2007 IEEE Education Society Awards and Frontiers in Education Conference Awards

Susan M. Lord, *Vice President and Awards Committee Chair*
IEEE Education Society

EACH year at the Frontiers in Education (FIE) Conference, awards are presented to recognize the contributions of many engineering educators. In addition to awards for contributions to the conference, awards are presented by the three FIE cosponsors: the Educational Research and Methods (ERM) Division of the American Society for Engineering Education (ASEE), the IEEE Computer Society, and the IEEE Education Society.

This paper lists the award recipients recognized at FIE 2007, Milwaukee, WI, October 10–13, along with their award citations and brief biographical sketches. Similar information was published previously for the 2006 recipients [1], 2005 recipients [2], and for the 2003 and 2004 recipients along with a listing of the names of earlier recipients [3].

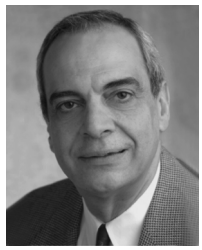
The 2008 awards will be presented at the Frontiers in Education Conference, Saratoga Springs, NY, October 22–25. Additional information about the IEEE Education Society awards is available on the Society's web site (http://www.ewh.ieee.org/soc/es/).

I. IEEE Education Society Achievement Award

The 2007 IEEE Education Society Achievement Award was presented to *Sarah Rajala*, "for contributions to engineering education through excellence in teaching, research, and administration and for leadership and service in professional societies" and to *Marwan A. Simaan* "for contributions to engineering education through excellence in teaching, administration, interdisciplinary research and professional activities on an international scale."

Sarah A. Rajala (S'73–M'79–SM'84–F'01) holds the James Worth Bagley Chair and serves as head of the Department of Electrical and Computer Engineering at Mississippi State University. Previously, she was a Professor and served as Associate Dean for Research and Graduate Programs, Associate Dean for Academic Affairs, and Director of the Industry/University Cooperative Research Center for Advanced Computing and Communication in the College of Engineering at North Carolina State University, Raleigh. During her career, she has conducted research on the analysis and process of images and image sequences with application to the areas of color imaging, image coding/compression, motion estimation, and target acquisition and tracking and made numerous contributions to engineering education. She has authored and coauthored more than 100 papers in these areas and has had contributions published in 13 books.

She has received numerous awards for her research and professional contributions, including the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring in 2000, Fellow of the Institute of Electrical and Electronic Engineers in 2001, and Fellow of the American Society for Engineering Education in 2007 for contributions to engineering education. She has an extensive record of leadership in professional and volunteer organizations, including the ASEE, IEEE, Phi Kappa Phi, and Sigma Xi. She is currently President-Elect of the American Society of Engineering Education.



Marwan A. Simaan (S'69–M'72–SM'79–F'88) received the Ph.D. degree in electrical engineering from the University of Illinois, Urbana-Champaign, in 1972.

He is the Bell of PA/Bell Atlantic Professor of Electrical and Computer Engineering at the University of Pittsburgh, Pittsburgh, PA. He joined the University of Pittsburgh in 1976 and served as Chair of its Electrical Engineering Department from 1991 to 1998. Over the past 35 years, his research and teaching activities have been mainly in the areas of control, signal processing, telecommunication networks, and engineering education. He has worked on a wide range of interdisciplinary projects with students and collaborators from a variety of disciplines including biomedical, mechanical, materials, and manufacturing engineering as well as physics, mathematics, geophysics, computer science, economics, and political science. His research has been supported by NSF, DARPA, AFOSR, ONR, NIH and a variety of industrial sources including Gulf Oil, Alcoa, Westinghouse and others. He has edited/coedited four books and authored/coauthored more than 300 publications, 24 industry technical reports, and two patents (one pending).

Dr. Simaan is a Fellow ASEE, AAAS, and a member of the National Academy of Engineering (NAE). He currently serves or has served on numerous professional committees/boards including the IEEE Proceedings Editorial Board, IEEE Fellow Committee, IEEE Pub Board, IEEE Prize Papers/Graduate Fellowships Committee, the AACC Education and Bellman Awards Committees, and others. He served as Program Evaluator for ABET (1993–99 and 2001–07). He and his students received three best paper awards from IEEE and Sigma-Xi. At the University of Pittsburgh, he received numerous teaching awards from Eta Kappa Nu and IEEE student chapters as well as the Beitle–Veltri Memorial Award for excellence in teaching. In 1995, he was named a Distinguished Alumnus of the ECE Department at the University of Illinois. He is a registered Professional Engineer in the Commonwealth of Pennsylvania.

II. IEEE Education Society Best Transactions Paper Award

The 2007 IEEE Education Society Best TRANSACTIONS Paper Award was presented to *Jason A. Day* and *James D. Foley* for their paper "Evaluating a Web Lecture Intervention in a Human-Computer Interaction Course," *IEEE Trans. Educ.*, vol. 49, no. 4, Nov. 2006, pp. 420–431.

Jason A. Day received the B.A. degree in computer science from DePauw University, Greencastle, IN, in 2001. He is currently working towards the Ph.D. degree in human-centered computing at the College of Computing, Georgia Institute of Technology, Atlanta.

His main areas of research are educational technology and human–computer interaction, focusing on blended learning approaches and multimedia learning.

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James D. Foley (S'63–M'69–SM'78–F'86) joined the Georgia Institute of Technology, Atlanta, in 1991 as Founding Director of the Graphics, Visualization and Usability Center in the College of Computing. The Center was ranked number one in 1996 by *U.S. News and World Report* for graduate computer science work in graphics and user interaction. On leave from Georgia Tech from 1996 to 1999, he was First Director of MERL—Mitsubishi Electric Research Laboratory and then CEO and Chair of Mitsubishi Electric Information Technology Center America.

He is coauthor of three computer graphics texts and is a Fellow of AAAS and ACM. He received ACM/SIGGRAPH's Lifetime Achievement Award for contributions to computer graphics in 1997 and ACM/SIGCHI's Lifetime Achievement Award in 2007. He was Chair (2001–2005) of the Computing Research Association. His research interests include interactive computer graphics, information visualization, and educational technologies.

III. IEEE Education Society Chapter Achievement Award

The 2007 IEEE Education Society Chapter Achievement Award was presented to the Spanish Chapter, "for the Chapter as an outstanding model of technical activities, membership services, and professional development in Spain and Latin America." The Chapter officers recognized individually were *Edmundo Tovar*, Chair, *Manuel Castro*, Past Chair, *Gabriel Díaz Orueta*, Vice Chair, *José Ángel Sánchez*, Secretary, and *Francisco Mur*, Treasurer.

The Spanish Chapter of the IEEE Education Society reports an impressive list of activities including three 2006 conferences and two 2006 technical meetings. In addition, the Chapter has taken initiatives to pull Latin America into IEEE Education Society activities, most notably through the establishment of the IEEE-RITA electronic journal. The Chapter also reports a substantial growth of members from 118 in 2004 to 167 in 2006. Finally, the Chapter has been clearly visible inside and outside the IEEE Education Society by presentations and papers in various venues, including the Frontiers in Education (FIE) conference. The Chapter is also represented by two members of the Administrative Committee of the Education Society.

Edmundo Tovar (M'94–SM'06) received the Bachelor's and Ph.D. degrees in computer engineering from the Universidad Politécnica de Madrid, Madrid, Spain, in 1986 and 1994, respectively.

He is a computer engineering educator and has worked for five years in private companies as a Knowledge Engineer and in public administration as a Software Engineer. He has been an advisor in quality assurance for several institutions and an expert evaluator in accreditation processes with the Spanish Agency for Quality Assessment and Accreditation (ANECA). He has been involved as a Researcher in software quality management tasks in international projects since 1988. He is also involved with educational projects, managing several of them in the context of the European Higher Education Area for the Spanish Education Ministry. He has served as Control Quality Unit Director in the School of Computer Science, Universidad Politécnica de Madrid, where he is currently Vice Dean for Quality and Strategic Planning.

Dr. Tovar is Chair of the IEEE Spanish Chapter, an at-large member of the Administrative Committee of the IEEE Education Society, and a Certified Software Development Professional (CSDP) in the IEEE Computer Society.

Manuel Castro (M'87–SM'94) received the industrial engineering and Ph.D. degrees from the Industrial Engineering School of the Universidad Politécnica de Madrid (UPM), Madrid, Spain.

He is an electrical and computer engineering educator at the Spanish University for Distance Education (UNED). He works as Researcher, Coordinator, and Director in research projects, from solar system and advanced microprocessor system simulation to telematics and distance learning, acting as Senior Technical Coordinator. He is now Professor and Director of the department and was serving as UNED's Vice Rector of New Technologies and other academic and management positions. He worked for five years for Digital Equipment Corporation as Senior System Engineer. He has authored technical books and articles for journals and conferences as well as multimedia materials.

His doctoral thesis received the Extraordinary Doctoral Award and the Viesgo Award. He is a member of the AdCom of the IEEE Education Society and Founder and past-Chair of its Spanish Chapter.

Gabriel Díaz Orueta (M'03–SM'06) received the Ph.D. degree in physics from the Universidad Autónoma de Madrid, Madrid, Spain, in 1988.

He developed "ab-initio" techniques while at the Universidad Autónoma de Madrid. From 1988 to 1996, he worked for Digital Equipment Corporation, Madrid, in different support and education jobs. From 1996 to 1999, he worked for Global Knowledge as Training Coordinator for different curricula, especially information security courses. In 2006, he founded his own company specializing in information security and communications training and consultancy. Since 2002, he has worked as a Professor for the Spanish Distance University (UNED), teaching several courses and investigating new e-learning methods and their security implications. He is the author of various publications and several books in the fields of information security and electronic design. He has earned Microsoft, Compaq and Cisco information technology certificates and is an ACM Senior Member.

José Ángel Sánchez received the telecommunications engineering degree from Catalonia Polytechnic University, Spain, and has completed a full doctoral program in electric, electronic, and control systems from the Spanish University for Distance Education (UNED).

He is Professor of Networking Computers and Factory Communications Systems at the Professional High School of Talavera de la Reina, Spain. He is also University Expert in Informatic Applications to Management and Automation of Business and Factory for the Spanish University for Distance Education Foundation. He has authored didactic books and tools for professional high schools on quality systems and electronic CAD. He has presented multimedia materials at conferences and awards.

Prof. Sánchez is a member of the Quality Committee in Education (ISO9001) to Quality High Schools Network of Castilla–La Mancha Education Department, Talavera de la Reina, where he also is Information and Communication Technologies Coordinator and Electric-Electronic Department Head. He is Founder and Secretary of the IEEE Spanish Chapter.

Francisco Mur (M'01) received the industrial engineering degree from the ETSII (Industrial Engineering School) of the Madrid Polytechnic University (UPM) and the doctoral engineering degree from the Spanish University for Distance Education (UNED).

He is an electrical and computer engineering educator at UNED. He is a Researcher on different projects, ranging from digital signal processing to control in power quality systems. He is now with UNED as Associate Professor in Electronics Technology within the Electrical and Computer Engineering Department. He has authored a variety of technical books and articles for journals and conferences (national and international).

Dr. Mur received the Extraordinary Doctoral Award in the UNED, and the 1998 and 2000 UNED's Social Council for the Best Didactic Materials in Experimental Sciences.

IV. IEEE Education Society Distinguished Chapter Leadership Award

The 2007 IEEE Education Society Distinguished Chapter Leadership Award was presented to *Carlos Rueda Artunduaga*, "for exceptional contributions to the Society and for leadership in the development of chapters in South America," and *Oliver K. Ban*, "for exceptional contributions to the Society and for leadership in the development of Chapters in China."

Carlos Rueda Artunduaga (S'98–M'03–SM'06) was born in Bucaramanga, Colombia. He received the systems engineer degree and the informatics projects management postgraduate degree (one year Master's) from the Universidad Distrital Francisco Jose de Caldas, Bogota, Colombia.

He is currently Manager of the Web Department at Jorge Tadeo Lozano University, Bogota. He has held several student volunteer positions (Magazine Editor, Webmaster, Branch Chair, Chapter Chair, Counselor Teacher, Chapter Advisor, Mentor) and is currently actively involved in section activities as Membership Development Chair. He is the Computer Society GOLD Coordinator and the Latin American Coordinator of the Education Society. His current main fields of interest are Web engineering and development, free software systems, and engineering management.

Rueda Artunduaga was elected student representative and member of the WIE committee in June 2002 for the creation of the first WIE Student Affinity Group in IEEE history. He also won second place in the IEEE World Wide Web Site Contest in 2001 and third place in 2002. He has also won the Larry K. Wilson Regional Student Activities Award, presented by the Regional Activities Board (RAB). In 2005, he won the RAB Achievement Award "for outstanding leadership, contributions and valued service to the IEEE through coordinating Student and Young Professional Activities," which was presented by the IEEE Regional Activities Board in Rio de Janeiro, Brazil.

Oliver K. Ban (M'02–SM'02) was born in Beijing, China. He received the B.S and M.S degrees in electrical engineering, the Ph.D. degree in computer science, and the M.B.A. degree from University of Texas, Austin.

He is a Senior Scientist at the IBM Corporation, Austin, and also serves as Chief Technologist in ShenZhen, IBM China. He is also an Adjunct Professor at Peking University, Tian Jin University, Sun Ye Shin University and Harbin University of Science and Technology. He has worked in the telecommunication and semiconductor industry for 15 years in such disciplines as computer graphic chip design, digital image processing algorithms development, microprocessor design, serial networking chip design, and 3G wireless chipset design. Along the way, he has taken positions as Design Engineer, Senior Design Engineer, Principal Engineer, Senior Consultant, and Senior Scientist at a variety of companies, including Integrated Information Technology, Sony Research Laboratories, and Synopsys Inc. He has 24 patents under filing. His birth name was Keren Ban. He adopted the "American name" Oliver after a lot of confusing cases of being mistaken as a star female student in an otherwise all-male engineering department.

V. IEEE Education Society Edwin C. Jones, Jr. Meritorious Service Award

The 2007 IEEE Education Society Edwin C. Jones, Jr. Meritorious Service Award was presented to *David V. Kerns*, "for exemplary service to and leadership of the Education Society, for contributions to engineering education, for educational innovation, for textbooks, and for guidance of the Frontiers in Education conference."

David V. Kerns, Jr. (M'71–SM'84–F'91) received the B.S., M.S., and Ph.D. degrees from Florida State University, Tallahassee.

He is the Franklin and Mary Olin Distinguished Professor of Electrical and Computer Engineering at Olin College, Needham, MA, where he served as the Founding Provost and Chief Academic Officer from 1999 to 2007. He recruited the founding faculty and academic staff at Olin College and led the development of the initial curricula and deployment of programs now recognized for their innovation. Previously, he held the Orrin Henry Ingram Distinguished Professorship in the Department of Electrical Engineering at Vanderbilt University, Nashville, TN, where he also chaired the department, directed the Management of Technology Program, and later served as Associate Dean and Chief Academic Officer of the School of Engineering. He has also served on the faculties of Bucknell University, Lewisburg, PA, Auburn University, Auburn, AL, and Florida State University. He established research programs and educational laboratories at each school. He was a member of the technical staff at Bell Telephone Laboratories and has cofounded several successful technology-based companies. In 1985, he coinvented a micromachined accelerometer, and his company produced one of the first commercial single-chip MEMS silicon accelerometers. He is the author of more than 100 technical papers and holds more than 15 patents. He has particular interest in innovation in engineering education as well as entrepreneurship and intellectual property, MEMS, and analog circuit design. He has coauthored two textbooks, *Introduction to Electrical Engineering* and *Essentials of Electrical and Computer Engineering* (Englewood Cliffs, NJ: Prentice-Hall).

Dr. Kerns is past-President of the IEEE Education Society and also served as the Society's Secretary and Vice President. He was the recipient of the IEEE Millennium Award. He served several terms on the FIE steering committee and was General Chair of FIE '92.

VI. IEEE Education Society Hewlett–Packard/ Harriet B. Rigas Award

The Education Society, with the sponsorship of the Hewlett–Packard Company, presents the Harriet B. Rigas Award to an outstanding woman engineering educator in recognition of her contributions to the profession. The 2007 IEEE Education Society Hewlett–Packard/Harriet B. Rigas Award was presented to *Bonnie Heck Ferri*.

Bonnie Heck Ferri (S'86–M'88–SM'03) received the B.S. degree in electrical engineering from the University of Notre Dame, South Bend, IN, in 1981, the M.S. degree in mechanical and aerospace engineering from Princeton University, Princeton, NJ, in 1984, and the Ph.D. degree in electrical engineering from the Georgia Institute of Technology, Atlanta, in 1988.

She has been a faculty member since 1988 at Georgia Tech, where she is currently Professor and Associate Chair for Graduate Affairs. She has also worked in industry for Honeywell Inc. as a Design and Test Engineer. Her research concentrates on embedded control systems, industrial control, and controls education. She has coauthored a junior-level textbook, written a number of papers on controls education, and is most recently active in developing portable experiments for lecture-based courses. She is active in the

recruitment and retention of women in engineering, including middle school, high school, undergraduate, and graduate-level activities.

Dr. Ferri was selected by the ECE senior class for the Best Teacher Award and has received several other campus-wide awards for her teaching, mentoring, outreach, and leadership activities. She has been active in the IEEE Control Systems Society. She was elected twice to that Society's Board of Governors, was the Program Chair for the American Control Conference, and was Chair of the Control System Society Technical Committee on Education. She has held the position of Associate Technical Editor for the IEEE TRANSACTIONS ON EDUCATION and for the IEEE CONTROL SYSTEMS MAGAZINE. She has won several research awards, including the NSF Presidential Young Investigator Award and the 2004 Best Paper Award from the IEEE CONTROL SYSTEMS MAGAZINE.

VII. IEEE EDUCATION SOCIETY MAC VAN VALKENBURG EARLY CAREER TEACHING AWARD

The 2007 IEEE Education Society Mac Van Valkenburg Early Career Teaching Award was presented to *Susan C. Hagness*, "for demonstrating the benefits of a holistic approach to engineering education that emphasizes the human impact of the subject matter with a multifaceted teaching strategy to engage the whole student."

Susan C. Hagness (S'91–M'98–SM'04) received the B.S. degree with highest honors and the Ph.D. degree in electrical engineering from Northwestern University, Evanston, IL, in 1993 and 1998, respectively.

Since August 1998, she has been in the Department of Electrical and Computer Engineering, University of Wisconsin-Madison, where she currently holds the rank of Professor. She is also a Faculty Affiliate in the Department of Biomedical Engineering. She has received national and international recognitions for her research in the area of computational and experimental applied electromagnetics. Her innovations span the undergraduate and graduate curriculum, and her interests include the recruitment and retention of women students in electrical engineering and the development of technology-enhanced learning tools. She is currently leading a college-wide effort to develop a modular undergraduate curriculum on society's engineering grand challenges. While working toward the Ph.D. degree, she was a National Science Foundation Graduate Fellow and a Tau Beta Pi Spencer Fellow. In 2000, she was the recipient of the Presidential Early Career Award for Scientists and Engineers presented by the White House. In 2002, she was named one of the 100 top young innovators in science and engineering in the world by MIT's *Technology Review* magazine.

Dr. Hagness has received numerous teaching awards and recognitions, including the 2003 University of Wisconsin Emil Steiger Distinguished Teaching Award. Her educational research activities have been supported by a National Science Foundation CAREER award. She received the IEEE Engineering in Medicine and Biology Society Early Career Achievement Award in 2004 and the International Union of Radio Science (URSI) Isaac Koga Gold Medal in 2005. In 2007, she received the IEEE Transactions on Biomedical Engineering Outstanding Paper Award.

VIII. FRONTIERS IN EDUCATION CONFERENCE BENJAMIN J. DASHER BEST PAPER AWARD

The Frontiers in Education Conference Benjamin J. Dasher Best Paper Award was presented to *Donna Riley* and *Gina-Louise Sciarra* for their paper "'You're All a Bunch of Fucking Feminists': Addressing the Perceived Conflict Between Gender and Professional Identities Using the Montreal Massacre," presented at FIE 2006, San Diego, CA, October 28–31, 2006, Session S2G.

Donna Riley received the Ph.D. degree in engineering and public policy from Carnegie Mellon University, Pittsburgh, PA, and the B.S.E. degree in chemical engineering from Princeton University, Princeton, NJ.

She is a founding faculty member of the engineering program at Smith College, Northampton, MA, where she teaches thermodynamics, ethics, and global development engineering. Her technical research focuses on risk assessment and communication for chemical consumer products. In 2005, she received a NSF CAREER award for implementing and assessing pedagogies of liberation, based on the work of Paulo Freire, bell hooks, and others, in engineering education. Aspects of these pedagogies that are operationalized in her classroom include connecting course material to student experience, emphasizing students as authorities in the classroom, integrating ethics and policy considerations in the context of social justice, problematizing science as objectivity, and de-centering western (and male) civilization. Her work capitalizes on the intimate, creative, and collaborative environment at Smith College, where intentional learners grow into critical thinkers and reflective actors.

Gina-Louise Sciarra received the B.A. degree in English from Smith College, Northampton, MA, and is working towards the Ph.D. degree in sociology at The Graduate Center at The City University of New York.

She is a primary Research Assistant on a five-year panel study of undergraduate engineering that is funded by the National Science Foundation. She has experience with qualitative and quantitative research methods, with particular expertise conducting interviews and observations, as well as coding ethnographic data. Her areas of concentration are the social construction of identity, the sociology of professions, and stratification and inequality in higher education. Her particular research interest is the effect of competing gender, racial and professional identities on academic and life decisions of engineering students.

IX. FRONTIERS IN EDUCATION CONFERENCE HELEN PLANTS AWARD

The Frontiers in Education Conference Helen Plants Award was presented to *Ruth A. Streveler, Karl A. Smith, and Ronald L. Miller* for the "Best Non-Traditional Session at FIE 2006: Session T2A "What is Rigorous Research in Engineering Education?"

Ruth A. Streveler received the B.A. degree in biology from Indiana University, Bloomington, in 1975, the M.S. degree in zoology from The Ohio State University, Columbus, in 1977, and the Ph.D. degree in educational psychology from the University of Hawaii, Manoa, in 1993.

She recently joined the Department of Engineering Education, Purdue University, West Lafayette, IN, after 12 years at the Colorado School of Mines, Golden, where she was the founding Director of the Center for Engineering Education. She is co-PI on several NSF-funded projects and is currently Acting Director for the NSF-funded Center for the Advancement of Engineering Education, a multicampus project investigating the educational experience of engineering students. Her primary research interests are investigating students' understanding of difficult concepts in science and engineering, and training engineering faculty to conduct rigorous research in engineering education.

Karl A. Smith received the Bachelor's and Master's degrees in metallurgical engineering from Michigan Technological University, Houghton, and the Ph.D. degree in educational psychology from the University of Minnesota, Minneapolis.

He is Cooperative Learning Professor of Engineering Education, Department of Engineering Education, and Fellow, Discovery Learning Center at Purdue University, West Lafayette, IN. He has been at the University of Minnesota since 1972 and is in phased retirement as Morse-Alumni Distinguished Teaching Professor and Professor of Civil Engineering. His research and development interests include building rigorous research capacity in engineering education; the role of cooperation in learning and design; problem formulation, modeling, and knowledge engineering; and project and knowledge management and leadership. He is currently co-PI on an NSF-CLT Center for the Advancement of Engineering Education (CAEE) and co-PI on a NSF-CCLI-ND Rigorous Research in Engineering Education: Cultivating a Community of Practice. He has worked with thousands of faculty all over the world on pedagogies of engagement, particularly cooperative learning, problem-based learning, and constructive controversy. He has cowritten 12 books, including *Cooperative Learning: Increasing College Faculty Instructional Productivity*; *Strategies for Energizing Large Classes: From Small Groups to Learning Communities*; and *Teamwork and Project Management*.

Ronald L. Miller is Professor of Chemical Engineering and Director of the Center for Engineering Education at the Colorado School of Mines, Golden, where he has taught chemical engineering and interdisciplinary courses and conducted engineering education research for the past 20 years. He has received three university-wide teaching awards and has held a Jenni teaching fellowship at CSM. He has received grant awards for education research from the National Science Foundation, the U.S. Department of Education FIPSE program, the National Endowment for the Humanities, and the Colorado Commission on Higher Education. His authored works in engineering education literature have been widely published. He won the Wickenden Award from the American Society for Engineering Education for best paper published in the *Journal of Engineering Education* during 2005.

X. Frontiers in Education Conference Ronald J. Schmitz Award

The 2007 Frontiers in Education Conference Ronald J. Schmitz Award was presented to *Joseph L. A. Hughes*, "for outstanding service to the Frontiers in Education Conference."

Joseph L. A. Hughes (S'78–M'84–SM'94–F'07) received the B.S.E.E. degree from the Illinois Institute of Technology, Chicago, in 1979, and the M.S.E.E. and Ph.D. degrees from Stanford University, Stanford, CA, in 1980 and 1986, respectively.

He is currently Professor and Senior Associate Chair at the School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta.

Dr. Hughes is President of the IEEE Education Society, having served since 2001 as an at-large member of the administrative committee and as a society officer. He was Chair of the ECE Division of ASEE in 2001–02, following terms as Secretary/Treasurer and Vice Chair/Program Chair. He was General Chair for the 2004 Frontiers in Education Conference and Finance Chair for FIE 1995. He is an IEEE alternate representative on the Engineering Accreditation Commission of ABET and a member of the IEEE Committee on Engineering Accreditation Activities. He is a Fellow of ASEE and received the 2005 ECE Distinguished Educator Award from the ECE Division of ASEE. He received an IEEE Computer Society Outstanding Contribution Award in December 2005. He is a member of Eta Kappa Nu, Tau Beta Pi, and Sigma Xi.

XI. ASEE ERM Division Distinguished Service Award

The 2007 ASEE ERM Division Distinguished Service Award was presented to *Daniel J. Moore*, "for contributions to the education of future engineers and their educators, through outstanding service to the ASEE Educational Research and Methods Division."

Daniel J. Moore (S'86–M'87–SM'02) received the Ph.D. degree in electrical engineering (in the area of compound semiconductors growth and device fabrication) from North Carolina State University, Raleigh, in 1989.

He is the Associate Dean of the faculty, Director of Graduate Studies, and Professor in the Electrical and Computer Engineering Department at Rose-Hulman Institute of Technology, Terre Haute, IN. He joined the faculty at Rose-Hulman in 1995 as an Associate Professor of Electrical and Computer Engineering. Prior to joining the faculty at Rose-Hulman he was Assistant Professor at Virginia Polytechnic Institute and State University, Blacksburg, VA, and an Instructor at North Carolina State University, Raleigh. In 1976, he joined the DuPont Corporation, where he worked in various technical, design, and supervisory positions before returning to obtain the Ph.D degree. At Rose-Hulman, he directed the Electrical and Computer Department's senior design program for several years and currently oversees externally sponsored multidisciplinary graduate and undergraduate projects as well as international project teams and collaborations. His current research interests include engineering design methodologies, student learning styles, active/cooperative education and the integration of entrepreneurial concepts and practices throughout the curriculum.

Dr. Moore was the 2001–2003 Chair of the Educational Research Methods (ERM) Division of ASEE and an ABET program evaluator. He was FIE program co-Chair for FIE 1998, 2001, and 2004. He is currently serving a second term as one of the ERM representatives on the FIE steering committee. He was recently appointed an Associate Editor of the online *Journal of Advances in Engineering Education* (AEE), an ASEE publication.

XII. ASEE ECE Division Frederick Emmons Terman Award

The Electrical and Computer Engineering Division of the American Society for Engineering Education, with the sponsorship of the Hewlett–Packard Company, annually presents the Frederick Emmons Terman Award to an outstanding young electrical engineering educator who is the principal author of a textbook. The 2007 Terman Award was presented to *Russel Jacob (Jake) Baker*, "for an outstanding young electrical engineering educator in recognition of his contribution to the profession."

Russel Jacob (Jake) Baker was born in Ogden, UT, on October 5, 1964. He received the B.S. and M.S. degrees in electrical engineering from the University of Nevada, Las Vegas, and the Ph.D. degree in electrical engineering from the University of Nevada, Reno.

From 1981 to 1987, he was in the U.S. Marine Corps Reserves. From 1985 to 1993, he worked for E. G. & G. Energy Measurements and the Lawrence Livermore National Laboratory designing nuclear diagnostic instrumentation for underground nuclear weapons tests at the Nevada test site. During this time, he designed over 30 electronic and electro-optic instruments including high-speed (750 Mb/s) fiber-optic receiver/transmitters, PLLs, frame- and bit-syncs, data converters, streak-camera sweep circuits, micro-channel plate gating circuits, and analog oscilloscope electronics. From 1993 to 2000, he was a faculty member in the Department of Electrical Engineering, University of Idaho, Moscow. In 2000, he joined a new electrical and computer engineering program at Boise State University, Boise, ID, where he was Department Chair from 2004 to 2007. Also, since 1993, he has consulted for various companies and laboratories including Micron Technology, Amkor Wafer Fabrication Services, Tower Semiconductor,

Rendition, Lawrence Berkeley Laboratory, and the Tower ASIC Design Center. He holds over 200 granted or pending patents in integrated circuit design. His research interests are in the areas of CMOS mixed-signal integrated circuit design and the design of memory in new and emerging fabrication technologies.

Dr. Baker is a member of the electrical engineering honor society, Eta Kappa Nu. He is a licensed Professional Engineer and the author/coauthor of the books: *CMOS: Circuit Design, Layout, and Simulation*, *CMOS: Mixed-Signal Circuit Design*, and *DRAM Circuit Design: Fundamental and High-Speed Topics*. He was a corecipient of the 2000 Prize Paper Award of the IEEE Power Electronics Society.

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Susan M. Lord (S'88–M'88–SM'04) received the B.S. degree with distinction in electrical engineering and materials science and engineering from Cornell University, Ithaca, NY, and the M.S. and Ph.D. degrees in electrical engineering from Stanford University, Stanford, CA.

Her teaching and research interests include electronics, optoelectronic materials and devices, service-learning, liberative pedagogy, and first-year engineering courses. From 1993 to 1997, she taught at Bucknell University, Lewisburg, PA. She is currently Professor and Coordinator of Electrical Engineering at the University of San Diego (USD), San Diego, CA. She was awarded NSF CAREER and ILI grants and named the 2004 USD Faculty Woman of Impact. She is currently working on a collaborative NSF-funded Gender in Science and Engineering project investigating persistence of women in engineering undergraduate programs. She has worked at SPAWAR Systems Center, NASA Goddard Space Flight Center, AT&T, and General Motors.

Dr. Lord is a member of the ASEE, SWE, and Tau Beta Pi. She has served on the national administrative boards of the IEEE Education Society and the ASEE Education and Research Methods (ERM) Division. She also served as the General Co-Chair of the 2006 Frontiers in Education Conference and as IEEE Education Society Program Co-Chair for FIE '05. She is a member of the FIE steering committee.