2015 SEM EXECUTIVE BOARD NOMINEES

The SEM National Nominating Committee has announced nominations for 2015–2016 SEM Executive Board officers. Biographies for each nominee appear in this article. If elected, they will join current Board members whose terms extend to 2016: Nancy Sottos, Jonathan Rogers, Kristin Zimmerman, F. Necati Catbas, Robert Goldstein, Daniel Rixen, and Satoru Yoneyama.

Guruswami Ravichandran
Kathryn Dannemann
Gäetan Kerschen
Michael Mains
Ghatu Subhash
Hareesh V. Tippur

PRESIDENT

GURUSWAMI (RAVI) RAVICHANDRAN

Guruswami (Ravi) Ravichandran is the John E. Goode, Jr. Professor of Aerospace and Professor of Mechanical Engineering, and Director of the Graduate Aerospace Laboratories (GALCIT) at the California Institute of Technology. He received his B.E. (Honors) in Mechanical Engineering from the University of Madras, Sc.M. in Engineering and Applied Mathematics, and Ph.D. in Engineering (Solid Mechanics and Structures) from Brown University. After a year of post-doctoral work at Caltech, he joined the faculty of the University of California, San Diego in 1987 and returned to Caltech in 1990 where he has been ever since. He is a Fellow of the SEM and ASME. His awards and honors include, B. J. Lazan and M. Hetényi Awards from SEM and Charles Russ Richards Memorial Award from Pi, Tau, Sigma and ASME. He received Doctor honoris causa (Dhc) from Paul Verlaine University and was awarded Chevalier dans l’ordre des Palmes Académiques by the Republic of France. His research interests are in the area of mechanical behavior of materials with emphasis on dynamic deformation and failure, biomaterials and cell mechanics, and experimental mechanics. He has served as an associate editor of SEM's Journal, Experimental Mechanics, and ASME's Journal of Engineering Materials and Technology.

PRESIDENT-ELECT

PETER AVITABILE

Dr. Peter Avitabile-Professor, Mechanical Engineering, Co-Director, Structural Dynamics and Acoustic Systems Laboratory, B.S.M.E., Manhattan College, M.S.M.E., University of Rhode Island, D.Eng., University of Massachusetts Lowell, Professional Engineer, Rhode Island. Pete has close to 40 years of experience in design and analysis using FEM and experimental techniques. His main area of research is structural dynamics specializing in the areas of modeling, testing and correlation of analytical and experimental models along with advanced applications for developing structural dynamic models. Pete has contributed over 200 technical papers in the area as well as his "Modal Space" article series in the Experimental Techniques magazine published by the Society for Experimental Mechanics. He is the 2004 recipient of the prestigious SEM DeMichele Award. He is recognized worldwide as an expert in structural dynamic modeling applications. He often provides consulting services for a wide variety industries in these specialty areas of expertise.

VICE-PRESIDENT

KATHRYN DANNEMANN

Kathryn Dannemann is Principal Engineer in the Engineering Dynamics Department at Southwest Research Institute. She is a materials engineer with professional interests and experience in the mechanical behavior of materials, and the interactive effects of microstructure and processing on materials performance. At SwRI, Dr. Dannemann’s technical work focuses on the dynamic behavior of various materials (metals, ceramics, composites, glass). She directs technical programs for both government and industry, often implementing customized experimental setups in her programs to aid with understanding mechanical response. She has taught as an adjunct professor in the ME Department at the University of Texas-San Antonio. Prior to joining SwRI in 1996, she worked at the GE Corporate Research and Development Center where she was most recognized for her contributions on the mechanical behavior of materials in extreme (high temperature) environments. Kathryn received her Ph.D. in Materials Engineering from the Massachusetts Institute of Technology in 1989, and earned B. S. and M. S. degrees in Materials Engineering from Rensselaer Polytechnic Institute. She has made dedicated contributions to SEM since becoming actively involved in 2006. Dr. Dannemann has chaired and organized numerous conference sessions, as well as the Dynamic Behavior of Materials Track for the 2008 and 2009 annual conferences. She served as a Member at Large (2012-2014) of the SEM Executive Board, and is
past Chair (2008-2010) of the SEM Dynamic Behavior of Materials Technical Division. Kathryn has served as a Guest Editor for Experimental Mechanics, and will also serve on the Editorial Board of the new SEM journal, Dynamic Behavior of Materials. She has held numerous leadership positions in other technical societies, including ASM International, The Minerals, Metals and Materials Society (TMS), and the Society of Women Engineers (SWE). Dr. Dannemann was recently nominated to the Board of Trustees of ASM International.

MEMBERS-AT-LARGE

GÄETAN KERSCHEN

Gäetan Kerschen completed his M.S. and Ph.D. degrees in Aerospace Engineering from the University of Liège in Belgium, in 1999 and 2003, respectively. In 2003 and 2004, he was a visiting postdoctoral fellow at the National Technical University of Athens and at the University of Illinois at Urbana-Champaign working under the supervision of Professors Alexander Vakakis and Lawrence Bergman. Since 2007, he has been a faculty member at the University of Liège, where he is now a professor in the Department of Aerospace and Mechanical Engineering. His publications are primarily in the areas of nonlinear structural dynamics (including nonlinear system identification, nonlinear modal analysis, constructive utilization of nonlinearity, and bifurcation analysis and management) and orbital mechanics. He is the recipient of a European Research Council (ERC) Starting Grant and serves as an Associate Editor of the journal of Mechanical Systems and Signal Processing.

MICHAEL MAINS

Mr. Mains received his undergraduate and master’s degrees in Mechanical Engineering from the University of Cincinnati. He is in his 9th year working at Brüel & Kjær as a Senior Software Developer. During his employment with Brüel & Kjær he has had the opportunity to work on many software projects related to Structural Dynamics and Modal Analysis. He has also had the opportunity to speak and lecture at several Brüel & Kjær sponsored conferences and travel to customer sites to interview customers on their future needs in the area of Structural Dynamics.

GHATU SUBHASH

Professor Subhash obtained his MS and PhD degrees from University of California San Diego in 1991 and then conducted post-doctoral research at California Institute of Technology, Pasadena, CA. He joined Michigan Technological University in 1993 and then moved to University of Florida in 2007. He has received numerous awards for excellence in teaching, research and professional service, including the ‘Significant Contribution Award’ American Nuclear Society Materials Science and Technology Division (2014) ‘Technology Innovator Award’ University of Florida (2014), University of Florida Research Foundation Professor (2013), College of Engineering Teacher/Scholar of the year (2013), ‘Researcher of the Year’ Mechanical and Aerospace Engineering Department, UF (2011); Second Place of the Best paper Awards at the 31st Annual American Ceramic Society meeting (2008); Michigan Tech Distinguished Research Award (2005); ASME Fellow (2004); ASME Student Section Advisor Award (2003); Society of Automotive Engineer (SAE) Ralph R. Teetor Educational Award (2000); American Society of Engineering Education (ASEE) Outstanding New Mechanics Educator (1996); Michigan Tech Distinguished Teaching Award (1994). He is an Associate Editor of Mechanics of Materials, Journal of the American Ceramic Society, Experimental Mechanics, ASTM Journal of Engineering Materials and Technology and Journal of Dynamic Behavior of Materials. He has graduated 22 PhD students and is currently advising 12 PhD students in various fields related to processing, microstructural characterization and multiflaxial behavior of materials including ceramics, metals, foams, composites, gels and brain tissue. He has authored 145 peer reviewed journal papers, 70 conference proceedings, 10 invention disclosures and patents.

HAREESH V. TIPPUR

Hareesh V. Tippur is McWane Endowed Chair Professor and Graduate Program Chair of Mechanical Engineering at Auburn University, Alabama. He received graduate degrees from the Indian Institute of Science and State University of New York - Stony Brook. He was a post-doctoral fellow of Aeronautics at the California Institute of Technology before joining the faculty of Mechanical Engineering Department at Auburn in 1990. He has worked extensively in the areas of fracture and failure mechanics of solids with an emphasis on high-strain rate response of novel materials. He is credited with the development of several quantitative visualization tools including hybrid laser-speckle and moiré method, coherent gradient sensing (CGS), infrared rough surface interferometry, digital image correlation for ultrahigh-speed photography and more recently the digital gradient sensing (DGS) method. His other major contributions are in the areas of fracture and failure mechanics of dissimilar material interfaces, functionally graded materials, syntactic structural foams, cellular structures, interpenetrating phase composites, nanocomposites, to name a few. To date his research has resulted in over 200 publications in archival journals, books and conference proceedings. Several federal agencies including NSF, DOD and NASA have sponsored his research consistently over the years. He has numerous received accolades from professional societies including the Hetényi Award from the Society for Experimental Mechanics, Beer-Johnston Mechanics Educator Award from the American Society for Engineering Education, Fellow status in the American Society of Mechanical Engineers and the Society for Experimental Mechanics, Fylde Electronics Prize from the British Society for Strain Measurement, A.S. Kobayashi Award from ICCES and Orr Award from ASME-Materials Division. Currently he serves on the editorial boards/committees of Strain, ASME Journal of Engineering Materials & Technology and as the Chief Editor of Experimental Mechanics.