



Clemens leads MRS Board of Directors for 2012

On January 1, **Bruce M. Clemens** (Stanford University) assumed the presidency of the Materials Research Society for 2012, after serving as vice president/president-elect for 2011. He succeeded **James J. De Yoreo** (Lawrence Berkeley National Laboratory), who now serves MRS as immediate past president.

In last fall's annual election of officers and directors, **Orlando Auciello** (Argonne National Laboratory) was elected vice president/president-elect. **Sean J. Hearne** (Sandia National Laboratories) continues his two-year term as MRS secretary and **Michael R. Fitzsimmons** (Los Alamos National Laboratory), appointed by the Board of Directors, continues to serve as MRS treasurer.

The newly elected members to the MRS Board of Directors are **Shenda Baker**, Synedgen, Inc./Harvey Mudd College; **Chang-Beom Eom**, University of Wisconsin–Madison; **Eric Garfunkel**, Rutgers University;

Ainissa Gweneth Ramirez, Yale University; and **Stephen K. Streiffer**, Argonne National Laboratory. They join continuing Board of Directors **Wade Adams**, Rice University; **Ana Claudia Arias**, University of California–Berkeley; **Tia Benson Tolle**, U.S. Air Force Research Laboratory; **Duane B. Dimos**, Sandia National Laboratories; **J. Murray Gibson**, Argonne National Laboratory; **Oliver Kraft**, Karlsruhe Institute of Technology; **Hideki Matsumura**, Japan Advanced Institute of Science and Technology (JAIST); **Susan E. Trolier-McKinstry**, the Pennsylvania State University; and **Pierre Wiltzius**, University of California–Santa Barbara.

Bruce M. Clemens President



Bruce M. Clemens is a professor in the Department of Materials Science and Engineering and is the Walter B. Reinhold Professor in the School of Engineering at Stanford University. His research interests include the synthesis, structure, and properties of thin film and nanostructured materials. He received his BS degree in engineering-physics from the 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, Clemens 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, is a member of the Photon Sciences Faculty of SLAC National Accelerator Laboratory, and is also a professor of Applied Physics at Stanford, by courtesy. 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 the Colorado School of Mines for 2009. He serves on the technical advisory boards and as a 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. Clemens served on the MRS Board of Directors from 2002 to 2005, and as vice president/president-elect in 2011.

Orlando Auciello Vice President/President-Elect



Orlando Auciello is an Argonne Distinguished Fellow at Argonne National Laboratory (ANL), where his main research activities are in the Materials Science Division. He is also Adjunct Professor in two universities. His work until 1996 expanded the science and technology of ion, plasma, and laser interactions with solids, and high-temperature superconducting, high-K dielectrics, and electro-optic and ferroelectric thin films. At ANL, Auciello continues his work on multicomponent oxide films. Auciello earned his MS (1973) and PhD (1976) degrees from the Physics Institute "Dr. Balseiro" (National University of Cuyo, Argentina). He did his postdoctorate tenure (1977–1979) at McMaster University, Canada; and he was a scientist in the Institute for Aerospace Studies at the University of Toronto (1979–1984), on faculty at North Carolina State University (1985–1988), and a Senior Scientist

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at the Microelectronics Center of North Carolina (1988–1996). He joined ANL in 1996. Auciello is co-author of approximately 400 publications and 14 patents. He is co-editor of 19 books and two book series. He has been a guest scientist in several institutions worldwide. Auciello has held several offices and contributed to many activities in MRS, including member of the governing council, Volume Organizer for *MRS Bulletin* and Associate Editor for the *Journal of Materials Research*, co-organizer of several symposia, and is co-chair for the 2012 International Materials Research Congress to be held in Cancun, Mexico. His honors include Argonne Distinguished Fellow, and he is a fellow of AAAS and MRS.

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-/nanofabrication 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. He 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, Hearne has chaired the MRS Information Services Committee which oversaw all of the MRS print and online publications, including *MRS Bulletin*, the *Journal of Materials Research*, and the *MRS Symposium Proceedings*.

Michael R. Fitzsimmons Treasurer



Michael R. 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. 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 and served as a member-at-large on the executive committee for the American Physical Society Topical Group on Magnetism and Its Applications.

James J. De Yoreo Immediate Past President



James J. De Yoreo is the Interim Director of the Molecular Foundry, a DOE Nanoscale Science Research Center at Lawrence Berkeley National Laboratory. His research has spanned a wide range of materials-related disciplines. Current activities focus on *in situ* investigation and manipulation of interactions, assembly, and crystallization 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 nu-

merous 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 the Laudise Prize, 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 Subcommittee, which served as the interface between MRS and major science museums in executing a National Science Foundation program

in informal science education. De Yoreo was a 2004 Spring Meeting Chair and has been a symposium organizer for numerous meetings. He served on the Board of Directors where he chaired the External Relations Committee, and he served as MRS President in 2011.

Jagadish, Lippert, Misra, Stach, and Xu to chair 2012 MRS Fall Meeting

The 2012 Materials Research Society Fall Meeting in Boston, November 26–30, will be chaired by Chennupati Jagadish (Australian National University), Thomas Lippert (Paul Scherrer Institut), Amit Misra (Los Alamos National Laboratory), Eric Stach (Brookhaven National Laboratory), and Ting Xu (University of California–Berkeley). Updated information on the meeting is available at www.mrs.org/meetings.

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Chennupati Jagadish is an Australian Laureate Fellow, Distinguished Professor, and Head of the Semiconductor Optoelectronics and Nanotechnology Group at the Australian National University (ANU). His research interests are in compound semiconductors, lasers, photodetectors, solar cells, photonic integrated circuits, quantum dots, nanowires, THz photonics, photonic crystals, metamaterials, and plasmonics. He obtained his PhD degree in physics from the University of Delhi in 1986 and worked as a postdoctoral fellow at Queen's University, Kingston, Ontario, during 1988–1990. He moved to ANU in 1990 where he has established a major research program in compound semiconductor optoelectronics and nanotechnology. Jagadish has published



more than 400 journal articles, holds five U.S. patents, has co-authored a book on semiconductor transparent thin films and co-edited a book on zinc oxide, edited 12 conference proceedings and guest edited five special issues of journals. He is an editor of *Progress in Quantum Electronics*, *IEEE Electron Device Letters*, and serves on editorial boards of 12 other journals. Jagadish received the IEEE Third Millennium Medal in 2000, the Peter Baume Award from ANU, and the Quantum Devices Award in 2010.

Thomas Lippert heads the materials group within the Department of General Energy Research at the Paul Scherrer Institut (PSI), Switzerland. His research is focused on the interaction of photons with materials and the development of materials for laser applications, with a special focus on thin-film deposition. He received his PhD degree in physical chemistry from the University of Bayreuth, Germany. He served as a postdoctoral fellow at the National Institute of Materials and Chemical Research in Tsukuba, Japan. He then joined Los Alamos National Laboratory, where he became a Technical Staff Member. In 1999, he joined PSI. He received his Habilitation at ETH Zurich in physical chemistry in 2002 and



became senior lecturer (Privatdozent). Lippert has published more than 220 articles, delivered over 100 invited talks, organized six international conferences, is a member of the editorial board/co-editor of two journals, and a member of the European Materials Research Society executive committee.

Amit Misra is the Director of the Center for Materials at Irradiation and Mechanical Extremes, an Energy Frontier Research Center at the Los Alamos National Laboratory (LANL). He joined LANL as a postdoctoral researcher in November 1996 and was promoted to a staff scientist in August



1998. His research expertise is in defects and interfaces in materials, transmission electron microscopy, nanomechanics, and structural materials for nuclear energy. He earned his MS and PhD degrees in materials science and engineering from the University of Michigan. He has co-authored over 225 peer-reviewed articles in archival journals, conference proceedings, and book chapters. Misra served as a 2009 Volume Organizer for *MRS Bulletin*, has co-organized five symposia at MRS, and is currently on the editorial board of *MRS Bulletin*. He is a fellow of the American Society of Metals, International; a fellow of LANL; and was awarded the 2008 LANL Fellows' Prize for outstanding research in nanomechanics and the 2011 Distinguished Scientist/Engineer Award from The Minerals, Metals and Materials Society.