## AGENDA

for

# **2018** Geotechnical Research in Progress

[DOT Course #BT-05-0135] FDOT / State Materials Office 5007 N.E. 39th Avenue Gainesville, FL 32609

Thursday (August 9, 2018)

| #  | Time          | Title   | Presenter   |
|----|---------------|---|---|
|    | 8:45 - 9:00   | Welcome   | Rodrigo Herrera &<br>Dave Horhota                       |
| 1  | 9:00 - 9:45   | -Development of an Improved Vertical and Horizontal In-situ<br>Permeameter (VAHIP)<br>-Field Implementation of the Vertical In-situ Permeameter<br>(VIP)                                | Drs. Ana Mohseni,<br>Harald Krammler, &<br>Mike Rodgers |
| 2  | 9:45 - 10:15  | -Bearing Capacity Factors for Shallow Foundations Subject to<br>Combined Lateral and Axial Loading  | Drs. Scott Wasman &<br>Michael McVay                    |
| 3  | 10:15 - 10:45 | -Estimating Soil Pressure against Unyielding Surfaces   | Drs. Mike Rodgers &<br>Michael McVay                    |
| 4  | 10:45 - 11:15 | -Implementation of Down-Hole Geophysical Testing for Rock<br>Sockets  | Dr. Dennis Hiltunen                                     |
| 5  | 11:15 - 12:00 | -Measuring While Drilling (MWD) for Florida Site<br>Investigations<br>-Implementation of Measuring While Drilling Shafts in Florida   | Drs. Mike Rodgers &<br>Michael McVay                    |
|    | 12:00 - 1:00  | Lunch Break   |   |
| 6  | 1:00 - 1:45   | -Evaluating the Effect of Temporary Casing on Drilled Shaft<br>Rock Socket Friction<br>-Effect of Polymer Slurry Stabilization on Drilled Shaft Side<br>Shear over Time                 | Dr. Gray Mullins  |
| 7  | 1:45 - 2:30   | -Development and Testing of the Miniaturized Pavement<br>Pressuremeter  | Dr. Paul Cosentino                                      |
| 8  | 2:30 - 3:00   | -LRFD Factors for Tip Grouted Drilled Shafts  | Dr. Gray Mullins  |
| 9  | 3:00 - 3:45   | -Design Phase Evaluations of High Pile Rebound Soils with an<br>Emphasis on SPT Testing<br>-Quantifying Pile Rebound with Deflection Measuring Systems<br>Best Suited for Florida Soils | Dr. Paul Cosentino                                      |
| 10 | 3:45 - 4:15   | -Sinkhole Detection with 3-D Full Elastic Seismic Waveform<br>Tomography  | Drs. Khiem Tran &<br>Michael McVay                      |
| 11 | 4:15 - 5:00   | <i>-Effect of Proximity of Sheet Pile Walls on the Apparent Capacity of Driven Displacement Piles</i>   | Drs. Jae Chung &<br>Michael Davidson                    |

### AGENDA

for

#### **2018** Geotechnical Research in Progress

[DOT Course #BT-05-0135] FDOT / State Materials Office 5007 N.E. 39th Avenue Gainesville, FL 32609

Friday (August 10, 2018)

| #  | Time          | Title  | Presenter                                |
|----|---------------|--|--|
| 12 | 8:15 - 8:30   | -Underwater Noise Level Study during Impact Pile Driving   | Dr. Raphael Crowley                      |
| 13 | 8:30 - 9:00   | -Determining Bearing Resistance of Cantilever Sheet Piles  | Drs. Xiaoyu Song &<br>Amirata Taghavi    |
| 14 | 9:00 - 9:30   | -Microbial Induced Calcite Precipitation to Stabilize<br>Florida High-Organic Soils                                | Dr. Raphael Crowley                      |
| 15 | 9:30 - 10:00  | -Strength Envelopes for Florida Rock and Intermediate<br>Geomaterials  | Drs. Michael McVay<br>& Xiaoyu Song      |
| 16 | 10:00 - 10:15 | -Development of GS-DEEP Software (pending approved scope of services)  | Drs. Michael Davidson<br>& Michael McVay |
| 17 | 10:15 - 11:00 | -Development of a Sinkhole Risk Evaluation Program   | Dr. Boo Nam                              |
| 18 | 11:00 - 11:30 | -Comparison of SPT N-value with Alternative Field Test<br>Methods in Determining Moduli for Settlement Predictions | Drs. Manoj Chopra &<br>Luis Monsalve     |
| 19 | 11:30 - 12:00 | -Development of Statistical Models to Predict<br>Compressibility of Florida's Soils                                | Dr. Boo Nam                              |
| 20 | 12:00 - 12:15 | -Prediction Model of Vibration-Induced Settlement Due to<br>Pile Driving (pending approved scope of services)      | Drs. Boo Nam & Luis<br>Monsalve          |

## PDH credits will be awarded by segments:

| Thursday (August 9, 2018) |          |
|---------------------------|----------|
| 9:00 AM - 12:00 PM        | 3.00 PDH |
| 1:00 PM - 5:00 PM         | 4.00 PDH |

Friday (August 10, 2018) 8:15 AM – 12:15 PM 4.00 PDH