

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY ELECTION

Election of Members to the Administrative Committee

FUSION TECHNOLOGY (Vote for One)

For a Four-Year Term 1 January 2020 – 31 December 2023



ANKITA JARIWALA (M'18) earned her Bachelor of Engineering - Production Engineering (Equivalent to B.S.-Mechanical) in 1999, from Saurashtra University in India. She began her career as a Planning Engineer at Universal Orthosystems, India in 2000. She worked as a Design engineer with leading engineering companies such as Engineering Technique and Larsen and Toubro (L&T), a global engineering conglomerate in India, til 2004.

She came to the USA in 2005 and started working as an on-site engineer for L&T at Kenworth Trucks, in Seattle. In 2007 she worked as L&T's onsite engineer at UTC Powers, a manufacture of fuel cell power plants. As a team-member of the stationary power plant development group, she generated trade studies of different plant layouts.

Her journey with alternate energy continued when she started working at Princeton Plasma Physics lab in 2009, as a Designer, for the Plasma Facing Components (PFC) for NSTX-U. After successful completion of tasks on the NSTX-U project in 2013 she started working as a vacuum vessel Port Integrator for US-ITER. She was responsible for the design and integration of two US-ITER upper ports. She interfaced with teams from four different countries who have diagnostic systems in US Ports. She is currently working as a design engineer for the PFCs for the NSTX Recovery project. Apart from designing tiles, she is also helping with testing of different grades of graphite to identify a suitable tile material for the PFCs.

She was elected as a Fusion Technology Committee member in 2018 and is the "Events Chair" for upcoming SOFE'19 conference.

Statement: I would like to serve as the FTC AdCom representative so that I can participate in discussions and actions at NPSS and higher levels that support fusion advancement. By being on this committee I can work with NPSS committee members and contribute in bringing those in the field together. I would also like to help draft IEEE USA Energy Policies for the future.



SUSANA REYES (M'19) is a Project Manager at SLAC National Accelerator Laboratory (SLAC) in California (USA), with over 20 years of experience in large scale fusion energy and basic energy science projects. Dr. Reyes earned an M.Sci. in Power Engineering from the Polytechnic University of Madrid in 1998, and a Ph.D. in Nuclear Engineering from the UNED University in Madrid in 2001. Dr. Reyes joined the Lawrence Livermore National Laboratory (LLNL) Fusion Energy Program in 1999 to work on the safety analysis of inertial fusion energy power plant designs. Since then, she has participated in the design, construction and operation of a variety of fusion research projects, including the NIF in LLNL, and the ITER Organization in Cadarache (France), where she supported the project through the coordination of safety analyses and associated documentation in preparation for ITER licensing.

Before joining SLAC, she also served as Accelerator Safety and Configuration Control Engineer at Lawrence Berkeley National Laboratory (LBNL), and worked in support of LBNL's ALS-U project. Her current interests are focused on project management for DOE SC office future facilities, so as next-generation XFEL lasers, and the development of fusion as a future energy source. Dr. Reyes is the recipient of the 2012 American Nuclear Society (ANS) Mary Jane Oestmann Professional Women's Achievement Award, and the 2015 Fusion Power Associates Excellence in Fusion Engineering Award, for her contributions to the safety and environmental aspects of both magnetic fusion energy (MFE) and inertial fusion energy (IFE) facilities.

She has served as a member of the IEEE NPSS Fusion Technology Committee since 2016.

Statement: I have worked as fusion engineer for a large part of my career in a variety of domestic and international projects, ranging from IFE/HEDP to MFE and including basic energy science research facilities. I look forward to this opportunity, as I think that the integration of FTC in the NPSS through the AdCom and close contact with other committees in the society is key for developing a strong engineering culture as fusion moves forward towards a future energy mission.

PLASMA SCIENCE AND APPLICATIONS (Vote for One)
For a Four-Year Term 1 January 2020 – 31 December 2023



ARATI DASGUPTA (M'09) Dr. Dasgupta received her BS in physics with Honors, MS, and PhD from the University of Maryland before joining the Naval Research Laboratory in 1986. She is a Section Head leading basic and applied research programs in atomic processes in laboratory and astrophysical plasmas that span pulsed power radiation sources, inertial confinement fusion (ICF), laser-matter interaction, plasma spectroscopy, low temperature plasma processing, and ultra-short wavelength lasers. Presently her research focus is on non-local thermodynamic equilibrium kinetics modeling and simulation of HEDP experiments of multi-keV plasma radiation sources on Sandia's Z machine and National Ignition Facility (NIF) at LLNL, ICF using Symcap implosion on NIF, magnetized plasma on Jupiter

Laser Facility at LLNL, and radiation physics for high ZA elements on the NRL NIKE laser in support of ICF. She has published reviews and numerous journal articles, presented national and international invited talks, tutorials, colloquiums, public lectures, DOE's HED Physics and OFES/DOE's Strategic Planning reports. She is a member of the Plasma 2020 Decadal Study committee of the National Academy of Sciences charged with a report on the current status, challenges and future directions of plasma science and technology. She is a member of the APS Committee of Status of Women in Physics and chair of its award sub-committee. She is a member of several science panels, and served on DOE's FESAC. She is a Fellow of the APS and the Washington Academy of Sciences. She has served on several APS committees including fellowship committees of DAMOP and DPP, chaired Women in Plasma Physics Committee of the DPP, and was the president of WISE at NRL. She is the author (on invitation) of a chapter in a book titled "Blazing the Trail; Essays by Leading Women in Science" and presented a public lecture at the University of Wisconsin – La Crosse in their yearly Public Lecture Series featuring prominent women in physics, astronomy, and engineering.

She has been very active in the IEEE community since the late 1990's by regularly attending IEEE/ICOPS conferences and serving in various activities supported by the IEEE Plasma Science Applications Committee (PSAC). She served as an executive member of PSAC and was the chair of mini-course subcommittee (2015-2017). She was the technical area coordinator of HEDP and organizer of several sessions at many IEEE/ICOPS conferences, lecturer of mini-course in 2005 ICOPS, and organizer and lecturer of mini-courses in 2014, 2017 ICOPS, and 2019 PPS/ICOPS conferences. She has been on a WIE panel and is organizing the WIE event at 2019 PPS/ICOPS conference.

Statement: As a member of the Administrative Committee (AdCom) of the Nuclear and Plasma Sciences Society (NPSS), I will serve a community that is broad and is responsible for making decisions on several important areas such as diversity of plasma physics workforce, conference finance, journal publications, and membership. One of my major goals in this position will be to ensure that there is support for broad collaborative cross-fertilization of research in interdisciplinary sciences that often produces the most notable discoveries. As an advocate of STEM education, exemplified by my lectures at several magnet science high schools and four-year colleges, I will foster outreach to mentor, encourage and support student and postdoctoral participation in NPSS conferences and other relevant meetings to continue the remarkable growth of plasma sciences in the future decades. I believe that in this difficult time of declining domestic budget, NPSS/IEEE should advocate strongly for expanded student involvement at national laboratories, besides maintaining student research at universities to help maintain training opportunities for students. Leveraging my experience and opportunities as a previous FESAC and a current NAS Plasma 2020 Decadal Study member, I will make efforts to seek support for continued cutting-edge research in many sub-fields of plasma science and engineering that are developing innovative technologies. Finally, as a member of AdCom, I will assist in any way in serving the community of plasma physicists, will play active roles in NPSS meeting related activities to make it successful, and will work with other AdCom members to represent the society at all levels.



BRAD W. HOFF (S'04-GSM'05-M'10-SM'18) is a Senior Research Physicist at the Air Force Research Laboratory (AFRL). He serves as Technical Advisor for the High Power Electromagnetics (HPEM) Sources Branch at the AFRL Directed Energy (DE) Directorate. His research background includes high power RF source technology, pulse power systems and diagnostics, PIC modeling, and electromagnetic interactions with high temperature materials. Current research interests involve high power microwave sources, nonlinear transmission lines (NLTLs), microwave-driven plasmas, applications of additive manufacturing techniques to HPEM sources, directed energy interactions with high temperature materials, and mm-wave power beaming. Dr. Hoff holds degrees from the U. S. Naval Academy (B.S. in Physics) as well as the University of Michigan (M.S.E. in Nuclear Engineering, M.S.E. in Electrical Engineering and

Ph.D. in Nuclear Engineering). Dr. Hoff is an IEEE Senior Member and a Member of IEEE Nuclear and Plasma Sciences Society (NPSS). He has served as a guest editor and reviewer for *IEEE Transactions on Plasma Science* and as a reviewer for *IEEE Transactions on Electron Devices*. Dr. Hoff is a recipient of the Air Force Research Laboratory Early Career Award.

Statement: I have been privileged to serve on the Executive Committee (ExCom) of the NPSS Plasma Science and Applications Committee (PSAC) as a voting member from 2017-2019. During this time, I had the opportunity to contribute as Chair of the PSAC Employment and Careers Subcommittee and as a member of the PSAC Nominations Subcommittee Member. The research communities represented by PSAC, and, more broadly, NPSS, are critically important to the greater international community in developing innovative solutions for technology needs in key areas, including energy, health, and security. I want to work within NPSS to enhance collaboration among the NPSS constituent societies to better understand and address the evolving challenges faced by scientists and engineers as well as to promote increased participation in the IEEE by researchers from underrepresented regions. I would be honored to have the opportunity to serve the IEEE Plasma Science and Applications community as their representative to the NPSS AdCom.

**PULSED POWER SCIENCE AND TECHNOLOGY (Vote for One)
For a Four-Year Term 1 January 2020 – 31 December 2023**



JOSHUA J. LECKBEE (S'00-M'04-SM'19) received the MS and BS degrees in electrical engineering from the University of Missouri. He is currently a Distinguished Member of the Technical Staff at Sandia National Laboratories where he has worked since 2004. His research interests include electron beam accelerator design, electron beam diodes, and pulsed power technology development. He is the author or coauthor of over 40 conference and journal publications. He served as a member of the IEEE Pulsed Power Science and Technology Committee from 2015-2018. He was technical co-chair of the 2019 IEEE Pulsed Power and Plasma Science Conference, guest editor for a special issue of the *IEEE Transactions on Plasma Science*, and served on the technical program organizing committee for several conferences.

Statement: As a member of the NPSS AdCom I would work to represent the interests and needs of the pulsed power science and technology community. Technical conferences and journal publications are the primary mechanisms for exchanging technical information with the broader community. As technology evolves, we must continually improve these important technical exchange mechanisms. I have been a member of the PPS&T committee where I have been involved in planning and execution of multiple conferences. I have also served as a guest editor of the *IEEE Transactions on Plasma Science*. Through working with the conferences and journal publications I have observed many of their strengths and challenges. I would like the opportunity to help advocate for continual improvement of these important venues for technical exchange.



HEATHER K. O'BRIEN (M'04) received the B.S. degree in engineering from Harvey Mudd College, Claremont, CA, and the M.S. degree in electrical engineering from Johns Hopkins University, Baltimore, MD. Ms. O'Brien began her engineering career working for Berkeley Research Associates on-site at the U.S. Army Research Laboratory (ARL), Adelphi, MD. Since 2006, she has been an Electronics Engineer with the Sensors and Electron Devices Directorate (SEDD) of ARL. Her expertise is in evaluation of high-voltage semiconductor devices for pulsed power applications. She additionally provides technical guidance for ARL's electrical safety program and manages cooperative research programs with universities and industry.

In 2012, Ms. O'Brien received the ARL Commander's Award for Civilian Service for dedication and technical accomplishments while serving as ARL-SEDD's lead pulse power component engineer. She has authored more than 20 conference proceedings and journal papers. She assisted the Technical Program Committee for the 2015 and 2019 IEEE Pulsed Power Conferences, and has been a reviewer for the *IEEE Transactions on Plasma Science* and for the *PowerAmerica Project Call*. She was a guest editor for the October 2018 *IEEE Transactions on Plasma Science Special Issue on Pulsed Power Science and Technology*. Ms. O'Brien began serving as a Member-at-Large on the NPSS Pulsed Power Science and Technology (PPST) Committee in 2018.

Statement: I am interested in serving the Pulsed Power Science and Technology Committee as AdCom Representative in order to gain exposure to the operations of NPSS and IEEE and to understand the overlapping interests of the various technical committees. I believe I can effectively collect and convey the pulsed power community's concerns and also clearly relay IEEE-NPSS developments back to the PPST committee. The strengths that I possess to support this role are attention to detail and the situational awareness to assess what needs to be done and follow through with appropriate action items.

RADIATION EFFECTS (Vote for One)
For a Four-Year Term 1 January 2020 – 31 December 2023



KENNETH F. GALLOWAY (M'74-SM'78-F'86-LF'08) is an alumnus of Vanderbilt University. He earned his doctorate from the University of South Carolina and went on to hold appointments at Indiana University, NAVSEA–Crane, the National Institute of Standards and Technology, the University of Maryland, and the University of Arizona before returning to Vanderbilt as dean of the School of Engineering in 1996. He served as dean until 2012. He is currently a Distinguished Professor of Engineering and Computer Science, Emeritus, and Dean of the School of Engineering, Emeritus, at Vanderbilt University.

Professor Galloway's research and teaching activities are in solid-state devices, semiconductor technology, and radiation effects in electronics. He has published numerous technical papers in these areas and has conducted research sponsored by NASA and several U.S. Department of Defense organizations. Among his professional activities, he has served as general chair of the IEEE Nuclear and Space Radiation Effects Conference (NSREC) and as general chair of the IEEE International Electron Devices Meeting (IEDM). He is a past-chair of the IEEE Nuclear and Plasma Sciences Society (NPSS) Radiation Effects Committee, has served on the Administrative Committees of the IEEE Electron Devices Society (EDS) and the NPSS, and has been a member of the U.S. Air Force Scientific Advisory Board. His American Society for Engineering Education (ASEE) activities included service as chair of the ASEE Engineering Deans Council Public Policy Committee, as chair of the ASEE Engineering Deans Council, as a member of the ASEE Board of Directors, and as President of the ASEE.

Professor Galloway has been elected a fellow of the Institute of Electrical and Electronics Engineers (IEEE), the American Association for the Advancement of Science (AAAS), the American Physical Society (APS), and the American Society for Engineering Education (ASEE). He has received the IEEE NPSS Radiation Effects Committee's Radiation Effects Award and the IEEE NPSS Richard F. Shea Distinguished Member Award. Additionally, he has received the Yuri Gagarin Award from the RADECS Association in Europe and the Distinguished Service Award from the Tennessee Society of Professional Engineers.



JOHN M. STONE (S'82-M'84-SM'18) is an Institute Engineer and Chief Engineer of the Space Systems Directorate at Southwest Research Institute in San Antonio, Texas. He received his Master of Science in Engineering degree from the University of Texas at Austin in 1986. He has spent his entire 32 ½ year career specifying, designing, testing, analyzing, and operating computing systems and scientific instruments for spaceflight. He has developed, or led the development of, hardware for military, civil, and commercial spaceflight programs. Avionics/C&DH hardware that he developed, or of which he led the development, has flown on the Space Shuttle, the Upper Atmosphere Research Satellite (UARS) Canada's RADARSAT-1 satellite, Gravity Probe-B, New Millennium Deep Space 1, the Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) mission, and Deep Impact. Instrument hardware that he designed, or for which he led the design, includes the ALICE UV spectrograph for the Rosetta mission, and the New Horizon's ALICE UV Spectrograph and Ralph Visible/Infrared Imager. As a part of the New Horizon's imaging team he received the 2017 SPIE George W. Goddard Award in Space and Airborne Optics. He served as payload electrical systems engineer and payload reliability/radiation program coordinator for the NASA Explorers Program's Interstellar Boundary Explorer (IBEX) and Magnetospheric Multiscale (MMS) missions and is currently the instrument system engineer for the Europa Clipper Mass Spectrometer for Planetary Exploration (MASPEX) instrument. His long career has given him a deep appreciation for the work of radiation effects engineers and scientists and the coordinating efforts radiation effects community.

Mr. Stone first became aware of the profound impact that radiation effects (RE) had on his work while working with Gary Mead of Ball Aerospace to procure mission compliant electrical components for the RADARSAT-1 mission. The data that had been produced by the RE community and the mentoring provided by Gary was vital to his success. As the applications for Mr. Stone's hardware development efforts extended beyond low earth orbit, the data compiled by and the information promulgated by the RE community became more vital to the success of his efforts. For several years, a heavy project workload prevented him from becoming active in the community, but he finally attended his first NSREC in 2004 in Atlanta. The warm welcome from Dan Fleetwood and others and the rich trove of data and knowledge provided at that conference brought him back to NSREC (Seattle) in 2005 and to every NSREC since then.

Since being asked to present the leadoff talk in the 2009 short course by Ken Label, he has been continually involved in the NSREC organizing effort. He was Finance Chair in 2011, served on the RESG in a special finance appointment from 2012 to 2015, was Local Arrangements Chair in 2017, and was Conference General Chair in 2019. His close work with the Radiation Effects Steering Group (RESG) and the army of volunteers that makes the NSREC a success has strongly reinforced his early realization that the information and mentoring provided by the Radiation Effects community is vital to the success of the world's spaceflight engineering effort and to creating a better life for all of us.

The Administrative Committee (AdCom) of the IEEE Nuclear and Plasma Sciences Society (NPSS) facilitates RESG activities and provides support and resources that help to make NSREC and other radiation effects engineering activities possible. In the spirit of continuing his involvement in the Radiation Effects community and from a desire to advocate for the community that has given him so much, Mr. Stone respectfully requests that you elect him your representative to the IEEE NPSS AdCom.

**IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY ELECTION
FUSION TECHNOLOGY STANDING COMMITTEE ELECTION
For the Four-Year Term 1 January 2020 – 31 December 2023
(Vote for UP to FOUR)**

DANIEL ANDRUCZYK (M'11) Prof. Andruczyk is heading up the HIDRA device at the University of Illinois. Previously he was a Research Engineer at the Princeton Plasma Physics Labs from 2012-2014. He currently is an Assistant Research Professor at the Center for Plasma-Material Interactions, a multidisciplinary center at the University of Illinois. Prof. Andruczyk conducts research into plasma edge studies and PFC materials as well as research related to manufacturing in the semiconductor industry. Prof. Andruczyk has previously worked as a post-doc at the Max Planck Institute for Plasma Physics, Greifswald where the W7-X Stellarator is located. He has extensive expertise in plasma diagnostics including the development and running of diagnostic He beams and has installed two on H-1NF Heliac in Canberra, Australia and the WEGA Stellarator in Greifswald, Germany.

Statement: My objectives with joining the FTC is to get more involved in many of the IEEE activities. At the moment I am part of the SOFE conference committee as the Chair of the mini courses. I would like to get more involved with an aim in the future of possibly being conference chair and organizer.

DANIEL BRUNNER (M'19) received his PhD in Applied Plasma Physics from MIT. For 8 years he worked as a graduate student, postdoc, and research scientist on Alcator C-Mod, which, with unmitigated parallel heat fluxes exceeding 1 GW/m^2 , has the most intense boundary conditions in any tokamak to date. He has 12 first-author publications covering boundary plasma diagnostics development and physics. With major contributions to fusion energy science including: development of surface thermocouple diagnostics, verification of the sheath heat flux transmission coefficient, demonstration of kinetic effects on boundary ion heat transport, direct feedback control of surface heat fluxes with impurity injection, extension of the poloidal field heat flux width scaling to reactor-relevant magnetic fields, and a unified cross-confinement scaling of the heat flux width with core pressure. Dan is one of the co-founders and the Chief Technology Officer of Commonwealth Fusion Systems, a spinout company working with MIT to develop a new class of high-field superconducting magnets for compact, high-field tokamaks.

Statement: My objective on the FTC is to connect the growing US and international private fusion efforts to the more traditional parts of the fusion community. At Commonwealth Fusion Systems, we are working to advance fusion science and technology as rapidly as possible for the betterment of the world. We aim to cooperate and exchange technical information with the rest of the global fusion community as has been done primarily across academic and government labs in the past. Fusion is too big of a lift for any one organization to handle.

ANDREI KHODAK (M'18) received an M.Sc. degree in engineering physics and the Ph.D. degree in physics and mathematics from St. Petersburg State Polytechnical University, Saint Petersburg, Russia, in 1988 and 1991, respectively. He has held various research and engineering positions, related to fluid mechanics and heat transfer. He has been with the Princeton Plasma Physics Laboratory, Princeton, NJ, USA, since 2010, where he is involved in multi-physics modeling, including plasma simulation, magneto-hydrodynamics, computational fluid dynamics, turbulence modeling, and heat and mass transfer.

Below is the list of some of the fusion related projects he has worked on:

- Project lead for NSTX high heat flux plasma facing components.
- Performed coupled structural, thermal, electrical and magnetic field analysis of the coils for new experimental nuclear fusion devices, including ITER CS and TF insert coils
- Magneto Hydro Dynamics flow simulations for blanket and divertor flows of future fusion devices
- Two-phase reacting flow simulations for tritium breeding blankets
- High collisional plasma simulations for nano-particle production and MHD generators.
- Conjugated heat transfer, computational fluid dynamics and non-linear structural analysis for ITER diagnostics first wall
- Designed and analyzed high heat load components for DIII-D neutral beams

Statement: Serving on the FTC will allow me to help advance fusion technology development by facilitating the exchange of information.

CARL PAWLEY (M'19) Dr. Carl Pawley received his BSEE from Purdue University and earned his Master's and PhD in Applied Plasma Physics from UCLA. He has worked in both the inertial fusion and in the magnetic fusion programs. Dr. Pawley's graduate work was high power microwave interactions with plasmas and stimulated scattering/optical mixing of electromagnetic waves in plasmas. His early career was in laser backscatter and the ISI concept studies at the Naval Research Laboratory. He became part of the build team for NIKE, a KrF UV laser system for accelerating planar targets using the broadband capability of the KrF laser system. The proof of principle experiment demonstrating sufficiently smooth laser drive for high gain ICF targets was conducted using a novel 1.8 keV reflective curved crystal imaging system implemented by Dr. Pawley allowed measurements of Raleigh-Taylor instabilities down to the relevant spatial scale lengths in both crystal and cryogenic D2 foam targets.

Dr. Pawley left NRL to join General Atomics working on the HV systems for the gyrotrons and neutral beam systems for DIII-D. Through his efforts the reliability of these system was significantly improved along with adding new capabilities, particularly recent developments in continuous sweeping of the beam power and beam energy during a single shot. Dr. Pawley is directing the complete upgrade of the neutral beam control systems to use FPGA and MCU dev boards to acquire analog signals and accurately control all parts of the beam operation. He is also helping support the lower hybrid and helicon power systems.

Statement: I have worked in both inertial and magnetic fusion with close coordination with the physics community to provide the tools needed to the advancement of the understanding of the basic physics issues. I am keenly aware of the need to bring new people to this effort and the creativity needed to overcome the technical challenges to fusion. If elected as a member of the Fusion Technology Standing Committee I work to support the conferences and cross meetings to find the people and solutions we need.

ROGER RAMAN (M'19) Dr. Raman holds a B.A.Sc. in Chemical Engineering from the University of Toronto, M.Eng. in Engineering Physics from McMaster University, an M.S.A.A. in Aerospace Engineering and Ph.D. in Plasma Physics both from the University of Washington. Upon graduation the Canadian Fusion Fuels Technology Project hired him for developing an advanced fueling system known as Compact Toroid Injection. Since 1999 he has been employed by the University of Washington to develop a solenoid-free plasma start-up system known as Coaxial Helicity Injection. He is an expert in both areas. He has been on long-term assignment to PPPL (1999 to present), where he developed the CHI concept on the NSTX experiment. He subsequently deployed the CHI system on the QUEST ST at Kyushu University in Japan for the purpose of developing reactor-relevant capability of CHI. More recently he has been involved in the development of a fast time response tokamak disruption mitigation system know as the Electromagnetic Particle Injector (EPI). Dr. Raman has been an active Physics Operator on NSTX, and Experimental Run Coordinator for the 2006 and 2009 NSTX Run campaigns, and before graduate studies was also trained as Reactor Shift Engineer for the NRU fission Research Reactor at the Atomic Energy of Canada Limited.

Statement: My interest is to help identify promising reactor-relevant concepts and to bring them to the forefront for the purpose of enabling a compact fusion system to be built as a next step device. I believe that my background in both fission and fusion systems, and my contributions to and experiences with the NSTX program, place me in a special position to be able to assess reactor relevant developments in fusion energy. Being a part of the Fusion Technology Committee would be one of the best ways for me to influence fusion energy development.

VALERIA RICCARDO (M'19) earned her Laurea (equivalent to a MS) in Nuclear Engineering from Politecnio di Torino in Italy, where she later completed a Dottorato (equivalent to a PhD) in Energetics. Riccardo began her career in nuclear fusion in 1995 when she joined JET, in Culham (UK) with a fellowship to fund her PhD in Mechanical Engineering at Imperial College London. She started at JET as an engineering analyst in support of the 4T upgrade, modeling the toroidal field magnets and the vacuum vessel and investigating asymmetric vertical displacement events, a sub-type of plasma disruptions which causes the largest electro-mechanical loads on the vessel.

From 2000 to 2014 she led the Engineering Analysis Group at JET. Between 2004 and 2011 she was the Acting/Deputy/- Engineering Design and Manufacture Team Leader for the ITER-like Wall (ILW) project which replaced all plasma facing components to offer the plasma a carbon-free layout like the one in ITER (beryllium main chamber and tungsten divertor). After serving as the Deputy Chief Engineer for JET between 2009 and 2011, she was appointed Chief Engineer in 2011. As Chief Engineer she oversaw the early operation years with ILW and replicated JET's Machine Protection Working Group and Operating Instructions on MAST, as well as supporting an initiative to rationalize lab-wide technical processes and documentation.

Dr. Riccardo moved to the US in December 2016 to become the head of the Engineering Department at Princeton Plasma Physics Laboratory (PPPL), where she was charged to increase engineering rigor. While at PPPL she has stood up a group of women in engineering and had a subset of these attending the IEEE WiE North East conference and career fair in November 2018. She is also working to re-establish a technician apprenticeship program and has started a graduate rotational program.

Statement: As a first-generation graduate, I feel strongly about giving back, supporting and setting up (albeit so far on a small local scale) frameworks so that others can have opportunities like those I was lucky enough to have.

When in the UK, I volunteered for the Institute of Mechanical Engineering in their chartered program, both as reviewer and interviewer and as a coach in their Monitored Professional Development Scheme. I have not yet found my feet in the US and I hope FTC is the organization where I can channel my energy and leadership contributing to initiatives close to my heart: development of young professionals and inclusion of non-traditional engineering workforce. I am willing to find the time to help organizing events as well as performing outreach activities to drive new interest in fusion engineering and technology.

YUHU ZHAI (M'18) is a senior mechanical engineer at the Princeton Plasma Physics Laboratory. He received the M. Sc. and Ph.D. from the University of Florida in Gainesville, FL in 2001 and 2003 respectively with a major in Engineering Mechanics and minor in Electrical and Computer Engineering. He worked as a chief design engineer for the North China Electric Power Design Institute on the design and construction of thermal power plants in Beijing before coming to the US. He was a postdoctoral research associate in the Electrical and Computer Engineering of Duke University from 2003 to 2006, focused on space plasma physics and remote sensing

of the Earth's magnetosphere. He became a scientist and superconducting magnet design engineer at the National High Magnetic Field Laboratory, on the research faculty of Florida State University, Tallahassee, FL since 2006 where he developed the Florida Electro-Mechanical Cable Model for understanding performance degradation of Nb3Sn cable-in-conduit conductors (CICCs) under thermal and mechanical loading. He joined Princeton Plasma Physics Laboratory (PPPL) in 2010 and became chief analyst for the design of ITER diagnostic first wall and led the multi-physics engineering analysis effort for US ITER diagnostics and port plug engineering. He was also involved in the final design of ITER in-vessel coils and became an expert in plasma disruption electromagnetic simulations for component design of the NSTX upgrade project at PPPL. He has authored or co-authored over 50 refereed journal papers and conference contributions.

Statement: My main objectives to better serve the community if elected on the FTC standing committee include:

- Advance understanding of technology integration with burning plasma for fusion
- Pursue opportunities to close gap between HTS innovation and fusion magnets
- Increase emphasis on bridging physics and technology gaps for compact fusion
- Promote strong national and international collaborations on fusion technology

Representing PPPL, I participated actively in the past and gave talks at the biennial Symposium on Fusion Engineering (SOFE) meetings and more recently, involved in the US fusion community input meetings organized by the US Fusion Energy Science Advisory Committee (FESAC). I will provide my professional service to the fusion community for organizing the biennial Symposium on Fusion Engineering and support the IEEE USA Energy Policy committee in the preparation of energy-related white papers if selected as a member of the FTC.

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY ELECTION
NUCLEAR MEDICAL AND IMAGING SCIENCES COUNCIL ELECTION
For the Three-Year Term 1 January 2020 – 31 December 2022
(Vote for UP to FIVE)

GERARD ARIÑO-ESTRADA (M'16) is an Assistant Project Scientist (APS) in the Department of Biomedical Engineering at the University of California Davis (UCD). Dr. Ariño-Estrada received his bachelor's degree in physics from the Universitat Autònoma de Barcelona (UAB) in Barcelona (Spain). Dr. Ariño-Estrada later completed his masters in applied mathematics (UAB) and PhD in physics (UAB). During his PhD, Dr. Ariño-Estrada worked in the Institut de Física d'Altes Energies (institute for high energy physics, IFAE) in Barcelona on the development and characterization of cadmium telluride detectors for nuclear medicine applications. Dr. Ariño-Estrada continued his work as a postdoctoral scientist at the Deutsches Elektronen-Synchrotron (DESY) in Hamburg (Germany) in the detector group, where he contributed to the development of detectors for serial femtosecond crystallography to be deployed in the European X-ray Free Electron Laser (European XFEL). Dr. Ariño-Estrada continued his career as a postdoctoral scholar in the Department of Biomedical Engineering at UCD under the supervision of Dr. Cherry. Dr. Ariño-Estrada worked on the development of thallium bromide (TlBr) detectors for positron emission tomography (PET) and on plant and equine studies using PET. Later, Dr. Ariño-Estrada became an APS and expanded his research focus to the study of TlBr detectors for proton range verification for quality assessment in hadron therapy. Dr. Ariño-Estrada is first author and co-author in 6 and 5 peer-reviewed manuscripts, respectively, principal investigator in an R03 award from the National Institutes of Health (NIH), journal reviewer for Physics in Medicine and Biology and the European Journal of Nuclear Medicine and Molecular Imaging, and abstract reviewer for the Nuclear Science Symposium (NSS)/ Medical Imaging Conference (MIC).

Statement: I was part of the volunteer crew staff in the IEEE NSS/MIC 2011 held in Valencia as a master student and I have been attending the conference yearly since 2016. Given my background in high energy physics, detector instrumentation, and molecular imaging, I can contribute to the scientific programs of both the NSS and MIC, as well as the Room Temperature Solid State Detector Workshop (RTSD). I believe my interdisciplinary profile can be widely useful to the Nuclear Medical and Imaging Sciences Council (NMISC). If elected to the NMISC I will try to promote diversity and equity within IEEE Nuclear and Plasma Science Society (NPSS) activities. I will encourage early-career scientists to engage in committees and conferences in the scope of the NPSS, and will contribute to keep improving the NSS/MIC conference logistically and scientifically, while preserving its standards of excellence. I am also looking forward to working with the editorial boards of the Transactions on Nuclear Science (TNS) and Transactions on Radiation and Plasma Medical Sciences (TRPMS) and provide my input related to new publishing trends and peer review process.

JOYITA DUTTA (GSM'09-M'11) is an Assistant Professor in the Department of Electrical and Computer Engineering at the University of Massachusetts Lowell (UML), Lowell, MA, and directs the Biomedical Imaging and Data Science Laboratory (BIDSLab) at UML. She also holds faculty appointments at Harvard Medical School and Massachusetts General Hospital (MGH), Boston, MA. Dr. Dutta received her B.Tech. (Honors) in Electronics and Electrical Communication Engineering from the Indian Institute of Technology Kharagpur, India, in 2004 and her M.S. and Ph.D. degrees in Electrical Engineering from the University of Southern California, Los Angeles, CA, in 2006 and 2011 respectively. Her research interests are signal processing and image analysis using PET/MRI and PET/CT for medical applications with an emphasis on image quantitation, multimodal information integration, and brain network analysis in the context of aging and Alzheimer's disease. In 2013, she received a Young Investigator Award from Computer and Instrumentation Council under the Society of Nuclear Medicine and Molecular Imaging (SNMMI). She was also a recipient of the SNMMI Mitzi & William Bland MD Pilot Research Grant (2013-2014), an American Lung Association Senior Research Training Fellowship (2013-2015), and an NIH K01 Career Award (2015-2020). Her contributions to medical imaging have been recognized by the 2016 Tracy Lynn Faber Memorial Award from the SNMMI and the 2016 Bruce Hasegawa Young Investigator Medical Imaging Science Award from the IEEE.

Statement: The IEEE 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 an exciting venue for both intellectual exchange of research ideas and networking with fellow researchers in this field. My medical imaging research experience of nearly 13 years 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 service as an elected Board Member for the Physics Instrumentation and Data Science Council (PIDSC) under the Society of Nuclear Medicine and Molecular Imaging (SNMMI) has added to my professional network. If elected to the Nuclear Medical and Imaging Sciences Council (NMISC), I hope to work toward attracting and promoting increased participation of young professionals (graduate students, postdocs, and junior faculty) at the conference. I am also a passionate educator with experience teaching courses at the intersection of medical imaging and deep learning. At UML, I have designed and taught a highly-rated graduate course titled Biomedical Imaging and Data Science for 4 consecutive years. I have also taught short courses at the IEEE EMBS Summer School on Medical Imaging (2014) and the AAPM Summer School on Practical Medical Image Analysis (2019). I, therefore, 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. Finally, I have been a routine attendee of the Women in Engineering (WIE) session at past MIC meetings and am strongly committed toward increasing the representation of

women engineers at this conference. As a council member, I will seek to garner support for and awareness about the WIE event and aid with organizing future iterations of this event.

NIKOS EFTHIMIOU (GSM'13-M'14-AF'16-M'18) Dr. Nikos (Nikolaos) Efthimiou is a Post Doctorate research assistance in Medical Imaging at the University of Hull, since 2016. He received his bachelor's degree in Biomedical Engineering from the Technological and Educational Inst. Of Athens in 2005. On 2008 he finished with distinction the postgraduate course in Medical Physics at the University of Patras. He completed his Ph.D. research at University of Patras in 2014 working in the field of detector technology for magnetic compatible preclinical Positron Emission Tomography (PET) systems. He then did 9 month compulsory service in the Hellenic army, assigned to the 414 Army Special Diseases Hospital. Afterwards he worked as post-doc research assistant in the Technological Educational Inst. Of Athens, then at UCL and finally Univ. of Hull. For a 6-months period he was a visiting researcher at the University of Leeds. He has contributions in more than 10 peer-reviewed papers and 13 IEEE conference records. He is an advocate of open source scientific software development having contributed code in more than 4 collaborative projects. In particular, he is active developer and co-maintainer of the open access software library for tomographic image reconstruction (STIR) and he has trained many early stage researchers on it. His research interest include statistical image reconstruction, Monte Carlo Simulations and detector modelling.

Statement: As an IEEE senior member, I have attended annually the Nuclear Science Symposium and Medical Imaging Conference (NSS-MIC) since 2010. Thanks to the efforts and persistence of some brilliant colleagues in this field, open source software is widely available, well established and accepted. However, most projects are incompatible, between them, and there is not a strong incentive to build interfaces between them. Back in 2014, I developed and shared a small application to bridge GATE simulated data with the STIR image reconstruction toolkit. Before 2017 (where the project was officially merged into STIR) it had more than 2000 downloads. This showed me the demand for further cross-project collaboration between the leaders and more importantly the developers. Therefore, if elected to the Nuclear Medical and Imaging Sciences Council (NMISC), I will be promoting and supporting the idea of more collaboration between the open source projects with the organisation of common panels and special workshops for developers of each platform. The main subject of these activities would be to discuss integration strategies. Furthermore, short hackathon sessions might further contribute to this end, in a practical manner.

ANTONIO J. GONZALEZ MARTINEZ (M'19) I am a researcher at the Spanish National Research Council (CSIC), working on the development of molecular imaging systems, with latest focus on hybrid Positron Emission Tomography (PET) and Magnetic Resonance (MR), since 2006. I have a permanent position since March 2017 at the CSIC, working at the Institute for Instrumentation in Molecular Imaging (i3M). Antonio J. González obtained in 2005 the Physics Doctorate at the University of Heidelberg in Germany with the qualification of Magna Cum Laude. The PhD work was carried out at the Max Planck Institute for Nuclear Physics in Heidelberg with a scholarship of the Max Planck Society. During my postdoctoral stage, I have developed dedicated (organ-specific) PET systems and have scientifically coordinated two EU projects. The first EU project, called MAMMI, ended in 2010 with such a significant success that the European Commission is still advertising it as a model. Currently, the system is commercialized by the Spanish company Oncovision with more than 15 installations worldwide. The second EU project has just successfully ended in November 2018, with the main aim of developing and constructing a hybrid brain dedicated PET-RF coil scanner, high-resolution, to study schizophrenic disorders. Another very important development in my career is the small animal PET system based on monolithic scintillators, so-called Albira. The system is currently commercialized by Bruker with nearly 50 installations worldwide. I am PI in a national grant building a two panels PET for heart examinations under stress. As a result of these previous experiences, I am aware of the importance of frequent communication among project members and of constructing a realistic research plan, timeline, and budget.

The breadth of my work with my colleagues and numerous students is reflected in the scientific literature and at conferences, including: first author of about 17 peer-reviewed publications and co-author of 65 more, several as second author due the importance contribution and PhD work supervising. I am co-author of about 50 conference proceeding, with an h-index of 17. He has successfully directed 6 PhD theses and is currently supervising three more concerning about the design of a gamma ray detectors, MR compatible.

Statement: I have participated annually in the Nuclear Science Symposium and Medical Imaging Conference since about 2007. I have been a reviewer, once session convener, and active member of the NSS-MIC conference program committee since 2010, primarily focusing on the MIC program but also with great interest on the NSS. I am Reviewer of the IEEE TNS and TRPMS journals, and Associate Editor of this last TRPMS. I have actively worked in international projects, and have a wide scope knowledge of research groups, as well as industrial partners. Given the active participation and strong commitment that I have demonstrated over the almost 10 years at MIC conferences (both as presenting scientist and committee member), I believe that I can make a unique and significant contribution to the Nuclear Medical and Imaging Sciences Council (NMISC). I am positive saying that there is a differentiation of my work with others since I have always worked in the design and translation of medical imaging instrumentation that could benefit the NMISC purposes.

If elected to the NMISC, I will try to engage scientists, I already do with all my students and colleagues, of all ages and sexes to participate in IEEE medical imaging activities. I will try to promote further scientific and educational activities, to ensure quality NSS-MIC joint sessions, and to help select dynamic plenary speakers. I would be happy to help manage and promote Nuclear Medical and Imaging Sciences activities as a NMISC council member.

MARIE-CLAUDE GREGOIRE (M'19) is the Leader of the Human Health Research Theme at the Australian Nuclear Science and Technology Organisation (ANSTO). She was awarded my PhD from the University of Technology of Compiègne in 1989 then worked in a high-tech industry R&D department until 1991 on imaging data processing for Single Photon Emission Computed Tomography (SPECT).

She then joined the team of Gordon Brownell at Mass General Hospital in Boston to work on data reconstruction and processing for a fully 3D Positron Emission Tomography (PET) scanner. She was recruited at the Centre National de la Recherche Scientifique (CNRS, France) in 1994, where she led and managed a clinical and pre-clinical PET imaging platform. Since that time, her research work focused on generating new data processing and modelling techniques for neuro-scientific research in human and non-human primates.

She moved to Australia to work at ANSTO in 2005 to establish and run a pre-clinical imaging platform dedicated to rodents with similar arrangements (70% management, 30% research). A fair part of her research in PET pre-clinical image processing and kinetic modelling was carried out as an Honorary A/Prof and Prof in the Faculty of Health Sciences, University of Sydney. Since her appointment as a General Manager at ANSTO in 2011 she has driven and overseen a broader range of programs, including radiation therapy dose enhancement and quantification as well as low radiation exposure of living systems. She has published around 100 publications with 6282 citations. She has also sponsored the successful ANSTO application to the Athena Swan Bronze Institutional Award as part of the first Australian cohort of applicants (Awarded December 2018).

Statement: As an IEEE member and research scientist, I have regularly participated in the Nuclear Science Symposium and Medical Imaging Conference since 1991. I have been a reviewer of abstracts and papers and delivered the highlights of the MIC conference in November 2018. Due to my long-term participation and the broad range of research contributions that I have demonstrated over the last 26 years at MIC conferences, I 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 commit to engaging scientists of all cultural backgrounds, ages and sexes to participate in IEEE medical imaging activities. I will try to promote further scientific and educational activities, to ensure quality NSS-MIC joint sessions, and to help select dynamic plenary speakers. I will also provide input to the editorial boards of *TNS* and *TMI*, encouraging them to speed up the review process wherever possible. I would be happy to help manage and promote Nuclear Medical and Imaging Sciences activities as a NMISC council member.

CRAIG S. LEVIN (M'93) Dr. Levin is currently Professor in the Departments of Radiology and, by courtesy, in Physics, Electrical Engineering, and Bioengineering at Stanford University. He is a founding Member of the Molecular Imaging Program at Stanford (MIPS), Faculty in the Division of Nuclear Medicine, and Member of Stanford's Bio-X Program, Cancer Institute, Cardiovascular Institute, Neurosciences Institute, and Center for Artificial Intelligence in Medicine & Imaging. He is director and PI of the NIH-NCI-funded Stanford Molecular Imaging Scholars (SMIS) post-doctoral training program, and Co-Director of the Stanford Center for Innovation in In Vivo Imaging (SCI³). Dr. Levin's also directs a 20-member research laboratory, named the Molecular Imaging Instrumentation Laboratory (MIIL), whose research interests are to explore new concepts in imaging instrumentation and algorithms for advancing our ability to non-invasively visualize and quantify molecular and cellular pathways of disease in living subjects. To support this work he has received numerous grants from NIH, DOE, DOD, NSF, industrial sponsorship from companies such as GE, Siemens, and Philips, as well as research awards from numerous non-profit foundations. Dr. Levin has over 160 peer-reviewed publications and 27 awarded patents.

Statement: As an IEEE member and researcher, I have participated annually in the Nuclear Science Symposium and Medical Imaging Conference (NSS-MIC) for the past 25 years. During that time, I have been actively involved in the conference program and various activities, such as: MIC Program Co-Chair twice (2010 and 2013); Member, Secretary, and Nominations Chair of the NMISC (1998-2004); Local Chairman (2001); Workshop Organizer and Lecturer (2002, 2004, 2006, 2009, 2011); Adjudication Committee for Student Paper Awards (2010, 2012); Jaszczak Award Committee (2014-2017); Organizer and Lecturer for Short Courses (2002, 2008, 2015); MIC and NSS Program Committee (1998-present); MIC Top Convenor (2014-pres.); Chair and Moderator for numerous conference sessions (2001-present); and Faculty Panelist, Women in Engineering session (2014). If elected onto the NMISC again, I will be thrilled to contribute to making the MIC meeting the most stimulating and educational event for scientists and trainees working in the field of radionuclide imaging to attend.

HAMID SABET (M'09) is an Assistant Professor of Radiology at Harvard Medical School and Cyclotron Physicist at Massachusetts General Hospital. He received his B.Sc. and M.Sc. degrees in Electronics & Electrical Engineering, and Nuclear Engineering from Shiraz University, Iran in 2002 and 2005, respectively. He earned his Ph.D. in Quantum Science & Energy Engineering from Tohoku University, Japan in 2008 where he worked on semiconductor-based Positron Emission Tomography for small animal imaging. In his time with Tohoku University as Assistant Professor (2008-2009), he carried out feasibility studies of gantry designs for transformable PET systems. He pursued his career in Rush Medical Center in Chicago from 2009 to 2010 as research fellow and was responsible for detector front-end of cardiac SPECT system design. Dr. Sabet joined RMD Inc. in 2010 as Staff Scientist and initiated and led multiple projects including laser processing of scintillators, SiPM-based photon counting detector, and intraoperative positron probe. To pursue his career in academic medicine, he joined MGH/Harvard faculty and established Radiation Physics and Instrumentation

Lab within Gordon Center in MGH Radiology. The research theme of his lab is development of novel detector technologies for nuclear medicine and x-ray imaging, and image-guided surgical applications.

Statement: I have been an active IEEE and NPSS member since 2008 and have served as ad-hoc reviewer for many journals in various fields including TNS. After graduation, either as industry scientist or university faculty, I have participated annually in Nuclear Science Symposium and Medical Imaging Conference.

I have found that MIC is one of the venues with high potential for filling the industry- academia gap. I believe that my experience in different aspects of the field from material science of detectors to laser physics, and to hardware/software development, is my strength in bridging between academia and industry as well as between medical imaging and other fields.

Given my active participation and strong commitment demonstrated over the years as attending and presenting at MIC conferences, I believe that I can contribute to the overall mission of the Nuclear Medical and Imaging Sciences Council (NMISC).

If elected to the NMISC, I will try to engage and reach out to scientists of all ages/sexes and across various fields to participate in IEEE medical imaging activities in line with NMISC's mission. I will contribute to further promote scientific, educational, and outreach activities, to help select plenary speakers for MIC and NSS-MIC joint sessions, to promote TMI/TNS/TRPMS journals, and to help select MIC committee members.

YOUNGHO SEO (SM'11) Youngho Seo, PhD, is a Professor and Director of Nuclear Imaging Physics in the Department of Radiology and Biomedical Imaging, Professor in the Department of Radiation Oncology, Faculty Affiliate of Bakar Computational Health Sciences Institute at the University of California, San Francisco (UCSF), and Physicist Faculty Scientist at Lawrence Berkeley National Laboratory. He is also a faculty member of the Joint Graduate Group in Bioengineering between UCSF and UC Berkeley, and the Master of Science in Biomedical Imaging Program at UCSF. He received his bachelor's degree in Physics from Korea Advanced Institute of Science and Technology (KAIST) where he investigated cosmic ray-induced radiation effects on electronics for his senior undergraduate thesis. He completed a master's degree in Physics at the University of Alabama in Huntsville while focusing on space plasma physics, followed by the second master's degree at the University of California, Los Angeles (UCLA). He finished his PhD in Physics from UCLA with his dissertation on a dark matter experiment using dual-phase xenon under the supervision of Professor David B. Cline, followed by postdoctoral training at the same institution in experimental neutrino physics. He joined the UCSF Physics Research Laboratory (PRL) in 2003, and was trained under the supervision of Professor Bruce H. Hasegawa before joining the faculty in 2006. He leads a group of physicists and engineers working in the field of radionuclide and x-ray imaging instrumentation and physics, and directs the UCSF PRL. His primary research focus is to develop and use quantitative SPECT/CT, PET/CT, and PET/MR molecular imaging tools for a broad range of research areas including small animal imaging and physics analysis of clinical research data. He also directs the preclinical PET/SPECT/CT/Optical imaging core facility at the UCSF Center for Molecular and Functional Imaging at China Basin. He is an author of 157 published articles including scientific journal manuscripts, book chapters, preprints, and conference proceedings.

Statement: I have participated annually with few exceptions in the Nuclear Science Symposium (NSS) and Medical Imaging Conference (MIC) since 2000. In 2006, I helped MIC Program Chairs review all MIC abstracts and develop the conference program. Also since 2006, I have been reviewing NSS and MIC abstracts for the conference programs every year. In 2009 and 2010, I was a topic convener of the NSS topic "Instrumentation for Medical and Biological Research". For the 2013 meeting, I serve as Conference Promotion Co-Chair. In addition, I have been an active member of Conference Information and Promotion Committee (CIP) since 2012. More recently, between 2014 and 2017, I was a co-chair for the short course program for NSS/MIC/RTSD by developing the program and overseeing the courses. Given the active participation and dedicated commitment that I have demonstrated over the 15+ years as a presenting scientist or in conference organization roles, I strongly believe that I can make a significant contribution to the Nuclear Medical and Imaging Sciences Council (NMISC). If elected to the NMISC, I plan on expanding my role in conference promotions particularly for underrepresented countries and societies. Another initiative I plan on taking is to expand educational opportunities for junior investigators in NSS and MIC communities by offering more affordable and accessible educational courses such as short courses than how they are offered currently. I am also very interested in promoting attractive sites as host cities for IEEE NSS/MIC with hopes of improving the general attendance numbers. Finally, I believe that I can contribute to the refinement of the portion of TNS and TRPMS manuscripts that have strong relevance to MIC, leading to inclusion of those manuscripts in PubMed. In particular, I am very interested in making the scientific outcomes from our NSS/MIC community more visible in biomedical researchers to foster seamless collaborations between scientists/engineers and biologists/clinicians.

JUN ZHANG (AM'17-M'19) I am an Assistant Professor of Radiology, American Board of Radiology certified Medical Physicist and Director of Operation of Imaging and Radiation Oncology Core (IROC) Ohio, at The Ohio State University. Before that, I started my career as a Postdoctoral Fellow in the Department since 2004, followed by a faculty member promotion as Clinical Instructor since 2007, after I completed my PhD on Biomechanics and Optical & Medical Imaging in Tsinghua University of China. My current interest focuses on the solid-state digital photon counting PET/CT technologies together with its validation, system performance, optimization and clinical translations. I have been actively pursuing low dose PET, fast PET imaging, and software and methodology development on PET quantification, reconstruction and clinical trial quality controls. I have >40 published peer-reviewed papers, >100 first author abstracts and talks on international meetings, and 1 book in editing. I serve as PI and Co-I on numerous grants of

state and NIH's, and is an active member of IEEE, SNMMI, RSNA, ACNM, AAPM, Alliance, SWOG, IROC and its steering committees. I started working on national clinical trial services and management since 2005 and have participated in serving and managing more than 50 multi-institutional multi-imaging modality clinical cancer trials (CALGB, SWOG, Alliance, pharmaceutical companies).

Statement: As an IEEE member, I am volunteering to run for the IEEE NMISC and looking for opportunities and election into the NMISC with my enthusiasm. I participated in the IEEE NSS/MIC since 2007 and was honored the travel grant for trainee in 2007. I am an active abstract reviewer for NSS/MIC. As an organizer and invited speaker of SP and CE sessions at SNMMI and AAPM in recent years, I see great opportunities of scientific and educational activities which can be extended and contributed to IEEE MIC/NSS. If elected to the NMISC, I will volunteer my time and efforts in serving NMISC and contributing to the committee by promoting further scientific and educational activities to leverage the advantages that Nuclear Medicine is experiencing, assisting to create new opportunities of seminars and training programs focusing on new and emerging PET technologies, helping to develop and grow relationships with other professional societies like SNMMI and AAPM. I am confident that with your vote I will be able to help with promoting the growth of Nuclear Medical and Imaging Sciences activities as a NMISC council member.

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

**Member-at-Large to the PAST ExCom
For the Four-Year Term 1 January 2020 – 31 December 2023
(Vote for ONE)**

WOLFRAM FISCHER (M'11-SM'12) is Accelerator Division Head at Brookhaven National Laboratory (BNL) and responsible for the operation and upgrades of the Relativistic Heavy Ion Collider (RHIC) and its injector complex. The injector complex also serves the Brookhaven Linac Isotope Producer (BLIP) and the NASA Space Radiation Laboratory (NSRL).

Wolfram received his Ph.D. in experimental accelerator physics in 1995 from the University of Hamburg. His thesis work, carried out at CERN and DESY, involved the investigation of the stability of particle motion in storage rings. In 1995 Wolfram joined BNL as a post-doc and worked there since, with one year interruption in industry. He is interested in all aspects of collider operation and performance enhancements, as well as the Electron-Ion Collider design.

Wolfram is a Senior Physicist with Tenure at BNL and was awarded the BNL Science & Technology Award in 2017. In addition to being a Senior IEEE Member, Wolfram is also a Fellow of the APS and an Associate Editor for Physical Review Accelerator and Beams, holds a MS in Management and Policy from Stony Brook University (2001) and the PMP certification (2016). Wolfram has served on numerous machine advisory, technical, project and program committees.

Statement: I am honored to be an IEEE NPSS AdCom candidate. IEEE has long history in supporting accelerator science and technology, and in particular the Particle Accelerator Conferences in North America. I was a member of the organizing and program committees of several of these conferences, and I am looking forward to working with IEEE on the organization of future conferences.

GRAEME MURDOCH (M'19) is the Neutron Technologies Division Director at the Spallation Neutron Source (SNS) at Oak Ridge National Laboratory with responsibility for several key technical systems including the mercury target and instrument beamline engineering, project management of upgrade projects, instrument data acquisition and controls and neutron optics, polarization and detectors. He is also currently leading the conceptual design activities for a proposed Second Target Station at SNS. Graeme joined SNS in 2001 with responsibility for oversight of design, installation and commissioning of the SNS accelerator mechanical systems. During his tenure at ORNL Graeme was also the Non-Nuclear Systems Division Director (2013-2018) at the US ITER Project in Oak Ridge with responsibility for the central solenoid magnet Systems, plasma facing vacuum systems, the steady state electrical network and plasma diagnostics. He has over 30 years of progressive experience working in technical and management capacities in an accelerator environment. Prior to joining ORNL, Graeme worked as a Senior Project Engineer at the Rutherford Appleton Laboratory, England on the ISIS Spallation Neutron Source specializing in mechanical engineering design of accelerator and target systems e.g. Radio Frequency Quadrupole, beam dumps, beam position monitors, targets and reflectors. Graeme is a mechanical engineer, graduated from the University of West England, Bristol. Graeme is a Fellow of the UK Institute of Mechanical Engineers and a registered Chartered Professional Engineer with the UK Engineering Council.

Statement: Having spent most of my career working on accelerator engineering and having attended and presented at many particle accelerator conferences, and international accelerator institutions, I am fully aware of the importance of promoting the field to engineers. For engineers it's an exciting and challenging field to work in and offers great opportunities for career growth and the ability to meet physicists and engineers from around the world to share ideas. However, effective promotion of the particle accelerator field requires a structured approach that only a professional organization like the IEEE can offer. As a member of the PAST technical committee and in my capacity as a senior manager I would commit to continue promoting the accelerator community to both engineering colleagues and potential future candidates and use my network of professionals to expand the understanding of the importance of the organization. I would endeavor to strengthen the links between IEEE and other professional organization in Europe and Asia.

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY
PULSED POWER SCIENCE AND TECHNOLOGY TECHNICAL COMMITTEE ELECTION
For the Four-Year Term 1 January 2020 – 31 December 2023
(Vote for UP to FOUR)

BRIAN T. HUTSEL (S'05-GSM'07-M'11) received B.S. (2007) degrees in electrical and computer engineering and the M.S. (2008) and Ph.D. (2012) degrees in electrical engineering from the University of Missouri, Columbia. Since 2012 he has been with the Advanced Accelerator Physics department at Sandia National Laboratories in Albuquerque, New Mexico. Over the course of his career Brian has worked on high voltage / high current laser-triggered gas switching, pulsed power system design and modelling, linear transformer driver development, and electrical power flow in magnetically insulated transmission lines.

Statement: I've had a chance to attend many of the pulsed power conferences since 2007 both as a student and as a researcher at Sandia National Laboratories. As a student the conferences provided valuable opportunities for me to interact with professionals in research organizations involved with pulsed power and played an important role in my decision to work in the field of pulsed power. Serving on the PPST committee would allow me to be involved in conference organization and planning to help encourage students to enter the pulsed power field.

JOHN KRILE (S'03-M'06) Dr. John Krile received his PhD in electrical engineering from Texas Tech University (TTU) in 2006 and served as a Senior Research Associate for the Center for Pulsed Power and Power Electronics until 2012. During that time, he received the Tom R. Burkes Outstanding Graduate Student Award and the EAPPC Young Scientist Award. Dr. Krile moved to the Naval Surface Warfare Center, Dahlgren Division (NSWCDD) in 2012 where he served as both program lead and technical lead on numerous High Power RF (HPRF) programs involving Advanced RF Source Research, HPRF Susceptibility Testing & Evaluation, Modeling & Simulation, and Prototype System Development in support of ONR, DTRA, AFRL, and JNLWD. He worked extensively with these funding agencies to influence future HPRF and Directed Energy (DE) research via Road Maps, STTR, SBIR, and RFI solicitation development. Dr. Krile served as the Payload Driver Chief Engineer for the High Power Joint Electromagnetic Non-Kinetic Strike (HiJENKS) program before accepting a role as the Directed Energy Group Lead at Scientific Applications and Research Associates (SARA) where he continues his work on pulsed power and DE development. He has published 24 peer-reviewed journal papers and given 25 domestic and international presentations with 4 invited talks.

Statement: I have spent the last 15 years working to advance the state-of-the-art in the fields of pulsed power, plasma physics, and High Power Microwaves. During this time, I have had the privilege of working with, and learning from, leaders in the pulsed power community. I believe the knowledge I have gained and the professional relationship I have fostered would be of great benefit to the PPST Committee. I look forward to facilitating growth in our field via collaboration across government and private institutions, outreach to young engineers, and cross discipline interactions. I would be honored to serve as a member of the Pulse Power Science and Technology committee and help ensure that our field continues to grow and provide young scientists with the opportunities I have been given.

GEORG MUELLER (M'06) received the Diploma degree in physics and doctoral degree from the University Karlsruhe, Germany, in 1990 and 1999 respectively. Since 1990, he was with the Research Centre Karlsruhe, here he worked in different research fields including thin film deposition by channel spark, plasma and electron beam diagnostics, development of multi-point explosive emission cathodes, transport of large area pulsed electron beams and surface modification by pulsed electron beams. Dr. Mueller is author and co-author of more than 250 publications in peer reviewed journals, conference proceedings and four book chapters. Since 2006, he has been Deputy Director and Head of the Pulsed Power Department of the Institute for Pulsed Power and Microwave Technology at Karlsruhe Institute of Technology (KIT). He is responsible and involved in research and development of pulsed power technologies and applications in the field of electrodynamic fragmentation of solid dielectric materials, material surface modification by pulsed electron beams, plasma diagnostic and beams physics, electroporation of biological cell membranes by pulsed electric fields and basic research in bioelectrics. In 2013, Dr. Mueller was appointed professor for pulsed power technologies at the Faculty of Electrical Engineering and Information Technology at KIT.

Statement: During my almost 30-year career, I have accumulated extensive expertise in the pulsed power field in which I served as a researcher, principle investigator and scientific manager aiming to develop practical pulsed power applications to address environmental and industrial needs. I enjoy working with young professionals. Through my lectures and job opportunities, I always try to get young researchers to fall in love with and remain faithful to our exciting scientific area. I am serving in various positions of our scientific community. I am member of the International Advisory Committees of the BEAMS- and EAPPC- conferences. I served as the General Chair of the IEEE -cosponsored EAPPC/BEAMS conference in 2012 and was the financial chair of the ICOPS 2008. By 2018, I was already a member of the IEEE-PPST committee and would like to resume my dedicated work there.

If I will be elected, I will use all my expertise and experience to represent the interests of our pulsed power community within and outside IEEE, to organize, conduct and encourage participation in the IEEE International Pulsed Power Conferences and I will do my utmost to promote international exchange and cooperation.

LUIS M. S. REDONDO (M'06-SM'15) was born in Lisbon, Portugal in 1968. He received the Doctor degree in Electrical and Computer Engineering in 2004, from IST, Lisbon University, Portugal. He is currently Coordinator Professor at Lisbon Engineering Superior Institute, ISEL, teaching Power Electronics and Pulsed Power. Prof. Luis Redondo participate in 7 Portuguese research projects as scientific Coordinator, has 5 Portuguese Patents, 4 international book chapters and 43 papers in international peer-review journals. He is Senior Member of the Nuclear and Plasma Science Society from IEEE, since 2015. Also, invited Editor of the October 2012 Special Issue on Pulsed Power Science & Technology of the *IEEE Transactions on Plasma Science* and invited Editor of the October 2015 Special Issue for Selected Papers from EAPPC 2014 of the *IEEE Transactions on Plasma Science*. In 2011 he founded the company EnergyPulse Systems, EPS, where he is R&D manager, and in 2015 the non-profit organization Association for the Advancement of Pulsed Power, A2P2, for the dissemination of pulsed power technology and applications, where he is Vice-President. His main achievements are related to solid-state monopolar and bipolar Marx generator topologies to industrial applications.

Statement: I have a long history in serving the Pulsed Power international community, as I was a voting member of the Pulsed Power Science & Technology Committee of the IEEE Nuclear and Plasma Science Society, PPST/NPSS, from 2011 to 2016, being nominated Distinguished Lecturer of the PPST/NPSS from 2011 to 2016 and Publication Chair for the Pulsed Power Conference since the 2013 conference. In addition, I was the General Chair of the EAPPC-BEAMS-MEGAGAUSS 2016 in Estoril, Portugal. Currently, I am a member of the International Organizing Committee of the Euro-Asian Pulsed Power Conference, EAPPC and a member of the International Advisory Committee of the International Conference on High-Power Particle Beams, BEAMS. My willingness to serve the international pulsed power community is clear by my active contribution on launching a non-profit international association for the dissemination of this technology and applications, the Association for the Advancement of Pulsed Power, A2P2, where I am Vice-President, and with which I intend to establish close cooperation with the PPST/NPSS. Finally, one of my long-term goals is to be the chair of the Pulsed Power Conference in Portugal contributing to spread Pulsed Power technology and applications worldwide.

EMILY A. SCHROCK (S'14-GSM'16-M'17) Emily A. Schrock (Hirsch) received her MS and BS degrees in electrical engineering from Texas Tech University (TTU). Her master's thesis involved research in wide bandgap semiconductor devices for pulsed power applications. She was president of the IEEE – HKN honor society at TTU where she led her organization's volunteering at robotics competitions for elementary through high school students. In addition, she volunteered as the lead mentor of twelve high school students for an engineering apprenticeship program. After completing her master's degree at TTU, Emily joined Sandia National Laboratories (SNL) as part of the Directed Energy Missions team. At SNL, Emily researches compact pulsed power, nonlinear transmission lines, and photoconductive semiconductor switches. Currently, Emily primarily serves as a compact pulsed power design engineer and SME for a joint Air Force / Navy airborne HPM weapon demonstration program. Emily has 13 publications from her research in compact pulsed power and power electronics technologies. In Albuquerque, Emily continues her volunteer work by mentoring under-represented undergraduate STEM students at the University of New Mexico (UNM), and by giving presentations to elementary school classes in Albuquerque to promote STEM careers. Emily is continuing her education with the pursuit of a Ph.D. in electrical engineering.

Statement: I have a history of service and leadership in and outside of IEEE organizations, and I have served as a reviewer for IEEE Transactions on Plasma Science. I am passionate about outreach and mentoring to promote diversity in engineering and specifically in the pulsed power community. I have strong leadership experience and believe I would bring a new perspective to the IEEE NPSS PPST committee.

JAMES A. SCHROCK (S'13-GSM'16-M'18) completed his BS, MS, and PhD in electrical engineering at Texas Tech University in 2013, 2015, and 2017, respectively. His graduate research determined the failure mechanisms and optimized design of advanced Silicon Carbide switches for pulsed power and power electronic applications. Dr. Schrock is currently an active duty captain at the Air Force Research Laboratory (AFRL), Directed Energy Directorate at Kirtland AFB. At AFRL, he serves as a Principal Investigator (PI) supporting the Electromagnetic Weapons Technology Program and as the Chief of the Computational Physics Section. As PI, he leads the technical direction of research projects in advanced pulsed power, compact prime power, and nonlinear transmission lines. As Chief of the Computational Physics Section, he leads both civilians and military simulating and designing next-generation high power electromagnetic sources, and is responsible for their professional growth and performance evaluations. Dr. Schrock was awarded "Best Presentation" by Chief Scientist's 2018 Scientific Advisory Board review and the 2018 Directed Energy Directorate "Supervisory" Award. In addition, Dr. Schrock is proactively engaging with IEEE and DEPS by serving as a session chair for the 2018 IEEE International Power Modulator and High Voltage conference, the 2019 IEEE Pulsed Power and Plasma Sciences conference, the 2019 Directed Energy Professional Society US/UK conference, and as Visa Support for the 2021 IEEE Pulsed Power Conference.

Statement: I have proven experience with leadership and service in IEEE. I currently serve as a reviewer for *IEEE Transactions on Plasma Science*, and I'm engaging with IEEE and DEPS conferences. Additionally, I'm a professional military leader in the DoD. I will bring my commitment to service and my leadership experience to further develop the objectives of this committee.

REBECCA SEVIOUR (M'03) is currently head of Accelerator Research at the University of Huddersfield (UK). Prior to joining Huddersfield, she was the Lise Meitner Professor at Lund University (Sweden), with a joint position at the European Spallation Source. Rebecca is an Applied-Physicist with research interests in RF for particle accelerators and the use of metamaterials for high-

power applications, with a focus towards novel high-power RF oscillators and amplifiers in the GHz regime. She is an active member of the NPSS community, having previously served as an elected member on the Plasma Science and Applications Executive Committee.

Statement: Pulsed Power is an area close to my heart and over the last few years I have had the privilege to be involved in many activities sponsored by the NPSS PPST & PSAC. This involvement has afforded me the opportunity to engage with a diverse range of researchers from industry, government and academia. If elected I will work towards creating a supportive environment for the cross-fertilization of research, ensuring that members of the pulsed power community benefit from enhanced cooperation between industry, academia and government research organizations across all regions.

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY
PLASMA SCIENCE AND APPLICATIONS EXECUTIVE COMMITTEE ELECTION
For the Three-Year Term 1 January 2020 – 31 December 2022
(Vote for UP to SIX)

LAY-KEE (RICKY) ANG (S'95-AM'99-M'14-SM'10) is the Head of Science and Mathematics at the Singapore University of Technology and Design (SUTD) and the Ng Teng Fong Chair professor for SUTD-Zhejiang University Innovation, Design, and Entrepreneurship Alliance (IDEA). He received his B.S. degree from the National Tsing Hua University, Taiwan, R.O.C. in 1994, and the M.S. degree and the Ph.D. degree in plasma physics from the Department of Nuclear Engineering and Radiological Science, University of Michigan, Ann Arbor in 1996 and 1999 respectively. From 1999 to 2001, he was a Los Alamos National Laboratory (LANL) director funded postdoctoral fellow in the Applied Physics Division. Before joining SUTD, he was a tenured Associate Professor in the School of Electrical and Electronic Engineering at the Nanyang Technological University, Singapore. His broad research interests are in the development of theoretical scaling laws and models for Physics and Applications in Electron, Photon, Plasmonic and Plasma interaction (EPPPi group of 11 members) in SUTD: https://people.sutd.edu.sg/ricky_ang/, and the research projects are now funded by Singapore (MOE, ASTAR) and USA funding agencies (AOFSR-AOARD and ONR-Global). He is one of pioneers in developing the quantum scaling law for Child-Langmuir law and new electron emission law (thermionic, field and photo-emission) for novel two-dimensional materials and operating at ultrashort pulse regime. He has published >140 journal papers and >160 conference papers, including 2 invited talks in the APS-DPP annual meeting (2005 and 2012). In 2018, he became one of the IEEE NPSS Distinguished Lecturers (only one from Asia) on these topics. He was also supported by the AFOSR-AOARD Window of Science program (2007, 2012, 2015, 2018) and ONR Global visiting scientist program (2009, 2017) to present many technical seminars in USA institutions.

He is now a senior member of IEEE-NPSS and a member of APS-DPP. He has served the IEEE in various capacities, such as technical session chairs or member of international committee for ICOPS (2007, 2013, 2014, 2019) and guest editor of IEEE Transactions on Plasma Science several times. He is looking forward to support the 2020 ICOPS to be held in Singapore. He was the founding chair of the IEEE NPSS Singapore chapter in 2013-2014. He was also editor board member for the *MPDI* – plasma journal (2017-2018) and *The Open Journal of Plasma Physics* (2007 – 2015). For Asia-based activities, he involved as a judging committee member for the U40 Young Research Award under the Division of Plasma Physics, Association of Asia Pacific Physical Societies (AAPPS), and a member of international advisory committee for the 2018 Asian-Pacific Symposium of Plasma and Terahertz Science and Technology. Due to his administrative contribution to the university, he was awarded the Public Administration Medal (Bronze) by Singapore in 2017, and Faculty Excellence Award (Professional Service) by SUTD in 2015.

MIN CHEN (M'19) received the B.S. degree from the School for the Gifted Young, University of Science and Technology of China (USTC) in 2002 and the PhD degree in Optics from Institute of Physics, Beijing, Chinese Academy of Sciences (CAS) in 2007. From 2007 to 2009 he worked as an Alexander von Humboldt research fellow in Heinrich Heine Universitaet, Duesseldorf, Germany. After that he joined Lawrence Berkeley National Laboratory as a postdoctoral research fellow. From 2012, he joined Shanghai Jiao Tong University as a Distinguished Research Fellow. In 2017 he has been promoted to a tenured associate professor. Currently, he is a Professor in the School of Physics and Astronomy, Shanghai Jiao Tong University.

His research areas include theoretical and computational studies on laser plasma interaction, especially on plasma based particle accelerator and radiation sources, including laser wakefield accelerator, laser solid ion acceleration, Terahertz and high order harmonics radiation from laser plasma interaction. To date he has published and coauthored more than 130 peer-reviewed scientific research papers in Nature Photonics, Physical Review Letters, Physics of Plasmas, etc. In 2007 he got the Tsai ST Plasma award from Chou Pei-yuan Foundation, China. In 2012 he was selected as a member of National Young Talents program. In 2013 he was awarded by Shanghai Pujiang Program. In 2018 he has been awarded by the Qiu Shi Science & Technologies Foundation. In 2019 he has won the first prize in Shanghai natural science.

JENNIFER ELLE (M'19) is a research physicist at the Air Force Research Lab (AFRL) in Albuquerque, NM. She received a BS in Physics from University of Idaho in 2007 and her PhD in Physics from the University of Maryland at College Park. Her dissertation focused on diagnosis of ultrashort pulse laser interactions with gases. She joined AFRL in 2015 as a National Research Council postdoctoral fellow and transitioned to a government position in 2016. She studies the dynamics of and electromagnetic emission from ultrashort laser generated plasmas, laser wakefield acceleration of electrons, and the physics of nonlinear electromagnetic energy propagation through atmosphere and plasma formation across a wide frequency spectrum. Other interests include development of mid-IR and far-IR wavelength ultrashort laser sources and the novel physics of material and plasma interactions at these wavelengths.

RONALD GILGENBACH (S'73-M'74-SM'92-F'06-LF'15) is the Chihiro Kikuchi Collegiate Professor in the Nuclear Engineering and Radiological Sciences Department at the University of Michigan (UM). He earned his Ph.D. in Electrical Engineering from Columbia University in 1978. His B.S. (1972) and M.S. (1973) degrees were received at the University of Wisconsin. In the mid-1970s he spent several years as a Member of the Technical Staff at Bell Telephone Labs. From 1978-1980, he performed gyrotron

research at the Naval Research Lab (NRL) and conducted the first electron cyclotron heating experiments on a tokamak plasma in the USA at Oak Ridge National Laboratory. Dr. Gilgenbach joined the faculty of the University of Michigan in 1980 and founded the Plasma, Pulsed Power and Microwave Laboratory. His research focus at UM has been in the areas of intense electron beams, high power microwave generation, MA-LTD driven z-pinch, laser ablation and plasma diagnostics. He served as department chair of UM Nuclear Engineering and Radiological Sciences from 2010-2018. At UM, Dr. Gilgenbach has supervised/ co-supervised 50 graduated Ph.D. students. He has nearly 200 publications in refereed journals and book chapters and 5 US patents.

Professor Gilgenbach is a Life Fellow of the IEEE and served as IEEE PSAC Chair in 2007-2008. He received the 1997 IEEE Plasma Science and Applications Committee (PSAC) Award and the 2017 IEEE Peter Haas Pulsed Power Award. He is a Fellow of the American Physical Society Division of Plasma Physics and of the American Nuclear Society. In 2017-2018 he served on the National Academy of Sciences panel on a "Strategic Plan for Burning Plasma Research in the U.S." He chaired the Review Committee for the Naval Research Laboratory Plasma Physics Division (2013, 2016) and served on the Advisory Board of Oak Ridge National Laboratories Nuclear Science and Technology Directorate (2013-2018). Dr. Gilgenbach is a past Associate Editor of the journal, *Physics of Plasmas*.

COLIN D. JOYE (S'04-GSM'05-M'08-SM'13) received the B.S. degree in electrical engineering and computer science from Villanova University in Villanova, PA in 2002, and the M.S. and Ph.D. degrees in electrical engineering from Massachusetts Institute of Technology (MIT), Cambridge, MA in 2004 and 2008, respectively. In 2008, he joined the Vacuum Electronics Branch at the U.S. Naval Research Laboratory in Washington DC, where his research interests include traveling wave tube amplifier sources at the millimeter wavelengths, and novel microfabrication techniques. In 2016, he received the Presidential Early Career Award for Scientists and Engineers, which included an invitation to the White House for congratulatory remarks by the President. In 2013, he was presented with the Dr. Delores M. Etter Top Scientists & Engineers for the Year Award for contributions to the U.S. Navy. He holds two US patents.

JOHN W. LUGINSLAND (S'95-M'96-SM'14-F'18) is a Senior Scientist and Principal Investigator at Confluent Sciences, LLC as well as an Adjunct Professor of Electrical and Computer Engineering at Michigan State University with expertise in high-power electromagnetics, computational plasma physics, directed energy technology, serious games studying the intersection of policy and technology, and high-performance computing. He also currently serves as chair of an External Advisory Board (EAB) for Sandia National Laboratory's Pulse Power Sciences unit, and is a member of the National Academies of Sciences, Engineering, and Medicine's Intelligence Science and Technology Experts Group (ISTEG). Previously, he was a Professor at Michigan State University in the Departments of Computational Mathematics, Science, and Engineering and Electrical and Computer Engineering. Dr. Luginsland served various roles at the Air Force Office of Scientific Research including Division Chief, Division Technical Advisor, Program Element Monitor for Air Force Basic Research, Program Manager for Plasma Physics, and Program Manager for Laser Science. Additionally, Dr. Luginsland was a staff member at NumerEx LLC, Science Applications International Corporation, and the Air Force Research Laboratory. He is a past chair of the IEEE's Plasma Science and Applications Committee, and a previous Guest Editor of *IEEE Transactions on Plasma Science* Special Issue on High Power Microwave Sources. Dr. Luginsland holds degrees from The University of Michigan in Nuclear Engineering. He is a Fellow of the IEEE and the Air Force Research Laboratory as well as being honored by the IEEE NPSS Early Achievement Award.

MICHAEL G. MAZARAKIS (M'75-LM'08) is an IEEE life member and member of the Executive committee of IEEE Power Modulation Conference. He is principal member of the technical staff in Sandia National Laboratories, Pulsed Power Center, Advanced Radiographic technologies. He recently successfully completed as the lead project physicist the high-power semiconductor diode experiments as applied to high energy accelerators and now he is concentrating his research interest on high current thermionic electron diodes. He has done pivotal research in nuclear physics and technology, nuclear astrophysics, particle beam physics, accelerator development, z-pinch physics, and magnetic and inertial fusion, and developed and successfully directed for several years the Sandia radiographic program. Before joining Sandia National Laboratories he was research physicist at the Argonne National Laboratory (1976-81), and before that was vice president and director of the experimental program at the Fusion Energy Corporation, Princeton, NJ.

He holds a summa cum laude bachelor and master degree in physics from the National University of Athens, Greece, a PhD in Nuclear Physics from the University of Paris (Sorbonne), France, and a second PhD in Physics from the University of Pennsylvania, Philadelphia. He did postgraduate work at Princeton Physics Dept., where he had the opportunity to take advance physics courses with the Nobel laureates professors James W. Cronin and Van. L. Fitch, and in the University of Pennsylvania with Robert J. Schrieffer. He has published more than 200 papers in referee magazines and conferences. He is member of the American Physical Society and of the Divisions of Plasma Physics and Physics of Beams.

NATHAN A. MOODY (S'02-M'06-SM'12) is a technical staff member in the Accelerators and Electrodynamics group (AOT-AE) within Accelerator Operations and Technology Division of Los Alamos National Laboratory where he serves as group leader for Accelerators and Electrodynamics and also project leader for electron source experiments and related material nanoscience

collaborations. In particular, he is the lead scientist of the Advanced Cathode Enhancement and Robustness Technologies (ACERT) project, a multi-disciplinary effort to control and enhance the properties of low-workfunction materials and electron sources using novel application of nanotechnology and surface science. He is a member of the technology maturation team for MaRIE, an anticipated signature science center for LANL, and his previous work has involved high power free electron laser technologies (photoinjection, thermionic cathodes, klystron systems, etc.) as well as miniature solid state THz sources and components. He has served in the local IEEE section as the NPSS chapter chair for 3 years and has been involved in STEM outreach as a staff scientist mentor in the local community. He holds four patents for his recent innovations in electron sources and has been a reviewer of DOE SBIR-STTR proposals for 6 years and is a regular reviewer to publications such as IEEE Transactions, Journal of Applied Physics, Applied Physics Letters, etc. He obtained his M.S. and Ph.D. in electrical and computer engineering from the University of Maryland at College Park, in 2004 and 2006, respectively, and he has received numerous awards including LANL's 2008 and 2016 Distinguished Performance Award, and the 2010 DOE Tri-Lab LDRD best presentation award.

ALEX MUROKH (M'19) is an accelerator physicist, entrepreneur, and cofounder of RadiaBeam Technologies. Dr. Murokh started his research career at the Belorussian State University in the field of Radio-Physics & Electronics, transferred to UCLA in 1993, and received his Ph.D. in Physics at UCLA in 2002, for his work on the VISA Free Electron Laser (FEL). The VISA FEL experiment (1999-2001) at Brookhaven National Laboratory had achieved FEL saturation length of 3.8 m at 840 nm wavelength, which made it to this date the most efficient SASE FEL in its class. Thus, from that point on, the interest in high efficiency FEL technology remains the main focus of Dr. Murokh scientific pursuits. At the present time these include: (1) Tapering Enhanced Stimulated Superradiant Amplification (TESSA) concept, to achieved ultra-high efficiency beam-to-laser energy conversion in FEL; (2) optical energy recovery laser-driven accelerators based on the combined inverse FEL (IFEL) and TESSA techniques; and (3) beam and light manipulation techniques for mitigating high energy spread of a laser accelerated electron beam in the context of compact FEL applications. In 2014-2016, Dr. Murokh led an EUV-FEL multi-institutional consortium in the US to develop a high average power, high efficiency 13.6 nm light source for semiconductor industry high volume manufacturing needs. From 2017, Dr. Murokh is a Principal Investigator for the TESSA-266 collaboration, a pilot high efficiency TESSA-FEL experiment at the Argonne National Laboratory.

In 2004 Dr. Murokh co-founded the UCLA spin-off company, RadiaBeam Technologies, focused on accelerator applications, with the initial goal to develop and commercialize Radiatron, a novel betatron inspired accelerator for industrial applications. Although Radiatron has never been realized in practice, the company launch was successful, as it grew over the following decade to about 50 people focusing on accelerator products for industrial and research applications, including: medical and security linacs, betatrons, magnets, diagnostics, detectors and beamline instrumentation systems. RadiaBeam also have a strong R&D program, mostly funded through SBIR and other government research funded programs. At the present time, as a Chief Technical Officer at RadiaBeam, Dr. Murokh is responsible for managing the company research division, advancing the company product line, and building strategic collaborative relationships with the scientific community in the US and internationally. His entrepreneurial passion is to bring to the industrial, medical and security markets, the next generation of accelerator systems, based on the advanced acceleration and light source concepts and technologies.

MARQUIDIA PACHECO (M'17) received her master's and PhD degrees in Physics and Plasma Engineering from Paul Sabatier University in France. In 2003, she joined the Laboratory of Plasmas Applications at the "*Instituto Nacional de Investigaciones Nucleares*" in Mexico, where she currently develops plasma technologies to take care of the environment. One of her projects, consisting of the treatment of car exhaust by plasma technology, was developed at the Institut Supérieur de L'Automobile et des Transports, in Nevers, France as a postdoctoral position. She won in 2009 the Prix L'Oréal-UNESCO for Women in Science, in Mexico, with a project dealing with plasma technology applied to treat greenhouse gases.

She has supervised 15 national and international projects; she has published 2 books, 11 chapters, 3 national and international patents, 47 international journals, 143 conference presentations. She also has co-organized 4 Mexican and international congresses. She is reviewer of national and international magazines and congresses and founder of "*Sembrando ConCiencias*" to involve kids in science.

EDL SCHAMILOGLU (M'90-SM'95-F'02) was born in The Bronx, NY. He received the B.S. degree from the Applied Physics and Applied Mathematics from Columbia University, NY, in 1979; he received the M.S. degree in Plasma Physics from Columbia University in 1981. He received the Ph.D. degree in Engineering (minor in Mathematics) from Cornell University, Ithaca, NY, in 1988 (dissertation advisor David A. Hammer, J.C. Ward Jr. Professor of Nuclear Energy Engineering). He joined the University of New Mexico (UNM) as Assistant Professor in 1988 and he is currently Distinguished Professor of Electrical and Computer Engineering and Associate Dean for Research and Innovation in the School of Engineering. He is also the Special Assistant to the Provost for Laboratory Relations. He lectured at the U.S. Particle Accelerator School (Harvard University in 1990 and at MIT in 1997). He coedited *Advances in High Power Microwave Sources and Technologies* (IEEE Press/Wiley, New York, NY, 2001) (with R.J. Barker), he has coauthored *High Power Microwaves, 3rd Ed.* (CRC Press, Boca Raton, FL, 2015) (with J. Benford and J. Swegle), and he is coediting *Advances in High Power Microwave Sources and Technologies using Metamaterials* (with J.W. Luginsland, J.A. Marshall, and A. Nachman) (IEEE Press/Wiley, New York, NY, 2020). He has coauthored over 155 refereed journal papers, 250 reviewed conference papers, and 8 patents.

Professor Schamiloglu is a Fellow of the IEEE, an EMP Fellow (sponsored by the Summa Foundation), and a Member of the Editorial Board of the Journal Matter and Radiation at Extreme. He was awarded the 2013 IEEE Nuclear and Plasma Sciences Society's Richard F. Shea Distinguished Member Award "For outstanding contributions to the IEEE Nuclear and Plasma Sciences Society through its Pulsed Power Science and Technology and Plasma Science and Applications Technical Committees," the 2014 IEC '1906 Award' "For his valuable technical contributions to SC77C projects and specifically for his technical contributions with respect to HPEM source technologies to support the standardization of test techniques for HPEM/IEMI," the 2015 IEEE NPSS PPST Peter Haas Award "For research in the area of pulsed power, beams, and microwaves, and for his dedicated service to the current and future pulsed power community through his leadership and educational endeavors," and the 2019 (inaugural) IEEE Nuclear and Plasma Sciences Society's Magne "Kris" Kristiansen Award for outstanding contributions in experimental nuclear and plasma science.

IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY ELECTION

RADIATION INSTRUMENTATION STEERING COMMITTEE ELECTION

For the Three-Year Term 1 January 2020 – 31 December 2022

(Vote for UP to FIVE)

ANDREAS ENQVIST (M'15) is an Assistant Professor of Nuclear Engineering, in the department of Materials Science & Engineering at University of Florida, Gainesville, FL, USA. He is the Director of the University of Florida Training Reactor (UFTR). He received his MSc in Physics from Gothenburg University, Sweden (2005), and his PhD from Chalmers University of Technology Sweden (2010). Dr. Enqvist has previously worked at University of Michigan and Oak Ridge National Lab. At UF he holds the Florida Power & Light professorship. He is a recipient of the 2017 Institute of Nuclear Materials Management Early Career Award and has received multiple faculty excellence and dissertation mentorship awards at the College of Engineering and his department. He leads a research group focusing on with radiation detector characterization and radiation measurements, with emphasis on neutron detection, nuclear material discovery and materials control & accountability for nuclear safeguards applications. He has authored or co-authored over 40 journal publications, and has over 100 presentations at professional conferences, workshops, and seminars.

Statement: During the last 10 years I have attended or contributed to the majority of IEEE NSS/MIC meetings. I love attending the meetings which are consistently of excellent scientific quality and professionally executed. IEEE NPSS meetings align great with my career that is focused on understanding and developing Radiation Instrumentation especially with applications in nuclear materials control and accountability. Further, my work covers experimentation, analysis, and simulation and the breadth of topics covered at the NSS/MIC meetings are a unique opportunity to see relevant work in all those areas. On RISC I would strive to keep the quality and relevance of those meetings and this organization phenomenal. I have been on various conference organizing committees including as sponsorship chair, and as faculty advisor for a student-led conference. I am a longtime reviewer of IEEE-TNS. Those experiences will help me if selected to the Radiation instrumentation Steering Committee (RISC).

As an educator and researcher, I am passionate about including young researchers into the field, and believe that keeping the diverse topical focus of the RI is a vital core principle to grow the reach of our organization. I hope to get involved and contribute wherever my ability and expertise allows in RISC.

ANNA ERICKSON (M'19) an Associate Professor, started at Georgia Tech in 2012 with a goal of creating a cross-cutting group serving nonproliferation community with expertise in radiation measurements, imaging, and development of novel detectors and algorithms. Prior to joining faculty at Georgia Tech, she had a postdoctoral appointment at Lawrence Livermore National Laboratory. She received her PhD from Massachusetts Institute of Technology, with a focus on detectors in active interrogation applications. Highlights of her leadership include:

- Director of the newly awarded interdisciplinary Consortium for Enabling Technologies and Innovation (ETI) sponsored by the National Nuclear Security Administration, which brings together 12 universities and 10 national laboratories to create solutions to nuclear proliferation. At GT alone, ETI brings together NRE, ME, ECE and GTMI (2019-2024)
- Co-lead of the Detectors Working Group, Basic Research Needs Workshop on Compact Accelerators for Security and Medicine (2019).
- Participant in The Frontiers of Engineering program administered by the National Academy of Engineering, which brings together a select group of 100 emerging engineering leaders from industry, academia, and government labs (2015).
- Chair and organizer of International Conference on Applications of Nuclear Techniques, which brings together experts in nuclear technology from over 20 countries (2013-current)
- I. Jovanovic and A. Erickson. Active Interrogation in Nuclear Security: Science, Technology, and Systems. Springer, 2018. ISBN: 978-3-319-74466-7

Statement: My main interest in being on RISC is to serve the community of radiation detection developers and users. As an active participant in the community, I recognize the need to connect users across various disciplines, from nonproliferation to medical physics to reactor instrumentation. Being on the Steering Committee would offer an opportunity for me to learn more about various needs in radiation detection as well as to provide an input into a long-term strategic planning of the technical committee. I have previously served in various roles in the American Nuclear Society Reactor Physics Division (currently as Vice-President elect), and I recognize the responsibility associated with leadership of these committees.

My main goals while serving on RISC would be to promote radiation detection via:

- Recruitment of new members from the communities traditionally underrepresented in RITC;
- Bringing my expertise in conference planning and organization to the benefit of RITC, in particular as applies to NSS/MIC planning;
- Providing input and general help to the editorial board of the TNS.

MAREK FLASKA (M'06) is an assistant professor of the Nuclear Engineering Department at the Pennsylvania State University (PSU). He received his Ph.D. in Applied Physics from Delft University of Technology in 2006. He has been actively working in the fields of nuclear nonproliferation, nuclear safeguards, nuclear forensics, and fundamental nuclear physics. He is the founder and director of the Radiation Detection, Characterization, and Imaging Laboratory at PSU. His interests include novel detection methods and algorithms for identification and characterization of nuclear materials for nuclear nonproliferation, homeland security, and nuclear forensics applications, particle imaging, neutron activation analysis, neutron and gamma-ray spectroscopy, time-of-flight experiments, Monte-Carlo simulations, and novel digital data-acquisition systems with real-time processing capabilities for various radiation detectors. During his professional career he has supervised a large number of graduate and undergraduate students and published approximately 200 papers in peer-reviewed scientific journals and international conference proceedings. His PSU teaching activities include undergraduate- and graduate-level courses on radiation detection for nuclear nonproliferation and safeguards, radiation detection instrumentation, radiation transport, and health physics. Dr. Flaska has been an active member of the IEEE Nuclear and Plasma Sciences Society for 13 years.

Statement: I would like to utilize my radiation detection expertise to help promoting the development and utilization of radiation detectors throughout the scientific community and public, as well as to serve the interests, desires, and needs of participants of the annual NSS/MIC meetings. I perceive the annual meeting as the most relevant radiation detection conference of the year, and it will be my mission, if elected as a member of the Radiation Instrumentation Steering Committee, to promote this notion throughout the research and public communities by popularizing the main topics of the meetings. These meetings need to continue being greatly beneficial to the attendees by strategically selecting meeting programs and topics. Another important objective I would like to pursue is to attract even more young scientists (young professionals and undergraduate/graduate students) to attend the NSS/MIC meetings, to further reinforce the importance of the meetings and to achieve their long-term quality and professional continuity. I have been contributing to the NSS/MIC meetings for more than 13 years and I am looking forward to, if given the opportunity, to serve the NSS/MIC community to the best of my capabilities by effectively supporting and promoting the annual meetings, and making them the ultimate annual meetings for the entire radiation detection community.

CHRISTER FRÖDJH (S'92-M'98) born 1952, Professor in Solid State Electronics at Mid Sweden University. My work on radiation detection and imaging started with the development of digital imaging sensors for dentists in 1992. This led to participation in the MEDIPIX collaboration and also to the start of the IWORID series of Workshops which are held annually with around 200 participants. Over the years I have been teaching microelectronics, computer science as well as radiation detection and imaging from undergraduate up to PhD-level. I have previously served on RISC (2014-2016) and am currently serving a second term as a RISC representative on the Valentin T. Jordanov Radiation Instrumentation Travel Grant selection committee. I have been a member of the Conference Information and Promotion (CIP) committee for NSS-MIC since the committee was founded and work to promote future meetings.

Statement: My interest in RISC is to promote the development of advanced radiation detectors based on microelectronics and to get young scientists from relevant fields working together to solve the critical problems on speed, timing and resolution. There are many challenges that can only be solved if we join forces from different scientific fields. There are also many new medical, industrial and environmental applications that can be developed using new advanced detectors. It is clear that this is a multidisciplinary field and it is important that future students get sufficient knowledge in topics as microelectronics, computer science, material science, physics and radiation science in addition to their special field in order to be able to form strong research teams.

SHAORUI LI (S'01-M'05-SM'11) Dr. Shaorui Li is currently a scientist and leading microelectronics designer with the Instrumentation Division of Brookhaven National Laboratory, conducting research and development in the design of low-noise, low-power, and high-performance integrated circuits for radiation detectors. Since 2009, she has developed pixelated readout ASIC for high energy- and spatial-resolution X-ray imaging detectors, ultra-low-noise cold front-end ASIC for Germanium point-contact detector (at 77 K), cold front-end ASIC for wire-based time-projection-chamber operating in liquid Argon (at 83 K) for MicroDUNE/DUNE, radiation-resistant readout ASIC for silicon-drift-detector-based X-ray spectrometer, in CMOS technologies down to 65nm, from concept to design, layout, and characterization. Prior to joining Brookhaven National Laboratory, Dr. Li had designed and developed CMOS and GaAs radio-frequency, analog, and mixed-signal integrated circuits for wireless transceivers in the industry. Dr. Li is currently the chairperson of Nuclear & Plasma Sciences Society of IEEE Long Island Section. Her main research interests include developing advanced low-power low-noise integrated circuits, analog and digital signal processing, and system level design for radiation detectors. Dr. Li is a reviewer for: *IEEE Transactions on Nuclear Science*, IEEE Nuclear Science Symposium, *IEEE Journal of Solid-State Circuits*, *IEEE Transactions on Circuits and Systems*, IEEE Custom Integrated Circuits Conference (CICC), *IEE Proceedings of Circuits, Devices, and Systems*, DOE High-Energy Physics Research, NASA Astrophysics Research and Analysis. Additionally, Dr. Li serves as Adjunct faculty, Dept. of Electrical and Computer Engineering, Stony Brook University.

Statement: It is great honor for me to volunteer for the Member-At-Large position of the Radiation Instrumentation Technical Committee. If elected, I would commit to provide inputs and contributes for scientific and educational activities beneficial to the RITC community. Particularly, I would like to help on: implement ways to offer networking opportunities to our members; foster ways for members to present their work through the IEEE resources and gain wider recognition in the industry; and establish channels for our experienced engineers and scientists to help the younger generation, startups, and the industry at large with their experience and knowledge.

AZAREE T. LINTEREUR (S'06-AM'11-M'15) joined the Mechanical and Nuclear Engineering Department at Penn State University as an Assistant Professor in August 2017 and is establishing a detector development laboratory. Prior to joining Penn State University, she was at the University of Utah, where she led the development of a radiation detection research program. She received her PhD from the University of Florida in 2013 and did postdoctoral work at Pacific Northwest National Laboratory in the Radiation Detection and Nuclear Sciences group where her research focused on ^3He alternatives for neutron detection, and pulse shape discrimination methods for neutron-gamma ray sensitive materials. Her research interests include radiation detector development, nondestructive assay techniques, international safeguards, and ^3He alternative technologies.

Statement: Radiation instrumentation has been the focus of my career for the past 12 years. During this time, IEEE has provided me with significant opportunities for professional development. Consequently, I am committed to advancing initiatives of importance to the radiation instrumentation community, and enhancing the value of the NSS/MIC/RTSD conference. As a junior faculty member, I am also interested in encouraging student participation, as well as promoting networking, skill building and mentoring opportunities for early career professionals. I have contributed to the NSS/MIC/RTSD conference through presentations and by chairing sessions, and I look forward to the opportunity to contribute further as a member of RISC.

FRANCISCO JAVIER RAMIREZ-JIMENEZ (AM'03-M'09) is a researcher on Nuclear Electronics in the National Institute for Nuclear Research, ININ, Mexico, since 1980. He is an engineer in Electronics from the National Polytechnic Institute, Mexico and received a Ph.D. in Electronic Engineering from the Toluca Technological Institute, Mexico in 2005. He leads the Laboratory of Radiation Detectors at ININ in which the main interest is the research on new radiation detectors and applications. He also has a continuous participation in scientific/technical events with the International Atomic Energy Agency, IAEA, and is considered an expert in semiconductor radiation detectors in the IAEA Physics Section, giving practical training in Latin America and Africa; is a member of the consultant team: Technical Working Group on Nuclear Power Plant Instrumentation and Control, TWG NPPIC of the IAEA Nuclear Power Engineering Section.

Statement: The main activities in my career are related with research on radiation instrumentation and nuclear electronics for applications in Medical Physics, industry and medicine. If elected to RISC, I would continue serving in the promotion of the application of radiation detectors in the different fields of science and trying to get more benefits to the IEEE NPSS community for its professional development. Since 2004, I have been serving on the Conference Information and Promotion (CIP) committee, promoting the NSS/MIC/RTSD meetings and attracting new young scientists to IEEE NPSS. I contribute to TNS and to the NSS/MIC/RTSD meetings as a reviewer in the fields of front end electronics, homeland security, scintillator and semiconductor radiation detectors. I consider that I could continue to be an effective member of RISC according to my experience serving with IEEE NPSS key activities.

LODOVICO RATTI (S'94-M'96-SM'11) received a M.Sc. Degree in Electronic Engineering in 1996 from the University of Pavia and a PhD in Electrical, Electronic and Computer Engineering in 1999 from the same university. He is currently an Associate Professor of Electronics at the Electrical, Computer and Biomedical Engineering Department, University of Pavia. His main fields of expertise include:

- the design of mixed-signal front-end circuits and of monolithic pixels for radiation detectors in planar and vertical integration (3D) CMOS technology,
- the characterization of advanced microelectronic processes (in particular CMOS technologies) from the standpoint of radiation tolerance and electronic noise,
- the development of instrumentation for noise characterization of electronic devices and circuits.

During the summer period of 2000 and 2001, Lodovico Ratti worked as a visiting researcher at the Lawrence Berkeley National Laboratory, USA. He has been the head of the Pavia unit in several R&D programs funded by MIUR (the Italian Ministry for Education, University and Research), INFN (Istituto Nazionale di Fisica Nucleare) and the European Union. He is a member of the CMS collaboration and is contributing to the design of the analog front-end channel for the phase II upgrade of the CMS inner tracker at the LHC. Lodovico Ratti has been a Senior Member of the IEEE since 2011 and is a Technology Research Fellow with INFN. He is the team leader of the Electronic Instrumentation Group and is responsible for the Electronic Instrumentation Laboratory at the University of Pavia. He is author or co-author of more than 130 papers published in peer-reviewed journals and more than 180 works presented at international conferences and workshops.

Statement: I have been working in the field of electronics for radiation detectors and instrumentation since I was a Ph.D. student. My education and academic career has significantly benefited from being, since 2003, an IEEE member, from taking part, since 2001, in the NSS-MIC conference, contributing with several presentations, and from regularly publishing in the IEEE Transactions on Nuclear Science. My participation in the activities of the IEEE NPSS have been steadily increasing in the past few years, when I started serving as a reviewer, as a session chair, since 2005, and as a topic convener, since 2017, for the NSS and as a reviewer for the *IEEE TNS* since 2010. Recently, in 2016, I have become an NPSS member and, in the same year, the secretary of the NPS Italy Chapter. I see the possibility to become an effective member of the RISC as a natural progression of my involvement in the IEEE NPSS activity. Leveraging my past and present experiences with the Society and my scientific background, if elected I will endeavor to pursue the aims, support the work and promote the development of the Radiation Instrumentation Technical Committee. In particular, I will seek to further improve the quality of the NSS-MIC conference, encouraging the participation of young scientists and their involvement in the Society, and to support the activity of the editorial board of the *IEEE TNS*.

MAXIM TITOV (AM'03-M'04-SM'11) Senior Scientist at CEA Saclay, France, received his Ph.D. in particle physics in 2001 and became Director of Research (HDR) in 2013. His research interests cover development of advanced gaseous/silicon detectors and data analysis at DESY, FERMILAB, CERN collider experiments. He was Spokesperson of the RD51 Collaboration at CERN (2007-2015). Nowadays, he is Member of CERN Council and involved into science-policy preparation of ILC project in Japan.

Statement: Maxim Titov served as an elected RISC member (2007-2009, 2012-2014) and TNC Vice-Chair (2005-2012), attending several ADCOM meetings. He was NSS Program Co-Chair in 2012 (Anaheim), 2008 (Dresden) and 2003 (Portland). Most recently, he served as a General Chair of the 2016 IEEE NSS/MIC/RTSD Symposium in Strasbourg, France. From my first participation in the NSS/MIC meeting 20 years ago, IEEE NPSS has played a major role in my research and career development. I would very much appreciate an opportunity to act as a liaison between RITC and NPSS and ensure strong communication between two bodies. I will exert my best efforts to strengthen the global importance of the NPSS with a special attention towards events outside of the USA, in particular in Europe and Asia. I'll promote interdisciplinary communications between radiation instrumentation and medical imaging fields, strongly support Society's international outreach activities and professional development of young scientists and encourage them more actively contribute into the NPSS life. I believe that my experience in international collaborations, organizational skills, and interest to multidisciplinary research could be useful to the RITC community, should I be elected to the RISC.