

Venue: Assembleia 1

Date: Oct 08, 2025. | Time: 2pm to 3:30pm

Topics: Ground Improvement and Stabilisation

Thematic Lecture:

Infrastructure Soil Stabilization and Ground Improvement: Case Studies and Insights
Sunil. S. Basarkar & Tamoghna Dasgupta

Contributed Presentations:

Effect of Lime and Fiber Addition on Shear Strength Response of Locally Available Soil
Sujay Vipulbhai Teli, Pragya Rathor & Ajanta Sachan

Shear Strength Behavior of Cementitious Mixes Incorporating Copper Slag and Rice Husk Ash
A.K. Agnihotri & K. Sharma

Strength Behaviour of Soluble Sulphate contaminated Lime Treated Soil
A. K. Jha, Shivanshi, V. B. Singh & Md. P. Akhtar

Engineering performance of alkali-activated slag-stabilized expansive soil
Datla Neeraj Varma & Suresh Prasad Singh

Enhancing Long-term Durability of Air Injection Induced Partially Saturated Soils using Xanthan Gum
Rima Das, Shubham Raj & Kasinathan Muthukkumaran

Comparative Analysis of Improved Soaked CBR Values in Local Subgrade Soil using Geogrid and Fiber Reinforcement
M U Rasool, H Iqbal, P Halder & R Bhowmik

Use of Carbon Nanotubes as Additives to Improve Liquefaction Resistance of Sands
Shaswat S & Rolando Orense
Bin-Hua Xu, Cholachat Rujikiatkamjorn, Buddhima Indraratna, Thanh Nguyen & Isuri Wijayarathne

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Venue: Assembleia 2

Date: Oct 08, 2025. | Time: 2pm to 3:30pm

Topics: Transportation Geotechnics

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Thematic Lecture:

Performance evaluation of geosynthetic-reinforced pavements under monotonic and repeated loading

S. Saride, A.K. Ram & S. Jain

Contributed Presentations:

Performance of Geocell-stabilized Expansive Subgrades in Flexible Pavements

Sundaram Srivastava, Umashankar Balunaini, Prabodh Kumar Mahopatra & Hariprasad Chennarapu

Utilization of Geotextile Reinforcement in Unpaved Road to Induce Long-term Performance

Nayan Jyoti Sarma & Arindam Dey

Evaluation of Pavement Performance under Light and Medium Duty Electric and Conventional Vehicles

Pratik Chaudhary & Sireesh Saride

Performance Evaluation of Geogrid in Pavement Stabilization under Varying Subgrade Conditions

Harish Sharma, Ratnakar Ramesh Mahajan, Saurya Dash & Gianluca Spadaro

A Comparative Study of Durability Characteristics of Bioenzyme-Cement Treated RAP mixes

Ashish Mishra, Rakesh Pydi & Sunny Deol Guzzarlapudi

Dune Sand Stabilization using Sustainable Pozzolanic Cement Supplementary Material

M.V. Shah & Sandipkumar Kori

Permeability of Granular Layers: A Critical Review of Predictive Techniques

Abishek R R & Sireesh Saride

Numerical Evaluation of Lightweight Geofoam-Filled Highway Embankment on Indian Soft Subsoils: A Case Study Approach

Vaibhav Vilasrao Butle, Parvathi G.S., Anirban Mandal & Srinivasan V

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Venue: Assembleia 3

Date: Oct 08, 2025. | Time: 2pm to 3:30pm

Topics: Cold, Coastal and Environmental Geotechnical Engineering

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Thematic Lecture:

Engineering the unsaturated soil behaviour for agricultural drought preparedness

S. Sreedeeep, B. Rattan & Saha, A.

Contributed Presentations:

Experimental evaluation of freeze-thaw cycles on seasonally frozen soils of Sela pass,
Tawang, Arunachal Pradesh

Chukhu Tagar, Ajanta Kalita & Arindam Dey

Effect of Freeze-thaw on Compressibility Behavior of Fine-grained Soils

Majid Hussain, Prashant Singh, Mohammad Sameer Dar & Asish Kumar

Freeze-thaw testing of gabion retaining walls on cantonal road 257, Switzerland

Jérémy Torche & Erika Prina Howald

Behavior of Marble Rock Exposed to Freezing-Thawing Cycles under Quasi-static and
High Strain Rate Loads

Naveen M & Ankesh Kumar

Ultrasonic Pulse Velocity for Measurement of Unfrozen Water Content in Frozen Soil

*Ramachandran Arangadurai, Jeevan Joseph, Velnampy Sathusikan, Arun P G, Rahul B
& Deepak C K*

Performance of thermal conductivity models for saturated fine grained soils

Arjun Sivaprasad & Prasenjit Basu

Influence of Heating on Swelling Pressure for Bentonite-sand Mixture with Suction
Control

Tomoyoshi Nishimura

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Venue: West 1

Date: Oct 08, 2025. | Time: 2pm to 3:30pm

Topics: AI and Computational Geomechanics

Contributed Presentations:

Numerical Simulation of Cone Penetration in Sand Focusing on State Parameter-based Interpretation

Biswaranjan Dalnayak, Vikram Singh & Santiram Chatterjee

Implications of Stress-Dilatancy Modelling on the Dynamics and Depositional Feature of Granular Flow

Tanishq Karanwal, Mousumi Mukherjee, Tien V. Nguyen & Ha H. Bui

Uplift Response of Deep Horizontal Plate Anchors in Cohesionless Soil: A Discrete Element Approach

Sowmya Ramani S, Gopika Rajagopal & Sudheesh T K

Modelling of Soil Erosion using Discrete Element Method: Challenges and Limitations

Margi Dave & Ashish Juneja

Evaluation of the Multi-level Morphology of 3D-printed Grains

KV Anusree & Gali Madhavi Latha

Hydromechanical Coupling of One-dimensional Water Infiltration Through Unsaturated Soil

Pushkar Nath Chaurasia & Manash Chakraborty

Comparative Assessment of a Few Thermomechanical Clay Constitutive Models

Irfan Ahmad Shah, Prasenjit Basu & Santiram Chatterjee

Numerical Assessment of Embankment Settlement on Soft Soils using Different Constitutive Models

Charakho N Chah, Naveen Kumar & Sreedeeep Sekharan

Analytical model for evaluating forces during extra-terrestrial regolith drilling for lunar missions

V. Raghav, A. Kamboj, A. Kejriwal, A. Kapoor, A. Kumar, K. Balaji & A. Shankara

Parametric Analysis and Modelling of Gas Hydrate Sediment Behaviour

Sahil Wani & Ramesh Kannan Kandasami

GIS-based AHP and DNN Models for Flood Susceptibility Mapping in South Tripura, India

Abhinandan Thakur, Kunjari Mog & Shivam Sharma

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Venue: West 2

Date: Oct 08, 2025. | Time: 2pm to 3:30pm

Topics: Practice, Risk and Education

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Thematic Lecture:

Characterisation of carbonate soils and their Impact on geotechnical designs - Case Studies
CR Parthasarathy & Prashanth Talkad

Contributed Presentations

Development of Sinkhole Susceptibility Map of Tehran City and Faced Challenges
Esmaeil Salimi, Mehdi Bolbolvand, Mohsen mojezi, Ali Fakher, Mohammad Mojallal & Khashayar Nikoonejad

Use of Geotechnical techniques for control of the high-water seepage along the River:
Case study of Small hydropower project at Koraput district, Odisha, India.
Vinay Kumar Pandey & Ramesh Kumar

Weathering the Future: Climate-Resilient Road Design Lessons from Nepal's BP
Highway Flood 2024
Rajan KC, Mandip Subedi, Sumit Adhikari, Kabin Lamichhane, Bijay Raj Marasini, Biraj Ojha, Suresh Neupane, Anil Bhattarai, Nitesh Thakur & Karan Budhathoki

Geotechnical Investigation for Wind Turbine Foundations on Liquefiable Silts in
Katchchh, Gujarat
Ravi Sundaram, Sanjay Gupta & Sorabh Gupta

Influence of Cavity Placement in Lateritic Rocky Strata on Collapse Load: A Case
Study
Annapurna Milind Sakhardande, Ganesh Hegde & Nisha P Naik

Experimental Investigation of Rock Anchor for Pile Load Testing
J. S. Salunkhe, Sohel. I Shaikh & Priti. V Wankhede

Standard Penetration Test: Standard Versus Practice in Bangladesh
Mohammad Mominul Hoque & Md. Mizanur Rahman

Design and construction of a road embankment using cellular foundation mattress
over weak ground
Mitul Dalwadi, Andrew Lees, Jacek Kawalec & Drew McCartney

Venue: All Day All Night

Date: Oct 08, 2025. | Time: 2pm to 3:30pm

Topics: Foundations and Deep Excavation

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Thematic Lecture:

Impacts from Consolidation Caused by Deep Excavation in Clay in Jakarta, Indonesia
*Bin-Chen Benson Hsiung, Muhammad Dwiyanto Agung Prakasa, Khac-Hai Phan,
Hesbon Moriasi, Fu Chen Teng & Chihping Kuo*

Contributed Presentations:

Assessment of Gravel Soils in Bridge Foundation Construction using X-Ray CT Analysis
and Density LOG
Kota Wakinaka, Kenta Hoshino, Hideki Mori & Jirou Shiotsuka

Thermal Performance of a Geothermal Pile Group in the presence of Coupled Thermo-
Hydro Flow Condition in Layered Soil
Arvind Kumar Tiwari & Prasenjit Basu

Non-destructive Evaluation for the Integrity of Geostructures Based on
Electromagnetic Waves
Jong-Sub Lee, Dongsoo Lee & Younghoon Lee

Forensic Geotechnical Analysis of Sinking of Large Concrete Slurry Tanks
K. T. Krishnanunni, D. Bishnoi & D. S. Murty

Effect of Footing-soil Stiffness ratio on Axial Dynamics of Shallow Footings
Bipin Kumar Gupta & Nikita Joshi

Pile Integrity Testing for Light Rail Project in Kazakhstan using Cross-Hole Sonic
Logging
Feng Yuxuan & Balganym Dosmukhambetova

A Case Study of Bi-directional Static Load Pile Test and Data Interpretation
Anik Kumar Chakraborti, Shreyansh Kumar Golchha & Aprajita Uppadhyay

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