2008 IEEE Education Society Awards and Frontiers in Education Conference Awards

Susan M. Lord, *2008 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 2008, Saratoga Springs, NY, October 22–25, along with their award citations and brief biographical sketches. Similar information was published previously for the 2007 recipients [1], 2006 recipients [2], 2005 recipients [3], and for the 2003 and 2004 recipients along with a listing of the names of earlier recipients [4].

The 2009 awards will be presented at the Frontiers in Education Conference, San Antonio, TX, October 18–21. 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 2008 IEEE Education Society Achievement Award was presented to *James Roberts* "for long-term contribution and sustained dedication to the furtherance of engineering education."

James A. Roberts (F'02) received the B.S., M.S., and Ph.D. degrees in electrical engineering from the University of Kansas (KU), Lawrence; Massachusetts Institute of Technology, Cambridge; and Santa Clara University, CA, respectively.

He joined KU in 1990 following a successful industrial career. He served as Department Chair until 1997 and then served in the University Research Office for almost 10 years, including four years as the KU Senior Research Officer. His research area is wireless telecommunications, and he teaches in this area as well as electric circuits, electromagnetics, and power.

Dr. Roberts has been active nationally in engineering education, including invited talks, papers, and reviews of programs at major universities. He helped form the Central States EE Department Heads Association, serving as President from 1995 to 1996. In 1997, he was elected Secretary/Treasurer and Director of the National EE Department Heads Association (now ECEDHA). He has been a Director of the International Engineering Consortium since 2000. He was a member of the IEEE Education Society Administrative Committee from 1995 to 1998 and has served on the EdSoc Fellow Committee four times. He was one of the EdSoc representatives to the FIE Steering Committee for 11 years and was Chair from 2006 to 2007. He has served FIE in a number of roles, including Conference Program Co-Chair in 1998 and Conference General Chair in 2000, the conference that established the management model used by FIE to this day. He is a registered Professional Engineer.

II. IEEE Education Society Best Transactions Paper Award

The 2008 IEEE Education Society Best TRANSACTIONS Paper Award was presented to *France Bélanger, Tracy L. Lewis, George M. Kasper, Wanda J. Smith,* and *K. Vernard Harrington* for their paper "Are Computing Students Different? An Analysis of Coping Strategies and Emotional Intelligence," *IEEE Trans. Education*, Vol. 50, No. 3, Aug. 2007, pp. 188–196.

France Bélanger received the Ph.D. degree in information systems and decision sciences from the University of South Florida, Tampa, in 1997.

She is a Professor and Alumni Research Fellow in the Department of Accounting and Information Systems at Virginia Tech, Blacksburg. Her research focuses on the use of communication technologies, in particular for distributed work and e-business, and on information privacy and security. She is widely published in the information systems field in such journals as *Information Systems Research*, *MIS Quarterly*, *Communications of the ACM*, *Journal of Strategic Information Systems*, *Information Systems Journal*, various IEEE transactions, and many others. She coauthored two books and is Associate Editor of *MIS Quarterly*. Her work has been funded by several agencies, corporations, and research centers, including the National Science Foundation.

Prof. Bélanger was named a Fulbright Distinguished Chair in 2006 (Portugal) and an Erskine Fellow in 2009 (New Zealand).

Tracy L. Lewis received the Master's degrees in computer science from North Carolina Agricultural and Technical State University, Greensboro, and Virginia Tech, Blacksburg, emphasizing software engineering and human computer interaction, and the Ph.D. degree in computer science from Virginia Tech in 2004.

She is currently an Assistant Professor in the Department of Information Science and Technology at Radford University, Radford, VA. She has industry experience in software design, development, and software production research, serving as a member of the Operator Service Position Systems Department at Lucent Technologies and Principal Research Investigator in the Software Production Research Department at Bell Laboratories.

George M. Kasper received the Ph.D. degree from the State University of New York at Buffalo in 1984.

He is a Professor of Information Systems at Virginia Commonwealth University, Richmond. He is the author of over 50 publications and has consulted for a number of business and government agencies on decision support systems and human–computer interface design and interaction.

Prof. Kasper's work has won several awards. He is Chair of the Special Interest Group on Management Information Systems of the Association for Computing Machinery.

Wanda J. Smith received the Ph.D. degree in organizational behavior and human resource management from the University of North Carolina at Chapel Hill in 1992.

She is a partner in H&S Enterprises, a firm comprised of business skills, system, and support experts specializing in Windows training, network integration, and Internet solutions. She conducts consultant skills training as well as technology diffusion and organizational change seminars in the public and private sectors. She is currently an Associate Professor in the Department of Management at Virginia Tech, Blacksburg, and serves as Principal Investigator for the National Science Foundation-funded PACE Project.

K. Vernard Harrington received the Ph.D. degree in management from Texas A&M University, College Station, in 1991.

He is a partner in the consulting firm H&S Enterprises. He conducts seminars in strategic management, team building, and the management of diversity for both private and public sector organizations. Prior to beginning his academic career, he worked in the computer industry as a Programmer and Sales Manager. He is currently an Associate Professor and Interim Chair of the Department of Management at Radford University, Radford, VA.

III. IEEE EDUCATION SOCIETY CHAPTER ACHIEVEMENT AWARD

The 2008 IEEE Education Society Chapter Achievement Award was presented to the Gulf Chapter, which "*has provided exemplary technical activities, membership services, and societal activities.*" The Chapter officers recognized individually were *Bakr Hassan*, Chair, *Ibrahim M. Elamin*, Vice-Chair, *Jaweed Yazdani*, Secretary, and *Sadiq Sait Mohammed* and *Tareq Y. Al-Naffouri*, Executive Committee Members.

The Gulf Chapter of the IEEE Education Society was formed in April 2007 to extend the success of the IEEE Education Society Saudi Chapter throughout six countries within the Gulf region. The major objectives of the joint chapter are to aggregate the expertise within the Gulf Cooperation Council (GCC) countries to form an influential unit within the IEEE and IEEE's Region 8 and to establish a link between research groups and communities in the Gulf countries toward emerging technologies, which will empower the Gulf's youth. Major Chapter activities include robotics workshops, an Ideas Challenge Contest for college students, and public educational lectures by prominent international and local professionals and scholars. The Gulf Chapter was one of the sponsors of the first International Conference on Technology, Communication, and Education (i-TCE) in Kuwait in April 2008. Finally, a student session track was organized and executed by the Saudi, Gulf, and Student IEEE chapters at the Saudi Technical Exchange Meeting (STEM) that was held April 29–May 1, 2008 at King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia.

Bakr Hassan (SM'06) received the B.Sc. and M.Sc. degrees in mathematics from Arizona State University, Tempe, and the Ph.D. degree in mathematics education in 1979 from the University of Oregon, Eugene.

He is currently the Vice President of Planning and Development at Ahlia University, Manama, the first private university in the Kingdom of Bahrain. He was a Visiting Professor/Scholar at the University of Illinois at Urbana-Champaign; the Department of Applied Mathematics and Theoretical Physics in the University of Cambridge, Cambridge, U.K.; and the Shell Center for Mathematical Education University of Nottingham, Nottingham, U.K. He was a Professor of mathematics at King Fahad University of Petroleum and Minerals (KFUPM) in Dhahran, Saudi Arabia. He was the Chairman of the Mathematical Sciences Department in KFUPM for more than six years. He also established a bilingual preschool in KFUPM, where he was the Chairman of the Board for 13 years. He was a KFUPM representative in many national and International committees. During his work at KFUPM, he was a chairman and member of many standing or ad hoc committees. In 1993, he worked at Saudi Aramco Oil Company in Dhahran, Saudi Arabia. He was initially in charge of the technical training in the area of computer and communications; he later worked in information and technology planning as Technology Consultant. He championed preparing an IT workforce for the future and was in charge of the IT Specialist Development Program. He was a member of the Long Term Comprehensive Plan for Science and Technology Team in Saudi Arabia. He was chosen by the Islamic Educational Scientific and Cultural Organization (ISESCO) in Rabat, Morocco, as the Chairman of the Expert Committee to Develop Mathematics Curriculum for the Muslim Countries at the Intermediate and Secondary Levels and authored seven books for this purpose. He was also selected as a member of the National Committee (Ministry of Education) to review the New Mathematics Texts at elementary and intermediate levels. He has published several books and articles in the area of mathematics education.

Dr. Hassan is an active member in the community. He is the Chairman of the IEEE Education Society in the Gulf/Saudi Arabia. The Saudi Chapter won the best 2006 chapter award for small/medium chapters in Region 8. He is a member of the Saudi Computer Society, where he held several positions. He is also a member of the Arab Thought Forum and the Gulf Development Forum.

Ibrahim El-Amin received the B.Sc. degree in electrical engineering from the University of Khartoum, Khartoum, Sudan, in 1971, and the M.Sc. and Ph.D. degrees in electrical engineering with a specialization in power systems from the University of Manchester, Manchester, U.K., in 1975 and 1978, respectively.

He is a Professor of electrical engineering at the King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia. His research interests include power systems, DC transmission, power electronics, and the integration of alternative energy sources into power networks.

Dr. El-Amin is a recipient of many awards. Among them are the best applied research award, KFUPM, in 1989 and the best academic advisor award at the College of Applied Engineering, KFUPM, in 1992. He received the Prince Mohammad bin Fadh Prize for Applied Research, 1995–1996. He also received the IEEE Third Millennium Medal, honoring members for their outstanding contribution to IEEE activities.

Jaweed Yazdani received the Master's degree in computer science in 1987 from King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia.

He has been Manager of the Computing Services Department at KFUPM since 1994. He has taught in the Information and Computer Science (ICS) Department at KFUPM since 1988. Currently, he teaches Advanced Databases, an ICS senior-level course. He is a member of the IT track team for the Aafaq project for the development of Saudi strategic plan for Higher Education and is a senior team member in the university ERP business and student systems.

Sadiq Sait Mohammed, photograph and biography not available at the time of publication.

Tareq Y. Al-Naffouri received the M.S. degree in electrical engineering from Georgia Institute of Technology, Atlanta, in 1998, and the Ph.D. degree in electrical engineering from Stanford University, Stanford, CA, in 2004.

He was a visiting scholar at California Institute of Technology, Pasadena, from January to August 2005 and during the summer of 2006. He is currently a Fulbright scholar at the University of Southern California, Los Angeles. He has held internship positions at NEC Research Labs, Tokyo, Japan, in 1998; Adaptive Systems Lab, University of California at Los Angeles, in 1999; National Semiconductor, Santa Clara, CA, in 2001 and 2002; and Beceem Communications, Santa Clara, CA, in 2004. He is currently an Assistant Professor in the Electrical Engineering Department, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. His research interests lie in the areas of adaptive and statistical signal processing, their applications to wireless communications, and multiuser information theory. He has over 50 publications in journals and conference proceedings.

Dr Al-Naffouri is the recipient of a best student paper award at the IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing (NSIP) 2001 for his work on adaptive filtering analysis.

IV. IEEE EDUCATION SOCIETY DISTINGUISHED CHAPTER LEADERSHIP AWARD

The 2008 IEEE Education Society Distinguished Chapter Leadership Award was presented to *Bakr Hassan* "for exceptional contributions to the Society over a sustained period of time, which have manifested themselves in the Gulf Chapter," and to *Edmundo Tovar* "for exceptional contributions to the Society over a sustained period of time, which have manifested themselves in the Spanish Chapter."

Bakr Hassan (SM'06) received the B.Sc. and M.Sc. degrees in mathematics from Arizona State University, Tempe, and the Ph.D. degree in mathematics education in 1979 from the University of Oregon, Eugene.

He is currently the Vice President of Planning and Development at Ahlia University, Manama, the first private university in the Kingdom of Bahrain. He was a Visiting Professor/Scholar at the University of Illinois at Urbana-Champaign; the Department of Applied Mathematics and Theoretical Physics in the University of Cambridge, Cambridge, U.K.; and the Shell Center for Mathematical Education University of Nottingham, Nottingham, U.K. He was a Professor of mathematics at King Fahad University of Petroleum and Minerals (KFUPM) in Dhahran, Saudi Arabia. He was the Chairman of the Mathematical Sciences Department in KFUPM for more than six years. He also established a bilingual preschool in KFUPM, where he was the Chairman of the Board for 13 years. He was a KFUPM representative in many national and International committees. During his work at KFUPM, he was a chairman and member of many standing or ad hoc committees. In 1993, he worked at Saudi Aramco Oil Company in Dhahran, Saudi Arabia. He was initially in charge of the technical training in the area of computer and communications; he later worked in information and technology planning as Technology Consultant. He championed preparing an IT workforce for the future and was in charge of the IT Specialist Development Program. He was a member of the Long Term Comprehensive Plan for Science and Technology Team in Saudi Arabia. He was chosen by the Islamic Educational Scientific and Cultural Organization (ISESCO) in Rabat, Morocco, as the Chairman of the Expert Committee to Develop Mathematics Curriculum for the Muslim Countries at the Intermediate and Secondary Levels and authored seven books for this purpose. He was also selected as a member of the National Committee (Ministry of Education) to review the New Mathematics Texts at elementary and intermediate levels. He has published several books and articles in the area of mathematics education.

Dr. Hassan is an active member in the community. He is the Chairman of the IEEE Education Society in the Gulf/Saudi Arabia. The Saudi Chapter won the best 2006 chapter award for small/medium chapters in Region 8. He is a member of the Saudi Computer Society, where he held several positions. He is also a member of the Arab Thought Forum and the Gulf Development Forum.

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

He is a Certified Software Development Professional (CSDP) from the IEEE Computer Society and has worked for five years in private companies as a Knowledge Engineer and in public administration as a Software Engineer. He is an expert evaluator in accreditation processes with the Spanish Agency for Quality Assessment and Accreditation, ANECA, and has been involved as a Researcher in software quality management tasks in international projects since 1988, managing several innovative projects in education in the context of the European Higher Education Area. He is Associate Dean for Quality and Strategic Planning in the Computing School of UPM. In this position, he is in charge of the training for academic staff and the introduction of innovative solutions, including new pedagogues, new approaches that improve student learning of technical and cultural skills, improved methods of blended learning, and others. He is leader of an Innovation Group in Education at UPM that addresses topics such as interactive techniques for learning, learning via discovery or project work, tools for formative and summative assessment, and creation of learning objects. He is the author of more than 40 papers in engineering education.

Dr. Tovar is a member of several program committees, has served as a European Co-Chair for several Frontiers in Education (FIE) conferences, and is a member of the IEEE RITA Editorial Committee. He is Past Chairman of the Spanish Chapter and is an At-Large Member of the Administrative Committee of the IEEE Education Society. He is currently Chair of the Distinguished Lectures Program for the Education Society.

V. IEEE EDUCATION SOCIETY EDWIN C. JONES, JR. MERITORIOUS SERVICE AWARD

The 2008 IEEE Education Society Edwin C. Jones, Jr. Meritorious Service Award was presented to *James J. Sluss, Jr.* "for contributions to the Education Society in program development and financial management."

James J. Sluss, Jr. received the B.S. degree in physics in 1984 from Marshall University, Huntington, WV, and the M.S. and Ph.D. degrees in electrical engineering in 1986 and 1989, respectively, from the University of Virginia, Charlottesville.

He is the Morris R. Pitman Professor and Director of the School of Electrical and Computer Engineering at the University of Oklahoma, Norman. He has been awarded seven U.S. patents, has authored or coauthored over 90 journal and conference publications, and has been principal or coprincipal investigator on over $11 million in sponsored research grants and contracts. His current research interests are in the areas of three-dimensional displays, optical communications, photonics, and intelligent transportation systems.

Prof. Sluss is currently serving his fourth year as Treasurer of the IEEE Education Society. Prior to being elected Treasurer, he served two years as Chair of the society's Finance Committee and has served on the Administrative Committee since 2000. He was the society's Program Co-Chair for FIE 2007. He was Chair of the Benjamin J. Dasher Award Selection Committee for FIE 2002 and served as the Society's representative on that committee for FIE 2003. He served as CD Supplement Editor for the IEEE TRANSACTIONS ON EDUCATION from 1999 to 2001.

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 2008 IEEE Education Society Hewlett-Packard/Harriet B. Rigas Award was presented to *Cheryl B. Schrader.*

Cheryl B. Schrader (SM'97) received the B.S. degree in electrical engineering with high distinction in 1984 from Valparaiso University, Valparaiso, IN, where she was an honors college graduate, and the M.S. and Ph.D. degrees in control systems at the University of Notre Dame, Notre Dame, IN, in 1987 and 1990, respectively.

She became the Dean of Boise State University's College of Engineering, Boise, ID, and Professor of electrical and computer engineering after 20 years of leadership in academia and industry, including McDonnell Douglas Astronautics Company; University of Texas at San Antonio; Rice University, Houston, TX; and Chimera Research. She has authored more than 80 technical publications in the areas of systems and control, robotics, and intelligent systems, with biomedical, networking, and aircraft applications. Her grant and contract funding exceeds $7 million.

Dr. Schrader received the Exemplary Online Course Award from WebCT and was Senior Fellow with the Texas Higher Education Coordinating Board. Other awards include the 2002 Engineering Excellence Award from Steven Myers & Associates for excellence in engineering; 40 Under 40 Rising Stars Award from the *San Antonio Business Journal* for leadership, career success, and community involvement; and the 2005 Idaho Women Making History Award. In 2005, the White House presented her with the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring for an enduring, strong, and personal commitment to underrepresented engineering students and faculty. She currently serves on the Board of Directors for the Discovery Center of Idaho and is an advisor to Highway 12 Ventures. She is Past President of the IEEE Control Systems Society, a professional organization with 9000 members worldwide. For her many contributions to the society, she recently received its Distinguished Member Award. She is a member of five societies of the IEEE, American Society for Engineering Education, and the Society of Women Engineers.

VII. IEEE Education Society Mac Van Valkenburg Early Career Teaching Award

The 2008 IEEE Education Society Mac Van Valkenburg Early Career Teaching Award was presented to *Kathleen E. Wage* "for inspiring classroom instruction and influential leadership in signal processing education research."

Kathleen E. Wage (S'88–M'00) received the B.S. degree in electrical engineering from the University of Tennessee, Knoxville, in 1990, and the S.M., E.E., and Ph.D. degrees in electrical engineering from the Massachusetts Institute of Technology (MIT)/Woods Hole Oceanographic Institution Joint Program, in 1994, 1996, and 2000, respectively.

Since 1999 she has been a faculty member in the Electrical and Computer Engineering Department at George Mason University (GMU), Fairfax, VA, where she is currently an Associate Professor. She has participated in several long-range propagation experiments as a part of the North Pacific Acoustic Laboratory project. In collaboration with John Buck, she has developed the Signals and Systems Concept Inventory (SSCI), a standardized exam designed to measure conceptual understanding of linear systems. As of 2008, instructors at 28 schools have administered the SSCI to over 1800 students. The SSCI project has been funded by the National Science Foundation, first through a grant to the Foundation Coalition and later by the Division for Undergraduate Education's Assessment of Student Achievement program. Her research interests include signal processing, adaptive arrays, and underwater acoustics. In addition to ocean signal processing, she is interested in new pedagogical methods and educational assessment.

Dr. Wage has received a number of research awards and fellowships, including an Office of Naval Research (ONR) Young Investigator Award in 2005 and an ONR Ocean Acoustics Entry-Level Faculty Award in 2002. She was a Tau Beta Pi and Clare Boothe Luce Fellow (1990–1991) and an Armed Forces Communications and Electronics Association Postdoctoral Fellow (1999–2001). In 2004, Dr. Wage was honored with an Outstanding Teaching Award from GMU's Volgenau School of Information Technology and Engineering. As a graduate student, she received the Harold L. Hazen Teaching Award from the MIT EECS department (1994).

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 *Eric Hamilton* and *Andrew Hurford* for their paper "Combining Collaborative Workspaces With Tablet Computing: Research in Learner Engagement and Conditions of Flow," presented at FIE 2007, San Diego, CA, Session T3C.

Eric Hamilton is Professor and Associate Dean of Pepperdine University's Graduate School of Education and Psychology, Los Angeles, CA, and currently teaches in the Mathematics Department. He is currently one of the Principal Investigators for an National Science Foundation (NSF) Phase-III Course, Curriculum, and Laboratory Improvement (CCLI) project and for a Department of Education and NSF-funded project on learning environments that blend collaborative spaces, avatars, digital libraries, and tablet computers. The Dasher Award paper reports work completed under Microsoft Research funding to the U.S. Air Force Academy and carried out in the Academy's mathematics classrooms, where he was a Research Professor and Director of the Center for Research on Learning and Teaching. Prior to that, he was a Division Director at NSF. In recent years, he has organized a set of international Distributed Learning research symposia held in China, Singapore, Germany, and east Africa under funding from NSF and Microsoft Research.

Andrew Hurford received the Ph.D. degree in science and mathematics education from the University of Texas at Austin.

His research involves modeling human learning as a complex adaptive system and development of next-generation technologies for teaching and learning. Trained as an experimental research physicist, he is now applying that knowledge to modeling and exploring applications of nonlinear systems in learning and teaching. His current efforts include design-based research that focuses on both the theoretical and practical connections between complexity and learning as well as applications of technology for education. He is a liaison between the University of Utah's College of Education and College of Science, Salt Lake City, in support of the new Center for Science and Mathematics Education. He is dedicated to improving the quality of education at K–16 levels by helping students better understand their own learning trajectories as well as helping preservice and in-service teachers to become more capable science and mathematics educators. He also works to support American Indian students in all phases of their education.

IX. Frontiers in Education Conference Helen Plants Award

The Frontiers in Education Conference Helen Plants Award was presented to *Maura Borrego, Lynita Newswander,* and

Lisa McNair for the "Best Non-Traditional Session at FIE 2007: Session S2F Applying Theories of Interdisciplinary Collaboration in Research and Teaching Practice."

Maura Borrego received the M.S. and Ph.D. degrees in materials science and engineering from Stanford University, Stanford, CA.

She is an Assistant Professor of engineering education at Virginia Tech, Blacksburg. Her current research interests center around interdisciplinary collaboration among faculty and graduate students.

Prof. Borrego was awarded a CAREER grant from NSF in 2006 to study interdisciplinarity in engineering graduate programs nationwide. She was awarded the best paper award in 2008 from the American Educational Research Association's Division I, Education in the Professions.

Lynita Newswander received the Master's degrees in English and political science from Virginia Tech, Blacksburg. She is currently a Ph.D. student in the School of Public and International Affairs at Virginia Tech.

Her current research interests are interdisciplinary and reside at the intersection of theory and the empirical aesthetic. She is especially attracted to the study of interdisciplinary graduate education and understanding how to make it most meaningful for students.

Lisa McNair received the B.A. degree in English from the University of Georgia, Athens, and the Ph.D. in linguistics from the University of Chicago, Chicago, IL.

She is an Assistant Professor of engineering education at Virginia Tech, Blacksburg, and Codirector of the VT Engineering Communication Center (VTECC). She is co-PI on several National Science Foundation-funded projects that explore issues of learning, practicing, and teaching interdisciplinarity in university and industry settings. Her teaching emphasizes the roles of engineers as communicators, the foundations and evolution of the engineering education discipline, documenting undergraduate research, and assessing communication in engineering. Her primary research interests are communication and interdisciplinary collaboration, institutional structures that encourage transformational learning, and integrating engineering, the social sciences, and the humanities.

X. FRONTIERS IN EDUCATION CONFERENCE RONALD J. SCHMITZ AWARD

The 2008 Frontiers in Education Conference Ronald J. Schmitz Award was presented to *Ted E. Batchman* "for outstanding service to the Frontiers in Education Conference."

Ted E. Batchman (LF'06) received the B.S.E.E., M.S.E.E., and Ph.D. degrees from the University of Kansas, Lawrence, in 1962, 1963, and 1966, respectively.

He worked four years in the aerospace industry and has taught at the University of Queensland, Australia; University of Virginia, Charlottesville; University of Oklahoma, Norman; and the University of Nevada, Reno. He is currently Founding Director of the Renewable Energy Center at the University of Nevada, Reno. He has been a Department Chair and Dean of Engineering for the past 20 years.

Dr. Batchman is a recipient of the IEEE Third Millennium Medal, IEEE Education Society 1998 Achievement Award, IEEE Education Society 2000 Meritorious Service Award. He was program Co-Chair of FIE 2000 and General Chair of FIE 2001. He has served on the FIE Steering Committee for the past six years and was Chair of the FIE Steering Committee in 2007–2008. He is a past member of the IEEE Education Activities Board (EAB), Past Chair of the EAB Pre-college Education Committee, a member of the IEEE Education Society Administrative Committee, and was editor-in-chief of the IEEE TRANSACTIONS ON EDUCATION from January 1997 to January 2001. He is a member of Eta Kappa Nu and Tau Beta Pi and a fellow of the American Society for Engineering Education.

XI. ASEE ERM DIVISION DISTINGUISHED SERVICE AWARD

The 2008 ASEE ERM Division Distinguished Service Award was presented to *Teri Reed-Rhoads* "for contributions to the education of future engineers and their educators, through outstanding service to the ASEE Educational Research and Methods Division."

Teri Reed-Rhoads received the Bachelor's degree in petroleum engineering from the University of Oklahoma, Norman, in 1985 and spent seven years in the petroleum industry, during which time she earned the M.B.A. degree from the University of Texas of the Permian Basin, Odessa, and received the Ph.D. in industrial engineering from Arizona State University, Tempe, in 1999.

She is the Assistant Dean of the College of Engineering for Undergraduate Education, Director of the First-Year Engineering Program, and Associate Professor of the School of Engineering Education at Purdue University, West Lafayette, IN. She joined the faculty of the University of Oklahoma in 1999 and became Director of Engineering Education in 2003 and Associate Dean for Engineering Education in 2005. She joined the Purdue faculty in 2006 as Executive Director of the Institute for P–12 Engineering Research and Learning (INSPIRE). Her teaching interests include engineering statistics, assessment, quality engineering, and introductory freshman engineering courses. Her research interests include statistics education, concept inventory development, assessment and evaluation of learning and programs, recruitment and retention topics, diversity, equity, and P–12 engineering education. She has received funding from a number of National Science Foundation programs, the Department of Education, various foundations, and industry.

Prof. Reed-Rhoads has won several teaching and education awards, including the Brandon H. Griffith Teaching Award, Frontiers in Education New Faculty Fellow, an Oklahoma Educators' Leadership Academy Outstanding Professors Participant, and a Committee on Institutional Cooperation (CIC) Academic Leadership Program Fellowship. She is an active participant in the American Society for Engineering Education (ASEE), the American Educational Research Association, and the IEEE as well as a member of the Institute of Industrial Engineers and the American Statistical Association. She is an ABET program evaluator through ASEE. She served the Educational Research Methods (ERM) Division of ASEE as Secretary-Treasurer from 2004 to 2008. She was the program Chair for ERM for the 2004 ASEE Annual Conference.

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 2008 Terman Award was presented to *Keith M. Chugg* "for an outstanding young electrical engineering educator in recognition of his contribution to the profession."

Keith M. Chugg received the B.S. degree with high distinction in engineering from Harvey Mudd College, Claremont, CA, in 1989 and the M.S. and Ph.D. degrees in electrical engineering from the University of Southern California (USC), Los Angeles, in 1990 and 1995, respectively.

During the 1995–1996 academic year, he was an Assistant Professor with the Electrical and Computer Engineering Department at the University of Arizona, Tucson. In 1996, he joined the Electrical Engineering Department at USC, where he is currently a Professor. His research interests are in the general areas of signaling, detection, and estimation for digital communication and data storage systems. He is also interested in architectures for efficient implementation of the resulting algorithms. He is a cofounder of TrellisWare Technologies, Inc., where he is Chief Scientist. Along with his former Ph.D. students, A. Anastasopoulos and X. Chen, he is coauthor of the book *Iterative Detection: Adaptivity, Complexity Reduction, and Applications* (Boston, MA: Kluwer, 2000).

Prof. Chugg has served as an Associate Editor for the IEEE TRANSACTIONS ON COMMUNICATIONS and was Program Co-Chair for the Communication Theory Symposium at Globecom 2002. He received the Fred W. Ellersick award for the best unclassified paper at MILCOM 2003.

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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 as well as three other NSF grants. 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 is the current President of the IEEE Education Society. She 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.