



are controlled for purposeful assembly. Kotov has demonstrated a fine degree of control over structures assembled spontaneously from nanoparticles by tuning the strength of repulsive and attractive nanoparticle interactions. He was also the first to recognize fundamental similarity in function and structure between inorganic and biological nanoscale particles, such as globular proteins.

Glotzer received her BS degree in physics from the University of California–Los Angeles, in 1987 and her PhD degree in physics from Boston University in 1993. After completing her studies, she joined the Polymers Division in the Materials Science and Engineering Laboratory at the National Institute of Standards and Technology (NIST), first as an NRC Postdoctoral Fellow, and then as a permanent member of the Technical Staff. In 1994, she co-founded the Center for Theoretical and Computational Materials Science at NIST, serving as Deputy Director (1995–1997) and Director (1997–2000), before joining the Departments of Chemical

Engineering and Materials Science and Engineering at the University of Michigan. She holds appointments also in Physics, Applied Physics, and Macromolecular Science and Engineering, and is affiliated with numerous institutes and centers. Glotzer is a member of both the National Academy of Sciences and the American Academy of Arts and Sciences. She is a Fellow of the American Association for the Advancement of Science and the American Physical Society, is a Simons Investigator, and is a member of the National Security Science and Engineering Faculty Fellows program. Other awards include the American Physical Society Maria Goeppert-Mayer Award in 2000, and the Charles M.A. Stine Award from the Materials Engineering & Sciences Division of the American Institute of Chemical Engineers in 2008. Glotzer serves the materials community broadly through leadership, strategic planning, and service on many national and international boards, committees, and studies, including those contributing to the creation of the Materials Genome Initiative.

Kotov received his MS (1987) and PhD (1990) degrees in chemistry from Moscow State University. On completion of his studies, he remained at Moscow State University as a research associate, before joining the Chemistry Department of Syracuse University, New York, as a postdoctoral associate. He continued his research as a visiting professor at Hamburg University, Germany, and then in the Chemistry Department at Oklahoma State University. In 2003, Kotov joined the Department of Chemical Engineering at the University of Michigan. He is a Fellow of the Royal Society of Chemistry and MRS. His awards include the Gran Prix, Materials Research Society Entrepreneurship Challenge in 2006; the ACS Langmuir Lecture Award, the College of Engineering Research Excellence Award, and Caddell Award from the University of Michigan in 2007; and the Charles M.A. Stine Award for Materials Research in 2012. Kotov serves as Associate Editor for *ACS Nano* and as a member of several Advisory Boards for nanotechnology and materials journals.



Hyuk Chang of Samsung to give plenary address at 2014 MRS Fall Meeting

HyuK Chang, Senior Vice President and Samsung Fellow at Samsung Advanced Institute of Technology (SAIT), a corporate research center of Samsung Electronics Co., South Korea, will give the plenary talk, “Innovation in Electronic Materials: Creating Novel Devices with New Functionalities,” at the 2014 Materials Research Society Fall Meeting in Boston. In the race to release new technology, product performance relies on the aid of new materials. However, “electronic

materials innovations are falling behind the device revolution,” said Chang. “Materials and devices therefore have to be synchronized in the development process from the beginning stage of research so that the performance requirements can be understood in order to accelerate the enhancement of both materials and devices.”

Focusing on recent achievements at Samsung Electronics, Chang will demonstrate this “innovation loop” in organic semiconductors, inorganic

nanomaterials, and optical film materials for display devices as well as energy storage, conversion, and ion-transport materials for rechargeable batteries. He will also emphasize the advanced experimental methodologies based on materials informatics and analytical science. The presentation will be given on Monday, Dec. 1, at 6:30 pm, in the Grand Ballroom, second floor of the Sheraton Boston Hotel.

Chang is now Director of the Materials Research Center of SAIT. In 2011, he was appointed Samsung Fellow—the most honorable in Samsung’s researchers and engineers—in recognition of his technology leadership in Samsung and industries as well. Prior to that, he held a research associate position at the University of Illinois at Urbana-Champaign. He received his PhD degree in metallurgical engineering from the University of Utah and has over 120 technical publications and 30 US patents.