

Sameh S.F. Mehanny is Professor of structural engineering at Cairo University in Egypt with special expertise in the field of earthquake engineering. He holds a Ph.D. in seismic structural engineering from Stanford University, 2000. His research activity is focused on computer modeling – under extreme load cases (earthquake, blast, etc.) – of structural systems considering both geometric and material nonlinearities; development and application of nonlinear analysis methods for performance-based earthquake design; identification of appropriate and optimal earthquake intensity measures for reliable estimate of structural response; development of code improved techniques for seismic analysis and design of structures (buildings and bridges); seismic vulnerability assessment of various structures (buildings, bridges, tanks, etc.); and general-purpose finite element applications. S. Mehanny has authored and co-authored about 38 scientific papers in international refereed journals and specialized conferences in the field of earthquake engineering. He is the recipient of the 2003 Raymond C. Reese Research Prize from the Structural Engineering Institute of the American Society of Civil Engineers for his paper: “Mehanny, S.S.F. and Deierlein, G.G. (2001). Seismic Damage Analysis – Assessing Collapse Prevention for Composite Moment Frames. ASCE Journal of Structural Engineering, Vol. 127 No. 9, September 2001.” He is also the recipient of the STA fellowship in Science and Technology sponsored by Japan Science and Technology Corporation (JST), March 1999.

S. Mehanny is serving as a technical reviewer for many international scientific journals in the area of structural and seismic engineering. He has been selected by the Editor-in-Chief of the ASCE Journal of Bridge Engineering as an Outstanding Reviewer for the year 2013. He is also serving for the period from Jan. 2013 to Dec. 2015 as a member of the scientific committee for evaluation of scientific research by faculty members applying for promotion to professorship and associate professorship in the field of structural engineering in Egyptian universities, Ministry of Higher Education, Egypt. He is a member of ASCE, affiliate member of Earthquake Engineering Research Institute EERI, member of Egyptian Society for Tunnels, and member of Egyptian Society for Engineers. He has been also previously elected President of EERI (Earthquake Engineering Research Institute) Peter Gergely Student Chapter at Cornell University for the year 1998. S. Mehanny has a very wide practical experience in seismic analysis and design of long and medium span bridges in moderate (e.g., Egypt) and high (e.g., Algeria, Panama, etc.) seismic zones. He is currently an active member in different committees responsible for the development of various specialized design codes for buildings and bridges in Egypt. S. Mehanny has been the Scientist in Charge from the Egyptian side in the 4-year (2011-2015) long project "Analysis and Design of Earthquake Resistant Structures" (Acronym: ADERS) that is funded by the Seventh Framework Programme (FP7-PEOPLE-2010-IRSES, Marie Curie International Research Staff Exchange Scheme), of the Research Executive Agency (REA) of the European Commission in Brussels. He is currently the Principal Investigator and the Scientist in Charge from the Egyptian side in the 4-year long project “Optimization Driven Architectural Design of Structures” (Acronym: OptArch) that is funded by Horizon 2020 MSCA-RISE-2015 of the Research Executive Agency (REA) of the European Commission in Brussels. He has also served as a member of the scientific committee of the 4th ECCOMAS Thematic International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering COMPDYN 2013, M. Papadrakakis, N.D.Lagaros, V. Plevris (eds.), Kos Island, Greece, 12–14 June 2013, and

of the 5<sup>th</sup> *International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering COMPDYN 2015*, M. Papadrakakis, N.D.Lagaros, V. Plevris (eds.), Crete Island, Greece, 25–27 May 2015.