

# GEOTECHNICAL PERFORMANCE-BASED DESIGN

Hosted by:

ASCE OC Geo-Institute  
and  
Professional Development Committee

February 6, 2020



2020 Continuing Education Seminar



## Featured Speaker

# Marshall Lew, Ph.D., P.E., G.E. Semi-Retired from Wood Environmental & Infrastructure Solutions



- Specialist in earthquake engineering
- Served as principal geotechnical engineer and/or project manager on many major consulting assignments, including the evaluation of the seismic design requirements for universities, schools, hospitals, public buildings, high-rise buildings, industrial complexes, and transportation systems.
- Involved in the development of guidelines for Performance-Based Earthquake Engineering (PBEE) for tall buildings through the Tall Buildings Initiative at the PEER Center at UC Berkeley and the Los Angeles Tall Buildings Structural Design Council (LATBSDC).
- Served as a principal geotechnical peer reviewer on about 50 tall building projects in Los Angeles, Long Beach, Oakland, San Diego and Seattle.



# Featured Speaker

## Kevin W. Franke, Ph.D., P.E.

### Associate Professor Brigham Young University



- Associate Professor in the Department of Civil and Environmental Engineering at Brigham Young University.
- BSCE from Utah State University in 2004, is MSCE from University of Washington in 2005, and his Ph.D. from Brigham Young University in 2011.
- Research focus relates to geotechnical/earthquake engineering.
- Currently developing performance-based (i.e., probabilistic) methods for dealing with soil liquefaction and its associated hazards.
- Investigator in the Center for Unmanned Aircraft Systems (C-UAS)
- Research focus in the Center deals with new and improved applications of small (UAVs) in monitoring infrastructure and performing post-disaster reconnaissance.





# Featured Speaker

## Shideh Dashti, Ph.D.

### Associate Professor

### University of Colorado Boulder



- Associate Professor in Geotechnical Engineering and Geomechanics at the University of Colorado Boulder (CU).
- Undergraduate degree at Cornell University and graduate degrees at the University of California, Berkeley.
- Worked briefly with ARUP (New York City) and Bechtel (San Francisco)
- Her research team at CU studies: the interactions and interdependencies among different infrastructure systems during earthquakes and other types of disasters; the seismic performance of underground structures; and consequences and mitigation of the liquefaction hazard facing structures in isolation and in dense urban settings.



# ASCE Geo-Institute (G-I)

- The G-I represents one of the six technical institutes of the ASCE Branch
  - Structural Engineering Institute (SEI), Transportation & Development Institute (T&DI), Environmental and Water Resources Institute (EWRI), Construction Institute (CI), Utilities Engineering & Surveying Institute (UESI)
- We host various events (luncheons, seminars, panels, and site visits) to exchange knowledge and information with the goal of improving the geotechnical community
- ASCE Orange County GI was formed in 2013



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- B.S., Civil and Environmental Engineering (UC Berkeley)
- ASCE OC Branch/YMF Webmaster, Newsletter Editor-In-Chief, and Government Relations Committee Co-Chair
- Jacobs, Irvine



- **Pavlo Chrysovergis, PE – Past Chair**

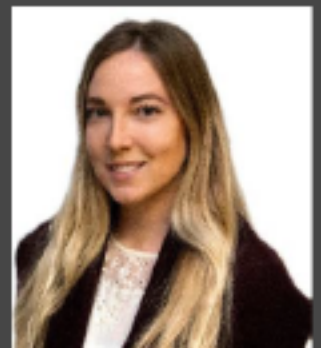
- BS, MS, Civil Engineering (UCLA)
- FAA Remote Pilot, US DOT
- SPC Geotechnical, Inc., Anaheim





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