Venue: Assembleia 1

Date: Oct 09, 2025. | Time: 4pm to 5:30pm Topics: Ground Improvement and Stabilisation

Contributed Presentations:

Constitutive Modeling and Fluidization Mitigation of Soft Soil Subgrades under Cyclic Rail Loading

Bin-Hua Xu, Cholachat Rujikiatkamjorn, Buddhima Indraratna, Thanh Nguyen & Isuri Wijayarathne

Finite Element Modelling of California Bearing Ratio Test in Plaxis 2D Ankur Abhishek & A. Guharay

Uniaxial Compressive Strength Increment by MICP and Discrete Element Modelling by PFC

Shivam Pandey, Arvind Kumar Jha & Trilok Nath Singh

Numerical Study on Axial Pullout Capacity of Group of Granular Anchor Pile Embedded in Sandy Soil Shweta Singh & Vishwas A Sawant

Design Curves for Preloading Nonlinear Consolidation with Vertical Drains Khrawboklang Kharsyiemiong, Vishwas A. Sawant & Satyendra Mittal

Study on Measurement of Wide-Area Ground Displacement using Interferometric SAR Analysis

Yuri Sugiyama, Daiki Takano, Mitsukazu Kageshima & Takumi Onuma

Numerical Evaluation of Geocell Reinforced Sand Layer Overlying Soft Clay Bed under Vertical Loading

Aswathi M & B V S Viswanadham

Numerical Investigation of Cement-stabilised Quarry Dust using DEM *Milind Amin, M Saravanan & Rakesh J Pillai*

Mechanical Modification of Laterite Soils Considering Root – Soil Interaction Mahima D., Jayasree P.K. & K. Balan

Venue: Assembleia 2

Date: Oct 09, 2025. | Time: 4pm to 5:30pm

Topics: Practice, Risk and Education

Contributed Presentations

Quarry Waste as a Sustainable Shell Material in Embankment Dam Construction Debdip Das & Ravi S. Jakka

Stabilization of Clayey Sand Embankment Soil using Guar Gum Biopolymer: An Ecofriendly Solution

Rakesh Pydi, Ashish Mishra, Laxmikant Yadu & Sandeep Kumar Chouksey

Dynamic Behavior of Clay-Rubber Soils: A Probabilistic Approach using Index Test and Empirical Model

Aman Mishra & Laxmikant Yadu

Large Scale Testing for Mine Waste Rocks Dong Wang, Tim Sullivan & Tim Nash

Application of Six Sigma in the Precision Testing of Standard Soil Mixes *J. A. R. Manaloto*

Measured Shaft Resistance of Bored Piles on Liquefiable Fine-grained Soils of Basin Swamp in Luzon, Philippines Rhey Gonzales, Roodney Ortal, Gian Reyes & Roy Luna

Sheet-pipe Installation Model Equipment for Digging a Hole Koremasa Tamura, Hiroshi Matsuda, Budi Indra Setiawan & Satyanto Krido Saptomo

Image Analysis of Model Pile Penetration using Mechanoluminescent-Coated Particles Akihiko Kondo, Daiki Takano, Eiji KOHAMA & Richard J. Bathurst

Building Information Modelling in Geotechnical Engineering Menaka K. & G. L. Sivakumar Babu

Practical Simulation Techniques: Magical Teaching Approach of Geotechnical Engineering

Pallavi Badry

Venue: Assembleia 3

Date: Oct 09, 2025. | Time: 4pm to 5:30pm

Topic: Geosynthetic Engineering

Contributed Presentations

Numerical Analysis of Geogrid Reinforced Soil Walls Subjected to Pseudo-static Seismic Loading

Sougata Mukherjee & Bhamidipati VS Viswanadham

Pullout Behaviour of Reinforcement in Reinforced Earth Wall Ankit Kumar, Vishnu Vamsi Mullangi & Dasaka Satyanarayana Murty

Geosynthetic Reinforced Soil Wall with Geocell Fascia Rizwan Ahamad, Abhay Shelke & Shabana Saeed Khan

Pullout Modeling of Modified Coir Geotextile-soil Interaction *Aarathy S.S., Divya P.V., & Sumy Sebastain*

Numerical Analysis of Ordinary and Encased Granular Piles with Tyre-derived Aggregates in Soft Clays Jayapal Jayarajan

Interface Shear Efficiency of Geocell Anchor Cages Aarya Krishna & Madhavi Latha Gali

Influence of Spread Ratio of Overlapping Geogrids on Pullout Resistance Factors and Shear Parameters

Abdelhakem Osman Abdallah Mohammed, Bhargav Kumar Karnamprabhakara & Umashankar Balunaini

Ground Improvement and Drainage Solution using Geosynthetics Section of NH-34 West Bengal

Sukrati Pandit, Saurabh Rajpoot, Gianluca Spadaro, Rudra Budhbhatti & Ratnakar Ramesh Mahajan

Design and Construction of Two-Tiered Polymeric Strip Reinforced Soil Wall P. S. Harshith, Nishitha Takkallapally, Rudra Budhbhatti & Ratnakar Ramesh Mahajan

Penstock Slope Stabilization using Geogrids as Reinforcements: A Case Study of Middle Tamor Hydropower Project (MTHP)- 73 MW Manab Rijal, Ratnakar Mahajan, Bipin Khanal & Bishes Bastola

Venue: South 1

Date: Oct 09, 2025. | Time: 4pm to 5:30pm Topics: Foundations and Deep Excavation

Thematic Lecture:

Influence of Deep Excavation and Foundation Loading on the Response of the Existing Tunnel in Sand

Ramanathan Ayothiraman, Vinay Kumar Singh & Sumeet Mahajan

Contributed Presentations:

Deep Soil Mixing with Steel Inclusion for 10m Excavation Support *Zhiwei He, Jet Si & Kam Weng Leong*

A Study on the minimum required cohesion for retention of soil in excavations using Soil Nailing systems

M. Nagalakshmi & C.N.V. Satyanarayana Reddy

Deep Excavation in Weathered Rock Profile Anirudhan I.V. & Madan Kumar Annam

Parametric Analysis of Anchored Diaphragm Wall Support System for Deep Excavation Mahendra Patel & Baleshwar Singh

Study on Trench Stability in Construction Test of Diaphragm Wall with Enlarged Part Akihiro Iwata, Koji Watanabe & Toru Watanabe

Performance of Sand-tire Derivative Mixture as a Compressible Inclusion Behind Retaining Wall

Subharthi Chattopadhyay & Adyasha Swayamsiddha Amanta

In Search of Alternative Solutions for Bridge Substructure – A Case Study M. S. Jambagi, Renu Kulkarni & Uday Kulkarni

Assessment of Vertical Anchor Stability in Unsaturated Sandy Soil M. Mushtaq & J. P. Sahoo

Design and Construction of Seepage Barriers using Plastic Concrete S. Chakraborty, S. K. Koley & P. K. Ray

Venue: South 2

Date: Oct 09, 2025. | Time: 4pm to 5:30pm

Topics: Rock Mechanics and Tunnelling Engineering

Contributed Presentations

A Mesoscale Model for Conglomerate and Breccia Rock Fracture *Timo Saksala & Reijo Kouhia*

Thermal, Physical, and Mechanical Properties of Rock Subjected to Thermal Shock by Water Treatment

Rugesh Kalanji, Ankesh Kumar & Jogender Singh

Effect of Degree of Saturation on Strength of Siltstone and Strength Prediction using ANN

G. You, J. Ganehi-Arachchilage, C. Stuart & S. Manamperige

Hydro-mechanical Coupling Analysis of Carbon Dioxide Migration in Saline Aquifers Shao-Min Chiang, Ming-Hsien Chuang, Meng Chia Weng, Hoang-Khanh Le & Bo-Lin Wu

Stiffnesses and Shear Strength of Rock Joints Rajeev Kumar & Vinay Kumar Pandey

A Generalized 3D Implicit Constitutive Model for Predicting Uniaxial Stress-Strain Response of Granite Rocks

Naveen K J, Ankesh Kumar, Gokulnath C & Ashish Juneja

Implementing a Monitoring Programme and TARP System on the Northern Wall of the Chadormalu Iron Mine

Soroush Alimadadi, Abolfazl Rezaeipour & Saeed Mahmoudi Janaki

An Innovative IoT Based Alert and Monitoring System for Rock fall and Debris Flow Mitigation Systems, Geostability monitoring and Events- Case history Rudra Budhbhatti, Ratnakar Ramesh Mahajan & Domenico Paldio

Rockfall Hazard Assessment and Mitigation Measures for Rasuwagadhi Hydroelectric Project, Nepal

Darshan Babu Adhikari & Mohan Prasad Acharya

Negotiating through Geological Hazards of Deccan Trap for NATM Tunnel Ameya Suhas Mehta, Uday Kulkarni & Renu Kulkarni