# Mohamed Aly Moustafa, Ph.D., P.E.

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#### **EDUCATION**

Ph.D., Structural Engineering, University of California, Berkeley, CA	2014
Certificate, Engineering and Business for Sustainability, University of California, Berkeley, CA	2014
M.Sc, Structural Engineering, University of California, Berkeley, CA	2010
M.Sc., Structural Engineering (coursework only), Ain Shams University, Cairo, Egypt	2009
B.Sc., Civil Engineering (Structural Engineering), Ain Shams University, Cairo, Egypt	2008

#### **APPOINTMENTS**

Assistant Professor, University of Nevada, Reno, NV	July 2015 - current
Postdoctoral Researcher, University of California, Berkeley, CA	Jan 2015 - June 2015
Graduate Student Researcher and Instructor, University of California, Berkeley, CA	2009 - 2014
Teaching Assistant, Ain Shams University, Cairo, Egypt	2008 - 2009
Structural Engineer, Arabia for Design and Engineering Consultants, Cairo, Egypt	2007 - 2009
Survey Engineer, Surveying Works Consulting Inc., Cairo, Egypt	2004 - 2007

#### **CERTIFICATIONS**

Professional Engineer (PE), California (License # C-82279) Professional Civil Engineer, Egyptian Engineers Syndicate (License # 35-02901)

#### SELECTED RESEARCH EXPERIENCE

- Effect of earthquake duration of seismic response and collapse risk of steel structures
- Shake Table Studies of a Bridge System with ABC Connections
- Cost and Ecological feasibility of using UHPC in Highway Bridges
- Seismic assessment and qualification of high-voltage substation electrical equipment
- Using laser scanning and modeling for damage assessment and reconnaissance
- Structural behavior of integral bent caps in as-built and retrofitted RC box-girder bridges

### TEACHING EXPERIENCE

- University of Nevada, Reno: Structural Dynamics (graduate Sp16), Structural Analysis I (undergrad F16)
- UC Berkeley: Prestressed Concrete Structures (grad Sp14), Finite Element Methods (grad Sp11,12,13)
- Ain Shams University: Design of RC Structures I and II, Graduation Project (undergrad F08, Sp09)

### SELECTED HONORS AND AWARDS

- ASCE/SEI Young Professional Scholarship, Geo-structures Congress, Phoenix, AZ, 2016
- CITRIS Invention Lab Fellowship, University of California, Berkeley, CA, 2014
- El-Toukhy East-West Gateway Fellowship, University of California, Berkeley, CA, 2012
- Top Engineering Student Certificate of Honor, National Science Day, Egypt, 2009
- Faculty Highest Honor, Distinction with Honor Degree, Ain Shams University, Cairo, 2008

## PROFESSIONAL MEMBERSHIP

- ACI (associate member of committees: ACI 239, 341, 343 and voting member ACI 239-C)
- ASCE (member of ASCE/SEI Retrofit of Structures under Dynamic Loads subcommittee)
- AISC
- EERI

### **SELECTED PUBLICATIONS (students underlined)**

- 1. <u>Hammad, A.</u>, M.A. Moustafa. (2017). "Seismic Performance of Buildings Steel Frames Under Long Duration Ground Motions," *Proceedings of 16WCEE*, Santiago, Chile, 9-13 January, 2017 (full paper accepted)
- 2. Moustafa, M.A. and K.M. Mosalam. (2017) "Online P-Delta Correction For Multi-Degree-Of-Freedom Hybrid Simulation Testing," *Proceedings of 16WCEE*, Santiago, Chile, 9-13 January, 2017 (full paper accepted).
- 3. Moustafa, M.A. and K.M. Mosalam, (2016). "Substructured Dynamic Testing of High Voltage Electrical Substation Disconnect Switches," *Earthquake Spectra*, Feb 2016. Vol. 32, No. 1, pp.567-589.
- 4. Moustafa, M.A. and K.M. Mosalam, (2016). "Structural Performance of Electrical Substations Porcelain and Polymer Post Insulators," *Journal of Performance of Constructed Facilities, ASCE*, In-press.
- 5. Alanany, Y.M., M.A. Moustafa, Mi.J. Tait. (2016) "Modeling and Evaluation of Seismically Isolated Bridge Using Unbonded Fiber Reinforced Elastomeric Isolators", *Earthquake Spectra* (submitted)
- 6. <u>Abbasi, M.</u>, M.A. Moustafa. (2016). "Viscous Damping Modeling Characteristics Effects on Seismic Response of Bridges," *Istanbul Bridge Conference*, Istanbul, Turkey, 8-10 August, 2016.
- 7. <u>Joe, C.D.</u> and M.A. Moustafa, (2016) "Cost and Ecological Feasibility of Using UHPC in Bridge Piers," *First International Interactive Symposium on UHPC*, Des Moines, IA, USA, July 18-20, 2016.
- 8. Moustafa, M.A. and K.M. Mosalam, (2016) "Effective Width of Integral Bent Caps in Reinforced Concrete Box-Girder Bridges," *ASCE Structures Congress*, Phoenix, AZ, USA, February 14-17, 2016.
- 9. Moustafa, M.A. and K.M. Mosalam, (2015). "Development of a Hybrid Simulation System for Multi-Degree-of-Freedom Large-Scale Testing," 6<sup>th</sup> International Conference on Advances in Experimental Structural Engineering, University of Illinois, Urbana-Champaign, IL, USA, August 1-2, 2015.
- Takhirov, S., K.M. Mosalam, M. Moustafa, L. Myagkova and B. Quigley, (2015). "Laser Scanning, Modeling, and Analysis for Damage Assessment and Restoration of Historical Structures," COMPDYN 2015, Crete Island, Greece, 25–27 May 2015.
- 11. Günay, S., K.M. Mosalam, M.A. Moustafa, N. Peralta and S. Takhirov, (2014). Chapter 2: Observations from South Napa Earthquake, 3:20 am. 8/24/2014: Field Investigation of the Napa Downtown Conducted on 8/24-25/2014in PEER Preliminary Notes and Observations on the August 24, 2014, South Napa Earthquake, Edited by G.S. Kang and S.A. Mahin, *PEER Technical Report 2014/13*, September 2014.
- 12. Moustafa, M.A. and K.M. Mosalam, (2012). "Finite Element Modeling and Simulation of Substation Porcelain Insulator Posts Subjected to Earthquake Loading," Proceedings of the 15<sup>th</sup> World Conference on Earthquake Engineering (15WCEE), Lisbon, Portugal, 24-28 Sept. 2012.
- 13. Mosalam, K.M., M.A. Moustafa, MS. Günay and S. Takhirov, (2012). "Experimental Investigation of the Seismic Performance of Substation Porcelain Insulator Posts in High Voltage Disconnect Switches," Proceedings of the 15<sup>th</sup> World Conference on Earthquake Engineering (15WCEE), Lisbon, Portugal, 24-28 Sept. 2012.
- 14. Günay, M.S., M.A. Moustafa, K.M. Mosalam, (2012). "Real Time Hybrid Simulation of Electrical Insulator Posts Using a Smart Shaking Table and Comparison with Full Dynamic Testing," Proceedings of the 3<sup>rd</sup> International Structural Specialty Conference, Edmonton, Alberta, Canada, June 6-9, 2012.
- 15. Mosalam, K.M., M.A. Moustafa, S. Günay, I. Triki and S. Takhirov, (2012) "Seismic Performance of Substation Insulator Posts for Vertical-Break Disconnect Switches", *California Energy Commission*. *Publication number: CEC-500-2012*, March 2012.