

**Purdue Geotechnical Society Workshop Program, Friday April 11, 2025**  
**Burton D. Morgan Center, 1201 Mitch Daniels Blvd, Purdue University, West Lafayette, IN**

**Engineering the Ground: from fundamentals to applications**

**7:30 a.m.** Breakfast: coffee, juice, rolls, and fruits

**8:00 a.m.** Welcome and Opening of Workshop

**MORNING SESSION**

**Moderator:** *Peter Becker, INDOT* - **Coordinators:** *Asad Ahmad & Aseem Jain, Purdue University*

**8:05 a.m.** Keynote Lecture

[PROJECT EXPERIENCES: WERE THE FUNDAMENTALS AND APPLICATIONS ALIGNED?](#)

*Raymond Franz, Keller North America*

**8:50 a.m.** [US 421 SLOPE STABILIZATION ON PINE MOUNTAIN USING A PERMANENT ROCK ANCHORED TIEBACK RETAINING WALL](#)

*Darrin Beckett, Terracon Consultants*

**9:10 a.m.** [REDEVELOPING TORONTO'S WATERFRONT: A MULTI-DISCIPLINARY CASE STUDY](#)

*Jim Hansen, Geosyntec Consultants*

**9:30 a.m.** USE OF WICKING GEOTEXTILE TO DEHYDRATE ROAD EMBANKMENT UNDER UNSATURATED CONDITIONS

*Xiong Zhang, Missouri University of Science and Technology*

**9:50 a.m.** **BREAK**

**10:20 a.m.** COASTAL GROUND IMPROVEMENT VIA ELECTRODEPOSITION

*Alessandro Rotta Loria, Northwestern University*

**10:40 a.m.** LOCKED AND LOADED: *AB INITIO* EXPERIMENTS ON COHESIVE INCLUSIONS IN GRANULAR MEDIA

*Tejas Murthy, Indian Institute of Science, Bangalore*

**11:00 a.m.** [BIO-CEMENTATION OF SANDS: A GRANULAR PERSPECTIVE](#)

*Matt Evans, Oregon State University*

**11:20 a.m.** **GROUP PHOTO**

**11:40 a.m.** **LUNCH** – Burton Morgan Center Café (MRGN 102)

**AFTERNOON SESSION**

**Moderator:** *John Wysockey, Thatcher Foundations* - **Coordinators:** *Juliana Pereira & Caroline Mimi Wadley, Purdue*

**1:00 p.m.** Keynote Lecture

EXPLORING GROUT TESTING LIMITATIONS AND OPPORTUNITIES FOR ENHANCING GROUND IMPROVEMENT IMPLEMENTATIONS

*Chadi El Mohtar, University of Texas, Austin*

**1:45 p.m.** DYNAMIC COMPACTION: A PROVEN GROUND IMPROVEMENT ALTERNATIVE FOR LANDFILL MATERIALS

*Chris Woods, Densification Inc.*

**2:05 p.m.** [INDIGENOUS BACTERIA-DRIVEN SOIL STABILIZATION: A BIOINSPIRED MICROBially INDUCED CALCITE PRECIPITATION APPROACH FOR EXPANSIVE SUBGRADES](#)

*Nitin Tiwari, Southern Illinois University*

**2:25 p.m.** **BREAK**

**3:00 p.m.** [MITIGATION OF EMBANKMENT FILL SLOPE MOVEMENT ON THAW-SENSITIVE PERMAFROST AT LOST CREEK ALONG THE TRANS-ALASKA PIPELINE SYSTEM](#)

*Oliver Hoopes, Shannon & Wilson*

**3:20 p.m.** TWO- AND THREE-DIMENSIONAL FINITE ELEMENT FREEZING BEHAVIOR OF COMPLEX FROZEN SOIL GEOMETRIES

*Mattias Lindenbauer, HDR Engineering*

**3:40 p.m.** [THE UNINTEDED CONSEQUENCES OF SOIL FREEZING: DEATH, DESTRUCTION AND IMPACTS OF EXPLOSIONS CAUSED BY LEAKING GAS PIPELINES](#)

*John Mundell, Mundell & Associates*

**4:00 p.m.** **WORKSHOP CLOSURE**