Monday, March 21

10:30 a.m. **Technical Session 1**

Track A | Room	Track B | Room	Track C | Room	Track D | Room	Track E | Room	Track F | Room	Track G | Room
Risk Informed Decisions in Geotechnical Engineering	**The Paradigm Shift in Non Circular Searching Techniques and Evolution of Limit Equilibrium Factors of Saftey in Slope Stability Analysis**	**Geoenvironmental Engineering** **Moderator:** Angel Palomino & Idil Akin	**Deep Foundations** **Moderator:** Rozbeh Moghaddam & Sebastian Lobo- Guerrero	**Earth Retaining Structures** **Moderator:** Sarah Khoshnevisan & Joel Dellaria	**Engineering Geology and Site Characterization** **Moderator:** Ethan Cargill & Kevin Foye	**Soil Improvement** **Moderator:** Mohammad Khosravi & Jie Huang
Speakers to be announced	**Speakers to be announced**	**Enhanced Landfill Methane Oxidation using Activated Biochar,** Krishna Reddy **Predicting Hydraulic Conductivity of Geosynthetic Clay Liners Using a Neural Network Algorithm,** Jiannan Chen **Advancing the State-of-the-Art in Bentonite Barrier Research: Measuring Membrane Behavior and Diffusion at Elevated Temperatures,** Kristin Sample-Lord **Influence of Electrochemical Remediation on the Hydraulic and Mechanical Behavior of Inorganic-Contaminated Clayey Soil,** Taiwo Akinleye **Integrity of HDPE Pond Liner Systems During and After PFAS Flocculation and Stabilization,** Bret Lingwall **Comparison of Gas Emissions from Conventional and Alternative Landfill Final Covers: Modeling Estimates,** James Hanson	**Geotechnical and Structural Design of Piles Under High-Rise Buildings,** Evelio Horta **Prospective of Biomimicking Tree Root Anchorage Mechanism to Develop an Innovative Foundation System,** Shweta Shrestha **Deep Foundations Load Testing using the Top-Loaded Bi-Directional Test,** Rozbeh Moghaddam **Relaxation of Aged Driven and Vibrated Pipe Piles in Unsaturated Silty Sand,** Alan Lutenegger **Static Load Capacity of H-Pile Installed with a Pilot Hole in Weathered Rock,** Xiaoming Yang **Flexural Strength of Micropile Threaded Connections,** Sebastian Montoya-Vargas	**2D and 3D Numerical Modeling of a Cellular Deep Soil Mixing Earth Retaining Structure,** Leon Cortes-Garcia **Soil-Structure Interaction on Excavation-Induced Response of Moment-Resisting Frame Buildings,** A. Felipe Uribe-Henao **Factors Affecting the Stability and Behavior of an MSE Wall: A Numerical Approach,** Md Azijul Islam **Parametric Study of Large Side Opening in Deep Shaft at Different Ko Ground Conditions using 3D Nonlinear Finite Element Analysis,** Sobhan Bhattacharya **Controlling Sliding Failure of MSE Wall Using Recycled Plastic Pins,** Prabesh Bhandari **Performance of Station Excavations for LA Metro K (Crenshaw/LAX) Line,** Charbel Beaino	**Estimation of Optimal Spacing between CPT Soundings,** Venkata Abhishek Sakleshpur **A Case History in Foundation Design on Very Soft Soils When Sampling is Impossible,** Bret Lingwall **Estimation of In-Situ Densities for Tailings and Coal Combustion Residuals using CPT Correlations,** Chrisitan Armstrong **Analytical CPTU Solutions Applied to Boston Blue Clay,** Shehab Agaiby **Relating the Proportion of Diatom Particles to the Physical Properties of Natural Diatomaceous Soil,** Ariadna Covarrubias Ornelas **Identification of Thin Soil Layers Utilizing the qmHMM-IFM Algorithm on Cone Bearing Measurements,** Gerald Verbeek	**Surfactant-Induced Soil Strengthening (SISS) – a Potential New Method for Temporary Soil Stabilization along Beaches and Coastal Waterways,** Raphael Crowley **Thermal Properties of Bio-Cemented Sand,** Pinar Gunyol **Hybrid Ground Improvement Solution in Deep Compressible Glacial Lake Clay,** Yan Zhang **Electro-Osmosis Dewatering and Consolidation – G-I China Scan Tour Overview,** Jie Huang **Soil improvement by Re-Orienting Magnetic Particles Using a Magnetic Field,** Xinyi Jiang **Settlement and Bearing Capacity of Stone Columns Foundation,** Wjdan Sahi

Tuesday, March 22

11:30 a.m. **Technical Session 2**

Track A | Room	Track B | Room	Track C | Room	Track D | Room	Track E | Room	Track F | Room	Track G | Room
Characterization and Modeling of Mine Tailings: from Risk Assessment to Early Warning	**Geophysics for Dam and Levee Siting and monitoring**	**Online Geotechnical Engineering Education**	**Underground Engineering** **Moderator:** Lizan Gilbert & Nathaniel Wagner	**Earthquake Engineering** **Moderator:** Shideh Dashti & Brett Maurer	**Monitoring and Remote Sensing** **Moderator:** Zhangwei Ning & Joseph Coe	**Innovative Materials and Geosynthetics** **Moderator:** TBD
Speakers yet to be announced	**Speakers yet to be announced**	**Speakers yet to be announced**	**Application of 3D Geological Model in Subway Construction in Singapore,** Jian Chu **Devonshire Street Tunnel Underpinning – An Innovative Approach,** Praveen Gadagi **Soil Classification and Feature Importance of EPBM Data Using Random Forests,** Dayu Apoji **Control of Seepage Pressures Beneath Cut-and-Cover Excavation in Varved Glacial Silt,** Chu Ho **Field Monitoring on Ground-Borne Vibration Caused by TBM Excavating in Mixed-face Conditions,** Mengbo LIU **Effects of Rehabilitation Methods on the Performance of Buried Corroded Steel Pipe – Numerical Study,** S. Mustapha Rahmaninezhad	**Numerical Investigation of Vs Spatial Variability Effects on the Seismic Response Estimated Using 2D And 1D Site Response Analyses,** Renmin Pretell **Liquefaction Evaluation of a Gravel-Sand Mixture Using Centrifuge Tests,** Pitak Ruttithivaphanich **Regional-Scale Liquefaction Analyses,** Michael Greenfield **The Effect of the Relative Age of Soil Deposits on Liquefaction-Induced Lateral Spreading,** Nancy Ingabire Abayo **Centrifuge And Numerical Modeling Of An Embankment on Liquefiable Soils Treated with Dense Granular Columns,** Juan Carlos Tiznado **Using Machine Learning for the Performance-Based Seismic Assessment of Slope Systems,** Jorge Macedo	**Mile-Long Monitoring: Geotechnical Instrumentation System Design for the Cobbs Creek Regional Water Supply Reservoir Project,** Corey Schaal **Bio-inspired Vibrational Transmitters for Wireless Underground Communication,** Yi Zhong **Geotechnical Effects on Fiber Optic Distributed Acoustic Sensing Performance,** Meghan Quinn **Soil Density Evaluation Using Solid-State Lidar,** Travis Shoemaker **Advancing the Modeling of the Surface Site using Structure from Motion Computer Vision: A Case Study of the Brigham Young University 3D Campus Model,** Kevin Franke **UAV-enabled Coupled Infrared and Optical Characterization of the May 19, 2020 Edenville Dam Failure in Michigan,** Dimitrios Zekkos	**Pore-Scale Modeling of Polymer Clogging in Bentonite-Polymer Composite Geosynthetic Clay Liners,** Juan Hou **The Ground Reaction Curve and Mobilization of Soil Arching in Geosynthetic-Reinforced Column-Supported Embankments,** Michael McGuire **Soil Water Retention Curve and Hydraulic Conductivity of Fungi-Treated Sand,** Joon Soo Park **Investigating Geotechnical Properties of Nest Soils Used by Mud Dauber Wasps,** Joon Soo Park **Wind Tunnel Study and Uplift Analysis of Geosynthetic Covers,** Ming Zhu **Numerical Simulation of Full-Scale Testing Performed on Multi-Axial Geogrid Stabilized Pavements,** Prajwol Tamrakar

Tuesday, March 22 *(continued)*

2:00 p.m. **Technical Session 3**

Track A | Room	Track B | Room	Track C | Room	Track D | Room	Track E | Room	Track F | Room	Track G | Room
The ASCE 7 Site Response Analysis Requirement for Liquefiable Sites: SOP or SOA	**Recent developments on bio-mediated soil improvement methods**	**Education for Geotechnical Engineering & Online Education** **Moderator:** TBD	**Embankments, Dams & Slopes** **Moderator:** Melissa Carolyn Setz & Beena Ajmera	**Geophysical Engineering** **Moderator:** Brent Rosenblad & Dennis Hiltunen	**Computational Geotechnics** **Moderator:** Quishi Chen & Alba Yerro	**Soil Properties & Modeling** **Moderator:** Long Chen & Matt Evans
Speakers yet to be announced	Speakers yet to be announced	**Geotechnical Engineering Lab Course Virtual Instruction Methods: A Response to Covid-19,** A. Lynnae (Luettich) Stypulkowski **Biocementation for All, Anywhere: A New Experiment for Introductory Soil Mechanics Courses,** Mary Roth **Recall Questions for Soil Compression: Potential Learning Gains for Students and Instructors,** Marina Pantazidou **State of the Field: Changing Geotechnical Faculty Demographics and Recognition,** Cameron Cumberland **Assessing In-Person Versus Remote Learning Gains: An Endeavor to Extend the Engineering Education Environment,** Victoria Bennett **A Virtual Board Game: Monosoil,** Onur Pekcan	**Predicting Embankment Behavior using the Bounding Surface and Modified Cam Clay Models,** Tommy Bounds **A Large-Scale Laboratory Experimental Study on the Behavior of Gravel-Concrete Interfaces Used in Dam Safety Evaluation,** Marzieh Shahraki **Old River Control Low Sill Structure: Monitoring and Performance of 60 Years of Service,** Lucas Walshire **Modeling the Mechanics of Rock Scour in Unlined Dam Spillways,** Michael Gardner **Recycled Plastic Pins for Deep-Seated Failures – A Case Study,** Sachini Madanayake **Probabilistic Assessment of Stability of Sloped Pavement Shoulders Subjected to Super Heavy Load (SHL) Vehicles,** Ali Morovatdar	**Road Sinkhole Imaging with Ambient Noise Tomography,** Khiem Tran **Full Waveform Inversion of a Synthetic Florida Limerock Specimen,** Dennis Hiltunen **Exploring Geophysical Methods to Identify and Mitigate Karstic Features at Robinson Lake Dam,** Zachary Mickel **Comparison of Wavefield Transformation Techniques for MASW Data Processing,** Salman Rahimi **Full Waveform Tomography of Parallel Seismic Data For Evaluation of Unknown Foundations,** Joseph Coe **Integrating Surface-Based Geophysics into Landslide Investigations Along Highways,** Jack Montgomery	**A Phenomenological Breakage Model for Crushable Sand,** Mohd Saqib **DEM Analysis of the Interplay Between Soil Density and Earthquake Surface Fault Rupture in Layered Soils,** Fernando Garcia **Temperature Effects on the Diffused Double Layer Thickness Using Molecular Dynamics,** Sherif L. Abdelaziz **Deep Reinforcement Learning for Controlling the Groundwater in Slopes,** Aynaz Biniyaz **Foundation Performance of the Millennium Tower in San Francisco, California: Three-Dimensional Settlement and Tilt Analyses,** Hamid Reza Nouri **Advanced Modeling of Liquefaction-Induced Flow Failure,** Usama El Shamy	**Predicting the Stress-Strain Behavior of Alluvial Soil Using Hyperbolic-Weibull Constitutive Model,** Emerzon Torres **Reformulation of a Bounding Surface Constitutive Model to Incorporate the Effects of Bio-Cementation on Sands,** Maya El Kortbawi **On the Liquid Limit of Diatomaceous Soils: Complex Behavior of a Non-Standard Material,** Jiayao Wang **Residual Interface Shear Strength Under Low Normal Stress Conditions,** Zack Westgate **Revisiting the Liquid Limit Determinations using Casagrande Percussion Cup Method vs. Fall Cone Device,** Fawad Niazi **Mechanical-Based Properties of Mine Tailings for Static Liquefaction,** Jorge Macedo