatives Committee Chair
Sukhakar Rao

Membership Committee Co-Chairs
Ali E. Yilmaz
Vitaliy Lomakin

New Technology Directions Committee Chair
Daniel Sievenpiper

Nominations Committee Chair
Tapan Sarkar

Sponsored Conferences Committee Chair
Ross Stone

Standards Committee (Antenna) Chair
Michael Francis

Standards Committee (Propagation) Chair
David Thiel

2016 Outstanding Chapter Award

Hong Kong Chapter
Chapter Chair: Dr. Hau Wah Lai
Vice Chair: Dr. Kam Man Shum

Poland Chapter
Chapter Chair: Dr. Wojtek Krzysztofik
Vice Chair: Dr. Jacek Misiurewicz

2016 Raj Mittra Travel Grant Award

Dr. Joshua Kovitz of UCLA

2016 AP-S Student Paper Awards

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

2016 AP-S Student Antenna Design Awards

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

Antennas and Propagation Society Volunteers Completing Their Terms

Transactions Associate Editors

Magdalena Salazar-Palma

Magazine Associate Editors

Tayfun Akgül
Lee W. Henderson
Michael Johnson
Jeff Kemp
Jay Kralovec
Ivan J. LaHaie
James C. Lin
Juan R. Mosig
Stephen W. Schneider
W. Dennis Swift
David V. Thiel
Marinos Vouvakis
Parveen Wahid
Daniel S. Weile
Yinghong Wen
Douglas H. Werner

APWL Letters Associate Editors

Nader Behdad
Anthony Grbic
Giampiero Lovat
Zhijun Zhang

Fellow Awards Committee Members

Thomas Milligan