

ASCE Geo-Institute (G-I)

Earthquake Engineering and Soil Improvement (EESD) Committee

Lectures on Offer from the EESD Committee (2018-2019)
Please Contact: Menzer Pehlivan, Menzer.Pehlivan@jacobs.com

Adda Athanasopoulos-Zekkos, Ph.D., A.M.ASCE

University of Michigan

- Investigation of the performance of the flood-protection systems of New Orleans in Hurricane Katrina, on August 29, 2005 - Lessons Learned
- Assessment of seismic response of levees and its variability due to time history selection
- Characterization of pile-driving induced vibrations: An integrated field testing and numerical modeling approach
- Liquefaction triggering and post-liquefaction response of gravelly soils
- Seismic earth pressures on yielding vs non-yielding gravity-type retaining walls - Overview and FEM results

Shideh Dashti, Ph.D., A.M.ASCE

University of Colorado at Boulder

- performance-based liquefaction assessment
- A physics-informed, semi-empirical, probabilistic approach to evaluating building settlement and tilt on liquefiable sites

Kevin Franke, PE, M.ASCE

Brigham young University

- Use of drones for monitoring infrastructure and performing post-earthquake reconnaissance
- Reconnaissance Efforts from Recent Earthquakes (including 2017 Central Mexico Earthquake)
- Performance Based Liquefaction Hazard Analysis

Russel Green, PhD, PE, M.ASCE

Virginia Tech

- any topic related to liquefaction, such as following:
- Role of paleoliquefaction studies in assessing the seismic hazard in the central-eastern US
 - Evaluating liquefaction potential in the central-eastern US
 - Evaluating liquefaction hazard from induced seismicity
 - Overview of the 2010-2011 Canterbury, New Zealand, Earthquake Sequence

Anne Lemnitzer, PhD, A.M.ASCE

University of California, Irvine

- Centrifuge Experiments to investigate levee deformation potential in the Sacramento – San Joaquin Delta
- Levees, Peat and Seismic Loading – Settlement Challenges Associated with Organic Soils
- An overview of ground improvement methods for liquefaction mitigation

Dimitrios Zekkos PhD, PE, M.ASCE

University of Michigan

- Theme: Robots (land-based and UAVs) in geotechnical engineering
 - Unmanned Aerial Vehicles for post-disaster response and geotechnical infrastructure assessment
 - Recent Applications of Unmanned Aerial Vehicles in Geotechnical Engineering and Future Opportunities
 - Ongoing Robot-enabled Research Efforts to Promote Resiliency and Sustainability of Geo-Systems
- Theme: Stability, energy-processes of Landfills
 - Seismic Response of MSW Landfills: Laboratory & In-Situ Testing of Properties & Dynamic Analyses
 - Recent Advances on the Static and Dynamic Properties of Municipal Solid Waste
 - Bio-Chemico-Physico-Mechanical Characterization of Degradation of Municipal Solid Waste for Energy Generation Processes
 - Other Potential Topics
- Remote Sensing and Field-Based Investigation of Landsliding in the 2015 Mw 7.8 Gorkha, Nepal, Earthquake
- Assessment of the Effects of Ground Motion Modification on Ground Motions and Seismic Response of Geotechnical Systems

Katerina Ziotopoulou, PhD, A.M.ASCE

University of California, Davis

- PM4Silt: A constitutive model for silts and clays in seismic deformation analyses
- PM4Sand: A constitutive model for sands in seismic deformation analyses
- Validation Protocols for the constitutive modeling of liquefaction