

# Susmita Bose appointed JMR associate editor for biomaterials

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ournal of Materials Research (JMR) J Editor-in-Chief Gary L. Messing is pleased to announce the appointment of Susmita Bose as associate editor for biomaterials. "Dr. Bose is a highly cited materials scientist who has an international reputation for her research on bone scaffold materials, drug delivery, and biomaterial processing by additive manufacturing and surface modification techniques. Her expertise in the areas of synthesis and advanced processing of biomaterials and their in vitro and in vivo studies involving cells-tissue-material interactions is crucial for the development of new biomaterials constructs and brings a wealth of expertise in calcium phosphate bioceramics and titanium biomaterials platforms. Under her leadership, we plan for significant coverage of bio-related materials science in JMR," stated Messing. Bose is the Herman and Brita Lindholm Endowed Chair Professor in the School of Mechanical and Materials Engineering at Washington State University.

Bose received her PhD degree in physical–organic chemistry from Rutgers, The State University of New Jersey in 1998. Her interdisciplinary research interests lie at the interface of chemistry, biology, bioengineering, materials science, and engineering, focusing on different biomaterials and 3D printing of ceramic and composite materials for various applications, including drug delivery, bone-tissue engineering, and surface modification of bone implants.

Bose received the Presidential Early Career Award for Scientist and Engineers from the National Science Foundation and was named a Kavli Fellow by the National Academy of Sciences. In 2009, she received the Schwartzwalder–Professional Achievement in Ceramic Engineering



Award, the Richard M. Fulrath Award from The American Ceramic Society in 2014, and the International Society of Ceramics in Medicine Research Excellence Award in 2016. Bose is an editorial board member of several international journals and holds six US patents. She is a Fellow of the American Association for the Advancement of Science, the American Institute for Medical and Biological Engineering, and The American Ceramic Society. Bose is an editorial board member of several international journals and holds seven US patents.

## Brosnan, LaVan, Paruch, Redwing, and Someya to chair 2018 MRS Fall Meeting

www.mrs.org/fall2018

Meeting chairs for the 2018 Materials Research Society (MRS) Fall Meeting are Kristen H. Brosnan (GE Global Research, USA), David LaVan (National Institute of Standards and Technology, USA), Patrycja Paruch (University of Geneva, Switzerland), Joan M. Redwing (The Pennsylvania State University, USA), and Takao Someya (The University of Tokyo, Japan). The Meeting will be held November 25–30, 2018, in Boston, Mass.

## Kristen H. Brosnan



manager of the Ceramics Laboratory at GE Global Research. She received her BS degree in materials science and engineering

Kristen

Brosnan is the

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from Georgia Institute of Technology

in 1999. She received her MS degree in 2002 and PhD degree in 2007, both in materials science and engineering at The Pennsylvania State University.

Brosnan has been with GE for 10 years, starting as a materials scientist at the Global Research Center studying microstructure–properties–performance relationships in ceramic thermal-spray coatings. Currently, her team in the Ceramics Laboratory is delivering key ceramic technology for GE Power and GE Aviation gas turbines, including ceramic matrix composites for LEAP (leading edge aviation propulsion) and GE9X Aviation engines, as well as solidoxide fuel cell (SOFC) technology for GE Fuel Cells. Brosnan is also the coleader of the GE Women's Network-NY Capital District Hub. She has organized GE's Women in Science & Engineering Symposium for the past two years. She has received numerous individual GE Global Recognition Awards, and her SOFC team won the GE Whitney Award for outstanding technical achievement in 2013. She was a recipient of the 2014 American Ceramic Society Du-Co Ceramics Young Professional Award and the 2014 Karl Schwartzwalder-Professional Achievement in Ceramic Engineering Award.

### David LaVan



a project leader in the Materials Measurement Science Division within the Material Measurement Laboratory at the National Institute of

David LaVan is

Standards and Technology (NIST). He received his BS degree in materials science and engineering from the University of Florida in 1991 and his PhD degree in mechanical engineering from Johns Hopkins University in 1998. He was a postdoctoral fellow at Sandia National Laboratories, a research associate in the Harvard–MIT Program in Health Sciences and Technology, and an assistant professor at Yale University prior to his present position.

At NIST, LaVan works on the development of new microelectromechanical systems (MEMS)-based materials characterization methods, including high rate and high throughput approaches, linking rapid materials measurements with microstructural chracterization tools such as electron microscopy and mass spectrometry. His research interests include the design and characterization of MEMS, materials characterization at small scales, and the development of biomimetic devices and bioMEMS. He was selected for the US National Academy of Engineering Frontiers of Engineering Symposium in 2006, the National Academies Keck *Futures Initiative* Conference on Designing Nanostructures at the Interface between Biomedical and Physical Systems in 2004, and the National Academies Keck *Futures Initiative* Conference on Synthetic Biology in 2009.

Patrycja Paruch

is an associate

professor in the

Department of

Quantum Mat-

ter Physics at

the University

of Geneva. She

obtained a BA

#### Patrycja Paruch



degree in physics from Harvard University in 2000, followed by a PhD degree in physics from the University of Geneva in 2004. She performed postdoctoral research at Cornell University and joined the University of Geneva in 2007.

Paruch's group uses scanning force microscopy to investigate the novel functional properties of individual ferroelectric domain walls, in addition to their static and dynamic behavior as pinned elastic interfaces. Within this broader framework, the group has recently begun to explore biological interfaces such as proliferating epithelial cell fronts. They are also developing combined ferroelectric-carbon nanotube devices for nanoelectronics and microscopy applications, and studying the effects of strain and interfacial coupling in multiferroic epitaxial superlattice structures. In 2005, Paruch was awarded the Swiss National Science Foundation Fellowship for Young Researchers, the Swiss Physical Society IBM Prize for Condensed Matter Physics, and the European Science Foundation Thin Films for Novel Oxide Devices Award for Young Researchers. She was a symposium organizer for the 2011 MRS Spring Meeting.

#### Joan M. Redwing



Joan M. Redwing is a professor of materials science and engineering, holds adjunct appointments in the Departments of Electrical Engineering and Chemical Engi-

neering, and is the director of the 2D Crystal Consortium–Materials Innovation Platform at The Pennsylvania State University (Penn State). She received her PhD degree in chemical engineering from the University of Wisconsin–Madison. She was employed as a research engineer and manager at Advanced Technology Materials, Inc. from 1994 to 1999, and then joined the faculty of the Department of Materials Science and Engineering at Penn State.

Redwing's research focuses on understanding fundamental mechanisms of crystal growth and epitaxy of electronic materials, with a particular emphasis on thin-film and nanomaterial synthesis by chemical vapor deposition. Redwing currently serves as vice president of the American Association for Crystal Growth and is an associate editor for the Journal of Crystal Growth. She is a Fellow of the Materials Research Society, American Physical Society, and the American Association for the Advancement of Science, and is a senior member of IEEE. She is an author or co-author on more than 270 publications and holds eight US patents.

#### Takao Someya



Takao Someya has been a professor in the Department of Electrical and Electronic Engineering at The University of Tokyo since 2009. He re-

ceived his PhD degree in electrical engineering from The University of Tokyo in 1997. From 2001 to 2003, he worked at the Nanocenter (NSEC) of Columbia



University and Bell Labs, Lucent Technologies, as a visiting scholar. He is also a chief scientist and a team leader at RIKEN, Japan.

Someya's current research interests include organic transistors, flexible electronics, plastic integrated circuits, large-area sensors, and plastic actuators. He has received a number of awards, including the Japan Society for the Promotion of Science Prize, the 2008 German Innovation Award 1st Prize, the 2004 IEEE/ISSCC Sugano Award, and the 2009 IEEE Paul Rappaport Award. He was a global scholar at Princeton University, a member of the MRS Board of Directors (2009–2011), and an IEEE/EDS Distinguished Lecturer (2005–2016). His "large-area sensor array" electronic thin film was featured in *Time* Magazine as one of the "Best Inventions of 2005."

### 75th Device Research Conference to be held June 25–28 www.deviceresearchconference.org

The 75th Device Research Conference (DRC) will be held June 25–28, 2017, at the University of Notre Dame, Indiana, USA, and is co-sponsored by the Materials Research Society and the IEEE Electron Devices Society. The general chair is Debdeep Jena of Cornell University, technical program chair is Aaron Franklin of Duke University, and technical program vice chair is Deji Akinwande of The University of Texas at Austin.

The DRC brings together scientists, researchers, and students from around the world to share their latest discoveries in device science, technology, and modeling. Topics include but are not limited to: biological devices, emerging electronic device materials, energy scavenging devices, magnetic devices, memory devices, and modeling and simulation of devices. Plenary speakers are Tsu-Jae King Liu of the University of California, Berkeley; Hideo Hosono of the Tokyo Institute of Technology; and John Bowers of the University of California, Santa Barbara. There will also be invited speakers, short courses, and evening rump sessions. Technical sessions will be accented by special events highlighting the anniversary of the DRC.

More information can be accessed from the conference website at www. deviceresearchconference.org.

## 7th International Conference on Hard X-Ray Photoelectron Spectroscopy to be held September 11–15 https://sites.google.com/a/lbl.gov/haxpes2017

The 7th International Conference on Hard X-Ray Photoelectron Spectroscopy (HAXPES) will be held September 11–15, 2017, in Berkeley, Calif., USA. Co-chairs are Charles Fadley of the University of California, Davis, and Lawrence Berkeley National Laboratory, USA; Zahid Hussain of Lawrence Berkeley National Laboratory, USA; and Piero A. Pianetta of Stanford University/SLAC National Accelerator Laboratory, USA.

HAXPES brings together researchers from a variety of fields, from fundamental condensed matter and atomic and molecular physics to more applied surface and interface studies of catalysis, energy and IT device- and process development, and environmental research. HAXPES involves photon energies in the multi-keV range above ~2 keV, but the conference also encourages presentations involving complementary photoemission measurements at lower energies, as well as other x-ray-based techniques.

The abstract submission deadline is June 15. More information can be accessed from the conference website at https://sites.google.com/a/lbl.gov/ haxpes2017 or by email at haxpes2017@ gmail.com.

## Next Generation Electrochemistry to be held June 26–30 https://energyinitiative.uic.edu/energy/ngene

Next Generation Electrochemistry (NGenE) will be held June 26–30, 2017, in Illinois, USA. The 2017 program will explore the theme: "Phenomena at Electrochemical Interfaces" and will consist of a combination of lectures and discussions, research project planning and mentoring, and demonstrations. The participants will consist of 25 advanced graduate students and 10 distinguished lecturers.

Faculty will present a series of critical questions, while motivating their importance through past experiences and future societal needs. They will also highlight the need for an accurate definition of chemical components at heterogeneous interfaces, down to the atomic level and under operating conditions. Emerging techniques to probe and model interfacial phenomena will be presented and discussed. The students will assemble into teams charged with one of the challenges and will develop a scientific program to solve the challenge using innovative experiments and theory.

For more information, visit https:// energyinitiative.uic.edu/energy/ngene.