Copel leads MRS Board of Directors for 2020

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On January 1, **Matt Copel** (IBM T.J. Watson Research Center) assumed the presidency of the Materials Research Society (MRS) for 2020, after serving as vice president/president-elect for 2019. He succeeded **Michael R. Fitzsimmons** (Oak Ridge National Laboratory and The University of Tennessee), who now serves MRS as immediate past president.

In last fall's annual election of officers and directors, **Cherie R. Kagan** (University of Pennsylvania) was elected vice president/president-elect. **Dawnielle Farrar-Gaines** (Johns Hopkins University) begins her term as MRS secretary, and **Shenda Baker** (Synedgen Inc.) begins her 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 **Leonard J. Brillson**, The Ohio State University; **Kristen H. Brosnan**, GE Global Research; **Coray M. Colina**, University of Florida; **Catherine Dubourdieu**, Helmholtz-Zentrum Berlin/Freie Universität Berlin; and **Ting Xu**, University of California, Berkeley.

Matt Copel

President

Copel is a research staff member with 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.

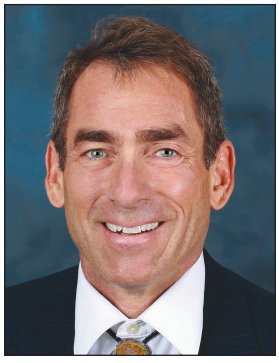
Cherie R. Kagan

Vice President/President-Elect

Kagan is the Stephen J. Angello Professor of Electrical and Systems Engineering, professor of materials science and engineering, and professor of chemistry at the University of Pennsylvania (Penn). She is also Penn Engineering's Associate Dean for Research. She graduated from the University of Pennsylvania in 1991 with a BSE degree in materials science and engineering and a BA degree in mathematics, and earned her PhD degree in materials science and engineering from the Massachusetts Institute of Technology in 1996. Kagan then worked at Bell Labs as a postdoctoral fellow and in 1998, she joined IBM's T.J. Watson Research Center, where she most recently managed the Molecular Assemblies and Devices Group. In 2007, she joined the faculty of the University of Pennsylvania. She has served MRS as a member of the Board of Directors, External Relations Committee, Mid-Career Researcher Award Subcommittee, and as a symposium organizer.

Michael R. Fitzsimmons

Immediate Past President



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

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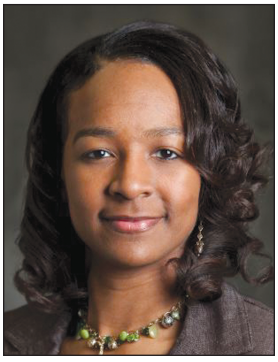
College and a PhD degree in materials science and engineering from Cornell University. In 1989 and 1990, Fitzsimmons was a Fulbright Junior Research Fellow at the Ludwig-Maximilians-Universität München, Germany. Prior to moving to Tennessee, he worked at the Los Alamos National Laboratory for 25 years 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 for the 2008 MRS Fall Meeting. Fitzsimmons also served six years as MRS treasurer. During this period, MRS undertook substantive changes to financial governance.

Dawnielle Farrar-Gaines

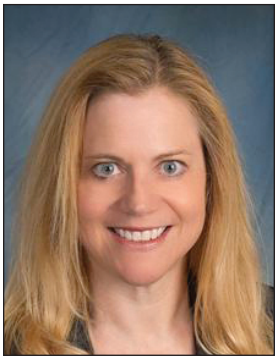
Secretary



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 is responsible for providing creative solutions to problems across disciplines, including nanomaterials, piezoelectric and multifunctional materials, sensors, microscopy, microelectronics, and packaging. Her research interests include micro/nano systems, polymer materials, medical devices, and transducers. 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.

Shenda Baker

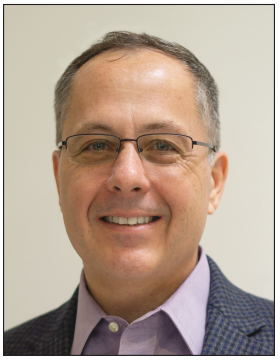
Treasurer



Baker serves as chief scientific officer of Synspira Therapeutics. She is president and COO of Synedgen Inc. Previously, Baker served as president of BioSTAR West and as the lead scientific advisor to Hawaii Chitopure and professor of chemistry at Harvey Mudd College. Baker served on the MRS Board of Directors and on advisory boards of the National Institutes of Health (NIH), National Science Foundation, and the US Department of Energy. She is a member of the American Chemical Society and MRS, and currently serves on the Advisory Council of the National Institute of Dental and Craniofacial Research of the NIH. She is co-inventor on all Synspira technology.

Todd M. Osman

Executive Director



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.

Leonard J. Brillson (2022)

Brillson is a professor of electrical and computer engineering and physics at The Ohio State University, where he is also the Center for Materials Research Scholar and a University Distinguished Scholar. He obtained his AB degree from Princeton University and his MS and PhD degrees from the University of Pennsylvania, all in physics. Brillson is a Fellow of MRS as well as the Institute of Electrical and Electronics Engineers, the American Association for the Advancement of Science, the American Physical Society, the American Vacuum Society, and is a former Governing Board member of the American Institute of Physics. He has served on the editorial boards for several technical journals, including the *Journal of Electronic Materials* currently. Brillson has been active on the MRS Government Affairs Committee.

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Kristen H. Brosnan (2022)

Brosnan joined GE Global Research in 2007 and currently is the technology manager for the Metals & Ceramics team in the Structural Materials Division. She received her BS degree in materials science and engineering from the Georgia Institute of Technology and MS and PhD degrees in materials science and engineering from The Pennsylvania State University. Brosnan is a Fellow of The American Chemical Society and a member of The Minerals, Metals & Materials Society, MRS, and the Society of Women Engineers. She was recognized with the GE Women in Technology Award in 2017. She was a Meeting chair for the 2018 MRS Fall Meeting and has served on the MRS Industrial Engagement Committee since 2018.

Coray M. Colina (2022)

Colina is a professor at the University of Florida in the Chemistry Department and is also affiliated with the Materials Science and Engineering and the Nuclear Engineering Departments. She completed her PhD degree in chemical engineering at North Carolina State University. Colina was a Meeting chair for the 2018 XXVII International Materials Research Congress co-sponsored by MRS. She received the 2019 American Chemical Society (ACS) Cooperative Research Award in Applied Polymer Science and serves on the Editorial Advisory Boards of ACS *Macromolecules* (2016–2020) and ACS *Macro Letters* (2016–2020). Colina has co-authored more than 90 refereed scientific papers and over 250 presentations at national and international conferences.

Catherine Dubourdieu (2022)

Dubourdieu is a full professor at Freie Universität Berlin and is the head of the Institute at the Helmholtz-Zentrum Berlin. She is also involved in establishing the Helmholtz Energy Materials Foundry. She earned an engineer diploma and a MSc degree from the Institut Polytechnique de Grenoble in 1992, and a PhD degree in physics from the Université Grenoble Alpes in 1995. Dubourdieu co-founded the European School on Nanosciences and Nanotechnologies in Grenoble and served as its adjunct director until 2006. She has more than 140 publications, 10 patents, and received the IBM Faculty Award in 2014. Dubourdieu has been active in MRS throughout her professional career since 1997 as well as in EMRS.

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 working with David Tirrell. Her research team specializes in integrating concepts from polymer physics and protein engineering to designing 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 current member of the Programming 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's 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 include the areas of mechanisms of surface, thin film, and aerosol chemical transformations, particularly at the nanoscale. Houle is a Fellow of the American Physical Society and the American Vacuum Society, and a member of the American Chemical Society and MRS. She 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.

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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 served as a Graduate Student Award Subcommittee member. His research interests range from the fundamental understanding of materials from theoretical calculations to system analyses and developments of new types of rechargeable batteries. He currently leads national research projects on new materials discovery for advanced rechargeable batteries.

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 best 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.

Linda S. Schadler (2021)

Schadler is Dean of the College of Engineering and Mathematical Sciences at The University of Vermont. She graduated from Cornell University in 1985 with a BS degree in materials science and engineering, and received a PhD degree in materials science and engineering from the University of Pennsylvania. She served as a faculty member at Drexel University before spending 22 years at Rensselaer Polytechnic Institute. Schadler is a Fellow of MRS and ASM International. She has co-authored more than 160 journal publications, several book chapters, and one book. She is an associate editor for the *Journal of Materials Research* and is a former member of ASM International's Board of Trustees and the National Materials Advisory Board.

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. Her group works on controlling the structure and thermodynamics of functional polymers, including semiconducting and bioinspired polymers. Among other awards, Segalman received the 2015 *Journal of Polymer Science* Innovation Award and the 2012 John H. 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 *Technology Review*'s Top 35 Innovators under 35. She served as a Meeting chair for the 2013 MRS Spring Meeting and has organized symposia in 2006 and 2014.

Ting Xu (2022)

Xu is currently a professor in the Department of Materials Science and Engineering and the Department of Chemistry at the University of California, Berkeley. She is also a faculty member in the Materials Sciences Division at Lawrence Berkeley National Laboratory. She received her PhD degree from the Department of Polymer Science and Engineering at the University of Massachusetts Amherst, and was a joint postdoctoral fellow at the University of Pennsylvania and the National Institute of Standards and Technology. Xu served as a Meeting chair for the 2012 MRS Fall Meeting and has served on the *MRS Communications* subcommittee since 2014. She has authored more than 100 peer-reviewed papers and books and has received several awards.

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 and as the director of SUSTech's Office of Research. 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 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 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 Platform on Advanced Materials and Technologies since 2013, and an Operational Management Board member of the European Materials Characterization Council since 2016.

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