

Purdue Geotechnical Society Workshop Program

Friday May 6, 2022

East Faculty Lounge, Purdue Memorial Union, West Lafayette, IN

Unconventional Geotechnics

- 7:30 a.m. Breakfast: coffee, juice, rolls, and fruits
8:00 a.m. **Opening of Workshop:** *Philippe Bourdeau, Purdue University*
Welcome: *Joe Sinfield, Purdue University*

MORNING SESSION

Moderator: *Arthur (A.J.) McGinn, Brierley Associates*; Coordinators: *Eirini Christoforidou & Hannah Cupples, Purdue Univ.*

- 8:15 a.m. **Keynote Lecture:** [GEOTECHNICAL PRACTICE IN THE AGE OF ALTERNATIVE CONTRACT DELIVERY METHODS](#), *Conrad Felice, Conrad Felice Associates*
- 9:00 a.m. [CALIBRATING ARTIFICIAL INTELLIGENCE AND HYDROLOGIC MODELING WITH SMART MONITORING INPUTS FOR ENHANCED LEVEE SAFETY PREDICTIONS UNDER CHANGING CLIMATE CONDITIONS](#), *John Mundell, Tyler Balson, Forrest Kunkel and Luke Johnstone, Mundell & Associates, Inc.*
- 9:20 a.m. [A NOVEL APPROACH TO EVALUATE WIND TURBINE FOUNDATION PERFORMANCE THROUGH FREQUENCY ANALYSIS](#), *Yazen Khasawneh, University of Notre Dame and Linna Duan, Terracon*
- 9:40 a.m. [BURROWING IS A GEOTECHNICAL ENGINEERING PROBLEM](#), *Julian Tao, Arizona State University*
- 10:00 a.m. **BREAK**
- 10:45 a.m. [USING THE LIGHT WEIGHT DEFLECTOMETER TO EVALUATE IN SITU STRENGTH OF CEMENT STABILIZED SUBGRADE](#), *Peter Becker, Indiana Department of Transportation*
- 11:05 a.m. [RETROFIT AND REUSE OF PIERS ON THE MILTON-MADISON OHIO RIVER BRIDGE](#), *Darrin Beckett, Kentucky Transportation Cabinet*
- 11:30 a.m. **GROUP PHOTO**
- 12:00 p.m. **LUNCH** – Anniversary Drawing Room, PMU

AFTERNOON SESSION

Moderator: *Antonio Bobet, Purdue University*; Coordinators: *Bianka Pajo & Matthew Halverson, Purdue University*

- 1:30 p.m. **STUDENT SHOWCASE** (four short presentations by Purdue students)
[Grain Portraits: from Qualitative Observations to Quantitative Information](#), *Luis Garzon Sabogal*
[Correlations between Falling Weight Deflectometer and Resilient Modulus Test](#), *Kanika Gupta*
[Geophysical Response of Rock Joints during Shear](#), *Kyungsoo Han*
[Study of an Unconventional Geomaterial through an Interdisciplinary Lens](#), *Mohammadhasan Sasar*
- 2:30 p.m. **Keynote Lecture** (via Zoom): [BIO-INSPIRED GEOTECHNICS: EMERGING OPPORTUNITIES AND TECHNOLOGIES](#), *David Frost, Georgia Institute of Technology*
- 3:15 p.m. **BREAK**
- 3:50 p.m. [CONSTRUCTION OF FILL EMBANKMENTS BY DISPLACEMENT OF SOFT FOUNDATION SOILS](#), *Suri Surendra, Findling Inc.*
- 4:10 p.m. [READY, FIRE, AIM: DEEP FOUNDATION RETROFIT DURING ORIGINAL CONSTRUCTION](#), *Michael Wysocky, Thatcher Foundations*
- 4:30 p.m. [DYNAMIC ANALYSIS OF FUNDÃO TAILINGS DAM FAILURE](#), *Timothy Stark, University of Illinois at Urbana-Champaign*
- 4:50 p.m. **WORKSHOP CLOSURE**