

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

Venue: Assembleia 2

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

Topics: Transportation Geotechnics

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

Fragility of Road Infrastructure Against Landslides in Uttarakhand, India Akshat Vashistha & Srikrishnan Siva Subramanian

Venue: Assembleia 3

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

Topics: Cold, Coastal and Environmental Geotechnical Engineering

Thematic Lecture:

Engineering the unsaturated soil behaviour for agricultural drought preparedness Sreedeep S., Abhisekh Saha, and Bharat Rattan

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

Cross-linking biopolymers using salt for frost susceptible silty soils Avishek Ghosh, Debayan Ghosh, Aritra Banerjee & Bhaskar Chittoori

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

Venue: South 1

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

Topics: Practice, Risk and Education

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*

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

Bayesian Updating of Slope Parameters for Spatially Variable Lateritic Soil Cutting *Priyanka Shadani, Sushant Rahul & Akanksha Tyagi*

Design and construction of a road embankment using cellular foundation mattress over weak ground

Mitul Dalwadi, Andrew Lees, Jacek Kawalec & Drew McCartney

Venue: South 2

Date: Oct 08, 2025. | Time: 2pm to 3:30pm Topics: Foundations and Deep Excavation

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 Assessment of Geothermal Micropile as a Sustainable Heating/cooling Solution for Existing Buildings

Arvind Kumar Tiwari & Rao Martand Singh

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

Numerical Investigation of Normal and Elasticized Geofoam Inclusion Behind a Rigid Yielding Wall

Dinesh Bishnoi & Satyanarayana Murty Dasaka

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

Venue: West 1

Date: Oct 08, 2025. | Time: 2pm to 3:30pm **Topics: Al and Computational Geomechanics**

Contributed Presentations:

Numerical Simulation of Cone Penetration in Sand Focusing on State Parameterbased 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 & Sreedeep 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,

Abhinandan Thakur, Kunjari Mog & Shivam Sharma