

## Monday, November 8, 2021

10:00 am – 12:00 pm <b>Concurrent Technical Session 1</b>			
<b>Risk Management of Extreme Events</b>	<b>Case Histories, Lessons Learned, and Best Practices - Slopes</b>	<b>Natural and Man-Made Earthquakes and Associated Geo-Hazards</b>	<b>Civil Infrastructure and Geo-Materials Under Extreme Loadings</b>
<b>Moderators:</b> Limin Zhang, Lei Wang	<b>Moderators:</b> Phillip Vardon, Jay McKelvey	<b>Moderators:</b> Kun David Li, Shideh Dashti	<b>Moderators:</b> Joe Tom, Amin Askarinejad
<p><b>Risk Management of Extreme Events</b></p> <p><b>Geo-Hazards and Climate Security &amp; Resilience at United States Diplomatic Missions</b>, Corrie Campbell</p> <p><b>How a Building Inventory Database Helps to Manage Coastlines at Risk</b>, Hamzeh Gol Zaroudi</p> <p><b>Assessing Small Probabilities in Extreme Hazard Event Trees When Limited Information Is Available</b>, Kai Feng</p> <p><b>Governmental Liability and Immunity for Geotechnical Infrastructure Failure Associated with Extreme Events</b>, Timothy Wyatt</p> <p><b>Comparison of Continuous and Quantile-Based Downscaling Approaches to Evaluate the Climate Change Impacts on Characteristics of Extreme Rainfall</b>, Elmira Hassanzadeh</p> <p><b>Assessing Consequences of Integrated Multi-Hazards on Hong Kong Island</b>, T. Abimbola Owolabi</p> <p><b>Probabilistic Slope Stability Analysis Focusing on Effect of Geological Uncertainty</b>, Chih-Hsiang Yeh</p>	<p><b>Slope Case Histories   Part 1</b></p> <p><b>Case Study of Slope Failures in Canal</b>, Amjeth Basheer</p> <p><b>An Evaluation of Post-Wildfire Debris Flows and Erosional Damage to a Southern California Floodway</b>, Pavlo Chrysovergis</p> <p><b>Post Disaster Reconnaissance Studies of Landslides In India: Current Practices and Opportunities</b>, Prashanth Vangla</p> <p><b>Evaluation of Pore Water Pressure Prediction Methods Under Rapid Drawdown: Case Study of the Pilarcitos Dam Failure</b>, Rowshon Jadid</p> <p><b>Development of a Modular Rockfall Protection System in Response to Major Earthquake Damage to a Transportation Corridor</b>, Rori Green</p> <p><b>Surficial Failures in Santa Clarita, California, during the 2005 El Niño storms</b>, Daniel Pradel</p> <p><b>Capturing Geotechnical Extreme Event Performance with the Nheri Rapid</b>, Joseph Wartman</p>	<p><b>Earthquake Session   Part 1</b></p> <p><b>An Exploratory Study on the Effects of Liquefaction – Induced Sand Ejecta on Foundation Settlements based on Moderate-Scale Shake Table Tests</b>, Ramin Motamed</p> <p><b>Initial Liquefaction Hazard Mapping of Northwest Tennessee Based on Liquefaction Probability Curves</b>, Hamed Tohidi</p> <p><b>Changes in Liquefaction Severity in the San Francisco Bay Area with Sea-Level Rise</b>, Alex Grant</p> <p><b>Assessment of Liquefaction Effects on Ground Motion Frequency Parameters for Accelerogram-Based Liquefaction Detection</b>, Weiwei Zhan</p> <p><b>Liquefaction Resistance of a Pleistocene-Age Deposit at the Sampit Site in South Carolina</b>, Sarah Gassman</p> <p><b>Deterministic Seismic Hazard Analysis of Chittagong City and District, Bangladesh</b>, Soumyadeep Sengupta</p>	<p><b>Infrastructure and Geo-Materials   Part 1</b></p> <p><b>Dynamic Localized Failure in Soils via a Nonlocal Poromechanics Model: Case Study of San Fernando Dam Failure</b>, Xiaoyu Song</p> <p><b>Enhancing Coastal Levee's Resiliency with Pressed-in Piles Against Strong Earthquakes and Tsunamis</b>, Takefumi Takuma</p> <p><b>Maxwell Damping, an Alternative to Rayleigh Damping</b>, Ethan Dawson</p> <p><b>Infrastructure and Community Resilience through the Lens of Civil Engineering Students</b>, Saeed Rokooei</p> <p><b>Stress-Controlled Direct Shear Tests of Shearing Behaviour of Lantian Loess Reinforced With Straw Fibers</b>, Zhong-Fei Xue</p> <p><b>Failure Mode of Single Stone Column under Full State Response</b>, Wjdan Sahi</p> <p><b>Data-driven Modelling of Granular Column Collapse</b>, Qinghao Yang</p>
3:00 pm – 5:00 pm <b>Concurrent Technical Session 2</b>			
<b>Case Histories, Lessons Learned, and Best Practices – Coastal Hazards</b>	<b>Modeling, Assessment, and Instrumentation for Extreme Events</b>	<b>Decision Making and Planning for Extreme Events</b>	<b>Case Histories, Lessons Learned, and Best Practices – Infrastructure</b>
<b>Moderators:</b> Brett Sanders, Hamed Mofkakhari	<b>Moderators:</b> Liang Gao, Lei Wang, Ming Peng	<b>Moderators:</b> Jason Giovannetto, Roger Pulwarty	<b>Moderators:</b> Johnathan Hubler, David Frost
<p><b>Coastal Hazards</b></p> <p><b>Managing Hurricane Debris and Elevated Temperatures</b>, Timothy Stark</p> <p><b>Luxury Living on the Beach in Post-Hurricane Sandy Coney Island, Brooklyn</b>, Anastasios Papathanasiou</p> <p><b>Northeast Florida – A New Hotspot for Hurricane Damage?</b>, William Dally</p> <p><b>Coastal Infrastructure Under Extreme Events and Changing Climate</b>, Jeffery Krusinga</p> <p><b>Development of a Decision Support Framework for Multi-Hazard Resilience Assessment of Coastal Structures</b>, Rouzbeh Nazari</p> <p><b>Marsh Erosion Processes near a Coastal Highway on the Outer Banks, NC</b>, Anna Wargula</p> <p><b>The Squibnocket Causeway and Beach Restoration Projects: Managed Retreat and Restoration of Coastal Beach</b>, Mark Haley</p>	<p><b>Extreme Event Modeling and Instrumentation</b></p> <p><b>Sensitivity Analysis of the Auxiliary Spillway Erosion based on the Material and Structural Properties</b>, Sanjeeta Ghimire</p> <p><b>Use of X-bar and R Control Chart Methods on Long-Term Piezometer Data for Sinkhole Assessment</b>, Boo Hyun Nam</p> <p><b>Impacts of Extreme Landslide Dam Event on the Yarlung Tsangpo Basin</b>, Danyi Shen</p> <p><b>Use of PANDA Dynamic Cone Penetrometer for Site Investigation following Blast Liquefaction Testing</b>, Jonathan Hubler</p> <p><b>Experimental Investigation of Carbonate Rock Dissolution: Applications to Dam Foundation Settlement and Sinkholes Caused by Climate Change Induced Acidic Flow</b>, Maziar Foroutan</p> <p><b>Coupled Hydro-Mechanical Analysis of Highway Slopes on Expansive Soil Subjected To Rainfall</b>, Masoud Nobahar</p> <p><b>Impact of Site-Specific Extreme Hydrological Cycle on Footing Performance</b>, Vahidreza Mahmoudabadi</p>	<p><b>Decision Making and Big Data</b></p> <p><b>Assessing Climate Change Impacts and Adaptation Options of Rain-fed Agriculture in Africa with Integrated Modelling Framework</b>, Liying Li</p> <p><b>Extreme Weather Impacts to Condition and Service Life of Building Components</b>, Christine Ansani</p> <p><b>Quantifying Pavement Roughness after Extreme Events Using Smart Phone Applications</b>, Margarita Ordaz</p> <p><b>Machine Learning Assisted Lithology Prediction Utilizing Toeplitz Inverse Covariance-Based Clustering (TICC)</b>, Sean Bartosik</p> <p><b>Comparing Statistical and Physical Methods for Compound Hazard Assessment: The Case of Compound Flooding During Tropical Cyclones</b>, Avantika Gori</p> <p><b>Application of Machine Learning Algorithms to Seismic Energy Dissipation of Rocking Foundations during Earthquake Loading</b>, Sivapalan Gajan</p> <p><b>Assessment of Post-Earthquake Landfill Methane Emissions</b>, Nazli Yesiller</p>	<p><b>Infrastructure Case Histories</b></p> <p><b>Variations in Sediment Strength along the Tidal Inlet Channel near Pea Island, NC</b>, Reem Jaber</p> <p><b>Performance of Geomembranes Exposed to Extreme Weather Conditions on High-Elevation Dams on the Alps</b>, Daniele Cazzuffi</p> <p><b>Specialized Multi-Axial Geogrid Stabilized Crane Platform Resilience to Hurricane Harvey</b>, Lois Schwarz</p> <p><b>Regional-Scale Geohazards Evaluation for Risk Assessment of Natural Gas Storage and Transmission Infrastructure</b>, Jonathan Stewart</p> <p><b>Lake Eloise Dr – Soft Soil Settlement Remediation and Roadway Elevation Increase with Permeable Low-Density Cellular Concrete (PLDCC)</b>, Nico Suttmoller</p> <p><b>Unlocking Data from the Online Footage of Edenville Dam Failure</b>, Yixing Yuan</p> <p><b>Foamed Glass Aggregate for Resilient Waterfront Construction</b>, Theresa Loux</p>

Tuesday, November 9, 2021

10:00 am – 12:00 pm <b>Concurrent Technical Session 3</b>			
<b>Anticipation, Preparedness, Response and Recovery from Extreme Events</b>	<b>Case Histories, Lessons Learned, and Best Practices – Slopes</b>	<b>Natural and Man-Made Earthquakes and Associated Geo-Hazards</b>	<b>Civil Infrastructure and Geo-Materials Under Extreme Loadings</b>
<b>Moderators:</b> Rouzbeh Nazari , Farshid Vahedifard,	<b>Moderators:</b> Joe Wartman	<b>Moderators:</b> Adrian Rodriguez, Tim Stark,	<b>Moderators:</b> Bhaskar Chittoori , Ranjiv Gupta ,
<p><b>Response and Recovery Preparedness</b>  <b>A Resiliency Study of Electric Power Network under Flooding in a Levee-Protected Area</b>, Saeed Miraei Ashtiani  <b>Turning Disaster into Knowledge: Geotechnical Aspects of the 2020 Magnitude 6.5 Monte Cristo Range Earthquake in Nevada</b>, Ramin Motamed  <b>Geotechnical Impacts of the January 7, 2020 Mw 6.4 Puerto Rico Earthquake and associated Seismic Sequence</b>, Alesandra Morales-Vélez  <b>Impacts of the El Dorado Ranch Park Fire on Geotechnical Properties of Soil</b>, James Kellogg  <b>Implementing a Practice-Focused Approach to Geotechnical Post-Earthquake Damage Assessment</b>, Christine Beyzaei  <b>Diverting Volcanic Debris Flows with Pressed-in Sheet Piles Installed in Lava Rock</b>, Takefumi Takuma  <b>Rapid Response Monitoring of a Coastal Wetland During Tropical Storm Cristobal</b>, Jack Cadigan</p>	<p><b>Slope Case Histories   2</b>  <b>Geotechnical Effects of 2018 Hurricane Florence</b>, R. Wooten  <b>Small Dams and Extreme Events</b>, James McKelvey  <b>Coupled Geotechnical-Hydrological Analysis of Earth Slopes Subjected to Different Hydrological Loadings Using Finite Element Model</b>, Tharshikka Vickneswaran  <b>Geotechnical and Wind Performance of Engineered Turf Landfill Cover</b>, Ming Zhu  <b>A New Approach to Quantify Risk of Slope Failures in MnDOT Highway System</b>, Nick Bradley  <b>Investigation of a Highway Slope Failure on Yazoo Clay Using Electrical Resistivity Imaging</b>, Sadik Khan  <b>The May 19, 2020 Failure of Edenville Dam near Midland, Michigan</b>, Daniel Pradel</p>	<p><b>Earthquake Session   Part 2</b>  <b>The Impact of Hazard-Consistent Ground Motion Scenarios Selection on Structural Seismic Risk Estimation</b>, Mohsen Zaker Esteghamati  <b>Impacts of 2011 Mineral, Virginia Earthquake</b>, Timothy Stark  <b>Sensitivity of Site Response Analyses to Input Motion Selection Protocols</b>, James Kaklamanos  <b>Site Response and Geohazard Analysis in New York City Area</b>, Kun David Li  <b>Site Response Impacts of the Memphis Sand Layer within the Mississippi Embayment</b>, Ashraf Kamal Himel  <b>Finite Element Analyses of Life-line Infrastructure Systems with regard to Seismic Response</b>, Mehrad Kamalzare  <b>Newmark-Type Pseudo-Three-Dimensional Back-Analysis of Co-Seismic Landslides in Egkremnoi, Lefkada, Greece</b>, Weibing Gong</p>	<p><b>Infrastructure and Geo-Materials   Part 2</b>  <b>A Dataset of Levee Overtopping Incidents</b>, Stefan Flynn  <b>Seismic Analyses of Statically Stable 3-m High Cantilevered Retaining Walls with Saturated Backfills</b>, Abdolreza Osouli  <b>Peak and residual shear strength of soils subjected to fires</b>, X. Wirth  <b>Numerical Modeling of Debris Flow at a Rainfall Induced Landslide at Malin in India</b>, Aniruddha Sengupta  <b>Flowslide Triggering in Volcanic Soils: Role of Stratigraphy and Bedrock Exfiltration</b>, Jose Lizarraga  <b>Geotechnical Tools for Rapid Response to Site Characterization Following Extreme Events</b>, Derrick Dasenbrock  <b>Engineered Water Repellency for Frost Mitigation: Practical Modeling Considerations</b>, John Daniels</p>
3:00 pm – 5:00 pm <b>Concurrent Technical Session 4</b>			
<b>Coastal Sustainability and Resilience Under Extreme Events and Changing Climate</b>	<b>Instrumentation and Remote Sensing of Extreme Events and Their Impacts</b>	<b>Climate Model Simulations and Predictions</b>	
<b>Moderators:</b> Ben Mason, Nina Stark	<b>Moderators:</b> Zhangwei Ning , Thomas Oommen	<b>Moderators:</b> Olivier Prat, Brian Nelson	
<p><b>Coastal Sustainability</b>  <b>A Proposed Approach to Assessing Coastal Property Risk Due to Sea Level Rise</b>, Anthony Julian  <b>Flood Protection and Climate Resiliency Study of the Columbia, South Carolina Metro Wastewater Treatment Plant</b>, Meghan Moody  <b>In-situ and Remotely Sensed Data Collection for Geotechnical Site Characterization of Intertidal Environments with Regards to Extreme Events</b>, Nina Stark  <b>Addressing Sea Level Rise from the Ground Up: Understanding the Implications for Coastal Geotechnics</b>, Abby Burke-Flask  <b>Small-Scale Underwater Breakwater Testing to Protect a Rio de Janeiro Beach</b>, Guilherme Amado  <b>Uplift Resistance of a Multiline Ring Anchor System in Soft Clay to Extreme Conditions</b>, Junho Lee  <b>Experimental Study on Stability of Coastal Levee with Double-Row Steel Sheet Piles under Extreme Storm Surge</b>, Ming Peng</p>	<p><b>Instrumentation and Remote Sensing</b>  <b>A Preliminary Study on the Use of Differential Interferometric Synthetic Aperture Radar (DInSAR) for Ground Subsidence Assessment</b>, Yong Je Kim  <b>Estimation of GPM Rainfall for Flood Occurrences Based on the Probability Distribution of Monthly Precipitation: A Case Study in Iran</b>, Shadnaz Kaheh  <b>Changes in Fiber Optic Distributed Acoustic Sensing Noise Amplitude Due to Tropical Depression Cristobal</b>, Katherine Winters  <b>A New Framework for Studying Urban Heat Island and Surface Energy Budget Using Remote Sensing and Ground Observations</b>, Abdou Bah  <b>Using Radar Remote Sensing from Space to Monitor Dams</b>, Thomas Oommen  <b>Transforming Aerial Reconnaissance Data of Infrastructure into Knowledge for Better Response to Natural Disasters</b>, Surya Sarat Chandra Congress  <b>Fire and Ice – The Effect of Wildfire on an Ice-Rich Slope along the Trans Alaska Pipeline System</b>, Peppi Croft</p>	<p><b>Climate Modeling and Predictions</b>  <b>A Joint-Probability Model for Tropical Cyclone Rainfall Hazard Assessment</b>, Dazhi Xi  <b>Effect of Antecedent Rainfall on Slope failures in Tropical Mountainous Environmental Setting</b>, Ujwalkumar Patil  <b>Empirical Numerical Simulation of Precipitation Events for Pluvial Flood Management</b>, Yi (Victor) Wang  <b>Bioremediation of Tsunami affected contaminated soil in Tohoku, Japan</b>, Azizul Moqsud  <b>Prediction of Matric Suction of Highway Slopes Using Autoregression Artificial Neural Network (Ann) Model</b>, Masoud Nobahar  <b>Study of Stabilized Expansive Soil as Subgrade Under Extreme Climatic Conditions</b>, Richa Mudliar  <b>Climate-Resilient Biogeochemical Cover for Waste Containment Systems</b>, Krishna Reddy</p>	

Wednesday, November 10, 2021

10:00 am – 12:00 pm <b>Concurrent Technical Session 5</b>			
<b>Modeling and Assessing Compound and Cascading Events</b>	<b>Climate-Resilient and Adaptive Infrastructure Systems</b>	<b>Case Histories, Lessons Learned, and Best Practices for Seismic Events</b>	<b>Civil Infrastructure and Geo-Materials Under Extreme Loadings</b>
<b>Moderators:</b> Amir Aghakouchak	<b>Moderators:</b> Francisco Mumoz-Arriola , Ramin Motamed	<b>Moderators:</b> Haitham Dawood, James Kaklamanos	<b>Moderators:</b> Ghada Elithy, Mike Sharp, Xiong Zhang
<p><b>Preliminary Study on Multi-hazards Modelling in an Urban Environment under Extreme Storms</b>, Liang Gao</p> <p><b>Challenges for Appropriate Characterization of Compound Coastal Hazards</b>, Hamed Mofkakhari</p> <p><b>Evaluation of Levees under Compound Flood-Earthquake Loadings</b>, Masood Abdollahi</p> <p><b>Understanding the Drivers, Impacts and Predictability of Connected Floods and Droughts</b>, James Done</p> <p><b>A Retrospective Evaluation of the Performance of the Lower San Fernando Dam</b>, Martin McCann, Jr.</p> <p><b>Systems Thinking and Decision Making Versus Location-Specific Approaches in Co-Seismic Slide Masses – Examples For Designers From The Farmington Siding Complex</b>, Bret Lingwall</p> <p><b>The Compound Impacts of Changing Temperature and Snow Cover on Freeze and Thaw Patterns across Québec</b>, Shadi Hatami</p>	<p><b>Climate Resilient and Adaptive Infrastructure</b></p> <p><b>Assessing Design Thresholds in the Oil Infrastructure in Light of Climate Change and Extreme Weather Events</b>, Theodoros Katopodis</p> <p><b>Fully Coupled Flow Deformation Analysis of Buried Concrete Pipe Using Finite Element Software PLAXIS 2D</b>, Tharshikka Vickneswaran</p> <p><b>Efforts to Build Infrastructure Resiliency to Future Hydroclimate Extremes</b>, Anna Wilson</p> <p><b>Flood-risk analytics for climate-resilient agriculture using remote sensing in the Northern High Plains</b>, Francisco Munoz-Arriola</p> <p><b>Building a Barrier: Resilient and Adaptive Flood Protection at Moakley Park</b>, Julie Eaton Ernst</p> <p><b>Framework for Adaptive Design of Infrastructure under a Changing Climate</b>, Farshid Vahedifard</p> <p><b>Performance of Geogrid Stabilized Roadways Constructed over Expansive Clay Subgrade</b>, Prajwol Tamrakar</p>	<p><b>Earthquake Session   Part 3</b></p> <p><b>Resilience through Predictive Modeling: Observing the Shift of Seismic Activities in Oklahoma</b>, Amin Amirlatifi</p> <p><b>Dynamic Analyses of Liquefaction and Lateral Spreading for an Interlayered Deposit in the Chi-Chi Earthquake</b>, Patrick Bassal</p> <p><b>Storm-Induced and Seismic-Induced Landslides across Puerto Rico’s Juvenile Landscape: Hazard Recognition, Quantification, and Long-term Impacts</b>, Stephen Hughes</p> <p><b>Impact of Anthropogenic Modifications along Rivers and Shorelines during the 2011 Tohoku Earthquake</b>, Daniel Pradel</p> <p><b>Seismic slope displacements: Insights from Traditional Regression and Artificial Neural Networks</b>, Youngkyu Cho</p> <p><b>Developing Best Practice for Helicopter Sluicing for Rockfall Mitigation Following the 2016 Kaikoura New Zealand M7.8 Earthquake</b>, J Stuart Finlan</p> <p><b>Seismic Retrofit Solutions of Waterfront Structures against Lateral Spreading</b>, Sam Yao</p>	<p><b>Infrastructure and Geo-Materials   Part 3</b></p> <p><b>Numerical Analyses of Erosion in Sand-Gravel Mixtures Caused by Buried Defective Pipeline under Intense Rainfall</b>, Wei-Zhen Jiang</p> <p><b>Characterizing the Impact of Temperature on Clay-Water Contact Angle in Geomaterials during Extreme Events by Deep Learning Enhanced Methods</b>, Xiaoyu Song</p> <p><b>Resiliency of Paving Materials Containing Warm Mix Technologies</b>, Isaac Howard</p> <p><b>Influence of Boundary Conditions on Response of Pipelines Crossing Reverse Fault Zone</b>, Abdolreza Osouli</p> <p><b>Reduction of Soil Swelling Potential Using PU Polyurethane Liquid Foam</b>, Mohamed Al atroush</p> <p><b>Performance of Drilled Shaft Under Combined Vertical and Horizontal Loading</b>, Jie Huang</p> <p><b>Insulated Pavement Analysis based on a Thermo-Hydro-Mechanical (THM) Coupled Finite Element Model</b>, Zhuang Zhuo</p>