10th INDIAN YOUNG GEOTECHNICAL ENGINEERS CONFERENCE

INDORE, INDIA



 10^{th} IYGEC $11^{th} - 12^{th}$ March 2025

SCHEDULE

Organised by



Department of Civil Engineering INDIAN INSTITUTE OF TECHNOLOGY INDORE

In association with



Indian Geotechnical Society, Ujjain, Indore, Jabalpur, and Bhopal Chapters

10th INDIAN YOUNG GEOTECHNICAL ENGINEERS CONFERENCE

INDORE, INDIA

----- Chief Guest -----



Dr. Sanjay Gupta, IAS Commissioner Ujjain Division



Sh. Rajeev Saxena Joint Secretary, Ministry of Textiles







Prof. Suhas S. Joshi Director, IIT Indore





Dr. Anil Joseph President, Indian Geotechnical Society



Dr. Ramu Baadiga IIT Indore



Conference Convenors

Prof. Neelima Satyam IIT Indore



Dr. Raghavendra Singh UEC Ujjain

SPECIAL INVITED LECTURES



Prof. GR Dodagoudar IIT Madras



Sh. Rajeev Saxena Joint Secretary, Ministry of Textiles

KEYNOTE SPEAKERS



Dr. Divya P. V. IIT Palakkad



Mr. Deeraj Kumar Reddy TechFAB India Industries Ltd.



Dr. Mohit Somani IIT Bhubaneswar



Ms. Vimala Keller India



Dr. Shilpi Mahapatra AtkinsRéalis



Dr. Divyesh Rohit TechFAB India Industries Ltd.

10 th INDIAN YOUNG GEOTECHNICAL ENGINEERS CONFERENCE (10 th IYGEC, 2025) 11 th – 12 th MARCH 2025 CORPORATE PRESENTATIONS 11 th March 2025		
Company	Presenters	
TechFab India Industries Pvt Ltd.	Mr. Manish Barot	
Vishwa Samudra Engineering Pvt. Ltd	Krishna &	
	Muli Nagendra	
Garware Technical Fibres Ltd.	Mr. Budhmal Jain	
12 ^{tt}	^a March 2025	
Company	Presenters	
Bonton Technomake Pvt Ltd	Mr. Vinod Bapna	
Maccaferri Environmental Solutions Pvt. Ltd	Mr. Sumit Pathak	
	Topic: Sustainable Erosion Control Using the RUSLE	
	Approach	
Suntech® Geotextiloe Pvt Ltd	Mr. Ashish Parakh	

10 th INDIAN YOUNG GEOTECHNICAL ENGINEERS CONFERENCE				
(10 th IYGEC, 2025)				
11 th – 12 th MARCH 2025				
	Conference Schedule at a Glance			
VENUE: IN	IDIAN INSTITUTE OF TECHNOLOGY I			
	DAY 1: 11 th MARCH 2025, TU			
8:00 - 10:00	Registration	Breakfast		
	Venue: Lecture Hall Complex	Venue: Carbon Building		
10:00 - 11:00		Ceremony da Auditorium		
11:00 - 11:30		Stall Exhibition		
11.00 - 11.30		e Hall Complex		
	PLENARY S			
11:30 - 12:15		gility analysis of GRS bridge abutments		
	using nonlinear fin			
	e	dagoudar, IIT Madras		
	Venue: Nalano			
12:15:12:45		nd monitoring of a hybrid reinforced soil		
	Wa			
	Keynote Speaker: Dr. Divya P. V., IIT Palakkad			
12.45 12.15	Venue: Nalanda Auditorium			
12:45 - 13:15	Keynote Lecture 2 – Landfill Rehabilitation in India - Challenges with Biomining			
	and Way Forward Keynote Speaker: Dr. Mohit Somani, IIT Bhubaneswar			
	Venue: Nalanda Auditorium			
13:15 - 14:15	Lunch			
	Venue: Carbon Building			
14:15 - 15:15	Corporate Presentations			
	Venue: Maitree Seminar Hall			
15:15 - 16:15	Parallel Techni			
	Venue: Lecture Hall Complex (L01 – L04, L11 – L14, L21 – L24)			
16:15 - 16:45	High Tea			
16.45 10.00	Venue: Lecture Hall Complex			
16:45 - 18:00	Parallel Technical Sessions – 2 Venue: Lecture Hell Complex (L01 – L04 – L14 – L14 – L24)			
18:00 - 19:00	Venue: Lecture Hall Complex (L01 – L04, L11 – L14, L21 – L24) Stall Exhibition			
10.00 - 17.00				
19:00 - 20:00	Venue: Lecture Hall Complex Cultural Program (Talent Night)			
		e Seminar Hall		
20:00 - 22:00		ner		
	Venue: Carb	oon Building		

10 th INDIAN Y	YOUNG GEOTECHNICAL EN	NGINEERS CONFERENCE	
	(10 th IYGEC, 2025)		
	11 th – 12 th MARCH 202	5	
VENUE: IN	IDIAN INSTITUTE OF TECHNOLOGY I		
	DAY 2: 12 th MARCH 2025, WEI		
8:00 - 9:30	Registration	Breakfast	
	Venue: LHC	Venue: Carbon Building	
	PLENARY S		
9:30-10:00	Special Invited Lecture		
	Joint Secretary, M	•	
10.00 11.00	Venue: Maitree		
10:00 - 11:00	Keynote Lecture 3 – Applications		
	Latest advancements in applications	-	
		vyesh Rohit, TechFab India	
		Kumar Reddy, TechFab India	
	Venue: Maitree		
11:00 - 11:15	High Tea and S	Stall Exhibition	
	Venue: Lecture		
11:15 - 11:45	Keynote Lecture 4 – Geotechnical design considerations for geomembrane faced		
	rockfill dar		
	Keynote Speaker: Dr. Shilpi Mahapatra		
11.45 10.15	Venue: Maitree Seminar Hall		
11:45 – 12:15	Keynote Lecture 5 – Insights of Bored Piling in Complex Ground Conditions: A Case Study		
	Keynote Speaker: Ms Vimala, Keller India Venue: Maitree Seminar Hall		
12:15 - 13:15	Corporate P		
12.15 15.15	Venue: Maitree		
13:15 - 14:15	Lunch		
	Venue: Carbon Building		
14:15 - 15:15	Parallel Technical Sessions – 3		
	Venue: Lecture Hall Complex (L01 – L04, L11 – L14, L21 – L24)		
15:15 - 16:15	Parallel Techni		
	Venue: Lecture Hall Complex (L		
16:15 - 16:30	High Tea		
16.20 17.45	Venue: Lecture Hall Complex		
16:30 - 17:45	Valedictory ISL 2028 Website Launch		
17:45 - 18:45	Venue: Maitree Seminar Hall Stall Exhibition		
17.75 - 10.75			
18:45 - 19:45	Venue: Lecture Hall Complex Networking		
20:15 - 22:00	Dinner		
	Venue: Carbon Building		



TECHNICAL SESSION – 01			
Ground Improvement Techniques – I			
Time: 15:15 – 16:15 16:45 – 18:00	Venue: L – 01	Date: 11-03-2025	
Paper ID	Title	Author	
002	A Comparative Study on Casagrande's Log Time and Taylor's Root Time Methods	Arindam Medhi and Ankurjyoti Saikia	
005	Three-Dimensional Seismic Behavior of Hill Buildings Considering Topographic Amplification	Dr. Sukanta Das	
010	Study on Compressive Strength Characteristics of Fine- grained Soil Mixed with Sand and Jute Fiber	Kabiraj Mahata and Ashis Kumar Bera	
020	Response Spectrum Analysis of G+15 building using ETABS	Deepshikha Shukla, Deepak Kumar, Aditi Yadav and Akshay Saini	
021	Comparative Analysis & Seismic Performance of LRB With Bracing & Viscous Dampers	Deepshikha Shukla and Moirangthem Barnat Meitei	
027	Compression Ratio Method for the Analysis of Radial Consolidation Problem	Aparna R Pillai, Robinson R G	
029	A carbon sink material for minimizing the deformation of saline expansive soil	Wenliang Liu, Ankit Garg, Lina Xiao, Neelima Satyam and Askar Zhussupbekov	
031	Performance Evaluation of Coir Made Geocells in Granular Soil Mass: An Experimental Study	Tanmoy Shil and Sujit Kumar Pal	
033	Stabilization of Black cotton Soil of Vindhya Region Using Rice Husk Ash (RHA)	Aman Pandey	
039	An Integrated Approach to Expansive Soil Stabilization with Lime and Biodegradable Jute Fiber	Subhojit Chattaraj and Sandeepan Saha	
042	Use of Menstrual Waste (Sanitary Pads) to Improve the Bearing capacity of Black Cotton Soil & Its Predicted Loads Using Response Surface Method (RSM) And Artificial Neural Network (ANN) Method	Prathik Kulkarni, Aastha Ghongade and Narendra Kanhe	
052	Utilisation of biomass rice husk ash waste as a potential binder for the stabilisation of clayey soil	Keerthana T V and Anjana Bhasi	
053	Performance Evaluation of Natural and Recycled Aggregates in Stone Columns: A Sustainable Ground Improvement Approach	Abhijeet Shukla, Neeraj Kumar, Vaishali Yede, Akash Jaiswal, Rakesh Kumar	
054	Capacity of pile group placed on sloping terrains under lateral loading	Aman Tiwari, Suneet Kaur, Nitin Dindorkar	
069	Enhancement of Soft Soil Ground Using Synthetic China Nylon Cord Fiber	Subhadeep Mondal, Labani Nandi, Sudip Basack, Joyanta Maity, Subha Sankar Chowdhury	
071	Geotechnical Evaluation of Clay Stabilized With Blast Furnace Slag And Fly Ash	Vikash Singh, Zishan Raza Khan, Arshad Hameed, Abdul Nabi	
	Q & A Session		

	TECHNICAL SESSION – 01		
Ground Improvement Techniques – II			
Time: 15:15 – 16:15 16:45 – 18:00	Venue: L – 02	Date: 11-03-2025	
Paper ID	Title	Author	
072	Assessing the efficacy of terrazyme as a soil stabilizer	Shahbaz Ahmad Mir, Vikash Singh, Samreen Bano, Vinay Bhushan Chauhan	
073	Effect of waste ceramic powder and calcium carbide residue on strength characteristics of soil	Yogitrika Thakur, Ravi Kumar Sharma	
076	Study of group of stone columns on effect of liquefiable soil	Tushar Jadhav, Dr. Nitin H. Joshi, Dr. Jaykumar Shukla, Dr. Lalit Thakur	
078	Stabilizing black cotton soil with a lime and bamboo fiber blend for subgrade applications	Avinash Rakh, Sagar Sonawane, Rajshekhar Rathod	
082	Experimental studies on coir- basalt geocomposite reinforced soil using plate load test	Aparna Dev T V, Manju G S	
089	Behaviour of soil nail wall using finite element modelling	Shashank Mohan Pandey, Saumya Kumar Mishra, Vinay Bhushan Chauhan	
091	Identification of most appropriate alkali-activated binder for tailings embankment material; a comprehensive review	Yatish Surve	
114	Reuse of dredged marine sediments in pavement construction	Akhila Chand C L, Bindu J	
123	A review on – stabilization of soil using basalt fiber	Akash Vansale	
127	Soil stabilization using industrial waste with alkaline activator for sustainable infrastructure: a critical review	Jagdish Patidar, Roop Kishor	
133	Stabilization of marine clay using recycled concrete powder (RCP) and the significance of silica-alumina ratio	Rejin P, Shivganga P, Dr Vandana Sreedharan	
136	Stabilization of black soil cotton soil using biopolymers.	Pradumna Layacha	
139	Performance of geosynthetic encased granular columns using C&D waste as a sustainable material	Neeraj Kumar, Rakesh Kumar, Akash Jaiswal, Abhijeet Shukla, Kirtish Kumar	
141	Effect of lime piles on the engineering behavior of black cotton soil: a ground improvement perspective	Kirtish Kumar, Rakesh Kumar, Neeraj Kumar, Abhijeet Shukla, Akash Jaiswal	
142	Analysis of embankment height impact on soft soil reinforced with stone columns: a numerical investigation	Vaishali Yede, Dr Rakesh Kumar, Dr. Nitin Dindorkar, Abhijeet Shukla	
146	Rutting behaviour of compacted subgrades having different clay mineralogy	H S Prasanna, Unnam Anil, Chethan C Katnavadi, Chiranth Balappa A R, Hayagreeva H	
Q & A Session			

TECHNICAL SESSION – 01 Ground Improvement Techniques – III		
Time: 15:15 – 16:15 16:45 – 18:00	Venue: L – 03	Date: 11-03-2025
Paper ID	Title	Author
151	An experimental analysis of CBR value improvement in soil reinforced with geotextile material	Zakar Ali
155	Cyclic stress-strain response of biopolymer treated fly ash	L Abhijith, Rangaswamy K, Renjitha Varghese
156	2d and 3d settlement analysis of spatially arranged rockfill trenches under overburden dumps on weak foundations	Rahul Shende, Sneha Pajai, Harshit Gupta, Srinivasan V
157	Sustainable ground improvement: a review on industrial waste utilization in India	T R Nikitha, Birithik P, Bhavya Namboothiri, Dali Naidu Arnepalli
164	Peat stabilization via stone column integration	Hrishikesh Kalita, Rajat Debnath, Ashim Kanti Dey
167	Analysis of soil structure interaction for multi-story building foundation using stone column-a review	Narayan Malviya, Raghvendra Singh
180	Application of sustainable solutions in ground improvement for resilience: a review	Aaisha Shahewar Sayyed
182	Waste foundry sand-based flowable fill for geotechnical engineering applications	Ramesh Sunkad, Annapurna Balulmath, Sridhar G
184	A review on - stabilization of soil using synthetic polyester fiber	Shrutika Mali
188	Effect of calcium chloride and quarry dust on expansive soil stabilized with groundnut shell ash and coir fiber	Gnana Prasanna G
190	Optimal pvds spacing for enhancing soft ground: a review of previous analytical studies	Khrawboklang Kharsyiemiong, Vishwas Sawant, Satyendra Mittal
191	Stabilization of sulfate-rich expansive soils - a review	Ganga Sri, Thyagaraj T
192	Ground vibration mitigation using open and in-filled trenches: fem based approach	Hansraj Saroj, Akarsh P K, Babloo Chaudhary, Subodh Kumar, Babita Sah
196	Study on a combined pile raft foundation having batter piles subjected to lateral loads using finite element analysis software	Reshma Illuri, Vinu Bhai Patel
203	Effects of polypropylene fibre reinforcements on the strength and stability of expansive soils	Ramesh Kailas Daundkar
208	Soil stabilization using fly ash, bagasse ash and lime	Ramesh Kailas Daundkar, Hrashavardhan G
212	Improvement of strength and consolidation behaviour of clay soil using scrap tyre derivatives	Adarsh Thakur, Manendra Singh

Casa Stu	TECHNICAL SESSION – 01 dies in Geotechnical Engineering and Off	fshare Cootechnics
Time: 15:15 – 16:15 16:45 – 18:00	Venue: L – 04	Date: 11-03-2025
Paper ID	Title	Author
009	Stability assessment of failed embankment on soft soils	Debabrata Giri, Sambit Kumar Sahoo
045	Investigation and mitigation of failure of reinforced earth retaining wall	Devendra Kumar Sharma, Anil Kumar Sinha, Syeda Yashmin, Devesh Jaysawal
049	Stability analysis of irrigation canal slope at Kandra Kota: a case study	Palli Karthikeya
061	Effect of pore water pressure fluctuations impacting soil stability in flood areas	Vamsi Kalyan Veerla, Harshitha Thada
063	A comparison on deformations of lateral loaded piles in sand and clay using the is code method and numerical modelling.	Subhojit Chattaraj
068	Critical evaluation and identification of landslide susceptible region in Guwahati city using analytical hierarchy process.	Nilotpoul Deka, Abinash Mahanta
094	Overcoming obstacles in solar park development: a case study of the Rann of Kutch	Gayathri S, Jiji Joseph, Ramesh Ts
108	Earth pressure on counterfort retaining wall – comparison of theoretical and numerical methods	Samrat Dutta, Debapriya Panigrahi, Manos De
150	Hasdeo Bango dam for seepage analysis using seep/w model: a case study	Shweta Dongre
175	A critical review of various retrofitting approaches in bridge engineering	Dipankar Nath, Dr. Abinash Mahanta
224	Effects of rock/soil properties on blasting vibrations	Kaushal Kumar Jangir, Dr. I K Pradhan , Dr. Ranjan Kumar, Dr. V S Phanikanth
240	Forensic evaluation of retaining wall failure on clay slopes: a case study	Mayuresh Ghule, Parvathi G.S., Srinivasan V
253	Assessing the influence of soil-structure interaction on the seismic behaviour of a high rise structure in northeast India	Antara Banerjee, Ashiqul Haque
283	Insights of bored piling in complex ground conditions: a case study	Vimala Chinnasamy, Madar Kumar Annam
67	Lateral response of caisson foundation under the influence of vertical load in a layered clayey deposit	Puran Puran, Pratik Goel, Kaustav Chatterjee
161	Influence of skirts on mudmat foundation stability under vertical loading: a finite element approach	Fathima Israr Khan, Saurab Kumar

	TECHNICAL SESSION – 01	
Transportation Geotechnics		
Time: 15:15 – 16:15 16:45 – 18:00	Venue: L – 11	Date: 11-03-2025
Paper ID	Title	Author
001	An examining analysis of the linear construction method for roadworks	Akash T, Dr.Sambhaji Padwal
003	Estimating the pedestrian level of service at signalized intersections based on qualitative and quantitative approach	Shivanshu Patel, Nitin Kumar Shukla
034	Improving embankment performance built on soft clay: influence of vehicle characteristics	Anitha K, Balbir Kumar Pandey, Vinod Kumar, Srijan Srijan
036	Carbon footprint estimation of conventional and geosynthetic reinforced flexible pavements	Sai Meghana Polisetti, Praveen Bodhanam S, Ramu Baadiga
064	Enhancing the strength and resilient behaviour of clays for pavement subgrade design	Al Rashid N, Rejoice Aleyamma Abraham
083	Experimental investigation for stabilization of subgrade using demolition waste with different fibres	Rudraksh Rajpurohit, T Subitha, Gowtham Padmanabhan
088	Numerical investigation on the performance of sand tire mixture as retaining wall backfill	Subharthi Chattopadhyay, Adyasha Amanta
128	Evaluation of bitumen behavior with EPDM additive for enhancing pavement strength	Aditya Shinde, Vedant Rokade, Amresh Mulge, Sarang Salunkhe
130	Enhancing subgrade performance of micaceous sand using xanthan gum biopolymer	Anjali S, Seethalakshmi P
171	Drainage potential of concrete waste in the gsb layer	Athulya Remesh, Blesson John, Dr.Jaya V.
177	A comparative study of geocell reinforced weak subgrade with aggregate and cdw as infill materials	Krishnapriya N S, Anusha Parayil , Jayasree P K, U Salini
194	Seismic response of horizontally bent buried pipelines under strike-slip faulting: a parametric study using bnwf modelling	Ratan Brandon P, Gautam S Nair
211	In-situ evaluation of performance of different geogrids laid in base layers of pavements	Yash Pandey, Rishabh Maurya, Atasi Das
241	Numerical modelling of a high railway embankment in hilly region	Soumyadip Kar, Sushovan Dutta, Sanku Konai,
259	Crosslinked chitosan-alginate mix for investigating the performance of laterite under alternate wetting and drying cycles	Ganga Devi C S, Devika Sujeendran, Suryajith J S, Sivapriya P A, Romana Mariyam Rasheed, Mohammad Nuruddin
268	Prediction of california bearing ratio (CBR) from dynamic cone penetration index (DCPI) of low compressible clay	Lavanya Rekha P, Srikanth Reddy S, Satyanarayana Reddy C.N.V.
284	Numerical analysis of locally available recycled waste materials filled geocell retaining wall	Somnath Paul, Dr. Dipankar Sarkar, Rajib Saha
288	Challenges and innovations in the implementation of linear construction methods for road infrastructure development	Akash T, Dr. Sambhaji Padwal
Q & A Session		

TECHNICAL SESSION – 01 Geosynthetics and Applications – I, Rock Mechanics		
Paper ID	Title	Author
011	Eco-friendly slope protection of dyke embankment using geo-naturals	Vinod Kumar Mauriya
022	Mitigation of soil erosion by using jute geotextile	Ankit Kumar Yadav, Amarnath Hegde
023	Innovative textured geogrids for superior reinforcement efficiency	Hasthi Venkateswarlu, Madhav Latha Gali
035	Model study on improvement of subgrade /subbase material by embedding geocell at varying depth for the pavement	Bhavini Desai, Mr. Meet Chaudhari
051	Experimental assessment of block machine foundation supporting on geocell strengthened soil layer.	Shrihari Bhuskade, Dhananjay Awachat, Dr. Anant Dhatrak, Sanjay Thakare
065	Enhancing cricket pitch conditions: the role of geotextiles and soil management	Parth Bhoir, Vihang Mudkarn Anand Daftardar, Jigisha Vash
070	Optimizing reinforcement layering for enhanced stability of soil slopes under seismic loading	Monica Manubolu, Vikash Singh, Samreen Bano, Vinay Bhushan Chauhan
081	Determining the optimal location of geogrid and modulus improvement factor using finite element analysis	Rakesh Peaka, S U S Sai Bhaskar Kalyanapu, Prof, Umesh Chandra Sahoo
086	Investigation on the potential application of compressible geofoams for the protection of buried pipelines	Shikhar Tripathi, Mithilesh Prajapati, Yantisha Jaiswal, Vinay Bhushan Chauhan
093	Evaluation of polypropylene woven geotextile performance in reinforced pavement sections: a case study from Panagarh-Palshit area	Sayantan Dutta, Amit Kotal, Purba Saha, Sudesna Paul, Rohit Deogharia
097	Static and cyclic load analysis of jute geocell reinforced foundations	Tirtha Sathi Bandyopadhyay, Pradeep Kumar, Dhanya Raveendran, Doma Hemanth Kumar, Sreevalsa Kolathayar
102	Effect of dual layer encasement on shear capacity of stone columns in soft soils: a physical and numerical analysis	Akash Jaiswal, Rakesh Kumar Neeraj Kumar, Abhijeet Shukl
038	Ae signature and volumetric strain: a technique for identifying compaction-dilatancy regime of the Purvanchal Himalayan sandstone	Shubham Chajed, Aditya Sing
055	Analysis of crack initiation and propagation mechanisms in polycrystalline rocks using discrete element modeling	Ananya Srivastava, Debanjan Guha Roy, Ravi Prakash
095	Temperature and fluid saturation impact on the mechanical and fracturing behaviour of deccan basalt under uniaxial compression	Vinoth Srinivasan, Manikanda Ramu
213	Stability analysis of rock slopes subjected to combined (planar-toppling) failure	Neeraj Chaudhary, Subhadeep Metya, Keshav Kumar Sharma

Environmental Geotechnics – I, Instrumentation in Geotechnical Engineering		
Time:	Venue: L – 13	Date:
15:15 - 16:15		11-03-2025
<u>16:45 – 18:00</u>		
Paper ID	Title	Author
004	Sustainable approaches in distillery wastewater treatment using electrocoagulation: environmental and economic perspectives	Savita Dubey, Abhinesh Kumar Prajapati, Amita Joshi, Shalini Sharma, Dharm Pal
014	Study on hydraulic conductivity of in-situ polymerized bentonites to coal combustion product leachates	Keerthana S, Dali Naidu Arnepalli
015	Estimation of rainfall runoff and determination of ground water by resistivity meter: a case study	Lalitesh Sinha, Devaanshi Jagwani, Manya Madhu
016	Machine learning-based explainable techniques for the prediction of shear modulus in municipal solid waste	Satyam Tiwari, Sarat Das
043	Influence of cation valence and concentration on liquid limit of pond ash-bentonite mixtures	Sankar Ganesh K S, Ashok Kumar
057	Characterization and evaluation of biochar from waste biomass material in concrete	Omanshi Rathore, Yashu Yadav, Sonam Yadav
060	Valorization of sandstone processing waste in structural fills of reinforced soil structures	Jagdish Lohar, Neha Shrivastava, Mahipal Singh
096	Development and characterisation of landfill liner using activated carbon	Liya Hendry, Dr. Ajitha A.F
105	Desiccation cracking analysis of expansive clay-quarry dust mix reinforced with polypropylene fibers	Anushree Ushara, Vanshika Makwana, Uma Chaduvula, Isha Talati
106	Development and evaluation of a laboratory column apparatus for landfill leachate treatment using sustainable adsorbents	Swati Patil, Mahesh Endait, Sunanda Sarkar, Bhairavi Thakare
110	Utilization of water treatment sludge for enhancing pavement performance of lateritic soil	Anuja S, Bindu J
112	Heterogeneity of rock(basalt) properties on carbon sequestration	Vislavath Rahul, Soukat Kumar Das
117	The influence of organic manure on the permeability of sandy soil	Gunuru Sravani, Samanthapudi Akhila
050	Prediction of compaction parameters of soil based on liquid limit	Tajalee Muneer, Mohammao Iqbal Mirza, Shujaat Hussai
220	Soft monitoring analysis for water content: an attempt towards mitigations in construction practices	Pallavi Badry, Pallavi Badry Akash Bharadwaj, Anusha Madhusudan, Nikhil Dubyala, Karike Sumanth, Obulesh

Geotechnical Site Investigations, AI/ML in Geotechnical Engineering – I Time: Venue: L – 14 Date:		
15:15 – 16:15	venue: L – 14	11-03-2025
16:45 - 18:00		11-03-2023
Paper ID	Title	Author
019	Impact of Tunnel Excavation Geometry on surface	Anas Mohammed, Himanshi
017	subsidence in Cohesionless soil	Jangir, Anirban Mandal
037	Prediction of SPT-N from Dilatometer Marchetti Test	Kaustav Das, Kaushik
057	(DMT) for Kolkata city using regression analysis	Bandyopadhyay
129	Comparative study of index properties and compaction	Jyothi D N, Unnam Anil, H S
12)	characteristics of artificial mix proportions and natural	Prasanna, Manjula K
	fine-grained soils; an overview	
132	Slope stability analysis of soil treated with guar gum	Athira U S, Rejoice
	biopolymer	Aleyamma Abraham
217	Geotechnical Investigations on Damaged Structures	Nitya Sanghvi, Oshin Victor
	Due to Earthquakes	
279	A Probabilistic Approach to Derive Site Specific SPT-	Shreya Hokam, Tanmay
	CPT Correlation	Gupta, Madan Kumar Annar
286	Ground Assessment for Selection of an Ideal	Sanjay Verma, Muskan
	Foundation	Kashyap, Vikas Kumar
		Jaiswal, Mayank Rao
		Ahirwar, Sumit Chadar, Shiv
		Yadav
075	Sensitivity Analysis of Slope Stability Parameters	Balendra Mouli Marrapu,
	Using Neural Network	Ravi Sankar Jakka
077	State of the Art Review on Challenges and	Debjit Mandal, Rudraksh
	Opportunities of Machine Learning Applications in	Rajpurohit, Gowtham
	Geotechnical Earthquake Engineering	Padmanabhan
090	Revolutionizing Soil Liquefaction Assessment: A	Janvi Marsale
	Comparison of Traditional and Machine Learning	
100	Methods	X7 11 1 . X7 11 1 4
103	Advancing Geotechnical Earthquake Engineering: The	Yadhisresht Harikrishnan,
	Role of Machine Learning and Deep Learning in	Gowtham Padmanabhan
104	Mitigating Seismic Risks	llass a Dl at
104	Cloud-Integrated IoT System for Structural Health	Ilyas Bhat
124	Monitoring and Predictive Maintenance	Insti A commol II
124	Predicting Tunneling-Induced Ground Settlements	Jyoti Agarwal, Heman
	Using Machine Learning Techniques	Manchanda, Varalika
160	AL Driven Soil Classification: Interacting Indian	Agarwal
168	AI-Driven Soil Classification: Integrating Indian	Anunil Paul, Swapnoneel
	Standard Soil Classification System with Machine Learning	Barua, Chiranjib Sarkar

TECHNICAL SESSION – 01 Field Manitoring in Castochnical Engineering		
Field Monitoring in Geotechnical Engineering, Stability of Embankments, Slopes, Landslides and Other Mass Movements – I		
Time: 15:15 – 16:15 16:45 – 18:00	Venue: L – 21	Date: 11-03-2025
Paper ID	Title	Author
074	Impact of wastewater disposal on soil characteristics and possible implications	H S Prasanna, Bhoomika M, Kushal D Raj, Chashika Thangamma M B, Avinash V
085	Study on the simulation of energy dissipation of loess soils using sensor based laboratory proctor mould	Manish Shah, Amritanshu Shandilya, Prachi Ganasva
219	Effect of sodium content on dispersive nature of clay	Megha B A, Raji M
008	Limit Equilibrium Method 3D Slope Analysis: Safety Factor and Failure Mode Effects of Slope Height and Angle	Sumit Kumar, Subodh Kumar Suman, Shiva Shankar Choudhary, Avijit Burman
017	Evaluating the Impact of Woody Debris on the Debris Flow Behavior Using an Inclined Channel Test	Trang Nguyen
018	Comprehensive Slope Stability Analysis and Mitigation Strategies Using PLAXIS 2D and GEO5	Sahil Thakur, Ravi Kumar Sharma
041	Slope Stability of Landfill Using Probabilistic Approach	Hari Naga Prasad Chenna
044	Numerical Modeling and Analysis of Slope in Jam gate Hill, Khargone	Krishna Gangrade, Pallavi Gupta, Anshu Jain
058	Deformation Analysis of Soft Ground Treated with Granular Layer under Embankment Loading	Malathi V, Shiva Bhushan J.Y.V., Madhav Madhira
084	Seismic Stability of a Layered Rock Slope using Finite Element Modelling	Omi Singh, Vaibhav Shahi, Shivendra Pratap Singh, Vinay Bhushan Chauhan
087	Numerical Studies on the Behaviour of L-shaped Retaining Wall under Seismic Loading Condition	Shivansh Shukla, Aastha Singh, Aditya Shukla, Vinay Bhushan Chauhan
252	Soil erosion control measures: state-of-the-art	Ram Wanare, A. Sandeep Reddy, Kannan K.R. Iyer
287	Analysis of the slope stability of dam using Geo-studio	Dr. Parvesh Kumar, Priyanka Priyanka, Digvijay Singh Rathore, Maninder Singh, Parth Anand, Animesh Negi
Q & A Session		

TECHNICAL SESSION – 01 Foundations			
Foundations – I			
Time: 15:15 – 16:15	Venue: L – 22	Date: 11-03-2025	
16:45 - 18:00			
Paper ID	Title	Author	
006	Comparative study of soil-concrete interface of	Padmsen Shubham, Sneha	
	different soils using ANSYS software	Gupta, Sathish Palaniappan	
013	Compressibility Effect on Bearing Pressure –	Shiva Bhushan J.Y.V.,	
	Settlement Response of Foundation on Granular Layer	Narasimha Reddy G. V.,	
	overlaying Normally Consolidated Ground	Madhav Madhira	
024	Application of Plaxis 3D software to simulate the	Thy Truc Doan	
	Deformation of Marine Clay Ground Under Raft		
	Foundation with Consideration of Topographic		
	Conditions		
025	Study of Interfering Vertical Pressure Distribution	Dr. Sarvesh R, Srinivasan V	
	under Square and Rectangular Footings		
026	Non-dimensional Analysis for a Small-scale 1g	Kabiraj Mahata, Ashis Kuma	
	Physical Laboratory Model of a Combined Pile Raft	Bera	
	Foundation		
028	Analyzing the Response of T-shaped Rectangular	Tammineni Gnananandarao,	
	Footing on Sloping Ground Through Finite Element	Vishal Panwar, Ch. Ajay,	
	Simulation	B.A.V. Ram Kumar, Rakesh	
		Kumar Dutta	
048	Performance of Laterally Loaded Pyramidal Shell	Roshni S	
	Foundations Resting on Sand		
056	Rocking Field Response of Combined Soil-Pile	Surya Prakash Sharma, Shiv	
	Systems under Machine-Based Dynamic Conditions	Shankar Choudhary	
079	A comparative analysis of combined pile raft	Km Nandini Singh, V. P.	
	foundation under different soil densification	Singh, Neelu Patel, Md	
		Naseem Ahamad	
080	Behavior of Bearing Capacity of Shallow Strip Footing	Arun Kumar Rai, Sudhansh	
	with an Inverted Triangular Base Under Seismic	Tripathi, Marisha Dubey,	
	Loading	Vinay Bhushan Chauhan,	
		Shashi Shekhar	
092	Hybrid Approach to Subgrade Modelling: Soil	Mansi Anil Kalyani, Dr.	
	Structure Interaction and Foundation Applications	Rutvik Sheth	
109	Behaviour of Disconnected Piled Raft Foundations :	Shilpa Mary Sam,	
	An Experimental Investigation	Seethalakshmi Palanisamy	
113	Comparative study of RCC Solid and RCC Cellular	Deeksha Gupta, Alark Patida	
	slab resting on ground for vibration attenuation	Govind Parchani, Dr.M.K.	
		Pradhan, A.S. Padiyar	
115	Uplift Capacity of Under-Reamed Pile in Cohesionless	Apoorva Apoorva, Mantu	
	Soil Underlaid by Cohesive soil	Majumder	
116	Finite Element Analysis of Vane-Shaped Footing of	Nayan Soni, Hemant Kumar	
	Varying Projection Depth under Eccentric and Inclined	Mahiyar	
	Loading Using Ansys Software		

TECHNICAL SESSION – 01 Earthquake Geotechnical Engineering and Tunnelling-I			
Time: 15:15 – 16:15 16:45 – 18:00	Venue: L – 23	Date: 11-03-2025	
Paper ID	Title	Author	
007	Vibration isolation using partially filled trenches	Ankita Mazumdar, Ankurjyoti Saikia	
012	Methodological framework established for managing adverse geological problems during the HRTs excavation phase of Teesta VI Hydroelectric Project (500MW), Sikkim, India.	Anoop Kumar Patel, Suresh Bishnoi, Anil Kumar Dash, Manoj Kumar Lakra, Pawan Kumar Sinha	
046	Navigating the Geotechnical Complexities of the Himalaya: Innovative Tunnelling Approaches in Rangit-IV HE Project, Sikkim	Pankaj Rawat	
047	Sequential construction behaviour of multi-tunnel considering interactive approach	Archana Das, Kumar Venkatesh	
062	Soil-Structure Resonance Study Using Microtremor Measurements in Srinagar City, Kashmir Valley	Aadil Saleem Bhat, Falak Zahoor	
066	Influence on pore water pressure due to millisecond delayed blast in blast-induced liquefaction	Karan Gupta, Tapobrata Lodh, Kaustav Chatterjee	
099	SPT-based liquefaction & post-liquefaction triggering of Roorkee region	Vipul Larokar	
100	Pushover Analysis of Pile Group Considered in Different Site Class	Tejas Nagdeve, Dhananjay Rahangdale, Shrabony Adhikary	
107	Analyzing Surface Settlement in Tunneling Using PLAXIS A Parametric Study	Rahufur Rahaman, Dipaloke Majumder, Ashis Kumar Bera	
111	Influence of Soil Condition on Seismic Response of Vertically Irregular Buildings	Smita Kaloni, Nisha Sahal, Shashank Bhatra	
119	Seismic Lateral Earth Pressure on the Retaining Wall with Sand-Tyre Mixture as a Backfill Material	Pradeep Kumar Prajapati, Mantu Majumder	
131	Liquefaction Behaviour of Pond Ash under Simulated Seismic Loading	Prashant Kumar, Kumar Venkatesh, Aman Pandey	
137	Integrated Earthquake Detection and Differential Settlement Analysis for Structural Health Monitoring and Retrofitting Guidance	Arush Shrivastava, Vedant Shrivastava, Anubhav Rai	
144	Seismic Fragility Analysis of Shallow Tunnels	Shubhankit Prateek, Dipaloke Majumder, Subrata Chakraborty	
148	Probabilistic liquefaction analysis incorporating standard penetration test data	Rahul Kumar Rajak, Md Naseem Ahamad, V. P. Singh	
149	Earthquake Geotechnical Engineering: Review of Research on Re-liquefaction Risk in Miniature Slope Models Using Shake Tables.	Vaibhavi Kamble	

<u> </u>		TECHNICAL SESSION – 01 Earthquake Geotechnical Engineering and Tunnelling-II		
Time: 5:15 – 16:15 6:45 – 18:00	Venue: L – 24	Date: 11-03-2025		
Paper ID	Title	Author		
152	Advancements in Shear Wave Velocity Profiling: A Review of Techniques, Applications and Challenges	Chandrakant Kumar, Md Naseem Ahamad, Neelu Pate V. P. Singh, Aravind Yadav		
173	Dynamic Performance of Vertical Piled Raft Foundations: Experimental Insights from Shaking Table Tests	Gyan Garima Singh, Deepak Anand, Ram Prakash Tiwari Vijay Kumar		
185	Experimental and numerical analysis of the dynamic behaviour of a gabion wall	Jyothi Visali Mummadisingh Aniruddha Sengupta		
200	Dynamic Response of Tunnels to Obliquely Incident P- and S- Waves Using Domain Reduction Method	Bhavesh Banjare, R. Dodagoudar G.		
201	Seismic Performance of Circular Tunnels in Liquefiable Soil	Ashish Sagar, Rajeswari J S		
204	Seismic Microzonation of the Greater Srinagar Region in Jammu and Kashmir	Falak Zahoor, K. Seshagiri Rao, Neelima Satyam		
209	Liquefaction Mitigation using Tyre Derived Aggregates	Prabal Dhiman, Manendra Singh		
214	Calibration of Hypoplastic Constitutive Model Parameters and Undrained Response of Cherthala Fine Sand in Kerala State	Sreelekshmi A, Rangaswam K		
222	Dynamic Properties of Soil: A Comprehensive Review on Shear Modulus and Damping Ratio of Soil Mixtures Using Cyclic Triaxial Apparatus	Aman Mishra		
226	Dynamic Response Analysis of Cantilever Walls Under Sequential Earthquake Loadings	Saikat Kuili, Debdip Das, Ravi Jakka		
234	Deterministic Seismic Hazard Assessment of Patna Smart City Using Logic Tree Approach	Bidyut Roy, Abhik Paul, Dr Pradipta Chakrabortty		
237	Seismic Performance of Two Story Confined Masonry Building	Amit Sharma, Rakesh Kuma Khare, Vasilii Golubev		
245	Numerical investigation of Liquefaction induced Lateral Displacement using SPT data	Aravind Yadav, Chandrakan Kumar, Md Naseem Ahama Neelu Patel, Vishwajeet Singh		
262	Numerical Prediction on Impact of High-Rise Building Construction above Existing Underground Twin Tunnels	Vadlamudi Naga Vamsi		
285	Design of 1g Laminar shear box for dynamic testing of soil	Srijit Bandyopadhyay, P Ramakrishna, J Chattopadhyay, Y.M Parulekar, J Pandey		
292	Evaluating the Seismic Resilience of Tunnels: A Practical Approach for Strength and Restoration	Rohan Paul, Swapnil Mishra		

TECHNICAL SESSION – 02 Ground Improvement Techniques – IV		
Time: 14:15–16:15	Venue: L – 01	Date: 12-03-2025
Paper ID	Title	Author
215	Behaviour of Expansive Soils with Kota Stone Slurry and Cement	Sumit Gahlot, Dr Abhishek Arya, Rajat Mangal
223	Sustainable Ground Improvement Techniques for Future Trends: A Review	Oshin Victor, Nitya Sanghvi
228	Soft expansive clay stabilization using calcium carbide residue	Naman Kantesaria, Apurvkumar Prajapati, Atif Khan, Manan Patel, Hasan Rangwala
230	Utilising Rice Husk Biomass in Contaminated Soil stabilization: A Bio Engineered-solution for Mitigating Stubble Burning	Akashdeep Singh, Rajiv Chauhan
231	Estimation of load carrying capacity of bored piles from initial pile load test data	Abudaheer A, Madan Kumar Annam
232	Performance Evaluation of CO ₂ -Exposed, Fiber- Reinforced Alkali-Activated Binder for Expansive Subgrade Soil Stabilization	Mazhar Syed, Gunde Sachin Chakravarthy, Muktinutalapati Jayatheja
235	Effect of organic modification of clay on the interaction potential with a polymer coating	Nidhi Murali, Pijush Ghosh
239	Uplift capacity of Rectangular-shaped and Cross- shaped multi-layer horizontal plate anchor in sand	Nitin Kumar, Vivek Dwivedi, Krishna Kotiyal
247	Enhancing the geotechnical properties of the thar desert using pectin as a sustainable solution	Saloni Samotra, Gurneet Kang, Shraddha Salunkhe , Vanshika Sharma , Monika Dagliya, Neelima Satyam
249	A Review On – Study of Ground Improvement By Using Encased Stone Columns	Priyanka Late
254	Lime Sludge Amended Liquefiable Soil for Earth Structure.	Mani Mahesh
258	Utilization of Rice Husk Ash for Mitigating Settlement and Excess Pore Water Pressure in Black Cotton Soil: A Plaxis 2D Analysis	Ankur Abhishek, Anasua Guharay
289	Particle Size and Minerology of Mechanically Ball Milled Residual Soils from Micro to Nano Scale	Polugari Venkateswarlu, Kondalamahanty Seshagiri Rao
	Q & A Session	

TECHNICAL SESSION – 02 Ground Improvement Techniques – V		
Time: 14:15–16:15	Venue: L – 02	Date: 12-03-2025
Paper ID	Title	Author
260	Reinforcing weak soils: a sustainable approach using shredded plastic waste	Pampa Mandal
264	Review of bio-cementation of soil via microbially induced calcite precipitation: an eco-friendly approach of soil stabilization	Varsha Reddy D, Renuka Roy, Anasua Guharay
122	Experimental study on liquefaction mitigation with geosynthetics and shredded plastic	Sanket Sabale, Dr. Anant Dhatrak, Sahil Bansod
267	Optimisation of Mix Design Of Cemented Stone Column Material Using Steel Slag as Aggregate	Prashant Mali, Punam Swargiary, Amit Padade
269	A Review on Topographic and Environmental Factors Influencing Landslide Susceptibility	Vaishnav J Panicker, Raji M Alessandro Anil Mathew
271	Laboratory Studies on Soft Clay Improved by Floating Stone Columns.	Prathamesh Kapile, Karri Vasu, Sridhar G
272	Effect of moisture content on unconfined compressive strength of soft soil	Kuna Gowtham, Madharam Akshay Kumar, Bhanuchitra Maheswaram, Padmavathi Viswanadham
273	Geotechnical and Geoenvironmental Performance Improvement of Landfilled Soil Using Microbially Induced Calcite Precipitation	Sanjay Roy, Mohit Somani
274	ANN Modeling for Predicting the Lateral Load Capacity of Pile Groups Embedded in Layered Soils	Aarathy S S, Teja Munaga, Kalyan Kumar Gonavaram, Sudheer Kumar Yamsani
276	Numerical Assessment of Foundation Stability Near Slopes: Effect of Various Indian Seismic Zones	Lokesh Sharan Srivastava, I Pradipta Chakrabortty
278	Efficacy of Combination of Vibro Stone Columns and Vibro Compaction in Layered Soils	Amaravathi Bhargav Ram, Anurag Chafale, Govind Ra
280	Future Trends in Ground Improvement using Sustainable Techniques- A Review Paper	Dr. Prachi Gour, Dr. Atul Bhatore
281	Effect of Configuration and Spacing on the Load- Carrying Capacity of Stone Columns	Prashant Mali, Mufaddal Ali Amit Padade
291	Peat Stabilization via Stone Column Integration	Hrishikesh Kalita,Rajat Debnath, Ashim kanti Dey

TECHNICAL SESSION – 02 AI/ML in Geotechnical Engineering – II		
Time: 14:15–16:15	Venue: L – 03	Date: 12-03-2025
Paper ID	Title	Author
178	Reliability analysis of eccentrically loaded strip foundation using Multivariate Adaptive Regression Splines programming and XGBoost	Manish Kumar, Karthikeyan M
183	A Comparative study on Prediction of CBR of fine grain soils using ANN and Regression Analysis	Singireddi Eswara Rao
187	Effects of Extraterrestrial Soil Simulant Properties on Rover Wheel Performance	Dushyant Sahu, Soukat Kumar Das
158	Estimation of Hydraulic Conductivity of Unsaturated Soil using Random Forest Regression and Neural Networks	Shraddha Sharma, Ajay Pratap Singh Rathor, Jitendr Kumar Sharma, Deepak Bhatia
198	An image-based grain size distribution prediction using deep learning and analysis via the chi-square test	S Sushmi, M Muttharam
205	A Hybrid Approach for Enhanced Prediction of Residual Shear Strength in Cohesive Soils	Shubhendu Vikram Singh, Sufyan Ghani
210	Prediction Of California Bearing Ratio of Subgrade Using Novel Machine Learning Approach	Md Asif Hasan, Praveen Bodhanam S, Ramakrishna Bag, Ramu Baadiga
218	Estimation of Shear Strength using Machine Learning: A Random Forest Approach	Kavya Mohan B, Sini T, Alessandro Anil Mathew, Alessandro Anil Mathew
221	ANN Integrated Metaheuristic Surrogate Model-based Reliability Analysis of Shallow Foundation over Cavity Induced with Simulated Noise	Kumar Shubham, Subhadee Metya, Abdhesh Kumar Sin
250	ANN modeling for the strength behaviour of Coal gangue-GGBS based geopolymer stabilized soil	Aravind Goud Gaddam, Amulya Gudla , Aarathy S S Sudheer Kumar Yamsani
251	Image classification of rocks using deep learning	Prateek Rajput, Ananya M, Prajwal L, Vinoth Srinivasar
265	Prediction of resilient modulus of subgrade soils using machine learning techniques	Rishitha Gantyala
290	Image classification of rocks using deep learning	Ananya M, Vinoth Srinivasa Prajwal L, Prateek Rajput

Geosynthetics and Applications – Venue: L – 04 Title Experimental studies on the pervious concrete facing einforced soil retaining wall subjected to dynamic oading mprovement in subgrade CBR values of low-volume ural roads using geogrids: experimental investigation Shear and deformation behaviour of rubber sand nixture reinforced with geogrids and geocells Systematic approach to evaluate effective modulus of geosynthetic reinforced flexible pavements Effects of tea biochar and different pyrolysis emperatures on water retention in biochar-amended toil Experimental investigation on dynamic response of cantilever retaining walls with deformable inclusions: a	Date:12-03-2025AuthorNagesh Pratap Singh, GanesKumar S, Santha Kumar GAnne Choudhury, MohmmaUmar Rasool, Prasun HalderRiya BhowmikJithin K M, Renjitha Varghe
Experimental studies on the pervious concrete facing einforced soil retaining wall subjected to dynamic oading mprovement in subgrade CBR values of low-volume ural roads using geogrids: experimental investigation Shear and deformation behaviour of rubber sand nixture reinforced with geogrids and geocells Systematic approach to evaluate effective modulus of geosynthetic reinforced flexible pavements Effects of tea biochar and different pyrolysis emperatures on water retention in biochar-amended soil Experimental investigation on dynamic response of	Nagesh Pratap Singh, Ganes Kumar S, Santha Kumar G Anne Choudhury, Mohmma Umar Rasool, Prasun Halder Riya Bhowmik Jithin K M, Renjitha Varghe Praveen Bodhanam S, Ramu Baadiga Jinming Yang, Ankit Garg, Zhussupbekov Askar
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nixture reinforced with geogrids and geocells Systematic approach to evaluate effective modulus of geosynthetic reinforced flexible pavements Effects of tea biochar and different pyrolysis emperatures on water retention in biochar-amended soil Experimental investigation on dynamic response of	Jithin K M, Renjitha Varghe Praveen Bodhanam S, Ramu Baadiga Jinming Yang, Ankit Garg, Zhussupbekov Askar
geosynthetic reinforced flexible pavements Effects of tea biochar and different pyrolysis emperatures on water retention in biochar-amended soil Experimental investigation on dynamic response of	Baadiga Jinming Yang, Ankit Garg, Zhussupbekov Askar
emperatures on water retention in biochar-amended toil Experimental investigation on dynamic response of	Zhussupbekov Askar
	Rajani Vyawahare
comparative study of rigid and laminar shake table esting with and without inclusion.	
Frictional and interface frictional characteristics of geogrid reinforced coal-mine overburden dumps	Prudviraju Vysyaraju Vysyaraju, Dr G Venkata Ramana, Sudheer Kumar Yamsani
Reinforced soil structures: a review of soil-polymeric einforcement interactions	Rohan Pokale, Parvathi G. S Srinivasan V
Effect of jute fiber reinforcement on soil behavior considering standard and modified proctor tests	Pampa Mandal, Swagata Bisoi
Railway bridge transition zones: problems and nitigation methods – a review	Sai Chandu Ronanki, C.N.V Satyanarayana Reddy, Karpurapu Rajgopal
Enhancing ground stability in marine clays using Armalynk® : a case study	Mahesh Babu Puttapakula, Pramod Karpe, Kalpana Nallewar, Ritwik Nandi
Development of smart sensing geosynthetics 3d printing conductive HDPE for enhanced strain neasurement	Divya P.V., Anita A
	einforced soil structures: a review of soil-polymeric inforcement interactions fect of jute fiber reinforcement on soil behavior nsidering standard and modified proctor tests ailway bridge transition zones: problems and itigation methods – a review hancing ground stability in marine clays using rmalynk® : a case study evelopment of smart sensing geosynthetics 3d inting conductive HDPE for enhanced strain

TECHNICAL SESSION – 02 Stability of Embankments, Slopes, Landslides and Other Mass Movements – I		
Time: 14:15–16:15	Venue: L – 11	Date: 12-03-2025
Paper ID	Title	Author
101	Slope stability analysis for highway embankment using FEM	Roli Yadav, Vijay Kumar
135	Slope stability analysis of railway embankment under cyclic loading	Saurabh Singh Katheriya, R. P. Tiwari, Anupam Rawat, Vijay Kumar
143	A review on soil stabilization: long-term performance and environmental sustainability	Ankush Agarwal, Vaibhav Thakar, Jigisha Vashi
147	Landslide susceptibility mapping using statistical methods in East Jaintia Hills, Meghalaya, India	Naveen Badavath, Smrutirekha Sahoo, Rasmiranjan Samal
166	Interpreting stress-strain curve from Cam-Clay model	Pushkar Nath Chaurasia, Manash Chakraborty
179	A comprehensive review and comparative evaluation of the efficacy and limitations of empirical, numerical, and hybrid approaches of slope stability assessment methods	Sagar Kalita, Dr. Abinash Mahanta
189	A comparative study of failure criteria between bamboo-grid and bamboo-nailed reinforced hill slope based on non-linear time history analysis	Rasmiranjan Samal, Naveen Badavath, Smrutirekha Saho
193	A critical review on rainfall induced landslide susceptibility mapping in Western Ghats, India	Jayasri Navuluri, Minu Tree Abraham, Neelima Satyam
195	Stability analysis of ash dykes with shear strength parameters measured under variable field conditions	Hanumantha Rao Bendadi, Jaswanth Reddy Banka, Jaswanth Reddy Banka
227	Geomorpho-tectonic characterization of Umri landslide Hariana, India	Shanku Ghosh, Dr C Prakasam
248	A state-of-art review: efficacy of capillary barrier systems to stabilize slopes under rainfall conditions – opportunities and challenges	Datunaka Sai Srujan, Ammavajjala Sesha Sai Raghuram
270	Integrating TRIGRS and RAMMS for the spatiotemporal prediction of rainfall induced landslides and landslide trajectory: a case study	Musaib Ahmad, Aparna Vinayan, Divya P.V.
293	Decoding debris flow behavior: Simplified Insights into entrainment and deposition dynamics	Nikhil Kumar Pandey and Neelima Satyam

TECHNICAL SESSION – 02 Foundations – II		
Time:	Venue: L – 12	Date:
14:15–16:15		12-03-2025
Paper ID	Title	Author
118	Bearing capacity of strip footing due to nearby existing	Vanrammawia Khawlhring,
	footing on hoek-brown rock mass	Mantu Majumder
126	Assessing pile bearing capacity by integrating the	Shubham Gupta, Vaibhav
	laboratory test results and empirical correlations	Singh, Chinar Garg
134	Numerical analysis of combined piled raft foundation	Aman Garg, Vishwas Sawar
	in a layered soil profile	Siddharth Mehndiratta
140	Pull out capacity of inverted partially tapered pile in	Vikas Mishra, Mantu
	sand	Majumder
145	Response of pile-raft foundation on clayey soil	Natasha Kakati, Abhijit Dek
159	Study of vibration caused by impact pile driving using	Subodh Karamkar, Shrabony
	fem analysis	Adhikary
169	Comparative analysis of contact pressure of solid raft,	Ajay Pratap Singh Rathor,
	granular piled raft and annular raft	Jitendra Kumar Sharma
181	Response of cushioned disconnected piled raft system:	Shruti Raut, Prasun Halder,
	numerical investigation using finite element method	Bappaditya Manna, Jagdish
		Shahu
206	Potential plastic hinge length of pile in a pile group	Begum Emte Ajom, Kaustul
	under seismic action: a numerical approach	Dasgupta, Arindam Dey
225	Bearing capacity of footing on layered soil under	Mayank Raj Singh Bisht,
	different loading condition	Manendra Singh
236	Experimental study on uplift behaviour of plate anchor	Rushikesh Badnakhe
	pile foundation system in black cotton soil	
243	Numerical study on performance of pre-engineered nail	Lakshmi Madhukrishnan K
	foundation system as an alternative to conventional	Rangaswamy K
	shallow foundations	
246	Numerical analysis of interference effects from new	Uday Shankar, Raviraj S, S
	strip foundation on existing foundation soil	Prasad
256	Comparative study on the behaviour of skirted	Shovan Bisai, Dr Rana
	foundation on double layered granular soil using Mohr-	Acharyya, Arindam Dey
	Coulomb and hardening soil models	
261	Effect of stiffening of pile in piled raft using elastic	Pragya Patel, Jitendra Kuma
	continuum approach	Sharma, S.K Singh, Suresh
		Kumar Nagar
263	Well foundation in the construction of intake structures	Vani B, Venkata Siva Saiteja
	- case studies	Narakula, Suriyanarayanan
		S, Chandramouli Yeddalapu

TECHNICAL SESSION – 02 Environmental Geotechnics – II		
Time:	Venue: L – 13	Date:
<u>14:15–16:15</u> Paper ID	Title	12-03-2025 Author
120	Valorizing fly ash for low to medium load-bearing applications using MgO	Basil Jaimon, Ranita Ray, Amisha Nair, Anna Saju, Sreedeep Sekharan, Rajan Choudhary
125	Influence of curing temperature, MgO salt and water content on Fly Ash-MgO composite	Ranita Ray, Basil Jaimon, Amisha Nair, Upadrashta Venkata Sai Sri Bhanu Tejaswi, Ashutosh Yadav, Sreedeep Sekharan, Uttam Manna
153	Utilizing marginalized material as controlled low strength material (CLSM) for infrastructure development: present status and challenges	Gargi Bhardwaj, Sarat Das
154	Remediation of lead contaminated soil using biochar- nanosilica composite	Anaswara Simon, Sini T
162	Development and evaluation of a laboratory bioreactor landfill simulator for anaerobic degradation of municipal solid waste	Mahesh Endait, Swati Patil, Aishwarya Mulay
163	Study of properties of vertical cut-off wall amended using steel slag and silica fume composite	Jumana Yasir, Dr. Ajitha A.R
165	Performance evaluation of ccr-activated slag-bentonite slurry for vertical cutoff walls	Rushikesh Gaikwad, Mahesh Endait, Pallavi Padalkar, Swati Patil
172	A study on geotechnical properties of red soil on addition of iron waste powder and lime	Sabana Yasmin, Dr. Abinash Mahanta
174	Impacts of acid mine drainage on surface and ground water: a case study from margherita mine site	Partha Saharia, Abinash Mahanta
197	Synthesis of hydroxyapatite as adsorbent for remediation of fluoride contaminated groundwater: batch study	Ravindra Budania, Surbhi Singh
207	Analysis of urban landfill using numerical techniques	Ramesh Kailas Daundkar, Chinni Krishna P
238	Enhancing wetting-drying resistance of biotreated coastal soil using fiber reinforcements	Vikas Rawat
244	Stabilization of desert sand using pectin as a sustainable solution	Kunal Jatav, Ashish Patel , Monika Dagliya, Neelima Satyam, Rewa Bochare

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