



## De Yoreo leads MRS Board of Directors for 2011

On January 1, **James J. De Yoreo** (Lawrence Berkeley National Laboratory) assumed the presidency of the Materials Research Society for 2011, after serving as vice president/president-elect for 2010. He succeeded **David S. Ginley** (National Renewable Energy Laboratory), who now serves MRS as immediate past president.

In last fall's annual election of officers and directors, **Bruce M. Clemens** (Stanford University) was elected vice president/president-elect and **Sean J. Hearne** (Sandia National Laboratories) was elected for a two-year term as MRS secretary. **Michael Fitzsimmons** (Los Alamos National Laboratory) was reappointed by the Board of Directors to serve as MRS treasurer.

The newly elected members to the MRS board of directors are **Ana Claudia Arias**, Palo Alto Research Center; **Duane B. Dimos**, Sandia National Laboratories; **Oliver Kraft**, Karlsruhe Institute of Technology and Institute für Materialforschung; **Hideki Matsumura**, Japan Advanced Institute of Science and Technology (JAIST); and **Susan E. Trolrier-McKinstry**, Pennsylvania State University. They join continuing Board of Directors **Wade Adams**, Rice University; **Tia Benson Tolle**, U.S. Air Force Research Laboratory; **Flemming Besenbacher**, University of Aarhus; **Eberhard Bodenschatz**, Max Planck Institute for Dynamics and Self Organization; **J. Murray Gibson**, Argonne National Laboratory; **Christine A. Orme**, Lawrence Livermore National Laboratory; **Michael F. Rubner**, Massachusetts Institute of Technology; **Takao Someya**, the University of Tokyo; and **Pierre Wiltzius**, University of California at Santa Barbara.

**James J. De Yoreo**  
*President*



James J. De Yoreo is interim director for Research at the Molecular Foundry, a DOE Nanoscale Science Research Center at Lawrence Berkeley National Laboratory (LBNL). His research has spanned a wide range of materials-related disciplines. Current activities focus on self- and directed assembly in biomolecular and biomineral systems. De Yoreo received his PhD degree in physics from Cornell University in 1985. Following postdoctoral work at Princeton University, he became a member of the technical staff at Lawrence Livermore National Laboratory (LLNL) in 1989, where he held numerous positions including group leader for Biophysical and Interfacial Sciences and deputy director of the Laboratory Science and Technology Office. He joined the Molecular Foundry in 2007. He is a recipient of an R&D 100 Award and the LLNL Science and Technology Award. He is a Fellow of the American Physical Society.

For MRS, De Yoreo was a member of the Strategic Program Planning Subcommittee and the Public Outreach Committee. Within the Public Outreach Committee, he chaired the Nanoscale Informal Science Education (NISE)

Subcommittee, which served as the interface between MRS and major science museums in executing an NSF program in informal science education. De Yoreo was a 2004 Spring Meeting Chair and has been a symposium organizer for numerous meetings. He has served on the Board of Directors where he chaired the External Relations Committee, and most recently served as vice president/president-elect.

**Bruce M. Clemens**  
*Vice President/President-Elect*



Bruce M. Clemens is a professor in the Department of Materials Science and Engineering at Stanford University. His research interests are the synthesis, structure, and properties of thin film and nanostructured materials. He received his BS degree in engineering-physics from Colorado School of Mines in 1978, and his MS and PhD degrees in applied physics from the California Institute of Technology (Caltech) in 1979 and 1983, respectively. From 1983 to 1988 he was a Senior Research Scientist and then Staff Scientist in the Physics Department at General Motors Research Laboratory. In 1988 he was an Exchange Scientist at Hughes Research Laboratory and a Visiting Professor at Caltech. In 1989 he joined the faculty at Stanford. He served as department chair from 2000 to 2005, and is a member of the Photon Sciences Faculty of SLAC National Accelerator Laboratory and is a professor by courtesy of Applied Physics at Stanford. Clemens is the author of nearly 200 scientific papers and two patents. He was the recipient of the 1995 ASM Silver Medal for Research, and is a Distinguished





Achievement Medalist from Colorado School of Mines for 2009. He serves on the technical advisory boards and as consultant for companies that span the range from large multinationals to small start-ups. He has been an active member of MRS since 1984 and has served four times as MRS Symposium Organizer and was a Meeting Chair of the 2001 Fall Meeting. He served on the MRS Board of Directors from 2002 to 2005.

**Sean J. Hearne**  
*Secretary*



Sean J. Hearne is currently Science Staff Manager at the Department of Energy's Center for Integrated Nanotechnologies located at Sandia National Laboratories. His research has primarily focused on the sources of intrinsic stress creation and evolution during thin-film deposition and has been well cited in the area of metal-organic chemical vapor deposition growth of GaN and in the fundamental mechanisms inducing stress during Volmer–Weber thin-film growth. This work led him into other research topics including micro-/nano-fabrication and nano-enabled devices for electrical energy storage. Hearne's current interests focus on enabling new programs to develop novel *in situ* techniques for the study of high energy and power density systems. Hearne received his PhD degree in solid-state physics from Arizona State University in 2000. He worked from 2000 to 2001 at Intel Corporation, where he was a Senior Process Engineer in the Components Research Group in Hillsboro, Oregon. Since 2001, Hearne has

worked for Sandia National Laboratories. Hearne has been active in the MRS community since attending his first MRS Meeting in 1995 as a graduate student. Over the years, he has presented, organized symposia, and served on a number of committees and task forces. Since 2007, he has chaired the MRS Information Services Committee which oversees all of the MRS print and online publications, including the *MRS Bulletin*, *Journal of Materials Research*, and the *MRS Symposium Proceedings*.

**Michael Fitzsimmons**  
*Treasurer*



Michael Fitzsimmons is a research scientist in the Lujan Neutron Scattering Center at Los Alamos National Laboratory. He is responsible for operating the user program for the polarized neutron reflectometer/diffractometer Asterix, and pursues research in nanostructured magnetic materials using neutron and x-ray scattering as a Basic Energy Sciences principal investigator. He received a BA degree in physics from Reed College (1982) and a PhD degree from Cornell University (1988) in materials science and engineering. After graduation, he pursued studies of nanostructured materials with synchrotron radiation in the group of J. Peisl, Ludwig Maximilians Universität in München as a Fulbright junior research fellow. In 1990, Fitzsimmons joined Los Alamos. He is a Fellow of the American Physical Society and recipient of the Los Alamos Lab Director's distinguished performance award and the LANSCE Director's Award. He has authored more than 100

papers and collaborates with more than 200 scientists in fields of hard and soft matter, and x-ray and neutron scattering. Fitzsimmons has given numerous invited lectures including neutron scattering tutorials. He co-authored a book chapter/tutorial on polarized neutron reflectometry and recently organized a neutron scattering school focused on magnetic materials and nanomagnetism. Fitzsimmons was a meeting chair for the 2008 Materials Research Society Fall Meeting.

**David S. Ginley**  
*Immediate Past President*



David S. Ginley is a research fellow and group manager of the Process Technology and Advanced Concepts group at the National Renewable Energy Laboratory in Golden, Colorado. His work focuses on the basic science and development of new technology related to the conversion and storage of solar energy. Key areas of focus are organic-based solar cells, atmospheric processing and direct-write materials, combinatorial materials development, and the incorporation of nanotechnology in energy-related generation, storage, and conversion technologies. Materials activities are specific to developing new materials and hybrid composite materials, including transparent conducting oxides, ferroelectric materials, and hybrid structures at the nanoscale of organic/organic or organic/inorganic systems. Ginley received a PhD degree in inorganic chemistry from the Massachusetts Institute of Technology. He has published more than 320 papers, received 28 patents, and been honored with a Department of Energy Award for Sustained Research in Superconducting

Materials, five R&D 100 awards, and three Federal Laboratory Consortium technology transfer awards. He is an adjunct professor of physics at Colorado University—Boulder, and a research professor of materials science at the Colorado School of Mines.

For MRS, Ginley has served as secretary, treasurer, and chair of the Board of Directors' Operational Oversight Committee. He was a Meeting Chair for the 2005 MRS Fall Meeting and has organized numerous symposia. He is a Principle Editor for the *Journal of Materials Research*. He

also served on the *MRS Bulletin* Energy Project Organizing Committee for the magazine's special issue on "Harnessing Materials for Energy" (April 2008). Ginley served as MRS vice president/president-elect in 2009 and president in 2010.

## Abernathy, Braun, Kawasaki, and Wahl to chair 2011 MRS Fall Meeting

The 2011 Materials Research Society Fall Meeting in Boston, November 30–December 2, will be chaired by Cammy R. Abernathy (University of Florida), Paul V. Braun (University of Illinois-Urbana), Masashi Kawasaki (University of Tokyo), and Kathryn J. Wahl (Naval Research Laboratory). Updated information on the meeting is available at [www.mrs.org/meetings](http://www.mrs.org/meetings).

**Cammy R. Abernathy** is currently dean of the College of Engineering at the University of Florida. Her research interests are in synthesis of thin-film electronic materials and devices using metal organic chemical vapor deposition and molecular beam epitaxy. She obtained her SB degree in materials science and engineering from the Massachusetts Institute of Technology in 1980, and her MS and PhD degrees in materials science and engineering from Stanford University in 1982 and 1985, respectively. She joined the University of Florida's Department of Materials Science and Engineering as a professor in 1993. In 2004 she became the College's Associate Dean for Academic Affairs and in July 2009 was appointed to her current position as dean. Abernathy is the author of over 500 journal publications, over 430 conference papers, one co-authored book, seven edited books, eight book chapters, and seven patents. She is a fellow of the America



electronic materials and devices using metal organic chemical vapor deposition and molecular beam epitaxy. She obtained her SB degree in materials science and engineering from the Massachusetts Institute of Technology in 1980, and her MS and PhD degrees in materials science and engineering from Stanford University in 1982 and 1985, respectively. She joined the University of Florida's Department of Materials Science and Engineering as a professor in 1993. In 2004 she became the College's Associate Dean for Academic Affairs and in July 2009 was appointed to her current position as dean.

Vacuum Society, the American Physics Society, and the Electrochemical Society. She is also a member of the American Society of Engineering Education and the Materials Research Society.

**Paul V. Braun** is a professor of materials science and engineering, and an affiliate of the Frederick Seitz Materials Research Laboratory, the Beckman



Institute for Advanced Science and Technology, and the Department of Chemistry at the University of Illinois at Urbana-Champaign. His research focuses on the synthesis and properties of three-dimensional architectures with a focus on materials with unique optical, electrochemical, thermal, and mechanical properties. Braun received his BS degree from Cornell University in 1993, and his PhD degree in materials science and engineering from Illinois in 1998. Following a postdoctoral appointment at Bell Labs, Lucent Technologies, he joined the faculty at Illinois as an assistant professor in 1999. Braun has co-authored a book, authored over 100 peer-reviewed publications, has been awarded multiple patents, and co-founded a company focusing on self-healing materials. He is the recipient of a Beckman Young Investigator Award (2001); a 3M Nontenured Faculty Award; the 2002 Robert Lansing Hardy Award from the Minerals, Metals, & Materials Society; the Xerox Award for Faculty

Institute for Advanced Science and Technology, and the Department of Chemistry at the University of Illinois at Urbana-Champaign. His research focuses on the synthesis and properties of three-dimensional architectures with a focus on materials with unique optical, electrochemical, thermal, and mechanical properties. Braun received his BS degree from Cornell University in 1993, and his PhD degree in materials science and engineering from Illinois in 1998. Following a postdoctoral appointment at Bell Labs, Lucent Technologies, he joined the faculty at Illinois as an assistant professor in 1999. Braun has co-authored a book, authored over 100 peer-reviewed publications, has been awarded multiple patents, and co-founded a company focusing on self-healing materials. He is the recipient of a Beckman Young Investigator Award (2001); a 3M Nontenured Faculty Award; the 2002 Robert Lansing Hardy Award from the Minerals, Metals, & Materials Society; the Xerox Award for Faculty

Research (2004, 2009); the Friedrich Wilhelm Bessel Research Award of the Alexander von Humboldt Foundation (2010); and multiple teaching awards. In 2006, he was named a University Scholar by the University of Illinois.

**Masashi Kawasaki** has been a professor in the Quantum-Phase Electronics Center and Department of Applied Physics



ics at the University of Tokyo since 2011. He had been co-assigned as Advisor at Joint Research Center for Atom Technology, AIST; Team Leader at Combinatorial Exploration and Technology, NIMS; and Team Leader at Correlated Electron Research Center, AIST; and has been co-assigned as Team Leader at Cross-Correlated Materials Research Group, RIKEN. Kawasaki is

interested in oxide thin films and interfaces from the view points of photonic, electronic, and magnetic functionalities. He has demonstrated the first  $p-n$  junction ZnO light-emitting diode, the first quantum Hall effect in oxide, and the first electric field-induced superconductivity. Kawasaki received his PhD degree in applied chemistry from the University of Tokyo in 1989. After two years as a postdoctoral fellow at IBM Research, Yorktown Heights, he became a research associate and later an associate professor at Tokyo Institute of Technology. In 2001, he joined Institute for Materials Research at Tohoku University as a professor and moved to the WPI Advanced Institute for Materials Research in 2007. He has published 500 refereed papers and gave 150