## Monday, November 3, 2025

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| 8:00 – 8:10 AM | **Announcements** |
| 8:10 – 9:45 am | **Morning Keynotes: Seismic**<br>*Session Lead: Jon Stewart & Youssef Hashash* |
| 9:45 – 10:15 am | **Morning Break** |
| 10:15 – 12:00 PM | **Technical Session 1** |

| Track A | Track B | Track C | Track D | Track E |
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| **Instrumentation and Remote Sensing of Extreme Events:** Melissa Beauregard, Mohammad Amin Nozari | **Decision Making, Planning and Risk Management of Extreme Events 1:** Derrick Dassenbrock, Jon Hubler | **Liquefaction:** Adda Athanasopoulos-Zekkos, Laurie Baise | **Geomaterials:** Mark Wayne | **Case Histories of Retaining Structures, Excavations, and Slopes:** Jay McKelvey, Beena Ajmera |
| **Assessing Vetiver Grass Impact on Erosion Control and Infiltration of Yazoo Clay Under Simulated Extreme Rainfall Condition:** Rahul Biswas, Asef Arnob, Sadik Khan<br>**Continuous Monitoring System for Resilient Railway Infrastructure:** AQM Zohuruzzaman, Mahdi Zulfikar, Sadik Khan, Brett Cobb, Abby Cisko, Thomas Beasley, Hugh Thompson, and Ted Sussmann<br>**Effects of Frontal Overlap on Checkpoint Errors During UAV Surveying: Corner and Inside Checkpoint Locations:** Mohammad Amin Nozari, William Baker, and Christopher L. Meehan<br>**Accuracy Evaluation of UAV-Based Orthophoto Mapping in Small, Semi-Planar Areas with Varying Control Point Configurations:** Mohammad Amin Nozari, Siamak Yoosefi, Mohammadreza Jebeli, and Christopher L. Meehan<br>**Climate-Resilient Coastal Management: A High-Resolution Data-based Approach to Assessing the North Sea Coastal Dune Dynamics of Katwijk, Netherlands:** Caroline Apraku<br>**Influence of Pore Fluid Temperature on the Performance of Electrical Conductivity Sensors for Assessing Pore Fluid Salinity Levels:** William Baker | **Case Studies on Unified Responses to Extreme Events via GHADs Case Studies on Unified Responses to Extreme Events via GHADs (Geological Hazard Abatement Districts)):** Uri Eliahu<br>**Enhancing Power Grid Resilience: The Role of Trenchless Methods in Undergrounding High Voltage Lines:** Samuel Brancheau, John Diamond, and Dennis Doherty<br>**Geohazards Related to Karst, State of Qatar: Towards the Elaboration of Geohazards/ Risks Maps and Guidelines:** Jerome Perrin, Bastien Lemaire, Elalim Ahmed, Gildas Noury, Alexandre Ortiz, Thierry Vilmus, Clément Lerevenu, Oliver Higgins, Boris Matti, Richeshkumar Pillai, Salem Al-Yafei, Salem Al-Yafei, Salmah Samad, and Husam Samman<br>**Predictive Detection of Soil Cavities in Embankments Due to Culvert Defects Using Centrifuge Modeling and Image Analysis:** Joelle Westcott and April Bowman<br>**Deriving Optimal Evacuation Pathways to Reduce Evacuation Time for Underground Geotechnical Structures for Extreme Disaster:** Hyunseok Kim, Mintaek Yoo, Yuseong Lee, SeokJung Kim, and Lee Jinsun<br>**Leveraging Geo-Fencing and Online Ad Campaigns for Enhanced Risk Communication in Hazard-Prone Areas:** Noah Maddox | **Probabilistic & Deterministic Approach to Assess Liquefaction Potential at Selected Sites Using SPT Data:** Ankit Adwani<br>**1-D Nonlinear Liquefaction Analysis for Newtown, Kolkata by Using Dilatometer Marchetti Test (DMT) Calibrated UBC3D-PLM Soil Model:** Kausatv Das, Diego Marchetti, Shiladitya Mandal, Abhipriya Halder, Kaushik Bandyopadhyay<br>**Liquefaction Resistance of Silty Sands Affected by Suffusion Under Different Confining Stress Conditions:** Taichi Ishimaru, Shogo Sakuraba, Shingo Gotou, and Yoshimichi Tsukamoto<br>**Influence of Microplastic Contamination on Sand Liquefaction Initiation and Post-Liquefaction Behavior:** Cesar Leal, Luis Salgado, and Wing Shun Kwan<br>**Application of Liquefaction Susceptibility Criteria within a Logic Tree Framework:** Arda Sahin, Amalesh Jana, Kristin Ulmer, Scott Brandenberg, Matthew Evans, Steven Kramer, Johnathan Stewart,and Armin Stuedlein<br>**Evaluation of the Validity of the Booker et al. and the Green, Mitchell and Polito Pore Pressure Generation Models for Use with Large Cyclic Stress Ratios:** Carmine Polito | **Fracture Angularity Influence on Failure Behavior of Grouted Rocks for Geohazard Mitigation:** Matthew Sonibare and Oladoyin Kolawole<br>**Shake Table Studies of a Geotechnical Seismic Isolation System Using Lightweight Aggregates:** Fariborz Tehrani, Farmehr Dehkordi, and Fariborz Tehrani<br>**Performance Assessment and Numerical Simulation of Geo-Materials in Civil Infrastructure Subjected to Typical Loading Conditions:** Sultan Almuaythir, Muhammad Zaini, and Norhaliza Wahab<br>**Role of Frequency on the Cyclic Compression Response of Tire-Derived Aggregate:** Mayalia Guntle, Axel Yarahuaman, and John McCartney<br>**Considerations of Undrained Behavior of Compacted Clay Embankments Under Extreme Wetting- Drying Cycles:** Ghada Elithy | **Landslide Identification and Proposed Remediation for Castaic Power Plant South Portal Access Road:** Anthony Dombrowski, Jennifer Vanegas, Liping Yan, and Cesar Larios<br>**Case Study on Excessive Displacements of MSE Wall and Retained Backfill Due to the Cumulative Effects of Tropical Rainfall:** Jose Carlo Eric Santos and Joanne Vizcarra<br>**Settlement Control of a Massive Underground Tank Rested on Uncontrolled Rock Fill: A Case Study:** Mohamed Ezzat Al-Atroush<br>**Deep Sewer Replacement in an Urban Area: Issa Oweis and Eric Graham**<br>**Methodologies for Effective Slope Failure Reconnaissance:** Pavlo Chrysovergies, Stavros Chrysovergis, and Taki Chryovergis<br>**Trump National Golf Club in Rancho Palos Verdes – 25 Years After a 17-Acre Land Slide Destroys the 18th Hole:** Richard Sack |

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| 12:00 – 1:30 PM | **Lunch** |

## Monday, November 3, 2025 *(continued)*

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| 1:30 – 3:00 PM | **Afternoon Plenary 1: Recovery, Policy, Governance**<br>*Session Lead: Nazli Yesiller & Rossana D'Antonio* |
| 3:00 – 3:30 pm | **Afternoon Beak** |
| 3:30 – 5:00 PM | **Afternoon Plenary 2: Reconnaissance**<br>*Session Lead: Joe Wartman* |
| 3:30 – 5:00 PM | **Technical Session 2** |

| Track A | Track B | Track C | Track D | Track E |
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| **Soil Structure Interaction:** John McCartney | **Coastal Soil Properties:** Jack Cadigan, Navid Jafari | **Permafrost Engineering:** Min Liew, Ming Xiao | **Wildfires & Geohazards:** Idil Akin, Francis Rengers | **Emerging Challenges:** Nazli Yesiller |
| **Freight Loss Analysis in Railway Geotechnical Structure due to Earthquakes Based on OD Matrix Method:** Jiyun Jeon, Mintaek Yoo, Hyunmin Song, Jihyeon Kim, Jin-Tae Han, and Byeong-Soo Yoo<br>**Investigation of Seismic Stability of Vegetated Slopes through Hydromechanical Characteristics:** Pouya Alipanahi, Sahand Motameni, Farshad Yazdani, and Lianyang Zhang<br>**Seismic Performance Assessment of Buried Reinforced Concrete Arches Crossing Highways:** Mostafa Mohammadzadeh Taleshi, Elnaz Esmaeilzadeh Seylabi, Ian Buckle,and Ertugrul Taciroglu<br>**Modeling Challenges and Key Considerations in Seismic Response of Sandwiched Structure-Soil-Structure Systems:** Qiuyu Wang, Shahab Zaregarizi, Kirk Ellison, Shaoshun Ben, Marc Tatarsky, and Ian Bruce<br>**Characterization of the Cyclic Compressive Interface Interaction between Tire Derived Aggregates and Rocking Shallow Foundations:** Dylan Cram, Axel Yarahuaman-Chamorro, and John McCartney | **Determination of Void Ratio Distribution within a Coastal Soil Sample using Laboratory Test Methods and Image Analysis of X-Ray CT Scans:** Siamak Yoosefi, William Baker, and Chrisopher Meehan<br>**Advanced CFD-DEM Analysis of Coastal Sand Dunes under Wave Attack:** Ekansh Agarwal and Ning Luo<br>**Assessing Spatial Variations in Dynamic Cone Penetration Across Bays and Horns on a Cuspate Shoreline:** Mohamad El Ahmad, Sarah Burghardt, Thomas Mayer, Stephen Adusei, Johnathan Hubler, Nina Stark, and Tian-Jian Hsu<br>**Application of Direct Shear Testing to Assess the Influence of Mangrove Root Structures on the Shear Strength of Coastal Wetlands:** Mohamed Hassan, Andre Rovai, Hamed Nasiri, Ivan Lopez, Youssef Mousa, Aaron Meyers, Jorge Gomez, Daniel Jensen, Annemarie Peacock, Anna Armitage, Jaime Brinkley, Briana Sebastian, Jacob Berkowitz, Marc Simard, Robert Twilley, and Navid Jafari<br>**Investigating the Driving Mechanisms of a Wetland Tension Crack:** Brian Harris, Aleksandra Ostojic, Johnathan Hubler, Anthony Priestas, Daniel Gallegos, Justin Shawler, and Lenore Tedesco | **Coincident Measurements of Soil Strength and Permafrost Active Layer on the North Slope, Alaska:** Jack Cadigan, Amanda Barker, Brian Harris, Elaina Bailey, Navid Jafari, and Merritt Turetsky<br>**Long-Term Efficacy of High-Modulus Geocells in Rehabilitation of Railway Track Damaged by Extreme Event in Permafrost Region:** Arghya Chatterjee, Sanat Pokharel, and Marc Breault<br>**On the Potential of Small-Diameter Passive Seismic Arrays for Monitoring Active Layer Thickness and Permafrost Stiffness:** Joseph Vantassel<br>**Geotechnical Engineering Case Studies in Western Alaska on Warming Permafrost:** Jeremiah Holland and Robert Sanders<br>**A Review of Gas Blowout Crater Formation in Permafrost Regions:** Yu Zhao, Min Liew, and Ann Cook | **A Socio-Behavioral Compartmental Model for Wildfire Response:** Zihui Ma<br>**Wildland-Urban Interface of Critical Infrastructure for Civil Engineers:** Todd Hansen<br>**Enhancing Soil Stability and Wildfire Resilience Using Fungal Mycelium and Agricultural Waste Substrates:** Zaid Alajilan | **Comparative Analysis of Resilience to Extreme Weather in Vulnerable Communities:** Saeed Rokooei<br>**Case Histories of Engineered Turf Landfill Cover Under Severe Weather Conditions:** Tate Niekamp<br>**Case Studies on Objective Sustainability and Resilience of Lightweight Backfills:** Fariborz Tehrani<br>**Climate Impacts Analysis of Disaster Debris: Case for F-Gas Emissions from Landfills:** Nazli Yesiller |

## Tuesday, November 4, 2025

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| 8:00 – 8:10 AM | **Announcements** |
| 8:10 – 9:45 AM | **Morning Plenary: Climate**<br>*Session Lead: Amir AghaKouchak & Farshid Vahedifard* |
| 9:45 – 10:15 am | **Morning Break** |
| 10:15 – 12:00 PM | **Technical Session 3** |

| Track A | Track B | Track C | Track D | Track E |
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| **Big Data and Data Analytics for Extreme Events:** Weibing Gong, Joe Vantassel | **Soil Dynamics & Liquefaction:** Shideh Dashti, Chukwuebuka C. Nweke | **Case Studies:** Sean Ahdi, Renmin Pretell | **Embankments, Dams, Levees, and Slopes:** Jeremy Varner, Ghada Ellithy | **Impacts from Weather and Climate:** Farshid Vahedifard, Amr Morsy |
| **Integration of Physics-Informed Neural Networks and Transfer Learning for Rainfall-Induced Landslide Forecasting:** Shian Cao and Weibing Gong<br>**Automating Ground Motion Quality Assessment Using Residual Neural Networks:** Ali Namin, Albert Kottke, and Mohsen Zaker Esteghamati<br>**A Physics and Reliability-Informed Machine Learning Framework for Landslide Susceptibility Assessment: A Case Study in Niangniangba, Gansu, China:** Hong-Zhi Cui, Te Pei, Jla-Xu Jin, and Jian Ji<br>**Physics-Informed Machine Learning Framework for Predicting Rainfall-Induced Shallow Landslides in the Colorado Front Range:** Te Pei, Marjan Maroufi, Chaopeng Shen, and Yingli Tian<br>**Towards Robust and Adaptive Bearing Capacity Prediction for Dry Shallow Foundations Using Physics-Informed Machine Learning:** Te Pei, Ekansh Agarwal, and Ning Luo<br>**Application of Explainable Theory-Guided Machine Learning-Based Modeling to Rocking Foundations during Earthquake Loading:** Sivapalan Gajan and Christopher Kantor | **Suction and Hydraulic Conductivity Measurements of Unsaturated Toyoura Sand Using the Membrane Filter Technique:** Hailong Wang<br>**Experimental Assessment of Efficacy and Environmental Impact of Different Mitigation Measures on Liquefaction-Induced Foundation Movements:** Ramin Motamed, Md Kausar Alam, and Reza Mohammadi<br>**Using Laboratory Data to Model the Cyclic Strength Transition from Clean Sands to Fines-Dominated Soils:** Varun Nigesh Sivakumar Renugah, Arda Sahin, Scott J. Brandenberg, and Johnathan P. Stewart<br>**Evaluation of Dynamic Soil Properties from Large-Scale Shake Table Experiments:** Satish Manandhar, Reza Mohammadi, and Ramin Motamed<br>**Probabilistic CPT-Based Models for Regional Liquefaction Manifestation:** Jonathan Schmidt, Shideh Dashti, and Cristinia Torres-Machi<br>**Data-Driven Sensitivity Analyses of Liquefaction Prediction in Undrained Cyclic Direct Simple Shear Tests using PM4Sand:** Qinlin Yu and Srikanth Madabhushi | **Nonlinear Effective Stress Site Response Analyses of Liquefiable Soils at the Port of Wellington:** Wiliam Zakka and Jonathan Bray<br>**Preventive, Corrective and Mitigating Geotechnical Measures in Salsipuedes Bay, Ensenada, Baja California, Mexico – A Working Memory:** Miguel Gallardo Contreras and Gabriel Morales Carranza<br>**Ground Improvement Seismic Design and Verification for a Wind Turbine Project in Mississippi:** Thomas Kennedy, George Bowers, and Matthew Dorsey<br>**A Regionalized Geospatial Liquefaction Model for California:** Laurie Baise, Hooman Shirzadi, Babak Moaveni, and Albert Kottke<br>**Pilot Study on Earthquake and Flood Resilient Wrap-Faced Embankment in Bangladesh: Laboratory and Field Insights:** Ripon Hore, Mosharof Alim, and Shoma Hore | **Effect of Pore Water Salinity on the Residual Strength of Bentonite:** Mohammadreza Jebeli, Siamak Yoosefi, and Christopher Meehan<br>**Quantitative Assessment of Levee Breach Widening and Time-Rate Volume Loss Using Historical Overtopping Events:** Stefan Flynn, April Bowman, and Farshid Vahedifard<br>**Large Deformation and Critical State Analysis of the Fundão Tailings Dam:** Almoir Favero Neto, Gustavo Oliveira, Leandro Rasmussen, and Erick Rogénes<br>**Modeling Thermal Slope Failure through a Nonlocal THM Meshless Paradigm:** Xiaoyu Song and Hossein Pashazad<br>**Seepage Dynamics of Geosynthetic-Reinforced Dikes Under Normal and Extreme Wave Condition in Coastal Louisiana:** Abhishek Kumar and Jay Wang<br>**Probabilistic Analysis of a Landslide under an Extreme Rainfall Considering Spatial Variability of Soil Strength and Hydraulic Parameters:** Leila Baninajarian, Sina Javankhoshdel, and Rashid Bashir<br>**Stabilization of Storm-caused Landslide with Fast Pressed-in Pipe Pile Wall Installation:** Takefumi Takuma and Masafumi Yamaguchi | **A Rapid Heatwave Prediction and Delivery System Through Automatic Generation of 3D Urban Models and Automated Execution of Microclimate Simulations:** Toshihiro Kameda, Kazuya Honda, Keigo Matsuda, Yuya Kurihara, Moe Someya, Hitoshi Nakase, Toru Sugiyama, and Kazuhiko Igata<br>**Quantitative Evaluation Methods of Fly Ash and Cement Concrete Powder $CO_2$ Fixation Reactions:** Shun Kawabe, Jaruya Suzuki, Sota Murase, Hideo Komine, amd Daichi Ito<br>**Harnessing Climate Data for Climate-Resilient Pavement Deterioration Modeling:** Mohamed Elshaer, Wei Sun, Meisam Khorshidi, Eshan Dave, and Jo Sias<br>**Long-Term Weather-Driven Deterioration of Clay Embankments Under Changing Climate in Los Angeles, California:** Amr Morsy and Emma Varela<br>**Modeling the Spatial Correlation of Tropical Cyclone Wind Field Residuals:** Amirreza Mohammadi and Michelle T. Bensi<br>**An Experimental Small-Scale Study of Floating Offshore Wind Turbine Systems: Anchor Failure and Scaling Considerations:** Brayden Curry and Srikanth Madabhushi |
| 12:00 – 1:30 PM | **Lunch** | | | |

## Tuesday, November 4, 2025 *(continued)*

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| 1:30 – 3:00 PM | **Afternoon Plenary 1: Wildfires**<br>*Session Lead: Ian Floyd & Idil Akin* |
| 3:00 – 3:30 pm | **Afternoon Beak** |
| 3:30 – 5:00 PM | **Afternoon Plenary 2: Regional Modeling & Sensing**<br>*Session Lead: Dmitrios Zekkos* |
| 3:30 – 5:00 PM | **Technical Session 4** |

| Track A | Track B | Track C | Track D | Track E |
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| **Soil Structure Interaction:** Lisa Star | **Pipeline Behavior During Extreme Events:** Yuderka Trinidad | **Soil Properties:** Stefan Flynn | **Coastal Hazards and Mitigation:** Brian Harris, Nina Stark | **Frozen Soil Characteristics and Applications:** Min Liew |
| **Assessment and Design Considerations for Tunnel Linings in Fault Zones Subject to Rubble-Induced Loading Using 2D and 3D Numerical Modeling:** Mohammad Moridzadeh<br>**Overcoming Stiff Clay Anchoring Challenges through Vibratory Installation with a Deeply Embedded Ring Anchor:** Song Qin, Junho Lee, and Charles Aubeny<br>**Modeling Suction Bucket Foundations under Cyclic Loading through a Coupled Nonlocal Meshless Paradigm:** Xiaoyu Song and Hossein Pashazad<br>**Finite Element Modeling of Soil-Foundation-Structure Interaction for Seismic Performance of Nuclear Power Plants:** Lei Wang and Skarleth Gutierrez<br>**Seismic Vulnerability Assessment of RC Buildings Considering Soil-Structure Interaction Effects:** Pranoy Debnath, Hamzah M. B. Al-Hashemi, and Deepankar Choudhury<br>**Experimental Behavior of Structurally Different Pile Foundations:** William Shaffer, Anne Lemnitzer, and Rabie Farrag | **Estimation of Permanent Ground Displacement Demand on Pipelines Buried in Organic Soils:** Dharma Wijewickreme, Prajakta Jadhav, and Thushara Jayasinghe<br>**Mechanical Performance of Rehabilitated Pipelines using Trenchless Technologies under External Loading:** Sina G. Senji, Brad Wham, and Shideh Dashti<br>**Response of Buried Pipelines Subjected to Abrupt Block Ground Movements:** Auchib Reza and Ashutosh Dhar<br>**Analytical Method for Assessing Buried Pipeline Performance Under Large Ground Movements:** Hailey-Rae Rose and Brad Wham | **Effect of Pore Fluid Salinity on Atterberg Limits of Three Types of Clay: Bentonite, Kaolinite, and a Natural Lean Clay:** Siamak Yoosefi, Mohammadreza Jebeli, William Baker, and Christopher Meehan<br>**Evaluating the Effect of Pore Fluid Salinity on the Volume Change Behavior of Bentonite Clay:** Siamak Yoosefi Sigari, Mohammadreza Jebeli, and Christopher Meehan<br>**Mechanical and Hydraulic Characteristics of Residual Soils in Indian Himalayas under Repeated Hydraulic Cycles:** Eedy Sana, Ashutosh Kumar, and Rousseau Prasanna | **Design and Full-Scale Testing of Sheet Pile Storm Surge Wall:** Guoming Lin<br>**Spatiotemporal Variability of Beach Sediment Properties Pre- And Post-Hurricanes Debby and Helene at South Ponte Vedra Beach, Florida:** Stephen Adusei, Nina Stark, and Noah Evans<br>**Integrated Geotechnical and Geophysical Assessments of Erosion Dynamics in a Chenier Plain Shell Beach Following Hurricanes and Seasonal Weather Events:** Cyrus Bahman, Hamed Nasiri, Omar Alawneh, Benjamin Fernandez, and Navid Jafari<br>**Need, Opportunities, and Challenges of Pre-, During-, and Post-Storm Reconnaissance in Coastal Environments:** Nina Stark, Michael Gardner, Michael Grilliot, Britt Raubenheimer, and David Frost<br>**Geotechnical Response of Cheniers to Breakwaters and Hurricanes: A case study in Rockefeller Wildlife Refuge:** Hamed Nasiri, Omar Alawneh, Navid Jafari, and Mohamed Hassan<br>**Fragility Analyses of Coastal Slab-on-grade Foundations Exposed to Storm Surge Induced Scour:** Hiramani Chimauriya, Anand Puppala, and Nripojyoti Biswas | **Comparative Analysis of Dynamic Modulus and Resilient Modulus Testing for Evaluating Frozen Soil Strength in Military Applications:** Andrew Bernier and Wade Lein<br>**Estimation of Osmotic Suction in Freezing Soils:** Micheal Uduebor, John Daniels, Mohammad Wasif Naqvi, and Bora Cetin<br>**Durability Assessment of Biopolymer-Stabilized Slag Tailings Under Freeze-Thaw Cycles:** Sahand Motameni, Pouya Alipanahi, Farshad Yazdani, and Lianyang Zhang |

## Wednesday, November 5, 2025

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| 8:00 – 8:10 AM | **Announcements** |
| 8:10 – 9:45 AM | **Morning Plenary: Mega Landslides**<br>*Session Lead: Tim Stark* |
| 9:45 – 10:15 am | **Morning Break** |
| 10:15 – 12:00 PM | **Technical Session 5** |

| Track A | Track B | Track C | Track D | Track E |
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| **Decision Making, Planning and Risk Management of Extreme Events 2:** Tucge Baser, Sadik Khan | **Numerical Modeling:** Patrick Bassal, Jorge Macedo | **Ground Motions & Site Response:** Neven Matasovic, Scott Brandenberg | **Case Histories Involving Extreme Loading Associated with Earthquakes:** Anne Lemnitzer | **Rainfall, Erosion, Geohazards, and Landslides:** William Baker, Julie Paprocki |
| **A Data-Driven Approach to Predicting the Stability of Root-Reinforced Slopes under Extreme Rainfall Conditions:** Sukrityranjan Samanta, Alba Yerro, Swostika Dhakal<br>**Geospatial Mosaic-Based 3D Ground Model of SPT-Derived Subsurface Stiffness in Seoul, South Korea:** Taek-Kyu Chung, Han-Saem Kim, Chang-Guk Sun, and Choong-Ki Chung<br>**Development of Tunnel-Specific Depth-Damage Functions for Road Tunnels in Baltimore, MD:** Michael Martello<br>**Extreme Weather Events and Natural Disasters:** Patrick Grover, Madeline Hille, Vincenzo Coia, and Caroline Scheevel<br>**Reducing the Extreme in Extreme Events by Knowing What is Possible:** Mark Vessely, Scott Anderson, Robert Group, Zac Sala, Madeline Hille, and Alex Brown<br>**Exploring the Impact of Extreme Rainfall on Risk and Resilience of Transportation Corridors Paralleling Rivers in Steep Terrain:** Derrick Dasenbrock | **Investigating Undrained Behaviour of Partially Saturated Granular Materials Under Cyclic Triaxial Loading Using DEM:** Yang Cao, Hoang Bao Khoi Nguyen, Md Mizanur Rahman, and Md Rajibul Karim<br>**Modelling Undrained and Drained Triaxial Shearing Behaviour of Realistic Sand Particles Using DEM:** Trung-Tri Le, Hoang Bao Khoi Nguyen, Md Mizanur Rahman, and Md Rajibul Karim<br>**Modeling path effects due to 3-D Velocity Structure for Non-ergodic Ground Motion Models: A Case Study Using Turkish Ground Motion Data:** Chenying Liu, Jorge Macedo, Norman Abrahamson, Maxime Lacour, and Albert Kottke<br>**Relationship Between Factors of Safety Against Soil Liquefaction Triggering and Liquefaction Effects on Ground Motions:** Renmin Pretell, Scott Brandenberg, Jonathan Stewart, James Gingery, and Zia Zafir<br>**Methodology and Validation for Tri-directional 1D Site Response Analysis in LS-DYNA:** Salman Rahimi, Kirk Ellison, Pawan Kumar, Rica Chen, and Yizhen Yan | **The Impact of Sub-Basins on the Spatial Variability of ground Motion Amplification in the Los Angeles Basin:** Rashid Shams<br>**Extrapolation Algorithm for Computing z1.0 From Shallow Measured Velocity Profile:** Rashid Shams<br>**Identification of Site Responsive Features Using Microtremor HVSR:** Francisco Javier<br>**Estimating Systematic Source, Site, and Path Effects in Non-Ergodic Ground Motion Models:** Insights from the Turkish Ground Motion Database:Chenying Liu, Jorge Macedo, Norman Abrahamason, and Albert Kottke<br>**Sub-regional site response for the San Francisco Bay Area:** Shako Mohammed;<br>**Regional Datasets Included in the NGA-West3 Ground Motion Database:** Shako Mohammed, Rashid Shams, Chukwuebuka Nweke, Scott Brandenberg, Jonathan Stewart, and Tristan Buckreis | **Lessons Learned from Site Characterization Efforts During Reconnaissance: 2022 Taitung Earthquakes:** Rashid Shams and Chukwuebuka Nweke<br>**Performance of Small Diameter Deep Foundations during the March, 11, 2011 Tohoku Earthquake:** Daniel Pradel<br>**Mitigating Geo-Hazards in Highway Construction: A First-Ever Application of GECs Below Water:** Carlos Rodriguez and Vona Ojaruega<br>**Validating Liquefaction Case Histories Using Earthquake Simulations: 1933 Long Beach Earthquake:** Sajan KC, Chukwuebuka Nweke<br>**Lessons Learned from the 2011 Tohoku Earthquake: Challenges and Innovations in Disability-Inclusive Infrastructure and Preparedness:** Mihoka Fukari and Lisa Grant<br>**Evaluating Site Response Analysis at Liquefiable Sites in the New Madrid Seismic Zone: Challenges and Lessons Learned:** Matteo Montesi and Rachel Reardon | **Analyzing Wall Failure in Mud-Capped Dredge Pits along the Louisiana Continental Shelf:** Omar Alawneh, Navid Jafari, Wenqiang Zhang, and Kehui Xu<br>**The Influence of Model Spatial Resolution on Rainfall-Induced Landslide Prediction for a Basin in Utuado, Puerto Rico:** Mirna Kassem and Dimitrios Zekkos<br>**Case Study of Debris Flow Mitigation – City of Glenwood Springs, Colorado:** Aliena Debelak, Bailey Fischer, Roger Pihil, and Ryan Gordon<br>**Assessing the Resiliency of a Highway Slope Built on Highly Plastic Clay Against Extreme Rainfall Events:** Fariha Rahman |