Tuesday, March 10, 2026

Track A | Room	Track B | Room	Track C | Room	Track D | Room	Track E | Room	Track F | Room	Track G | Room/3
8:00 – 8:30 a.m.	**Welcoming Remarks from…**					
8:30 – 10:00 a.m.	**Geo-PIT: Powerful,** *Informative Talks on Geotechnical Topics*					
10:00 – 10:30 a.m..	**Morning Networking Break**					
10:30 a.m. – 3:00 p.m.	**Student Competitions**					
10:30 a.m. – 12:00 p.m	**Technical Sessions**					
Computational Modeling **Moderator:** Yifei Ma and Hanu Kulkarni	**Dams, Levees, and Tailings Storage Facilitites** **Moderator:** Bret Lingwall	**Energy Geotechnics and Thermal Soil Behavior** **Moderator:** Julia Loshelder	**Geotechnical Challenges in Soft Soils** **Moderator:** Michael McGuire	**Geotechnical Aspects of the Salt Lake Temple Seismic Retrofit** **Moderator:** Taylor Nordquist & Lisheng Shao	**Panel Session: Future Environmental Hazards and Conditions in Geotechnical Engineering Practice** **Moderator:** Sissy Nikolaou	**Benefits of Geotechnical Data Resources: NGL, GMDB, and VsPDB Databases** **Moderator:** Kristin Ulmer
Numerical Modeling of Centrifuge Tunnel Tests using the Norsand and the Hardening Soil Models: *Felipe Vitali, Ricardo Formigari, and Osvaldo Vitali* **Hybrid Surrogate Modeling of a Quay Wall: An Automatically Tuned Framework Integrating Long Short-Term Memory and Feedforward Neural Networks:** *Kacper Cerek, Elnaz Hadjiloo, and Jürgen Grabe* **3D Numerical Study on Geosynthetically Reinforced Stone Columns:** *Mohebollah Agahnav, Hossein Bahmyari, Ali Noorzad, and Mohammad Jammali Moghadam* **Influence of Geometry and Mass Distribution on Penetrator Stability in FEM Simulations of Rapid Penetration in Clay:** *Boules Markos, Mehdi Omidvar, Stephan Bless, and Magued Iskander* **Evaluation of a Numerical Modeling of the Radial Expansion and Axial Loading of a New Bioinspired Deep Foundation in Granular Soil:** *Paola Bandini, Mohsen Zamani, Peter Zelkowski, and Craig Newtson* **A Stress–Deformation Modeling Approach to Support Adaptive Geotechnical Design and Risk-Informed Decision Making:** *Saeed Nazary, David Walter, Jeffrey Keaton*	**Sevier Bridge Dam Rehabilitation:** *Richard Buhler, Jed McFarlene, Ryan Cole, Travis Gerber, and Phil Gerhart* **Modeling of Static Liquefaction-induced Failure of a TSF.:** *Alfonso Cerna-Diaz, Richard Davidson, Emad Ghodrati, Masood Kafash, Pooya Sheykhloo, and Lisa Yenne* **Impact of Reservoir Fluctuations on Cracking and Erosion: Physical Modeling and Numerical Investigation:** *Amanda Sampaio, Jaden Ladd, Jonathan Kurien, and Yuderka Trinidad Gonzalez* **Considerations for Levee Design Using Staged Construction in Southeast Louisiana: A Case Studying the Design and Construction of the West Shore Lake Pontchartrain Levee:** *James Williams, Richard Varuso, Jehu Johnson, Leeland Richard, and Sean Walsh* **Back-Analysis of a Rapid Drawdown Failure at Sparmos Dam Using UAV-based 3D Failure Geometries:** *Jhih-Rou Huang, Dimitrios Zekkos* **Evaluation of Slope Stability of Tailings Storage Facility under Static and Seismic Conditions:** *Siwadol Dejphumee, James Devereaux, and Timothy Adams*	**A Modified Split Hopkinson Pressure Bar for Temperature-Controlled Dynamic Testing of Frozen Sands:** *Ruben Aza-Gnandji, Youssef Abouhussien, and Tugce Baser* **Effective Stress Evaluation of the Thermal Volume Change of Swelling Soils:** *John McCartney, Xufei Liu, Fatemah Behbehani, and Yu Lu* **Numerical analysis of Thermo-Hydro-Mechanical Behavior of Expansive Soils Close to the Geothermal Energy Systems:** *Fereydoun Najafian Jazi, Kiarash Jafarzadeh, Omid Ghasemi-Fare, and Thomas Rockaway* **Scenario-Based Field-Scale Evaluation of Thermal Performance of Ground Heat Exchangers:** *Alireza Fakhrabadi, Aditya Deshmukh, Puneet Bhaskar, Xinbao Yu, and Anand Puppala* **A Coupled Thermo-Hydraulic Transport Model During Soil Freezing:** *Antai Dong and Xiong Zhang* **Compressibility and Volume Change of Bentonite at Variable Temperatures:** *Abdullah Almajed, Muuwia Dafalla, and Lemboye Kehinde*	**Design and Performance Evaluation of Geosynthetic-Reinforced Load Transfer Platforms in Pile-Supported Embankments:** *Masoud Nobahar and Murad Abu-Farsakh* **Timber Piled Load Transfer Platform and GRS Abutments on Soft Ground for Temporary Panel Bridge:** *Graham Elliott, Mark Landis, Philip Shull, and Kirsten Wilde Grant* **Simplified method for Consideration of Soil Arching in 2D Limit Equilibrium Slope Stability Analyses of Pile-Stabilized Embankments:** *James McKelvey and Miguel Pando* **Evaluation of Bearing Capacity for TBM Tunneling in Deep Soft Soils:** *Chu Ho and Vishnu Saketh Jella* **Load Transfer Platforms for Column-Supported Embankments: A Comparative Study:** *Ashutosh Singh and Anumita Mishra* **Nonlinear Simulation of the Seismic Performance of Unreinforced and Fiber-Reinforced Rigid Inclusions in Soft Soil Site:** *Daniel Hutabarat, James Gingery, and Francisco Humire*	The Salt Lake Temple of the Church of Jesus Christ of Latter-day Saints, completed in 1893, is undergoing seismic retrofitting. A base isolation system is being installed adjacent to the historic footings of the 170-million-pound unreinforced stone masonry structure, which bears on shallow foundations with pressures up to 19,000 psf (900 kPa). Extensive shoring and underpinning—including tie rods, micropiles, secant piles, tiebacks, hand-dug piers, and jack-and-bore casings—support construction in gravelly alluvial soils. This presentation highlights the project's geotechnical challenges and innovative solutions. **Presenters:** *Taylor Nordquist, P.E., Project Manager, Applied GeoTech* *Georges Bonnet, Director of Communications for Historic Temple Renovations, The Church of Jesus Christ of Latter-day Saints* *Brent Maxfield, S.E., Structural Engineer, The Church of Jesus Christ of Latter-day Saints* *Rob Jameson, Executive VP, Malcolm Drilling Company* *Eric Lindquist, S.E., Ph.D., President, Brierley Associates* *René Vignos, S.E., Principal/COO, Forrell Elsesser*	This panel of experienced practitioners and researchers will discuss the current state of practice, guidelines, codes, and standards in geotechnical engineering as they relate to future environmental hazards and conditions. Panelists will assess priorities and pressing needs for incorporation in the development of future codes and standards as well as the broader view points of the community. **Panelists**: *Georgette Hlepas, USACE* *Jim Collin, Collin Group* *Joe DiMaggio, HNTB* *Youssef Hashash, UIUC*	The Next Generation Liquefaction (NGL) database, the Ground Motion database (GMDB), and the Shear-wave Velocity (Vs) Profile Database (VsPDB) are relational databases that have been developed to advance geotechnical earthquake engineering by providing open access to key data from around the world. In this special session, attendees will learn about the development of these databases and how these resources have been used to benefit engineering research and practice. **Presenters:** *Scott Brandenberg, Professor, UCLA* *Tristan Buckreis, Post-doctoral Researcher, UCLA* *Onder Cetin, Professor, Middle East Technical University* *Kenneth Hudson, Principal Geoscientist, Hudson Geotechnics* *Chukwuebuka Nweke, Assistant Professor, USC* *Renmin Pretell, Assistant Professor, U. Nevada Reno* *Arda Sahin, PhD Student, UCLA* *Kristin Ulmer, Senior Research Engineer, Southwest Research Institute*
12:00 – 1:00 p.m..	**Lunch in Exhibit Hall**					
1:00 – 2:30 p.m.	**Technical Sessions**					
Dynamic Soil Behavior and Foundation Performance **Moderator:** Anthony Tessari and William "Tripp" Baker	**Soil Improvement** **Moderator:** Nripojyoti Biswas	**Underground Engineering** **Moderator:** Canan Ozudorgu	**Geophysical Engineering** **Moderator:** Jonathan Hubler	**Climate Change and Sustainability** **Moderator:** Sadik Khan	**JGGE Editor's Choice Papers** **Moderator:** Catherine O'Sullivan	**Geotechnical Failures Investigations, Unveiling the Hidden Layers** **Moderator:** Saj Salam
Evaluation of New and Existing Shear Modulus Reduction Models to Predict Measured In-Situ G/Gmax in Transitional Silts: *Besrat Alemu, Armin Stuedlein, Zhongze Xu, and Kenneth Stokoe* **Observations and Interpretation from a Centrifuge Test on a Pile-Supported Wharf Subjected to Combined Superstructure Inertia and Lateral Ground Deformations:** *Arash Khosravifar, Andrew Parrott, Benyamin Jalilnavaznovin, Stephen Dickenson, Nason McCullough, and Scott Schlechter* **Shake Table Studies of a Geotechnical Seismic Isolation System Using Lightweight Aggregates:** *Farnehr Dehkordi, Farzad Naseri, and Fariborz Tehrani* **Seismic Settlement Analysis of Nihal Atakaş Mosque: A Comparison of Field Observations, Semi-Empirical Estimates, and 3D Seismic Soil-Structure Interaction Simulation Results:** *Ozgun Numanoglu, Renmin Pretell, and Daniel Hutabarat* **Examination of Undrained Cyclic Shear Behavior of Montanan varved lacustrine fines:** *Bret Lingwall, James Olsen, Tyler Chatfield, and Tyler Quick* **Effect of Overburden Stress on Cyclic Resistance of Fine-Grained Materials:** *Varun N. S. Renugah, Arda Sahin, Amalesh Jana, Kristin Ulmer, Scott Brandenberg, Jonathan Stewart, Armin Stuedlein, Matthew Evans, and Steven Kramer*	**Shear Strength Envelope Characteristics of Lime-Treated Clays:** *Mohammad Moridzadeh and Gholamreza Mesri* **Enhancing the Performance of Biopolymer Stabilization of Sulfate-Rich Expansive Soil Using Co-additives:** *Debayan Ghosh and Aritra Banerjee* **Feasibility Study of Quantifying the Soil Strength Improvement from Polyurethane Injection:** *Chadi El Mohtar, Kowshik Kumar, Bianca Zuleta, Abhilash Reddy* **Innovative Electrokinetic Treatment of Expansive Soils: Evaluating MgCl2 and CaCl2 as Stabilizing Agents:** *Najibullah Zulfeqar, Shiqiang Zou, and Ali Khosravi* **Rethinking the Role of Downdrag in Rigid Inclusions Design:** *Sonia Swift, Mary Nodine, and Kevin Johnson* **Optimized Foundation Design and Construction for Provo, UT Wasterwater:** *Lisheng Shao, Aaron Leopold, Mathew Francis, Tim Siegal, Mike Robison, and Scott Simmons*	**Feasibility Study on Health Monitoring of Buried Structures using Battery-Free and Cable-Free Sensors:** *Jun Wang, Fei Wang, Yu Luo, Lina Pu, Isaac Howard, and William Crook* **Laboratory Investigation on Advancing an Eco-Friendly Backfill Grout for Shield TBM Tunneling Using Biopolymer-Based Soil Treatment (BPST):** *Ilhan Chang, Chanjo Kwon, and Hyungbin Park* **Cottonwoods Connection Pipeline Crossing of the Wasatch Fault:** *Travis Gerber and Ryan Maw* **Dual-Auger Bio-Inspired Self-Burrowing Robot (BurroBot): Experimental Evaluation of Horizontal Burrowing Behavior:** *Sarina Shahhosseini and Junliang Tao* **GIS Interoperability Framework for Risk Management in Tunneling Projectsdual:** *Rajat Gangrade and Steve Savage*	**Improved Correlations of Geophysical Models With Sparse Borehole Data Using Geostatistical Algorithms:** *Alastair McClymont and Eric Johnson* **Seismic Geotechnical Imaging Using Full-Waveform Inversion and Physics-Informed Neural Networks:** *Yuze Pu and Kamil Mohammadi* **Seismic Full Waveform Inversion for Sinkhole Assessment and Remediation Monitoring: A Case Study on a Roadway in Montgomery County, Pennsylvania:** *Joseph Coe, Pourya Alidoust, Sarah McInnes, and Katherine Kubiak* **Rapid Three-Dimensional Subsurface Imaging with Data-Driven Full Waveform Inversion:** *Samuel Nakai, Sanish Bhochhibhoya, and Joseph Vantassel* **Site characterization using electrical resistivity tomography after microbially induced desaturation treatment:** *Aaron Gallant, Andres Cordoba-Ordonez, Diane Moug, Fadzai Zivanai, Kayla Sorenson, and Arash Khosravifar* **A Dataset of Microtremor Horizontal-to-Vertical Spectral Ratio (mHVSR) Measurements Collected at Strong Motion Stations that Recorded the 2020 M5.7 Magna, Utah Earthquake:** *Kyle Cannon and Brady Cox*	**Experimental Study of the Mechanical and Durability Properties of a Collapsible Soil Treated with Biopolymers:** *Shamontee Aziz, Pushan Bal, Scott Olson, and Paul Braun* **Sustainable Utilization of Waste Slurry in Road Construction: Development and Evaluation of Solidification Methods Using Industrial Byproducts:** *Ningjun Jiang, Bowen Yu, and Xuanyu Chen* **Case Studies: Increase in Climactic Events Causing Increase in Foundation Costs:** *Xinyi Jiang and Morgan Race* **Centrifuge Modeling of the Effects of Native Vegetation on Levee Slope Stability:** *Nethmi Silva, Tommy Bounds, April Bowman, and Kanthasamy Muraleetharan* **Evaluation of Printability and Flow Properties of 3D-Printed Earthen Mixes:** *Saswati Ray, Md Montaseer Meraz, Pavan Akula, John Rushing, and Jeb S. Tingle* **Strengthening Recycled Glass Sand Using Xanthan Gum: A Sustainable Approach:** *Junjie Li, Kejun Wen, and Bin Zhang*	This special session includes presentations by authors of editors choice papers in ASCE's Journal of Geotechnical and GeoEnvironmental Engineering in 2025, covering different topics and methodologies. **Pipeline-Soil Interaction Behaviour: Acoustic Emission and Energy Dissipation:** *Shijin Li.* **Machine Learning-Based Settlement Models for Shallow-Founded Structures on Interbedded Sites Considering Dense Granular Columns:** *Shideh Dashti.* **Evolution and Prediction of the Saturated Hydraulic Conductivity of Municipal Solid Waste during Long-Term Biodegradation Experiment:** *Xunchang Fei* **Displacement-Based Design of Axially Loaded Piles for Seismic Loading and Liquefaction-Induced Downdrag:** *Katerina Ziotopoulou* **Changes in Soil Properties over Time after a Wildfire and Implications to Slope Stability:** *Idil Akin*	Geotechnical Failures Investigation is an interdisciplinary field that aims to spotlight cutting-edge research, innovative methodologies, and case studies that illustrate the pivotal role of geo-forensics in solving complex problems. Participants will gain insights into the application of failure analysis investigation techniques in geotechnical engineering, understand the legal and scientific challenges associated with geotechnical failures investigations, and explore future directions in geo-forensic research. **Presenters:** *Jean-Louis Briaud, Professor, Texas A&M University* *David Frost, Professor, Georgia Institute of Technology* *Robert Kayen, Professor, UC Berkeley* *Rodrigo Salgado, Professor, Purdue University*
2:30 - 3:00 p.m.	**Afternoon Networking Break**					
5:00 - 6:30 p.m.	**Shamsher Prakash Lecture**					
6:30 - 9:00 p.m.	**Off-site Event - TBA**					
8:15 – 9:15 p.m.	**G-I Student Program: Organizational Members and Student Travel Grant Winners Job Fair (Invitation Only)**					
9:15 – 10:15 p.m.	**G-I Student Program: Organizational Member and Student Reception**					

Technical Program *(continued)*

Wednesday, March 11, 2026

Track A | Room	Track B | Room	Track C | Room	Track D | Room	Track E | Room	Track F | Room	Track G | Room/3
8:00 – 10:00 a.m.	**Plenary Session, Geo-PITs, Student Competition Awards**					
10:00 – 10:30 a.m.	**Morning Networking Break**					
10:30 a.m. – 12:00 p.m.	**Technical Sessions**					
In-Situ Testing: Field Methods and Modeling **Moderator:** Aaron Budge	**Advances in Liquefaction Analyses** **Moderator:** Renmin Pretell	**Engineering Geology and Rock Mechanics** **Moderator:** Shahrzad Roshankhah	**Soil Erosion** **Moderator:** Surya Congress	**Panel Session: Geo-Debate 2026** **Moderator:** Derrick Dasenbrock	**Panel Session: Working Platforms – Do we really need to design them?** **Moderator:** Peter Faust	**Younger Member Technical Session** **Moderator:** Intisar Ahmed and Santiago Martinez-Granata
Meshless Numerical Modeling of Vane Shear Test: *Alomir Favero Neto, Gustavo Oliveira, and Alfonso Cerna-Diaz* **Measurement of Soil Thermal Conductivity Using a Novel CPT Module:** *Joseph Bindner, Ong Siau-Hwa, and Ethan Cargill* **Undrained Shear from CPTU in Soft Clay, Stiff Till, and Soft Rock in the UK:** *Paul Mayne* **Cone Penetration Rate Effects on Field Characterization of Hydraulically Placed Fly Ash:** *Longde Jin, Andrew Fuggle, and Lina Maria Pua Pita* **Analysis of Video Images Obtained During Cone Penetration Testing:** *Gerald Verbeek and Oksana Khomiak* **Effect of Particle Refinement Method Parameters in Discrete Element Method Simulations: Cone Penetration Test Examples:** *Pingki Datta and Matthew Evans*	**Comparing Liquefaction Hazard Assessment Methods for Fuel Storage Facilities in Portland's CEI Hub:** *Ana Tijerina Esquino, Diane Moug, Arash Khosravifar, and David Yang* **Machine Learning-Assisted Calibration of Plasticity Models for Liquefiable Geosystems:** *Maziar Mivehchi, Laura Luna, and Katerina Ziotopoulou* **CPT-Based Probabilistic Assesment of Seismic Soil Liquefaction Triggering Relationships:** *Gizem Can, Kemal Cetin, Robb Moss, Robert Kayen, Makbule Ilgace, and Umut Ayhan* **Comparison of Synthetic Datasets Generation and Their Efficacy in the ML-Assisted Calibration of Plasticity Models for Liquefaction:** *Tyler Southam, Maziar Mivehchi, Laura Luna, and Katerina Ziotopoulou* **Addressing the Needs and Challenges in Evaluating Liquefaction: A Survey of the State-of-Practice:** *Kristin Ulmer, Scott Brandenberg, Ken Hudson, Paolo Zimmaro, Steve Kramer, and Jonathan Stewart* **Modeling of Strain-Rate Effects and its Implications on the Lateral Spreading of Liquefiable Soils:** *Mohamed El Ghoraiby and Majid Manzari*	**Effect of Dual Surface Crack on the Seismic Stability of Strip Footing Placed Over the Rock Mass:** *Avneet Lahariya and Debarghya Chakraborty* **Evaluation of Flexure Modulus and Energy Dissipation in Intact Rocks Using Resonant Column Testing and Numerical Simulations:** *Sakshi Rohilla and Resmi Sebastian* **Rockfall Hazard Assessment in Pennsylvania through Coupled Monitoring and Modeling:** *EunSik Choi, Sarah Burghardt, Jonathan Hubler, Virginia Smith, and Sarah McInnes* **Exploring UAV Survey for Geotechnical Applications: A Comparative Study of Photo and Video Capture Techniques:** *Mohammad Amin, Mohammadreza Jebeli, Siamak Yoosefi, William Baker, and Christopher Meehan* **Characterizing the At-Rest Lateral Stress Coefficient in South Carolina Coastal Plain Quaternary Sands:** *Ronald Andrus, Ali Sedaghat, Andrew Russell, Akhter Hossain, and Bikram Paudel* **Recommendations for Selecting an Optimal Rock Joint Direct Shear Test Procedure:** *Steve Berry and Mary MacLaughlin*	**Development of Erosion Functions for Florida Beach Sand Treated with Bioslurry:** *Saeed Booshi, Pete Schnillen, Amar Kosovak, Raphael Crowley, Terri Ellis, and Brian Wingender* **Development of Deep Learning Based Model for Estimating Erosion Rates in Cohesive Soils:** *Hiramani Chimauriya, Nripojyoti Biswas, Amit Gajurel, and Anand Puppala* **Does the Atmosphere in Soil Pore Space During Wildfire Affect the Erosion Potential of Scorched Earth?** *Calvin Tohm and Bret Lingwall* **Pore Pressure Assessment in Sandy Nearshore Sediments during a large-scale Wave Flume Experiment:** *Lea Eggensberger, Nina Stark, and Jack Puleo* **Preliminary Assessment of the Interplay among the Capillary Rise, Atmospheric Evaporation, and Aeolian Sand Erosion:** *Paula Sarmiento, Luis Zambrano-Cruzatty, and Georgia Doore* **Modeling Effects of Biopolymer Treatment on the Overtopping Performance of an Earthen Embankment:** *Brock Huner, Ethan Vroman, Lucas Walshire, Anna Lancaster, and Jack Montgomery*	Where narrative, evidence, anecdote, logic, teamwork, oratory, and persuasion meet: "Yes" or "No" to our debate motion—two teams of two debaters face off— arguing for and against the motion with opening statements, discussion, rebuttal, experience, humor, and closing arguments, as we explore our professional practice in geotechnical site characterization using our own and others' data. Intrigued? Join us for an Oxford-style debate presented in three short rounds and help decide the winning team in our "before" and "after" audience polling. **Panelists:** *Allen Cadden, P.E., D.GE, Principal, Schnabel Engineering* *Silas C. Nichols, P.E. , Principal Geotechnical Engineer, USDOT, FHWA, Office of Bridges and Structures* *Mary Nodine, P.E., BC.GE, Principal Engineer, Morris-Shea Bridge Company* *Matthew Glisson, P.E., Director of Technical Activities, Deep Foundations Institute*	Providing a safe, adequate working platform is essential for stable construction equipment operation. Working platforms are temporary surfaces, typically compacted granular soils placed over weak ground, that support heavy equipment such as cranes and piling rigs. Poor platforms are a major cause of equipment instability, leading to injuries and financial impacts. This session emphasizes proper site investigation, accurate equipment loading, and sound design methods. It also covers best practices for platform design, maintenance, inspection, and evolving legal requirements. **Panelists** 1. *The EFFC-DFI Guide to Working Platforms – Peter Faust [Malcolm]* 2. *Working Platform Design Aspects and Impacts – Scott Jacobs [Keller]* 3. *Nationwide experience – Keith Mattecheck [Kiewit]* 4. *Local legislative and practice – Brian Garrett [Gerhart Cole]* 5. *OSHA Update – Rick Marshall [ADSC]* 6. *Discussion – all*	This session will feature early career industry geoprofessionals presenting on recent case histories. The presenters will be scored by a panel of judges during the session and the winning younger member will present to the entire conference in a morning plenary.
12:00 – 1:00 p.m.	**Lunch in Exhibit Hall**					
1:00 – 2:30 p.m.	**Technical Sessions**					
Foundation Design and Performance **Moderator:** Aaron Gallant	**Geosynthetics** **Moderator:** Hossein Bahmyari	**Landslide Analyses and Case Studies** **Moderator:** Ben Leshchinsky	**Innovations in Site Characterization** **Moderator:** Mo Sadeghi	**Seismic Hazards and Site Response** **Moderator:** Anthony Tessari	**Centrifuge Modeling and Civil Engineering Practice** **Moderator:** Srikanth Madabhushi	
Evaluating the Effect of General Scour on the Axial Capacity of Driven Piles Considering Pile Installation: *Murad Abu-Farsakh and Isam Khasib* **Evaluation of End Bearing of Driven Steel H-Piles in Intermediate Geomaterials Based on Spherical Cavity Expansion Methods:** *Kam Ng, Nafis Masud, and Shaun Wulff* **A History of Foundation Engineering in Windsor, Ontario and Developments in Wick Drain Design:** *Mark Henderson* **Strain Gauge Instrumentation of Spliced Concrete Piles in Soft Alluvial Soils:** *Patrick Thurmond* **Large Diameter ACIP/CFA Pile Performance in Laramie WY:** *W. NeSmith and Steven Duncan* **Improvement on Existing P-Y Curves for large-Diameter Piles in Cohesionless Soils:** *Shin-Tower Wang, Jose Arrellaga, Luis Vasquez, and Daqing Xu*	**Investigating the Impact of Cold Weather Agining and Temperature on Rock Simulant Puncture Resistance of Geomembranes:** *Calvin Tohm, Isaac Neved, and Bret Lingwall* **Comparative Study of Wicking and Conventional Geotextiles: Interface Properties and Drainage Performance for Slope Reinforcement:** *Jaime Suarez, Puneet Bhaskar, Darlene Goehl, and Anand Puppala* **Performance of Strip Foundations Reinforced with 3D-Printed Geocells:** *Sarper Demirdogen and Ayhan Gurbuz* **Multi-Axial In-Plane Creep Testing of Geogrids:** *Emre Duman, Michael Bauby, and David Frost* **Geogrid Stabilization of Railway Ballast under Varying Moisture Conditions Evaluated Using Bender Element Shear Wave Technology:** *Youngdae Kim, Hyunsoo Lee, Han Wang, Erol Tutumluer, Hugh Thompson, and Theodore Sussman* **Performance Evaluation of Geosynthetic-Reinforced Subgrade Soils Using Dynamic Cone Penetrometer Testing:** *Jongwan Eun, Ali Behdad, Yuan Feng, Laith Ibdah*	**A Physics-Informed Neural Network for Hydraulic Diffusivity Inversion in Rainfall-Induced Landslide Analysis:** *Shian Cao and Weibing Gong* **Evaluation of Retrogressive Slope Failure in Sensitive Clays Under Undrained Conditions with Smoothed Particle Hydrodynamics:** *Enrique del Castillo and Jun Geng* **Landslide Displacement Prediction Using Interferometric Synthetic Aperture Radar and Machine Learning Techniques:** *Lei Wang and Yuxin Yuan* **The Influence of Storm Time Series Characteristics on Landslide Triggering within a Watershed in Utuado, Puerto Rico:** *Mirna Kassem and Dimitrios Zekkos* **A Framework for Landslide Susceptibility Mapping for Minnesota Using Multi-Layer Perceptron Neural Network:** *Ambikesh Dwivedi and Surya Sarat Chandra* **The Utah Thistle Landside of 1983: A Historical Perspective:** *Blaine Leonard*	**Supporting Coastal Shorelines through Site Characterization of a Confined Dredged Material Disposal Facility in Southern New Jersey:** *Daniel Gallegos, Justin Shawler, Brian Harris, Kaithyn McPherran, David White, Jonathan Hubler, and Monica Chasten* **AI-Powered Rapid Evaluation Scheme for Multiscale Properties of Porous Civil Engineering Materials: Integrating RGB Imaging, Voronoi Random Finite Element(VrFEM), and Numerical Virtual Experiments:** *Yusheng Jiang, Xiong Yu, Sreelakshimi Sreeharan, Kiranmayee Madhusudhan, and Hui Wang* **Updating CPT-Based Liquefaction Parameters Through Bayesian Inference: Insights From The 1979 Imperial Valley Earthquake:** *Kannebaigari Mahammad Rafi and Pinom Ering* **Site Characterization for Selected Liquefaction Case History Sites from February 6, 2023, Türkiye-Kahramanmaras Earthquakes:** *Arda Sahin, Robb Moss, Kemal Cetin, Scott Brandenberg, and Jonathan Stewart* **Shear Behavior of Mangrove Soils in Louisiana and Texas: A Dual Approach Using Large-scale Direct Shear Testing and In-Situ Cone Penetration Testing:** *Mohamed Hassan, Hamed Nasiri, Youssef Mousa, Andre Rovai, Ivan Lopez, Aaron Meyers, Jorge Gomez, Xiaochen Zhao, Daniel Jensen, Annemarie Peacock, Anna Armitage, Jaime Brinkley, Briana Sebastian, Jacob Berkowitz, Marc Simard, Robert Twilley, and Navid Jafari* **Leveraging Advances in Passive Seismic Methods for Improved Site Screening and Ground Risk Management from Project Planning to Construction:** *Thaleia Travasarou, David Valintine, and Gouri Mohan*	**Towards Improved Regional Liquefaction Hazard Assessments using Geospatial Surrogate Models:** *Morgan Sanger, Mertcan Geyin, and Brett Maurer* **Design and Integration of a Pneumatic Rainfall System with Seismic Shaking in the Geotechnical Centrifuge:** *Amir Alam Sayari, Ian McLeod, and Shideh Dashti* **Site and Basin Effects in the Central and Eastern U.S.: City- and State-Scale Evaluations in Memphis, New York City, and Massachusetts:** *James Kaklamanos, Laurie Baise, Christina Sanon, Elise Meyer, Irvin Guzman, and George Sachs-Walor* **Site response for nearly vertical incident P and SV Waves:** *Santosh Katuwal and Renmin Pretell* **Automated Workflow for 3D Site Response Analysis with Complex Stratigraphy Using LS-DYNA:** *Yizhen Yan, Ian Bruce, Kirk Ellison, Pawan Kumar, and Rica Chen* **Three-Dimensional Ground Response Analyses at the I-15 Downhole Array Site near Salt Lake City:** *Nishkarsha Dawadi, Tyler Jackson, and Brady Cox*	Basic principles of the centrifuge modeling technique and centrifuge facilities around the United States will be introduced. The panel will share past examples of centrifuge modeling tests informing real world designs; demonstrating how the results from various instrumentation approaches can reveal failure mechanisms at the ultimate limit state as well as validate predictions of the serviceability limit state. Applications ranging from foundation settlements to earthquake loading, coastal waves, and liquefaction, will be illustrated to demonstrate the methods applicability from coast to-coast, as well as sharing perspectives from practitioners on the usage of centrifuge modeling in industry. The session will end with a panel discussion on future directions of both centrifuge modeling and the evolving needs of engineering practice. **Presenters:** *Jenny Ramirez, Ph.D. – Geosyntec* *Bret Lingwall, Ph.D., Bureau of Reclamation* *Jason DeJong, Professor, University of California Davis* *Anthony Tessari, Assoc. Prof., Rensselaer Polytechnic Institute* *Srikanth S. C. Madabhushi, Assoc. Prof. University of Colorado Boulder*	
2:30 – 3:00 p.m.	**Afternoon Networking Break**					
5:30 – 7:00 p.m.	**Awards Presentation & Karl Terzaghi Award Lecture**					
7:30 – 9:00 p.m.	**Terzaghi Lecture Dinner (Invitation Only)**					

Technical Program *(continued)*

Thursday, March 12, 2026

Track A | Room	Track B | Room	Track C | Room	Track D | Room	Track E | Room	Track F | Room	Track G | Room/3
8:00 – 10:00 a.m.	**Plenary Session,** *Geo-PITs*					
10:00 – 10:30 a.m.	**Morning Networking Break**					
10:00 – 11:30 a.m.	**Panel Session: Changing the Paradigm for Large Landslides: Forecasting Time-to-Failure**					
10:30 a.m – 12:00 p.m.	**Technical Sessions**					
Soil Behavior and Modeling **Moderator:** Sandeep Chitta	**Geoenvironmental Engineering** **Moderator:** Jongwan Eun	**Earth Retaining Structures** **Moderator:** Lei Wang	**Transportation Geotechnics** **Moderator:** Sadik Khan	**Panel Session: Solutions, Not Problems: Research-to-Practice Application** **Moderator:** Sean Ahdi		
An Investigation on the Interactions between Two Roots Elements in Sand During Pullout: *Sujia Liu, Alejandro Martinez, and Jason DeJong* **Evaluating Chemically Stabilized Soils Using Geochemical Pore Solution Modeling:** *Ashish Bastola, Pavan Akula, and John Rushing* **Micro-to-Macro Exploration of Shear Behavior at Sand-Steel Interfaces:** *Lalit Kandpal, Prashanth Vangla, and Satoshi Matsumura* **Large-Scale Wave Flume Experiments for Modeling Coastal Seabed under Solitary Waves:** *Majid Ghayoomi, Ahmad Klait, Seyedalireza Mirghafouri, Ali Farhadzadeh, and Tian-Jian Hsu* **Influence of Xanthan Gum on Compaction and Shear Strength Behavior of Kaolinite and Loess:** *Rupsa Roy, Edward Asamoah, Beena Ajmera, Cassandra Rutherford, Yuderka Trinidad Gonzalez, Lucas Walkhire, Ethan Vroman, Mohammed Mohammed, and Benjamin Breland* **Printability and Structural Integrity of Fiber-Reinforced Earth-Based Materials for 3D Printing:** *Nitin Tiwari znd Suvechha Dhakal*	**Enhanced Shear Strength of Wildfire Impacted Soils Using Biochar and Chitosan:** *Krishna Reddy, Banuchandra Nagaraja, Jagadeesh Kumar Janga, and Arvin Farid* **Efficacy of Construction and Demolition Waste on the Strength Enhancement of Expansive Soil: An Experimental Exploration:** *Shailesh Kumar Yadav, Amaan Hussain, and Ramakrishna Bag* **Sediment ISS in an Aqueous Environment: An Innovative Adaptation of a Proven Remedial Technique:** *Darin Payne, Ken Andromalos, Nathan Coughenour, Angelo Toscano, and Michelina Ponziani* **Geotechnical Assessment of Dredged Sediments as an Infiltration Berm Medium:** *Ahmet Aydilek, Allen Davis, Adam Smith, and Eren Kaya* **Water Repellent Soils in Geoenvironmental Applications:** *Michael Uduebor, Vincent Ogunro, and John Daniels*	**Post-Failure Stability Analyses of I-295, Wall 22:** *Alexander Reeb and George Filz* **Anchored Bridge Abutments and Soil Nail Walls in Upper Coastal Plain Soils: College Street Bridge, Macon, Georgia:** *Graham Elliott, Justin Wood, and Ethan Brown* **Chloride Corrosion and Earth Retaining Systems: Novel Measurement and Calibration Techniques to Track Chloride Movements in Soils:** *Jenna Stein, Srikanth Madabhushi, and Ronald Park* **Large-Scale Testing to Evaluate Lightweight Cellular Concrete (LCC) Backfill behind MSE and Cantilever Walls:** *Kyle Rollins, Ryan Maw, Ryan Wilkinson, Christian Lundskog, Meghann Morgan, and Matthew Bueckers* **Incidence of Partial Failures in a Retention System Composed of Anchored Piles Using a Finite Element Model:** *Jackson Gil-Hernandez, Laura Rojas-Oviedo, Astrudillo-Ramirez, and Luis Arboleda-Monsalve* **Case History of the Design of Temporary Earth Shoring in Clay Soil for the SLCIA TRP Central Tunnel:** *Brian Garrett and Michael Haas*	**Characterisation of Foamed Asphalt Stabilised Base Course Layers for the Thickness Design of Aircraft Pavements:** *Greg White* **Evaluating Pavement Resilience to Freeze-Thaw Cycles Using Geocell and Geocomposite:** *Berjees Anisa Ikra, Yongxuan Gao, Jiming Liu, Taylor Dagenais, Arghya Chatterjee, Sanat Pokharel, Min Sun, and Cheng Lin* **Performance of Wicking Geotextile for Flexible Pavements Built Over Frost Susceptible Soils:** *Md Fyaz Sadiq, Danial Mirzaiyan, Mohammad Wasif Naqvi, Bora Cetin, and Raul Velasquez* **Verification of a Finite Element Model Utilized to Simulate the Vibratory Response of a Compaction Roller:** *William Baker and Christopher Meehan* **Effect of Axle Configuration on Railway-Induced Vibrations:** *Tapan Suyal and B.K. Maheshwari* **Numerical Analysis of Climate-Induced Changes in Pavement Subgrade Performance:** *Amanda Sampaio and Yuderka Trinidad Gonzalez*	Standards in geotechnical earthquake engineering are rapidly evolving with the increased availability of computational resources and advanced modeling techniques. While these methods can be challenging to apply and interpret, they offer significant benefits such as cost savings, risk reduction, and improved knowledge transfer from research to practice. A panel of experts from industry, academia, and government will discuss practical applications of research-grade solutions, including seismic hazard assessment, ground motion characterization, dynamic material testing, and advanced modeling for soil-structure interaction and 2D/3D seismic site response. **Panelists:** *Alfonso Cerna-Díaz, AECOM* *Shideh Dashti, University of Colorado, Boulder* *Kirk Ellison, ARUP* *Christie Hale, Geosyntec* *Youssef Hashash, University of Illinois Urbana-Champaign* *Sissy Nikolaou, NIST* *Özgün Numanoğlu, Geosyntec*		
12:00 – 1:00 p.m.	**Lunch in Exhibit Hall**					
1:00 – 2:30 p.m.	**Ralph B. Peck Award Lecture**					
1:30 - 6:00 p.m.	**Exhibitor Moveout**					
2:30 – 3:00 p.m.	**Closing Ceremony**					

Tuesday, March 10, 2026

2:30–4:30 p.m.

Machine Learning-Based Estimation of SPT-N Values from CPT Measurements: Vahidreza Mahmoudabadi, Milad Fatehnia

Performance-Based Testing of Trenchless Pipeline Rehabilitation: Sina Senji, Shideh Dashti, Brad Wham

Application of coal-derived char in cement-stabilized sodium bentonite-sand soil for subgrade applications: Kam Weng Ng, Chooi Kim Lau, Hua Yu, Kamal Gautam

Engineering Performances of Silty Sand Stabilized by Reactive Magnesia Activated Granulated Blast-furnace Slag: Ningjun Jiang, Bowen Yu, Qianwei Ma

Influence of Cement Dosage and Plasticity on the Stiffness of Stabilized Clays: Classification & Mechanical Response: Balaji Bandaru, Robinson R.G., Ramesh Kandasami

Potential of Selected Grass Species for Phytoremediation of Diesel Hydrocarbon Contaminated Soils: Abdulbasit Sa'eed, Kolawole Osinubi, Thomas Ijimdiya, Ochepo Joshua, Adrian Eberemu

Data-Driven Machine Learning Surrogates to CTHBM Model for MSW Landfill Settlement Prediction: Jagadeesh Kumar, Krishna Reddy

Durability of Zein-treated sand under wetting-drying cycles: Yong-Hoon Byun, Yoon-Hoon Heo, Adolf Minta, Quadri Babatunde

Photogrammetry Quantifies Rock Slope Movements Induced by Temperature Change: Fulvio Tonon

Evaluating the Influence of Surface Characteristics on Shear Strength of Sand-Fines Mixture Soil-Foundation Interface: Mu'ath Abu Qamar, Azhar Hamad, Mohammad Tamimi, Ammar Alshannaq, Aya Migdadi

Integrating Numerical Modeling and Stochastic Weather Generation to Predict Environmentally-driven Seasonal Ground Movements in Expansive Clays: Mahdi Seyyedan, Jiali Ma, Andrew Whittle

Utilizing Lime Sludge as a Co-additive to Cement Stabilized Expansive Soils under Cyclic Environmental Stressors: Sopharith Chou, Jianxin Huang, Anand Puppala, Bora Cetin, Raul Velasquez

Compressible Soil Considerations for Design and Construction of a Water Treatment Facility: Stoney Mather, Braden Error, Bryan Franke

Measuring the Shear Strength of Spartina Alterniflora Vegetated Soil in Delaware Salt Marshes Using Field Vane Shear Tests: Siamak Yoosefi, Christopher Meehan, Mohammad Amin Nozari, Claudia Zoccarato

Multiscale Analysis of Water Stability and Durability of High-Dosage Phosphogypsum Subgrade Fillers in Water-Rich Environments: Ningjun Jiang, Huaming Lu, Qianwei Ma, Zihao Hu

Assessing the Spatial Variability in Geotechnical Sediment Properties on a Sandy Hardbottom Intertidal Beach: Stephen Adusei, Nina Stark, Noah Evans, Jaquline Mueller, Arianna Martin

Feasibility of Geothermal Energy Pile Use in Soft Alluvial Deposits in New Orleans Area: Patrick Thurmond

Validating Machine Learning Based Subsurface Predictions with Geophysical and Boring Data: Aavash Ghimire, Kaleigh Yost, Ross Cutts, Tieyuan Zhu

Effect of Clay Mineralogy on the Extent of Ettringite-induced Heaving in Lime-treated Sulfate-rich Soils: Ajeyo Mukherjee, Vipul Kotha, Sayantan Chakraborty, Suresh S., Nripojyoto Biswas, Suman Roy

Geotechnical Engineering and Near-Surface Geophysics – Correlations of Parameters Using Machine Learning: David Barrick, Curtis Link

Imaging Suspended Sediment Concentration in Ship Channels with Marine Electrical Resistivity: David Barrick, Curtis Link

Impact of Arch Geometry on Subsurface Settlement Prediction Due to Tunnelling in Sand Considering Soil Arching: Venkata Medishetty, Quamar Tabish, Kousik Deb

Correlation Between Monitoring While Drilling (MWD) Compound Parameters and Undrained Sheer Strength of Fine-Grained Soils in Nebraska: Michael Erzuah, Yasaman Abdolvand, Mohammadhossein Sadeghiamirshahidi, Nikolas Glennie, Alex Silvey, Raul Velasquez

Application of Sole Shallow Geothermal Systems for Deicing and Enhancing the Resilience of Existing Bridge Decks: A Field Testing Approach: Amin Mohammadzadeh, Mir Ali Hosseini, Omid Ghasemi-Fare, Zhihui Sun

Innovative Approaches to Addressing Surficial Slope Failures: The Role of Engineered Earth Armoring Solutions in Enhancing Infrastructure Resiliency: Jared Hill, Drew Loizeaux

Geotechnical Challenges and Innovative Solutions for the Hyundai Motor Group Metaplant America (HMGMA) in Georgia: Guoming Lin

Probabilistic Analysis of Compacted Embankments Using Kriging Surrogates: Rakshanda Showkat, G L Babu, Deepankar Choudhury

Assessing Landslide Risk and Susceptibility in Michigan's Upper Peninsula: A Case Study of the 2003 Rockland Incident: Yasaman Abdolvand, Mohammadhossein Sadeghiamirshahidi

Enhancing 3D Soil Characterization through Machine Learning from CPT data: Laith Sadik, Sara Khoshnevisan

Evaluating the effect of MICP treatment on problematic calcareous soil of Hormoz Island in Iran: Yasaman Abdolvand, Mohammadhossein Sadeghiamirshahidi, Mohammad Vahid

Probabilistic Scheme for Seismic Fragility Analysis of Nuclear Power Plants under Earthquake Hazards: Lei Wang, Skarleth Gutierrez

Behavior of Single Pile in Unsaturated Clay: Vinay Thakur, Ashutosh Kumar

Machine Learning-Based Prediction of Soil Electrical Resistivity Using Field-Instrumented Hydrologic Data: Md Jobair Bin Alam, Robi Mozumder, Naima Rahman, Chukwuzubelu Ufodike

Coal Fly Ash-Based Passive Treatment of Acid Mine Drainage: Md Jobair Bin Alam

Sorption Performance of Sandy Clay Soil Using Duraflex as a Cement Admixture Against Iron Contamination: Jonny Joan Mercedes Balcazar

Improving Strength and Cohesion in 3D-Printed Soil Composites Using Xanthan Gum: Sampson J. Arku, Cassandra J. Rutherford

Assessing the Impact of Wildfire Intensity on Soil Water Retention Curve: The Role of Soil Organic Matter and Mulching Strategies: Avishek Ghosh, Md. Raihanul Alam, Arita Banerjee

Dynamic LCA Framework for Environmental Impact Assessment of a Tunnel in Northwestern China: Ningjun Jiang, Xinlei Hu

Disconnected Combined Pile-Raft Foundations: A Comprehensive Review for Optimal Performance: Arpita Ray, Deepankar Choudhury

Influence of Boundary Conditions on Centrifuge Tunnel Tests: Felipe Vitali, Osvaldo Vitali, Antonio Bobet, Tarcisio Celestino

Reliability Analysis for Differential Settlement of Shallow Bridge Foundations in Cohesionless Soils: Aseel Ahmed, Andrzej Nowak, Brian Havens

A Hybrid Physics-Guided and Machine-Learning Framework for Modeling Ground Subsidence in the Greater Houston Area: Yong Je Kim, Arip Nur, Jinwoo An

Monitoring Soil Resistivity in Highway Slopes to Evaluate the Performance of the Slope Stabilized with Vetiver Grass: Fariha Rahman, Sadik Khan, Avipriyo Chakraborty

IoT Enabled Data-Driven ML For Predictive Modeling in Unsaturated Soil Mechanics: A Q M Zohuruzzaman, Mahdi Zulfikar, Sadik Khan

Enhancing the Chemical Compatibility of Calcium Bentonite-Soil Vertical Barrier through Biostimulated MICP: Ningjun Jian, Yu Zhang

Biopolymer-Based Injection for into cracked soil mass: Evaluation of Workability, Shrinkage, and Bonding Performance: Leela Krishna Mohan, Zachary Nick, Samantha Lucker, Lucas Walshire, Marcelo Sanchez

Experimental Investigation of the Depth of Influence of Simultaneously Recorded Compactometer and Machine Drive Power Measurements: William Baker, Christopher Meehan

Nonlinear Shear Strength Characteristics of a Silty Soil Under Varying Moisture Conditions: Kalani Rajamanthri, Sravan Thandrangi, Claudia Zapata

Enhancing Granular Surface Material Performance Using California Bearing Ratio and Repeated Load Triaxial Tests: Mahsa Belalzadeh, Jeramy Ashlock, Umar Farooq, Bora Cetin

Effects of MICP Stabilization Using Aerobic Denitrification and Non-sterile Ureolysis Pathways on Sand Column Properties: Yasaman Abdolvand, Mohammadhossein Sadeghiamirshahidi

Impact of Rainfall Variability on Landslide Stability: A Study on Chattogram Hill Tracts Using GeoStudio Software: Mahmudur Rahman, Md. Azijul Islam, Md. Anisur Dip,

Performance Assessment of Self-Induced and Externally Induced Pozzolanic Reactions in Lime-Treated Expansive Soil: S Chandru, S Jayalekshmi

Evaluation of the Bearing Capacity of Ring Foundations Placed on Weak Clays Reinforced with Circular and Annular Stone Columns: Sudipto Mukherjee

Novel Biogeochemical Cover for Landfill Gas Mitigation: Insights into Microbial Diversity: Gaurav Verma, Krishna Reddy

Consolidation Behavior of Stone Column-Improved Soft Soil Under Different Applied Stress Conditions: Tekkali Satya Durga, Kousik Deb, Aniruddha Sengupta

Field Performance of Compacted Amended Clay Liners at an Industrially Polluted Site: Jialei Wan, Jiaming Wen, Yingzhen Li, Chi Che, Yanjun Du

Swelling Behavior of a Hydrophilic Seal and Flow Rates of the Interlocking System in Composite Geomembrane Cutoff Walls Exposed to Metal-Rich Solutions: Min Wang, Xian-Lei Fu, Yan-Jun Du

Durability Evaluation of Soil-Geopolymer Based Composites for 3D Printing Applications in Geotechnical Engineering: Akash Tanshette, Zoheb Faisal, Jianxin Huang, Anand Puppala

Comparison of Sandy Beach Moisture Content Measurements from In Situ Sampling and Moisture Probes: Julie Paprocki, Muhammad Touqeer

Surface Effects on Variability of Horizontal-to-Vertical-Spectral Ratio (HVSR) Measurements in Urban Areas: Braydon Smith, Brent Rosenblad

Comparative Study of Under-Reamed and Conventional Piles Subjected to Horizontal Machine-induced Vibration in Homogeneous Clay: Sayantan Banerjee, Debarghya Chakraborty

Enhancing the Properties of Landfill-Mined Legacy Soil-Like Fine Fractions Through Local Soil Blending: A Novel Approach: Pradyumna Konar, Satyendra Mittal, Absar Kazmi

Sustainability Benefits Assessment of Cement and Recycled Concrete Aggregate Fines in Subgrade Stabilization Application: Muddassir Sanei, Nripojyoti Biswas, Jianxin Huang, Anand Puppala

A Cone-Penetration-Test Inversion Model Trained by Machine Learning: Gunjan Rateria, Brett Maurer

Laboratory Study on Stiffness and Strength of Cement Stabilized Clay Subjected to Four-Season Durability Cycles: Kyle Parr, Jianxin Huang, Anand Puppala, Jeb Tingle

Use of Expanded Polystyrene in Slab-on-Grade Concrete Foundation Systems for Thermal Insulation and Settlement Reduction: Mahia Mahbub Riana, Jianxian Huang, Shanmukha Sai Avinash, Anand Puppala

Development of Machine Learning-based Software for Geotechnical Subsurface Characterization: Case Studies from Singapore: Xiangfeng Guo, Ze Zhou Wang, Yue Hu

Evaluation of Rock Fractures in the Laboratory Using Acoustic Emission Measurements and Digital Image Correlation: Shahrzad Roshankhah, Shivesh Shandilaya

Consideration of Spatial Variability and Environmental Impacts in the Probabilistic Design of Driven Piles in Sand: Dora DeMelo, Jason DeJong

Cut-and-Cover Construction Using Floating Diaphragm Walls - A Case Study: Chu Ho

Ground Improvement for Liquefaction Mitigation at Sevier Bridge Dam: Travis Gerber, Jed McFarlane, Ryan Cole, Richard Buhler, Phil Gerhart

Static and Cyclic Behavior of Oil Contaminated Sand: Anjali Verma, Nihar Patra

Physics-Informed Neural Network Approach for Geotechnical Parameter Estimation in Soil Consolidation Analysis: Shian Cao, Weibing Gong

Numerical Simulation of Damage in Pile for Health Monitoring Using 3D-FEA: Sukanta Das, Satoshi Matsumura, Meisam Goudarzy, Robert Kayen

Cement enhanced short columns for stabilizing plastic clays under structures: Muawia Dafalla, Abdullah Shaker

Fluidization and Stabilization of Soft Soil Subgrades under Cyclic Rail Loading: Buddhima Indraratna, Bin-Hua Xu, Cholachat Rujikiatkamjorn, Joseph Arivalagan, Mandeep Singh

Performance Evaluation of Virgin and Recycled Aggregate Blends for Unpaved Roads Under Freeze-Thaw Cycles: Umar Farooq, Celso Santos, Bora Cetin, Jeramy Ashlock, Mahsa Belalzadeh

Effect of Plasticity Index on the Spatiotemporal Evolution of Desiccation-Induced Strain Localization in Compacted Clayey Soils Using DIC: Soumik Majumder

Application of Phase Change Material in Enhancing the Efficiency of Geothermal Energy Piles: Sohail Saheb, Omid Ghasemi-Fare, Mark McGinley

Sustained Collapse Testing of Soluble Soils in The Moab Valley: Taylor Hall

Enhancing Shear Strength of Sandy Soils Using Enzyme-Induced Carbonate Precipitation and Sodium Alginate Biopolymer: Shantanu Paul, Anas Bin Faruque, Azmain Mottaqi, Binta Anwar

Applications of Aerial LiDAR Datasets for 3D Probabilistic Slope Stability Analysis of Transportation Geotechnical Infrastructure Assets: Raja Jaladurgam, Surya Sarat Chandra Congress, Raul Velasquez, Jason Hedeen, Wolff Thomas, Bora Cetin

Impact of Grout Strength on the Structural Performance of Sliplined Corrugated Steel Pipes Under Parallel-Plate Loading Tests: S. Mustapha Rahmaninezhad, Jie Han, Robert Parsons

Effect of Soil Permeability of Liquefiable Ground on Pile Group Behavior: 3D Numerical Analysis: Sareh Kamran, Morteza Rajabigol, Fariborz Tehrani

Quality of Recycled Materials Resulting from Full Depth Reclamation of an Airfield Asphalt Pavement: Fariborz Tehrani, Victor Garcia, Mark Different, Alvaro Rodriguez, Waldemar Perez

Exploring the Potential of Nuclear Magnetic Resonance (NMR) for Geotechnical Property Characterization: Ryan Rasanen

Groundwater Control and Excavation Support For the Salt Lake City Water Reclamation Facility Influent Pump Station: Scott Simmons, Scott Chambers, Eric Lindquist, Matt Kennedy

Testing Considerations for Quantifying PFAS Adsorption by a Soil-Bentonite Matrix Amended with Granular Activated Carbon: Leeann Michael, Kevin Gilmore, Michael Malusis, Austin Wadle

Acoustic Emission Monitoring of Cohesive and Cohesionless Soils During Consolidation and Shear Phases: Saad Allah Solh, Sherif Abdelaziz

Pore Pressure Accumulation and Pullout Capacity Reduction of Suction Anchor Foundations for Floating Offshore Wind Turbines under Cyclic Tensile Loading: Amin Rafiei, Fahim Hassan

Antifreeze Cellulose Nanofiber Gels for the Sustainable Improvement of Soils against Freeze-Thaw Deformations: Mohammadhasan Sasar, Sherif Abdelaziz

Water adsorption of Non-Saline and Salt-Affected clay: Omid Ghasemi-Fare, Shaya Banar

Impact of Hydrophobic Material on Kaolin Slurry Consolidation: Kushal Sharma, Ruoyu Zheng, Xinbao Yu, Laureano Hoyos

Feasibility of Slope Failure Identification using Google Street View: Xinbao Yu

Numerical Investigation of Micropile Group Lateral Capacity for Anchoring Floating Offshore Wind Turbines in Rocky Seabeds: Neda Jamaleddin, Mohammed Gabr, Roy Borden, Richard Argall, Donald Lasser

Appraising the Potential to Responsibly Recycle Plastic Within Pavements, Pipe, and Rail Infrastructure: Jason Stewart, Abby Cisko, Chris Wacinski, Isaac Howard

Innovative InSAR-Based Method for Multi-Scale Risk Assessment of Seasonal Impacts on Water Main Breaks: Yusheng Jiang, Hui Wang, Xiong Yu

Large-Scale Carbonation of Recycled Concrete Aggregates and Implications for Sustainable Materials for Transportation-Geotechnics: Hossein Sousanabadi Farahani, Chris Hawkins, Jiong Hu, Eric Thompson Seunghee Kim

Evaluating the Durability and Recycling Potential of Xanthan Gum-Amended Soils for Sustainable Geotechnical Infrastructure: Alek Zhang

Enhancing Geotechnical Data Workflows Through Open-Source Integration: Xin Peng, Jesse Rauser

Characterization of Recycled Materials for Advancing Sustainable Utilization into Transportation Geotechnical Infrastructure: Balaji Lakkimsetti, Shanmukha Sai Avinash, Anand Puppala

A Sustainable Hybrid Stabilization Approach for Expansive Soils: Integrating Enzyme-Induced Carbonate Precipitation with Sodium Alginate Biopolymer: Shantanu Paul, Anas Bin Faruque, Azmain Mottaqi, Ojashwy Islam Audri

Aggressive Rehabilitation of Gravel Roads With and Without Enzymatic Soil Stabilizer: Godfred Akwoa, Jeramy Ashlock

Centrifuge Modeling of Laterally Loaded Piles and CPT-Based p–y Curves in a Soft Clay: Shahriar Khorami, Mohammad Khosravi, Srikanth Madabhushi, Ali Khosravi

Evaluating Time-Dependent Strength Gain in Tailings Using Cone Penetration Test Data from a Large Tailings Storage Facility: Akhter Hossain, Juan Ayes-Zamudio, Tony Freiman

Strain-Dependent Effects of Microplastic Contamination on the Strength and Modulus of Kaolin Clay: Wing Shun Kwan, Elizabeth Nunez, Brandon De Jesus

Predicting Axial Capacity of Pipe Piles using Artificial Neural Networks: Baturalp Ozturk, Antonio Kodsy, Magued Iskander

Using Machine Learning (ML) Method to Improve Correlations between SPT and TCP Data: Jie Huang, Drew Johnson, Fei Wang

Verification Infiltration Testing for Stormwater Management Design for a Light Rail Extension Project in Washington State: Roy Jensen, Blake Lytle-Goldstein, William Hickey, Madan Karkee, Garry Horvitz

Engineering Considerations and Case Histories of Landfill Intermediate Covers: Ming Zhu, Bryan Scholl

Evaluating the Efficacy of Instrumented Settlement Plates (ISP) in Monitoring Geotechnical Properties of Dredged Sediments in Marsh Creation Projects: Omar Snosi, Navid Jafari

Current Practice of Load and Resistance Factor Design of Driven Piles with Dynamic Testing and Analysis in the United States: Xiaoming Yang, Soonkie Nam, Yuting Zhang

Drive Point Tests and Measurement-While-Drilling Technologies: Literature Review: Syed Shadman Sakib, Jie Han, Robert Parsons

Improvement of Mechanical Properties and Erosion Resistance in Soils Using Biopolymers for Sustainable Geotechnical Applications: Bin Zhang, Kejun Wen

Sustainability Analysis of MICP-Treated High-Fines Soil with Geocell Reinforcement for Pavement Base Stability: Bhaskar Chittoori, Mabin Dahal, Nick Hudyma

Enhancing Durability and Permanency of Problematic Soils Using Silica-Based Co-Additives with Calcium-Based Stabilizers: Nripojyoti Biswas, Sopharith Chou, Krishneswar Ramineni, Sayantan Chakraborty, Anand Puppala

Dynamic Stability Assessment of a Jointed Rock Slope in the Seismically Active Himalayan Region: A Case Study from Uttarakhand, India: Amalesh Jana, Arindam Dey, Sreedeep S

Potential of Biopolymer-Enhanced EICP Biocementation in Rock Mass: Mary Ngoma, Oladoyin Kolawole

On the Use of CPT Correlations to Identify and Determine the Engineering Properties of Diatomaceous Soils: Ariadna Covarrubias Ornelas, Diane Moug, T. Matthew Evans

A New, Multi-Scale Perspective on Polymer Support Fluids: Catherine O'Sullivan, Si Suo, Stephan Jefferis, Martin Blunt, Yongxin Wang

Performance Evaluation of Deeply Embedded Ring Anchors in Saturated Sand: Mohamed Ali, Junho Lee, Charles Aubeny

Measurement of Contact Angle for Different Soil Minerals Using Two Methods of Sessile Drop (SD) and Water Drop Penetration Time (WDPT): Jongwan Eun, Laith Idhah, Yuan Feng, Ali Behdad

Stabilization of Construction and Demolition Waste with High Fines Content using Biopolymer: Beatrice Magombana, Shihui Liu, Lin Li, Kang Du

Load Transfer in an End-Bearing Auger-Cast Pile: Laboratory-Scale Single-Pile Tests and Numerical Simulation: Edgar C. Correa-Prada, Jorge E. Orozco-Herrera, Jackson Gil-Hernandez, Luis G. Arboleda-Monsalve, Kevin R. Mackie, Rodrigo Herrera

Modeling Solute Transport through Semipermeable Bentonite-Based Barriers under Transient Conditions: Andrea Dominijanni, Nicolo Guarena

Optimizing Metakaolin-Cement Proportions for Stabilizing Aggregate Quarry By-Products: Mechanical Property Assessment: Taeyun Kong, Issam Qamhia, Erol Tutumluer

Validation of Tri-directional 1D Site Response Analysis in LS-DYNA: Case Studies of Service Hall Array in Japan: Alejandro Huaman, Ramin Motamed, Kirk Ellison, Pawan Kumar, Salman Rahimi,

Early Detection of Slope Deformation Using Airborne LiDAR Monitoring: Md Fahimuzzaman Khan, A Q M Zohuruzzaman, Sadik Khan, Ian LaCour

Lab-Scale Evaluation of Using Type-IL and LC3 Cements in Deep Mixing Applications- Stage One- Fresh Grout Properties: Mahsa Salehi Nia, Chadi El Mohtar

Post-Wildfire Landslide Susceptibility Assessment Following January 2025 Palisades Wildfire in Southern California: Hao-Qing Yang, Farshid Vahedifard, Ben Leshchinsky

Wednesday, March 11, 2026

2:30–4:30 p.m.

A Cofferdam Design with Finite Element Modeling Verification: Wen Jun Dong, Yue Xu

A Database of Aftershock Ground Motions Recorded by the I-15 Downhole Array Following the 2020 M5.7 Magna, Utah Earthquake: Tyler Jackson, Brady Cox

A Development of the Modified Cam-Clay Model for Unsaturated Soils under Elevated Temperatures: Toan Cao

A Laboratory Protocol for Simulating Installation Damage in PVC-Coated PET Woven Geogrids Based on a Targeted Reduction Factor: Sezgin Sarak, Burak Tanyu, Erol Guler

A Machine Learning Framework for Predicting Liquefaction Ejecta Severity: Lianne Brito, Shideh Dasti, Abbie Liel, Brad Wham

A Practical Correlation for Axial Strain at Failure in Drained Triaxial Compression of Sands: Miguel Pando, Youngjin Park

A Study of Laboratory Compaction Methods for Foamed Glass Aggregate: Shafkat Bin Jafar, Haifang Wen, Michael McGuire, Tuncer Edil

An ML-Based System for the Early Detection of Earth Slope Failures Using IoT Sensing Technology: Mehnaz Antora, Fyaz Rahman, Omar Miloudi, Rahul Debnath, Jobair Alam, Ahmed Ahmed

An Experimental Investigation on Solar Panel (H-Shape Steel) Pile and Frozen Soil Interaction: Zihao Shang, Leela Krishna Mohan Radarapu, Chang Huang, Alfred Williams, Jeffrey Liu, Rohit Pant, Marcelo Sanchez

Application of Machine Learning for Identification of Hidden Rock Sites Using Earthquake Records: Michael Dupuis

Application of a Concrete Constitutive Model to Marine Clays Treated with Calcium Carbide Residue: Charity Marbaniang, Ashish Juneja

Assessing Landslide Susceptibility in a Changing Climate: Integrating Future Land Use Scenarios: Nabin Budhathoki, Yuderka Trinidad Gonzalez

Assessment of Analytical and Numerical Methods for Stability of Embankments over Deep Mixed Columns-Improved Soft Ground under Undrained Conditions: Haohua Chen, Jie Han, Robert Parsons

Assessment of Erosive Conditions at Cumberland Island National Seashore in Southeast Georgia: Christopher Harrigan, Raphael Crowley, Cigdem Akan, Christopher Bender

Assessment of Satellite-Based Remote Sensing Methods for Levee Monitoring: Debayan Ghosh, Puneet Bhaskar, Vinaykrishnan Lakshminarayanan, Anand Puppala

Assessment of Expanded Clay Aggregate for Use in Railroad Embankments: Behdad Mofarraj, Saeed Goodarzi, Jack Moore

Assessment of Restricted Zone for Blast Induced Liquefaction and Its Effect on Nearby Slopes: Karan Gupta, Tapobrata Lodh, Kaustav Chatterjee

Calibration of Pressure-Dependent Multi-Yield Surface Constitutive Soil Model for Undrained Cyclic Shear Behavior of Low Plasticity Silt: Arash Khosravifar, Benyamin Jalilnavaznovin

Case Study: Liquefaction Evaluation and Comparison with Reconnaissance Observations in the Port of Manta, after the Mw 7.8 earthquake of April 16, 2016, in Pedernales, Muisne (Ecuador): Karina Roman-Solorzano, Santiago Caballero Olmedo

Case of Slope Collapse and Reinforcement of a Cut Retaining Wall Applied to the Colluvium Layer in the Limestone Zone: Yong Eun Roh, Min Ku Yu, Ilhan Chang

Classification of Densely Packed Sand Particles Using a Digital Camera and the Segment Anything Model (SAM): Linzhu Li, Magued Iskander

Comparative Analysis of AI Models for LiDAR and Drone Based Change Detection in Slope Stability Assessment: Suprobha Darothy, A Q M Zohuruzzaman, Sadik Khan

Comparative Analysis of Seismic Hazard Parameters in India: A Dual-Scale Approach: Arindam Das, Ranjit Das, Deepankar Choudhury

Coupled Hydro-Mechanical Analysis of Rainfall Induced Shallow Slope Instabilities: Rupsa Roy, Beena Ajmera, Binod Tiwari

Critical State Behavior of Granular Materials From Direct Shear, Simple Shear, and True Triaxial Discrete Element Simulations: Esteban Patino Marin, Fernando Thibodeaux Garcia, David Zapata Medina, Luis Arboleda Monsalve

Cross-Comparison of Plastic Hardening Models in FLAC3D and PLAXIS3D for Soil Behavior Simulation Mehrdad Karimipetanlar: Peter Kottke, Mahsa Jerdi

Cut-off Wall Construction of the Bastora Dam: Seepage Solution: Bestun Shwan, Yassen Azeez, Khalil Hamadamin

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