

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY ELECTION

Election of Members to the Administrative Committee for a Four-Year Term
1 January 2015 - 31 December 2018

NUCLEAR MEDICAL AND IMAGING SCIENCES (Vote for One)

MAGNUS DAHLBOM (S'84-M'87-SM'97) Magnus Dahlbom, Ph.D., is currently a Professor in the Ahmanson Biological Imaging Clinic and the Ahmanson Translational Imaging Division of the Department of Molecular and Medical Pharmacology at the David Geffen School of Medicine at UCLA. He is the faculty graduate adviser in the Biomedical Physics Graduate program where he is teaching classes in Nuclear Medicine Imaging and Instrumentation. In 1983 he joined the IEEE and the NPSS as a student member and is currently a senior member. He has served several terms on the NMISTC between 1995 and 2008 and was chairing this committee from 2004 to 2005. He was the Deputy MIC chair for the 1995 and the 2007 Nuclear Science Symposium and Medical Imaging Conference. He has been a regular active participant in this meeting since 1983, has served on the program committee since the 1995 and is an active reviewer for the *IEEE TNS* and other medical imaging journals. His research interests are in nuclear medicine imaging and instrumentation.

Statement: I have been actively involved in the IEEE NSS and MIC conferences and related activities since the mid-90s. With my experience in committee work for the NMISTC I have a good insight into the organization of the NPSS society. The consistent high quality and success of the NSS and MIC are to a high degree the results of the voluntary committee work of the members NMISTC and the support these activities receives from the AdCom of the NPSS. The increased international involvement in the organization of the conferences in recent years is very exciting and is an effort that I will continue to support. If elected as a representative to the AdCom, I will do my best to represent the NMISTC, support and speak for the interest of its members to ensure that our conferences and educational activities will maintain a high status within the medical imaging community.

STEVEN MEIKLE (M'96-SM'00) is the Professor of Medical Imaging Physics at the University of Sydney and Head of the Imaging Physics Laboratory at the Brain and Mind Research Institute (BMRI). He received his Ph.D. from the Graduate School of Biomedical Engineering, University of New South Wales in 1995. He was a medical physicist at Royal Prince Alfred Hospital in Sydney from 1987-2004, a visiting research associate at the Division of Nuclear Medicine and Biophysics, UCLA School of Medicine from 1991-2 and a post doctoral research scientist at the MRC Cyclotron Unit in London from 1995-6, before joining the University of Sydney in 2004. He is best known for his contributions to the development of quantitative emission computed tomography and small animal imaging. He has published 7 book chapters and 165 research papers which have attracted more than 3,600 citations (h-index 31). He has served on the Nuclear Medical and Imaging Sciences Council (secretary and chair of awards sub-committee 2004-9) and the Radiation Instrumentation Steering Committee, organised IEEE short courses and workshops and was Deputy General Chair of the 2013 Nuclear Science Symposium, Medical Imaging Conference and 20th International Workshop on Room Temperature Semiconductor Detectors. He is a senior member of the IEEE, a fellow of the Australian Institute of Physics and an Editorial Board member of *Physics in Medicine and Biology*.

Statement: Throughout my career I have benefited enormously from the generosity of the IEEE medical imaging sciences community. I see membership of the Nuclear and Plasma Sciences Society (NPSS) Administrative Committee (AdCom) as a further opportunity to serve our scientific community. My previous roles on the Nuclear Medical and Imaging Sciences Council and NSS-MIC-RTSD conference organising committees have given me insights into our needs in relation to conference finances, awards, membership and journal management, as well as the importance of our relationship with the radiation instrumentation technical committee. If elected to the NPSS AdCom, I will use my experience to advocate for policies and resources that ensure the continued vibrancy and sustainability of our conference, journals and membership, especially as we continue to experience significant growth in the Asia-Pacific region.

TIMOTHY (TIM) TURKINGTON (M'95) is an Associate Professor in Radiology in the Duke University Medical Center with additional appointments in Biomedical Engineering and Medical Physics. He received his bachelor's degree in Physics and Mathematics from DePauw University in 1982. He received his Ph.D. in Physics from Duke University in 1989, working in experimental particle physics (direct photon and charmonium production at Fermilab). He then entered nuclear medicine imaging as a post-doc at Duke, working on quantitative SPECT of I-123, In-111, and At-211. Since 1993 he has worked in the Duke PET facility. His research has included PET and PEM instrumentation, quantitative corrections for PET and SPECT, and image reconstruction. He has also collaborated with investigators using PET for oncologic, cardiac, and neurologic research. He has trained post-docs, graduate students (PhD and MS) and undergraduates in PET research. He has 86 peer-reviewed publications. He currently serves as Director of Graduate Studies of the Duke Medical Physics Graduate Program.

Statement: I have participated in the Nuclear Science Symposium and Medical Imaging Conference every year since 1991, either in person or through a trainee. I have been an IEEE and NPSS member for 20 years. I have benefitted greatly from the MIC meeting and from IEEE journals in which the presented material is published. The MIC has remained a unique opportunity to exchange new information about nuclear emission imaging with academic, industrial, and lab-based colleagues. I am honored to be a nominee to serve this community as an NMIS representative on the AdCom. As the MIC has increased in size and scope, I believe it has become particularly important to retain a focus on emission-based imaging and the technologies that are relevant to it. I am committed to working for the success of the MIC and our community in general by promoting our interests within the NPSS leadership. These interests include maintaining a viable and focused MIC, journals that will reach the widest possible audience, encouraging young scientists and engineers, recognizing the efforts more established members, and, of course, ultimately improving healthcare.

PARTICLE ACCELERATOR SCIENCE AND TECHNOLOGY (Vote for One)

STEPHEN MILTON (M'04-SM'13) completed his PhD in accelerator physics in 1989 at Cornell University, but his initial involvement in the field of accelerators and lasers began in 1980 with an internship at Crocker Nuclear Laboratory on the University of California, Davis campus. He is currently a Professor of Electrical and Computer Engineering at Colorado State University where he and his colleagues have established an R&D and education program in Accelerator and Beam Science and Technology. His 33+ years of experience has allowed him to work in a variety of settings--industry, national laboratories, academia, and in Europe--providing him a unique view of the field. His employment background also includes stints at Sincrotrone Trieste (Director of FERMI@Elettra Project), Argonne National Laboratory (Senior Scientist, ANL Director of LCLS Project, Lead of LEUTL FEL project, Accelerator Physics Group Leader, 7-GeV Booster Synchrotron Ring Manager), Paul Scherrer Institute (Post Doctoral Fellow), and Bell Laboratories (Senior Technical Associate). He is an IEEE NPSS Particle Accelerator Science and Technology Prize winner, a senior member of the IEEE, a member and fellow of the American Physical Society, and a member of the Directed Energy Professionals Society.

Statement: Since their inception particle accelerators have had a tremendous impact on the world and this impact will certainly grow with our vivid imagination and skills. It is with this record of the past and the hope of future impact that propels me to run for election as the PAST-TC representative of the IEEE AdCom. Particle accelerators and the ancillary systems that are a part of them consist of many technologies tightly linked to the expertise exhibited by the IEEE. The wide variety of areas that IEEE represents make it an ideal home for much of accelerator science and technology, but I feel we can still become more tightly integrated with IEEE and thus capitalize further on their ability to support us and further our field. We must innovate, produce, and teach, but we must also promote our field so that we obtain the resources to continue this work. The IEEE AdCom is an ideal platform for such promotion. If elected I will support, serve, and ensure a thriving accelerator science and technology community, one that fosters training, innovation, and production, and I would be honored to serve as your PAST-TC AdCom representative.

ALAN TODD (M'92-SM'01) received an Honours "First" in Aeronautical Engineering from Bristol University, England in 1970. He performed his graduate work at Columbia University, New York, completing a PhD in Plasma Physics in 1974. Accepting an appointment at Princeton University, he studied the MagnetoHydroDynamic stability of plasmas before moving to Grumman Corporation in 1979. From 1985 on, his research interests evolved from plasmas to accelerator physics. He was the Chief Scientist for the SMDC CWDD and NPBSE Neutral Particle Beam programs. In September 1998, through a leveraged buyout, a group of former Northrop Grumman employees established Advanced Energy Systems (AES), Inc. He is the program manager for AES DOD, Security and FEL programs including the Fritz-Haber-Institut FEL project. Alan is the Co-President and a Director of the company. He is the author of more than 140 technical publications, a Senior Member of IEEE and a Fellow of the American Physical Society.

Statement: IEEE membership is not particularly widespread in the PAST community, resulting in compromised influence within the Society. This in turn makes the group less effective in serving its members. It has been some years since I served on the NPSS AdCom committee and I need to refresh my knowledge of PAST operation. However, it is clear we need to develop where IEEE NPSS membership adds value for our members and promote that value to increase the membership. It is a difficult time for Particle Accelerator Science and Technology worldwide, and particularly in the United States where program and funding contraction continues to occur. It is precisely in this climate that an organization such as IEEE needs to work for its members. I hope that I can assist in taking some small steps in this direction.

RADIATION EFFECTS (Vote for One)

STEVEN S. MCCLURE (M'06) is the Technical Group Supervisor of the Radiation Effects Group at the Jet Propulsion Laboratory, California Institute of Technology. Steve received his B.S. in Physics from the California Polytechnic State University, San Luis Obispo, and did his graduate work in nuclear physics the Department of Applied Science, UC Davis/Lawrence Livermore National Laboratory. He joined the Jet Propulsion Laboratory in 2000. Prior to taking the position of group supervisor, Steve has been the lead radiation effects engineer and electronic parts manager for several JPL projects including the Jupiter Icy Moons Orbiter, Phoenix Lander, Grace Follow-on. Further, he has been the task manager for Radiation Mitigation for the Europa Jupiter System Mission, and is presently the task manager for the JPL NASA Electronic Parts and Packaging (NEPP) Radiation Effects task. Prior to joining JPL, he performed radiation effects analysis at the device and system level for a variety of programs having natural space and/or nuclear weapon radiation environments including MilStar, B2, Advanced EHF, and DirecTV, among many others. He has authored/co-authored over 40 papers on radiation effects in semiconductor devices and holds a patent for radiation hardening technique for CMOS microcircuits. Steve also works extensively in the radiation community; he has served the IEEE Nuclear and Space Radiation Effects Conference as Finance Chair (2014), Short Course Chair (2011), Poster Session Chair (2009), Hardness Assurance Session Chair (2007), and was selected to serve as Local Arrangements Chair (2016). He has also served as technical session chair for the Radiation and its Effects on Components and Systems (RADECS) conference (2009, 2012).

Statement: When I began working in the radiation effects community more than 30 years ago I quickly found the Nuclear and Space Radiation Effects Conference (NSREC) to be an invaluable resource for knowledge in the field and the ideal venue for forging highly productive collaborations. I have been proud and honored to serve in several capacities in the Nuclear and Space Radiation Conference committees and hope to continue to do so. I would be honored to serve on the NPSS AdCom, and, if fortunate enough to be selected, I hope continue to support and foster diversity in NPSS membership, participation and conference attendance internationally, across government agencies, universities, and industry. I would further strive to maintain the technical quality of NSREC and its relevance to the present day and future challenges and opportunities in our industry. Also of high importance to myself, I would work to ensure that NSREC continues to inspire and to develop the experts of the future, as well as continue to foster collaboration across government, academia, and industry. If elected, I would be honored to serve dutifully as a member of the NPSS AdCom and a representative of the radiation effects community.

JONATHAN A. PELLISH (S'04-GSM'05-M'08) received his B.S. in Physics as well as his M.S. and Ph.D. in Electrical Engineering from Vanderbilt University between 2004 and 2008. During his graduate school career, where he focused on radiation effects in microelectronics, Jonathan was selected as an IBM Fellow and worked at the IBM Austin Research Laboratory investigating radiation effects in a 45 nm SOI CMOS process. In 2008, Jonathan became an aerospace engineer at the NASA Goddard Space Flight Center in the Flight Data Systems & Radiation Effects Branch. His areas of expertise span radiation effects in highly-scaled CMOS processes, flight project radiation hardness assurance, and Federal contracting. Jonathan is currently an associate branch head and contracting officer's representative, which requires him to carry both technical and managerial responsibilities. He provides radiation hardness assurance support to a variety of flight projects in all phases of development, conducts radiation effects research with multiple organizations, supervises and develops a portion of the branch's civil servants, and provides technical oversight for a large electrical engineering support contract. Jonathan has been an IEEE member since 2003 and is active in the Nuclear and Space Radiation Effects Conference (NSREC), the Single-Event Effects Symposium, and the European Conference on Radiation Effects on Components and Systems. Jonathan is the Finance Chair for the 2015 NSREC. He has presented a NSREC Short Course (2012), received NSREC Outstanding Paper Awards in 2009, 2010, and 2013, and has published over 50 peer-reviewed journal articles.

Statement: I began work in the radiation effects community a relatively short time ago. However, this community has become my home in addition to being a fantastic group of professional colleagues. Ever since I attended my first IEEE Nuclear and Space Radiation Effects Conference (NSREC) in 2006, I knew that I wanted to volunteer for a larger role in the radiation effects community. As an NPSS AdCom member, I will use my strong professional connections, my passion for radiation effects research, and my practical flight project radiation hardness assurance experience to grow and improve the international radiation effects community. Through my experience as a Federal manager and young engineer, I am acutely aware of the widening age and knowledge gaps in our community. I want to work to address this through conscious succession planning and student recruitment efforts. Our community does amazing work and offers a multidisciplinary experience second-to-none – two qualities that make it an attractive choice for young engineers. I will grow relationships with our domestic and international colleagues, maintain current priorities, and develop additional agenda items that will allow the NPSS and the radiation effects community to be productive and relevant into the next decade. If elected, I would be honored to serve as a member of the NPSS AdCom as a dedicated representative of the radiation effects community.

RADIATION INSTRUMENTATION (Vote for One)

RALF ENGELS (M'97-SM'12) is a member of the detector group at the Forschungszentrum Jülich in the Central Institute of Engineering, Electronics and Analytics, ZEA-2. His basic fields of research are the development, construction, and operation of advanced detector systems for thermal neutrons. After his study in electronic design at the Aachen University of Applied Sciences, he wrote his diploma thesis in the detector group (1994).

Following his degree, he worked as a staff engineer in this group and with other departments. In addition to the neutron detector developments he was involved in designs for biological detector systems and medical systems such as the TierPET (Animal PET) system. He has close collaborations with companies and Universities who are working in the nuclear instrumentation field. His activities also include the design of detector readout electronics and DAQ systems. He earned his PhD from the Albert Ludwigs University Freiburg in 2012 in the field of neutron detectors.

Since 2004, he has been the head of the "Neutron and Gamma Detector" group. One of his main tasks now is the development of He-3 alternatives for the Six Anvil Press for High Pressure Radiography and Diffraction to be installed at the research reactor FRM-II in Munich. Since 2000, Ralf has additionally been working as an expert for the International Atomic Energy Agency (IAEA), giving training courses and going on expert missions in the nuclear instrumentation field worldwide. He taught a semester at Aachen University in 2012 and is a lecturer at the Summer School on Neutron Detectors and Related Applications: NDRA-2014.

Statement: I have been interested in IEEE activities for many years and have attended the IEEE Nuclear Science Symposium and Medical Imaging Conference since 1995. At the conference, I especially appreciate the chance to meet experts from various fields like radiation detection and instrumentation fields, medicine and others. This combination together with discussions with company representatives during the conference, short courses and workshops are a perfect environment for a professional growth.

The IEEE/NPSS has been successful in bringing people together from different scientific areas and different countries. Nevertheless, I believe we need a stronger link between EU and USA. The link has been able to bring the NSS-MIC conference to Europe four times. In helping to achieve this goal I served as Conference Coordinator in 2008, Dresden, Germany, Treasurer for 2010 Knoxville, and treasurer for 2011 Valencia, Spain, the Workshop Chairman for 2012 conference, Anaheim, 2013 as Co Local Arrangement Chair in Seoul, Korea and selected to be the Conference Coordinator for the 2015 conference, to be held in San Diego, USA. In 2013 – 2014, I served on the RISC committee for the second time. In 2012 until 2013, I was Joint Oversight Subcommittee (JOS) and I will be on the committee as past chair until end of 2015.

I have been a reviewer of the IEEE Transactions on Nuclear Science (TNS) since 1999. I was one of the conveners for the 2003 & 2013 IEEE Nuclear Science Symposium and served in various meetings as session chair. Since 2002, I have been a member of the Conference Information and Promotion (CIP) Steering committee.

If elected to the NPSS AdCom, I intend to work with the committee members to support the continued growth of our society by promoting the participation of professionals from around the world in our meetings and publications. I also look forward to working with the committee to improve the meaningful participation of students in our activities and at our meetings.

MICHAEL FIEDERLE (M'06)

Lecturer and Professor for Material Science at the Albert-Ludwigs-University Freiburg
Head SG Material Characterization & Detector technology at FMF
Head Detector-Lab at the Institute for Synchrotron Radiation ISS of the
Karlsruher Institute of Technology KIT

Technical Activities/Interests

- Development of radiation detectors for spectroscopic systems
- Development of spatial resolving detector systems using pixel detectors and the Medipix electronic
- Responsible scientist for the FMF in the Medipix3 Collaboration from CERN
- Crystal growth of semiconductors CdTe, CdZnTe and scintillators SrI2
- Material characterization by optical, electrical and chemical methods

Service to the Technical Community

- Member of RITC committee since 2012
- Co-Chair for RTSD Workshop at the NSS-MIC Conferences in 2006, 2008, 2010 and 2012.
- Member of Steering Committee RTSD for IEEE NSS-MIC conferences since 2006
- Member Scientific Boards of FP7 projects (e.g., COCAE, LACX, REWARD)
- Panel and Invited Speeches (e.g., MRS, IEEE-RTSD, SPIE, IW_oRiD, ICCG)
- Conference and Program Committees (MRS, ICCG)

Professional Honors

- Room Temperature Semiconductor Detector RTSD Award at NSS-MIC Meeting in Knoxville in 2010
- BMBF Award for innovative Medical Instrumentation (2007)

Statement: For more than 20 years I have been active in the research for radiation detectors. Since 2001 I have been attending the IEEE Nuclear Science Symposium NSS and Medical Imaging Conference MIC. This meeting and the strong connection to NPSS are an excellent opportunity for the interdisciplinary discussion between international scientists and researchers in the important field for radiation detection. The possibility of the election for RITC Representative for Administrative Committee (AdCom) of the NPSS is an important chance to support the scientific community and the organization of future meetings for international collaborations in the field of detector development and technology. Emerging subjects of recent developments require an active role in the Administrative Committee.

PAUL LECOQ (M'03-SM'13) has received his diploma as Engineer in Physics Instrumentation at the Ecole Polytechnique de Grenoble in 1972, under the leadership of Nobel Laureate Louis Néel. After two years of work at the Nuclear Physics laboratory of the University of Montreal, Canada, he got his PhD in Nuclear Physics in 1974. Since then he has been working at CERN in 5 major international experiments on particle physics, two of them led by Nobel Laureates Samuel Ting and Carlo Rubbia. His action on detector instrumentation and particularly on heavy inorganic scintillator materials has received a strong support from Georges Charpak. He has been the technical coordinator of the electromagnetic calorimeter of the CMS experiment at CERN, which played an important role in the discovery of the Higgs boson.

Member of a number of advisory committees and of international Societies he is since 2002 the promoter of the CERIMED.NET initiative (European Center for Research Research in Medical Imaging) for networking physics and medicine in the field of medical imaging. He has been awarded an ERC advanced grant in 2013 by the European Research Council. He has been elected in 2008 member of the European Academy of Sciences.

Main positions:

Elected Member of the European Academy of Sciences (2008)

Senior Physicist at CERN (European Organization for Nuclear Research), Geneva, Switzerland (diplomat status)

Technical coordinator of the European FP7 EndoTOFPET-US project

PI of the ERC (European Research Council) project TICAL (Time Imaging Calorimeter)

Statement: My scientific education and a large part of my career have been driven by a strong interest in multidisciplinary. This is the reason for my participation to almost all the NSS-MIC conferences, which open the floor to scientists of different disciplines, all contributing to the development of radiation detectors for a large variety of applications. I have served several times in the RISC and NMISC committees and I am an active member of the JOC committee since its creation. Being a member of the ADCOM would be a fantastic opportunity for me to better focus my action for NSS/MIC in the general context of IEEE. If elected I would like to contribute to keep, and possibly further improve, the quality and the reputation of this conference. As a European having promoted with some colleagues the enlargement of the conference to other continents I also would like to reinforce the European and Asiatic partnership, so that this conference becomes THE WORLD EVENT not to be missed every year.

The increasing success of the NSS-MIC series requires however to continuously adapt the strategy to match new demands from the application domains with the continuous technological progress. A number of questions will have to be solved in the next years. Just to cite a few:

- should the conference fight for an ever increasing number of oral or poster presentations, as was the case in the previous years?
- should we on the contrary raise the acceptance threshold and be more strict on the scientific level, novelty, avoid redundancy, etc...?
- how to better normalize the refereing system?
- how to raise the TNS impact factor?

One subject of particular interest for me is related to the NSS-MIC-RTSD complementarity and overlap. The joint sessions are more and more playing a pivotal role in the conference. The possibility for these three communities to get together is one of the richness of the conference. But the world is evolving fast and efforts should be made to keep at the high level this interdisciplinarity in the future.

MAXIM TITOV (AM'03-M'04-SM'11) is a staff scientist at the CEA Saclay (since 2007), the French Atomic Energy Commission. He received his PhD from the Institute of Theoretical and Experimental Physics (ITEP), Moscow in 2001, having carried out research in high energy physics (HEP) at the Deutsche Electron Synchrotron (DESY), Hamburg. During more than 20 years of working in HEP, he has been involved both in the development of novel detector technologies and analysis of physics data from collider experiments, within large collaborations in the international research centers. Since the beginning of his carrier, he contributed to the HERA-B Experiment at DESY (Hamburg), D0 Experiment at Fermilab (Chicago), ATLAS, CMS Experiments and RD51 Collaboration at CERN (Geneva), and International Linear Collider Project. Dr. Titov followed a large variety of projects from conceptual design through construction, assembly, system integration to commissioning and maintenance of complex instrumentation systems. He is an author of more than 600 publications, including review papers and monographs on modern detector technologies. An important component of his experience includes management of large scientific collaborations. In 2008 Dr. Titov was elected as the spokesperson of the RD51 collaboration at CERN "Development of Micro-Pattern Gaseous Detectors", which consists of 84 Universities and Research Laboratories world-wide.

Dr. Titov is a Senior IEEE member since 2011. He is actively involved in the NPSS through participation and organization of the annual IEEE NSS/MIC Conference (since 2002). Dr. Titov has served twice as a Deputy NSS Program Chair (2003 and 2008), NSS Program Chair (2012) and will serve as the General Chair of the 2016 IEEE NSS/MIC/RTSD Symposium in Strasbourg, France. He was elected twice as the member of the Radiation Instrumentation Steering Committee (2007-2009 and 2012-2014) and is the Deputy Chair of the IEEE NPSS Trans-National Committee.

Statement: The IEEE NPSS has been a very important part of my research and career development. If elected to the AdCom, I will exert my best efforts to strengthen the global importance of the NPSS community with a special attention towards NSS/MIC meetings to be held outside of the USA. I'll strongly encourage interdisciplinary communications between radiation detection instrumentation and medical imaging fields, and strive to enhance international cooperation and participation in the NSS/MIC. I would strongly attract and support young scientists to contribute more actively into the life of the IEEE NPSS society. I believe that my background in detector instrumentation and large international collaborations, my organizational skills, and interest to multidisciplinary research could be very useful to the NPSS community, if I elected.

**For a Two-Year Term (to fill an AdCom vacancy)
1 January 2015 - 31 December 2016**

PLASMA SCIENCE AND APPLICATIONS (Vote for One)

BRENDAN B. GODFREY (SM'83-F'00) is a visiting senior research scientist at the University of Maryland, where he conducts studies on numerical simulation of plasmas, participates in committees of the National Academy of Sciences, and served as advisor to the U.S. Deputy Assistant Secretary of Defense for Research. Previously, he was director of the Air Force Office of Scientific Research, responsible for its nearly half billion dollar basic research program. He was an Air Force officer at Kirtland Air Force Base from 1970 to 1972, performing plasma research. He began his civilian career at Los Alamos National Laboratory, establishing its intense particle beam research program. He then managed and conducted intense microwave and particle beam research at Mission Research Corp., becoming vice president and regional manager. In 1989, he returned to the Air Force as civilian chief scientist of the Weapons Laboratory. Later responsibilities included director of Phillips Laboratory high power microwave research; director of the 1500-person Armstrong Laboratory; director of plans at the Air Force Research Laboratory, and deputy director of Brooks City-Base. Known for his contributions to computational plasma theory and applications, he is author of more than 200 publications and reports. He also has served on numerous professional and civic committees. Dr. Godfrey received his BS from the University of Minnesota and Ph.D. from Princeton University. He is a fellow of the IEEE and of the APS.

Statement: I have benefitted greatly from my many years in the IEEE and look upon Nuclear and Plasma Sciences (NPSS) Administrative Committee (AdCom) membership as a further opportunity to give back to the NPSS community. I have been a member of the Plasma Science and Applications Committee (PSAC) Executive Committee (ExCom) for many years, serving as its Chair and twice as its Vice-Chair. Being ExCom Chair allowed me to serve for two years as an ex officio member of NPSS AdCom, obtaining valuable experience on its roles and responsibilities. For the past three years, I also have been an active member of the IEEE-USA R&D policy committee, drafting four subsequently adopted policies and letters, and contributing to several others. If elected to the NPSS AdCom, I would work to represent the plasma science and applications community. I also would seek opportunities for collaboration between NPSS AdCom and IEEE-USA. Especially in this time of constrained budgets, it is important to assure sustained research support and healthy IEEE conferences. Limitations on conference attendance by government and some contractor engineers is a particular concern.

BARUCH LEVUSH (M'88-SM'90-F'01) Dr. Levush graduated from Latvian University, Riga, Latvia in 1972 and received his Ph.D. in Plasma Physics from Tel-Aviv University, Israel in 1981. In 1985, he joined the Institute for Plasma Research (IPR) at the University of Maryland, College Park. After ten years with IPR, Dr. Levush joined the Naval Research Laboratory (NRL) as the leader of the Theory and Design Section of the Vacuum Electronics Branch, becoming the Head of the Branch in 2003. In 2012, Dr. Levush entered the U.S. Government Senior Executive Service (SES) as the Superintendent of the Electronics Science and Technology Division (ES&TD) at NRL. As the ES&TD Superintendent, he is responsible for the technical and administrative management of a broad spectrum of state-of-the-art research programs involving in-house experimental research at the frontiers of electron device technology and technical management of industrial programs which create advanced prototype electron devices for defense applications. He has been actively involved in developing theoretical models and computational tools for the analysis of vacuum electronic devices and in inventing new concepts for high power oscillators and broadband amplifiers that operate at frequencies ranging from the UHF to THz bands. Dr. Levush holds numerous awards including the Robert L. Woods Award from the U.S. Department of Defense for his role in the successful development of a 10 kW average power W-band gyro-klystron (1999); an R&D100 Award for MICHELLE, a 3D charged-particle beam optics code (2006); the IEEE International Vacuum Electronics Conference Award (2007); the NRL E.O. Hulburt Annual Science Award (2007); the Department of the Navy's Captain Robert Dexter Conrad Award for Scientific Achievement (2009); the IEEE Electron Device Society's J.J. Ebers Award (2009); and the IEEE-USA Harry Diamond Memorial Award (2011). Dr. Levush is the co-author of more than 190 refereed journal articles and has presented numerous invited talks at international conferences and workshops. He is a Fellow of the IEEE and has served the Nuclear and Plasma Science Society (NPSS) in many capacities including Co-Guest Editor of the IEEE Transactions on Plasma Science Special Issue on High Power Microwave Generation (1990); Distinguished Lecturer on Vacuum Electronics (2006-2011); two terms as an elected member of the Executive Committee of the NPSS Plasma Science and Applications Committee (2009-2011 and 2014-2016); and as a session organizer and chair at numerous International Conferences on Plasma Science.

Statement: Over the past 26 years, I have greatly benefitted from my association with the IEEE and the NPSS. These benefits have accrued from active participation in conferences such as ICOPS, Beams, and the Pulsed Power Conference; through collegial relationships formed at these events; and from knowledge gained from Society publications. As an active member of the vacuum electronics community – most recently serving as the Chair of the IEEE Electron Devices Society's Technical Committee on Vacuum Devices – I have always believed that there is a strong synergism between plasma physics and the technologies that enable vacuum electronics devices. To promote this relationship, I have worked hard over the past ten years to strengthen the NPSS by encouraging a greater participation from the international vacuum electronics community in Society activities such as ICOPS and service on PSAC. I believe that a strong and vital NPSS must be continue to reach out to our colleagues in diverse technical fields and to seek new opportunities in emerging technologies, for example THz devices and applications. Furthermore, I strongly believe that the NPSS must embrace the growing globalization of science and technology and seek to grow our membership in a wider range of geographic regions. If elected, I will use my scientific experiences and associations together with my own multi-cultural perspective to work diligently to act on these beliefs and serve the NPSS community.

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY ELECTION
NUCLEAR MEDICAL AND IMAGING SCIENCES COUNCIL ELECTION
For the Three Year Term 1 January 2015 – 31 December 2017

NICOLA BELCARI (M'14) started his research activity in the field of experimental Nuclear Physics at the INFN (National Institute for Nuclear Physics) national laboratory of Legnaro, Italy. He received the degree in Physics from the University of Pisa in 1999. Since 2000 he has been conducting his research activity in the field of Medical Physics, and particularly in the development of new imaging detectors for molecular and morphological imaging on small animals and in the use of PET for dose monitoring in hadron therapy. He received his PhD in Applied Physics in 2003. Since 2007 he is a researcher of the Department of Physics of the University of Pisa and since 2010 he is a staff Assistant Professor. His present research is oriented to the development of dedicated multi modality instrumentation for high-resolution imaging with a stronger focus on pre-clinical PET/CT and brain-dedicated PET/MRI systems. He is also an expert of performance assessment of small animal PET and SPECT instrumentation. He is author/co-author of about 80 papers on international journals on Nuclear Physics and Medical Physics. He is a member of the Physics Committee of European Association of Nuclear Medicine (EANM).

Statement: I have participated in the Nuclear Science Symposium and Medical Imaging Conference since 2003. I have been member of the Conference Information and Promotion (CIP) table and I was involved in the organization of the NSS/MIC in Rome in 2004. I have been the organizer of a short course at NSS/MIC in Valencia in 2011. In last years, I am also participating to the abstract review process for the Medical Imaging Conference. I am willing to further contribute to the success of the IEEE NSS/MIC as member of the Nuclear Medical and Imaging Sciences Council (NMISC). If elected to the NMISC, I will try to encourage the active participation of young scientists in the organization of the conference and in chairing sessions. I will propose a stronger abstract selection in order to discourage the group/authors research break up. There are too many submission of abstract similar to previous ones or to other simultaneously submitted and the number of posters is now too high. I will also try to promote the IEEE NSS/MIC and the paper submission to IEEE TNS through my involvement in EANM and EFOMP (European Federation of Organizations in Medical Physics).

DIMITRA G. DARAMBARA (M'97) is a Senior Team Leader at the Joint Department of Physics, Division of Radiotherapy and Imaging of the Institute of Cancer Research and the Royal Marsden NHS Foundation Trust, London, UK (2006-present), where she established the group and lab of Multimodality Molecular Imaging. She received her BSc in Physics & Maths from the University of Athens, Greece (including a 6-month CERN summer studentship). She then successfully pursued her postgraduate studies at Yale University and received her PhD in Experimental Physics from the University of Surrey, UK with a full NATO research studentship developing a novel generic imaging detector based on Si-memory devices with biomedical and industrial applications (closed access). While a 3rd year PhD student she received the Leading Young Researcher award by Rank Prize Funds. Afterwards she held positions at CERN as a Research Fellow, at the University of Surrey as a NATO Research Fellow and at UCL and back at University of Surrey as a Senior Research Fellow sponsored by the Wellcome Trust with a research career development fellowship working on emerging medical imaging techniques and technologies for quantitative molecular imaging. Her research interests focus on the development of innovative detectors to enhance molecular sensitivity (CdTe/CZT, a-Si:H/a-Se, dRAM/CMOS, Si-pad, direct photoconductors), the realisation of multimodal imaging systems and techniques for the next generation of healthcare hardware as well as the performance modelling of imaging systems by combining Monte Carlo and Finite Element Analysis codes.

She is a member of the Institute of Physics (IOP), IPeM and IEEE. She has had several advisory roles in industry, governmental bodies, EU and NHS. She has also served on several committees of the IOP Professional and Policy Groups (Medical Physics, founding member of Higher Education, Women in Physics, Groups Forum, Council Diversity committee and Science Policy Advisory committee). She is currently the Chair of the IOP Medical Physics Group, the Chair of Trustees of Mayneord-Philips Trust, member of the Royal Academy of Engineering (RAE) Panel for Biomedical Engineering and member of the "Science in Health" special interest strategy group of the UK Science Council.

Statement: I have been a member of the NPSS of IEEE for over 18 years and I have been attending the NSS/MIC conference every single year since I was a PhD student. I, along with my students and young postdocs, have greatly benefited from participating into this conference, due to its cross boundary nature, collaborations and impact, which help to maintain strong ties and promote stimulating scientific advances between radiation detector instrumentation and medical imaging communities. During the last year I have been very actively involved, as a member of the local organising committee, with preparing and running the bid to bring the IEEE NSS/MIC to the UK as the next European one. This provided me with broad knowledge, deep understanding and useful experience in many different administration aspects of both the IEEE and the NSS/MIC conference.

My professional background and my extensive involvement with several administration activities in the realm of international professional societies have given me the insight and broad experience necessary to be an effective member of NMISC Council, if elected, and to help the IEEE to increase its influence in all physics, engineering and medical imaging areas and to continue the key role it plays in the educational and professional development of its members. I am devoted to promote the interests and the activities that best contribute to the growth of the Society and its goals to keep up the publications high standards and the scientific quality of the conference, in particular of the NSS/MIC joint sessions, to encourage young scientists to have a dynamic role within the Society and to improve the level of satisfaction of the NSS/MIC participants.

JOYITA DUTTA (GSM'09-M'11) Dutta is an Instructor in Radiology at Harvard Medical School and an Assistant in Physics at Massachusetts General Hospital. She received a B.Tech. (Honors) in Electronics and Electrical Communication Engineering in 2004 from the Indian Institute of Technology (IIT) Kharagpur, India. She completed her Ph.D. in Electrical Engineering at the University of Southern California in 2011 under the mentorship of Prof. Richard Leahy. Her doctoral research was focused on the development of computational methods for fluorescence molecular tomography. In addition, she was actively involved in the design and testing of two prototypic 3D small animal imaging systems in collaboration with Prof. Simon Cherry at the University of California Davis. Between 2011 and 2013, Dr. Dutta was a Research Fellow at Harvard Medical School working on PET/CT and simultaneous PET/MR. In 2013, she was promoted to the research faculty rank of Instructor at Harvard Medical School. She is currently instrumental in developing novel multimodality imaging approaches, with a special focus on clinical applications of PET/MR and PET/CT. She is the first author of 10 journal and conference articles and co-author on several other articles. In 2013, she received a Young Investigator Award from the Society of Nuclear Medicine and Molecular Imaging (SNMMI). She was also a recipient of the SNMMI Mitzi & William Blahd MD Pilot Research Grant and the American Lung Association Senior Research Training Fellowship.

Statement: The Nuclear Science Symposium and Medical Imaging Conference (NSS-MIC) is one of the most important conferences where the biggest engineering breakthroughs in nuclear medicine and molecular imaging are showcased every year. As an electrical engineer and a medical imaging researcher, I have participated in this conference with utmost enthusiasm since 2011 and found it a most exciting venue for both intellectual exchange of research ideas and networking with fellow researchers in this field. Having been selected as a Junior Lecturer at the IEEE EMBS Summer School on Medical Imaging, I have gathered experience in designing educational courses in medical imaging. If elected to the Nuclear Medical and Imaging Sciences Council (NMISC), I will be able to significantly contribute to the educational activities of the NMISC. I will aid in both the selection of cutting-edge educational content and motivated lecturers for the short courses and refresher courses offered at the meeting. My medical imaging research experience of almost 8 years (especially the experience of working with stalwarts in this field like Profs. Richard Leahy, Simon Cherry, and Georges El Fakhri) has put me in touch with a fairly large network of engineers, physicists, and medical professionals in academia, hospitals, and industry who are involved in medical imaging research and development. My membership with the Young Professionals Committee at the Society of Nuclear Medicine and Molecular Imaging has also added to my professional network. I will therefore also be able to work toward attracting and promoting increased participation of young professionals (graduate students and postdocs) at the conference. I am also strongly committed toward increasing the representation of women engineers at this conference. As a council member, I will seek to garner support for organizing and incorporating a networking event through IEEE Women in Engineering.

JAE SUNG LEE (S'96-AM'01-M'06) Dr. Jae Sung Lee is a Professor of Nuclear Medicine and Biomedical Sciences at Seoul National University (SNU) in South Korea. He received his bachelor's degree of Electrical Engineering and PhD of Biomedical Engineering from SNU in 1996 and 2001, respectively. He then worked as a Postdoctoral Fellow of Radiology at John Hopkins University (JHU). In 2005, he joined the Department of Nuclear Medicine at SNU College of Medicine as a faculty member. His early academic achievements during his graduate studies in SNU and postdoc fellowship in JHU are mainly related with the PET/SPECT imaging studies for understanding the energetics and hemodynamics in brain and heart. His pioneering work in this research field is the epochal improvement in physiologic components separation in dynamic PET scan data with extremely poor noise properties using independent component analysis (ICA) and non-negative matrix factorization (NMF). The most notable achievement of Dr. Lee's group since the foundation of his own lab in SNU is the development of PET systems based on a novel photo-sensor, silicon photomultiplier (SiPM). His group successfully led the development of MR-compatible SiPM insert systems which were combined with high field MR scanners. He has published 7 book chapters and over 200 papers in peer-reviewed journals and received multiple research awards from various scientific societies. He serves as editorial and advisory board members for several international scientific journals.

Statement: As an IEEE member and research scientist, I have participated annually in the Nuclear Science Symposium and Medical Imaging Conference for the past 15 years and have been actively involved in the conferences and society activities. I have served as the General Secretary of IEEE NPSS Seoul Chapter for 6 years since its foundation in 2009 and was the MIC Program Chair of 2013 NSS/MIC/RTSD meeting that was successfully held in Seoul, Korea. This year I keep continuing my contribution as an MIC Topic Advisor. If I am elected as an NMISC member, I will work with all my enthusiasm to ensure the high level and exciting conferences and promote young scientists to play a key role in our meetings and community. I'm also particularly interested in continuing efforts to encourage the contribution from Asian-Pacific countries to NPSS and NSS/MIC/RTSD. I wish to apply my organizational skills and my passion to further enhance the overall quality of scientific and academic activities and develop a broad collaborative approach to engage scientists of all ages and nationalities to the IEEE medical imaging activities as a NMISC council member.

CHI LIU (M'10) is an Assistant Professor in the Departments of Diagnostic Radiology and Biomedical Engineering of Yale University. He received his Ph.D. in 2008 from Johns Hopkins University with Dr. Benjamin Tsui, with emphasis on cardiac SPECT/CT imaging. Following his graduate work, he was a postdoctoral fellow with Dr. Paul Kinahan at University of Washington, specializing in oncological PET/CT studies with emphasis on compensation algorithms for respiratory motion. In 2010, he joined Yale University as a faculty member. He is board certified in Nuclear Medicine physics and instrumentation by the American Board of Science in Nuclear Medicine. His current research focuses on quantitative PET/CT and SPECT/CT imaging for oncology and cardiology applications, including reconstruction algorithms, motion correction, dynamic imaging, and translational imaging of cardiotoxicity. He also provides physics support for Yale PET Center and Yale Nuclear Cardiology. In 2012, he won the Bruce

Hasegawa Young Investigator Medical Imaging Science Award from the IEEE Nuclear Medical and Imaging Sciences Council (NMISC) for “contributions to the imaging physics of SPECT/CT and PET/CT, with emphasis in quantitative imaging and motion correction”.

Statement: It is an honor to be nominated for board membership of NMISC. I strongly support the mission and goals of NMISC. If elected, I will volunteer my time to serve the council and promote its growth. I would like to work with the board to bridge imaging technology developments and clinical sciences, and support early stage investigators, postdocs, and students through educational and scientific activities. I will also actively participate in the planning of IEEE NSS-MIC conference to promote dynamic scientific and educational programs.

VOLKMAR SCHULZ (M’10) is a full professor at the RWTH Aachen University and a Principal Scientist at the Philips Research lab in Aachen. He received two diploma degrees on electrical engineering and information technology from the University of Applied Science Bielefeld, Germany, and the University of Paderborn, Germany, in 1993 and 1996, respectively. He completed his Ph.D (Dr.-ing.) at the Institute of Theoretical Electrical Engineering in 2000 in the field of integrated optics in 2000. After this, Volkmar joined the group of Tomographic Imaging System at Philips Research in Hamburg, focusing on Magnetic Resonance Imaging (MRI), in particular on the design and simulation of transmit and receive coils. At the end of 2004 he joined the Philips Research lab in Aachen in which he started his research on high energy photon detector for the application in Positron Emission Tomography (PET) and Single Photon Emission Computed tomography (SPECT) combined with MRI. In 2013 he was appointed to a Full Professor at the RWTH Aachen University, heading the group “Physics of Molecular Imaging System”. His main research interests are silicon photomultiplier based PET detectors, PET-MRI instrumentation, interference of PET and MRI, statistically reconstruction techniques, and high resolution detector designs for clinical as well as preclinical applications. He furthermore started research in the domain of Magnetic Particle Imaging (MPI) combined with MRI. He is currently executing his university position jointly with his industrial position at Philips Research in Aachen. Volkmar Schulz is the author and co-author of more than 90 conference and journal papers. In addition, he is the author and co-author of more 25 US patents.

Statement: As an IEEE member (since 1997) and research scientist, I have participated with high enthusiasm annually the Nuclear Science Symposium and Medical Imaging Conference (NSSMIC) since 2006. I have been a reviewer and active member of the NSS-MIC conference since 2010, primarily focusing on the MIC program, getting more and more involved in the exciting program of the overall NSS-MIC. With my strong commitment to fundamental as well as applied science, I strongly believe that I can make a unique and significant contribution to the Nuclear Medical and Imaging Sciences Council (NMISC). If elected to the NMISC, I’ll try to stimulate new research areas in our community with high preclinical and clinical impact in order to grow the level of innovation in our community. In particular I will try to promote future scientific and educational activities, to maintain high quality NSS-MIC joint sessions, and to help selecting dynamic plenary speakers. In addition, I’ll try to motivate young bright scientists of all technical disciplines, ages and sexes to participate in IEEE medical imaging activities. Specifically, I will support the editorial board of IEEE-TNS and IEEE-TMI with input and creative ideas optimizing the review process wherever possible. I would thus be very happy to help managing and promoting Nuclear Medical and Imaging Sciences activities as a NMISC council member.

KRIS THIELEMANS (AM’03-M’04-SM’11) is a Senior Lecturer at the Institute of Nuclear Medicine at University College London, UK. He graduated in physics at the Rijksuniversiteit Gent, Belgium in 1987 and a PhD in string theory at the Katholieke Universiteit Leuven, Belgium. After a postdoc at Imperial College London, he switched to research in medical imaging in 1997, first at the Medical Research Council (MRC) Cyclotron Unit in Hammersmith, UK and then for a small company owned by the MRC and Amersham plc, which was absorbed into GE Healthcare in 2004. He then worked closely with researchers in GE until 2011. He then switched back to academia, first at King’s College London and since 2013 at University College London. He is member of the Expert Panel on Scanning Methodology of the National Cancer Research Institute (NCRI) PET Research Network (UK) since 2009 and Senior Member of the IEEE since 2011. His research covers all aspects of data-processing in Positron Emission Tomography with an emphasis on statistical estimation techniques. His recent work concentrates on motion detection and correction. Dr. Thielemans has 35 journal papers, 13 patents and ~100 conference contributions. He maintains the open source Software for Tomographic Image Reconstruction (STIR). STIR has around 150 active users and has been used in 40+ journal papers by external users. This is set to grow thanks to the recent addition of SPECT reconstruction.

Statement: I have attended the IEEE NSS-MIC annually since 1997. Most of my research was first presented to the public at the NSS-MIC and I feel grateful to the community for the extensive feedback. It’s a great conference for getting up-to-date and for discussion. I always try to actively participate in questions after the oral presentations. I have been a reviewer for the conference since 2004, external advisor for the 2008 conference in Dresden and thrice session co-chair. If elected to the Nuclear Medical and Imaging Sciences Council (NMISC), I will try to use my experience in both industry and academia to serve the community. I will try to raise the standard of the presentations at the conference while providing first class training opportunities and grants for young researchers.

PAUL VASKA (M'98) is a Professor of Biomedical Engineering and Radiology at Stony Brook University as well as a Scientist in the Biosciences Department at Brookhaven National Laboratory (BNL). He received his bachelor's degree in Physics from Clarkson University in 1994 and his Ph.D. in Nuclear Physics from the State University of New York (SUNY) at Stony Brook in 1997. He then took an industrial research position at UGM Laboratory which designed and manufactured clinical positron emission tomography (PET) systems, and which was subsequently incorporated into Philips Medical Systems. In 2000, Dr. Vaska joined the PET imaging group at Brookhaven National Laboratory where he helped to develop multiple imaging systems, most notably the RatCAP brain scanner for the behaving rat. He won the Presidential Early Career Award for Scientists and Engineers in 2004 and in 2011, transitioned to Stony Brook University as Professor of Biomedical Engineering while maintaining a formal Joint Appointment with BNL. In 2014, he also accepted an appointment in the Department of Radiology in the Stony Brook School of Medicine. Dr. Vaska has co-authored 77 peer-reviewed manuscripts and is an inventor on 4 patents.

Statement: As an IEEE member and research scientist, I have participated in the Nuclear Science Symposium and Medical Imaging Conference, missing only one meeting in over 15 years. I have served as a reviewer most of this period and often as Session Chair. I took the initiative to organize the first IEEE PET/MRI workshop in 2006 with Dr. Jean-Francois Pratte, and helped organize the biannual workshop after that. Moreover, I have been an Associate Editor for IEEE Transactions on Nuclear Science for a number of years. I'm eager to participate more directly in IEEE activities and believe that my perspective and experience will serve the Nuclear Medical and Imaging Sciences Council (NMISC) well.

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY
EXECUTIVE COMMITTEE OF THE PLASMA SCIENCE AND APPLICATIONS COMMITTEE ELECTION
For the Three Year Term 1 January 2015 – 31 December 2017

NADER BEHDAD (S'99-M'06-SM'12) received the Ph.D. degree in Electrical Engineering from University of Michigan - Ann Arbor in 2006. Currently, he is an Associate Professor at the Electrical and Computer Engineering Department of the University of Wisconsin-Madison. He was an Assistant Professor at the ECE Department of UW-Madison (2009–2013) and the EECS Department of University of Central Florida (2006–2008). His research expertise is in the area of applied electromagnetics with particular emphasis on antennas, metamaterials and periodic structures, frequency selective surfaces, passive high-power microwave devices, and applications of metamaterials in vacuum electronics. He is currently serving as an Associate Editor for IEEE Antennas and Wireless Propagation Letters and served as the co-chair of the technical program committee of the 2012 IEEE International Symposium on Antennas and Propagation in Chicago, IL.

Dr. Behdad received the 2014 R. W. P. King Prize Paper Award and the 2012 Piergiorgio L. E. Uslenghi Letters Prize Paper Award from the IEEE Antennas and Propagation Society. He received the 2011 CAREER award from the National Science Foundation, the 2011 Young Investigator Award from Air Force Office of Scientific Research, and the 2011 Young Investigator Award from the Office of Naval Research. He received the ONR Senior Faculty Fellowship in 2009, the Young Scientist Award from the International Union of Radio Science (URSI) in 2008, the Horace H. Rackham Predoctoral Fellowship from the University of Michigan in 2005-2006, the best paper awards in the Antenna Applications Symposium in Sep. 2003, and the second prize in the paper competition of the USNC/URSI National Radio Science Meeting, Boulder, CO, in January 2004. His graduate students were the recipients of the 15 different awards/recognitions at the IEEE Pulsed Power & Plasma Science (2013), IEEE AP-S/URSI Symposium (2010, 2012, 2013, and 2014), and the Antenna Applications Symposium (2008, 2010, 2011).

ARATI DASGUPTA (M'09) Dr. Arati Dasgupta received her BS with honors in physics, MS and PhD in atomic physics from the University of Maryland. She is an atomic and plasma physicist whose research spans pulsed power radiation sources, inertial confinement fusion, laser-matter interactions, astrophysics and lighting. She leads activities in the modeling and simulation of experimental High Energy Density (HED) laboratory and astrophysical plasmas and radiation-source development programs. Her benchmark atomic models are used as a guide to understand experiments at major national facilities including nested-wire and gas-puff implosions on the Z facility at the Sandia National Laboratories and the quantitative X-ray photo-pumping experiments utilizing the LCLS free electron laser. Currently she is working on atomic and radiation models for very high Z elements on the NRL NIKE laser in support of the indirect drive campaign on the National Ignition Facility for inertial confinement fusion.

She is a fellow of the American Physical Society (APS). She has presented numerous invited talks and colloquia all over the world and gave a mini course lecture at ICOPS conference in 2005. She served on the program and education committees and organized many invited sessions of APS Division of Atomic, Molecular, and Optical Physics. She has been an active member of the IEEE community, serving in various capacities as a session organizer at several IEEE ICOPS conferences on Z pinch and other sessions. She is currently the chair of the Committee of Women in Plasma Physics of APS DPP and past president of the NRL chapter of Women in Science and Engineering. She is organizing a mini-course on Atomic and Radiation Physics at this year's ICOPS conference in Washington DC. She is also currently serving on the Fusion Energy Sciences Advisory Committee (FESAC) Strategic Planning panel on High Energy Density Laboratory Plasmas and diagnostics. Among her outreach activities, she is the division leader for the NRL mentor program, gives lectures at local high schools on popular science topics and author of an essay in the book titled "Blazing the Trails/ Essays by Leading Women in Science" to inspire young women contemplating science careers.

CHRISTOPHER DEENEY (M'90-SM'03-F'06) Dr. Christopher Deeney is the Chief Technology Officer (CTO) of National Security Technologies, LLC, at Nevada National Security Site. As the CTO, he directs the science and technology activities and long-term strategy. Prior to NSTec, he was Assistant Deputy Administrator for Stockpile Stewardship which included the National Ignition Facility, Advanced Computing, DARHT, Z, Omega, and the subcritical program. This portfolio ensured the ability of the U.S. to maintain a safe, secure, and effective deterrent without recourse to underground nuclear testing.

Dr. Deeney was born and lived in Hamilton, Scotland, graduating in June 1984 with a First Class Honours B.Sc. in Physics from the University of Strathclyde, Glasgow. In 1987, he completed his Ph.D. research on the formation of hotspots and electron beams in gas puff Z pinches and plasma focii at Imperial College, London. Dr. Deeney was a postdoctoral researcher at the University of Stuttgart, Germany until May 1988 when he joined Physics International Co. in California, where he was a Program Manager for Z-pinch-based plasma radiation source development, for x-ray laser research and the application of pulsed corona technologies to pollution control. In 1991, he became the Department Manager of the Plasma Physics Group. In 1995, Dr. Deeney joined Sandia National Laboratories (SNL) where he had been one of the experimenters on the 8-MA Saturn and 20-MA Z pulsed-power generators, doing pioneering research on high wire number arrays, and nested wire arrays. In 2000, he became a Department Manager at SNL with responsibilities in areas including Z-pinch development and applications of pulsed power to material dynamics studies, and was the lead on developing experimental plutonium capabilities on the Z Facility. In 2005, he managed the Pulsed Power Technology Group, managing five departments and a \$25M program. In August 2006, he joined the National Nuclear Security Administration as a member of the Senior Executive Service.

To date, Dr. Deeney has published over 120 journal papers on high energy density physics, x-ray lasers, spectroscopy, x-ray diagnostics, and dynamic material properties. He is also an active member of the IEEE, having sat on the PSAC EXCOM plus the Nuclear and Plasma Society ADCOM, and being the Chairperson for the 1999 International Conference on Plasma Science (ICOPS), and was the co-chair for a Z-pinch mini-course at ICOPS 2005 in Monterey, California. He was awarded an APS Fellowship in the Division of Plasma Physics in 1999, an IEEE Fellowship in 2005, and received the 2006 IEEE Plasma Science and Applications Award.

MARK GOLKOWSKI (AM'10-M'13) received his B.S. degree in electrical engineering from Cornell University, Ithaca, NY in 2002 and his M.S. and Ph.D. degrees in electrical engineering from Stanford University, Stanford, CA in 2004 and 2009, respectively. He served as a Postdoctoral Research Fellow with the Space, Telecommunications, and Radioscience Laboratory, Department of Electrical Engineering, Stanford University from 2009-2010. Dr. Golkowski is currently an Assistant Professor at University of Colorado Denver in the Department of Electrical Engineering and also Bioengineering. He actively conducts research on electromagnetic waves in plasmas, ionospheric physics, near-Earth space physics, characterization of antennas in reverberation chambers, hybrid imaging technologies, and biomedical applications of gas discharge plasmas. Dr. Golkowski is associate editor of the journal *Earth, Moon, Planets* and co-author of the textbook, "Principles of Plasma Physics for Engineers and Scientists". Dr. Golkowski was recipient of International Association of Geomagnetism and Aeronomy (IAGA) Young Scientist Award for Excellence in 2008, IEEE Electromagnetic Compatibility Society Best Symposium Paper Award in 2011 and the National Science Foundation CAREER Award in 2013. Dr. Golkowski is a member of the American Geophysical Union, the International Union of Radio Science (URSI) - Commission H (Waves in Plasmas), and IEEE.

THEODORE (CHRIS) GRABOWSKI (AM'11-M'12) Chris Grabowski attended Texas Tech University in Lubbock, TX for undergraduate studies and received a B.S. degree in electrical engineering from there in 1988. He then moved to the University of New Mexico in Albuquerque, NM for graduate studies and received an M.S. in electrical engineering in 1990 for work related to Pulse-Modulated Microwave Plasma Etching and a Ph.D. in 1997 for studies on Pulse Shortening and Plasma Filling of High Power Backward Wave Oscillators. Between his Master's and Ph.D. studies (Jan 1991 - Mar 1992), Chris worked as a Research Student in the Pulsed Power Laboratory at Kumamoto University, Kumamoto, Japan, studying inductive energy storage pulsed power generators. After completing his Ph.D., he worked as a Post-Doctoral Researcher at the Weizmann Institute of Science in Rehovot, Israel, studying plasma spectroscopy, and then at Cornell University in Ithaca, NY studying the design of high-power traveling wave tube amplifiers. In 2000 Chris began working for Maxwell Technologies in Albuquerque, NM as a senior staff engineer, supporting research in directed energy at the Air Force Research Laboratory at Kirtland AFB. He transitioned to Science Applications International Corporation in Albuquerque, NM a short time later, where he continued supporting the work at AFRL, and then in May 2010 he began working directly for the AFRL as a senior research physicist/engineer, working on various plasma, microwave, and radiation-source experiments.

HAE JUNE LEE (M'07) Prof. Hae June Lee received a B.S. degree with honors in department of nuclear engineering at the Seoul National University, S. Korea, in 1994. In the same year, he joined the Plasma Application Modeling Group working with Prof. Jae Koo Lee in Pohang University of Science and Technology (POSTECH), S. Korea. He received M.S. and Ph.D. degrees in physics in 1996 and 1998 from the POSTECH, respectively. His Ph.D. thesis research was to investigate and analyze chaotic behaviors in plasmas, especially for the beam-plasma interactions. From September 1998 to January 2000, he was employed as a postdoctoral researcher at the Basic Science Research Institute in the POSTECH. During this period, his research topic was modeling and simulation of plasma chaos in beam-discharge and dusty plasmas, diocotron instability in a plasma shear flow. From February 2000 to May 2001, he worked for Prof. C. K. Birdsall at the Plasma Theory and Simulation Group in the University of California at Berkeley as a postdoctoral researcher for the development of radiation transport simulation for fluorescent lamp discharges. During this period, he also worked with Prof. J. S. Wurtele at the department of Physics, UC Berkeley, for the particle-in-cell simulation of laser-plasma interactions. After returning back to Korea with the obligation of military duty, he worked in Korea Electro-technology Research Institute (KERI) for laser-plasma interaction researches such as electron acceleration by laser wakefields and ion generation from laser-material interaction.

He has been at the department of electrical engineering in the Pusan National University since 2004 with wide simulation research topics such as micro dielectric barrier discharges, low temperature processing plasmas, Hall thrusters, laser-plasma interactions for the generation of atto-second radiation, theory and simulation of drift instabilities of shear flow, and numerical simulation of edge plasmas in Tokamak. Recently, his research topic includes experiments of plasma application to biology and medicine as well. He collaborated with Prof. M. J. Kushner in University of Michigan and Prof. J. P. Verboncoeur in Michigan State University as a visiting scientist at the Michigan Institute of Plasma Science and Engineering (MIPSE) from August 2012 to August 2013. He has still strong collaboration with MIPSE members. In Korea, he is a leading scientist in the research field of plasma modeling and simulation.

LUTFI OKSUZ (M'07) got his BSc degree from Nuclear Energy Engineering Department, Hacettepe University, Ankara, Turkey in 1991. Dr Oksuz received the MSc degree from the Nuclear Engineering and Engineering Physics Department, University of Wisconsin Madison, 1997 and the PhD degree from the Engineering Physics Department in 2000. His thesis work was about experimental investigation of the sheath and pre-sheath characteristics of DC unmagnetized plasmas under the guidance of Professor Noah Hershkovitz. After graduation, he returned to Suleyman Demirel University in Turkey. He spent one year in the Oxford Research Unit in the UK and also one year in Dublin City University, Ireland. He has participated in many DOE, NASA, Air Force, and NSF supported projects in the USA during the summers. He has directed government funded projects in Turkey about atmospheric pressure plasma systems and plasma applications. He established the PLUS Electronic Company in Turkey and also has an Associate Professor position in Suleyman Demirel University, Isparta, Turkey. His research includes atmospheric pressure plasma physics and applications to material surfaces for deposition and sterilization purposes including the sheath, presheath, plasma diagnostics, rf, dc, microwave, ECR plasmas and space charge and nanotechnology. Recent experimental achievement was obtaining most of the colors in electrochromic glass or the other name smart glass. His recent interest is about high power microwave especially experimental investigation of BWO systems. He has authored and co-authored about 30 papers published and contributed chapters in refereed journals and books, and published a book from his thesis work. He has many national and international patents. He also authored and coauthored more than 100 conference abstracts. He is a member of the IEEE and a member of NPSS. He is also elected Chair of ICOPS 2015 in Turkey.

ALLA S. SAFRONOVA (M'06) was born in Moscow, Russia. She received a Ph.D. in physics from the Institute of General Physics, Russian Academy of Science (RAS), Moscow, in 1986. From 1979 to 1981, she was a Graduate Student at the P.N. Lebedev Physical Institute, RAS. From 1982 to 1994, she was a Junior Researcher and then a Senior Researcher in several Russian scientific institutions in Moscow. From 1994 to 1998, she was first a Visiting Scientist and then a Postdoctoral Research Associate with the Department of Physics, University of Nevada, Reno, where since 1998 she has been an Associate Research Professor and is now a Research Professor. Her former PhD students are working at Sandia National Laboratories, Naval Research Laboratory, and also abroad at various universities. She is one of the pioneers in the application of x-ray line polarization to astrophysical and laboratory plasmas. She has published about 200 papers in scientific journals and is working in the exciting area of High Energy Density (HED) science where atomic, radiation, and plasmas physics merge and produce new applications. Her current research focuses on radiation from HED plasmas and includes the studies of efficient radiators from Z-pinch plasmas and the unique spectral signatures of high-power laser plasmas. She organized and chaired sessions at International Conferences on Plasma Science and International Workshops on Radiation from HED Plasmas (RHEDP) and was the guest editor of 5th Special Issue of IEEE Transactions on Plasma Science on Z-pinch Plasmas and Special Topic Section on RHEDP of Physics of Plasmas.

JOSEPH SCHUMER (M'00-SM'12) Dr. Schumer is a Research Physicist and Head of the Pulsed Power Physics Branch of the Plasma Physics Division at the Naval Research Laboratory (NRL), Washington, DC, specializing in computational plasma physics with over 95 publications, 101 conference talks, and 1 patent in the areas of high power x-ray sources, numerical models for collisionless and collisional plasmas, advanced energetics using nuclear isotopes, the design of power conditioning systems, and the study of high-energy electron and ion beam transport physics for radiography and nuclear weapons effects simulation. He received his B.S. degree in nuclear engineering from the University of Missouri-Rolla in 1992, a M.S. (1994) and Ph.D. (1997) degrees in nuclear engineering from the University of Michigan, developing spectral methods for the solution of the non-linear Vlasov-Maxwell equations for the study of electromagnetic coupling to collisionless quasineutral plasmas.

Dr. Schumer is a Senior Member of the IEEE-Nuclear and Plasma Sciences Society, serving as Chair of the 2014 ICOPS-Beams conference, member of the Plasma Sciences Applications Committee Executive Committee (2003–2005, Vice Chair 2005, 2007–2009), and served as Local Chair for the ICOPS 2004 meeting. He was co-recipient of two DOE Defense Program Awards of Excellence (2002, 2004) and two NRL Alan Berman publication awards (2001, 2008). Dr. Schumer is a technical reviewer for the IEEE Transactions on Plasma Science, Journal of Computational Physics, and Physics of Plasmas as well as many DoD and DOE panels. In addition to IEEE, he has been active in American Physical Society, American Nuclear Society, University of Michigan Nuclear Engineering Department-Advisory Board (2009–present), University of Missouri-Rolla (Washington DC Area) Alumni Section (President 2002–2007), and holds a 2nd degree black belt in Shotokan-Fudokan karate.

TATYANA SIZYUK (M'12-SM'13) Dr. Tatyana Sizyuk, IEEE Senior Member, obtained her Ph.D. degree in Physics in 2014 from the University of Rzeszow (Poland) and M.Sc. degree in Applied Mathematics in 1988 from Byelorussian State University in Minsk (Belarus). She is currently Assistant Professor at the School of Nuclear Engineering, Purdue University. Prior to that she worked at Argonne National Laboratory, Math and Computer Science Division, performing computer simulation of advanced nuclear energy systems and plasma physics applications.

Her current major research includes models development and computer simulation of beam-target interactions, laser and discharge-produced plasmas for industrial and medical applications such as advanced nanolithography, water-window microscopy, modeling of material erosion, plasma radiation and hydrodynamic confinement for fusion applications, and laser induced breakdown spectroscopy (LIBS) for nuclear material detection. She has developed and enhanced several models and computer packages to study plasma evolution and MHD processes in large fusion devices, and Monte Carlo simulation of particle and radiation transport problems. She has participated in numerous IEEE conferences and activities and has numerous publications in IEEE transactions, Nuclear Fusion, J. Nuclear Materials, Physics of Plasma, J. Applied Physics, etc. She is also Senior Member of SPIE. She was the Scientific Secretary of IEEE 38th ICOPS-2011, Chicago.

WILKIN TANG (GSM'06-M'11) Dr. Wilkin Tang graduated from the University of Michigan, Department of Nuclear Engineering with concentration on Plasma Physics in 2009. His Ph.D thesis involves the study of ohmic heating of particulates which is an important topic in high power microwave components and sources. In addition, Dr. Tang developed a higher dimensional theory of electrical contact resistance with his advisor Dr. Y. Y. Lau from the University of Michigan, the new theory extended the original theory of contact resistance developed by Holms back in the 1960s. Upon graduation, Dr. Tang was a National Research Council (NRC) Postdoc at the Air Force Research Laboratory (AFRL) based at Kirtland Air Force Base. His NRC Postdoc project studied the turn-on mechanism of electron emission, and the influence of the electron beam emission on the turn-on of a High Power Microwave device. During his tenure as a NRC postdoc, Dr. Tang also studied analytically and experimentally the electric field screening effect due to the proximity of field emitters. The work also involved the first experiment that uses only two carbon fiber field emitters with different separation to quantify and isolate the effect of electric field screening, the effect of electric field screening is extremely important in the development of Field Emitter Array (FEA). In 2011, Dr. Tang joined the Directed Energy Directorate at AFRL as a permanent staff. Since then Dr. Tang was involved in advanced relativistic magnetron design, and continued his work on studying advance cathode technology. Recently, Dr. Tang was involved in the study of field emission using an Ultra Short Pulse Laser. Dr. Tang had experiences in theory development, as well as Particle-in-cell (PIC) simulation. During his tenure as a NRC postdoc and as a permanent staff at AFRL, Dr. Tang uses the PIC code ICEPIC extensively to help aid experimental design. Dr. Tang had also presented at many conferences, as well as monthly seminar organized by the Directed Energy Directorate at AFRL.

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY ELECTION

RADIATION INSTRUMENTATION STEERING COMMITTEE ELECTION

For the Three Year Term 1 January 2015 – 31 December 2017

TANCREDI BOTTO (M'09) Botto is a Principal Scientist at Schlumberger Doll Research in Cambridge, MA. Tancredi performed his PhD research at Dutch National Institute of Nuclear and Particle Physics (NIKHEF) on a recoil detector for thin, gaseous internal targets in electron storage rings. He then continued his research in fundamental spin-polarized, electro-nuclear physics with intermediate energy electron beams at the MIT Laboratory of Nuclear Science. Tancredi's academic research activities were primarily directed towards the precise determination of the electro-magnetic form factors of protons and neutron, and he contributed to various experiments at NIKHEF, MIT/Bates, Mainz MAMI and TJNAF.

Since 2005, Tancredi has joined Schlumberger at its primary research facility, where he has been involved with the development of a variety of measurements for downhole, borehole applications including research and development of novel x-ray sources, photonic crystals and nuclear detectors. He has maintained a high level of engagement with the academic community, initiating several external innovation projects that extended significant ties between Schlumberger and MIT and Harvard university groups. In 2012-2013 he developed a compact (3.5" OD, 1.5m long) Cosmic-Ray density imaging tool for borehole applications suitable for determining the extent of underground steam chambers in heavy oil fields. This device was successfully field tested in Canada in 2013. He is the holder of 3 patents and has numerous outside publications. Tancredi obtained his BS degree in Physics from the University of Genova, Italy in 1993 and a PhD in Nuclear Physics from the Vrije Universiteit in Amsterdam, The Netherlands, in 1999.

Statement: I have been a member of IEEE NPSS for several years and I have always followed with great interest its various activities. I believe effective communication and a sense of community is of great importance in order to bring together scientists and engineers from our many diverse disciplines, such as Medical Imaging, High-Energy Physics, Astrophysics, Radiation Detection, Homeland Security, and Industrial Applications. We share many common detector and instrumentation technologies, simulation software, and analysis techniques and we stand to profit from each other by learning about our respective challenges. I will work others to make sure we continue on the successful path that the NPSS has already established and to insure that our Society will adapt, as required, to the challenges of the future.

CINZIA DA VIÀ (AM'04-M'05) is a permanent faculty member at the University of Manchester in the UK. She is an expert in radiation detectors for High Energy Physics and medical applications. In particular she has been working on radiation hard silicon detector development for the LHC (Large Hadron Collider) since 1998 and is one of the two co-discoverers of the Lazarus effect, property which enhances silicon detector performances after heavy irradiation at cryogenic temperatures. In 1995 she participated in the discussions which led to the design of 3D silicon sensors. She has been working on 3D silicon with the proponents since 1998. At present she leads the 3D ATLAS pixel R&D Collaboration, which successfully designed and commercially fabricated the first 3D sensors to be installed in an experiment and plans to insert 3D silicon pixels in the upgraded pixel layers of the ATLAS (A Toroidal LHC Apparatus) experiment at CERN in 2023. Moreover she coordinated the 3D silicon detector development for the AFP (ATLAS Forward Proton) project, which aims to detect diffractive protons in the forward region in ATLAS from 2006 till 2011. In 2010 she proposed the use of MEMS technology to fabricate 3D sensors for micro-dosimetry and now collaborates with international partners on the microdosimetry Mimic project. In 2006 she formed the 3D Consortium to transfer the original 3D silicon technology to industry and now she is involved on the miniaturised vertical integration of smart-systems including micro-channels for local cooling. Since 2013 she is representing the UK in the TNS Committee and is leading the organisation of the UK Proposal to host the NSS-MIC Conference in the United Kingdom in 2018. CDV is in the Scientific Committee of the Technology and Instrumentation in Particle Physics (TIPP) and the International Workshop on Imaging Detectors (IWORID) Conferences. She is the co-founder and co-coordinator of the European Radiation Detectors and Imaging Technology Platform (ERDIT: www.erdit.eu)

Statement: I would like to express my interest in serving in the Radiation Instrumentation Technical committee for the next 3 years (2015-2017). I believe this would allow me to actively contribute to the promotion of the development and application of radiation detectors within the Nuclear Science Symposium & Medical Imaging Conference (NSS/MIC) which I have been following since I was a student.

SERGE DUARTE PINTO (GSM'08-M'11) is a physicist in the Radiation Science & Technology division at Delft University of Technology. In 2011 he received a PhD with great honors from University of Bonn, Germany, for research and development on micropattern gaseous detectors done at CERN. He then joined the Beam Instrumentation group at CERN as a senior fellow, developing diagnostics for the experimental areas. Since 2013 he develops neutron scattering and imaging instrumentation for the European Spallation Source.

Statement: A summer studentship at CERN in 2001 triggered my interest in radiation instrumentation, and I have worked in this field ever since. Throughout the years I have attended the IEEE Nuclear Science Symposium, and presented my work. I also contributed to this conference as a topic convener and session chair, as well as by helping with information and promotion. Now I would like to serve the radiation instrumentation community by getting involved in the activities of the technical committee. I intend to work on continuing the success of the NSS/MIC/RTSDS and increasing the standards of its proceedings, and on encouraging interaction and collaboration between the various domains within the field of radiation instrumentation.

INGRID-MARIA GREGOR (M'03-SM'11) senior staff scientists at DESY, is an expert in detector development for high-energy physics since more than fifteen years. Dr. Gregor completed two diplomas, one diploma in physics engineering (1994) and one diploma in physics (1998), both at the Wuppertal University. In 2001 she received her Dr. rer. nat. in particle physics from the Wuppertal University. In her career she worked on detector projects for the particle physics experiments DELPHI, HERMES, ZEUS and ATLAS, mostly in the field of silicon tracking detectors. As postdoctoral researcher she developed and constructed the silicon-strip recoil detector for the HERMES target region (2002-2005). In 2005 she got promoted to senior staff scientist at DESY and coordinated the ZEUS Uranium calorimeter group. During the EUDET project she led the development of the high-resolution pixel telescope that is now being used for many R&D studies for pixel and strip detectors around the world. Currently Gregor is the project leader of the ATLAS strip detector for the HL-LHC organizing the efforts from about 40 international institutes towards the replacement of the ATLAS inner detector. Furthermore she is the deputy group leader of the DESY ATLAS group and leading the detector activities of the group.

Statement: I have regularly attended the NSS/MIC conference since 1998 and it always the conference highlight of the year. Meeting people from all over the world working in similar fields constantly helps to broaden my knowledge. The interface between the different disciplines, from high-energy physics to bio-medical applications, gives a very special character to this event. Being a long-time member of the Conference Information and Promotion committee (CIP, chair 2007-2012) helped me to understand the organization of the conference and to meet many people. Since being elected to RISC, I had an even better insight to the conference and learned a lot about the mechanisms of the organization behind this exciting and important event. In 2013 I was co-chair of a RISC sub-committee working on the quality improvement of the paper submissions for this event. New guidelines for the authors and for the reviewers were prepared in this sub-committee. If elected, I would work to further improve the overall scientific quality of this conference, maximize benefit to attendees of NSS/MIC/RTSD meetings, and advocating initiatives of value to the radiation instrumentation community. Furthermore I would like to attract more young scientists to these meetings and, in general, to this field.

I have contributed presentations to IEEE meetings since 1998, participated in numerous meetings to help the conference organizing teams, and have been a core member of the CIP group. I was elected RISC member for the years 2012-13. Additionally I was asked to help to organize the 2012 meeting as NSS deputy program chair and the 2014 event as NSS program chair. The combination of these activities has given me the experience and insight to be an effective member of RISC.

MALCOLM JOYCE (M'13) Joyce holds a Personal Chair in Nuclear Engineering at Lancaster University, and is currently Head of the Engineering Department at Lancaster. He was appointed Lecturer at Lancaster in 1998 and promoted to professor in 2007. His area of research interest is in the field of Control & Instrumentation (C&I), and the development of radiation detection instruments including: portable neutron spectrometry; decommissioning-related analytical methods; nuclear policy and environmental consequences; medical radiotherapy and radiation effects. He is author on > 130 refereed journal articles including 26 refereed outputs and 2 patents since 2008, primarily in the field of digital mixed-field radiation assay with fast, organic liquid scintillation detectors. Prior to this he spent four years in research in industry. His h-index is 26.

Professor Joyce's research interest in this area began with the use of digital processing methods for applications in neutron spectrometry. This work underpinned an application for an EPSRC Instrumentation Development award for the development of an advanced portable neutron spectrometer. This stimulated the launch in 2003 of a spin-out company, Hybrid Instruments Ltd., see www.hybridinstruments.com. Subsequently, MJJ led one of the first Think Crime! research projects awarded by the EPSRC in 2004 entitled DISTINGUISH. This project focused on the mixed-field radiation detection method developed on the spectrometer based on the fast digitization of events from fast, organic liquid scintillation detectors. Subsequent research, spanning a number of PhD awards, pioneered a novel algorithm for the ultra-fast, digital pulse-shape discrimination of neutrons and gamma rays[1], and led to a dedicated instrument that exploits this ultra-fast processing capability[2]. When combined with an astronomical scanning platform for imaging, this pioneered the first, real-time 2D-scanning technique to deconvolve neutrons and gamma rays into separate images[3] with a single detector. Prof Joyce also has extensive research interests of relevance to nuclear decommissioning, including the depth profiling of entrained radioactivity[4].

Professor Joyce has supervised 19 PhD students to completion since 2003. He was the Scientific Chair of the Nuclear Institute's International Conference on Control & Instrumentation for Nuclear Installations (September 2011). He is a Chartered Engineer and Fellow of the Nuclear Institute. He is Editor-in-Chief on the Elsevier journal 'Progress in Nuclear Energy'. He has provided consultancy

to Lockheed Martin, BAE SYSTEMS, Rolls Royce plc., NNL and the MoD. He led the team in 2010 that researched and wrote the Nuclear Lessons Learned report[5], on behalf of the Royal Academy of Engineering and Engineering the Future, which was commended by the Minister of State for Energy, HMG Chief Scientist and Lord Browne. He has related research interests associated with the behaviour of fluids, fusion and clinical radiotherapy. In October 2012, the degree of Doctor of Engineering (DEng) was conferred upon him in recognition of his contribution to the field of Fast Neutron Digitization and Related Analytical Methods.

[1] See for example: 'Digital n-gamma discrimination in liquid scintillators using pulse gradient analysis', Bob D'Mellow, Michael Aspinall, R. Mackin and Malcolm J. Joyce, Nucl. Inst. Meth. Phys. Res. A578 (1) (2007) 191-197

[2] See for example: 'The Design, Build and Test of a Digital Analyzer for Mixed Radiation Fields', M. J. Joyce, M. D. Aspinall, F. D. Cave, K. Georgopoulos and Z. Jarrah, IEEE Trans. Nuc. Sci 57 (5) pt. 2 2625-2630 (2010).

[3] See for example: Gamage, K.A.A., Joyce, M.J. and Adams, J.C., 'Combined digital imaging of mixed field radioactivity with a single detector', Nucl. Inst. Meth. Phys. Res. A635 (2011) 74-77.

[4] See for example: 'The determination of the depth of localised radioactive contamination by ^{137}Cs and ^{60}Co in sand with principal component analysis', J.C. Adams, M. Mellor and M. J. Joyce, Env. Sci. Tech. 45 (19) 8262-8267.

[5] See for example: 'Lessons learnt from recent nuclear build projects', Richard Garnsey, Malcolm J. Joyce and Ian Nickson, Proc. ICE - Energy (2011) 164 (2) 57-70.

Statement: I am keen to help because for many years I have attended the conferences organised by the NPSS and benefited from the work done by esteemed colleagues on the committee and believe it's now time to put something back in. I also look forward to working with colleagues from all over the world and broadening my network.

MEREDITH (MERRY) KEYSER (M'09) has been involved with the Radiation Instrumentation community for many years. She first attended the NSS in 1972 as a participant from Canada. In 1975 she moved to Oak Ridge, Tennessee, and taught for 10 years at a local college where she had additional responsibility as an academic advisor for international students. She then moved to ORNL and worked in areas related to reactors, heat pumps and ESH compliance. She also mentored students from the University of Tennessee and participants in the ORNL Summer School program. The last 10 years of her career were with the NNSA's Y-12 National Security Complex where she retired from the Contracts Division in 2004.

In her volunteer activities she has over 40-years experience in finance and administration of Tax-Exempt organizations and continues to be active in several non-profit organizations. For many years she has been an active volunteer for the NSS-MIC serving in several roles. She has been Scholarship Chair (which also involves coordinating the Paul Phelps Continuing Education grants) for several years; has coordinated the Valentin T. Jordanov Radiation Instrumentation Travel grants since they were started in 2008; and has served as the Companion Program Chair. She is a member of the Steering Committee of the CIP and enjoys working to promote upcoming conferences. As a volunteer on the NSS-MIC Registration Desk she has had the opportunity to meet with many members of our community. She has enjoyed learning about the needs of the RI community and helping to work toward meeting those needs.

Statement: If elected, it is Merry's desire to continue working in areas of student recruitment and retention and she also has a special interest in working to bring early career professionals into active involvement in NPSS and RITC.

G. JOSEPH (JOE) MAUGER (S'79-M'85) received his BSc in Physics from Duke University and his MS in Electrical Engineering from the University of Texas at Austin. His first assignment at Lawrence Livermore National Laboratory was in the Nova Laser Inertial Confinement Fusion Program developing instruments and techniques to characterize the experimental targets. This included modifying standard materials characterization techniques as well as developing then novel techniques such as micro CT and alpha edge imaging with synchrotron radiation, proton induced x-ray emission, and low angle electron scattering. Subsequently he developed, optimized, and prototyped charged particle trackers and scintillating calorimeters for the Superconducting Super Collider. He designed and ran a set of experiments to measure radiation induced conductivity of insulator materials at extreme dose rates and tested a novel application. He then entered a period when he developed and fielded gamma ray spectrometers and neutron detectors primarily for nonproliferation projects. This included developing and fielding electromechanically cooled HPGc detectors, fielding arrays of roadside and marine systems to detect SNM, and prototyping an active neutron cargo interrogation system. His next assignment was as System Manager for National Ignition Facility Laser Diagnostics during installation, commissioning, and the first few years of experiments. He is currently developing algorithms for post detonation nuclear analysis.

Statement: RISC's goal is to promote the development and application of radiation detectors. RISC's primary tool to accomplish this is to provide an effective communication platform for the NSS/MIC community. The persistent challenge is to enhance the quality of the communication and maximize the quantity information exchange. As I see it, RISC's responsibilities are to define, develop and interpret the appropriate metrics to measure our progress and to implement the actions that will provide the best and the most communication for

our resources. I have benefited from both the information I have gathered in the transactions and from contacts made at conferences who helped me find solutions and avoid pitfalls. It would be my pleasure to contribute to the continued good work of the RISC.

STEFAN RITT (M'07-SM'11) got his Ph.D. in physics from the University of Karlsruhe, Germany, in 1993. He is currently head of the muon physics group at PSI, Switzerland, where he is working for the lab's particle physics program involving experiments with muons and pions. Among other involvements he is technical coordinator of the MEG experiment, where he is responsible for the readout electronics, the DAQ hardware and software and the slow control system. He is primary author of the MIDAS DAQ system and the ELOG electronic logbook software, which are used today in many experiments worldwide. He designed and owns a patent for the DRS series of chips, which allow ultra-fast waveform digitizing in the GHz range. This chips and associated electronics boards are now used in more than 50 locations worldwide, having a major impact in the community and enabling many groups to perform better experiments compared to traditional electronics. He is involved in the organization of the IEEE NPSS Real Time conference since 2003, where he served as short course instructor, program co-chair and chair of the CANPS technical committee. He served as Associate Editor of the Transactions on Nuclear Science (2005-2009) and was member of the NPSS awards committee (2010 and 2014). He was topic convener of the NPSS Nuclear Science Symposium (2013) and is a NPSS Distinguished Lecturer since 2013.

Statement: Since my participation in the IEEE NPSS Real Time Conference in 1997 my career was heavily affected by the knowledge I was able to obtain from IEEE conferences and publications such as the TNS. Trends in this quickly changing field were communicated effectively through regular conferences and guided the development of data acquisition soft- and hardware in our community, inspiring each other and preventing double work. Being involved in the RT and NSS/MIC conferences and serving as Technical Chair of the CANPS technical committee I could already return something to the community. My primary goal is to adapt RISC and the conferences to the rapidly changing field of instrumentation by extending our activities more to Asia, by attracting new fields such as fusion technology and astro-particle physics, and by bringing in new young people, which share my enthusiasm and passion.

ANDRÉ SOPCZAK (M'07-SM'11) has pursued his undergraduate studies in mathematics and physics at Munich University, received his PhD in 1992 from the University of California, San Diego and was awarded the Isidor I. Rabi Diploma for Best Students at the Erice School. He became CERN Fellow, then DESY Fellow and continued research at CERN as teaching and research assistant at Karlsruhe University. In 2001 he joined the faculty at Lancaster University and tenured in 2004. Since 2012 he joined the Czech Technical University in Prague. His research has been on detector and accelerator R&D, in the field of searches for new particles, in particular Higgs bosons, and physics studies for a future Linear Collider. In the early 90's he pioneered the search for neutral and charged Higgs bosons, using the then new technology of micro-strip vertex detectors. He led the alignment of the vertex detector in the L3 experiment which was crucial for many analyses. In 1996 he joined the DELPHI experiment and became a working group convenor and a major contributor to the LEP Higgs working group which combined the results of the four LEP experiments. In 2001 he joined the D-zero experiment at Fermilab, contributed to the detector alignment, clustering of charge deposit studies, b-quark tagging, triggering, and tau-lepton identification in Higgs searches. He led test-beam studies for the new innermost vertex detector layer and also participated in test-beam experiments at SLAC. Since 1995 he has been initiating several research projects on radiation hardness of CCD detectors and modelling the detailed effects, and for example being the corresponding author of four IEEE TNS publications since 2007. In the ATLAS experiment he is leading a team on the data-analysis of Medipix detectors which took data at 16 positions in the ATLAS experiment for radiation measurements and luminosity monitoring. Among the international recognitions and awards received are the election as Fellow of the Higher Education Academy, the election as Fellow of the Institute of Physics and the election as Chartered Physicist.

Statement: As a member of the RISC I can contribute to several areas. With my research experience I can directly contribute to advancements of theory and applications of Ionising Radiation Instrumentation. In addition to the standard applications of Medipix and CCD detectors, there are many applications in particle physics which require detailed studies. I can give a positive image of the detectors based on successful applications and contacts. My communication skills can help to promote the detector technology advancements for further applications. With my experience in large HEP collaborations, I can serve as ambassador between the large Collaborations and RISC. As primary author for TNS and JINST publications, or journal referee in NIM, I can assist in the RISC regarding publications and help with the recognition of individuals. With some 20 years of University teaching experience, I find efficient ways to explain detector advancements understandably. I have received several grants for outreach and to promote public understanding. In the outreach projects we reached many thousand high-school students. I initiated and completed a project on electronic learning in an international consortium, an experience I can bring to the RISC. I like to contribute to conference and school organizations for which I was successful with fund raising in the past, in addition to receiving about 20 national and international grants for research projects. In organizations of Conferences, Workshops and Schools I would like to focus on supporting PhD students and beginning postdocs. I have been an active member of organizing teams in IEEE NSS/MIC Conferences, the Scientific Program Network (SPN), the Conference Information and Promotion (CIP) Committee, and Technical Program Committees. I believe I can strengthen the RISC Committee and I am devoted to promote the interests of the RITC.

**IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY
PARTICLE ACCELERATOR SCIENCE AND TECHNOLOGY (PAST) EXECUTIVE COMMITTEE ELECTION**

**CHAIR (Vote for One)
For a Two-Year Term 1 January 2015 – 31 December 2016**

STEVE GOURLAY (M'06-SM'10) is a Senior Staff Scientist at the Lawrence Berkeley National Laboratory (LBNL) in the Accelerator and Fusion Research Division (AFRD). He joined Fermilab in 1985 after receiving a PhD in high energy physics from the University of California, Davis. In 1988 he joined the Fermilab as project physicist for the Low Beta Project where he was in charge of constructing the interaction region quadrupoles for the Tevatron and worked on the development of dipoles for the SSC. In 1995 he led the Superconducting Magnet Group at Fermilab, working on the development of IR quadrupoles for the Large Hadron Collider. After a year as a Scientific Associate at CERN he moved to LBNL in 1997. From 2001 until 2005 he was head of the Superconducting Magnet Group, developing high field Nb3Sn dipoles for future accelerators and headed the magnet activities of the LHC Accelerator Research Program. From 2006 – 2014 he was director of AFRD and has recently returned to head the Superconducting Magnet Group. He is a member of the IEEE Council on Superconductivity and was a Distinguished Lecturer in 2006. He is on the Board of Directors of the Applied Superconductivity Conference and was Conference chair in 2012.

Statement: I have been an IEEE member for many years and for me, the greatest direct benefits of membership are the networking opportunities provided by the conferences and organizations within the IEEE and the variety of publication options. As Chair of the PAST-TC I would help continue our role to inform and educate the public and government so they understand the value and need for funding in accelerator science and technology development, support relevant IEEE publications, and provide peer recognition for our members. Most of you are aware of the government restrictions on conference travel that have resulted in reduced participation at our signature community conferences and fewer opportunities for early career scientists and engineers. Combined with increasing internationalization, we are facing a real challenge, but I believe that by broadly soliciting input from the community and working with other organizations such as the APS-DPB, the PAST-TC can help facilitate a conference structure that serves the needs of our community, enhances our international partnerships and has the flexibility to withstand the unpredictability of government travel restrictions. Going forward I want to increase the international aspect of PAST-TC membership to reflect that of the IEEE and to fully leverage the vast resources they have available.

STAN SCHRIBER (M'86-SM'02-F'05-LF'14) earned his PhD in Nuclear Physics from McMaster University, Canada in 1967. From 1966 to 1984 Schriber worked at CRNL where he was internationally recognized for linac expertise. Schriber moved to LANL in 1984 as a senior manager including Technical Director of the SDI NPB and AOT Director (LANSCE operations and other R&D activities which led to APT and ATW). In 2001-2002, Stan spent several months at each of three European institutions. At Saclay he contributed to ESS, at CERN he contributed to the Neutrino Factory, and at FZ-Juelich he contributed to COSY and ESS. In 2003 Stan became Michigan State University full professor, working on RIA design and teaching freshman physics courses. Now retired in Eagle, Idaho, he has ample opportunity to spend time with family, help various scientific institutions and teach physics classes at BSU. Stan has 8 patents and more than 150 publications. He remains involved in IEEE and APS affairs, and chaired two PAC conferences (1995, 2007). Within APS he serves as the DPB Secretary-Treasurer. Within IEEE-NPSS he serves as the appointed Chair for the PAST TC Executive Committee. Among much recognition, he is a Fellow of the APS and a Fellow of IEEE.

Statement: Having been involved in IEEE, APS and xPAC (IPAC and NA-PAC) committees, my experience would be useful in serving as Chair of PAST-TC Executive Committee (EC). My interests in PAST-TC and for strengthening this organization in the future are evident to those who have seen the evolution of the IPAC and NA-PAC conferences over the past several years, from the PAC series. As part of the PAST-TC EC I would bring information to possible new members about the benefits provided by the PAST-TC, and would help increase participation worldwide in an important society assisting the accelerator and related technologies community. In addition, there are aspects of information/actions that could be useful to PAST TC based on my committee interactions with APS-DPB and the various xPAC committees. I've been active in updating our PAST TC web page, as well as the associated pages for the PAC Organizing Committee, in helping arrange support for the successful Teacher's Day events and WISE events at the conferences, and in helping plan for future conferences for the benefit of our accelerator related community. There are a number of international interactions that I'd like to complete if elected as Chair.

VICE-CHAIR (Vote for One)
For a Two-Year Term 1 January 2015 – 31 December 2016

FULVIA PILAT (M'13) is Deputy Associate Laboratory Director for Accelerators at Jefferson Laboratory. Her present duties at JLAB include overview commissioning and early operations of CEBAF recently upgraded to 12 GeV, as well as the JLAB Superconducting RF production and R&D facility. Prior to her present appointment, she served from 2005 to 2010 as Head of Operations for RHIC at Brookhaven National Laboratory. As Head of Operations she increased machine availability and initiated construction of a new control room. Fulvia joined BNL in 1994 where she contributed to all stages of RHIC, from design to commissioning to operations. She developed and led the Accelerator Physics Experiment Program at RHIC, a structured program to devote beam time for beam studies and accelerator R&D. Previously, she joined the Superconducting Super Collider Lab in 1990 after a fellowship in the LEP Theory Group at CERN, which in turn followed her graduate work on nonlinear dynamics at the CERN SPS in collaboration with the University of Trieste, Italy. She has been a member and a chair of many advisory and review committees. Fulvia served as a Member-at-Large in the APS DPB Executive Committee 2002-2005, in the Nominating Committee 2006-2007 and is 2014 Chair of APS DPB. She was awarded the 2007 Town of Brookhaven award for outstanding achievement in science.

Statement: Beam physics is a vibrant field with great potential. An estimated 30,000 accelerators are already in operations worldwide with needs and plans for many more. There are basic challenges that this field needs to address to make further growth possible. First, we need to maintain and grow the level of funding for accelerator operations and R&D in economically and politically challenging times. That requires outreach to Congress and the community alike. Second, we need to harness the potential of particle beams beyond fundamental research and foster their applications to society in energy, environment, industry, medicine, and security. This requires a comprehensive vision, coordinated R&D plans and collaboration among the partners. Third, we need to continue increasing the presence and status of beam physics in academic institutions, universities and continue the educational outreach. Meeting these challenges can be greatly facilitated by the presence and action of focused professional organizations, of which the IEEE and the APS are outstanding examples. I intend to strengthen the synergies between IEEE and APS, as well as with our sisters professional organizations in Europe and Asia.

(ARLENE) WU ZHANG (S'86-M'88) is a Principle Electrical Engineer and Pulsed Power group leader of the Collider-Accelerator Department at Brookhaven National Laboratory. She received her PhD in Electrical Engineering and MBA from Stony Brook University in 1988 and 2010, respectively. She has broad work experience in engineering, business, and management. Her research focus is in accelerator engineering including pulsed power, RF, large scale complex power supply systems, etc. She has contributed in many national and international projects and is actively participating in project engineering consulting and technical reviews for the DOE and international facilities. She has been an IEEE volunteer for more than a decade serving as local NPS chapter chair for nearly 10 years. She also served on several PAC Scientific Program Committees and IPAC Scientific Advisory boards. In addition, she has served on several boards of culture and societal importance.

Statement: I want to serve our technical community and the greater human society by promoting science and technology and expanding its value to broader and higher architectures. As an IEEE member for more than 20 years, I understand the members' interests in technical advancement, job security, and societal impact. The opportunity to promote accelerator science and technology has come. The technology's transfer to applications in medical, defense, and industry is our way to return public investment in large scale science projects and reward people for their support of science. I have the unique skill set and interest to serve in this area as I have demonstrated through my many years of volunteer work and professional work. I have participated in accelerator projects serving discovery science and medical synchrotrons. My service on PAC scientific program committees and IPAC scientific advisory boards covered areas of pulsed power, accelerator technology, RF, industry applications, etc. I believe the broader application of accelerator science and its system technologies would create new market and job opportunity for the NPSS members.

Members-at-Large to the PAST ExCom (Vote for up to Four)
For the Term beginning 1 January 2015

BRUCE E. CARLSTEN (M'97-SM'13) is a Senior R&D Engineer in the Accelerator Operations and Technology Division at the Los Alamos National Laboratory, where he has worked since 1982. He received a BS in Physics from UCLA in 1979 and an MS and PhD in Electrical Engineering from Stanford University in 1980 and 1986 respectively. In 2005 he became Group Leader of High-Power Electrodynamics, overseeing the Laboratory's activities in high-power microwave, free-electron laser, advanced accelerator, mm-wave, and THz research. In 2012 he returned to research to focus on advanced accelerator technology (particularly phase-space manipulation), free-electron lasers, RF sources, and novel antennas. He is a 1999 recipient of the US Particle Accelerator School (USPAS) Prize for Achievement in Accelerator Physics and Technology, is a Fellow of the American Physical Society (2005), and is a Los Alamos National Laboratory Fellow (2011). He is a regular instructor at the USPAS, teaching a course on RF Sources roughly every two years. He has six patents and over 100 refereed publications. Through 2016, he is one of the accelerator specialists serving on the joint DOE/NSF High-Energy Physics Advisory Panel and also on its subcommittee on Accelerator R&D, which advises DOE on accelerator research strategies.

Statement: I am a zealous supporter of accelerator S&T and I understand the need for compelling advocacy for Accelerator R&D investments and clear articulation of both its unique value and its needs at all levels. We are in a particularly difficult time with federal budgets under significant pressure, most importantly that of the Accelerator R&D budget from DOE's Office of High Energy Physics. Through my positions as a member of the High Energy Physics Advisory Panel (HEPAP) and as Vice-Chair of our local IEEE Section (Northern New Mexico) I have unique opportunities to represent the accelerator community at both Federal and professional levels. Of particular and pressing importance is supporting DOE's ability to articulate to the Office of Management of the Budget the value of our professional conferences, especially the community-wide and IEEE-sponsored xPAC series. Other critical issues include a continued threat to the US Particle Accelerator School by possible conference classification and the complicated impact on our professional societies by the Federal policy of open access. By serving on the Particle Accelerator Science and Technology (PAST) Technical Committee, I can add additional community voices to these critical discussions and support a larger cross-section of accelerator S&T scientists and engineers.

PAOLO CRAIEVICH (AM'11-M'11-SM'12) is a research engineer at Paul Scherrer Institute (PSI) in Switzerland where he is working in the radiofrequency group for the Swiss FEL project and for the Swiss Light Source synchrotron storage ring. His research interests include microwave applications to accelerators, such as cavities and travelling wave accelerating structures, rf photo and thermionic guns, wakefield, instability and coupling impedance. He is currently involved in the design of the deflecting structures, dielectric-loaded waveguide and serves as a physics liaison support for the rf systems. During his career he was also a staff member at Sincrotrone-Trieste in Italy where he served as S-band structures lead engineer in the FERMI@Elettra FEL project and as a member of the FERMI commissioning team. He has also collaborated in research activities with the Department of Electrical Engineering at University of Trieste, Italy, and has served as tutor and supervisor of PhD and master degree students. He studied electronic engineering at the University of Trieste, Italy, and received his PhD. degree in applied physics from University of Technology in Eindhoven, Netherlands. He is a senior member of the IEEE and a member of NPSS and is author of more than hundred publications on peer-reviewed international journals and on international conference proceedings.

Statement: I have research experience in electromagnetics and technology applied to particle accelerators and, if elected, I would like to serve our society as a member of the PAST Technical Committee (TC), to encourage and promote the exchange of ideas and to spread the knowledge in the applications of particle accelerator science, engineering and technology. Specifically, as your Member-at-Large, I will continue to expand the European and student member base of NPSS PAST and encourage our colleagues to publish technical updates in the NPSS newsletter. I have personally benefitted from many contacts in NPSS PAST that have led to useful collaborations and joint effort. I will also strive to convey the importance of PAST in building these personal bridges that have led to career growth. Further, I have benefitted immensely from attending and presenting at IEEE sponsored or IEEE co-sponsored conferences for many years and will work with the PAST-TC to insure the quality and continuation of the conferences. Finally, I will be working with the TC members and PAST members to help identify and both promote members to the Senior and Fellow levels as well as for awards. Lastly, I am really honored to be nominated as a candidate for the PAST-TC.

KATHERINE HARKAY (M'07-SM'14) received a PhD in accelerator physics from Purdue University in 1993. She joined the Advanced Photon Source at Argonne that same year and served as Accelerator Physics Group Leader from 2003-2008. She was the co-lead on successfully commissioning a superconducting undulator at the APS in 2013, and continues to analyze the beam-induced heat loads. She is an expert in the study of electron cloud effects in high-energy storage rings. Other research interests include beam intensity limits, collective instabilities, and photocathode R&D for ultra-bright electron sources for next-generation x-ray sources. In 2013 she was named a Fellow of the American Physical Society, and in 2009 she received an Outstanding Alumnae award from Purdue University. Dr. Harkay serves on the scientific program advisory committees for FACET at SLAC, ATF at BNL, and the Physics of Photocathode for Photoinjectors Workshop series. In the past, she has served on the Fermilab Accelerator Advisory Committee (chaired 2010-12), the U.S. Particle Accelerator Conference Scientific Advisory Committee (2001-2011), and the APS Division of Beams PhD Dissertation Award Selection Committee (chaired 2010). She has advised five students over the past 10 years on accelerator research projects at Argonne and is presently advising a graduate student.

Statement: I have served previously as an APS Division of Physics of Beams Member-at-Large (2001-2005), and in that role I represented not only the Light Source community but also served as an advocate for women accelerator physicists. Since that time, my service on several advisory committees have given me a broader perspective. Two challenges that I would like to address as IEEE PAST-TC Member-at-Large are: (i) to ensure that the North American Particle Accelerator Conference (PAC) is as effective as possible and (ii) to ensure sufficient funding for accelerator technology R&D. The original PAC served a key role in bringing physicists, engineers, and industry together across the spectrum of accelerators. Today, researchers can choose among numerous topical workshops and conferences, and benefit from interacting with experts in their field. Attendance at IPAC by North American researchers is typically far lower than PAC. The situation has led to greater isolation within the community as a whole, and I would like to work on ways to strengthen NA-PAC to revive its benefit to our field. Accelerator technology R&D is typically focused on accelerator projects, and I believe that our field could benefit from longer-term R&D that is not specifically tied to projects. The challenge is finding ways to fund such research.

STEPHEN MILTON (M'04-SM'13) completed his PhD in accelerator physics in 1989 at Cornell University, but his initial involvement in the field of accelerators and lasers began in 1980 with an internship at Crocker Nuclear Laboratory on the University of California, Davis campus. He is currently a Professor of Electrical and Computer Engineering at Colorado State University where he and his colleagues have established an R&D and education program in Accelerator and Beam Science and Technology. His 33+ years of experience has allowed him to work in a variety of settings--industry, national laboratories, academia, and in Europe--providing him a unique view of the field. His employment background also includes stints at Sincrotrone Trieste (Director of FERMI@Elettra Project), Argonne National Laboratory (Senior Scientist, ANL Director of LCLS Project, Lead of LEUTL FEL project, Accelerator Physics Group Leader, 7-GeV Booster Synchrotron Ring Manager), Paul Scherrer Institute (Post Doctoral Fellow), and Bell Laboratories (Senior Technical Associate). He is an IEEE NPSS Particle Accelerator Science and Technology Prize winner, a senior member of the IEEE, a member and fellow of the American Physical Society, and a member of the Directed Energy Professionals Society.

Statement: Since their inception particle accelerators have had a tremendous impact on the world and this impact will certainly grow with our vivid imagination and skills. It is with this record of the past and the hope of future impact that propels me to run for Member-at-Large of the PAST-TC. Particle accelerators and the ancillary systems that are a part of them consist of many technologies tightly linked to the expertise exhibited by the IEEE. The wide variety of areas that IEEE represents make it an ideal home for much of accelerator science and technology, but I feel we can still become more tightly integrated with IEEE and thus capitalize further on their ability to support us and further our field. We must innovate, produce, and teach, but we must also promote our field so that we obtain the resources to continue this work. The PAST-TC is great platform to strengthen our position within IEEE. If elected I will support, serve, and ensure a thriving accelerator science and technology community, one that fosters training, innovation, and production. I would be honored to serve as a PAST-TC Member at Large, and as your advocate within IEEE.

GEORGE R. NEIL (M'07-SM'12) received his PhD in Nuclear Engineering from the University of Wisconsin. After 13 years in the aerospace industry in California he joined Thomas Jefferson National Accelerator Facility in Newport News, Virginia where he is presently employed. He served as Linac Department Manager during the construction of the CEBAF accelerator and subsequent to this worked to develop the Jefferson Lab Free Electron Laser. This FEL achieved what remains world-record high power lasing and became the first operational high-average-current energy-recovering linac. He is presently the manager of Jefferson Lab's program supporting the construction of 50% of the superconducting linac and the cryogenic refrigerator system for the LCLS-II FEL effort at SLAC. He is past winner of the Free Electron Laser Prize and a Fellow of the American Physics Society. He is a Senior Member of IEEE, past Editor of the Elsevier journal, Infrared Physics and Technology, and Member of the Board of Directors of the International Society for Infrared, Millimeter, and Terahertz Technology. He leads the Future Light Sources Committee of the International Committee on Future Accelerators.

Statement: Over many years I have seen support for development of accelerator technology fade from high priority at our national funding agencies. Even in the best years support still lacked coherence and breadth. Despite regular studies and reports showing the national economic benefits from this technology, the topic has been only haphazardly addressed. Accelerator technology is taught at only a few graduate schools and in the USPAS and similar topical schools. There are many planned major construction efforts over the next decades utilizing accelerators for nuclear and high energy physics as well as potential applications in medicine and industry. We need a trained workforce and scientific innovation in this field. I hope to encourage education for students and support for young researchers in accelerator science and related fields. I also believe the IEEE has a role in encouraging accelerator science and technology development support by our national funding agencies through publicity to our legislative bodies. We can also do this by promoting a broader appreciation for the benefits of the field.

BRUCE STRAUSS (M'98-SM'00-F'05) is presently Program Manager for the US Department of Energy's contributions to the LHC Hi-Lumi Project. As a member of the DOE Office of High Energy Physics, he is responsible for superconductivity development, university grants and laboratory activities. He received his undergraduate and doctoral education at the Massachusetts Institute of Technology and a Master of Business Administration degree at the University of Chicago. Following early experience at ANL, he joined the Fermi National Accelerator Laboratory in Batavia, Illinois where he was responsible for the procurement scheme for the entire superconductor inventory for that project. He left Fermilab to join the Magnetic Corporation of America where he served as

production manager for superconducting wire and magnet fabrication. He is an incorporator of the Applied Superconductivity Conference, Inc. where he presently serves as the corporate treasurer as well as a member of several technical committees. He is also an officer of the IEEE Council on Superconductivity who awarded him the Max Swerdlow Award for service to the community. He was the co-chairman of the 2000 Applied Superconductivity Conference and the chairman of Magnet Technology Conferences in 2007 and 2013.

Statement: Practitioners in the technology of large particle accelerators will be facing a number of political and financial challenges in the coming years. It will be important for our community to increase the amount and quality of outreach to all elements of society in order to ensure growth of our profession. PAST-TC can have significant influence on the training of the next generation of accelerator technologists, as well as sustaining and growing our field, and it is important that we take advantage of this opportunity.

BOB ZWASKA (S'05-M'06-SM'14) is a physicist in Fermilab's Accelerator Physics Center. He works on high-power proton and neutrino beams. He is presently deputy project manager of the Proton Improvement Plan at Fermilab and co-subproject manager for Targetry in the LBNE project. He also studies electron cloud effects and longitudinal beam dynamics, and collaborates with the NOvA experiment. His undergraduate studies were at the University of Notre Dame, and graduate studies at the University of Texas.

Statement: PAST's central role is to support the long-term viability of the NA-PAC and IPAC conferences. NPSS has been involved in staging everyone of these conferences in North America, and some level of involvement with the European and Asian IPACs. This financial and technical support is vital to continuing the conferences, especially in these times of travel restrictions and changes in intellectual property. My focus would be to maintain this relationship so that the IPAC and NA-PAC conferences may remain as strong as possible.

YOUNG PROFESSIONAL (Vote for One) **For a Two-Year Term 1 January 2015 – 31 December 2016**

HEATHER ANDREWS (M'07) is a scientist at Los Alamos National Laboratory currently working with photocathode drive laser systems and pursuing research into performance of high-current density field-emission array cathodes. She received her B.A. from Whitman College and PhD in Physics from Dartmouth College in 2003 working with John Walsh. Her graduate work included using Smith-Purcell radiation as an electron bunch length diagnostic, as well testing a grating based free-electron laser. She went on to work with Charlie Brau at Vanderbilt University investigating needle photo-field emission cathodes, Smith-Purcell and grating-based free-electron lasers, compact terahertz sources, and optical trapping of biological molecules. Her current research interests include novel cathodes, beam diagnostics, and drive laser systems.

Statement: I have been a member of IEEE-NPSS and participated in the various Particle Accelerator Conferences held in North America since 2007. I have always enjoyed and benefitted a great deal from these conferences. It is an honor to be nominated as a candidate for the Particle Accelerator Science and Technology Technical Committee Young Professional. I am excited to have this opportunity to be more involved and the chance to give back to the accelerator community. Having prior experience with many different aspects of accelerator work, I hope to bring a wide perspective to the PAST committee. As a member of the PAST TC I hope to ensure the quality and diversity of the PAC meetings as well as the accessibility of PAC, particularly to students and early career scientists.

JONATHAN EDELEN (GSM'11) earned his BSc in Electrical Engineering at Rensselaer Polytechnic Institute, Troy NY, 2009, with concentrations in Communications and Optics. He is now working towards his MS and PhD degrees in Electrical Engineering at Colorado State University in the field of particle accelerators. His theoretical work at CSU focuses on beam dynamics in electron injectors. This includes the design of novel techniques for thermionic cathode RF guns, the study of beam evolution in injectors, and the study of space charge effects (with a concentration on the virtual cathode instability). He is also responsible for the design and optimization of the CSU accelerator beam-line, as well as the refurbishment of the high voltage pulsed power system at CSU. Recently, Jonathan published a paper in IEEE Transactions in Nuclear Science on back-bombardment effects and mitigation in a novel un-gated thermionic RF gun. Prior to CSU, Jonathan worked as an Electrical Engineer in the Underwater Electromagnetic Signatures and Technology Division at the Naval Surface Warfare Center, Carderock Division. In this capacity he has served as principal investigator for a large-scale model test, participated in a small-scale model test, in the United Kingdom, in collaboration with the UK government, served as a signatures analyst in support of technology development, and fleet support for full-scale trials.

Statement: As a new member to the particle accelerator community, I am excited at the prospect of being involved with the technical committee, and I hope to provide a broad perspective to the committee business. I have a diverse background in engineering and a wide variety of interests across engineering and mathematics. In the short time that I have been engaged in the accelerator community, I have enjoyed the benefits of publishing in IEEE Transactions in Nuclear Science, and attending NA-PAC 2013. These opportunities are crucial to the development of young professionals such as me, and, if selected, I hope to continue to offer my support to this program for years to come.