Venue: Assembleia 1

Date: Oct 07, 2025. | Time: 2pm to 4pm Topics: Foundations and Deep Excavation

Thematic Lecture:

Piled Raft Foundation and Soil Structure Interaction Sangseom Jeong, Jinwoo Lee, Dohyun Kim & Jongjeon Park

Contributed Presentations:

Performance Evaluation of Combined Piled Raft Foundation Subjected to Combined V-H Loading

Aman Garg, Vishwas A. Sawant & Siddharth Mehndiratta

Numerical Investigation of the Cushion-Dependent Behaviour of Disconnected Piled Raft System

S. Raut, P. Halder, B. Manna & J. T. Shahu

Centrifuge Model Test on Vertical Bearing Characteristics of Soil-Cement Composite Pile

Shohei Koga, Koji Watanabe, Tetsuro Naito & Nobuaki Tsuchiya

Model Load Tests on Lateral Resistance of Soil-Cement Composite Pile Tetsuro Naito, Shohei Koga, Nobuaki Tsuchiya & Koji Watanabe

Designing against failure: Early lessons on geotechnical and construction pitfalls *B. Govind Raj & Madan Kumar Annam*

Effect of Anisotropy on the Torsional Response of Pile Foundations Bipin Kumar Gupta

Study on Loading Rate Effect of Geomaterials for Vertical Bearing Characteristics Evaluation of Pile

Kiyoka Kono, Koji Watanabe, Shihchun Lin & Shuichi Kamei

Static and Rapid Load Tests with Various Interpretation Methods on a Steel Pipe Pile in Sandy Ground

Ram Krishna Mandal, Shuichi Kamei, Isaku Yamamoto & Tatsunori Matsumoto

Finite Element Modeling of Laterally and Cyclically Loaded Monopiles on Sloping Terrain

Jegadeesh kumar Thangavel & Deendayal Rathod

Seismic Lateral Capacity Analysis of Skirted Ring Foundation in Layered Soil Kaustav Chatterjee, Puran, Pratik Goel & Sambit Pani

Excavation-induced deformations in adjacent pile foundations R. B. Rao & S. S. Kandolkar

Venue: Assembleia 2

Date: Oct 07, 2025. | Time: 2pm to 4pm Topics: Earthquake and Soil Dynamics

Thematic Lecture:

Towards a Particle Based Approach for Simplified Liquefaction Susceptibility Assessment

S. Banerjee, R.K. Kandasami, M.U. Rehman and A. Srivastava

Contributed Presentations:

Comprehensive Multi-method Assessment of Liquefaction Potential Along the Levee Mario Bacic, Lovorka Libric & Meho Sasa Kovacevic

Cyclic Response of Soft Cohesive Soil Shrweta Dutta & Ajanta Sachan

Undrained Cyclic Response of Indus Basin Sand in Leh, Ladakh *Abid Ahmad Sofi & Majid Hussain*

Evaluation of Dynamic Parameters of Tropical Peat Ashim Kanti Dey, Rajat Debnath & Soumitra Kumar Kundu

Effect of Seepage and Suction on Liquefaction Resistance for Unsaturated Soil *Tomoyoshi Nishimura & Masafumi Matsumoto*

Analytical Framework for Estimating Excess Pore Pressure Redistribution in Liquefiable Layers

Sumeet Kumar Sinha, Katerina Ziotopoulou & Bruce Lloyd Kutter

Comparative Study of Liquefaction Potential of Core areas of Kathmandu Valley using Microtremor Measurement

Sanjeeb Pudasaini, Khemraj Pokharel, & Ram Chandra Tiwari

Effect of Nonlinear Soil Behavior on the Seismic Performance of a Zoned Embankment Dam

A. Kumar & B.K. Maheshwari

Monitoring Ground Vibration during Blast Induced Demolition of Coal Tower & Chimneys

Alina Anil, Tarun Naskar, A Boominathan, Anil Joseph & Dhanya J S

Small-Strain Dynamic Behavior of a Coalmine Overburden (OB) Waste Koushik Das, Debjit Bhowmik, Bappaditya Manna & Ramanathan Ayothiraman

Influence of Heterogeneous Wave Velocities on the Seismic Passive Resistance of Dry Granular Soils

G Gowtham & Jagdish Prasad Sahoo



Venue: Assembleia 3

Date: Oct 07, 2025. | Time: 2pm to 4pm **Topics: Practice, Risk and Education**

Thematic Lecture:

Integrating Geophysics into Geotechnical Workflows: Principles, Practices, and Pitfalls Sanjay Rana

Contributed Presentations

Impact of Probability Density Function on TLBO Converged Shear Wave Velocity Profile in MASW Test

Prabhakar Vishwakarma

Influence of Gradation on Failure Mode of Saturated Sand at Particle Scale Mohammed Elnur & Khalid Alshibli

Hydraulic Conductivities of Unsaturated Bauxite: Directly Measured and SWCC-based Hailong Wang, Jaylord Tan Tian & Junichi Koseki

Liquefaction Analysis of Pond Ash using Dynamic Cone Penetration Tests Sujay Vipulbhai Teli & Ajanta Sachan

Stochastic Evaluation of Liquefaction Severity via Second Order Reliability Method Saikat Kuili, Akash Kumar Bharti & Ravi S. Jakka

A Reliability-based Framework for Evaluating Seismic Liquefaction Saidu Konneh & Ganesh W. Rathod

Stress on the Cohesionless Finer Fraction and Its Influence on Internal Erosion Ricardo Moffat & Diego Soto

Effect of Relative Compaction on Stress-Strain Response of Low Plasticity Soil Shrweta Dutta, Areen Khan & Ajanta Sachan

Model Scale Studies on Time-Lapse ERT for Monitoring Seepage Flow Vaishnavi Bherde & Umashankar Balunaini

New-Gen of Surface Wave Method for Enhancing Site Characterization and Infrastructure Inspection

Chih-Ping Lin, Tsai-Jung Wu, Quoc Kinh Tran, Ernian Pan & Yin-Ming Po

Estimation of OCR and Coefficient of Consolidation for Typical Kolkata Deposit using **DMT-Dissipation**

Kaustav Das, Shiladitya Mandal, Harika Anupoju, Kaushik Bandyopadhyay & Goudappa Ramanagouda Dodagoudar

Venue: South 1

Date: Oct 07, 2025. | Time: 2pm to 4pm

Topics: Geosynthetic Engineering

Thematic Lecture:

Geosynthetics Tensile Behaviour after Exposure to Non-conventional Fill Materials Castorina Silva Vieira & Paulo M. Pereira

Contributed Presentations

Micromechanical Insights into Frictional Behavior at Non-dilative Geomaterial Interfaces

Lalit Kandpal, Prashanth Vangla & Satoshi Matsumura

Effect of Metal Ions on the Thermo-oxidation Resistance of High-density Polyethylene Geotextiles

José Ricardo Carneiro & Maria Lurdes Lopes

Evaluation of Mechanical Degradation to Glasgrid under Cyclic Loading During Installation in Roads

Nitish Kumar & Ramesh Kannan Kandasami

Performance of Double Twisted Mesh in Acidic Environment Samudera Dandy Aribowo, Anisur Rahman, Aningtyas Safitri, Marco Vicari & Ratnakar Ramesh Mahajan

Micro & Nano X-ray CT Visualization of a GCL Subjected to 1D Freeze-thaw Cyclic Effects

Nana Yamaguchi, Toshifumi Mukunoki & Toru Yoshinaga

Comparison of ASD- and LRFD- based designs of Reinforced Soil Walls D.S.K. Mana & S.D. Vyas

Dewatering of Low-solid-content Wastes using Geotextile Tubes: Insights from Laboratory Testing

George Segre & Shobha K Bhatia

Achieving SDGS Through Geotextile Tube Dewatering Systems in South Africa *Nikhiel Budhai*

Evaluation of MIF/LCR through Laboratory Test for Polypropylene and Polyester Biaxial Geogrid

Saurabhh Vyas & Shivani Mistry

Evaluation of the Performance of Geogrid Strip RSW Subjected to Rainfall: Centrifuge Study

Viswateja V Turlapati & B V S Viswanadham

State-of-the-art review of the creep behaviour of geotextiles J. Y. Kolekar, S. M. Dasaka, S. B. Kharmale & Y. A. Kolekar



Venue: South 2

Date: Oct 07, 2025. | Time: 2pm to 4pm Topics: Slope Stability and Landslides

Contributed Presentations

Calibration of Open-Pit Mine Slope Models Through Forensic Investigation of Actual Failures

Andre-Jean De Guzman Pineda, John Michael Intal Tanap, Kirsten Julia Doble Cruz, Marielle Gwen Garcia Martinez, Desz Justinne Nosa Ocampo, Joselito Suñga Tañagras, Gian Paulo Dumigpi Reyes, Patrick Adrian Yap Selda, Ramon Diaz Quebral & Roy Anthony Capisonda Luna

Design and Construction of Hybrid Reinforced Soil Slopes for Railways Ratnakar Ramesh Mahajan, S Reginald, Rudra Budhbhatti, N. K. Panda & Gianluca Spadaro

Volcanic Ash Clay and Risk of Catastrophic Landslide *Mizuki Kunisawa, Tomohiro Higashi & Tetsuo Tobita*

A Comparative Study on Machine Learning Models to Predict Landslide Susceptibility *Tulasi Ram Bhattarai & Netra Prakash Bhandary*

Comparative Assessment of Antecedent Rainfall Threshold for Roadside Landslide Prediction

Suresh Neupane & Netra Prakash Bhandary

Effect of Spatial Variability of Permeability in Rainfall-induced Landslides using Random FEM

Abhijith Ajith & Rakesh J Pillai

Numerical Analysis of Piles Placed on Sandy Sloping Ground Considering Hardening Soil Model

Yamini Jala, Vishwas A. Sawant & Anumita Mishra

A Study on the Wind Erosion Mitigation of Flyash in Disposal Sites using Surface Geopolymerization

Hari Krishna Padavala & Abhilash Pampana

Analysis of Erosion Control Methods and Soil Loss Estimation using the Rusle Model Ratnakar Ramesh Mahajan, Saurabh Rajpoot, Gianluca Spadaro & Saurya Dash

Soil-water Index (SWI) Thresholds for Territorial Landslide Early Warning System (TE-LEWS) in India

Srikrishnan Siva Subramanian, Sudhanshu Dixit, Anamika Sekar, Piyush Srivastava, Sumit Sen, Tapas Ranjan Martha & Tatsuya Ishikawa

Numerical Analysis of Slopes Stabilized with Helical Soil Nails Gaddam Harshitha & Renjitha Mary Varghese

Rheological Properties and Flow Behavior of Mine Tailings and Fly Ash: Lessons from Failures

N. Fatema, S. K. Bhatia & A.M. Palomino

Effect of stress anisotropy on shear strength parameters and infinite slope stability: A numerical Approach

Revathy Manohar & Sireesh Saride

Venue: West 1

Date: Oct 07, 2025. | Time: 2pm to 4pm

Topics: Ground Improvement and Stabilisation

Contributed Presentations:

Consolidation Assessment of a Layered Subsurface Improved with prefabricated vertical drains and Embankment Preloading Samrat Ghose & Arindam Dey

Geopolymer Soil Column-supported Embankments: A study of Soft ground improvement through Experimental and Numerical Approaches Sanjoli Gupta & Suresh Kumar

Enhancing the Geotechnical Properties of Micaceous Sand using Xanthan Gum Biopolymer: A Sustainable Alternative to Conventional Stabilisers Anjali S & Seethalakshmi P

Compressibility and Shrinkage Characteristics of Clayey Soil Amended with Sugarcane Bagasse Biochar Mohammad Nuruddin & Arif Ali Baig Moghal

Compressibility Behaviour of Marine Clays Treated with CCR Measured using CRS **Tests**

Charity Marbaniang & Ashish Juneja

Stabilization of Clayey Soil with GGBS-based Hybrid Alkali-activated Cement Sanobar Arafat & Monowar Hussain

Multiscale Evaluation of SCM-Enhanced Montmorillonitic Clay Ankit Kumawat, Sourabh Choudhary, Ritik Kumar & Lalit Borana

Experimental Evaluation of Electrodeposits in Silica Sand under varying humiditycontrolled environment

Vandana Brar, Deepanshu Shirole & Sovik Das

Influence of Molding Water Content on Strength Development of Marine Clay-Binder System

Rejin Raj P & Vandana Sreedharan

Strain Localization in Lime Treated Expansive Soil under Compression Loading using **Digital Image Correlation**

Brijesh Kumar Agarwal & Ajanta Sachan

Role of Natural Moisture in the Geo-polymerization Process for Marine Clay Improvement

Himanshu Yadav, Satyanarayana Murty Dasaka & P. Hari Prasad Reddy

Curing Stress Effects on Stabilization of Low and High Plastic Clays in Inactive and Active Zone

Balaji Sai Kumar Bandaru, Ramesh Kannan Kandasami & R G Robinson

Effect of Morphological Characteristics on the Shear Strength Behavior of Sand Hansa Devi, Kunjari Mog, & Anuj Kumar

Venue: West 2

Date: Oct 07, 2025. | Time: 2pm to 4pm

Topics: Rock Mechanics and Tunnelling Engineering

Thematic Lecture:

Probabilistic Analysis of a Wellbore in Rocks *Priti Maheshwari & Anil Kumar Barik*

Contributed Presentations

Preserving Heritage: Geologic and Geotechnical Strategies for Restoring a Historic Tunnel

Francis Jenner Bernales, Kate Trishia Papina, Vanessa Erestain, Marceliano Cruz & Roy Anthony Luna

Back Analysis of Volume Loss From Tunnelling in Chennai Formations
Parimala Ragunathan, Buddha Varma Nadampalli, N Kumar Pitchumani & G V R Raju

Strain Responses of an Existing Tunnel to Instability of New Tunnel Support Jiaqi Lin, Jianhong Zhang, Aixia Wang & Xiangsheng Chen

3D Analysis of TBM Tunelling Effects in Layered Soils using MIDAS GTS-NX Jyoti Agarwal, Gaurav Garg, Heman Manchanda, Chaitanya Gandhi & Gopal Passi

Ground Subsidence of Circular Tunnels under Static and Seismic Loads Shilpa Mary Sam, Shazin Muhammed & Seethalakshmi P

Appraisal of Face Stability in Soft Ground Conventional Tunneling Animesh Sharma, Ashish Juneja & Raghvendra Pratap Singh

Design and Construction of Low Overburden High-Speed rail Tunnel in India Uday Prasad Singh, Krishan Singh & Animesh Sharma

Effects of Tunneling on the Ground Surface Movement K.M. Dharme, K.L.V Reddy, N. Verma & D.S. Murty

Impact of Nearby Excavation on Stability of Existing Urban Tunnel N. Verma, K. T. Krishnanunni, M. J. John, B. V. S. Viswanadham & D. S. Murty

Performance of tunnel boring machine in basaltic deccan trap rock – A Case Study G. V. Rao, Uday Kulkarni & Renu Kulkarni

Stability Assessment of Water Curtain Tunnel in Very Poor Rockmass Anjali J & Altaf Usmani

Venue: Day-in Day-out

Date: Oct 07, 2025. | Time: 2pm to 4pm

Topics: Cold, Coastal and Environmental Geotechnical Engineering

Thematic Lecture:

The Geotechnical Love Affair with Landfills G. V. Ramana

Contributed Presentations:

Analysis of desiccation cracking in high plasticity compacted clay using DIA and DIC Soumik Majumder, Brijesh Kumar Agarwal & Ajanta Sachan

Swelling and Infiltration Properties of Bentonite with Different Cations under Various Solutions

Daichi Ito, Nanase Yamada, Hailong Wang & Hideo Komine

Influence of Cd2+ and Cr6+ on compressibility of crosslinked biopolymer treated soil R.M. Rasheed, S.S. Fathima, S.A. Akhila, C. Panchami, S. Roshitha, M. Nuruddin & A.A.B. Moghal

A Heuristic Approach to Optimizing Shallow Geothermal Energy Storage in Unsaturated Clay Formations

Aditya Deshmukh, Alireza Fakhrabadi, Puneet Bhaskar, Anand J Puppala & Xinabo Yu

State-of-the-art Detection of Pharmaceutical Contamination in Soil Yi En Chng, Thanusan Ranjan, Sean Shao Zuen Lau, Jun Cheng Kho & Mavinakere Eshwaraiah Raghunandan

Red mud effects on shrinkage potential of bentonite clay J. Shaikh, G. Sridevi, S. Kumar & P. Ahir

Environmental risk assessment of tailing dams in Iran
Pedram Nasiri, Abbas Soroush, Seyed Mohammad Fattahi & Mohammad Mehdi
Salarirad

Estimation of Methane Emission from Municipal Solid Waste Dumpsites using Modified FOD Model

Manish Sharma & Mohit Somani

A novel nano-based approach to mitigate alkali-induced swelling in red soil T Aravind Kumar, P Hari Prasada Reddy & Sai Kumar Vindula

Sustainable Solutions for utilizing the Abandoned Oil and Gas Wells to extract geothermal energy-A review
Faakirah Rashid & Devendra Narain Singh

Safe Utilization of Wastewater Sludge: From Lab Characterization to Field Use D.R. Pathak, B. Acharya, B.B. Chand & L. Pathak