
2012 SEM Executive Board Nominees

The SEM National Nominating Committee has announced nominations for 2012–2013 SEM Executive Board officers. Biographies for each nominee appear in this article. The Executive Board Nominees are: President–Carlos E. Ventura; President-Elect–Emmanuel E. Gdoutos; and Vice-President–Nancy Sottos. Executive Board Member nominees are: Alberto Carpinteri, Kathryn Dannemann, James De Clerck, and Charles Van Karsen. If elected, they will join current Board members whose terms extend to 2013; Peter G. Ifju, Ryszard J. Pryputniewicz, Jonathan D. Rogers, Thomas W. Proulx, Paul Reynolds, Todd Simmermacher, K. Jane Grande-Allen, and Cosme Furlong.

President Carlos E. Ventura



Dr. Carlos Ventura is a Civil Engineer with specializations in structural dynamics and earthquake engineering. He has been a faculty member of the Department of Civil Engineering at the University of British Columbia (UBC) in Canada since 1992. He is a registered professional engineer in British Columbia, California and Guatemala. He is currently the Director of the Earthquake Engineering Research Facility (EERF) at UBC, and is the author of more than 200 papers and reports

on earthquake engineering, structural dynamics and modal testing. He is a member of several national and international professional societies and advisory committees. Dr. Ventura has conducted research for more than twenty-five years in the dynamic behavior and analysis of structural systems subjected to extreme dynamic loads, including severe ground shaking. His research work includes experimental studies in the field and in the laboratory of structural systems and components. Research developments have included novel techniques for regional estimation of damage to structures during earthquakes, detailed studies on nonlinear dynamic analysis of structures and methods to evaluate the dynamic characteristics of large Civil Engineering structures. Ventura has a substantial research record in shake table testing and vibration studies of existing structures subjected to different levels of dynamic loading and seismic retrofit of existing structures. His current research is focused on the development of performance-based guidelines for seismic retrofit of schools, on methods to evaluate the interaction between critical infrastructure vulnerable to natural and

Additional Nominations

These individuals are the official choice of the SEM Nominating Committee. The Society's bylaws also provide for alternate nominations. Article IX, Section 4, of the SEM constitution states that, "A member may also be nominated by written petition of at least 75 members of the Society, and submitted to the Secretary, together with the member's consent to serve, if elected, at least 90 days prior to the Annual Business Meeting," (June 11, 2012 in Costa Mesa, California).

The Bylaws also provide that, if no additional nominations are submitted by the membership at large, the Secretary of the Society (in this case, the Executive Director) shall cast an affirmative vote on behalf of the membership at the Society's Annual Business Meeting.

man-made hazards, and on structural health monitoring of bridges.

President-Elect Emmanuel E. Gdoutos



Dr. Emmanuel E. Gdoutos is Professor and Director of the Laboratory of Applied Mechanics of the Democritus University of Thrace, Greece, and Adjunct Professor at Northwestern University. He is a member of the European Academy of Sciences and Arts, the European Academy of Sciences, Academia Europaea, Russian Academy of Engineering, International Academy of Engineering, Bulgarian Academy of Sciences, and Corresponding Member of the Academy of Athens. He is Fellow of the American Academy of Mechanics (AAM), the American Society of Mechanical Engineers (ASME), the European Structural Integrity Society (ESIS), the International Congress on Fracture (ICF) and honorary member of the Italian Group of Fracture (IGF). He received an honorary Ph.D. from the Russian Academy of Sciences.

Dr. Gdoutos is author of over 250 technical papers and 17 books and editor of 15 books. He served as Editor-in-chief of *Strain* (2007-2010), President of the European Structural Integrity Society (ESIS) (2006-2010), the Greek Group of Fracture (2002-2010), and chairman of the European Association for Experimental Mechanics (EURASEM) (2003-2007). He received the award of merit and the Griffith medal from ESIS, the award of merit from EURASEM, Medal and Diploma of the International Academic Rating of Popularity "Golden Fortune," the Paton Medal of the Ukrainian Academy of Sciences, and the Jubilee Medal "XV Year to IAE" of the International Academy of Engineering.

He is Fellow of SEM, served on the Executive Board (2006-2008), and received the Lazan, Theocaris, Tatnall and Zandman awards.

Vice President Nancy Sottos



Nancy Sottos is the Donald B. Willet Professor of Engineering in the Department of Materials Science and Engineering at the University of Illinois Urbana-Champaign. She is also a co-chair of the Molecular and Electronic Nanostructures Research Theme at the Beckman Institute. Sottos started her career at Illinois in 1991 after earning a Ph.D. in mechanical engineering from the University of Delaware. Her research group studies the mechanics of complex, heterogeneous materials such as self-healing polymers, advanced composites, and thin film microelectronic devices, specializing in micro and nanoscale characterization of deformation and failure in these material systems. Sottos' research and teaching awards include the ONR Young Investigator Award (1992), Outstanding Engineering Advisor Award (1992, 1998, 1999 and 2002), the R.E. Miller award for Excellence in Teaching (1999), University Scholar (2002), the University of Delaware Presidential Citation for Outstanding Achievement (2002), the Hetényi Award from the Society for Experimental Mechanics (2004), Scientific American's SciAm 50 Award (2008), Fellow of the Society of Engineering Science Fellow (2007), and the M.M. Frocht and B.J. Lazan awards from the Society for Experimental Mechanics. She served

as Associate Editor (1999-2002) and as Editor-in-Chief (2003-2006) for *Experimental Mechanics* and currently chairs the International Advisory Board. She has also been a member of the SEM Executive Board (2007-2009).

Member-At-Large Alberto Carpinteri



Professor Alberto Carpinteri is the President of the National Research Institute of Metrology in Italy, INRIM (2011-2015). He is also the Chair of Structural Mechanics at the Politecnico di Torino (Italy), and the Director of the Laboratory of Fracture Mechanics, since 1986. He has held different responsibilities during this period, among which: Head of the Department of Structural Engineering (1989-1995), and Founding Member and Director of the Post-graduate School in Structural Engineering (1990-). He has been a Visiting Scientist at Lehigh University, Pennsylvania, USA (1982-1983), and a Fellow of different Academies and Institutions, among which: European Academy of Sciences (2009-), International Academy of Engineering (2010-), Turin Academy of Sciences (2005-), American Society of Civil Engineers (1996-). Prof. Carpinteri is President of the International Congress on Fracture, ICF (2009-2013), and has been President of the European Structural Integrity Society, ESIS (2002-2006), the International Association of Fracture Mechanics for Concrete and Concrete Structures, IA-FraMCoS (2004-2007), the Italian Group of Fracture, IGF (1998-2005). He is a Member of the Congress Committee of the International Union of Theoretical

and Applied Mechanics, IUTAM (2004-2012), a Member of the Editorial Board of thirteen international journals, the Editor-in-Chief of the journal *Meccanica*, and the author of over 700 publications, of which more than 300 are papers in refereed international journals and 42 are books. Prof. Carpinteri received numerous Honours and Awards: the Robert L'Hermite Medal from RILEM (1982), the Japan Society of Mechanical Engineers Medal (1993), the Honorary Professorship from the Nanjing Architectural and Civil Engineering Institute, China (1996), and from the Albert Schweitzer University, Geneva, Switzerland (2000), the Wessex Institute of Technology Eminent Scientist Medal, UK (2000), the Griffith Medal from ESIS (2008), the inclusion in the "Top 100 Scientists" list of the International Biographical Centre, Cambridge, UK (2009), the Honorary Fellowship Medal from ICF (2009), and the Swedlow Memorial Lecture Award from ASTM (2011).

Member-At-Large Kathryn Dannemann



Dr. Kathryn Dannemann is Principal Engineer in the Engineering Dynamics Department at Southwest Research Institute. She is a materials engineer with professional interest and experience in the interactive effects of microstructure and processing on materials performance. For the past decade, Dr. Dannemann has focused on the high strain rate behavior of various materials (e.g., high strength structural steel for naval applications, aluminum alloys for armor applications and brittle

materials (high strength ceramics, glass, reinforced carbon-carbon) for defense and space applications), often implementing customized test setups. She has taught as an adjunct in the ME Department at the University of Texas-San Antonio. Prior to joining SwRI, she worked at the GE Corporate Research and Development Center and at the Bethlehem Steel Homer Research Laboratories.

Kathryn received her Ph.D. in Materials Engineering from the Massachusetts Institute of Technology in 1989, and B.S. and M.S. degrees in Materials Engineering from Rensselaer Polytechnic Institute. She has been actively involved with SEM since 2006 and has chaired and organized numerous conference sessions, as well as the Dynamic Behavior of Materials Track for the 2008 and 2009 annual conferences. Dr. Dannemann is past Chair of the SEM Dynamic Behavior TD, and is currently serving as Guest Editor for a special issue of *Experimental Mechanics*. 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.

Member-At-Large James De Clerck



Dr. James De Clerck is a Professor of Practice in the Mechanical Engineering-Engineering Mechanics Department at Michigan Technological University. He received his Ph.D. in Engineering

Mechanics in 1991. Prior to joining Michigan Tech in 2009, Jim was a Project Design Engineer at the General Motors Noise and Vibration Center in Milford, Michigan. His areas of expertise include noise and vibration, structural dynamics, design, modal analysis, model validation, inverse methods applied to design, and advanced measurement techniques.

Member-At-Large Charles Van Karsen



Chuck Van Karsen has been a member of the Michigan Tech Department of Mechanical Engineering - Engineering Mechanics since August 1987. He is currently Associate Chair and Director of the Undergraduate Program. Prior to that he had a twelve year career as a practicing engineer in the Machine Tool, Automotive, and Software industries. He specializes in Experimental Vibro-Acoustics, NVH, and Structural Dynamics. His research efforts have concentrated on experimental noise and vibration methods related to automotive systems and subsystems, large home appliances, machine tools, and off-highway equipment. Chuck regularly presents seminars and short courses on Experimental Modal Analysis, Digital Signal Processing, Acoustic Measurements and Sound Quality, and Source-Path-Receiver methods. At Michigan Tech, Chuck teaches Mechanical Vibrations, Experimental Vibro-Acoustics, Analytical and Experimental Modal Analysis, Mechanical Engineering Laboratory, and Controls. He received his BSME and MSME degrees from the University of Cincinnati. Chuck is currently Chair of the Modal Analysis Technical Division of SEM.