



Auciello leads MRS Board of Directors for 2013

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On January 1, **Orlando Auciello** (University of Texas at Dallas) assumed the presidency of the Materials Research Society for 2013, after serving as vice president/president-elect for 2012. He succeeded **Bruce M. Clemens** (Stanford University), who now serves MRS as immediate past president.

In last fall's annual election of officers and directors, **Tia Benson Tolle** (The Boeing Company) was elected vice president/president-elect. **Sean J. Hearne** (Sandia National Laboratories) continues his three-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 **David Cahen**, Weizmann Institute of Science; **Sossina M. Haile**, California Institute of Technology; **Andrea M. Hodge**, University of Southern California; **Fiona C. Meldrum**, University of Leeds; and **Eric A. Stach**, Brookhaven National Laboratory. **Steve Eglash** of Stanford University and **Susan Ermer** of Lockheed Martin Advanced Technology Center were appointed by the Board of Directors. They join continuing Board of Directors **Ana Claudia Arias**, University of California–Berkeley; **Shenda Baker**, Synedgen, Inc.; **Duane B. Dimos**, Sandia National Laboratories; **Chang-Beom Eom**, University of Wisconsin–Madison; **Eric Garfunkel**, Rutgers University; **Oliver Kraft**, Karlsruhe Institute of Technology; **Hideki Matsumura**, Japan Advanced Institute of Science and Technology (JAIST); **Stephen Streiffer**, Argonne National Laboratory, and **Susan E. Trolrier-McKinstry**, The Pennsylvania State University.

Orlando Auciello President



Orlando Auciello has recently joined the University of Texas at Dallas. Previously, he was an Argonne Distinguished Fellow at Argonne National Laboratory (ANL), where he shared his time between the Materials Science Division and the Center for Nanoscale Materials. His work until 1996 expanded the science and technology of ion, plasma, and laser interaction with solids, and high-temperature superconducting, high-K dielectrics, electro-optic and ferroelectric thin films. At ANL, Auciello continued 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 work (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 at the Microelectronics Center of North Carolina (1988–1996). He joined ANL in 1996. Auciello is co-author in 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 principal editor for the *Journal of Materials Research*, co-organizer of several symposia, and served as co-chair of the 2012 International Materials Research Congress held in Cancún, Mexico. His honors include Argonne Distinguished Fellow, and he is a Fellow of AAAS and MRS. In 2012, Auciello served as MRS vice president/president-elect.

Tia Benson Tolle Vice President/President-Elect



Tia Benson Tolle is Director of Advanced Materials in Boeing Commercial Airplane's Innovation Center & Technology. In this position she has responsibility for a targeted technology portfolio spanning metals, composites, finishes, and assemblies for Product Development. Previously, she held the position of Technology Director of the Nonmetallic Materials Division at the Air Force Research Laboratory's Materials and Manufacturing Directorate. Her research focus has been on advanced polymeric composite materials, and has spanned basic research through transition to aerospace weapons systems, working with academia, industry, government, and international collaborations. Prior to this, she has held several technical leadership positions within the Air Force Research Laboratory's Materials and Manufacturing Directorate and before joining the Directorate,

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she worked as a composites structures' engineer at the Composites Advanced Development Program Office, Flight Dynamics Laboratory, Wright Laboratory, and prior to that as an instructor in the Space Shuttle Flight Training Division, Johnson Space Center, NASA. She holds a BS degree in mechanical engineering from the University of Washington and MS and PhD degrees in materials engineering from the University of Dayton. Benson Tolle has been active on several MRS committees and served as a symposium organizer. She is also a Fellow in the Society for the Advancement of Material and Process Engineering (SAMPE). She served as SAMPE Executive Cabinet Officer (1998–2005) and as the International President (2005–2006).

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, Ore. 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, Hearne has presented, organized symposia, and served on a number of committees and task forces, and he has chaired the MRS Information Services Committee (now called the Publications 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 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 Maximilian

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.

Bruce M. Clemens
Immediate Past 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 are 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, 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 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 MRS President in 2012.

Board of Directors

Ana Claudia Arias (2013)

Arias joined the Electrical Engineering and Computer Sciences Department at the University of California–Berkeley as an acting associate professor in January 2011. Her research focus is on physical electronics, flexible and printed electronics, and energy. Arias received an MRS Gold Graduate Student Award in 2000, and served as a Graduate Student Award judge, symposium organizer, workshop chair, and as a Meeting Chair of the 2010 MRS Fall Meeting.

Shenda Baker (2014)

Baker, on leave from Harvey Mudd College, is the President and COO of Synedgen, Inc., a biotechnology company that optimizes modified biopolymers to treat and prevent bacterial infection, reduce bacterial biofilms, and stimulate wound healing. She served as a Meeting Chair of the 2008 MRS Fall Meeting. Baker has been particularly active in the

public outreach interests of MRS, where she chaired the committee that designed, built, and tested the traveling exhibition *Strange Matter* and served on the Public Outreach Committee that developed the PBS NOVA four-part series *Making Stuff*, narrated by David Pogue.

David Cahen (2015)

Cahen is a professor in the Materials and Interfaces Department of the Weizmann Institute of Science, having chaired it between 2007 and 2012. His research focus is on bio-molecular electronics, hybrid organic–inorganic interfaces and materials, and photovoltaic devices. He has served as a Volume Organizer for *MRS Bulletin*, where he currently chairs the Energy Quarterly department; with David Ginley, he edited the MRS/Cambridge University Press textbook on *Fundamentals of Materials for Energy and Environmental Sustainability*; he serves on the Sustainability Task Force; and he co-chaired the 2011 International Materials Research Congress.

Duane B. Dimos (2013)

Dimos is Director of the Engineering Sciences Center at Sandia National Laboratories. His work has spanned the range from fundamental understanding of materials properties to process integration and compatibility to advanced device technologies. Dimos served as a symposium organizer, a chair of the 2007 MRS Fall Meeting, and as chair of the Government Affairs Committee.

Steve Eglash (2015)

Eglash is Executive Director of the Energy and Environment Affiliates Program at Stanford University, where he is responsible for developing and managing university–industry relations in energy, environment, materials, chemistry, and sustainability. He has been CEO of solar-cell start-up Cyrium Technologies, an advisor and consultant to the US Department of Energy and National Renewable Energy Laboratory, a venture capitalist, a senior executive at JDSU, and a research staff member at MIT Lincoln Laboratory. He received a BS degree from the University of California–Berkeley and

MS and PhD degrees from Stanford University. He is a Fellow of the SPIE.

Chang-Beom Eom (2014)

Eom is the Harvey D. Spangler Distinguished Professor at the University of Wisconsin–Madison. His research focuses on heteroepitaxy of complex oxide thin films and heterostructures and nanostructure fabrications of novel materials. He has served MRS as a guest editor of *MRS Bulletin*, symposium organizer, a Meeting Chair of the 2011 MRS Spring Meeting, and as a member of the Meeting Quality Subcommittee.

Susan Ermer (2014)

Ermer is Senior Manager, Fundamental Research, of the Advanced Materials and Nanosystems Directorate at Lockheed Martin Space Systems Company's Advanced Technology Center. For MRS, she has served as symposium organizer and proceedings editor. She was first elected to the MRS Board of Directors in 2006. During that three-year term, Ermer served on multiple Board committees including External Relations, Nominating, Governance, and Planning.

Eric Garfunkel (2014)

Garfunkel is a professor at Rutgers, the State University of New Jersey. His research focuses on surface and interface properties of organic and inorganic materials for electronics and energy applications. Within MRS, he served as a chair of the 2002 MRS Fall Meeting and in 2008, as a co-chair of the first International Materials Research Conference (in China). He currently serves on the MRS External Relations Committee and helps oversee MRS's interactions with the Africa MRS.

Sossina M. Haile (2015)

Haile is the Carl F. Braun Professor of Materials Science and of Chemical Engineering at the California Institute of Technology. Her research broadly encompasses solid-state ionic materials and devices, with particular focus on energy technologies. She was a principal editor for the *Journal of Materials Research* (1997–2001), co-organized



several symposia, and currently serves as the faculty advisor for the local MRS Student Chapter.

Andrea M. Hodge (2015)

Hodge is a professor and the Philip and Cayley MacDonald Early Career Chair in the Aerospace and Mechanical Engineering Department with a joint appointment at the Mork Family Department of Chemical Engineering and Materials Science at the University of Southern California. Her research interests range from processing of nanocrystalline and nanoporous materials to nanomechanics of metals and biomaterials. For MRS, Hodge has served as a symposium organizer and as a chair of the 2011 International Materials Research Congress. She is currently a principal editor of the *Journal of Materials Research*.

Oliver Kraft (2013)

Kraft is Director at the Institute for Applied Materials and Robert Bosch Professor for Nanostructured Functional Materials at the Karlsruhe Institute of Technology. His research interests range from the mechanical behavior of advanced structural and functional materials to the reliability of microelectronic and microelectromechanical systems devices. For MRS, he served as a Chair of the 2005 MRS Spring Meeting and he was a member of the Program Development Subcommittee.

Hideki Matsumura (2013)

Matsumura is Professor and Immediate Past Dean of the School of Materials Science and special advisor to the president at Japan Advanced Institute of Science and Technology. His research focus is in the field of thin-film technology, Cat-CVD, to prepare device quality thin-film materials. Matsumura has been active in MRS mainly in the field of amorphous materials, where he has served as a symposium organizer.

Fiona C. Meldrum (2015)

Meldrum holds a chair in Inorganic Chemistry at the University of Leeds, where her research centers on bioinspired materials chemistry. For MRS, she has served as a symposium organizer, a co-chair for the 2013 International Materials Research Congress, and as a Volume Organizer for *MRS Bulletin*, where she currently serves on the Editorial Board.

Eric A. Stach (2015)

Stach is the Group Leader for the Electron Microscopy Group at the Brookhaven National Laboratory's Center for Functional Nanomaterials, where he focuses on real-time studies of working catalysts and the nucleation and growth of nanostructure materials. He is also the Chief Technology Officer for Hummingbird Scientific, which he co-founded in 2004. Stach has served as a guest editor for *MRS Bulletin*, a symposium organiz-

er, and as a chair for the 2012 MRS Fall Meeting. He is currently a principal editor of the *Journal of Materials Research*.

Stephen Streiffer (2014)

Streiffer is currently Deputy Associate Laboratory Director for the Physical Sciences and Engineering Directorate (PSE) at Argonne National Laboratory. His scientific expertise is in nanostructured oxides and nitrides and in structural characterization of materials. For MRS, he served as a Volume Organizer for *MRS Bulletin*, as a symposium organizer, and as a member of the Public Outreach Committee that developed the traveling exhibition *Strange Matter* and the PBS NOVA four-part series *Making Stuff*.

Susan E. Trolrier-McKinstry (2013)

Trolrier-McKinstry is a Professor of Ceramic Science and Engineering and Director of the W. M. Keck Smart Materials Integration Laboratory at The Pennsylvania State University. Her research interests include ferroelectric thin films for dielectric and piezoelectric applications, microelectromechanical systems, and the development of texture in bulk ceramic piezoelectrics. She served MRS as a chair of the 2003 MRS Fall Meeting, a symposium organizer, and a guest editor of *MRS Bulletin*, and she was the 2011 chair of the MRS Planning Committee.

Black, Comini, Frey, Kiick, Tsakalacos to chair 2013 MRS Fall Meeting

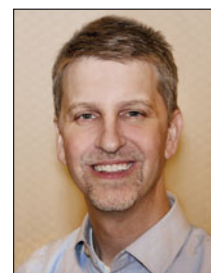
www.mrs.org/fall2013

The 2013 Materials Research Society Fall Meeting in Boston, December 1–6, will be chaired by Charles T. Black (Brookhaven National Laboratory), Elisabetta Comini (Università di Brescia), Gitti L. Frey (Technion–Israel Institute of Technology), Kristi L. Kiick (University of Delaware), and Loucas Tsakalacos (General Electric–Global Research Center). Updated information on the meeting is available at www.mrs.org/fall2013.

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Black received his BS degrees in physics and mathematics from Vanderbilt University (1991) and his PhD degree in physics from Harvard University (1996). From 1996 to 2006, Black was a Research Staff Member at the IBM

User Facility at Brookhaven National Laboratory. His research interests include using nanostructured materials and self-assembly approaches in photovoltaic devices.



Black received his BS degrees in physics and mathematics from Vanderbilt University (1991) and his PhD degree in physics from Harvard University (1996). From 1996 to 2006, Black was a Research Staff Member at the IBM