2018 SEM EXECUTIVE BOARD NOMINEES

The SEM Nominating Committee has announced the following updates for the 2018–2019 SEM Executive Board. Biographies for each member appear in this article. Once elected, these members will join current Board members whose terms extend to 2019.


Wendy C. Crone


John Lambros


Daniel Rixen


Bonnie Antoun


Jason Blough


Raman Singh


Michael Todd

PRESIDENT

WENDY C. CRONE

Wendy C. Crone is a Professor in the Department of Engineering Physics with affiliate appointments in the Departments of Biomedical Engineering and Materials Science and Engineering at the University of Wisconsin–Madison. Her research is in the area of solid mechanics, and many of the topics she has investigated are connected with nanotechnology and biotechnology. She has applied her technical expertise to improving fundamental understanding of mechanical response of materials, enhancing material behavior through surface modification and nanostructuring, exploring the interplay between cells and the mechanics of their surroundings, and developing new material applications and medical devices. In addition to more than 50 peer reviewed journal publications, dozens of explanatory education products, and four patents, she is the author of the book Survive and Thrive: A Guide for Untenured Faculty. Prof. Crone has garnered awards for research, teaching and mentoring, including Fellow (2015) and M.M. Frocht Award (2013) from the Society for Experimental Mechanics (SEM). She has been a member of SEM since 1988 and has served on the Executive Board (2010-2012); National Meetings Council (2010-2012); Vice-Chair, MEMS and Nanotechnology Technical Division (2001-2006); and society representative to the US National Committee on Theoretical & Applied Mechanics, National Academy of Science (2015-2018). She has also served in numerous leadership roles at UW-Madison, including Interim Dean and Associate Dean of the Graduate School (2011-2015).

PRESIDENT-ELECT

JOHN LAMBROS

Prof. Lambros received a B.Eng. degree in Aeronautical Engineering from the Imperial College of Science and Technology of the University of London in 1988, an M.S. degree in Aeronautics from Caltech in 1989, and a Ph.D. degree also in Aeronautics from Caltech in 1994. After a year as a postdoctoral researcher, he joined the Mechanical Engineering department of the University of Delaware as an Assistant Professor in 1995 and moved to the Aerospace Engineering department of the University of Illinois in 2000, where he is currently a Professor. He is a Fellow of the American Society of Mechanical Engineers, the Society for Experimental Mechanics, and the American Academy of Mechanics. He has served as an Associate Editor for Experimental Mechanics (1999-2005) and the ASME Journal of Applied Mechanics (2011-2014). He has also served on the Executive Board of the SEM (2008-2010) and recently completed one term as Associated Head for Graduate Studies in the Aerospace Engineering Department at Illinois (2011-2016). Over his 20-year career he has received numerous honors and awards for both research and teaching achievements including an NSF CAREER Award (1999), the SEM Hetényi (2012) and Frocht (2015) Awards, and the UIUC Campus Award for Excellence in Graduate and Professional Teaching (2015).

VICE-PRESIDENT

DANIEL RIXEN

Daniel Rixen, born in 1967, received his engineering degree in Electromechanics and doctoral degree in Applied Sciences from the University of Liège (Belgium), at the Laboratoire de Techniques Aéronautiques et Spatiales (LTAS). He also holds a master degree in Aerospace Vehicle Design from the College of Aeronautics in Cranfield (UK). After a post-doctoral stay at the University of Colorado (Center for Aerospace Structures), he was appointed in 2000 professor and chair of Engineering Dynamics at the Delft University of Technology (The Netherlands). Since 2012, he leads the chair of Applied Mechanics at the Technical University of Munich (Germany).

His research focuses on the dynamics of mechanical systems and covers the fields of numerical methods, experimental techniques, multiphysics and mechatronics. A significant part of his research involves partitioning problems in order to apply parallel computing, model reduction techniques or experimental substructuring. He regularly collaborates with industry to apply theoretical developments to real-life applications (automotive, aerospace, wind energy, ...). Since 2012, his research field also includes robotics and humanoids.

MEMBERS-AT-LARGE

BONNIE ANTOUN

Dr. Antoun is a Distinguished Member of the Technical Staff in the Mechanics of Materials Department at Sandia National Laboratories in Livermore, California. She received her B.S. in Civil Engineering, M.S. degrees in Mechanical Engineering and Engineering Mechanics, and Ph.D. in Engineering Mechanics from Rensselaer Polytechnic Institute in 1998, after which she joined Sandia. Her research interests are in the mechanical behavior of materials with emphasis on coupled thermal-mechanical experiments and time and temperature dependence.

Bonnie has enjoyed active participation in the Society for Experimental Mechanics (SEM) as a presenter and author, Secretary, Vice-Chair and Chair of the Time Dependent Materials Technical Division, organizer of Track 2 (Challenges in the Mechanics of Time Dependent Materials) for the SEM Annual conference for several years, organizer of Track 5 (Mechanics of Additive and Advanced Manufacturing) for the 2017 and 2018 SEM Annual conferences, and organizer of several SESM conference sessions on metallic materials and extreme environments. She currently serves as an associate editor of SEM's Journal of Experimental Techniques..

JASON BLOUGH

Dr. Jason R. Blough – Professor, Mechanical Engineering – Engineering Mechanics, Dynamic Systems Laboratory at Michigan Technological University (MTU) received his B.S.M.E. (1990) and M.S.M.E. (1991) from MTU and his Ph.D. from the University of Cincinnati (1998). Dr. Blough has over 25 years of experience in experimental dynamics having worked at General Motors, the Keweenaw Research Center, and as an independent consultant. Dr. Blough has been a faculty member at MTU since 2003 and advises the SAE Student Chapter and Clean Snowmobile Team at MTU. Dr. Blough has won numerous awards for both research and advising.

Dr. Blough's research covers a broad range of topics including shock testing, torque converter noise, and snowmobile noise as well as a range of driveline vibration issues and innovative dynamic measurement techniques. Dr. Blough is widely known for rotating equipment signal processing methods, modal analysis, and general signal processing research as well as teaching. Dr. Blough has taught the Young Engineer's course and given tutorial seminars at IMAC for over 10 years..

RAMAN SINGH

Dr. Raman P. Singh serves as the Associate Dean for Engineering at OSU-Tulsa and as the Head of the School of Materials Science and Engineering in the College of Engineering, Architecture and Technology at Oklahoma State University (OSU). He also serves as the Director of the Helmerich Advanced Technology Research Center on the OSU-Tulsa campus and is appointed as the Helmerich Family Endowed Chair Professor of Engineering.

Raman holds M.S. and Ph.D. degrees in Mechanical Engineering and Ap- plied Mechanics from the University of Rhode Island, and a B.Tech. degree in Mechanical Engineering from the Indian Institute of Technolog-Kanpur, India.

Prior to joining OSU in 2006 he was a faculty member at the State University of New York at Stony Brook, and before that a post-doctoral scholar at the California Institute of Technology.

Raman's academic interests are in student mentorship, development, and re-tention with a focus on new pedagogical methods. His research interests are in the mechanics of advanced materials, with an emphasis on the investigation of modern engineered materials and development of new techniques for mechanical characterization at highly localized length scales. His research has been funded by the National Science Foundation, NASA, the Oklahoma Center for the Advancement of Science & Technology, the Oklahoma Transportation Commission, the US Army Research Oce, the Department of Energy, and industry. He has authored or co-authored several archival journal publications and conference proceedings and holds two patents. He is an active member of the Society of Experimental Mechanics (SEM) and serves as an Associate Technical Editor for Experimental Mechanics. He is also a member of the Materials Research Society and the American Society of Mechanical Engineers.

MICHAEL TODD

Michael Todd received his B.S.E. (1992), M.S. (1993), and Ph.D. (1996) from Duke University's Department of Mechanical Engineering and Materials Science, where he was an NSF Graduate Research Fellow. In 1996, he began as an A.S.E.E. post-doctoral fellow, then a staff research engineer (1998), and finally Section Head (2000) at the United States Naval Research Laboratory (NRL) in the Fiber Optic Smart Structures Section. In 2003, he joined the Structural Engineering Department at the University of California San Diego, where he currently serves as Professor of Structural Engineering. He has published over 350 papers and proceedings and holds 4 patents in his research areas, which are in applying nonlinear time series techniques to structural health monitoring (SHM) applications, adapting Bayesian inference frames for optimal decision-making in SHM, developing novel ultrasonic interrogation strategies for aerospace structural assessment, optimizing sensor networks for various SHM-rooted performance measures, developing RF-based sensing systems for structural assessment, creating real-time shape reconstruction strategies for highly flexible aerospace and naval structural systems based on limited data sets, creating rapid assessment checks for validation of satellite systems, designing and testing fiber optic measurement systems for many structural applications, and modeling noise propagation in fiber optic measurement systems. Prof. Todd won the 1999 Alan Berman NRL Publication Award, the 2003 and 2004 NRL Patent Award, was a 2004-2005 UC San Diego Hellman Fellow, was an invited speaker at the 2003 National Academy of Engineering Japan-America Frontiers of Engineering Symposium, won the 2005 Structural Health Monitoring Person-of-the-Year Award, presented at Stanford University in September 2005, was named a 2009 Benjamin F. Meaker Fellow at the University of Bristol (UK), and won the 2016 Society of Experimental Mechanics D. J. DeMichele Award for contributions to research and education in experimental mechanics. He serves as the Managing Editor of Structural Health Monitoring: An International Journal.