Fitzsimmons leads MRS Board of Directors for 2019

www.mrs.org/board

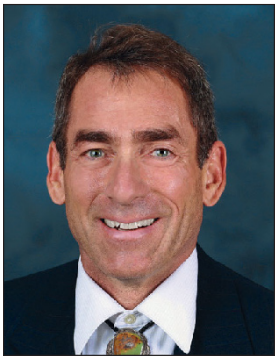
On January 1, **Michael R. Fitzsimmons** (Oak Ridge National Laboratory and The University of Tennessee) assumed the presidency of the Materials Research Society (MRS) for 2019, after serving as vice president/president-elect for 2018. He succeeded **Sean J. Hearne** (who will soon be at Oak Ridge National Laboratory following his position at Sandia National Laboratories). Hearne now serves MRS as immediate past president.

In last fall's annual election of officers and directors, **Matt Copel** (IBM Research Division) was elected vice president/president-elect. **Eric A. Stach** (University of Pennsylvania) continues his term as MRS secretary, and **David J. Parrillo** (DowDuPont Industrial Intermediates and Infrastructure) continues his term as MRS treasurer. MRS Executive Director **Todd M. Osman** serves as an ex-officio member of the MRS Board of Directors and is the chief staff officer.

Newly elected members to the MRS Board of Directors are **Sharon C. Glotzer**, University of Michigan; **Sarah Heilshorn**, Stanford University; **Frances A. Houle**, Lawrence Berkeley National Laboratory; **Sergei V. Kalinin**, Oak Ridge National Laboratory; and **Kisuk Kang**, Seoul National University. **Mônica Jung de Andrade**, Alan G. MacDiarmid NanoTech Institute, The University of Texas at Dallas, and **Yusheng Zhao**, Southern University of Science and Technology, were appointed by the Board. All members of the Board serve on at least one of the Board's committees: Audit, External Relations, Finance, Governance, Nominating, Operational Oversight and Audit, and Planning.

Michael R. Fitzsimmons

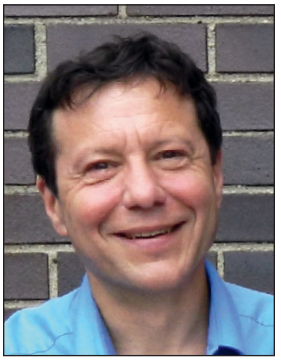
President



Michael R. Fitzsimmons is group leader for Large Scale Structures in the Neutron Scattering Division at Oak Ridge National Laboratory. He also holds a joint faculty position as professor of physics at The University of Tennessee, Knoxville. He is a Fellow of the American Physical Society and the Neutron Scattering Society of America. Fitzsimmons obtained a BA degree in physics at Reed College and a PhD degree in materials science and engineering from Cornell University. In 1989 and 1990, Fitzsimmons was a Fulbright Junior Research Fellow at the Ludwig-Maximilians-Universität München, Germany. Prior to moving to Tennessee, he worked at the Los Alamos National Laboratory for 25 years as a research scientist in the fields of magnetism and neutron scattering. While in Tennessee, he developed means to control magnetism of interfaces in heterostructures and vertical-architecture-networked materials using strain and electric fields. He has a long history with MRS, including service as a symposium organizer and as a Meeting chair of the 2008 MRS Fall Meeting. He also served six years as MRS treasurer. During this period, MRS undertook substantive changes to financial governance.

Matt Copel

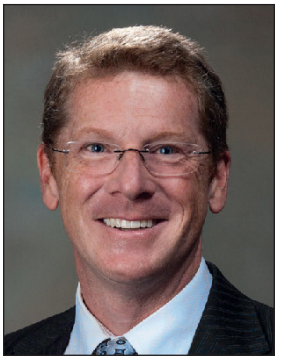
Vice President/President-Elect



Matt Copel is a research staff member at the IBM Research Division. He received bachelor's and PhD degrees in physics from Harvard University. His research interests include structural characterization of advanced electronic materials, metal-oxide gate dielectrics, ferroelectric/metal interfaces, surface chemistry and processing, and ion-beam analysis. He has contributed to areas where electronic materials are critical to industrial applications, using expertise in structural characterization to guide development. He co-invented the technique of surfactant-mediated epitaxy. He currently serves on the Penn State Materials Research Institute Industrial Advisory Board. Copel served on the MRS Board of Directors (2016–2018), the MRS New Publications Products Subcommittee (2011–2014), and several MRS task forces. He received the IBM Outstanding Technical Achievement Award in 2013 and is a Fellow of the American Physical Society.

Sean J. Hearne

Immediate Past President



Sean J. Hearne is currently interim co-director at the US Department of Energy's

Center for Integrated Nanotechnologies located at Sandia National Laboratories, where he works closely with partners from Los Alamos National Laboratory on an international user program that advances the understanding of the fundamental science behind integrating nanocomponents into systems that affect the macroscopic world. He received his PhD degree in solid-state physics from Arizona State University in 2000. Since 2001, Hearne worked for Sandia National Laboratories in the Physical, Chemical, and Nano Sciences Center, where he continued his research in the mechanical properties of materials, materials processing, electrical energy storage, and nanotechnology. His research has primarily focused on the sources of intrinsic stress creation and evolution during thin-film deposition. This work led him into other research topics, including micro- and nanofabrication and nano-enabled devices for electrical energy storage. From 2007 to 2010, Hearne chaired the MRS Information Services Committee, which oversaw all MRS publications. He was secretary on the MRS Board of Directors from 2011 to 2016.

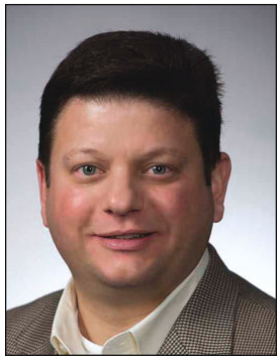
Eric A. Stach

Secretary

Eric A. Stach is a professor in the Department of Materials Science and Engineering at the University of Pennsylvania. He received his PhD degree in materials science and engineering from the University of Virginia in 1998. He then joined the National Center for Electron Microscopy at the Lawrence Berkeley National Laboratory as a staff scientist and became the program leader for the metals program. In 2004, he moved to the School of Materials Engineering at Purdue University as an associate professor and as scientific director for the Birck Nanotechnology Center's electron microscopy lab. Later at Purdue, he received an appointment as a university faculty scholar and was promoted to full professor. He then moved to the Center for Functional Nanomaterials at Brookhaven National Laboratory as a group leader in 2010. Stach's research efforts focus on the development and application of electron microscopy techniques in a broad class of materials research. He has organized a number of MRS symposia and served as a Meeting chair for the 2012 MRS Fall Meeting. He served on the MRS Board of Directors from 2013 to 2015.

David J. Parrillo

Treasurer



David J. Parrillo is the Global Research and Development Director for DowDuPont Industrial Intermediates and Infrastructure, including DowDuPont businesses of polyurethanes, construction chemicals, oil and gas, and industrial solutions. He has experience in materials science R&D, application development, new business development, and adhesives. He holds a BS degree in chemical engineering from the University of Rhode Island and a PhD degree in chemical engineering from the University of Pennsylvania. Previously, he held positions at General Electric (Silicone & Plastic Business Units) and Air Products and Chemicals. Parrillo holds positions on the External Advisory Board at UC Santa Barbara for Chemical Engineering and the Board of Directors for the West Midland Family Center and also serves as a member of the Leadership Council of Manufacturing Foresight. He holds 15 US patents, has (co-)authored 20 scientific publications, and is the recipient of the Whitney Technical Achievement Award.

Todd M. Osman

Executive Director

Todd M. Osman became Executive Director of MRS in September 2008. During his tenure, MRS has launched the Materials Research Society Foundation, expanded its communications and meetings portfolio, and broadened its outreach and engagement programs. Prior to joining MRS, Osman co-founded The Pennsylvania NanoMaterials Commercialization Center. He also spent 11 years at the US Steel Corporation, where he received peer and corporate recognition for his research and coordinated cooperative R&D programs in North America, Europe, and Asia. He received his PhD degree in materials science and engineering from Case Western Reserve University and has authored numerous articles. Osman is a member of the Board of Directors of the Lighthouse Foundation, a nonprofit charitable organization, and a member of the MRS Board of Directors.

Board of Directors

Griselda Bonilla (2020)

Bonilla is a senior technical staff member and senior manager of the Advanced Interconnect Technology Group at the IBM T.J. Watson Research Center. She leads a cross-functional team involved in the integration, scaling, and optimization of semiconductor materials, on-chip interconnects, and processes for use in the next generation of chips and electronic devices. Her work has been rewarded internally with several technical accomplishments,

including a Corporate Award, IBM's highest technical recognition, in 2016. Bonilla has participated in MRS as a member, at conferences as a presenter and invited speaker, and as an editor of symposium proceedings.

Li-Chyong Chen (2019)

Chen is a distinguished research fellow of the Center for Condensed Matter Sciences at National Taiwan University (NTU), Taiwan. She also serves as the director of the Center of Atomic Initiative for New Materials, under the Featured Areas Research Center Program of the Ministry of Education in Taiwan. On her own research, she leads NTU's Advanced Materials Laboratory, where her program focuses on low-dimensional nanomaterials and related hybrids for energy and optoelectronic applications. She served as a symposium organizer for the 2008 MRS Spring Meeting and the International Materials Research Congress/China-MRS 2008. She was a 2009 MRS Fall Meeting chair. From 2010 to 2011, Chen chaired the Pacific Rim Subcommittee under the MRS International Relations Committee. She was recognized as a MRS Fellow in 2010.

Dawnielle Farrar-Gaines (2019)

Farrar-Gaines is a senior electrical and materials engineer at the Johns Hopkins University (JHU) Applied Physics Laboratory and a professor in the JHU School of Engineering. She received her PhD degree from Johns Hopkins University and holds multiple patents for her work involving smart materials. She received the MRS Woody Award in 2013, won first place in the Innovation in Materials Science (iMatSci) forum in 2014, and was chair of the MRS Women in Materials Science and Engineering Committee from 2011 to 2016. She has chaired a number of technical sessions for the Society and is a symposium organizer in the 2019 MRS Spring Meeting.

Sharon C. Glotzer (2021)

Glotzer is the Anthony C. Lembke Department Chair of chemical engineering at the University of Michigan in Ann Arbor. She is also the John Werner Cahn Distinguished University Professor of Engineering and the Stuart W. Churchill Collegiate Professor of Chemical Engineering, and Professor of Materials Science and Engineering, Physics, Applied Physics, and Macromolecular Science and Engineering. She received a PhD degree in physics from Boston University. Glotzer's current research focuses on computational assembly science and engineering, which is aimed toward predictive materials design of colloidal and soft matter. She is a Fellow and longstanding member of MRS and has organized multiple Fall symposia and presented dozens of talks. She is the recipient of the 2017 MRS Communications Lecture Award and the 2014 MRS Medal.

Claudia E. Gutiérrez-Wing (2019)

Gutiérrez-Wing is a researcher in the Department of Materials Technology at the Instituto Nacional de Investigaciones Nucleares (National Institute for Nuclear Research) in Mexico, where she founded a laboratory for the synthesis of nanomaterials in 1996. Her research is focused on the synthesis, characterization, and applications of nanomaterials. Of particular interest is the design of metallic nanoparticles and self-assembling processes, metallic nanowires, and nanocomposites for different applications under conventional and radiation-exposed environments. Gutiérrez-Wing was a 2013 International Materials Research Congress co-chair, organizer of several symposia, and an editor for its proceedings. She served as the treasurer of the Sociedad Mexicana de Materiales from 2011 to 2012 and as vice president from 2013 to 2016.

Sarah Heilshorn (2021)

Heilshorn is the Lee Otterson Faculty Scholar and associate professor of materials science and engineering at Stanford University. She received her PhD degree from the California Institute of Technology in 2004 while working with David Tirrell. Her research team specializes in integrating concepts from polymer physics and protein engineering to design materials for medical applications. This approach to biomimetic materials design has enabled several new technologies, including the development of injectable materials for cell transplantation and printable materials for regenerative medicine. She has organized multiple symposia, served as a Meeting chair for the 2016 MRS Fall Meeting, and is a past member of the MRS Program Development Subcommittee.

Frances A. Houle (2021)

Houle is deputy director for Science and Research Integration of the Joint Center for Artificial Photosynthesis, a US Department of Energy (DOE) Energy Innovation Hub, and senior scientist in the Chemical Sciences Division at Lawrence Berkeley National Laboratory. She received her PhD degree from the California Institute of Technology. Her research interests are in the areas of mechanisms of surface, thin-film, and aerosol chemical transformations, particularly at the nanoscale. She is a Fellow of the American Physical Society and the American Vacuum Society, and a member of the American Chemical Society and MRS. She has co-organized symposia and was active in establishing the African Materials Research Society, and, more recently, she was a member of the New Meetings Subcommittee, where she participated in the development of a streamlined process for evaluating sponsorship of meetings in areas of MRS interests.

Mônica Jung de Andrade (2021)

Jung de Andrade is a research professor at the Alan G. MacDiarmid NanoTech Institute, The University of Texas at Dallas. She earned her PhD degree in materials science and engineering in 2010 from the Université Paul Sabatier (France) and the Universidade Federal do Rio Grande do Sul (UFRGS), Brazil. Her research interests include dry-draw of carbon nanotube sheets and spinning of yarns; nanostructured materials as building blocks for nano-/microdevices; and (bio-) chemical and physical properties of nanostructured materials. She has served as chair of the International Students Academic Affairs Subcommittee at MRS, is the founder and president of the MRS UT Dallas Chapter, is president of the Materials Engineering Academic Center at UFRGS, served twice as the lead-organizer of scientific/technical symposia at international conferences, and received the 2017 MRS Woody White Service Award.

Sergei V. Kalinin (2021)

Kalinin is the director of the Oak Ridge National Laboratory (ORNL) Institute for Functional Imaging of Materials and is a distinguished research staff scientist at the Center for Nanophase Materials Sciences at ORNL. He holds a joint associate professor position in the Department of Materials Science and Engineering at The University of Tennessee, Knoxville, and an adjunct faculty position at The Pennsylvania State University. He received his PhD degree from the University of Pennsylvania in 2002. He is a Fellow of MRS, the American Physical Society, Institute of Physics, the Institute of Electrical and Electronics Engineers, and the American Vacuum Society. Kalinin has organized numerous symposia and was a Meeting chair for the 2014 MRS Spring Meeting and the IUMRS Meeting in Cancun in 2017. He served as a volume organizer in 2012 for *MRS Bulletin*. His research interests include the application of big data and machine learning in atomically resolved and mesoscopic imaging to guide the development of advanced materials for energy and information technologies, as well as electromechanical, electrical, and transport phenomena on the nanoscale explored via scanning probe and scanning transmission electron microscopy.

Kisuk Kang (2021)

Kang is a professor in the Department of Materials Science and Engineering at Seoul National University in the Republic of Korea. He received his PhD degree in materials science from the Massachusetts Institute of Technology. Kang has been an organizer for various MRS Meeting symposia and has served as a Graduate Student Award Subcommittee member. His research interests range from the fundamental understanding of materials from theoretical calculations to the system analyses and developments of new types of rechargeable batteries. He currently leads national research projects on new materials discovery for advanced rechargeable batteries.

Lincoln J. Lauhon (2019)

Lauhon is the associate chair of the Department of Materials Science and Engineering at Northwestern University. His research group investigates structure–property relationships in low-dimensional materials and heterostructures using correlated imaging methods that probe structure, composition, and function at the nanoscale. He pioneered the use of atom probe tomography to analyze doping in semiconductor nanowires and explore the ultimate limits of composition control. He has been active in MRS for 20 years, beginning with the 1996 MRS Fall Meeting, and has organized several symposia. He served on the MRS Program Development Subcommittee from 2011 to 2016.

Paul C. McIntyre (2020)

McIntyre is the Rick and Melinda Reed Professor in the School of Engineering and department chair of materials science and engineering at Stanford University. He leads a research team that performs basic research on nanostructured inorganic materials for applications in electronics and energy technologies. He is well known for his work on metal oxide/semiconductor interfaces, ultrathin metal oxide films, atomic layer deposition, semiconductor nanowires, and materials for (photo) electrochemical energy transformations. McIntyre has been a member of MRS since attending his first Fall Meeting in 1989. He has served as a MRS symposium organizer and was a Meeting chair for the 2010 MRS Spring Meeting. He chaired the MRS Publications Committee from 2010 to 2013, and he has served as a principal editor of *MRS Communications* since its founding in 2011 until 2018.

Christopher A. Schuh (2020)

Schuh is the Department Head and the Danae and Vasilis Salapatas Professor of Metallurgy in the Department of Materials Science and Engineering at the Massachusetts Institute of Technology. His research focuses on metals, including their processing, microstructure, and mechanics. Much of his work is on the design and control of grain boundary structure and chemistry in alloys, and he has commercialized a number of metals technologies from his research. He also currently serves as the coordinating editor of the *Acta Materialia* family of journals, and has held a number of roles within MRS over the past 15 years.

Rachel A. Segalman (2020)

Segalman is the Kramer Chair Professor of Materials and Chemical Engineering and the department chair of chemical engineering at the University of California, Santa Barbara. Segalman's group works on controlling the structure and thermodynamics of functional polymers, including semiconducting and bioinspired polymers. Segalman received the 2015 *Journal of Polymer Science* Innovation Award and the 2012 Dillon Medal from the American Physical Society. She is also a Fellow of the American Physical Society, an Alfred P. Sloan Fellow, a Camille Dreyfus Teacher Scholar, and was named one of *MIT Technology Review*'s Top 35 Innovators under 35. She was a Meeting chair for the 2013 MRS Spring Meeting and has organized MRS symposia in 2006 and 2014.

Molly M. Stevens (2019)

Stevens is a professor in the Departments of Materials and Bioengineering and is a research director for biomedical materials science in the Institute of Biomedical Engineering at Imperial College London, UK. Her research program aims to create biomaterials with impact on regenerative medicine, tissue engineering, and biosensing. She is the Director of the UK Regenerative Medicine Platform Hub for smart materials and co-director of the UK's Interdisciplinary Research Centre, i-sense. She has organized several MRS symposia in the area of self-assembly and nanomaterials and served as a Meeting chair for the 2014 MRS Spring Meeting. She has served on the MRS Program Development Subcommittee.

Yusheng Zhao (2021)

Zhao is a chair professor in physics and the associate vice president of the Southern University of Science and Technology (SUSTech), China. He also serves as the dean of SUSTech Academy for Advanced Interdisciplinary Studies. Zhao earned his BS degree from Peking University and his PhD degree from Stony Brook University, The State University of New York. He served as a senior scientist and team leader in his 18-year tenure at Los Alamos National Laboratory. He was a pioneer in the development of simultaneous high *P-T* neutron

diffraction capability and made high-*P*/low-*T* gas/fluid cells for neutron experiments. He has conducted original research on novel superhard materials and on innovative superionic materials. Formerly, he served as a professor of physics at the University of Nevada and was appointed as the executive director of the High Pressure Science and Engineering Center (a DOE/NNSA Center of Excellence) from 2010 to 2016. He has presented tutorial lectures at MRS meetings, set up satellite meetings, and organized special sessions.

Ehrenfried Zschech (2020)

Zschech is department head for microelectronic materials and nanoanalysis at the Fraunhofer Institute for Ceramic Technologies and Systems, Germany. His responsibilities include multiscale materials characterization and reliability engineering. He holds an adjunct professorship at the Faculty of Chemistry of Warsaw University, Poland, as well as honorary professorships for nanomaterials at Brandenburg University of Technology and for nanoanalysis at Technische Universität Dresden, Germany. He has acted as a German Materials Research Society Board member and as a Federation of the European Materials Societies (FEMS) executive member. He served as FEMS president in 2012–2013. Zschech has been a member of the Steering Committee of the European Technology Platform for Advanced Engineering Materials and Technologies since 2013, and an Operational Management Board member of the European Materials Characterization Council since 2016.

MRS invites nominations for awards program

The Materials Research Society (MRS) is seeking award nominations beginning March 1 until April 1, 2019. These awards will be presented at the 2019 MRS Fall Meeting, December 1–6, in Boston.

The MRS Awards Program recognizes outstanding contributors to the progress of materials research and their exciting and profound accomplishments. **Nomination forms and details about eligibility and nomination criteria are available from the MRS website at www.mrs.org/awards.**

Von Hippel Award acknowledges outstanding interdisciplinary work in materials research

The Von Hippel Award, first presented to Arthur R. von Hippel, whose interdisciplinary and pioneering research typified the spirit of the award, is the Society's highest honor. The recipient is recognized for brilliance and originality of intellect, combined with vision that transcends the boundaries of conventional scientific disciplines. The award includes a $10,000 cash prize, honorary membership in MRS, and a unique trophy—a mounted ruby laser crystal, symbolizing the many faceted nature of materials research.

Turnbull Lectureship honors the career of an outstanding researcher and communicator

The David Turnbull Lectureship recognizes the career of a scientist who has made outstanding contributions to understanding materials phenomena and properties through research, writing, and lecturing, as exemplified by the life work of David Turnbull. While honoring the accomplishments of the recipient, the Turnbull Lectureship is intended to support and enrich the materials research community. The recipient will give a technical lecture of broad appeal at a designated session of the 2019 MRS Fall Meeting. The Turnbull Lecturer will receive a $5,000 honorarium and a citation plaque.

MRS Medal recognizes a recent discovery or advancement in materials science

The MRS Medal recognizes an exceptional achievement by an individual in materials research. The Medal is awarded for a specific outstanding recent discovery (approximately in the last 10 years) or advancement that is expected to have a major impact on the progress of any materials-related field. The award consists of a $5,000 cash prize, an engraved and mounted medal, and a citation certificate.

Materials Theory Award honors advances made in materials structure and behavior

The Materials Theory Award recognizes exceptional advances made by materials theory to the fundamental understanding of the structure and behavior of materials. This award is intended to honor both those who have pioneered the development of a new theoretical approach and those who have used existing approaches to provide significant new insight into materials behavior. The annual award consists of a $5,000 cash prize, a presentation trophy, and a certificate. MRS acknowledges the generosity of Toh-Ming Lu and Gwo-Ching Wang in endowing this award.

MRS Nelson "Buck" Robinson Science and Technology Award for Renewable Energy

This award recognizes a student (bachelor's, master's, or PhD), postdoc, or other young professional through five years following the highest degree attained for the development of sustainable solutions for the realization of renewable sources of energy. The annual award consists of a $5,000 honorarium, meeting registration, annual MRS membership, and reasonable travel expenses to attend the Meeting at which the award is presented. MRS acknowledges Sophie Robinson for endowing this award in memory of her father, Nelson "Buck" Robinson.

The Kavli Foundation Early Career Lectureship in Materials Science recognizes significant contributions

The Kavli Foundation Early Career Lectureship in Materials Science is an honor that recognizes significant novel contributions to materials science by a researcher in the early stages of his/her career. The award includes a $1,000 honorarium and a two-night hotel stay to attend the Meeting to present a talk.