Venue: Assembleia 1

Date: Oct 09, 2025. | Time: 4:30pm to 6:30pm Topics: Ground Improvement and Stabilisation

#### **Thematic Lecture:**

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

## **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

Comparative Study of Geocell Reinforced C&D waste and Natural Aggregates as Base Layers under Repeated Loading

Barmavath Shiva Prasad & Umashankar Balunaini

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

Effectiveness of sugarcane molasses as a broth medium in MICP Vikas Rawat & Neelima Satyam

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

Shivam Pandey, Arvind Kumar Jha & Trilok Nath Singh

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

Charity Marbaniang & Ashish Juneja

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

Stabilization of high-sulfate soils using lime and quarry dust A. Mukherjee, S. Suresh, S. Chakraborty & U. Patil

Venue: Assembleia 2

Date: Oct 09, 2025. | Time: 4:30pm to 6:30pm

**Topics: Practice, Risk and Education** 

### **Thematic Lecture:**

Evaluating Hybrid SOE Systems for High-Risk Urban Excavations: A Case Study Approach

Shahab Yasrebi & Emad Zolqadr

#### **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 Eco-friendly 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

Developing Correlation for Friction Angle for Silty Sand (SM) Soils using SPT (N1)60 Values in Gujarat, India

M. P. S. K. Lakshmi & C. N.V. Satyanarayana Reddy

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

Critical review on Seismic Performance based design of quay walls as per Indian and Japanese Codes
K Pushpa, P Nanjundaswamy & S. K Prasad

Venue: Assembleia 3

Date: Oct 09, 2025. | Time: 4:30pm to 6:30pm

**Topic: Geosynthetic Engineering** 

### **Thematic Lecture:**

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

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

## **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

Micromechanical Insights into Frictional Behavior at Non-dilative Geomaterial Interfaces

Lalit Kandpal, Prashanth Vangla & Satoshi Matsumura

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

Abdelhakem Osman Abdallah Mohammed, Bhargav Kumar Karnamprabhakara & Umashankar Balunaini

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

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

**Venue: South 1** 

Date: Oct 09, 2025. | 4:30pm to 6:30pm 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

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

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

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

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

Dinesh Bishnoi & Satyanarayana Murty Dasaka

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. Mushtag & J. P. Sahoo

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

Dynamic response of circular footing: Findings from experimental soil-foundation interactions

Fardin Jafarzadeh & Jafar Maleki

Venue: South 2

Date: Oct 09, 2025. | 4:30pm to 6:30pm

**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

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

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

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

Influence of rock mass on uplift anchor behavior: field & FEM studies G.S. Parab, V.V. Dandage & A.V. Sharma

Venue: West 1

Date: Oct 09, 2025. | Time: 4:30pm to 6:30pm

**Topics: Slope Stability and Landslides** 

### **Thematic Lecture:**

Integrating TabNet and SHAP for Interpretable Landslide Susceptibility Modeling in Minnesota

Surya Sarat Chandra Congress, Ambikesh Dwivedi, Raul Velasquez, Prince Kumar & Uiwalkumar Patil

## **Contributed Presentations**

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

Hydrometeorological Analysis of Rainfall Variability (2000 2024) and Its Implications for Slope Failures in Nepal

Kabin Lamichhane, Saroj Karki, Keshab Sharma, Biplav Acharya, Rajan KC & Karan Budhathoki

Integrated Geophysical and Geotechnical Assessment of Unstable Slope in Kaligandaki Corridor, Nepal

Biraj Ojha, Rajan KC, Nitesh Thakur, Mandip Subedi, Jibendra Mishra, Kalpana Adhikari, Keshab Kumar Sharma, Indra Prasad Acharya & Laxman KC

Lessons learnt from recent landslides in Goa Preeyal Fernandes & Purnanand P. Savoikar

Application of Micro-pile for slope stability, case study of Jhyaple Khola, NM Road, Nepal

Udaya Raj Neupane, Tukalal Adhikari, Saurav Ghimire & Jenish Sharma

Comparative Assessment of Antecedent Rainfall Threshold for Roadside Landslide Prediction

Suresh Neupane & Netra Prakash Bhandary

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

Seismic Response of Imja Lake Moraine Dam and Outlet Structure under Kobe and Chile Earthquakes

P. Dangi Chhetri, A. Tiwari, S. Sapkota & R. C. Tiwari