

Purdue Geotechnical Society Workshop Program

Friday April 26, 2019

Burton Morgan Center, Purdue University, West Lafayette, IN

Geotechnics of Natural Hazards

7:30 a.m. Breakfast: coffee, juice, rolls, fruit

8:00 a.m. **Opening of Workshop:** *Philippe Bourdeau, Purdue University*

Welcome: *Antonio Bobet, Purdue University*

MORNING SESSION

Moderator: *Rick Deschamps, Nicholson Construction Co.*; Coordinators: *Hala El Fil & Osvaldo Vitali, Purdue U.*

8:15 a.m. **Keynote Lecture: SEISMIC LIQUEFACTION IN THE CENTRAL-EASTERN US**

Russell Green, Virginia Polytechnic Institute and State University

9:00 a.m. **LIQUEFACTION OF GRAVELLY SOILS AND THE IMPACT ON CRITICAL INFRASTRUCTURE**

Adda Athanasopoulos-Zekkos, University of Michigan

9:20 a.m. **LIQUEFACTION HAZARDS MITIGATION USING EARTHQUAKE DRAINS**

Yan Zhang and Greg Terri, Hayward Baker, Inc.

9:40 a.m. **PERFORMANCE OF FOUNDATIONS OF COASTAL INFRASTRUCTURE IN PUERTO RICO DURING HURRICANE MARIA**

Miguel Pando, University of North Carolina at Charlotte

10:00 a.m. **BREAK**

10:30 a.m. **THE EVOLUTION OF SEISMIC RISK IN PANAMA AND ITS CONSEQUENCES**

Luis Alfaro, Committee for Panamanian Structural Code

10:50 a.m. **"NATURAL" HAZARDS OF TAILINGS DAMS AND RECENT DEVELOPMENTS IN RISK TOLERANCE AND POLICY**

David Geier, Golder Associates, Inc.

11:10 a.m. **GEOTECHNICS OF LUNA LAVA TUBES: METEORITE IMPACT-INDUCED SEISMICITY**

Anahita Modiriasari and Audai Theinat, Purdue University

11:35 a.m. **GROUP PHOTO**

12:00 p.m. **LUNCH** – John Purdue Room, Marriott Hall

AFTERNOON SESSION

Moderator: *Robert Rabeler, SME*; Coordinators: *Andrea Ardila Quiroga & Venkata Abhishek Sakleshpur, Purdue U.*

1:20 p.m. **Keynote Lecture: PROTECTING THE GULF COAST AGAINST THE NATURAL HAZARDS OF STORM SURGE AND RISING WATER – A GEOTECHNICAL PERSPECTIVE**

Joseph Cibor, Cibor Geoconsultants

2:05 p.m. **OSO LANDSLIDE AND RUNOUT ANALYSES TO PREDICT FUTURE HAZARDS**

Timothy Stark, University of Illinois at Urbana-Champaign

2:25 p.m. **THE NATURAL HAZARDS OF DRILLED SHAFT CONSTRUCTION ON HERRINGTON LAKE**

Darrin Beckett, Kentucky Transportation Cabinet

2:45 p.m. **BREAK**

3:15 p.m. **CONSIDERING NATURE IN ADDRESSING RESILIENCE AND SUSTAINABILITY DURING POST-EARTHQUAKE RECONSTRUCTION**

Rodrigo Borela and David Frost, Georgia Institute of Technology

3:35 p.m. **THE UNEASY RELATIONSHIP BETWEEN FOLSOM DAM AND THE CITY OF SACRAMENTO**

Terry Sullivan, U.S. Army Corps of Engineers Risk Management Center

3:55 p.m. **TRANSITIONING TO RESILIENT/SUSTAINABLE DESIGN IN THE FACE OF NATURAL HAZARDS**

David Espinoza, Geosyntec Consultants

4:15 p.m. **WORKSHOP CLOSURE**