

**IEEE RELIABILITY SOCIETY ADCOM ELECTION**  
**For a Three-Year Term: 1 January 2012 - 31 December 2014**

**SCOTT ABRAMS** (S'79-M'83-SM'08) is the founder (1984) and president of The Omnicon Group Inc., Hauppauge New York, one of the nation's leading engineering firms specializing in software, systems, reliability, safety and test equipment engineering. Scott received his B.E. in Electrical Engineering from the State University of New York at Stony Brook (1980) and a M.S. in Electrical Engineering from Polytechnic Institute of New York University (1984). He is a licensed Professional Engineer in New York State (1984) and a member of the IEEE for almost 30 years. In 2011 and 2010 Scott was a member of the conference team and chaired the Publicity Committee for the IEEE Reliability Society's 2011 International Conference on Prognostics and Health Management. In 2011 Scott also successfully continued to add revenue to the Society as the Advertising Business Manager for Publications of the IEEE Reliability Society - a position he has held continuously since 2004. In 2008 Scott served as Assistant Treasurer for the IEEE Reliability Society. In 2007 Scott was a member of the IEEE Reliability Society Executive Committee serving as Vice President of Membership. During his term as Vice President of Membership and in partnership with Stony Brook University, College of Engineering and Applied Sciences, Scott was Symposium Coordinator for an all-day student and industry outreach entitled, Developing Highly Reliable and Trustworthy Products and Systems. The outreach featured thirteen presentations by experts in various reliability disciplines and was well received by attendees, presenters, the Society, and the University. From 2002 through 2007, and 2009 through 2011 Scott was a member of the Society's Administrative Committee where he provided successful business experience and knowledge to solving challenges facing the IEEE Reliability Society.

For over 25 years, Scott has helped companies improve their products by performing reliability analyses, reliability improvement studies, safety analyses and fault analyses. He has personally improved the reliability of systems and equipment used by the military and space, medical device, information technology, communications, transportation, and advanced commercial electronics industries. Dubbed "Mr. Reliability" by the Long Island Business News and "The Gizmo Doctor" by the New York Times, Scott's most proud citation is the "Reliability Engineer of the Year" award he received in 2001 from his peers at the IEEE Reliability Society. Additional honors Scott has received include: 2011 Inducted into Long Island Technology Hall of Fame as Long Island Technology Entrepreneur and Rising Technology Leader; 2010 Stony Brook University "Distinguished Alumni" Award.

**Statement:** Membership in the IEEE Reliability Society is decreasing and the Society must attract younger members if it is to stay viable into the future. I believe I can continue to assist the Society in this regard. In addition, I feel that my receipt of several prestigious awards and honors strengthens my position as a role model and spokesperson for our profession. If re-elected, I will also continue my work as Advertising Business Manager to increase Society revenue by securing new advertisers and developing new advertising models for our publications. I will also continue to be active in the Society's technical activities, and provide guidance in the development and implementation of short and long term strategic business initiatives.

**MOHAMED ABUALI** (M'11) is a Postdoctoral Research Fellow at the NSF Industry/University Cooperative Center (I/UCRC) on Intelligent Maintenance Systems (IMS) at the University of Cincinnati, Ohio. The vision of the IMS Center is to enable products and systems to achieve and sustain near-zero breakdown performance, and ultimately transform the traditional maintenance practices from "fail and fix" to "predict and prevent" methodology. Dr. AbuAli manages and leads the center's industry-driven research projects with global IMS member companies in a variety of industry segments including automotive, semiconductor, military and defense, renewable energy (wind and solar), and others. The IMS Center currently has about 30 active industry members. In addition, Dr. AbuAli manages research activities of the center including writing and submitting proposals to NSF, DOE and other agencies, as well as publishing the center's research activities in academic journals and conferences. Dr. AbuAli also helps manage the Intellectual Property of the center and is a co-inventor on several patents. Dr. AbuAli has broad international experience and has traveled to, lived in, and worked with companies in Germany, Japan, Taiwan, China, and Singapore. Dr. AbuAli's field of research is in the design and implementation of prognostics and health management (PHM) methodology and techniques for effective predictive maintenance and innovative service business. He has a Ph.D. in Industrial Engineering from the University of Cincinnati. He is also a Project Management Professional (PMP), a Six Sigma Green Belt (SSGB) and a Certified Quality Engineer (CQE). He is an active member of several professional societies including IEEE, ASQ, IIE, APICS, and others. Specialties: Advanced Manufacturing, Prognostics and Health Management (PHM), Product-Service Systems (PSS).

**Statement:** I would like to become an AdCom member to further promote all aspects of reliability, locally and globally. I have prior and extensive professional and academic experiences in working with local and global industries, giving presentations and keynote speeches at prominent conferences, publishing in high-impact journals, reviewing journal publications, providing training to academic and industry audiences, as well as managing research activities that includes proposal writing, intellectual property management, publications, and event hosting and management. I am active in the Prognostics & Health Management (PHM) community for over 5 years and am quite interested in promoting PHM activities and sharing my knowledge within the society. I would like to participate in and contribute to the Prognostics & Health Management (PHM) area of the Reliability Society. This includes but not limited to fundamentals of PHM, design techniques, algorithms and technical details, as well as application of PHM in real-world industrial applications. I would like to help promote the role of PHM as the future of reliability and would like to help integrate PHM with other existing specialties in the Reliability Society from device/sensor-level to system-of-system level. In addition, I am interested to participate in training activities as well as outreach activities, locally and globally.

I am very interested in promoting new opportunities for applying PHM in renewable energy applications (wind and solar) as well as electric vehicle battery applications using new data storage/transfer mechanisms such as cloud computing. I would like to expand the Reliability Society activities to include a topic on “PHM for Innovative Business Models and Service Business” that will utilize PHM methodology and techniques to establish business models and product-service frameworks built on data mining and artificial intelligence techniques. Can we use PHM to generate profit? Yes, you can.

**PIERRE DERSIN** (M’11) was born in Belgium in 1953, obtained his Ph.D. in Electrical Engineering in 1980 from the Massachusetts Institute of Technology (MIT) after receiving a Master’s degree in O.R. in 1976, also from MIT. He worked in the late seventies on reliability of large electric power networks, as part of the Large Scale System Effectiveness Analysis Program sponsored by the US Department of Energy, from MIT and Systems Control Inc., and later joined FABRICOM (Belgium and head of U.S subsidiary), where he was involved with fault diagnostic systems for factory automation.

Since 1990 with ALSTOM Transport, he has occupied several technical and managerial positions, mainly involved with RAMS and Maintenance, including R&D Program Manager of the Service Business, and is now RAM Methods & Tools Director and RAM Operations Director in ALSTOM Transport’s Information Solutions (i.e. railway signalling and communication) product line. In that capacity he defines the strategy of that division of ALSTOM in reliability, availability, maintainability (RAM) and is responsible for its enforcement worldwide (i.e., France, Belgium, Italy, Spain, Canada, USA, Brazil, India, China).

P. Dersin’s job also includes building cooperative R&D programs with universities (currently in France, Italy, Sweden, USA). He has contributed a number of communications and publications in IEEE conferences and journals (including the 2008, 2009, 2010, 2011 RAMS Symposia and MMR 2009), in the fields of RAMS, automatic control and electric power systems. He was the chairman of UNIFE’s (Union of European Railways Manufacturers) LCC/RAM working group in 1998-2001. He is an associate editor of the *International Journal of Performability Engineering*. Also, he is a Technical Program Committee Chairman of the 41st ESREDA Seminar, on “Advances in Reliability-based Maintenance Policies”, La Rochelle, October 2011 and teaches a courses on Probability & Statistics applied to Reliability, at University of La Rochelle, France.

**Statement:** With more than 30 years of experience in the reliability area (both in academia and industry), on both sides of the Atlantic, I think I would be able to contribute positively to IEEE-RS’s drive for increased globalization, through my international experience and connections. Knowledge of several languages (French, Spanish, Italian, Russian, Dutch) can be an asset in that context. Also, throughout my career I have often worked on “bridging the gap” between university and industry through establishing cooperative programs. In my opinion, closer cooperation between those two worlds is key to continued progress. I would like to be involved with Technical Activities, Publications, and Conferences.

**IRVING ENGELSON** (S’55-AM’57-SM’73-F’93-LF’96) received his BS(EE) Magna Cum Laude (Polytechnic Institute, Brooklyn), MS (Rutgers University), and Ph.D. (EE) (Worcester Polytechnic Institute). He specialized in statistical communication theory, nonlinear systems and random signal theory. His research included statistical systems analysis and reliability. He was elected as a full member of Sigma Xi – the research honorary society. Irv was an NSF Faculty Research Fellow and did research at the Princeton Neuropsychiatric Institute where he studied the electrical activity of the brain, and pharmacological reliability.

Irv is a Life Fellow of the IEEE Reliability Society, with about 30 years of continuous society membership. He is Principal of Isinglee Associates - a Strategic Planning Function. Irv is a past-president of the IEEE Engineering Management Society; and has served as a member on the IEEE Board of Directors and on all IEEE major boards, and some society AdComs, including the Reliability Society AdCom member in 2008-2010. He chaired numerous IEEE Committees with distinction.

Dr. Engelson has held leadership and executive positions in industry, academe, and the not-for-profit sector. Irv has served as a University Full Professor and College Dean; has lectured on six continents; has given testimony on international technology transfer to an US Congressional Committee; speaks seven languages and served as a linguist with the US Army; held elective positions in IEEE, AAAS, ASEE, and the Eta Kappa Nu Board of Directors; Affiliate to the United Nations Economic and Social Council; Member, State of NJ Higher Education Master Planning Committee; and Member, Omaha NE Chamber of Commerce Free Enterprise Task Force.

Engelson was elected to several academic and scientific organizations and is the recipient of many recognitions, awards, and honors. He is the second non-Russian to be named an Honorary Member of the Russia Popov Society; holds honors from the IEEE Board of Directors, IEEE Technical Activities Board, Computer Society, Engineering Management Society, the Systems, Man, and Cybernetics Society, and others. The Engineering Management Society named him Engineering Manager of the Year. His memberships include Eta Kappa Nu, Tau Beta Pi, Sigma Xi, and the NY Academy of Science. Irv was an NSF Faculty Research Fellow.

Irv is particularly experienced in IEEE governance issues, and is the only IEEE member who held the position of IEEE Presidential Advisor and IEEE Parliamentarian. Engelson is an IEEE Fellow.

**Statement:** When I finished my 2008-2010 term on the Reliability Society AdCom, I declared that I want to take the next year off and not run for reelection. Now after a one year break, I am delighted to have been invited to submit my credential for another term. During my previous term I served as Coordinator of our Distinguished Lecturer Program, and developed a set of operational rules to assure quality and accountability in this area. If elected I intend to use my extensive knowledge of IEEE operations and broad management experience to help optimize the society operations, particularly in the membership and administrative areas. My previous research in neuro-psycho-pharmacology may be useful to the society's new interest in the life sciences area. If elected I will have the needed time to accomplish all my obligations.

**MASOUD GHAFFARI (S'05-M'11)** is a Lead Reliability Engineer at GE Aviation practicing reliability for improving legacy and new jet engines and service contracts. Previously, he was a Research Assistant Professor at the University of Cincinnati and Associate Director at the National Science Foundation Industry/University Cooperative Research Center (NSF I/UCRC) for Intelligent Maintenance Systems (IMS). The IMS Center is the largest industry driven research consortium in the area of Prognosis and Health Management (PHM) in collaboration with more than 40 paying member companies including GE Aviation, Procter & Gamble, Parker Hannifin, EATON, Ingersoll Rand, Nissan, Toyota, GM, Goodyear, Caterpillar, Chevron, Boeing, Siemens, etc. Masoud has served as full time expert consultant for P&G and has directed several projects sponsored by the National Science Foundation and a number of companies including GM, P&G, Parker Hannifin, Goodyear, GE, etc.

He is a registered Professional Engineer, Certified Reliability Engineer, Six Sigma Green Belt, and Project Management Professional. His academic background includes BS in Electrical Engineering from Isfahan University of Technology, MS in Systems Engineering from Amirkabir University of Technology and PhD in Industrial Engineering from the University of Cincinnati.

Masoud has served as a reviewer for a number of journals and conferences including *IEEE Transaction on Neural Networks*, *Journal of Manufacturing Systems*, *Journal of Mechatronics*, and *WCEAM*. His other synergetic activities include mentoring high school teachers, undergraduate students, and middle school teachers and students in their research experience.

**Statement:** It is my pleasure to serve as AdCom member of the Reliability Society contributing to the advancement of reliability discipline and products. As a reliability engineer in Aviation industry I am involved with, and passionate about, reliability methods, tools, standards, and challenges every day. Serving as an AdCom member is in line with my daily work which enables me to devote time and energy to the society. In addition, with a multidisciplinary educational and work background, and expertise in Prognostics and Health Management, I will be able to assist the society in moving towards the complementary topics such as PHM. I have collaborated with more than 40 companies in the last five years and will continue reaching out to different groups to support the society activities. I would like to contribute to new RS focus areas including life sciences and PHM. I was a member of IEEE Engineering in Medicine and Biology society and have published a number of papers on topics such as perception based robotics, engineering immune systems, and human factors. In addition, my previous experience as associate director of the largest industry/university consortium on PHM, IMS, would enable me to contribute to RS efforts on PHM.

**CAROLE GRAAS (M'11)** is a Senior Technical Staff Member with IBM's Systems and Technology Group, in charge of Reliability Strategy for the Microelectronics Division. She earned a Ph.D. in Materials Science from Colorado School of Mines in 1989, where she currently also holds a Research-Associate Professor appointment in Metallurgical and Materials Engineering. During her career in technology development successively with Texas Instruments, Siemens Microelectronics, Infineon Technologies and IBM, both in the US and in Europe, she accumulated extensive experience driving technology introductions through a variety of reliability and qualifications engineering and management responsibilities. She holds patents and has published extensively in the fields of chip multilevel metallization process and reliability integration, and chip qualifications. Her current interests focus on developing effective methodologies to optimize the manufacturability and reliability of nanotechnologies. Over the course of her many assignments supporting and developing several IEEE conferences, she has been the Technical Program Chair ('04), General Chair ('06) and Chairman of the Board of Directors ('07) of the IEEE International Reliability Physics Symposium. She completed her early academic education in France, holding a B.S. Degree from the University of Paris, an M.S. Degree from the University of Orléans, and a Diplôme D'Ingénieur from the Polytechnic Engineering School of Orléans.

**Statement:** I am looking forward to serve on the IEEE RS AdCom because this Society is uniquely positioned to support the multidisciplinary professional vitality of members across a wide range of industries, and academic and research institutions. The development of well-rounded reliability experts is key to all of today's advanced technologies, from software to hardware, and components to systems. As a new member of the IEEE RS AdCom, I will dedicate my combined technical, management and volunteer experience to develop new, and energize existing Society programs, ensuring alignment with the needs of our membership for resources and skills that gives them the competitive edge in all aspects of reliability that their professional endeavors require. I have a strong interest in collaborative activities in the emerging fields of nanotechnologies, including task forces, focus groups and networks for both students and professionals, and managing meetings/conferences for sustained growth. I also have an interest in leveraging the RS's outstanding potential for membership growth thanks to the multidisciplinary nature of reliability. Hence I would like to help the RS expand on its role as one of the most dynamic, innovative and forward-looking societies of the IEEE, in particular, by strengthening its presence and recognition on campuses across the world. The RS can aim to become the professional society of choice for many graduating students entering new academic, research, and industrial careers.

**SAMUEL J. KEENE** (M'66-SM'76-F'95-LF'05) is an independent consultant and a Six Sigma Senior Master Black Belt. He teaches Black Belts and Green Belts, mentors Black Belt projects and certifies new Black Belts. When Sam was at Seagate, he executed at least two major cross-functional projects each year. Sam also led Seagate's Master Black Belt Council, comprising the leading MBB's at each Seagate location, worldwide. This council promotes best practices, develops and organizes tools and procedures and promotes cross-organization project facilitation. He was one of 13 Six Sigma professionals participating with the ASQ developing the Body of Knowledge for the Black Belt certification exam.

Dr. Keene is a Recognized International Resource in the R & QA field. He is a Past President of the IEEE Reliability Society and received the 1996 "Reliability Engineer of the Year" Award. He received the IBM Outstanding Contribution award for his multimillion dollar savings through failure analysis activities. The ASQ presented Sam the Allan Chop award in 1999. He has also been recognized with the Outstanding Education Award from the Reliability Society. He holds the office of Fellow of the IEEE, for his technical accomplishments, and is the recipient of the IEEE 2000 Medallion Award. He produced eight video tutorials on different aspects of "Software Development", "Reliability", and "Concurrent Engineering" and he has published over 150 technical papers and book chapters. He is listed in "Who's Who in the United States". He was invited to participate with the ASQ Six Sigma body to develop the Six Sigma body of knowledge for the Black Belt Certification exam.

Dr. Keene has worked or consulted with Bendix Radio, NASA, IBM, Loral, Lockheed Martin, Storage Technology Corporation, Hughes Aircraft, Raytheon, and Seagate Technologies. Sam's strengths are a broad technical background, strong technical network, and excellent people and project facilitation skills. Dr. Keene has also taught at George Washington University, Prairie View A&M, and the University of Colorado. Plus he has taught numerous short courses on time management, creativity, problem solving, delegation, transformational leadership, as well as on reliability topics. Dr. Keene is currently the Secretary of the IEEE Reliability Society and serves on the IEEE Technology Management Council Board of Governors.

**Statement:** I want to build society synergy with our diverse set of skills and interests, and better engage our membership in society initiatives. My areas of interest include:

Six sigma, software reliability, system reliability, requirements development, security, system safety, in particular, and all other assurance areas in general.

**PRADEEP LALL** (S'90-M'93-SM'08) is the T. Walter Professor in the Auburn University Department of Mechanical Engineering. He is the Director of NSF CAVE3 Electronics Research Center at Auburn University. His research areas are in electronic reliability, prognostics, material constitutive behavior, nano-composites, failure mechanisms, life prediction models, and explicit dynamics. He is author and co-author of two-books, thirteen chapters, and more than 270 journal and conference papers. He is a member of the National Academies Panel on Electronics Vehicle Controls and Unintended Acceleration. He is a fellow of the American Society of Mechanical Engineers (ASME), recipient of the Samuel Ginn College of Engineering Senior Faculty Research Award, and a Six-Sigma Black-Belt in Statistics. He is the recipient of three Motorola Outstanding Innovation Awards, and five Motorola Engineering Awards. Dr. Lall is an Associate Editor for *ASME Journal of Electronic Packaging* and the *IEEE Transactions on Components and Packaging Technologies*. Previously, he has served as the Associate Editor for *IEEE Transactions on Reliability* and *IEEE Transactions on Electronics Packaging Manufacturing*. He is the founding faculty advisor for the SMTA Student Chapter at Auburn University. He has served as the General Chair of the ASME Congress in 2010. He is a member of the ASME Congress Steering Committee. He earned the B.E. degree from the University of Delhi, the M.S. and Ph.D. degrees from the University of Maryland, and the M.B.A. degree from the Kellogg School of Management at Northwestern University.

**Statement:** I would like to grow the focus areas of Prognostics Health Management (PHM) and Electric Vehicles (EV). I am a current member of the RS AdCom for the 2010-11 period. In this role, I have been very active in organization of tutorials at the PHM 2011 conference which was held in Denver, June 20-23, 2011. In all 8-tutorials were presented in two-parallel sessions over the first day of the conference. The tutorials had strong technical content and were very well attended and received. In addition, I have presented -technical papers, one-tutorial and chaired the PHM design techniques and algorithms track. I have been working with Dennis Hoffman and Bob Loomis for development of the PHM focus area for the IEEE Reliability Society. Specific areas include development of a special section on PHM in the *IEEE Transactions on Reliability* and the development of *Transactions on PHM* with an online presence. I have written the PHM section of the *IEEE Reliability Society Newsletter*.

I am also the Reliability Society representative for the Electric Vehicle Conference. In the role of a member of the AdCom, I would like to work on Reliability Society expansion in the area of Prognostics Health Management (PHM) and Electric Vehicles (EV). My strategic focus will be development of Technical Activities (TA) committees, PHM technical journal, and the subject area of electric vehicle reliability. I plan to serve in the role of Guest Editor for the 2-Special Sections on PHM in 2011-12. I would like to develop the newly approved special sections on PHM in *IEEE Transactions on Reliability* into an *IEEE Transactions on PHM* for the Reliability Society. I will reach out to industry, government agencies and the student community to bring in key-leaders and future contributors in these areas through conferences at high-organization levels both nationally and internationally will be help in these strategic initiatives. I would also like to work with the PHM Conference Team to grow the PHM 2012 conference. Currently, I am actively involved with the planning of the IEEE Reliability Society's PHM Conference 2012 in the roles of tutorial chair and publications and conference technical teams. My current role as Walter Professor and Director of the NSF Center for Advanced Vehicle and Extreme Environment Electronics (CAVE3) coupled with industry experience, positions me as a contributor for enhancing the strategic areas of reliability and PHM for electronics in the IEEE Reliability Society. CAVE3 Center is NSF's national center of excellence in harsh environment electronics at Auburn University and is supported by 25 member companies and government agencies.

**PHILLIP A. LAPLANTE** (M'86-SM'90-F'08) is Professor of Software Engineering at Penn State's Great Valley Graduate Professional Center. He conducts research and teaches in the areas of software and systems engineering, project management, and software testing and security. Before Penn State, Phil was president of a small, two-year technical college, an academic dean for a community college, department chair of the Mathematics and Computer Science Department for liberal arts college and a faculty member.

Prior to his academic career Phil spent several years as a software engineer and project manager working on avionics, computer aided design and software test systems. He currently serves on the Board of Directors for a medium-sized highway infrastructure company and has served on the advisory boards for several high technology startup companies.

He has authored or edited 27 books and has published more than 200 scholarly papers. Recently, he was named by the National Council of Engineering Examiners to Chair the committee that will develop the examination, which will be used nation-wide to license Professional Engineers in the practice of Software Engineering.

Phil has been a member of the IEEE for more than 25 years and an IEEE volunteer for more than 20 years. He has served on various IEEE committees pertaining to publications, digital libraries, continuing education and finance. He is completing his first full term as a member of the Reliability Society AdCom, and has served as chair of the Fellows Committee for the Society.

Dr. Laplante received his B.S., M.Eng., and Ph.D. in Systems Planning & Management, Electrical Engineering, and Computer Science, respectively, from Stevens Institute of Technology and an MBA from the University of Colorado. He is a Fellow of the IEEE and SPIE. He is a licensed professional engineer in Pennsylvania and a Certified Software Development Professional.

**Statement:** I would like to continue to serve the AdCom by using my experiences on many IEEE committees, both large and small, and to continue to help guide the Reliability Society through an important time of global economic challenges. I believe that expanded delivery of webinars, lectures, other scholarly content and virtual meetings will extend the reach of the society, provide more valuable services to members and attract new members. I have considerable experience in these areas, both within and outside of the IEEE, and I intend to help lead in these efforts for the Reliability Society.

As a current AdCom member I have provided my expertise in IEEE publications matters to assist the Society in publications strategy, have served as the Society's representative to the Biometrics Council, have participated in the Smart Grid and Cloud Computing initiatives and have served as the Chair of the Society's Fellows Committee for three years. Before joining the Society's AdCom I assisted the Reliability Society in partnering with the Computer Society to create *Security & Privacy Magazine* (I was IEEE Periodicals Chair at the time).

If elected to the AdCom, I would like to continue to be involved in publications and in the Smart Grid and Cloud Computing initiatives and I would like to lead an initiative to expand the society's online community presence.

**LYNWOOD (WOODY) RABON** (M'11) is retired from the Department of the Army and is currently a Senior Independent Assessment Engineer working for ManTech, Inc. supporting the Safety and Mission Assurance Directorate at the Kennedy Space Center (KSC).

His prior positions include:

- Associate PM for R&D programs and Chief Engineer for the Department of Defense (DOD) Project Manager for Mobile Electric Power (PM-MEP).
- Chief, Belvoir Division, Intelligence, Electronic Warfare and Sensors Directorate and Product Integrity and Production Engineering Directorate, Communications and Electronics Command, US Army Materiel Command
- Director, Product Assurance and Engineering Directorate and Chief Engineer, Belvoir Research, Development and Engineering Center, Aviation and Troop Support Command, US Army Materiel Command

Woody's professional society participation includes:

- Member of the RS team working on development and implementation of the new RS website
- Chairman, Board of Directors, 49th Annual Reliability and Maintainability Symposium (RAMS)
- General Chairman, 48th Annual Reliability and Maintainability Symposium
- Chair, Reliability Division, ASQ
- Chairman, Electronics and Communications Division of ASQ
- President, International Society of Reliability Engineers (SRE)
- Deputy Director, Region 11, ASQ
- Chairman, Electronics Division, ASQC
- Webmaster, Electronics and Communications Division, American Society for Quality
- Co-webmaster, International Society of Reliability Engineers

Mr. Rabon earned a MS in Industrial Engineering and Operations Research (IE&OR) from Texas A&M University and a BS in Mechanical Engineering from the University of South Carolina.

**Statement:** Over the past 35 years both professionally and through voluntary activities, I have focused on Reliability, Maintainability and Quality in my career. I have gained significant experience in leadership in voluntary organizations and hands-on experience at getting things done. In particular I have extensive experience in pioneering the use of electronic media and internet accessible communications and operations in RAMS, the ASQ and the SRE. I believe that my extensive experience both professionally and in volunteer organizations will allow me to contribute effectively to the AdCom. If elected I will be pleased to serve the Reliability Society in any area where assistance is needed.

**REX A. SALLADE** (M'10) has performed twenty seven years in military and commercial hardware and software engineering design and management and eight years in U.S. Air Force avionics electronics maintenance. Rex Sallade has been involved in the development and application of test, diagnostics and prognostics technology for more than 27 years. During that time, he has participated in the development of several industry standards, including the IEEE 1149.1 test bus standard which is in widespread use throughout the world, and Mil-Std-2084, the Integrated Diagnostics standard, which represented systems engineering across the breadth of diagnostic technology and its application throughout the system life cycle. Rex has been directly involved in the development of many systems in use today and in development to be fielded in the near future, including the F-35 Joint Strike Fighter and the CH-53K Heavy Lift Helicopter. On both the F-35 and the CH-53K, Rex was the Chief Systems Engineer and IPT manager for aircraft Prognostics and Health Management. Previous to his work on the F-35, Rex was the manager of the Diagnostic Test Group at Texas Instruments and Raytheon Electronic Systems, responsible for managing the development of technology, processes and methodology related to integrated diagnostics hardware and software and the use of those technologies and processes in support of defense and commercial systems development. Rex has been actively engaged in the engineering community, encouraging and supporting the development and application of technology and processes to improve the understanding of test and diagnostics and their effect on system reliability, availability, and life cycle cost. Rex served as the Technical Program Chair for the annual National Defense Industrial Association Systems Engineering conference for 7 years. He has chaired and participated in industry forums, workshops and studies on testability, diagnostics and prognostics. Rex served as the General Chairman for the 2011 IEEE Reliability Society Prognostics and Health Management Conference. Rex has published a number of papers, participated in panel sessions, and chaired paper sessions in IEEE, NDIA and SAE conferences.

Throughout his career, Rex has worked to extend the technology and engineering processes to improve the quality, reliability, and cost/value of systems through the effective application of diagnostics, prognostics, and health management techniques.

Rex has a Bachelors degree in Computer Science from Indiana University and a Certificate in System Engineering from California Institute of Technology.

**Statement:** I would like to become an AdCom member to support growth of the Reliability Society and help ensure that we fully realize the benefit of integrating Diagnostics, Prognostics, and Health management in the design, development and evaluation of the operational and life cycle reliability of systems. As an engineer who has worked in the testability, diagnostics, and prognostics field for nearly 30 years I am well prepared to help bring the associated processes and technologies to the Society and AdCom for consideration and integration into the overall improvement of system reliability science and I am interested in participating in Reliability Society conferences, publications, standards and seminars. I have significant experience in several of those areas, and some experience in all of them.

**SHIUHPYNG WINSTON SHIEH** (S'85-M'91-SM'00) received his M.S. and Ph.D. degrees in electrical and computer engineering from the University of Maryland, College Park, respectively. He is a professor and the past chair of the Department of Computer Science, National Chiao Tung University (NCTU), the Director of Taiwan Information Security Center at NCTU, and was a visiting professor of UC Berkeley, 2003-2004, 2005-2006. He has served as Advisor to the National Security Council of Taiwan Presidential Office, the Chair of Malware Forum of NICCST, Director of GSN-CERT/CC, Advisor to National Information and Communication Security Task Force, and Advisor to National Security Bureau. He was the former President of Chinese Cryptology and Information Security Association (CCISA), one of the leading security organizations in Asia.

He has been actively involved in IEEE Reliability Society where he serves as Editor-in-Chief of *IEEE RS Newsletter*, AdCom member, Associate Editor of *IEEE Trans. on Reliability*, Program Chair of 2012 IEEE Software Security and Reliability (SERE), and the Chair of IEEE Reliability Society Taipei/Tainan Chapter. During his term as the chapter chair, the chapter received the best chapter award from both the Reliability Society and the IEEE Taipei Section (among the 41 chapters in TS), respectively. In addition, Dr. Shieh is an ACM SIGSAC Awards Committee member, and the associate editors of *IEEE Trans. on Dependable and Secure Computing*, past associate editors of *ACM Trans on Information and System Security*, *Journal of Computer Security*, *Journal of Information Science and Engineering*, *Journal of Computers*, and the guest editor of *IEEE Internet Computing*, respectively. He has been on the organizing committees of many conferences, such as the Steering Committee Chair and Program Chair of ACM Symposium on Information, Computer and Communications Security (AsiaCCS) which he founded.

Dr. Shieh is an experimentalist. He (along with Virgil Gligor of Carnegie Mellon University) invented the first US patent in the intrusion detection field, and has published over 150 technical papers, patents, and books. Recently he received the ACM Distinguished Scientist Award, one of the 41 recipients worldwide in 2010. He also received ACM Service Award for his contribution to ACM, and Distinguished Information Award (presented by Taiwan Vice President) for his contribution to computer security research. This is the highest honor awarded to computer scientists in Taiwan.

**Statement:** As the Internet and mobile applications grow rapidly, I observe the increasing need to integrate reliability and security technologies into the design and development of better hybrid schemes, to protect our critical information infrastructure. With my background in network reliability and software security, I can help bridge reliability and security to develop Trustworthy Systems. At the Adcom level, I feel I can better contribute to society publications and technology activity initiatives, and engage our membership. During the years as the chairs of IEEE and ACM conferences, and the president of Chinese Crypto and Information Security Association, I maintained close contact with many research institutes worldwide, especially in Asia. This will be a valuable liaison to the Reliability Society Adcom. If elected, it will be a great honor for me to assist the president as well as the AdCom committee, and continue to make contribution to IEEE Reliability Society. My areas of interest are: Reliability and security hybrid mechanisms, network and system security, and software program behavior analysis.

**NIHAL SINNADURAI** (SM'86-F'99) is already active in IEEE UK&RI and Region 8: (1) The Chapter committee has delivered a number of Chapter activities annually, (2) He has established and works with a strong industry team in UK&RI Section, and (3) He has worked with R8 colleagues to develop an increased relevance to the interests of the engineering community.

His main IEEE positions held with dates are:

1. IEEE CPMT committee UK&RI since 2001
2. Chairman Reliability & CPMT UK&RI 2004-
3. Industry Relations Officer (IRO) UK&RI 2004-
4. Region 8 Industry Relations Sub-committee (IRSC) 2005-
5. Chairman-Elect UK&RI Section 2010-2011
6. Executive Chair, IEEE Electronics System-Integration Technology International Conference 2008
7. IEEE Distinguished Lecturer, 2008-

**Statement:** Nihal believes that professional institutes must serve the members and keep this at the forefront of their thinking. He is a volunteer and activist within IEEE with a clear motivation to do his best and persuade and lead others to do their best to serve the members and to work to improve the service provided by IEEE to the members.

Any team is only as good as the service it delivers to its members and the community at large. So, he will work with the colleagues in RS AdCom to engage with members and deliver activities required by our IEEE RS members globally. Among these, the team must:

1. Establish an ethos of delivering activities and information to IEEE members in RS worldwide to ensure members get value for their membership and are kept informed.
2. Work to help IEEE RS be more international.
3. Support worthy members in elevation to Senior Member and Fellow of IEEE
4. Work within the IEEE RS to steer it to serve rebalance its activities towards industry.
5. Work with other AdCom and Region leaders and consult with IEEE industry members at large to improve the relevance of IEEE activities and services for practical professionals in Industry and to improve and make relevant the Academia-Industrial relationships.
6. Establish active co-operation with other national institutes on events – i.e. serve the customers.
7. Work with publications committees to make the publications timely and also more relevant and timely. Nihal is already very active in IEEE UK&RI and Region 8.