

**Khalid M. Mosalam, PhD, PE**

Taisei Professor of Civil Engineering and PEER Director

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**a) Professional Preparation**

Cairo University	Egypt	Civil Engineering	BS	1988
Cairo University	Egypt	Structural Engineering	MS	1991
Cornell University	Ithaca, NY	Civil & Env Engineering	PhD	1996

**b) Appointments**

2016-present	Director of Pacific Earthquake Engineering Research (PEER) Center
2015-present	Taisei Professor of Civil Engineering
2014-present	Chair, Structural Engineering, Mechanics & Materials Program, Univ. of Calif., Berkeley
2007-present	Professor, Civil and Env. Eng., Univ. of Calif., Berkeley
08/12-07/13	Visiting Professor, Civil and Env. Eng., Nanyang Technological University, Singapore
2007-2012	Vice Chair, Civil and Env. Eng., Univ. of Calif., Berkeley
1997-2007	Assistant/Associate Professor, Civil and Env. Eng., Univ. of Calif., Berkeley
1996-1997	Lecturer, Civil and Environmental Engineering, Cornell University, New York
08/04-12/04	Visiting Professor, Disaster Prevention Research Institute, Kyoto Univ., Uji, Japan
01/05-07/05	Visiting Professor, Middle East Technical University, Ankara, Turkey

**c) Products**

Closely related:

1. Pan, P., Tomofuji, H., Wang, T., Nakashima, M., Ohsaki, M., Mosalam, K.M., "Development of Peer-to-Peer (P2P) Internet Online Hybrid Test System," *Earthquake Eng. & Structural Dynamics*, **35**(7), 867-890, 2006.
2. Elkhoraibi, T., Mosalam, K.M., "Towards Error-Free Hybrid Simulation Using Mixed Variables," *Earthquake Eng. & Structural Dynamics*, **36**(11), 1497-522, 2007.
3. Mosalam, K.M., Takhirov, S., Hashemi, A., "Seismic Evaluation of 1940s Asymmetric Wood- Frame Building Using Conventional Measurements and High-Definition Laser Scanning," *Earthquake Eng. & Structural Dynamics*, **38**(10), 1175-1197, 2009.
4. Mosalam, K.M., M. Hube, S.M. Takhirov, S. Günay, "Teaching Innovation through Hands-on-Experience Case Studies Combined with Hybrid Simulation," *ASCE, Journal of Professional Issues in Engineering Education and Practice*, **139**(3), 177-186, 2013.
5. Günay, S., K.M. Mosalam, "Enhancement of Real-time Hybrid Simulation on a Shaking Table Configuration with an Advanced Control Method," *Earthquake Eng. & Structural Dynamics*, **44**(5), 657-675, 2015.

Other significant:

1. Gardoni, P., Der Kiureghian, A., Mosalam, K.M., "Probabilistic Capacity Models and Fragility Estimates for RC Columns Based on Experimental Observations," *J. of Eng. Mechanics*, ASCE, **128**(10), 1024-1038, 2002.
2. Lee, T.-H., Mosalam, K.M., "Probabilistic Fiber Element Modeling of Reinforced Concrete Structures," *Computers and Structures*, **82**(27), 2285-2299, 2004.
3. Hashemi, A., Mosalam, K.M., "Shake-Table Experiment on Reinforced Concrete Structure Containing Masonry Infill Wall," *Earthquake Eng. & Structural Dynamics*, **35**(14), 1827-1852, 2006.
4. Talaat, M., Mosalam, K.M., "Modeling Progressive Collapse in Reinforced Concrete Buildings Using Direct Element Removal," *Earthquake Eng. & Structural Dynamics*, **38**(5), 609-634, 2009.
5. Ahuja, A., K.M. Mosalam, T.I. Zohdi, "Computational Modeling of Translucent Concrete Panels," *ASCE, Journal of Architectural Engineering*, **21**(2), B4014008-1 to B4014008-8, 2015.

#### **d) Synergistic Activities (Selected)**

1. Conducting real-life application to demonstrate use of “Dense-Packed Wireless Sensors” for damage detection and health monitoring of woodframe structural systems: This was conducted by instrumenting several regions of a 3-story building using 55 2D wireless MEMS accelerometers developed by Berkeley Sensor and Actuator Center (BSAC).
2. Development of NEES reconfigurable reaction wall seismic testing facility at UCB: The goal of NEES is to provide a geographically distributed collaboration to achieve significant improvement in the ability to model seismic behavior of civil infrastructure. The testing facility at UCB is designed to support development of new generation hybrid testing methods, which smoothly integrate physical and numerical simulations at different locations using the Internet. This objective is explored in the NSF funded research project for Hybrid On-Line Experiments and Monitoring of Structural Systems.
3. Formulation of a seismic-resistance building code for energy-efficient (green) earthen architecture in Morocco: This multi-disciplinary project involved engineers, architects, and anthropologists to develop provisions for both builders and engineers to design and construct rammed earth buildings.
4. Team co-leader for the project “Singapore-Berkeley Building Efficiency and Sustainability in the Tropics (SinBerBEST)”: The project involves more than 30 co-PIs from different disciplines of engineering and architecture from UC-Berkeley and Singapore. The project aims to provide solutions for efficient use of energy in building construction and operation phases in tropical climate.

#### **e) Collaborators & Other Affiliations**

##### Research Collaborators (past 24 months) (17):

S.A. Mahin, J. Moehle, T.I. Zohdi, S. Govindjee, C. Spanos, C. Ostertag, S. Li & M. Panagiotou, M. Nakashima, DPRI, Japan; S.K. Kunnath, UCD, J. Armengou, UIC, Spain, S.-P. Chiew, NTU, Singapore, M. Eberhard & J. Stanton, UoW, J. Restrepo, UCSD, F. Zareian, UCI, E. Taciroglu, UCLA.

##### Graduate Advisors and Postdoctoral Sponsors (2):

Professors P. Gergely (deceased) and R. N. White (deceased), Cornell University

##### Thesis Advisor and Postgraduate-Scholar Sponsor:

MS thesis advisor (11): S. De Alwi, 1998 (SOHA Eng.), M.B. Stevenson, 1998 (Tipping-Mar Eng.), M. Rubina, 2000 (Marina Rubina, Architect), E. Kunkel, 2001 (Opus Int. Consultants), G. Petropoulos, 2002 (UCB), R.R. Senescu, 2004 (Stanford Univ.), X. Rognin, 2006 (VINCI, France), I. Triki, 2009 (Natural Power, France), M. Moustafa, 2010 (UCB), L. Lombard, 2011 (Structures Complexes chez Elioth, France), A. Bakhaty, 2013 (WJE).

MEng report advisor (7): S. Khaykina, 2000 (Aurecon, Australia), J. Lee, 2001 (Nabih Youssef Assoc.), H.-N. Nguyen, 2003 (Ball Aerospace & Tech. Corp., Sys. Eng. Sol.), D. Evans, 2006 (Forell/Elsesser), S. Kadysiewski, 2008 (Bechtel National), K. Cronin, 2008 (WJE), D. Wilcoxon, 2011 (ARUP).

PhD thesis advisor (15): C.J. Naito, 2000 (Lehigh Univ.), P. Gardoni, 2002 (UIUC), T.-H. Lee, 2005 (Konkuk Univ., Korea), Y. Arici, 2005 (METU, Turkey), A. Hashemi, 2007 (Bechtel National), T. Elkhoraibi, 2007 (Bechtel National), J. Li, 2007, M. Talaat, 2007 (SGH), M. Hube, 2009 (Pontificia Univ. Católica de Chile), S. Park, 2010 (Validus Research Inc.), Y. Yang, 2010 [Tongji University] (Chongqing University, China), H. Lee, 2011 (Government of S. Korea); B. Huang 2014 [Tongji University] (Tongji University), M. Moustafa 2014 (UNR), P. Kumar 2015 (UCB).

Post-docs and visiting scholars sponsor (10): M. Tabatabai (SolidWorks Corporation), I. Catagay (Cukurova Univ., Turkey), C.J. Naito (Lehigh Univ.), K.-U. Gliniorz (Swiss Federal Inst. of Technology, Lausanne, Switzerland), N.K. Hong (Seoul National University, Korea), T.-H. Lee (Konkuk Univ., Korea), S. Park (Validus Research Inc.), J. Armengou (UIC, Spain), A. Dilsiz (METU, Turkey), S. Yarra (UCB), H. Lee (Government of S. Korea).

Current PhD students at UCB unless otherwise noted (8): X. Liang, N. Peralta, A. Ahuja, A. Mead, Y. Wu, N. Casquero-Modrego [Universitat Politècnica de Catalunya, Spain].

Current Post-docs (2): S. Günay (UCB), U. Alibrandi (NTU).