



Balk, Devanathan, Malliaras, Nagahara, and Torsi to chair 2015 MRS Fall Meeting

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Meeting chairs for the 2015 Materials Research Society (MRS) Fall Meeting are T. John Balk (University of Kentucky, USA), Ram Devanathan (Pacific Northwest National Laboratory, USA), George G. Malliaras (École Nationale Supérieure des Mines, France), Larry A. Nagahara (National Cancer Institute, USA), and Luisa Torsi (University of Bari “A. Moro,” Italy). The meeting will be held November 29–December 4, 2015, in Boston, Mass.

T. John Balk is an associate professor in the Department of Chemical and Materials Engineering at the University of Kentucky, where he has worked since 2004. He received his BS degree from the University of California–Berkeley, where he double-majored in mechanical engineering and materials science and engineering. He received his MS and PhD degrees in materials science and engineering from The Johns Hopkins University. He completed his postdoctoral work at the Max Planck Institute for Metals Research, where he was a staff scientist prior to joining the faculty at Kentucky.

His research focuses on structure–property relationships in the mechanical behavior of metals, alloys, and covalent materials, primarily systems that allow the study of size effects. His current work is on the deformation mechanisms that operate in nanoporous noble metals and nanoporous silicon, and separately, the effects of thin-film microstructure on the work function of dispenser cathode materials.

Balk was awarded the Bradley Stoughton Award for Young Teachers from ASM International in 2007 and an NSF CAREER Award in 2008. He is faculty advisor to the Material Advantage student chapter at his university. He was chair of the 2012 Gordon Research Conference on Thin Film and Small-Scale Mechanical Behavior. He has organized three MRS symposia and served as a volume organizer in 2010 for

MRS Bulletin. Balk currently serves on the Society’s Grassroots Subcommittee of the Government Affairs Committee and was part of the delegation to Congressional Visits Day in Washington, DC, in March 2013.

Ram Devanathan is a technical group manager in the Energy & Environment Directorate at Pacific Northwest National Laboratory (PNNL), leading a group of 40 scientists and engineers in developing innovative materials science solutions to tackle energy and environmental challenges. He is also an adjunct professor in the School of Mechanical and Materials Engineering at Washington State University.

He received a BTech degree in metallurgical engineering from the Indian Institute of Technology Madras, a PhD degree in materials science and engineering from Northwestern University in 1993, and a MBA degree from Washington State University in 2011. Devanathan was a postdoctoral researcher at Los Alamos National Laboratory and PNNL; he then joined the Indian Institute of Technology Madras as an assistant professor of metallurgical engineering before returning to PNNL in 2003.

Devanathan’s research interests include modeling and simulation of

proton hopping in polymer electrolytes, selective molecular transport through graphene oxide membranes, design of ceramics for extreme environments, and materials informatics. He has published over 100 peer-reviewed papers. He is a recipient of the US Department of Energy’s Outstanding Mentor Award in 2010 for his efforts to involve high school, undergraduate, and graduate students in computational materials science, and The American Ceramic Society’s Richard M. Fulrath Award in 2012 for ceramics research.

George G. Malliaras is the head of the Department of Bioelectronics at the Centre Microélectronique de Provence of the École Nationale Supérieure des Mines de Saint-Étienne. He received a BS degree in physics from Aristotle University in 1991 and a PhD degree in mathematics and physical sciences from the University of Groningen in 1995.

After a two-year postdoctoral period at the IBM Almaden Research Center, he joined the faculty in the Department of Materials Science and Engineering at Cornell University. From 2006 to 2009, he served as the Lester B. Knight Director of the Cornell NanoScale Science & Technology Facility prior to joining the Centre Microélectronique de Provence in 2009.



T. John Balk



Ram Devanathan



George G. Malliaras



Larry A. Nagahara



Luisa Torsi



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Malliaras' research on organic electronics and bioelectronics has been recognized with awards from the New York Academy of Sciences, the National Science Foundation, and DuPont. He has more than 200 publications in peer-reviewed journals and several book chapters. He is a Fellow of the Royal Society of Chemistry.

Larry A. Nagahara is an associate director in the Division of Cancer Biology at the US National Cancer Institute (NCI)/National Institutes of Health (NIH), where he directs and coordinates NCI's Physical Sciences in Oncology Initiative that brings research activities related to expanding the role of the physical sciences and engineering in cancer research, which includes the Physical Sciences–Oncology Centers (PS-OC) Program. He is also an adjunct professor in the Department of Physics at Arizona State University. He received his BS degree in physics from the University of California–Davis, and a PhD degree in physics from Arizona State University.

Nagahara has been involved in advanced technologies for over 20 years, most notably novel scanning probe microscopy development, carbon nanotube applications, molecular electronics, nanoenergy, and nanosensors. Previously, he served as the nanotechnology projects manager for NCI's Alliance for

Nanotechnology in Cancer, overseeing the development of nano-based diagnostics and therapeutics projects, which became applications to benefit cancer care. He also led Motorola's nanosensor effort as a Distinguished Member of the Technical Staff and was a member of their Scientific Advisory Board.

Nagahara has published over 95 technical papers and three book chapters, with over 25 patents issued or filed. He is an associate editor for *IEEE Sensors Journal* and a Fellow of the American Association for the Advancement of Science, American Physical Society, and IEEE. He represents NCI on the NIH Biomarker Consortium's Cancer Steering Committee and the Trans-NIH Nano Task Force.

Luisa Torsi is a professor of chemistry and coordinator of materials science and technology courses at the University of Bari "A. Moro," where she received her laurea degree in physics in 1989 and PhD degree in chemical sciences in 1993. She was a postdoctoral fellow at Bell Laboratories from 1994 to 1996.

Her principal scientific contributions are in the fields of advanced materials and organic bio-electronic devices for sensing applications. Recently, she co-investigated interfacial electronic effects in functional biological systems integrated into

organic field-effect transistors (OFETs). She has also achieved the realization of a solid-state device capable of electronic chiral detection at very low concentrations as well as the measurement of multiparametric responses in OFETs, and has contributed to the demonstration of the two-dimensional field-induced conductance in OFETs.

Torsi was awarded the Hedrick Emanuel Merck Prize for analytical sciences in 2010, making her the award's first female recipient. She has authored more than 100 technical papers and is co-inventor of several patents. She has given more than 70 invited lectures. Torsi was principal investigator in a recent ICT STREP proposal and was the 2009–2013 coordinator of a European network and a national PRIN. She has served on one of the Physical and Engineering Science panels of the European Research Council (ERC) for the evaluation of ERC grants; is coordinator for a Marie Curie ITN "European Industrial Doctorate" Marie Curie project in collaboration with Merck; and is scientific coordinator to a Structural Reinforcement PON Project awarded to UNIBA. She is a vice president of the European Materials Research Society (E-MRS) and has organized several symposia as one of the 2012 E-MRS Spring Meeting chairs.