Bewlay, Gradečak, Heilshorn, Spolenak, and Venkatesan to chair 2016 MRS Fall Meeting

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Research Society (MRS) Fall Meeting are Bernard Bewlay (General Electric–Global Research Center, USA), Silvija Gradečak (Massachusetts Institute of Technology, USA), Sarah Heilshorn (Stanford University, USA), Ralph Spolenak (ETH Zürich, Switzerland), and T. Venky Venkatesan (National University of Singapore). The Meeting will be held November 27–December 2, 2016, in Boston, Mass.

Bernard Bewlay is a chief scientist at General Electric-Global



Research Center, in Niskayuna, New York. He leads a group developing advanced aircraft engine technologies, with a particular emphasis on air-

craft engine durability. He received his BA, MA, and DPhil degrees from the University of Oxford, United Kingdom.

He has extensive experience in high-temperature materials and advanced high-temperature systems. He has focused on structure—property—processing relationships in metallic alloys, ceramics, and coatings, with an emphasis on component design and applications. His research involves both computational and experimental techniques in areas such as materials design, process design, heat transfer, and fluid flow. He holds more than 90 issued patents, with an additional 90 published patent applications, and has published more than 120 articles.

Bewlay's awards include the ASM International Alfred H. Geisler Award in 1991, the GE Whitney Gallery Award in 1991 and 1998, the GE Global Research Blodgett Award in 2011, the GE Whitney Award in 2010, the GE Aviation William

L. Badger Award in 2011, the GE Global Research Charles Greskovich Award in 2009, the Eastern New York Law Association Intellectual Property Award in 2013, and the ASM International Engineering Materials Achievement Award in 2013. He is a member of MRS, TMS, and the Institute of Materials, Minerals and Mining. He has been a Fellow of ASM International since 2000.

Silvija Gradečak is an associate professor of materials science and



engineering at Massachusetts Institute of Technology (MIT). After receiving her MS degree in physics from the University of Zagreb, Croatia,

in 1999, she moved to Switzerland to pursue her PhD degree in the field of III–V materials and electron microscopy at the École Polytechnique Fédérale de Lausanne (EPFL). In 2003, she obtained her PhD degree in physics and subsequently was awarded the Swiss National Science Foundation Fellowship for Prospective Researchers. After spending two years as a postdoctoral research fellow at Harvard University, USA, she joined the MIT faculty in September 2006.

Gradečak's interdisciplinary research program is based on the synthesis of materials with confined dimensions, including two-dimensional films, one-dimensional nanowires/nanotubes, and zero-dimensional nanocrystals, and their assembly into functional devices for applications in nanophotonics, nanoelectronics, and in energy harvesting and conversion. To address some of the key challenges in the field of nanomaterials, she combines a set of synthesis and characterization techniques with robust

material models and device fabrication. Her honors include a National Science Foundation CAREER Award, 3M Innovation Award, Inaugural 2012 *Nano Letters* Young Investigator Lectureship, Merton C. Flemings Career Development Chair, Thomas Lord Career Development Chair, and MIT Alumni Fund Award for Teaching and Education Enhancement.

Sarah Heilshorn is an associate professor in the Department of Materials



Science and Engineering and, by courtesy, of Bioengineering and Chemical Engineering at Stanford University. She earned a BS degree in chemi-

cal engineering at Georgia Institute of Technology (Georgia Tech) in 1998. She completed a MS degree in 2000 and a PhD degree in 2004, both in chemical engineering at California Institute of Technology, and was a visiting scientist at Kyoto Institute of Technology, Japan. Prior to joining Stanford in 2006, she was a postdoctoral scholar in the Department of Molecular and Cell Biology at the University of California–Berkeley.

Heilshorn combines the fields of polymer science and protein engineering to design new materials that mimic those found in our own bodies. These materials are being explored for applications in minimally invasive regenerative medicine, robust self-assembly systems, and human tissue mimetics. Recent recognitions for her research include the National Science Foundation CAREER Award and the National Institutes of Health New Innovator Award. She serves on the Editorial Board of the journal Biomaterials Science and is the chairelect for the Gordon Research Conference on Signal Transduction from Engineered Extracellular Matrices.

Ralph Spolenak has been a full professor since 2014, chair of the Laboratory for Nanometallurgy since 2004, and serves as the chairman of the board of the Scientific Center for Optical and Electron Microscopy (ScopeM) at ETH Zürich, Switzerland. He



served as the director of ETH Zürich's Materials Research Center for six years.

Spolenak studied physics at the Technical University of Vienna, Austria.



He completed his diploma thesis in the field of solid-state physics in 1995, and had a brief research term at the University of Pavia, Italy. In 1999, Spolenak

completed his dissertation on alloying effects in electromigration at the Max Planck Institute for Metals Research and the University of Stuttgart, Germany, and was awarded the Max Planck Society's Otto Hahn Medal. Prior to joining ETH Zürich, he spent time at Bell Laboratories, USA; the Advanced Light Source, Lawrence Berkeley National Laboratory, USA; Lehigh University, USA; and the Max Planck Institute, Germany.

Spolenak's group focuses on the mechanical properties of metals at the

nanoscale and how these properties can be influenced by metallurgical approaches. His own recent research includes switchable semiconducting interference layers in the visible range at the nanometer length scale, color tuning in precious intermetallics, strain engineering to approach the direct bandgap in Ge, microstructure tuning by ion irradiation, size effects in high entropy alloys, and industry projects on coatings for biomedical materials and contact materials.

T. Venky Venkatesan is the director of the Nano Institute at the National



University of Singapore, where he is a professor of electrical and computer engineering, materials science and engineering, and physics. Previously, he

worked at Bell Laboratories, USA, and Bellcore, USA, for about 17 years before becoming a professor at the University of

Maryland for another 17 years. He is the inventor of the pulsed laser deposition (PLD) process. He has published over 650 papers and holds over 30 patents in the area of oxide thin films. He has had over 34 doctoral students, 35 postdoctoral students, and 40 undergraduates. He is also the founder and chairman of Neocera, a company specializing in PLD and magnetic field imaging systems.

Venkatesan is an academician of the Asia Pacific Academy of Materials, member of the Physics Policy Committee in Washington, DC, guest professor at Tsinghua University in China, member of the Board of Visitors at the University of Maryland, and the chairman of the American Physical Society's (APS) Forum of Industry and Applications of Physics. He is the recipient of the Bellcore Award of Excellence, the APS George E. Pake Prize in 2012, and the President's Gold Medal of the Institute of Physics Singapore. He is a Fellow of APS and of the World Innovation Forum.

ISCAN 2015 to be held October 26-29 in the United States http://www.iscan.vcu.edu

The International Symposium on Clusters and Nanomaterials (ISCAN) 2015 will be held October 26-29, 2015, in Richmond, Va., USA. It is sponsored by Virginia Commonwealth University.

The symposium will focus on the role clusters and nanomaterials play in solving outstanding problems in energy and life sciences. In the area of energy, focus will be on solar, hydrogen, thermoelectric, and electrochemical storage for energy applications. In the area of life sciences, the focus will be on bioactive, bioresponsive, and biomimetic materials; nanotoxicity; bioengineering; and regenerative medicine. Topics associated with both areas such as reactions, catalysis, electronic, optical, and magnetic properties will also be included. It will be an interdisciplinary exchange, bringing together researchers from physics, chemistry, biology, materials science, engineering, and medicine.

In addition to 14 plenary sessions of invited talks and two poster sessions, the symposium will feature oral presentations from contributed abstracts. The abstract submission deadline is July 10. Early registration ends August 14. The manuscript submission deadline is November 29.

More information can be accessed from the symposium website at http://www.iscan.vcu.edu or email at iscan@vcu.edu.

