

**Indian Geotechnical Conference 2020**  
(online mode)

**Developments in Geotechnical Engineering for  
Sustainable Tomorrow (DIGEST)**  
December 17-19, 2020

Organised by  
IGS Visakhapatnam Chapter &  
Department of Civil Engineering, Andhra University, Visakhapatnam  
Andhra Pradesh, India

**Online Conference Schedule at a Glance**

Time	Programme	Link
<b>17 December 2020, Thursday</b>		
09:00 – 10:15	Inaugural Ceremony	<a href="#">Link 1</a>
10:30 – 11:30	42 <sup>nd</sup> IGS Annual Lecture by Prof. T.G. Sitharam	<a href="#">Link 1</a>
11:35 – 13:00	<b>Plenary Session 1</b>	<a href="#">Link 1</a>
Lunch Break (13:00 – 14:00)		
14:00 – 15:45	<b>Plenary Session 2</b>	<a href="#">Link 1</a>
<b>Technical Sessions</b>		
16:00 – 17:40	<b>Theme 1:</b> Soil Behavior and Characterisation of Ground 16:00 – 16:20: Theme Lecture 16:20 – 17:40: Paper Presentations	<a href="#">Link 2</a>
	<b>Theme 2:</b> Shallow Foundations 16:00 – 16:20: Theme Lecture 16:20 – 17:40: Paper Presentations	<a href="#">Link 3</a>
	<b>Theme 8:</b> Developments in Ground Improvement 16:00 – 16:20: Theme Lecture 16:20 – 17:40: Paper Presentations	<a href="#">Link 1</a>
	<b>Theme 3:</b> Deep foundations 16:00 – 16:20: Theme Lecture 16:20 – 17:40: Paper Presentations	<a href="#">Link 4</a>
	<b>Theme 4:</b> Environmental Geotechnology 16:00 – 16:20: Theme Lecture 16:20 – 17:40: Paper Presentations	<a href="#">Link 5</a>
18:00 – 20:30	<b>Annual General Meeting</b>	<a href="#">Link 1</a>
<b>18 December 2020, Friday</b>		
09:00 – 10:45	<b>Plenary Session 3</b>	<a href="#">Link 1</a>
11:00 – 11:20	Corporate Presentations	<a href="#">Link 1</a>
11:30 – 13:00	<b>Plenary Session 4</b>	<a href="#">Link 1</a>
LunchBreak (13:00 – 14:00)		
<b>Technical Sessions</b>		
14:00 – 15:30	<b>Theme 1:</b> Soil Behavior and Characterisation of Ground 14:00 – 15:30: Paper Presentations	<a href="#">Link 2</a>
	<b>Theme 5:</b> Transportation Geotechnics 14:00 – 14:20: Theme Lecture 14:20 – 15:30: Paper Presentations	<a href="#">Link 3</a>
	<b>Theme 8:</b> Developments in Ground Improvement 14:00 – 15:30: Paper Presentations	<a href="#">Link 1</a>

	<b>Theme 3:</b> Deep foundations 14:00 – 15:30: Paper Presentations	<a href="#">Link 4</a>
	<b>Theme 3 &amp; 4:</b> Deep foundations & Environmental Geotechnology 14:00 – 15:30: Paper Presentations	<a href="#">Link 5</a>
15:45 – 17:30	<b>Technical Sessions</b>	
	<b>Theme 1:</b> Soil Behavior and Characterisation of Ground 15:45 – 17:30: Paper Presentations	<a href="#">Link 2</a>
	<b>Theme 6:</b> Landslides and Slope Stability 15:45 – 16:05: Theme Lecture 16:05 – 17:30: Paper Presentations	<a href="#">Link 3</a>
	<b>Theme 8:</b> Developments in Ground Improvement 15:45 – 17:30: Paper Presentations	<a href="#">Link 1</a>
	<b>Theme 9:</b> Numerical and Physical Modeling 15:45 – 16:05: Theme Lecture 16:05 – 17:30: Paper Presentations	<a href="#">Link 4</a>
	<b>Theme 11:</b> Dynamics of Soils and Foundations 15:45 – 16:05: Theme Lecture 16:05 – 17:30: Paper Presentations	<a href="#">Link 5</a>
19:00 - 20:00	<b>Cultural Program</b>	<a href="#">Link 1</a>
<b>19 December 2020, Saturday</b>		
09:00 – 11.15	<b>Plenary Session 5</b>	<a href="#">Link 1</a>
11:15 – 11:30	Corporate Presentations	<a href="#">Link 1</a>
11:30 – 13:00	<b>Technical Sessions</b>	
	<b>Theme 7 &amp; 13:</b> Forensic Geotechnical Engineering & Tunneling and Deep Excavations 11:30 – 11:50: Theme Lecture 11:50 – 12:10: Theme Lecture 12:10 – 13:00: Paper Presentations	<a href="#">Link 2</a>
	<b>Theme 5 &amp; 6:</b> Transportation Geotechnics & Landslides and Slope Stability 11:30 – 13:00: Paper Presentations	<a href="#">Link 3</a>
	<b>Theme 8:</b> Developments in Ground Improvement 11:30 – 13:00: Paper Presentations	<a href="#">Link 1</a>
	<b>Theme 9:</b> Numerical and Physical Modeling 11:30 – 13:00: Paper Presentations	<a href="#">Link 4</a>
	<b>Theme 10:</b> Geosynthetics and Reinforced Soil Structures 11:30 – 11:50: Theme Lecture 11:50 – 13:00: Paper Presentations	<a href="#">Link 5</a>
<b>Lunch Break (13:00 – 14:00)</b>		
14:00 – 15:45	<b>Technical Sessions</b>	
	<b>Theme 13:</b> Tunneling and Deep Excavations 14:00 – 15:45: Paper Presentations	<a href="#">Link 2</a>
	<b>Themes 12 &amp; 14:</b> Scour and Erosion & Offshore Geotechnics 14:00 – 14:20: Theme Lecture 14:20 – 15:45: Paper Presentations	<a href="#">Link 3</a>
	<b>Theme 8:</b> Developments in Ground Improvement 14:00 – 15:45: Paper Presentations	<a href="#">Link 1</a>
	<b>Theme 10:</b> Geosynthetics and Reinforced Soil Structures 14:00 – 15:45: Paper Presentations	<a href="#">Link 5</a>
16:30 – 17:15	<b>Valedictory Function</b>	<a href="#">Link 1</a>

# SCHEDULE OF IGC 2020

December 17, 2020

09:00 – 10:15	Inaugural Ceremony		<a href="#">Link 1</a>
10:30 – 11:30	42 <sup>nd</sup> IGS Annual Lecture		<a href="#">Link 1</a>
	The Quintessence of 25 years of our Contributions to Geotechnical Earthquake Engineering by <b>Prof. T. G. Sitharam, Director, IIT Guwahati, Professor, IIT Guwahati &amp; IISc., Bangalore</b>		
	Chairman: <b>Prof. G.L. Sivakumar Babu</b> , President, IGS Co-Chairman: <b>Prof. J. T. Shahu</b> , Secretary, IGS		
Plenary Session 1 (11:35 – 13:00)			<a href="#">Link 1</a>
<b>Session Coordinator: Prof. C. N. V. Satyanarayana Reddy, Andhra University, Visakhapatnam</b> <b>Chairman: Prof. M. R. Madhav, Professor Emeritus, IIT Hyderabad &amp; JNTU, Hyderabad</b> <b>Co-Chairman: Dr V. Balakumar, M/s Simplex Infrastructures Limited, Chennai</b>			
11:35 – 12:10	Keynote Lecture 1	A Novel Environmentally Friendly Vegetated Three-layer Landfill Cover System using Construction Wastes but Without A Geomembrane by <b>Prof. Charles W.W. Ng, The Hong Kong University of Science &amp; Technology &amp; President, ISSMGE</b>	
12:10 – 12:45	Keynote Lecture 2	Applicability of Recycled Soil Mixed with Bentonite and Polymer as a Waste Landfill Liner by <b>Dr. Eun Chul Shin, Incheon National University, South Korea &amp; Vice President (Asia), ISSMGE</b>	
Lunch Break (13:00 – 14:00)			
Plenary Session 2 (14:00 – 15:45)			<a href="#">Link 1</a>
<b>Session Coordinator: Dr. K. Rajya Lakshmi, DTE, Govt. of AP</b> <b>Chairman: Prof. G.V. Rao, Professor Emeritus, IIT Gandhinagar</b> <b>Co-Chairman: Prof. S. Chandrakaran, NIT, Calicut</b>			
14:00 – 14:35	Keynote Lecture 3	Reliability Analysis of Contaminant Transport Models in Soils and Fractured Rocks by <b>Prof. G.L. Sivakumar Babu, I.I.Sc., Bangalore</b>	
14:35 – 15:10	Keynote Lecture 4	Sustainable Measures for Protection of Structures against Earthquake Induced Liquefaction by <b>Prof. Gopal Madabhushi, University of Cambridge, UK</b>	
15:10 – 15:45	Keynote Lecture 5	Solutions for Foundation Systems Subjected to Earthquake Conditions by <b>Prof. Deepankar Choudhury, IIT Bombay, Mumbai</b>	
16:00 – 17:40	TECHNICAL SESSIONS (December 17, 2020)		

**THEME 1 - Soil Behavior and Characterisation of Ground**

[LINK 2](#)

**Session Coordinator: Prof. K. Muthukkumar, NIT Trichy**  
**Chairman: Prof. Amit Prashant, IIT Gandhinagar**  
**Co-Chairman: Dr. Jaykumar Shukla, M/s. Geo Dynamics, Vadodara**

16:00 – 16:20	Theme Lecture	Soil Behaviour and Characterization: A Study on Improvement of CBR Characteristics of Soil Subgrade by <b>Prof. Sibapriya Mukherjee, Jadavpur University, Kolkata</b>
<b>December 17, 2020</b> 16:20 – 17:40	<b>Paper Presentations</b>	
	TH-01-002	Effect of Plasticity of Fines on Properties of Uniformly Graded Fine Sand by <i>Akhila M, Rangaswamy K, Sankar N and Sruthy M R</i>
	TH-01-003	Comparison of Theoretical and Laboratory Permeability for Coarse Grained Soil at Different Ground Conditions by <i>Satyajit Roy, Bharti R K, Jain V K, Manish Gupta and Chitra R</i>
	TH-01-004	Geotechnical Investigations for the Afflux Bunds of A Barrage Project in Eastern India by <i>Jain V K, Satyajit Roy and Chitra R</i>
	TH-01-005	Prediction of Engineering Properties of Kerala Soil by <i>Anju Mary E and Chandrakaran S</i>
	TH-01-006	Durability Study on Coir Fiber Reinforced Soil by <i>Muttharam M and Dhana Teja M</i>
	TH-01-008	Effect of Curing Period on the Geotechnical Properties of Lime Treated Organic Soils by <i>Annie J, Sruthy B, Abraham B M and Sridharan A</i>
	TH-01-10	Influence of Density and Degree of Saturation on the Shear Strength Characteristics of Marine Sands by <i>Natarajan K and Siva Sankara Reddy D V</i>
	TH-01-12	Evaluating Soil Shrinkage Behavior Using Digital Image Analysis Process by <i>Sharanya A G, Heeralal M and Thyagaraj T</i>
	TH-01-13	An Approach for Geotechnical Site Characterization of Brown Field Site of a Steel Plant by <i>Manos De and Shuvranshu Kumar R</i>
	TH-01-15	Effect of Palm Fibres on Lime Blended Sandy Clay by <i>Athira T and Sini T</i>
	TH-01-16	Direct Swell Pressure Measurement by Using Newly Designed Proving Ring - A Comparative Study by <i>Farahnaz D, Viswanadham B V S, Kayabali K and Qureshi A</i>
	TH-01-18	Influence of CaCl <sub>2</sub> on Compaction and CBR Characteristics of Gypsum (CaSO <sub>4</sub> .2H <sub>2</sub> O) Stabilized High Plastic Clay by <i>Ramanjaneyulu B and Darga Kumar N</i>
TH-01-24	Compaction Characteristics of China Clay- Bentonite-Sand Mix Proportions by <i>Jyothi D N, Prasanna H S, Pooja B S and Vidya B V</i>	

**THEME 2 – Shallow Foundations**

**[LINK 3](#)**

**Session Coordinator:** *Prof. Sireesh Saride, IIT Hyderabad*  
**Chairman:** *Prof. K.S. Beena, Cochin University Science and Technology, Kochi*  
**Co-Chairman:** *Dr. Arif Ali Baig Mughal, NITWarangal*

16:00 – 16:20	Theme Lecture	Performance of Geosynthetic Reinforced Shallow Foundations by <i>Prof. A. Murali Krishna, IIT Tirupati</i>
<b>December 17, 2020</b> 16:20 – 17:40	<b>Paper Presentations</b>	
	TH-02-005	Comparative Study of Bearing Capacity of Clay Mixed with Sand Proportions by <i>Raviteja P, Saibaba Reddy E and Padmavathi M</i>
	TH-02-006	Variability in Settlements of Foundations on Fine Grained Soils by <i>Deepthi M, Nageshwar Rao Ch and Madhav M R</i>
	TH-02-007	Probabilistic Investigation on Seismic Bearing Capacity of Shallow Foundation on Unsaturated Fly Ash Deposit by <i>Abhijit Anand and Rajib Sarkar</i>
	TH-02-009	Bearing Capacity of Reinforced CNS Soil Bed on Clay Soil with Inclined Reinforcement Considering Kinematics by <i>Rajashekar Reddy P, Narasimha Reddy G V and Saibaba Reddy E</i>
	TH-02-12	Study of Pullout Behaviour of Bell-Shaped Anchor without and with Tie in Clayey Medium by <i>Arya Das and Ashis Kumar B</i>
	TH-02-14	Mobilised Frictional Shear and Dead-Weight of Sand Wedge: Contributing to the Pull-Out Resistance of Belled Anchor Pile in Sand by <i>Tanaya Deb and Sujit Kumar Pal</i>
	TH-02-15	Influence of Moment on Load-Settlement Behaviour of Circular Footing Resting on Clayey Soil by <i>Sreedhu P S P, Jayamohan J and kannan K</i>
	TH-02-17	Horizontal Load-Deformation Behaviour of Shallow Circular Footing by <i>Amrita Varsha T S, Jayamohan J and Anila Angel</i>
	TH-02-23	Geotechnics of a Unique Irregular High-Rise Statue by <i>Ravi Sundaram, Abhay Gupta and Sanjay Gupta</i>
	TH-02-26	Experimental Studies on Load Settlement Behavior of Cohesionless Soil using Bamboo Grid by <i>Bipasha Das and Nayanmoni C</i>
TH-02-28	Ultimate Bearing Capacity of Strip Footing on Reinforced Embankment using Upper Bound Limit Analysis by <i>Debashis Manna, Santoshkumar G and Priyanka Ghosh</i>	

**THEME 8 – Developments in Ground Improvement**

[LINK 1](#)

**Session Coordinator:** *Dr. K. Rajya Lakshmi, DTE, Govt. of AP*  
**Chairman:** *Prof. Priti Maheswari, IITRoorkee*  
**Co-Chairman:** *Dr.B. Janakiramaiah, IITTirupati*

**Paper Presentations**

<p><b>December 17, 2020</b> 16:00 – 17:40</p>	TH-08-001	Improvement of soft clays using stone columns with and without encasement by <i>Vittalaiah A, Nirmala Peter E C and Ravinder R</i>
	TH-08-002	Geotechnical Properties of Soft Improved Ground from in-situ Time-Settlement Plots by <i>Divya J, Padmavathi M and Madhav M R</i>
	TH-08-003	Bio-Cementation of Fat Clay using MICP by <i>Rajani G, Ramana G V and Arif Ali Baig M</i>
	TH-08-005	Settlement of a Square Footing on Dry Sand Bed Reinforced with Stone Columns under Seismic Conditions: Effect of Frequency by <i>Priti Maheswari, Sahoo J P and Siddartha S</i>
	TH-08-006	Experimental Study on Parametric Influences of Stone Column Reinforced Foundation Systems by <i>Arghadeep B, Utpal Mandal and Agnishek C</i>
	TH-08-10	Stabilization of soft clay using nylon fiber and fly ash by <i>Nilna C V and Chandrakaran S</i>
	TH-08-13	Enhancing the Properties of Dune Sand using Marble Dust by <i>Ashish Solanki and Jitendra Kumar Sharma</i>
	TH-08-16	Experimental Investigation of Expansive Soil Mixed with Shredded Rubber Tyre by <i>Banti Singh, Vishal kumar N and Jitendra kumar Sharma</i>
	TH-08-19	A Laboratory Study on the Stabilized Expansive Soil with partial Replacement of Flyash and Palm Oil Fuel Ash by <i>Ramu K and Dayakar Babu R</i>
	TH-08-20	Effect Of Soil Burial On Durability of Alkali Activated Binder Treated Jute Geotextile by <i>Sachin chakravarthy G and Anasua GuhaRay</i>
	TH-08-22	Enhancing the Engineering Properties of Black Cotton Soil by using Magnesium Chloride by <i>Sukanya Sharma, Vijay Kumar and Ajay B</i>
	TH-08-23	Study on Permeation Grouting with Cement to Improve Load Carrying Capacity of Sandy Soil by <i>Rawat P, Prabhat Kumar and Supriya M</i>
	TH-08-25	Decontamination of soil by Electro Kinetic Treatment by <i>Muddassir Nadaf, Kaveri D J and Vikas G</i>
	TH-08-27	Influence of Curing Methods on Strength of Nano Silica Treated Soil by <i>Kannan G and Sujatha E R</i>
TH-08-28	The Behavior of Expansive Soil on The Addition of Kota Stone Slurry And Cement by <i>Ajay Pratap Singh R, Jitendra Kumar Sharma and Charan H D</i>	
TH-08-29	Effect of Waterborne Polymer on Geo technical Properties of Black Cotton Soil by <i>Deepak P and Jitendra Kumar Sharma</i>	

**THEME 3 – Deep foundations**

**[LINK 4](#)**

**Session Coordinator: Sri. Ravikiran Vaidya, M/s Geo Dynamics, Vadodara**

**Chairman: Prof. Ramendu Bikas Sahu, Jadavpur University, Kolkata**

**Co-Chairman: Dr. Anil Joseph, M/s. Geo Structural Pvt. Ltd., Kochi**

16:00 – 16:20	Theme Lecture	Rock Anchors for Static Pile Load Testing – Considerations and Case Studies by <i>Sri. Ravi Kiran Vaidya, M/s Geo Dynamics, Vadodara</i>
<b>December 17, 2020</b> 16:20 – 17:40	<b>Paper Presentations</b>	
	TH-03-002	3D Numerical Study of the Behavior of Piled Raft Foundation on Soft Clay with Uniform and Varying Pile Lengths by <i>Rajib M, Debjit B and Baleshwar Singh</i>
	TH-03-003	Analysis of Decomposed Components of Raft and Piles of Piled-Raft Foundation in Sandy Soil by <i>Tusshar Sharma and Baleshwar Singh</i>
	TH-03-005	Evaluation of Initial Stiffnesses and Ultimate Resistances of Shaft and Base of a Pile from Initial Load Test by <i>Vedhasri S, Nageshwar Rao Ch and Madhav M R</i>
	TH-03-008	Behavior of Single Pile Subjected to Eccentric Loading in Cohesionless Soils by <i>Dhanasree N, Saibaba Reddy E and Padmavathi V</i>
	TH-03-009	Evaluation of Bearing Capacity for Cast In-situ Bored Pile by <i>Raisa P S and Chandrakaran S</i>
	TH-03-11	Effect of Bentonite Support Fluid on Pile Capacity by <i>Keerthi S and Abraham B M</i>
	TH-03-12	Predicting Residual Stress State Around Bored Cast-in-situ Piles Utilizing Cavity Contraction and Expansion Solutions by <i>Alpha Lukose and Sudheesh T</i>
	TH-03-14	Estimation of Mobilized Shaft Resistance of Bored Piles from Pile Load Test by <i>Gouthami M, Srinivas K and Madhav M R</i>
	TH-03-15	Numerical Analysis of Jointed Piles by <i>Swathi B, Balakumar V and Chandrasekaran S S</i>
	TH-03-17	Numerical Analysis of Finned Pile in Clayey Soil under Combined Loading by <i>Rekha A, Jayasree P K and Unnikrishnan N</i>
	TH-03-23	Genetic Algorithm based Optimisation and Design of Pile Foundation by <i>Bhargav Jyoti B and Sasanka B</i>
	TH-03-25	A Numerical Study about the Development of Stressed Zone around Single Pile when Moved away from the Crest of the Slope under Static Lateral Load by <i>Sivapriya S V and Gandhi S R</i>
TH-03-26	A Critical Review of Some Important Aspects of the Indian Practice of Geotechnical Design of Bored Piles by <i>Jimmy Thomas, Gitty R E and Joyis Thomas</i>	

THEME 4 – Environmental Geotechnology		<a href="#">LINK 5</a>
<b>Session Coordinator: Dr. D. Neelima Satyam, IIT Indore</b> <b>Chairman: Prof. D.K. Baidya, IIT Kharagpur</b> <b>Co-Chairman: Dr. Ankit Garg, Shantou University, China</b>		
16:00 – 16:20	Theme Lecture	Effect of Physico-Chemical Interactions and Cyclic Wet-Dry Process on Behaviour of Compacted Clay Soils by <b>Dr. T. Thyagaraj, IIT Madras, Chennai</b>
<b>December 17, 2020</b> 16:20 – 17:40	<b>Paper Presentations</b>	
	TH-04-001	Strategies and Learnings in Execution of Filter Works with Manufacture-Sand in an Earth and Rock-Fill Dam by <i>Vinod Kumar Mourya</i>
	TH-04-002	Performance of an Electro Magnetic Sensor for Field Monitoring of Volumetric Water Content in Water Absorbing Polymer (WAP) Amended Soil by <i>Abhisekh S, Sreedeeep S and Uttam Manna</i>
	TH-04-007	Effect of Biochar for the Remediation of Heavy Metal Contaminated Industrial Site Soil by <i>Susmitha R T and Bindu J</i>
	TH-04-008	Compressive Strength of High Plastic Clay stabilized with Fly Ash Based Geopolymer and Its synthesis Parameters by <i>Neeraj Varma D, Tulasi Kumar M and Vamsi Nagaraju T</i>
	TH-04-009	Numerical Analysis on the Reinforced Earth Walls backfilled with Coal Gangue by <i>Chetan B, Mohammed Ashfaq and Heeralal M</i>
	TH-04-10	Study on Retention Characteristics of Amended Clay Liner by <i>Anju S and Ajitha A R</i>
	TH-04-14	An Experimental Study on Flyash Behaviour as Landfill by <i>Kingshuk Dan</i>
	TH-04-15	Geotechnical Characteristics of Thermal Powertech Fly Ash from Krishnapatnam, Nellore by <i>Narasinga Rao B N D and Vinay Kumar P</i>
	TH-04-16	Treatment of Akkulam Dredged material with Lime by <i>Abhijith A and Jaya V</i>
	TH-04-20	Study on the Characteristics of Overburden Dump of the Coal Mines by <i>Atul D Gautam and Yadu L K</i>
	TH-04-23	Effectiveness of Bioremediation Technique on Oil Contaminated Marine Soil by <i>Sravya K, Sangeetha S and Hari Krishna P</i>
TH-04-26	Microbially Treated Lateritic Soil as a Landfill Liner Material by <i>Kavya K S and Ajitha A R</i>	
TH-04-27	Decontamination of Heavy Metal Contaminated Soils by Phytoremediation: Pot Experimentation by <i>Rajasekhar P and Somanath Mondal</i>	
18:00 – 20:30	<b>Annual General Meeting</b>	
		<a href="#">Link 1</a>

**December 18, 2020**

<b>Plenary Session 3 (09:00 – 10:45)</b>		<a href="#"><u>Link 1</u></a>
<b>Session Coordinator: Prof. C. N. V. Satyanarayana Reddy, Andhra University, Visakhapatnam</b> <b>Chairman: Prof. K.S. Rao, IIT Delhi</b> <b>Co-Chairman: Prof. R. ShivaShankar, NIT, Suratkal</b>		
09:00 – 09:35	Keynote Lecture 6	A Road Map for Geotechnical Monitoring of Transportation Infrastructure Assets using Three-Dimensional Models Developed from Unmanned Aerial Databy <b>Prof. Anand J. Puppala, Texas A &amp; M University, USA</b>
09:35 – 10:10	Keynote Lecture 7	Geoenvironmental Considerations for Bulk Reuse of MSW Residues from Old Dumps and WTE Plants in Geotechnical Applicationsby <b>Prof. Manoj Datta, IIT Delhi</b>
10:10 – 10:45	Keynote Lecture 8	Geosynthetics Encased Granular Columns: Design and Analysis under Vertical and Lateral Loads by <b>Prof. K. Rajagopal, IITMadras, Chennai</b>
11:00 - 11:20		Corporate Presentations: M/s. AIMIL Ltd. and M/s. HEICO
<b>Plenary Session 4 (11:30 – 13:00)</b>		<a href="#"><u>Link 1</u></a>
<b>Session Coordinator: Prof. B.N.D. Narasinga Rao, ANITS, Visakhapatnam</b> <b>Chairman: Prof. N.K. Samadhiya, IIT Roorkee</b> <b>Co-Chairman: Sri. I.V. Anirudhan, M/s. Geotechnical Solutions, Chennai</b>		
11:30 – 12:05	Keynote Lecture 9	Use of Centrifuge-based Physical Modelling for Understanding the Performance of Geostructuresby <b>Prof. B.V.S. Viswanadham, IITBombay, Mumbai</b>
12:05 – 12:40	Keynote Lecture 10	Simple Approaches for the Design of Shallow and Deep Foundations for Unsaturated Soils: Theoretical and Experimental Studiesby <b>Prof. Sai. K. Vanapalli, University of Ottawa, Canada</b>
<b>Lunch Break (13:00 – 14:00)</b>		
<b>14:00 – 15:30</b>	<b>TECHNICAL SESSIONS</b>	
<b>THEME 1 - Soil Behavior and Characterisation of Ground</b>		<a href="#"><u>LINK 2</u></a>
<b>Session Coordinator: Prof. K. Muthukkumaran, NIT Trichy</b> <b>Chairman: Sri. Ravi Sundaram, CENGRS, New Delhi</b> <b>Co-Chairman: Dr. Jaykumar Shukla, M/s. Geo Dynamics, Vadodara</b>		
14:00 – 15:30	<b>Paper Presentations</b>	
	TH-01-25	A Lab Study on the Factors Effecting Settlement and Electrical Resistivity of Gypsum Sands by <i>Raghava Aditya B and Michael E K</i>
	TH-01-26	Evaluation of Liquefaction Susceptibility of Soils in Kerala, India based on Equivalent N-Value and Equivalent Acceleration by <i>Akshay Vikram, Alex Abraham S M, Greeshma M R, Iswarya Ani, Mmohammad Siddique A and Adarsh S</i>
	TH-01-27	Plasticity Characteristics of China Clay -Bentonite -Sand Mix Proportion by <i>Jyothi D N, Prasanna H S, Pavithra H S and Yashaswini K A</i>

December 18, 2020 14:00 – 15:30	TH-01-28	Estimation of Preconsolidation Stress of Compacted FineGrained Soils by User Friendly Methods by <i>Prasanna H S and Basava Raju</i>
	TH-01-31	Relationship between various Consolidation Parameters of Compressible Soil by <i>Siri A, Nageshwar Rao Ch and Madhav M R</i>
	TH-01-33	Implementation of Wavelet Algorithm and Maximum Change Point Method for Detection of Ballast Substructure Using GPR by <i>Savita S J, Ambazhagan P and Pallavi A</i>
	TH-01-34	Control of Heave Action using Micropile with Geotextile Layer in Expansive Soil by <i>Prashanth G S, Sanjay R and Mayur G V</i>
	TH-01-39	Assessment of Deformability Characteristics of Sandstone by Direct and Indirect Methods - A Case Study by <i>Sarwade D V, Senthil P, Pankaj Kumar and Hari Dev</i>
	TH-01-43	Flood Sediment Characterization and Modification as Construction Material by <i>Athul O K and Jaya V</i>
	TH-01-45	Interpretation of Static Cone Penetration Test with Triaxial Test to Determine Undrained Shear Strength of Clayey Soil by <i>Sachin K M</i>
	TH-01-48	Load Settlement Characterstics of Sand Bed Reinforced with Woven Glass Fibre by <i>Devendra Singh R and Ashwani Jain</i>
	TH-01-49	Stress-deformation Behaviour of Feldspathic Gneisses as Foundation Medium for a 278 m High Concrete Gravity Dam in Eastern Himalayas by <i>Hari Dev and Gupta S L</i>
	TH-01-50	Load - Penetration Behaviour of Composite Soil with Nano - Alumina Material under Soaked and Unsoaked Condition by <i>Sivapriya S V, Madhu T R and Sajid Ali</i>
	TH-01-53	Engineering Behaviour of Alluvial Rockfill Material by <i>Uday Bhanu C and Honkanadavar N P</i>
TH-01-54	Prediction of Shear Strength Parameter using Basic Index Properties and Modeling the Behaviour of Prototype Riverbed Rockfill Material by <i>Honkanadavar N P</i>	
<b>THEME 5 – Transportation Geotechnics</b>		<b><a href="#">LINK 3</a></b>
<b>Session Coordinator: Prof. Sireesh Saride, IIT Hyderabad</b> <b>Chairman: Prof. Dasaka S N Murthy, IIT Bombay, Mumbai</b> <b>Co-Chairman: Dr. Munwar Basha, IIT Hyderabad</b>		
14:00 – 14:20	Theme Lecture	New Layer Coefficients for Geogrid-Reinforced Pavements Bases by <b>Prof. Sireesh Saride, IIT Hyderabad</b>
December 18, 2020 14:20 – 15:30	<b>Paper Presentations</b>	
	TH-05-003	Mechanical Stabilization of Subgrade using Sand-Cement Mixture by <i>Mainak Majumdar and Sayan Bhattacharyya</i>
	TH-05-006	Effect of Stabilisation on Geomechanical Properties of Pond Ash for Pavement Subbase Applications by <i>Sudhakar M, Heeralal M and Kalyan Kumar G</i>
	TH-05-008	Use of Geofoam for Road Construction over Very Soft Clay by <i>Subhatosh P, Amit kumar Das and Ashim Kanti Dey</i>

December 18, 2020 14:20 – 15:30	TH-05-009	Development and Study on the Properties of Eco-friendly Coir Latex Composites by <i>Sibi Joy, Jayasree P K and Balan K</i>
	TH-05-10	Flexural and Rutting Behaviour of Subgrade Reinforced with Geocell and Demolition Waste as Infill by <i>Mahima D and Sini T</i>
	TH-05-16	Static Analysis of Thin Rectangular Plate Resting on Pasternak Foundation by <i>Ashis Kumar Dutta, Debasish Bandyopadhyay and Jagatjyoti M</i>
	TH-05-18	Significance of GPR Studies in Urban Planning and Road Works - A Case Study from Gujarat, India by <i>Mohammad Rafiq Joo and Silky Agrawal</i>
	TH-05-19	Interrelationship between CBR and Electrical Resistivity in Gravelly soils by <i>Shah A J and Bhuvnesh Pandey</i>
	TH-05-22	Design and Construction of Road Embankments in Swampy area - A Case Study of Uganda in East Africa by <i>Avik Kumar M, Sailesh S and Pradyot B</i>
	TH-05-23	Behaviour of Geosynthetic Reinforced Reclaimed Asphalt Pavement Bases under Static Loading by <i>Ishfaq Rashid Sheikh, Shah M Y and Saqib Wani K M N</i>
	TH-05-25	Evaluation of Surface Deformation in Geo-cell Reinforced and Unreinforced Bases over Weak Subgrade by <i>Ishfaq Rashid Sheikh, Shah M Y and Saqib Wani K M N</i>

**THEME 8 – Developments in Ground Improvement**

[LINK 1](#)

**Session Coordinator: Dr. K. Rajya Lakshmi, DTE, Govt. of AP**

**Chairman: Prof. G.V.R. Prasada Raju, JNTU, Kakinada**

**Co-Chairman: Dr.B. Janakiramaiah, IIT Tirupati**

December 18, 2020 14:00 – 15:30		Paper Presentations
TH-08-33	Desiccation cracking behavior and strength characteristics of areca fiber reinforced fine-grained soils by <i>Ravi D A and Renjitha M V</i>	
TH-08-36	Experimental And Numerical Analysis Of Geosynthetic Encased Tapered Stone Columns by <i>Keerthi K, Agila K and Johnson A S</i>	
TH-08-37	Numerical Analysis and Experimental Study on Reinforcement using PVC Rod in the Vicinity of Pressure Bulb in Sand by <i>Agila K, Arvee Sujil J and Keethi K</i>	
TH-08-38	Unconfined Compressive Strength of MICP Treated Black Cotton Soil by using Pseudomonas putida by <i>Wath R B and Pusadkar S S</i>	
TH-08-39	Strength and Deformation Characteristics of Subgrade Soil Stabilized with Plastic Covers by <i>Monica Simon, Vismaya A, Jayasree P K and Leema Peter</i>	
TH-08-40	Enhancement of Soil Stabilization by Electro-Kinetic Process by <i>Stalin V K and Balasundari S</i>	
TH-08-41	Improvement on Strength Characteristics of Soil using Nanomaterials:A Critical Review by <i>Jayanti M and Supriya M</i>	
TH-08-45	Sulphate Resistance of Lime stabilized Clay using Silica Fume by <i>Meenu K and Manju G S</i>	

<b>December 18, 2020</b> 14:00 – 15:30	TH-08-46	Effect of modification on coir fiber in durability and shear strength parameters of flyash clay mixture by <i>Athira S and Manju G S</i>
	TH-08-48	Dynamic Compaction of Sandy and Silty Soils Near Delhi for Liquefaction Mitigation by <i>Amit S, Sandeep G and Manoj T</i>
	TH-08-51	Lateral Displacements of Soft Ground under Embankment Loading by <i>Bhanuchitra M, Padmavathi V and Madhav M R</i>
	TH-08-52	Influence of Eco-sand Drains on the Performance of Consolidation Characteristics Founded on Soft Clay Deposits by <i>Gowtham P, Subitha T and Kishore K S</i>
	TH-08-54	Effect of Fiber Reinforcement on Strength of Geopolymerised Soil: An Experimental Investigation and Numerical Modeling by <i>Mazhar Syed, Yash V K, Gaurav B S and Anasua GuhaRay</i>
	TH-08-56	Influence of Coconut Coir on the Strength Characteristics of Silica Fume based Geopolymer Expansive Clay Blends by <i>Nagaraju T V and Vinay kumar Ch</i>
	TH-08-57	Strength Behaviour of Polypropylene Fiber Reinforced GGBS based Geopolymer Clay Blends by <i>Sarada Sharmila Ch, Nagaraju T V and Santoshi A S P V</i>

**THEME 3 – Deep foundations**

**[LINK 4](#)**

**Session Coordinator: Sri. Ravikiran Vaidya, M/s Geo Dynamics, Vadodara**

**Chairman: Prof. Ashim Kanti Dey, NITSilchar**

**Co-Chairman: Dr. Anil Joseph, M/s. Geo Structural Pvt. Ltd., Kochi**

<b>Paper Presentations</b>		
<b>December 18, 2020</b> 14:00 – 15:30	TH-03-28	Appraisal of Innovative Finned-Pile foundations to Resist lateral Loads by <i>Pankaj B and Sreevalsa K</i>
	TH-03-29	Unsatisfactory Behavior of Bored Cast In-situ Piles during Testing - Ignorance or Negligence! by <i>Maurya R R and Vijayaraman A</i>
	TH-03-32	Lateral Load Carrying Capacity of Vertical Micropiles by <i>Udaya Pratap, Awdhesh Kumar Choudhary and Abdhesh Kumar Sinha</i>
	TH-03-33	Short Piles for a Solar Power Plant in Western Rajasthan by <i>Mohit J, Ravi Sundaram, Sanjay Gupta and Jitendra Kumar</i>
	TH-03-35	Experimental Study on Seismic Behaviour of Liquefiable Soil using Piled Raft Foundation with varying Length of Pile by <i>Mansi K, Karan M and Nidhi P</i>
	TH-03-36	Performance of Barrette Foundations in Sandy Soil Subjected to Vertical Loading by <i>Sohail Qureshi, Thakare S W and Dhattrak A I</i>
	TH-03-37	Numerical Analysis of Plate Anchors in Clay by <i>Dhattrak A I, Rushikesh R B, Lalit S A and Sanjay W T</i>
	TH-03-40	Performance of Helical and Square Plate Anchors in Cohesionless Soil by <i>Dhattrak A I, Amrutkar L S, Thakare S W and Badnakhe R R</i>
	TH-03-42	Performance of Barrette foundation in Sandy Soil Subjected to lateral loading by <i>Sunil D, Thakare S W and Dhattrak A I</i>

TH-03-44	Performance of the Helical Pile Foundation in Cohesionless Soil by <i>Ananth I D, Himanshu R Varma, Minal M D and Sanjay W T</i>
TH-03-47	Analysis of Pile Group and Piled Raft as a Foundation System by <i>Shreyansh Kumar G, Jaykumar Shukla and Nitin H Joshi</i>
TH-03-48	Parametric Study on Performance of Piled Raft Foundation on Dense Sand underlain by Soft Clay by <i>Eswara Prasad C R, Surya Ch and Mallikharjuna Rao K</i>
TH-03-51	Experimental Investigation on Performance of Helical pile in Cohesionless Soil by <i>Dhatrak A I, Minal M Dhage, Himnashu R Varma and Thakare S W</i>
TH-03-52	Load Settlement Behaviour and Interaction Effect of Piled Raft Foundation in Cohesive Soil by <i>Eswara Prasad C R, Vinod Kumar D and Mallikarjuna Rao K</i>
TH-03-60	Instrumented Pile Load Tests in Southern India by <i>Sujan Kulkarni, Ravikiran Vaidya and Sriram P</i>

**THEMES 3 & 4 – Deep foundations & Environmental Geotechnology**

[LINK 5](#)

**Session Coordinator: Dr. D. Neelima Satyam, IIT Indore**

**Chairman: Prof. D.K. Baidya, IIT Kharagpur**

**Co-Chairman: Dr. Ankit Garg, Shantou University, China**

**Paper Presentations**

<b>December 18, 2020 14:00 – 15:30</b>	TH-03-61	Bidirectional Static Load Test (BDSLT) on a Versatile Barrette Foundation for High-Rise Building in Dubai by <i>Anil Cherian</i>
	TH-03-62	Analytical Study of Load carrying Capacity of Fiber Reinforced Polymer Piles by <i>Dhatrak A I, Shweta N B and Thakare S W</i>
	TH-04-30	Effect of High Suction Measurement Technique on the SWCC of Expansive Soil by <i>Abhijit D, Srikanth V and Sreedeeep Sekharan</i>
	TH-04-31	Strength Characterisation of Stabilized Class "F" Flyash using Class "C" Flyash by <i>Soundarapandian M and Stalin V K</i>
	TH-04-32	Effect of Fly Ash Addition to the Viscous Behavior of Bentonite by <i>Sayali Belawadikar, Dhananjay S Patil and Ashish Juneja</i>
	TH-04-35	Application of Bio Inspired Systems for Geotechnical Solutions- A Review by <i>Bhuvaneshwari S</i>
	TH-04-36	Design of Compacted Clay Liner with Black Cotton Soil and Micro Silica Fume by <i>Anjuraj C and Soumya Jose</i>
	TH-04-41	Reuse of Dredge Material as a Liner in Landfills by <i>Abhijith Sathya, Chanthu R, Martin Robert, George Johnson and Rani V</i>
	TH-04-42	A Review on Soil Reinforcement using different Natural Fibers by <i>Apurva A K, Sankar N and Chandrakaran S</i>
	TH-04-46	Effect of Synthetic Leachate on Volume Change Behaviour of Compacted Clay Liners by <i>Shanmuga Priya R and Thyagaraj T</i>
	TH-04-49	Environmental Geotechnical Issues in River Interlinking Proposal by <i>Laxmikanta Tripathy</i>
	TH-04-51	Use of Dynamic Compaction for Densifying MSW Landfills by <i>Saptarshi Kundu and Viswanadham B V S</i>

15:45 – 17:30	TECHNICAL SESSIONS (December 18, 2020)	
<b>THEME 1 - Soil Behavior and Characterisation of Ground</b>		<a href="#"><u>LINK 2</u></a>
<b>Session Coordinator: Prof. K. Muthukkumaran, NIT Trichy</b> <b>Chairman: Prof. K. Rajagopal, IIT Madras, Chennai</b> <b>Co-Chairman: Dr. Yashwant Kolekar, College of Engg., Pune</b>		
<b>December 18, 2020</b> 15:45 – 17:30	<b>Paper Presentations</b>	
	TH-01-56	Modelling using ANN and RNN Approach for Shearing Behavior of Residual Soil by <i>Manas B and Milind A</i>
	TH-01-57	Assessment of Local Seismic Hazard of Agartala based on Nonlinear Site Response Analysis by <i>Rima Das, Rajib S and Rajat D</i>
	TH-01-58	Effect of Alkali Activated Fly Ash on Shrinkage Characteristic of Expansive soil by <i>Vamsi Navya Krishna M and Sireesh Saride</i>
	TH-01-59	Strength and Micro-structure Evolution of soft soils by using Nanosilica by <i>Rupa Shree R S and Anuradha P</i>
	TH-01-60	Analysis of Desiccation Crack Patterns of Expansive Soil Treated with Lignosulphonate and Lime by <i>Landlin G and Bhuvaneshwari S</i>
	TH-01-63	Laboratory Assessment of Clogging Potential using Soil Drilling Test by <i>Arya S Babu and Sayida M K</i>
	TH-01-64	Chemical Remediation of Soil Contaminated with Heavy Metals by Washing with EDTA by <i>Neelam P, Bharti R K and Chitra R</i>
	TH-01-65	Analysis of Freezing Thawing Cycles on Unconfined Compressive Strength of Expansive Soil by <i>Mohmad Maaz M M, Bhavita D, Solanki C H and Desai A K</i>
	TH-01-67	Standard Penetration Test (SPT) Pitfalls and Improvements by <i>Selvam S, Manoj M and Swathi A</i>
	TH-01-70	Effects of Soil Structure Interaction on the Embankment Resting on Different Soils Subjected to Strong Earthquake Ground Motions by <i>Sridevi G, Shivaraj A, Sudarshan G and Rama Rao M</i>
	TH-01-72	A comparison of Rock Mass Deformation Modulus from Empirical Correlations versus Plate Load Test at Pare Hydro-Electric Power Project, Papum Pare, Arunachal by <i>Pawan Kumar Singh, Diganta Goswamy and Dibyajyoti K</i>
	TH-01-74	Strength Behavior of Lime Stabilised Soil Reinforced with Waste Plastic Strips by <i>Gnana Prasanna G and Venkata krishna G</i>
	TH-01-79	Effect of Tyre Waste Addition on UCS of Bentonite-Sand and Bentonite-Rock Quarry Dust Mixes by <i>Nazrul Islam, Tinku K and Chetia M</i>
	TH-01-83	Consolidation: Critical Appraisal of Settlement versus Rate of Settlement (SRS) Approach with Fuzzy Logic by <i>Sudhir Kumar T, Chetia M, Nasrin T and Kanishck T</i>
TH-01-84	Characterization of Dispersive Soils using Chemical and Mineralogical Tests by <i>Sameer V, Beena A, Rajeev kumar and Gupta S L</i>	
TH-01-85	Study of Maliya Marine Clay for A Highway Embankment by <i>Anandji Kalyanji Shah</i>	

**THEME 6 – Landslides and Slope Stability**

[LINK 3](#)

**Session Coordinator:** *Dr. G. V. Ramana, NIT Warangal*  
**Chairman:** *Prof. S.K Prasad, Vidyavardhaka Engineering College, Mysore & Former Prof., SJCE, Mysore*  
**Co-Chairman:** *Dr. J. Ravi Shankar, IIT Roorkee*

15:45 – 16:05	Theme Lecture	<b>Ultrasonic Removal of Clogging and Evaluation of Flow Capacity of Geotextile Drain by Prof. Chandan Ghosh, IIT Jammu</b>
<b>December 18, 2020</b> 16:05 – 17:30	<b>Paper Presentations</b>	
	TH-06-001	Prediction of Stability of an Infinite Slope using Geospatial Techniques by <i>Dinesh Srirama, Savita C and Arif Ali Baig M</i>
	TH-06-002	Application of Bi-Directional Extreme Learning Machine for Predicting Stability of Slope of Railway Embankment in Seismic Condition by <i>Abi Bardhan, Dilip Kumar B, Lakshmi M and Tijush Samui</i>
	TH-06-003	Risk Assessment and Early Warning System for Landslides in Himalayan Terrain by <i>Panigrahi R K and Gaurav D</i>
	TH-06-004	Multiple Regression (MR) and Artificial Neural Networks (ANN) for Predicting Factor of Safety in Slope Stability Analysis by <i>Aswathi M and Chandrakaran S</i>
	TH-06-007	Application of Numerical Modelling to Solve Slope Stability and Landslides by <i>Sukumar Saha</i>
	TH-06-008	Numerical Analysis of the Stability of Soil Slopes subjected to Rainwater Infiltration by <i>Bhanuprakash H R and Adarsh S C</i>
	TH-06-10	Analysis of Layered Slope Subjected to Rainwater Infiltration by <i>Anil Kumar G M and Adarsh S C</i>
	TH-06-11	Response of Sand at Low Normal stresses using Gravity Shear Test by <i>Kiranmai K, Srinivas K and Madhav M R</i>
	TH-06-21	Rock Slope Stability Analysis of a Metro Station Excavation by <i>Rajaraman R and Sumanth Kumar G</i>
	TH-06-22	Design of Core of Earthen Dam by Replacement with Geosynthetics by <i>Asif Ali Md., Sasanka Mouli S and Shiva Bhushan J Y V</i>
	TH-06-25	Investigation and Design of Remedial Measures for Landslide in Hunthar Veng, Mizoram - A Case Study by <i>Vinoth M, Prasad P S, Sudhir Mathur and Kishor Kumar</i>
	TH-06-31	Stability Analysis of Tailings Dams using Finite Element Approach and Conventional Limit Equilibrium Approach by <i>Surender Singh, Abhishek Kumar and Sitharam T G</i>
TH-06-33	Stability Analysis of Slopes at a Landslide Prone Area: A Case Study on the Landslide at Madikere, India by <i>Sumalatha J</i>	
TH-06-37	Study of Dry Granular Flow Behaviour with and without Erodible Layer by <i>Sureka S, Kavin Kumar C and Rakesh J P</i>	

THEME 8 – Developments in Ground Improvement		<a href="#">LINK 1</a>
<b>Session Coordinator: Dr. K. Rajya Lakshmi, DTE, Govt. of AP</b> <b>Chairman: Prof. Ch. Solanki, NIT Surat</b> <b>Co-Chairman: Prof. G. Sridevi, BVRIT, Hyderabad</b>		
<b>December 18, 2020</b> 15:45 – 17:30	<b>Paper Presentations</b>	
	TH-08-58	Advancement in Microbial Soil Treatment for Enhancing Geotechnical Properties by <i>Ripunjoy D and Abhijit D</i>
	TH-08-60	Effect of Marble Dust on Strength Characteristics of Rice Husk Stabilized Soil by <i>Srikalpa R M, Monoswi M S and Rupareshree R S</i>
	TH-08-63	Modification Of Geotechnical Properties Of Local Soil Mixed With Fly Ash by <i>Divya S and Gupta S S</i>
	TH-08-64	Swelling Characteristics of Flyash based Geopolymer Expansive Clay blends by <i>Nagaraju T V and Naga Mounika K</i>
	TH-08-67	A critical review on stabilization of expansive soils with compensating materials by <i>Ashok Kumar T, Thyagaraj T and Robinson R G</i>
	TH-08-69	Internal and External Sulfate Attack on Expansive Soil Stabilized with Calcium Based Stabilizers: A Review by <i>Sriram Karthick Raja P and Thyagaraj T</i>
	TH-08-70	Swell-Shrink Behaviour of Lime Pile and Lime Slurry Treated Expansive Soil by <i>Kumar K S R and Thyagaraj T</i>
	TH-08-71	Effect of lignosulfonate on strength and deformation behavior of Swelling soil by <i>Richa M and Rajesh S</i>
	TH-08-73	Efficacy of Red mud and GGBS in Improving the Engineering Properties of Black Cotton Soil by <i>Sweeti S, Somenath M and Anil Kumar C</i>
	TH-08-74	Use of Nanolime and Fly Ash Mixture to Improve Consistency Limits & UCS of Rajkot Soil by <i>Hardik B A, Davit Druv and Siddharth G S</i>
	TH-08-76	Strength and Compressibility of Kaolinite Clay Stabilized with Lime Sludge and Fly Ash by <i>Burra S G, Kolay P K, Puri V K and Kumar S</i>
	TH-08-80	Effect of Ground Granulated Blast Furnace Slag and Plastic Fibres on Geotechnical Properties of Black Cotton Soil by <i>Durga Prasad S, Prasad D S V and Prasada Raju G V R</i>
	TH-08-81	Slope Stability Analysis of Stacker “ Reclaimer embankment under the influence of Adjacent Stock Pile by <i>Riddhi Mineshbhai Gupta</i>
	TH-08-83	Improvement of bearing capacity of stone columns- An analytical study by <i>Manita Das and Ashim Kanti Dey</i>
	TH-08-84	Applicability analysis of stone column against liquefaction under repeated dynamic events by <i>Aravind M, Godson M D, ganesh Kumar S and Nantha Kumar S</i>
TH-08-88	Application of Geosynthetics for Geotechnical Challenges by <i>Ksheeraja Al and Srilatha N</i>	
TH-08-89	Effectiveness of Geosynthetic Encased Stone Column Technique for Liquefaction Mitigation by <i>Geever A A, Shankar K, Ganesh Kumar S and Bhuvaneshwari S</i>	

**THEME 9 – Numerical and Physical Modelling**

[LINK 4](#)

**Session Coordinator:** *Prof. B.V.S. Viswanadham, IIT Bombay*

**Chairman:** *Prof. Chandan Ghosh, IIT Jammu*

**Co-Chairman:** *Dr S. Rajesh, IIT Kanpur*

15:45 – 16:05	Theme Lecture	Investigation of Instabilities in Granular Media and their Numerical Simulation by Vetiver System by <b>Prof. Amit Prashant, IIT Gandhinagar</b>
<b>December 18, 2020</b> 16:05 – 17:30	<b>Paper Presentations</b>	
	TH-09-002	Numerical Analysis of Laterally Loaded Pile near Sloping Ground by <i>Rajeswari B, Teja M and Kalyan Kumar G</i>
	TH-09-008	Development of Equivalent Lattice Beam Model for Support System in Tunnels and Caverns using FEM Analysis by <i>Rishabh Tiwari and Singh U K</i>
	TH-09-11	Earth Pressures of Soils Partially Replaced with Building Derived Materials for Narrow Backfill Condition by <i>Jayatheja M and Anasua GuhaRay</i>
	TH-09-13	Development of Full-Scale Retaining Wall Model to Evaluate Lateral Earth Pressure Reduction using EPS Geofam by <i>Vikas S P, Mrunmay J and Dasaka S Murthy</i>
	TH-09-14	Prediction of Ultimate Bearing Capacity of Eccentrically Inclined Loaded Strip Footing resting over Dense and Medium Dense Sand using Generalized Regression Neural Network by <i>Vaibhav Chaudhary and Jitendra Singh Yadav</i>
	TH-09-16	Optimization of Piled Raft on Sand for Plaza-type Structures by <i>Sharmila B, Balakumar V and Chandrasekaran S S</i>
	TH-09-20	Development of Calibration Methodology for Earth Pressure Cells for Installation on Full Scale Retaining Wall by <i>Dinesh B, Mrunmay J and Dasaka S Murthy</i>
	TH-09-23	Numerical Simulation of Field Vane Shear Test using Finite Element Method by <i>Anand M H, Pankaj B, Solanki C H and Dodagoudar G R</i>
	TH-09-24	Dynamic Stability Analysis of Shallow Triple Tunnel in Rock by <i>Mohammad Zaid and Irfan A S</i>
	TH-09-25	Comparison of Flownets for Varying Thickness of Vertical Core Earth and Rockfill Dam under Rapid Draw Down and Steady State Seepage and Its Effect on Stability using Numerical Modeling by <i>Rajesh Khanna and Chitra R</i>
	TH-09-26	Numerical Analysis of Ring Foundation Fixed with Geogrid by <i>Rahul P S, Dipendra C S and Singh A K</i>
	TH-09-28	Numerical Analysis of Bearing Capacity and Settlement Reduction of Bamboo Reinforced Sand Beds by <i>Ajesh Sankar M, Akhil K S, Sankar N and Chandrakaran S</i>
	TH-09-29	Distribution and Sharing of Load for Partially Strengthened Floating Granular Piled Raft by <i>Sanadhya R R, Ashish Solanki and Jitendra Kumar Sharma</i>
TH-09-31	Non-Linear Static Pushover Analysis of Plan Irregular Structure incorporating Soil-Structure Interaction by <i>Karismita P and Atanu Kumar D</i>	

**THEME 11 – Dynamics of Soils and Foundations (December 18, 2020)**

[LINK 5](#)

**Session Coordinator:** *Dr. D. Neelima Satyam, IIT Indore*

**Chairman:** *Prof. A. Boominadhan, IIT Chennai*

**Co-Chairman:** *Dr. Arif Ali Baig, NIT Warangal*

15:45 – 16:05	Theme Lecture	Seismic Site characterization and dynamic analysis of pile supported Wharf structure by <i>Dr. D. Neelima Satyam, IIT Indore</i>
December 18, 2020 16:05 – 17:30	<b>Paper Presentations</b>	
	TH-11-002	Effect of Strain-Rate on Stress-Strain Behavior of Dredged Material at Different Moisture Contents - An Experimental Study by <i>Tehseena Ali and Mir B A</i>
	TH-11-003	Effect of Liquefaction on Behavior of Strip Footings on Sands in Roorkee by <i>Manendra Singh and Maheshwari B K</i>
	TH-11-004	Plasticity based Liquefaction Susceptibility using Multi-Linear Regression Model by <i>Sufyan G and Sunita Kumari</i>
	TH-11-007	A Case Study of Liquefaction-induced Damages to A Port Building Supported on Pile Foundation by <i>Monirul M, Kalyan Kumar M and Sahu R B</i>
	TH-11-009	Behavior of Single Pile Embedded in Multi-Layered Soil Subjected to Dynamic Excitation by <i>Bidisha B and Arup B</i>
	TH-11-10	Analysis of Laterally Loaded Single Pile in Cohesionless Soil Considering Nonlinear Soil-Structure Interaction Effects by <i>Monirul M, Kalyan Kumar M and Sahu R B</i>
	TH-11-16	Evaluation of Liquefaction Potential of Fly Ash and Calibration of Numerical Model by <i>Sangeeta Yadav and Sumanta Halder</i>
	TH-11-19	Seismic Performance of Soft Storey Tall Buildings on Flexible Ground by <i>Niranjan R K and Prasad S K</i>
	TH-11-20	A Review on Ground Improvement with Surcharge in Addressing Liquefaction Mitigation by <i>Anurag S C and Madan Kumar A</i>
	TH-11-21	Dynamic Behaviour of Pond Ash Mixed with Crumb Rubber by <i>Ashish M and Singh S K</i>
	TH-11-25	Probabilistic Seismic Response of Soil-Pile Foundation-Structure System: A Substructure based Analysis by <i>Rajat B and Rajib S</i>
TH-11-42	Strain Dependent Dynamic Soil Properties for Wide Range of Shear Strains for North East Region by <i>Shiv Shankar Kumar, Pradeep Kumar D and Muralikrishna A</i>	
TH-11-45	Impact of Vibrations on a High Rise RCC Structure due to Blast Induced Demolition of Adjacent Building by <i>Akhil A, Chandrasekharan S S and Boominathan A</i>	
19:00 - 20:00	<b>Cultural Program</b>	
		<a href="#"><u>Link 1</u></a>

**December 19, 2020**

<b>Plenary Session 5 (09:00 – 11.15)</b>		<a href="#"><u>Link 1</u></a>
<b>Session Coordinator: Prof. M. Srinivas, GVPCE, Visakhapatnam</b> <b>Chairman: Prof. S.R. Gandhi, Director, NIT Surat</b> <b>Co-Chairman: Dr. Sharokh P Bagli, CTO, Strata Geosystems (India) Pvt. Ltd.</b>		
09:00 – 09:35	Keynote Lecture 11	Limit Equilibrium Analysis and Design of Geosynthetic-Reinforced Fill Walls under Special Conditions by <b>Prof. Jie Han, University of Kansas, USA</b>
09:35 – 10:10	Keynote Lecture 12	Some Aspects of Seismic Soil- Structure Interaction of Lifeline Structures by <b>Prof. M.N. Viladkar, IIT Rookee</b>
10:10 – 10:45	Keynote Lecture 13	Reclamation and Ground Improvement of Soft Marine Clay for Development of Offshore Terminal 4, JNPT, Navi Mumbaiby <b>Dr. Kumar Pitchumani, M/s AECOM India Pvt. Ltd.</b>
10.45 - 11.15	Keynote Lecture 14	Densification of Loose Sand Below a Large ECRF Dam by <b>Prof. G.V. Ramana, IIT Delhi</b>
11:15 - 11:30		Corporate Presentations: M/s. Garware Wall Ropes Pvt. Ltd. and M/s. MACCAFERRI
		<a href="#"><u>Link 1</u></a>
<b>11:30 – 13:00</b>	<b>TECHNICAL SESSIONS</b>	
<b>THEMES 7 &amp; 13 - Forensic Geotechnical Engineering &amp; Tunnelling and Deep Excavations</b>		<a href="#"><u>LINK 2</u></a>
<b>Session Coordinator: Prof. M. Rama Rao, RVR&amp;JCCE, Guntur</b> <b>Chairman: Prof. H.N. Ramesh, Bangalore University</b> <b>Co-Chairman: Dr. T. Thyagaraj, IIT Madras</b>		
11:30 – 11:50	Theme Lecture	Forensic Study of an Earth Retaining System Failure by <b>Dr. Anil Joseph, M/s Geo Structural Pvt. Ltd., Kochi</b>
11:50 – 12:10	Theme Lecture	Analysis of Shotcrete Lining and Estimation of Support Pressure of Sardar Sarovar Underground Powerhouse Cavern by <b>Prof. N.K. Samadhiya, IIT Roorkee</b>
<b>Paper Presentations</b>		
12:10 – 13:00	TH-07-001	Engineering Performance of the Foundation of Thanjavur Brihadeeswarar Temple by <i>Premalatha K and Arunkumar K</i>
	TH-07-004	Forensic Analysis of Retaining Wall Failure by <i>Aravind P S and Neerad Mohan</i>
	TH-07-006	Re-evaluation of Failure of Silo Tower Foundations by <i>Shiva Bhushan J Y V, Asif Ali Md. and Madhav M R</i>

TH-13-001	Rock Mass Index (RMI) to Estimate the Shear Strength Parameters of the Rockmass: Case Study from Lesser Himalaya, Jammu & Kashmir, India by <i>Pratap Chandra D</i>
TH-13-002	Nonlinear Finite Element Stability Analysis of Tunnel in Sandstone against Blast Load by <i>Zaid Md, Rehan Sadique Md. and Masroor Alam Md.</i>
TH-13-003	Modelling of Diaphragm Wall for Deep Excavation in Sandy Soil by <i>Mandeep Singh and Baleshwar Singh</i>
TH-13-004	The Light at the end of the Tunnel - The Sleemanabad Tunnel by <i>Surendra Singh Pawar</i>
TH-13-006	Static and Dynamic Assessment of Tunnel Rock Supports in Weak Rock by <i>Jishnu C, Vineet G, Dhritilekha D and Sreedeeep S</i>

**THEMES 5 & 6 – Transportation Geotechnics & Landslides and Slope Stability**

[LINK 3](#)

**Session Coordinator:** *Dr. G. V. Ramana, NIT Warangal*

**Chairman:** *Prof. S.K Prasad, Vidyavardhaka Engineering College, Mysore & Former Prof., SJCE, Mysore*

**Co-Chairman:** *Dr. A. P. Singh, M/s. Explore Engineering Consultants (P) Ltd., Noida*

<b>Paper Presentations</b>		
<b>December 19, 2020</b> 11:30 – 13:00	TH-05-30	Economic Appraisal of Lime and Sugarcane Waste Utilisation in Road Construction by <i>Sagun Gupta and Prashant Garg</i>
	TH-05-36	Experimental Investigation on Stabilization of Silty Sand using Flyash by <i>Balreddy M S, Abhilash K E and Manjunath H K</i>
	TH-05-37	An Experimental Study on the Valorization of Crushed Concrete in Pavement Base and Sub-base Applications by <i>Neha S, Rinku M and Ajay Sharma</i>
	TH-05-42	Establishment of Relationships between Compaction Parameters and Oxides Composition of Industrial Waste Materials by <i>Sreekanth Reddy P, Rohan L, Bijayananda M and Hanumantha Rao B</i>
	TH-05-44	Cost Economics of Geocell Reinforced Flexible Pavements on Intermediate Compressible Clayey Subgrades by <i>Satyanarayana Reddy C N V, ViswaTeja T V and Vineel Ch</i>
	TH-06-38	Numerical Analysis of Buried Pipelines Located in Slopes by <i>Rishi Ranjan, Anil Kumar C and Awdhesh Kumar C</i>
	TH-06-40	Effect of Shear Modulus on Slope Stability Analysis by <i>Bala Padmaja S, Narasimha Reddy G V and Saibaba Reddy E</i>
	TH-06-43	Different Sets of Remediations for Mitigation of Landslides in Hilly Terrain of India by <i>Panigrahi R K</i>
	TH-06-44	Influence of Fines Content on Stability of Unsaturated Soil Slopes by <i>Raghuram A S S, Munwar Basha B and Arif Ali Baig</i>

	TH-06-45	Analysis and Design of Veneer Cover Soils with Internal Seeper by <i>Soujanya D and Munwar Basha B</i>
	TH-06-46	Stability of Sloped Soil Embankment for Seismic and Tidal Load Combination by <i>Amritansh Mishra and Trivedi A</i>
	TH-06-47	Monitoring of Landslide in Heavy Rainfall Areas using Low Cost Microcontrollers by <i>Beena K S, Varun Menon O and Rooma P J</i>
	TH-06-48	An Experimental Study on Influence of Water Level Fluctuation on Stability of Slope of Model River Bank Composed of Cohesionless Material by <i>Firoz Ali Md, Supia K and Arafat Y</i>
	TH-06-49	Riverbank Slope Stability Analysis by <i>Snigdha K and Khaund P K</i>
<b>THEME 8 – Developments in Ground Improvement</b>		<a href="#"><u>LINK 1</u></a>
<b>Session Coordinator: Dr. A. Murali Krishna, IIT Tirupati</b> <b>Chairman: Prof. V. Ramana Murthy, NIT Warangal</b> <b>Co-Chairman: Sri A. Madan Kumar, M/s. Keller India Ground Engineering Pvt. Ltd.</b>		
<b>December 19, 2020</b> 11:30 – 13:00	<b>Paper Presentations</b>	
	TH-08-95	Stabilization of Artificial Soils Using Waste Marble Dust by <i>Saqib Wani K M N, Mir B A and Ishfaq Rashid S</i>
	TH-08-96	A Laboratory Study on the Effect of Pine Needles in Stabilizing Artificial Soils by <i>Saqib Wani K M N, Mir B A and Ishfaq Rashid S</i>
	TH-08-98	Geopolymer for Pavement Construction: A Review by <i>Rupashree R S and Baidya D K</i>
	TH-08-99	Black Cotton Soil Stabilization Using Terrasil for Its Expansive Nature by <i>Krupa R K and Parth N L</i>
	TH-08-106	Compressibility Characteristics of Guar gum Treated Expansive Soil by <i>Vydehi K V and Arif Ali Baig M</i>
	TH-08-108	In-Situ Study on Improvement of Soft Ground Using Stone Columns for Railway Embankment by <i>Kishore Kumar B, Srinu Naik B, Eswara Prasad C R and Rama Krishna Raju N</i>
	TH-08-110	Influence of Microstructural and Geotechnical Behaviour of Expansive soil Using Ultra-Fine Slag and Calcium Chloride by <i>Suresh R and Murugaiyan V</i>
	TH-08-112	Development of New Grout Mix using Kota Stone Slurry for Sustainable Development by <i>Neha Shrivastava and Hemlatha K</i>
	TH-08-117	Influence of TerraZyme on Geotechnical Properties of Clayey Soils by <i>Prasad D S V, Sastry Y M S D and Shivanarayana Ch</i>
TH-08-118	Experimental Study on Waste Tire Chips-Reinforced Sand using Cyclic Plate Load Test by <i>Sanket R, Ravikant M and Ashirbad S</i>	

	TH-08-119	Influence of Crumb Rubber and Polypropylene Fibre on the Behaviour of Cemented Black Cotton Soil by <i>Vineeth Reddy K, Abhishek K and Sowjanya K</i>
	TH-08-121	Importance of Verticality of PVD in Consolidation Settlement of Prefabricated Vertical Drain-improved Soft Soils by <i>Rai Bahadur R, Sujit Kumar Pal and Sanjay Paul</i>
	TH-08-122	Effect of Addition of Scrap Tire Chips in Stabilisation of Clayey Sand by <i>Satyanarayana Reddy C N V, Tabitha G, Srikanth Reddy S and Chandranna K</i>
	TH-08-125	Ground Modification Techniques for Deep Soft Soils Sites in Goa Region by <i>Roshani K M and Purnanand P S</i>
	TH-08-127	Strength Characteristics of Kuttanad Soil Stabilized using A Biopolymer Guar Gum by <i>Mohan R P and Adarsh P</i>
<b>THEME 9 – Numerical and Physical Modelling</b>		<b><a href="#">LINK 4</a></b>
<b>Session Coordinator: Prof. B.V.S. Viswanadham, IIT Bombay</b> <b>Chairman: Prof. R.G. Robinson, IIT Madras</b> <b>Co-Chairman: Dr S. Rajesh, IIT Kanpur</b>		
<b>December 19, 2020</b> 11:30 – 13:00	<b>Paper Presentations</b>	
	TH-09-36	Reliability Analysis of Settlement of a Foundation resting over a Circular Void by <i>Kumar S, Subhadeep M and Goutam B</i>
	TH-09-41	Behavior of Buried Pipelines in Geosynthetics Reinforced Soil Slopes by <i>Soumen N and Awdhesh Kumar C</i>
	TH-09-42	Parametric Study of Stone Column using PLAXIS 2D by <i>Shruti Roy and Abdhesh kumar Sinha</i>
	TH-09-45	Time-Dependent Response of Soft Soil under Tilted Storage Tanks by <i>Suhit Chakraborty and Amit Kumar Das</i>
	TH-09-46	Effect of Seepage Barrier in Steady Seepage below Earthen Dam by Centrifuge Modelling by <i>Smita Tung, Sibapriya Mukherjee and Gupinath Bhandari</i>
	TH-09-50	Analysis of 3D Consolidation Settlement of C- $\phi$ Soil using PLAXIS 3D under different Drainage Conditions by <i>Arpan L and Sujit Kumar Pal</i>
	TH-09-52	Studies on Centrifuge Modelling of Rainfall Induced Landslides by <i>Dipankana Bhattacharjee and Viswanadham B V S</i>
	TH-09-53	Studies on the Performance of Pipelines Subjected to Differential Settlements: Numerical study by <i>Vaibhav V N, Viswanadham B V S and Chatterjee S</i>
	TH-09-54	Effect of EPS Geofoam on Lateral Earth Pressure Reduction - A Numerical Study by <i>Neeraj kumar B and Satyanarayana Murty D</i>
	TH-09-55	Numerical Study on the Effect of Rock-Socketing on Laterally Loaded Piles in the Proximity of Sloping Ground by <i>Nandhagopal Raja and Muthukkumaran K</i>
	TH-09-56	Numerical Analysis on Stability Assessment of Left Bank Rock Slopes, Polavaram Irrigation Tunnel by <i>Rajendra Kumar P and Muthukkumaran K</i>
TH-09-57	Displacement Based Analysis of Retaining Wall with Narrow Backfill under Rotation about Bottom Mode by <i>Srikar G, Satyendra Mittal and Sindhuja A</i>	

	TH-09-58	Theoretical Simulation of Experimental Results with Barron's Theory for Consolidation of Soft clay by Radial Flow using PVD by <i>Shrivastava R P and Shroff A V</i>
<b>THEME 10 – Geosynthetics and Reinforced Soil Structures (December 19, 2020)</b>		<a href="#"><u>LINK 5</u></a>
<b>Session Coordinator: Prof. Sireesh Saride, IIT Hyderabad</b> <b>Chairman: Prof. Satyendra Mittal, IIT Roorkee</b> <b>Co-Chairman: Prof. Sireesh Saride, IIT Hyderabad</b>		
11:30– 11:50	Theme Lecture	Geocells for Transportation Geotechnical Applications by <b>Prof. G. Madhavi Latha, IISc., Bangalore</b>
<b>December 19, 2020</b> 11:50 – 13:00	<b>Paper Presentations</b>	
	TH-10-001	Soil Nail Wall Design using Simplified Charts by <i>Vikas Pratap Singh</i>
	TH-10-004	Bearing Capacity of Thin Ring Footings on Reinforced Foundation Bed over Soft Ground by <i>Rajyalakshmi K and Madhav M R</i>
	TH-10-006	Slope - Reinforcement interactions: Effect of Strength Parameters by <i>Akshay Kumar Jha, Madhav Madhira and Narasimha Reddy G V</i>
	TH-10-009	Influence of Excavation Phase on the Performance of Soil Nail System by <i>Krupa H R and Prasad S K</i>
	TH-10-10	Dynamic Response of Dry Rubber Tire Chips and Sand Mixture by <i>Amanta A S and Satyanarayana Murty D</i>
	TH-10-11	Comparative Analysis of Single and Two-Tiered Geosynthetic Reinforced Soil Walls Subjected to Dynamic Excitation by <i>Anindita G and Arup B</i>
	TH-10-12	Effect of Submergence on Settlement and Bearing Capacity of Sand Reinforced with Pet Bottle Geocell by <i>Vismaya A, Monica Simon and Jayasree P K</i>
	TH-10-13	Effect of Surface Modification on the Performance of Natural Fibres - A Review by <i>Jiniraj R B, Jayasree P K and Anusha S P</i>
	TH-10-14	Comparison of Factor of Safety between LEM and FEM for Geotextile Reinforced Embankment on Difficult Foundation by <i>Jigisha V, Atul D, Chandresh S and Babu V S</i>
	TH-10-19	Experimental Investigation on Bamboo-made Cellular Mattress Reinforced Fly Ash Beds Overlying Soft Clay by <i>Sushovan D, Ankita Kumar and Mandal J N</i>
TH-10-20	Experimental and Numerical Studies of Three Layered Reinforced Soil Slope under Dynamic Loading Condition by <i>Kingshuk Jana, Suman H and Sima G</i>	

**Lunch Break (13:00 – 14:00)**

**14:00 – 15:45**

**TECHNICAL SESSIONS (December 19, 2020)**

**THEME 13 - Tunnelling and Deep Excavations**

**[LINK 2](#)**

**Session Coordinator: Prof. Mahendra Singh, IIT Roorkee**

**Chairman: Prof. H.N. Ramesh, Bangalore University**

**Co-Chairman: Prof. G.V. Narasimha Reddy, JNTU Hyderabad**

**Paper Presentations**

**December 19,  
2020  
14:00 – 15:45**

TH-13-009	Numerical Study on the Influence of In-Situ Stress Ratio on Stress and Deformation Characteristics of Rock Tunnel by <i>Jegadeesh Kumar T and Muttharam M</i>
TH-13-10	Numerical Study on Prediction of Behaviour of Braced Excavation in Heterogeneous Soil by <i>Anand M H, Pankaj B, Gothakhindi D S and Solanki C H</i>
TH-13-13	Active Earth Pressure Distribution against Braced Wall considering Arching Effects by <i>Kingshuk Dan and Sahu R B</i>
TH-13-15	Investigation on Axial Response of Pile due to Staged Tunneling: A Numerical Approach by <i>Manojit S , Abishek R R and Sawant V A</i>
TH-13-16	Comparison of Limiting Equilibrium and Finite Element Analysis for Embedded Retaining Walls by <i>Tehseena Ali and Nazeeh K M</i>
TH-13-18	Assessment of Effect of Deep Excavation on Adjacent Structures using Finite Element Analysis by <i>Anand M H, Solanki C H and Dodagoudar G R</i>
TH-13-20	Hazard Assessment of Coal Mines under Impact Loads using Holmquist Johnson -Cook Constitutive Model by <i>Bhat I A, Rupali S and Arvind Kumar</i>
TH-13-21	Performance Evaluation of Controlled Blasting and Prediction of Attenuation Relation for Charnockite Rocks by <i>Nitheesh N, Padmanabhan G, Sudipta C and Rao B C P</i>
TH-13-22	Geotechnical Assessment of Building Damaged by Tunnelling Works and Suitable Remedial Measures - A Case Study by <i>Aswathy M S and Vinoth M</i>
TH-13-24	Embedded Retention Wall Design Practices- Consequences and Measures by <i>Govind Raj and Madan Kumar A</i>
TH-13-26	Effect of Overburden Pressure and Soil Parameters on Tunnel Induced Ground Settlement by <i>Chiranjib Sarkar and Sibapriya M and Pitchumani N K</i>
TH-13-28	Development of Software for Real Time Instrumentation, Monitoring and Interpretation of Tunnels and other Civil Engineering Structures by <i>Heman M, Chaitanya G and Mallika K</i>
TH-13-30	Seismic Analysis of Shallow Tunnels in Soil Medium by <i>Ansari Abdullah, Rao K S and Jain A K</i>
TH-13-32	Development of Rational Method of Design of Soil Nailing System in Granular Soil by <i>Nagalakshmi M and Satyanarayana Reddy C N V</i>

	TH-13-34	Numerical Analysis on Interaction of Single Pile Tunnel System by <i>Arnab C and Awdhesh Kumar C</i>
	TH-13-36	Electrical Resistivity Testing along Tunnel Alignment under Lonavla Lake, A Part of Mumbai Pune Expressway Missing Link Project – A Case Study by <i>Suprio Choudhury, Indrajit B</i>
	TH-13-39	Behavior of Underground Tunnel under Strong Ground Motion by <i>Irfan A S and Mohammad Zaid</i>
<b>THEMES 12 &amp; 14 – Scour and Erosion &amp; Offshore Geotechnics (December 19, 2020)</b>		<b><a href="#">LINK 3</a></b>
<b>Session Coordinator: Dr. Sumanta Haldar, IIT Bhubaneswar</b> <b>Chairman: Dr. Parthasarathy, M/s. Sarathy Geotech and Engineering Services, Bangalore</b> <b>Co-Chairman: Dr. Sumanta Haldar, IITBhubaneswar</b>		
14:00 – 14:20	Theme Lecture	Evaluation of Pavement Stripping using Ground Penetrating Radar – A Case Study by <b>Prof. K.Muthukkumaran, NIT Trichy</b>
<b>December 19, 2020</b> 14:20 – 15:45	<b>Paper Presentations</b>	
	TH-12-004	Feasibility Study on Dispersivity of Lignosulfonate Treated Clay using Pin Hole Test by <i>Sowmya V K and Keerthi S</i>
	TH-12-006	Effect of Flood Parameters on Lateritic Slope Erosion by <i>Zoheb F, Muhammed S P , Jayasree P K and Jayamohan J</i>
	TH-12-008	Experimental Study on Scour due to Submerged Vertical Impinging Circular Jet by <i>Rahul S, Sarda V K and Manendra Singh</i>
	TH-12-009	Experimental Study on Soil Piping and Effect of Coir Geotextiles on Piping Resistance of Soils by <i>Anjana V P and Niranjana K</i>
	TH-12-10	Study of Erodability of Cemented Sand by <i>Prakash B, Premalatha K and Sabarishree K</i>
	TH-14-003	A Study on the Vertical Pullout Capacity of Suction Caisson Foundation in Sandy and Clayey Soils by <i>Suchit Kumar Patel and Baleshwar S</i>
	TH-14-004	Pile Group Effect Analysis of a Group of 12 Conductors in an Offshore Jacket Platform by <i>Rupam Mahanta and Ghanekar R K</i>
	TH-14-005	Load Sharing Mechanism of Piled Raft System under Vertical and Lateral Loading by <i>Plaban Deb and Sujit kumar Pal</i>
	TH-14-006	Uncertainty in Capacity of Spudcan Foundation from CPT Data by <i>Deepanjan D and Sumanta Haldar</i>
	TH-14-007	Seismic Design of Large Offshore Wind Turbine considering Rocking Vibration by <i>Maria J and Sumanta Haldar</i>
	TH 14-009	Geotechnical Investigation at a Typical Approach Jetty and Intake Well Located Offshore by <i>Naresh D N, Sharma V V R and Murthy A B S N</i>
	TH-14-13	Strain Rate Characterisation of Soft Clay using T-bar by <i>Sneha Sen, Akash Rai and Satyajeet Nanda</i>
TH-14-14	Liquefaction Assessment of Gulf of Kutch Offshore Soils using CPTU Data by <i>Sri Harsha G</i>	

	TH-14-15	Calibration of CPTU Factor $N_{kt}$ for Two Recently Explored Areas of Indian Offshore by <i>Rupam Mahanta and Ghanekar R K</i>
	TH-14-18	Prediction of Increase in Offshore Pile Shaft Capacity following Installation using the Coefficient of Horizontal Consolidation (Ch) by <i>Ramesh G, Parthasarathi C R and Sireesh S</i>
<b>THEME 8 – Developments in Ground Improvement</b>		<a href="#"><u>LINK 1</u></a>
<b>Session Coordinator: Dr. A. Murali Krishna, IIT Tirupati</b> <b>Chairman: Prof. E. Saibaba Reddy, Director, VJIT, Hyderabad &amp; Former Professor, JNTUH</b> <b>Co-Chairman: Sri A. Madan Kumar, M/s. Keller India Ground Engineering Pvt. Ltd.</b>		
<b>December 19, 2020</b> 14:00 – 15:45	<b>Paper Presentations</b>	
	TH-08-128	Confined Reinforcement Barrier system for Mitigating Generated Ground Motions in Liquefiable Soils by <i>Vijay Kumar S P and Ganesh Kumar S</i>
	TH-08-131	Swell-Consolidation Characteristics of Fiber Reinforced Expansive Soil by <i>Greeshma M and Anjana T R</i>
	TH-08-132	Soil Stabilization Using Bio-Enzyme: A Review by <i>Ayush Mittal</i>
	TH-08-134	Performance Of Vertically Confined Shallow Foundation On Reinforced Sand Under Concentric Loading by <i>Kirtimayee B and Samadhiya N K</i>
	TH-08-135	A Study on the Performance of Marine Clay Stabilized with Waste Materials by <i>Srujana A V S A, Hemanadh M, Ravi Kumar K, Preethi S and Srinivas M</i>
	TH-08-137	Influence of Biopolymer Treatment On Suction Characteristics of Bhavnagar Expansive Soil by <i>Jahnvi P, Vikas Yadav and Saloni P</i>
	TH-08-143	Evaluation of the Efficacy of Nylon Fibers and Lime in Improving Metakaolin Modified Expansive Soil by <i>Varaprasad L N V N, Dayakar Babu R and Appanna D</i>
	TH-08-147	A Novel Method of On-site Biochar Production from Crop Residues and further Application to Soils for Improvement in Soil Characteristics by <i>Mahendra Pratap Choudhary, Charan H D and Biswajit A</i>
	TH-08-148	Analytical Studies on the use of Stiffer Drains for soft soil improvement by <i>Viswanadham B V S and Manaswini V</i>
	TH-08-149	Advances in Bioremediation of Extremely Alkaline Bauxite Residue: Review by <i>Manas Chandan M, Hanumantha Rao B and Swagatika S</i>
	TH-08-150	Improvement in Strength Behaviour of Dispersive Soil in Presence of Additives by <i>Ramesh H N, Nethravathi S</i>

		<i>and Durga Prashanth L</i>
	TH-08-152	Review of Osmotic and Mechanical Loading on the Behavior of Soft Clays by <i>Ramakrishna P and Thyagaraj T</i>
<b>THEME 10 – Geosynthetics and Reinforced Soil Structures</b>		<a href="#"><u>LINK 5</u></a>
<b>Session Coordinator: Prof. Sireesh Saride, IIT Hyderabad</b> <b>Chairman: Prof. J.T. Shahu, IIT Delhi</b> <b>Co-Chairman: Prof. Sireesh Saride, IIT Hyderabad</b>		
<b>December 19, 2020</b> 14:00 – 15:45	<b>Paper Presentations</b>	
	TH-10-30	Encased Granular Column as an Advancement over Ordinary Granular column-A Brief Review by <i>Sabreena Md. And Mir B A</i>
	TH-10-31	Effect of A Coarse Material Sandwich Technique on the Behavior of Geotextile Reinforced Clay by <i>Dayana Arvind E and Vasudevan A K</i>
	TH-10-33	Finite Element Analysis of Soil Reinforced Canal Tunnel by <i>Archana Singh B and Singh A K</i>
	TH-10-34	Influence of Footing Size on Reinforcement Geometrical Parameters by <i>Venkatesh B and Thyagaraj T</i>
	TH-10-35	Effect of Geosynthetic Reinforcement on CBR Strength of Soft Soil-Aggregate System by <i>Gautham, Hussain M and Bhowmic D</i>
	TH-10-36	Influence of Rainfall on the Interface Shear Strength of Unsaturated Lateritic Soil with Geosynthetics by <i>Dhanya K A, Musaib A and Divya PV</i>
	TH-10-38	The Behaviour of Multi-Tiered Mechanically Stabilised Earth (MSE) Retaining Wall by <i>Ananya S, Sagar J and Vinay Bhushan C</i>
	TH-10-40	Performance of Strip Footing on Sand Bed Reinforced with Multilayer Geotextile with Wraparound Ends by <i>Sagar J, Ananya S and Vinay Bhushan C</i>
	TH-10-44	A Review Study on Geotechnical Applications of the Construction and Demolition (C&D) Waste by <i>Ajay Sharma and Neha S</i>
	TH-10-45	Probabilistic Analysis of Reinforced Soil Retaining Structures using FORM and Surrogate based Monte-Carlo Simulation by <i>Ekansh A, Anindya P and Shantanu S</i>
	TH-10-54	Numerical Study of Multi-Layered Geocell Confined Pavement Subgrade by <i>Arghadeep B and Haradhan S</i>
	TH-10-55	Use of Geosynthetics as a Soft Structural Measure to Mitigate Flood Hazard and Bank Erosion Problem by <i>Suresh Maurya, Manish Gupta and Chitra R</i>
TH-10-58	Sustainability Study on Geosynthetic-Reinforced Retaining Wall Construction by <i>Sateesh P, Swetha T and Sanjay S</i>	

	TH-10-59	Geo-Composite Drain for Capillary Cut-Off and Horizontal Sub-Surface Drainage in High Altitude Roads In Uttarakhand - A Case Study by <i>Roychowdhury D</i>
<b>16:30 – 17:15</b>	<b>Valedictory Function</b>	
		<a href="#"><u>Link 1</u></a>