ASCE Geo-Institute (G-I) Virtual Speakers Bureau Earthquake Engineering and Soil Dynamics (EESD) Technical Committee

Lectures on Offer from the EESD Committee (2020-2021)
Virtual Platform - Microsoft Teams Live

Speakers and Topics

Adda Athanasopoulos-Zekkos, Assistant Professor at UC Berkeley

- 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

Scott Brandenberg, Professor at UCLA

- Soil-structure interaction procedure for evaluating seismic earth pressures
- Levee system reliability analysis
- Influence of liquefaction and lateral spreading on deep foundations
- Next generation liquefaction relational database

Deepankar Choudhury, Professor at the Indian Institute of Technology Bombay Powai

- Seismic design aspects for combined pile-raft foundation systems of high-rise structures
- Seismic studies on liquefaction, remediation and design of foundation systems for various structures of different petroleum terminals
- Estimation of liquefaction potential at various soil sites in India using CPT and DMT for different field projects
- Seismic design of tailing dam
- Seismic stability analysis and design for longest canal of India

Shideh Dashti, Assistant Professor at 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
- Considerations for mitigation of earthquake-induced soil liquefaction in urban environments
- Seismic performance of buried water reservoir structures
- Considerations for design of permanent and temporary cut-and-cover box structures near tall buildings

Kevin Franke, Professor at 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, Professor at 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, Associate Professor at 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, Assistant Professor at UC Berkeley

- 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-
- 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 ProcesseOther 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

Zia Zafir, Chief Engineer at Kleinfelder

Seismic updates in the 2018 International Building Code

Katerina Ziotopoulou, Assistant Professor at 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