



**International Conference on Soil and Environment**  
22-23 July 2016  
INDIAN GEOTECHNICAL SOCIETY BANGALORE CHAPTER &  
DEPARTMENT OF CIVIL ENGINEERING,  
INDIAN INSTITUTE OF SCIENCE, BANGALORE



### Conference Schedule

Day 1: 22 <sup>nd</sup> July 2016, Friday	
8:30 Onwards	Registration
9:00 – 9:45	Inaugural Session
9:45 – 10:15	Conference Lecture by Prof. P.V. Sivapullaiah on “Stabilization efforts for problematic soils”
10:15-10:45 Organic High Tea	
10:45 – 12:45 Technical Session I Chairmen: Prof. A. Boominathan & Prof. J T Shahu	
10:45-11:15	Keynote Lecture : Prof. Krishna R. Reddy on “Field–scale phytoremediation of contaminated site with mixed contaminants”
11:15-11:45	Keynote Lecture : Prof. Joseph Patrick Hettiaratchi on “Cost Effective Resource Recovery from Waste: from concept to implementation”
11:45-12:45	<b>Oral Presentations:</b>
	“Capillary Barrier Effects in Unsaturated Layered Soils” by Bharat Solanki, Yagom Gapak, T.V.Bharat
	“Centrifuge Modeling for Isolated Footing on Expansive Soil” by Bhavita S. Dave, Pathik Soni, Rinam P. Kachiyapatel
	“Prediction of Consolidation Behaviour of Soil by Finite Element Method” by Chandra Bogireddy, Himmat. K. S, Krishna. M. V. N, Solanki C. H, Vasanwala. S. A
	“Study on effect of cone diameter in cone penetration test on sandy soil” by P. Dayakar, K. Venkat Raman, K.V.B. Raju
	“Shrinkage Behaviour of Clay Soils: An experimental study” by Geetanjali Das, T.V.Bharat
	“Salt Diffusion in Compacted Plastic Clay: Experimental and Theoretical Evaluation” by Partha Das, Man Parvesh SR, Bharat TV
	<b>Rapporteur Summary of following papers by T. V. Bharat:</b>
	“Theoretical Characterisation of Equilibrium Sediment Volume of Clays” by D. S. Das, T.V. Bharat
	“Establishing Soil-Water Characteristic Curve of Soil Using Filter Paper Technique” by Ramakrishna Bag, Siddharthan. S
“Influence of Load Eccentricity and Aspect Ratio on Lateral Load Capacity of Bucket Foundation Installed In Medium Dense Sand” by Tanmoy Kumar Deb, Baleshwar Singh	
“Assessment of Soil Quality at Various Agricultural Fields Near Industrial Area of Visakhapatnam” by T. Srinivasl, N. Srinivas, K. Jagadeeswara Rao, G. Ramoji	
“Some Studies on the Mechanical and CBR Behavior of Dredged Material Admixed Silty Soil” by B. A. Mir, Rajesh Kumar Roy	
12:45 – 14:00 Lunch Break	

<b>22<sup>nd</sup> July 2016, 14:00-16:00 Technical Session 2</b> <b>Chairmen: Prof. M R Madhav &amp; Prof. S. K. Prasad</b>	
14:00-14:30	Keynote Lecture: Prof. James Tinjum on “Energy Geotechnics at the Frontiers of Wind Energy and Geothermal Exchange”
14:30-16:00	<p><b>Oral Presentations:</b></p> <p>“Properties and Behaviour of Laterites and Lithomargic clays of Coastal Karnataka of Coastal Karnataka” by R. Shivashankar, Sitaram Nayak, Srinath, K., Arun Kumar Bhat, K., Shubhananda Rao</p> <p>“Spatial Variability of Soil Properties” by P. Shwetha</p> <p>“A Study on Influence of pH and Organic Chemical on Adsorption Capacity of BC Soil” by Sudheer Kumar Y, Subhashini.A, Hari Krishna P</p> <p>“Understanding Desiccation Potential of A Given Soil Compaction State” by Sudheer kumar Y, Sreedeeep S.</p> <p>“Numerical Modelling of Soft Soil Deformation using Creep Models” by Tulasi Ram Bhattarai, Gustav Grimstad</p> <p>“A Review on Recent Development of Image Analysis Systems for Particle Size and Shape Characterization” by Krishna. M.V.N, Vangla. P, Madhavi Latha. G, Chandra. B, Solanki. C.H</p> <p>“A Study on Particle Dissolution and Shear Strength of Reactive Granular Materials” by Viswanath P.,Arghya Das</p> <p>“Critical Review of Swelling Behaviour of Different Types of Bentonite and Bentonite Sand Mixtures” by K Ravi, Rohini C Kale</p> <p>“Water Flow through Unsaturated Compacted Clays” by Yagom Gapak, TV Bharat</p> <p>“Assessment of Infiltration Rate and Soil Characteristics – A Case Study of Pydibhimavaram Industrial Area, Srikakulam, A.P, India” by B.Neelima Sri Priya, G.Venkata Rao, Y.Sandhya Ramani, R. Srinivasa Rao</p> <p><b>Rapporteur Summary of following papers by Aarif Ali Baig :</b></p> <p>“Experimental Analysis of Infiltration Studies in the Kunigal Taluk of Tumkur District, Karanataka State and Using Geospatial Techniques” by Ravindranath.C, Nandeesha, Veerappa Devaru, Narayana</p> <p>“Water Absorption Study of the Coconut Coir Fibre After Surface Modification by Different Chemicals for Varied Duration” by Mandeep Raj Pandey , Sagar Pokharel, Narendra Kumar Karn</p> <p>“Swelling Behaviour of Expansive Soils Blended with Lime and Polypropylene Fiber” by M.Muthukumar, Shiv Shankar Agrawal</p> <p>“Improvement of Black Cotton Soil using Crushed Stone Dust” by P.Pradeep Kumar, V.Sai Sravani</p> <p>“Compressive Strength Study on Bottom Ash Based Material” by Vicky A. Hinge, Sonali S. Nawkhare, B. Ram Rathan Lal</p>
<b>16:00-16:15 Tea Break</b>	

<b>22<sup>nd</sup> July 2016, 16:15-17:45 Technical Session 3</b> <b>Chairmen: Dr. Mahavir Bidasaria &amp; Prof. B R Phani Kumar</b>	
16:15-16:45	Keynote Lecture: Prof. Jay N Meegoda on “Feasibility of Recovering Metallic Iron and Chromium from Chromium Contaminated Soils”
16:45-17:45	<p><b>Oral Presentations:</b></p> <p>“Transport of Multiple Colloids in Saturated Porous Media” by Madumathi.G, Ligy Philip</p> <p>“Analysis of Influence of Various Ground Water Conditions in the Contaminant Transport through the Sodium Bentonite Slurry Wall” by Mandeep Raj Pandey, GL Siva Kumar Babu</p> <p>“Effect Of Inorganic Acid Contamination on Volume Change Behaviour of Fly Ash” by Chavali Rama Vara Prasad, Ponnappureddy, Hari Prasad Reddy</p> <p>“Formulation of Reactive Mixture for Permeable Reactive Barrier in Retention of Heavy Metals” by Rashmi A Urabinahattia, Veena S Soraganvi</p> <p>“A Study on Characteristics of Leachate through Fly Ash Stabilized Expansive Clay Liners” by Phanikumar B R, Uma Shankar M</p> <p>“Stress Strain Behaviour of Alkalis Treated Kaolinitic Soil Contaminated with Acids” by S.D. Venkataraja Mohan, H.N Ramesh</p> <p><b>Rapporteur Summary of following papers by Vandana S:</b></p> <p>“Assessment of Soil contamination by E-Waste using Earthworm as a Bioindicator-A review” by R. Jayakumar, Wagdevi, Vijay</p> <p>“Remediation of Contaminated Dumping sites in Goa” by Sohan Naik, Purnanand P Savoikar</p> <p>“Electro- Kinetic Remediation of Sulphate from Soil” by Deendayal Rathod, P.V. Sivapullaiah</p> <p>“Reliability Analysis of Slurry Wall” by Richa Mudliar, G.L. Sivakumar Babu</p> <p>“Comparative Study on Stabilization of Expansive Soil using Fly Ash, Rice Husk Ash, Bagasse Ash &amp; Marble Dust” by S.R.Hosamani, A. M. Hulagabali</p>
<b>17:45-19:00 Proceed to ITC Windsor Manor Hotel. Buses start at 6 PM from the conference venue</b>	
<b>19:00-20:00 Felicitation to Prof. P. V. Sivapullaiah at ITC Windsor Manor, Golf Course Road, Bangalore</b>	
<b>20:00 Onwards - Banquet Dinner</b>	

<b>Day 2: 23<sup>rd</sup> July 2016, Saturday</b>	
<b>9:00 – 11:15 Technical Session 4</b>	
<b>Chairmen: Prof. Satyendra Mittal &amp; Dr. Anil Joseph</b>	
9:00-9:30	Keynote Lecture: Prof. Pradeep Kurup on “Recent Advances in Geoenvironmental Site Characterization”
9:30-10:00	Keynote Lecture: Prof. Yan-Jun Du on “Effect of Phosphate Amendment on Hydraulic Conductivity of Soil-Calcium Bentonite Backfill for Vertical Cutoff Walls”
10:00-11:15	<p><b>Oral Presentations:</b></p> <p>“Soil Stabilization by using Micro Fine Ground Granulated Blast Furnace Slag (Mfggbs)” by Daksha Pawar, Purnanand, P Savoikar</p> <p>“Influence of End Condition on the Behaviour Of Stone Columns In Soft Soils” by M.R.Dheerendra Babu, R.Shivashankar, Sitaram Nayak</p> <p>“An Experimental Investigation on RBI-8I Stabilized Soil for Pavements” by Harish G R , Sufiyan junaidi, Nayeem Ahmad Bhat, Mohammed Ismail , Anmol Bharadwaj</p> <p>“Experimental Study on use of Composite Material as Reinforcement on Unpaved Test Sections” by Sayida M K, Girish M S, Jainy K Mathew</p> <p>“Enhancement of Properties of Dredged Materials for its Application in Geotechnical and Construction Industry” by S.Pavithra, C.Sandhiya Premalatha</p> <p>“Effect of Chemical Stabilizer Master Roc on Strength Characteristics of Expansive Soil” by Prabavathy S, Muttharam M</p> <p>“Investigation of Load-Deformation Characteristics of Unbound Granular Materials Confined By Geocells Using Three Layered Beam Model” by Raju J, Mamatha K H, Dinesh S V</p> <p>“Biocementation in Termite Mounds Ramesh” by Kandasami, Renee Borges, Tejas Murthy</p> <p><b>Rapporteur Summary of following papers by Murali Krishna A :</b></p> <p>“Flexural Behaviour of Geogrid Reinforced Unbound Granular Material Beams” by Prakasha E, Mamatha K H, Dattatreya J K, Dinesh S V</p> <p>“Soil Stabilisation using Geosynthetic and Plastic Waste as Reinforcement” by Pranav Hadfadkar, Purnanand P Savoikar</p> <p>“Soil Stabilisation using Stone Columns” by Pranav Hadfadkar, Purnanand, P Savoikar</p> <p>“Effective use of Vertical Sand Drain in Railway Embankment Construction at Nagapattinam - A Case Study” by Vinothkumar M, Muthukkumaran K,</p> <p>“Stabilisation of Mining Haul Roads in Goa” by Viraj Vaingankar, Purnanand, P Savoikar</p>
<b>11:15-11:30 Tea Break</b>	

23rd July 2016, 11:30 – 13:00 Technical Session 5 Chairmen: Prof. Deepankar Choudhury & Shri Ravikiran Vaidya	
11:30-12: 00	Keynote Lecture: Prof. Manoj Datta on “Assessment of Subsurface Contamination Potential of Municipal Solid Waste Dumps”
12:00-13:00	<b>Oral Presentations:</b>
	“Bentonite Enriched Quarry Sand for Landfill Liner Applications” by Pradeep Raghu, Rakesh J Pillai
	“Influence of Curing Period on Cement, Lime-Stabilized Expansive Soil Using Rice Husk Ash and Stone Dust as Additives” by P. Samatha Chowdary, M.Rama Rao
	“Performance Evaluation of Fiber Distribution and Layered Reinforcement on Black Cotton Soil Under Static and Dynamic Loading” by Sindhujha R, Muthukkumaran K
	“Effect of Compaction State on Unconfined Compressive Strength of Glass Fiber Reinforced Fine-Grained Soil” by Suchit Kumar Patel, Baleshwar Singh
	“Reduction of Lateral Earth Pressure on Retaining Wall Using A Relief Shelf: An Experimental Study” by Rizwan Khan, Vinay Bhushan Chauhan, Satyanarayana Murty Dasaka
	“Modification of Subgrade Properties using Waste Generated from Sand Manufacturing Unit and Fibre” by Sharon Raju, Sreevalsa Kolathayar , Anil Kumar Sharma
	<b>Rapporteur Summary of following papers by Thyagaraj T :</b>
“Pile Supported and Basal Reinforced Embankment over Soft Clay: A Case Study” by Prasun Halder, Baleshwar Singh	
“Performance Studies of Geosynthetics Reinforcement in Pavements Resting over A Weak Subgrade by Repetitive Load Test” by Ranjan D, Mamatha K H, Dinesh S V	
“An Experimental Investigation on Deformation and Strength Characteristics of Unreinforced and Geosynthetic Reinforced Layers by Plate Load Test” by Sugandh Y E, Mamatha K H, Dinesh S V	
“Utility of using fibers extracted from Eicchornia crassipes and Corchorus plant as a natural reinforcement material” by V.Patil, S. Pachauri, A.Chouksey, B. Jakhar, V. Kashyap , A. Garg	
“Bearing Capacity of Circular Footing in RFB over Compressible Ground Stabilized by Granular Pile” by K. Rajyalakshmi, S.V. Abhishek, M.R. Madhav	
<b>13:00 – 14:15 Lunch Break</b>	

23rd July 2016, 14:15-16:65 Technical Session 6 Chairmen: Prof. R. Shivashankar & Prof. R. G. Robinson	
14:15-14:45	Keynote Lecture: Prof. Snehasis Tripathi on “Underground Disposal of Nuclear Waste: Recent Advances in Hydro-mechanical Behaviour of Compacted Bentonites”
14:45-16:15	<b>Oral Presentations:</b>
	“Effect Of Phosphogypsum and Calcium Chloride on Soil Stabilization using Fly Ash” by Eswara Reddy O, Harish M, Trinadh N, Krishna Sai E
	“Problems with Pozzolanic Additives in Imparting Strength to Kuttanad Clay” by K. Suganya, P. V. Sivapullaiah
	“Potential of Fly Ash to Enhance the Behaviour of Lime Treated Gypseous Soil” by Arvind Kumar Jha, P. V. Sivapullaiah
	“Experimental Studies to Investigate Potential of Using Waste Materials as Infills for Geocell Reinforced Constructions” by Asha M N, Divya V, Burhanuddin M K, Fateh A M, Priya A, Shashi K S
	“Some Studies on the Behavior of Sugarcane Bagasse Ash Admixed Cement Stabilized Soil” by B. A. Mir, Karan Gupta, J. N. Jha
	“Phytoremediation Studies on Accumulation of Heavy Metals from Polluted Soils of Visakhapatnam” by K. Suresh Kumar, N. Srinivas
	“An Assessment of Heavy Metals in Soils of Industrial Area in Visakhapatnam” by Ch. Ramakrishna , G. Ramoji, K. A. Sunil Kumar, N. Srinivas
	“Treatment of Wastewater by Soil Aquifer Treatment (SAT) System in Conjunction with Adsorbents” by Nagarajappa D.P, Manjunath N.T, Manjunatha K
	“Constructed Wetlands A Novel Initiative for Waste Water Treatment to Attain Sustainable Environment” by Umang K Shah, Anant Mitra, Renuka Dharwarkar, J.S.Sudarsan
	“Performance Enhancement of Geogrid Reinforced Soil Walls with Geofoam Inclusion” by A. S. Mane, Gawali Seema, Gore Pooja, Muley Ranjana, Usfoor Abbas
	<b>Rapporteur Summary of following papers by Suganya K:</b>
	<p>“Strength Improvement of Poor Subgrade Soil Reinforced with Non-Woven Geotextile Sheet” by Ayush Mittal, Shalinee Shukla</p> <p>“Analysis The Strength of BC Soil Stabilized using Cement\Rice Husk Ash\Sisal Fiber” by Kiran. S.P, A.N Ramakrishna</p> <p>“Geotechnical Stabilization of Soil with Sugarcane Bagasse (Organic Waste)” by Mehul Parmar, Pradeep Rathod, Ravi Patel, Darshit Padaria, N. B. Hasilkar, S. M. Engineer</p> <p>“Bottom Ash - as an Engineered Construction Material for Sustainable Environment” by B. A. Mir, Asim Hasan Malik</p> <p>“Utilization of Solid Waste as A Filler Material in Roads” Eleane Da Costa , Sanchita Sawant, Naguesh Sawant Talaulikar ,Varad Gaonkar Satyesh Kakodkar</p>
16:15-17:00 Closing Session & Refreshments	