

*Annexure XI and XII*

**DETAILED TECHNICAL PROGRAM WITH KEY NOTE SPEAKERS**

<b>Detailed Program</b>		
<b>27<sup>th</sup> October 2015</b>		
<b>09:30 am - 10:35 am</b>	<b>Venue A</b>	<b>Inaugural Session</b>
<b>11:00 am - 12:30 pm</b>	<b>Venue A</b>	<p><b>Technical Session I:</b> Chair: Dr. V. M. Sharma Consultant; Co-Chair: Shri. Y. Deva, ICCS Ltd (Formerly GSI) <b>Special Theme I: Hydropower in India</b> <b>Keynote Lecture 01 R. N. Mishra:</b> Hydropower-Myths and Conjectures <b>Keynote Lecture 02 S. P. Sen:</b> TBM: Its success and Failures in Hydro Tunnels -Indian Himalaya <b>Keynote Lecture 03 Dr. Robert Gold Smith:</b> The importance of Engineering Geology for hydropower development in India</p>
<b>12:35 pm - 13:35 pm</b>	<b>Venue A</b>	<p><b>Technical Session 2 (A):</b> Chair: Shri Harbans Singh, Director General GSI; Co-Chair Dr. Sujit Dasgupta, Formerly GSI <b>Theme I Investigation Techniques and Exploration</b> Keynote Lecture 12:35-13:05 hrs <b>Keynote Lecture 04 A. B. Pandya:</b> New Frontiers in Geotechnical Engineering: Challenges and Opportunities 13:05-13:35 hrs <b>Paper I P. K. Gupta</b> and Prashant Rai: Challenges and construction of big dams in Siwaliks Himalayas-A need for future <b>Paper II G. K. Kaishtha:</b> Yamuna Valley Projects-A Journey Down Memory Lane. <b>Paper III Atiye Tugrul,</b> Selahattin Hasdemir and Murat Yilmaz: Assessment of Mineralogic, Petrographic and Chemical Composition of Natural Sands Using as Concrete Aggregate.</p>
	<b>Venue B</b>	<p><b>Technical Session 2 (B):</b> Chair: Dr. Prabhas Pande, Formerly GSI; Co-Chair: Shri N. K. Mathur, Formerly NHPC; <b>Theme I: Investigation Techniques and Exploration</b> <b>Paper I J. K. Yachu,</b> Mr. Prashant Rai and Dr. Gopal Dhawan: Influence of geology on layout optimisation of Tamanthi multipurpose project. <b>Paper II S. L Kapil</b> and Pallavi Khanna: Systematic approach to seismicity studies for hydroelectric projects with special reference to NE India. <b>Paper III S. Kunar:</b> Integrated Geophysical Approach to Assess Geotechnical Input Parameters for Design of underground storage cavern: A Case Study from Western Ghat Mountain belt, India. <b>Paper IV Abhay Kumar Bharti,</b> S. K.Pal, Piyush Priyam and Satya Narayan: Detection of Illegal Mining over Jharia Coalfield using Electrical Resistivity Tomography. <b>Paper V A. K. Chadha,</b> K. S. Chauhan and Mahesh Dutt: Remoteness of an area should not be impediment for good investigation program for large hydroelectric Projects.</p>

**Venue A: Main Auditorium (Seminar Hall)**

**Venue B: Block IV Lecture Theatre**

**Venue C: Block V Lecture Theatre**

<b>27<sup>th</sup> October 2015</b>		
<b>12:35 pm - 13:35 pm</b>	<b>Venue C</b>	<p><b>Technical Session 2 (C):</b>            Chair: Dr. B. Bhattacharya;            Co-Chair: Shri Rajeev Sethi, Formerly NHPC</p> <p><b>Theme I: Investigation Techniques and Exploration</b></p> <p><b>Paper I Sanjay Rana:</b> Unique Applications of Engineering Geophysics</p> <p><b>Paper II Megha Kalra &amp; Gauhar Mehmood:</b> Analysis of three types of quartzite as coarse aggregate material and their impact on compressive strength on concrete.</p> <p><b>Paper III Sanjit Kumar Pal, Sunny Kr. Ranjan and K. K. K. Singh:</b> Utilization of multimode surface wave dispersions for improving of shallow surface characterization.</p> <p><b>Paper IV Sahadev Kumar, S. K. Pal and Jitendra Vaish:</b> Utilization of magnetic gradient</p> <p><b>Paper V Satyajit Rath, S. K. Pandey, D. P. Sandha, S. K. Mishra and B. P. S. Sahoo:</b> Earth Monitoring using Wireless Sensor Networks: A Case Study of Landslide Monitoring.</p>
<b>13:35 pm - 14:20 pm</b>	<b>Lunch</b>	
<b>14:20 pm - 15:50 pm</b>	<b>Venue A</b>	<p><b>Technical Session 8:</b>            Chair: Shri P. L. Narula Formerly GSI;            Co-Chair: Shri U. V. Hegde GMR</p> <p><b>Technical Session 3: 14:20-15:20 hrs</b>  <b>Technical Session 3 (A): 15:20-15:50 hrs</b></p> <p><b>Theme VIII Seismicity</b></p> <p><b>Keynote Lecture 05 Prabhas Pande:</b> Seismo-tectonics in the planning of hydropower projects in the Himalaya</p> <p><b>Keynote Lecture 06 Sujit Das Gupta:</b> Foreland and hinterland structural features athwart Himalaya: Exposition and seismic propensity</p> <p><b>Keynote Lecture 07 Shuichi Hasegawa:</b> Engineering Geology in Active Mountain Belts-Application of knowledge from Japan to the Himalaya</p>

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<b>14:20 pm - 15:50 pm</b>	<b>Venue B</b>	<p><b>Technical Session 3 (A)</b> Chair: Shri Gyaneshwar Pant, Formerly GSI; Co-Chair: Shri Joyesh Bagchi, Director (Tech), Ministry of Steel &amp; Mines</p> <p><b>Theme III Construction Stage Engineering Geology and Geotechnical Aspects</b></p> <p><b>Paper I R. D. Dwivedi</b> &amp; R. K. Goel: Empirical correlation between joint factor, Jf and rock mass number, N.</p> <p><b>Paper II A. K. Mishra</b>, K. Chhophel, Pankaj Punetha, K. Lahkar and Mandeep Singh: Excavation and rock support for concrete dam abutments: A case study of Mangdechhu HE Project, Bhutan</p> <p><b>Paper III D. C. Tripathi</b> and Vachaspati Pandey: Tunnel Seismic Prediction, a Diagnostic Tool in Geotechnical studies: Case study of 231 MW (3x77 MW) Chamera Stage-III Power Station Distt. Chamba (H.P.), India.</p> <p><b>Paper IV D. Ramakrishna</b>: Geotechnical properties of AMRP Tunnel-1 and rock borability by TBM.</p> <p><b>Paper V L. N. Sharma</b>: Integration of Field, Geological and Geoinformatics data for potential construction site of a Dam- A case study from Pipalghatti village, Panchkula District, Haryana, India.</p> <p><b>Paper VI A. K. Verma</b>, B. R.Godara and Pradeep Singh: Delineation of Buried Channel with the help of Bedrock Contours and Surfer Software using Surface and Subsurface Explorations- Goriganga-IIIA HE Project.</p> <p><b>Paper VII Jina Mandal</b> and K. Lakshmanan: Post construction stage geotechnical investigation of Sidhata medium irrigation project, Jawali, District Kangra, Himachal Pradesh.</p>
	<b>Venue C</b>	<p><b>Technical Session 3 (B)</b> Chair: Shri R. S. Garkhal, DDG, GSI ; Co-Chair: Shri Mukhopadhyay Tapanjypti SNC-Lavalin</p> <p><b>Theme III Construction Stage Engineering Geology and Geotechnical Aspects</b></p> <p><b>Paper I Prasanna Jain</b>, A.K. Naithani and T.N. Singh: Performance characteristics of Tunnel Boring Machines and correlation with empirical prediction model – case study from Mumbai, India.</p> <p><b>Paper II Ravi Kumar</b>: Panjal and Murree Thrusts– Influence and Prognostication of Associated Problems in Water Conductor of Parnai HEP (37.5 MW).</p> <p><b>Paper III Dr. A.K. Sisodia</b>, Vinay Kumar Dixit and Dixit Baruah Tunneling in Adverse Geological Conditions in Mangdechhu Hydro-Electric Project.</p> <p><b>Paper IV Shyam Sundar Singh</b>, Prashant T. Ilamkar and Dr. K. Jayabalan: Preconstruction stage geotechnical evaluation of Thana-Plaun hydroelectric project, Mandi district, Himachal Pradesh.</p>

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<b>27<sup>th</sup> October 2015</b>		
<b>14:20 pm - 15:50 pm</b>	<b>Venue C</b>	<p><b>Paper V T. N. Srivastava</b>, R.C. Senan, A.K. Singh. G.C. Pargaien, N. Gopalakrishnan and M. Bedi: Excavation of Inclined Pressure Shafts in Difficult Geological Conditions – A Case Study from Tapovan Vishnugad H.E. Project, Joshimath, Uttarakhand, India.</p> <p><b>Paper VI L. G. Singh</b> and A.K. Naithani: Rock mass Assessment of a deep pump house area – A case study.</p>
<b>15:50 pm - 16:20 pm</b>	<b>Tea Break</b>	
<b>16:20pm - 18:00 pm</b>	<b>Venue A</b>	<p><b>Technical Session 4 &amp; 5 :</b> Chair: Shri S.P. Sen Formerly NHPC; Co-Chair: Shri Y. Deva ICCS Ltd (Formerly GSI)</p> <p><b>Technical Session 4 16:20-16:50 hrs</b> <b>Special Theme III: - Education</b> <b>Keynote Lecture 08 Martin Culshaw:</b> How to write and publish a paper.</p> <p><b>Technical Session 5: 16:50-18:00 hrs</b> <b>Special Theme IV: - Tunnel Boring Machines and Tunnelling</b> <b>Keynote Lecture 09 Joe Roby:</b> Application of TBM in Himalaya</p> <p><b>Keynote Lecture 10 Paul Marinos:</b> Tunnelling in difficult ground</p> <p><b>Paper I Jie Wu:</b> Competition between TBM excavation and convergent deformation of surrounding rock.</p>
	<b>Venue B</b>	<p><b>Technical Session 3 (C):</b> Chair: Dr. Y. P. Sharada, Formerly GSI; Co-Chair: Dr. Manoj Verman, Rockscience</p> <p><b>Theme III Construction Stage Engineering Geology and Geotechnical Aspects</b></p> <p><b>Paper I A. K. Mishra</b>, K. Chhophel, P. Punetha, K. Lahkar, Deepak Joshi: Case Study on Dam Foundation Condition of Mangdechhu Hydroelectric Project, Bhutan.</p> <p><b>Paper II Vachaspati Pandey</b> and J. K. Yachu: Surge Shaft Excavation in Challenging Geology: A case study of Surge shaft of Chamera HE Project Stage-III, (H.P.), India.</p> <p><b>Paper III Aiswarya Kumar</b>, Naveen Kumar Gupta, B. K. Misra and R. K. Hustoo: Tunneling below the American Center for DMRC phase-III project- A case study.</p> <p><b>Paper IV Kranti Kumar Gupta</b>, R. K. Chauhan, <b>Dr. Umakant Sharma</b> and M. P. Singh: Applications of Geotechnical Techniques in RHEP-412 MW- A Case Study.</p> <p><b>Paper V P. T. Ilamkar</b>, Virender Singh Negi, Kundan Rangari and K. Jayabalan: Construction stage geotechnical evaluation of Shaongtong Karcham HEP, District Kinnaur, Himachal Pradesh.</p> <p><b>Paper VI Rahul Joshi*</b>, Dr. L. K. Kshirsagar, Dr. P. B. Jadhav: Engineering Geological Assessment of Volcanic Breccia: a Case Study from a Tunnel near Gulbarga, NW, Karnataka, India.</p>

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<b>27<sup>th</sup> October 2015</b>		
<b>16:20pm - 18:00 pm</b>	<b>Venue C</b>	<p><b>Technical Session 3 (D):</b>  Chair: Shri M. Ahmed ACES, Dubai  Co-Chair: Shri Prashanta Mishra, GSI  <b>Theme III Construction Stage Engineering Geology and Geotechnical Aspects</b>  <b>Paper I A. K. Pathak</b>, J. B. Stypulkowski,  F. B. Bernardeau: Supervision of Engineering Geological Activities during Construction of Abu Hamour Surface and Ground Water Drainage Tunnel Phase-1 Doha, Qatar.  <b>Paper II Aditya Bhatt</b>, Amit Gupta and R. K. Gupta:  Prediction, interpretation and treatment of adverse geological features in underground powerhouse cavern – A case study  <b>Paper III Y. R. Dhar</b>, and John, D.: Geotechnical characterization of rock mass and preconstruction stage slope stability analyses of rock slopes abutting Barrage site at Tapovan-Vishnugad Hydropower Project, Uttarakhand Himalaya.  <b>Paper IV B. D. Patni</b>, and Arindom Chakraborty: Coping with Unprecedented Tunnelling Conditions at Pallivasal Extension Scheme - A Case Study.  <b>Paper V S. K. Mohanty</b>, Joffy, V. L., Adhikari, V., Dimri, R., Tirumala, S. K., &amp; Krenn, F.: Construction Stage Geological - Geotechnical Investigations for Underground Crude Oil Storage Caverns, Padur, Karnataka, India.  <b>Paper VI Harish Bahuguna</b>: Optimisation of excavation and support measures for the slopes back of surface powerhouse of Vyasi hydroelectric Project..</p>
<b>28<sup>th</sup> October 2015   Registration: 09:00 am - 11:00 am</b>		
<b>09:30 am - 11:30 am</b>	<b>Venue A</b>	<p><b>Technical Session 4 (A) &amp; 5 (A)</b>  Chair: Shri Brijendra Sharma, Formerly NHPC;  Co-Chair: Dr. Ann Williams, IAEG  <b>Technical Session 4 (A) 09:30-10:30 hrs</b>  <b>Special Theme III: Education</b>  <b>Keynote Lectures 09:30-10:30 hrs</b>  <b>Keynote Lecture 11 Helen Reeves</b>: Computers and Engineering Geology  <b>Keynote Lecture 12 Faquan Wu</b>: Large deformations in tunnels  <b>Technical Session 5 (A) 10:30-11:30 hrs</b>  <b>Theme II Rock Mechanics</b>  <b>Paper I Balraj Joshi</b>, Anil Kr Jain and Rajesh Kumar:  Excavation stability analysis of underground hydraulic structures- Desilting chambers- NHPC perspective.  <b>Paper II R. K. Goel</b> and Dr. Subhash Mitra: Importance of Weathering in Rock Engineering.  <b>Paper III Ali Burak Yener</b> and Sinem Centinkaya, The Importance of Engineering Geological Considerations during construction stage of a Dam - A case Study of Ballikaya Dam, NW Anatolia, TURKEY.</p>

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<b>09:30 am - 11:30 am</b>	<b>Venue A</b>	<p><b>Paper III K. S. Rao</b> and Ankesh Kumar: Geological and Engineering Behaviour of Oil Shales.</p> <p><b>Paper IV Hari Dev</b> and Singh Rajbal: Evaluation of In-situ Stresses for Design of Underground Structures in Hydropower Development.</p> <p><b>Paper V Ashok Kumar</b>, Sahendra Ram and Rajendra Singh: Rock Mechanics considerations for rib/snook design in mechanised depillaring.</p>
<b>10:30 am - 11:30 am</b>	<b>Venue B</b>	<p><b>Technical Session 7 (A)</b> Chair: Dr. V. Venkateshwarulu, Director, NIRM; Co-Chair: Shri P. K. Gupta, GM NHPC</p> <p><b>Theme VI : Mining</b></p> <p><b>Paper I D. N.Sharma</b>, O. Gopal and D. Srinivas: Assessment of Slope Stability in Opencast Coal mine through Structural mapping, Manuguru, Singareni Collieries.</p> <p><b>Paper II A. Mokhtari</b>, Monjezi, M and Mehrdaneh, A. H.: Application of Multi-Criteria Decision Making Models in Designing Blasting Pattern of Gole-E-Gohar (mine # 1) Iron Mine.</p> <p><b>Paper III H. K. Verma</b>, N. K. Samadhiya, M. Singh and R. K. Goel: Extent of rock mass damage induced by blasting in tunnelling.</p> <p><b>Paper IV F. Coli</b>, M. Coppi, G. Donati, L. Funaioli, Leoni: Critical Short Term and Strategic Long Term Slope Monitoring Radar – an approach using SAR.</p> <p><b>Paper V S. S. Ghalib Askari</b>, Sanjeev Kumar Thakur, N. V. Sairam, Dr. Suman Krishna Sit and Sanjay Kumar Singh: Geological Discontinuity Mapping during Development &amp; Depillaring of 2S Panel, Seam IX in Digwadi Colliery, Jharia Coalfield, Jharkhand, India: A Case Study on Roof fall Hazards Mitigation in Underground coal mine.</p> <p><b>Paper VI V. Saini</b>, R.P. Gupta and M. K. Arora: Environmental issues of coal mining - A case study of Jharia coal field India.</p>
<b>09:30 am - 11:30 am</b>	<b>Venue C</b>	<p><b>Technical Session 11(A)</b> Chair: Shri S. P. Sen, Formerly NHPC; Co-Chair: Dr. Rajinder Bhasin, NGI, Norway</p> <p><b>Theme VII: Hydrology, Groundwater and Geo-environment.</b></p> <p><b>Keynote Lecture 13</b> Rajinder Bhasin and Bhoop Singh: Cost effective method for early warning of rainfall induced landslides in Asian countries.</p> <p><b>Paper 0</b> S.K. Wadhawan: Geotechnical Application for Geohazards Mitigation in Dryland Environment of Thar Desert, India</p> <p><b>Paper I Xiaolei Liu</b>, Yonggang Jia, Jiewen Zheng and Hongxian Shan: Critical role of wave-induced bed liquefaction in the re-suspension and transport of sediments discharged from the Yellow River.</p>

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<b>28<sup>th</sup> October 2015</b>		
<b>09:30 am - 11:30 am</b>	<b>Venue C</b>	<p><b>Paper II Shaotong Zhang</b> and Yonggang Jia: Field experiments on the role of seepage-induced pump action in sediment re-suspension on an intertidal flat of Yellow River delta, China.</p> <p><b>Paper III K. R. Kafle</b>, S. N. Khanan, R. K. Dahal "Adaptation on sedimentation" in term of agriculture practices after 2008, August Koshi flood in Nepal:</p> <p><b>Paper IV K. Rama Mohan</b>, A. Keshav Krishna, Irina V. Galitskaya, Olga N. Eremina &amp; Gleb I. Batrak: Comparative assessment of natural and human induced heavy metal pollution in the surface soils in urban areas in platform conditions.</p> <p><b>Paper V Yaoru Lu</b> and Qi Liu: The features of six-dimensional geo-environment and Karst development.</p> <p><b>Paper VI Ranjan Kumar Dahal</b>: Consequences of large-scale landslide dams in the Nepal Himalaya.</p> <p><b>Paper VII Dr. K. Jayabalan</b>, Ravi Shankar Chaubey, Kundan Digambar Rangari &amp; P T Ilamkar An overview of Glacio-Fluvial lake burst in the upper reaches of Kirgrang nala (Yula glacier), Pin Valley, District Spiti, Himachal Pradesh, India</p>
<b>11:30 am - 11:50 am</b>	<b>Tea Break</b>	
<b>11:50 am - 13:30 pm</b>	<b>Venue A</b>	<p><b>Technical Session 5 (B)</b> Chair: Prof K.S. Rao, IIT Delhi; Co-Chair: Shri Hasan Abdulla Jt Director CSMRS</p> <p><b>Theme II Rock Mechanics</b> <b>Keynote Lecture 11:50-12:20 hrs</b> <b>Keynote Lecture 014 Rajbal Singh</b>: Issues in rock mechanics testing for hydropower projects 12:20-13:30 hrs</p> <p><b>Paper I T. L. Goh</b>, N. Simon, A. Hussin, A. S. Serasa, A. G. Rafek: Weathered related rock material strength reduction: The Malaysian Granites</p> <p><b>Paper II Imran Sayeed</b> and Rahul Khanna: Empirical correlation between RMR and Q systems for Himalayan rocks.</p> <p><b>Paper III K. S. Rao</b> and M. Ghosh Roy: Analysis of creep behaviour of soft rocks in tunnelling.</p> <p><b>Paper IV Arup Bandyopadhyay</b> and Hasan Abdullah: A comparative study of the laboratory parameters of gneiss.</p> <p><b>Paper V K. S. Rao</b> and Swapnil Mishra: Fracture Propagation of Rocks under Dynamic Regime.</p> <p><b>Paper VI G.V. Ramana</b>, Shashank Pathak, Hari Dev, Rajbal Singh, Deformability characteristics of phyllite rock mass: Empirical and experimental approach.</p>

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<b>11:50 am - 13:30 pm</b>	<b>Venue B</b>	<p><b>Technical Session 5 (C)</b>  Chair: <b>Dr A. K. Dhawan</b> Consultant;  Co-Chair: <b>Shri Hari Dev</b> CSMRS  <b>Theme II Rock Mechanics</b>  <b>Paper I Rakesh Sehgal:</b> Design and Construction of Head Race Tunnel of Rampur HEP (412 MW) in adverse geological conditions-A case study.  <b>Paper II H. K. Singh</b> and Dr. A. Basu: Influence of surface roughness characteristics of unfilled rock joints on peak shear strength.  <b>Paper III Seyed Mohammad Mahdi Niktabar,</b> K. Seshagiri Rao and Amit Kumar Shrivastava: Shear Behaviour of rock joints under cyclic condition.  <b>Paper IV R. G. Virmani &amp; M. Ghosh Roy:</b> Monitoring long term movement of hill slope in penstock area of Loktak Power Station.  <b>Paper V B. K. Ojha:</b> Innovative tunnelling practices at Teesta-III.  <b>Paper VI Feroz Ahmad,</b> M. Kazafi, Shakeel Ahmad, Saadat B Khakiand and G. A. Mukthar: To Analyze the Slope Stability for Designing the Dam Abutments of Kirthai-I HEP, Kishtwar, J&amp;K, India.  <b>Paper VII B. K. Ram</b> and Dr. A. Basu: Influence of weathering on the shear strength of rock joints in Granites</p>
	<b>Venue C</b>	<p><b>Technical Session 4 (B)</b>  Chair: Dr. Gopal Dhawan  Co-Chair: Shri J.K. Yachu, NHPC  <b>Special Theme III: Education</b>  <b>Keynote Lecture 15 Surya Prakash:</b> Natural disaster in the Himalaya-Lessons learnt and way forward  <b>Keynote Lecture 16 Arindam Basu:</b> International practices in Engineering Geology: Education in India.</p>
<b>13:30 pm - 14:15 pm</b>	<b>Lunch Break</b>	
<b>14:15 pm - 15:45 pm</b>	<b>Venue A</b>	<p><b>Technical Session 6 (A)</b>  Chair: Dr. Carlos Delago;  Co-Chair: Shri Balraj Joshi GM Design NHPC  <b>Theme IV Geotechnical Engineering and Soil Mechanics</b>  <b>Keynote Lectures 14:15-15:25 hrs</b>  <b>Keynote Lecture 17 Carlos Delago:</b> Problematic soil foundations for large buildings  <b>Keynote Lecture 18: Victor Osipov:</b> Shear resistance as a multifactor parameter of soil strength  <b>Keynote Lecture 19 Dr. Ricardo Oliveira:</b> Role of environment in project optimisation  15:25-15:45 hrs  <b>Paper I N. P. Honkanadavar,</b> Nripendra Kumar and Murari Ratnam: Large Size Triaxial Behaviour of Alluvial and Blasted Quarried Rockfill Materials.  <b>Paper II Jiewen Zheng,</b> Baohua Liu, Xiaolei Liu,</p>

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	<b>Venue A</b>	Guangming Kan, Kaiben Yu and Guanbao Li: Sound velocity and geotechnical properties of intertidal flat sediments near Dagu Estuary, China.
	<b>Venue B</b>	<p><b>Technical Session 3 (E)</b>  Chair: Dr. S.K. Wadhawan (Formerly GSI);  Co-Chair: Shri D.C. Tripathi NHPC</p> <p><b>Theme III Construction Stage Engineering Geology and Geotechnical Aspects</b></p> <p><b>Paper I N. K. Mathur</b> &amp; Sumegh Meghraj Kawade, Integrated approach in planning &amp; execution of infrastructure projects</p> <p><b>Paper II D. S. Rawat</b>, A.K. Naithani and G. Srinivasa Rao, Treatment of cavities during construction of twin tunnels in an irrigation project – a case study.</p> <p><b>Paper III Arindom Chakraborty</b> and K. Seshagiri Rao: Water Ingress Assessment in Tunnels – An Overview</p> <p><b>Paper IV Dr. K. Jayabalan</b> and R. Srinivasan: Geotechnical investigation on intra state river linking canal project of Tamiraparani- Karumeniyar and Nambiar rivers, Tirunelveli and Thoothukudi districts, Tamil Nadu.</p> <p><b>Paper V Radhakrishnan. S</b>, D.K. Joshi, P.C. Nawani: Prognostication of rock mass behaviour of Hydropower Tunnels in Trans Himalayan region, North East India.</p>
14:15 pm - 15:45 pm	<b>Venue C</b>	<p><b>Technical Session 8 (E) 14:15-15:45 hrs</b>  Chair: Prof. K. S. Rao;  Co-Chair: Dr. V.K. Sharma GSI</p> <p><b>Theme VIII Landslide Studies Hazards and Seismicity</b></p> <p><b>Paper I K. Seshagiri Rao</b> and Tarun Singh: Rainfall Thresholds for Landslides: Their Capabilities and Limitations.</p> <p><b>Paper II Amitansu Pattanaik</b>, Abhay Tripathi and Himanshi Singh Negi: Validating landslide events by Precipitation Depth Frequency (PDF) estimation method: an analysis for Tangni Landslide, Uttarakhand, India.</p> <p><b>Paper III B. D. Malbarna</b>: Development of three major landslides and adopted remedial measures along Katra-Dharm Railway Line section of USBRL Project, Jammu &amp; Kashmir.</p> <p><b>Paper IV K. Lakshmanan</b> and Jina Mandal: Geological impact assessment of Kedar Ghati - A mass destruction during June 2013 disaster, district Rudraprayag, Uttarkhand, India.</p> <p><b>Paper V. R. K. Panigrahi</b>, and Shaw, A.K: Engineering Geological Assessment of Hill Rock Slope</p> <p><b>Paper VI Subash Chandra Roy</b>: Environmental impact evaluation of mining in Maldeota- a case study.(shifted from Hydrology).</p> <p><b>Paper VII Ravi Shankar Chaubey</b>, Kundan Rangari, P.T. Ilamkar and K. Jayabalan: Mass movement on the top of Shongtong Karchham underground powerhouse site, Mebar, Rekong Peo, district Kinnaur, Himachal Pradesh.</p>

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<b>28<sup>th</sup> October 2015</b>		
<b>15:45 pm - 16:05 pm</b>		<b>Tea Break</b>
	<b>Venue A</b>	<p><b>Technical Session 12, 3 and 3 (F):</b> Chair: Dr. M.L. Sharma IIT Roorkee; Co-Chair: Shri J.S. Mehta, Director GSI.</p> <p><b>Technical Session 12 &amp; 3: 16:05-17:05 hrs</b> <b>Special Theme VI &amp; II Energy &amp; Engineering Geology</b> <b>Keynote Lecture 20 Shri M. M. Madaan:</b> Energy development scenario in India. <b>Keynote Lecture 21 V. Balachandran:</b> Engineering Geology for hydropower development in Peninsular India <b>Technical Session 8: 17:05-18:00 hrs</b> <b>Keynote Lecture 22 B. Bhattacharya :</b> Understanding the Emerging Potential of Geophysics for Novel Application in Complex geotechnical problems <b>Technical Session 3 (F): 17:35-16:00 hrs</b> <b>Theme III Construction Stage Engineering Geology and Geotechnical Aspects</b> <b>Paper I Ning LIANG,</b> Faquan WU and Yunfeng WANG: Adjustment of rock mass classification based on statistic mechanics of rock mass (SMRM) in deeply buried and high in situ stressed Guanshan railway tunnel. <b>Paper II Sanjiv Kumar</b> and M. Raju: 3D Wedge analysis of desilting chambers of Punatsangchhu-II hydroelectric project, district Wangduephodrang, Bhutan: a case study <b>Paper III K.S. Rao</b> and Ashwani Jain: Approaches for assessment and analysis of squeezing phenomenon in underground structure.</p>
<b>16:05 pm - 18:00 pm</b>	<b>Venue B</b>	<p><b>Technical Session 6 (B)</b> Chair: Shri Kanwar Singh ED NHPC; Co-Chair: Dr. R.K. Goel, CMFIR, Roorkee</p> <p><b>Theme IV Geotechnical Engineering and Soil Mechanics</b> <b>Paper I Elif Avşar,</b> Resat Ulusay and Mahmut Mutlutürk: Geomechanical properties of a slightly cemented volcanic soil (Turkey) and effect of microstructure on its geomechanical behaviour. <b>Paper II Darin Baruah</b> and Prof. Anil Kumar Sahu: Comparative study of load deformation behavior of silty clay bed reinforced with stone column of different depth and gradation. <b>Paper III Balendra Mouli Marrapu</b> and Dr. Ravi Sankar Jakka: Slope stability assessment of Kalla - Coonoor Hill road stretch of the Nilgiris: A comparative study of multiple regressions and neural network. <b>Paper IV Md. Saif Ahmed,</b> Pankaj Patnaik and Shaheen Sultana: Quality audit for saline embankment: A geotechnical engineering perspective. <b>Paper V S. Sinha</b> and A. Basu: Physico-mechanical characterization of lateritic profiles: A depth-wise assessment. <b>Paper VI Alok Ranjan</b> and Prof. R. Ayothiraman: Stabilisation of black cotton soil with saw dust. <b>Paper VII</b> Arpita Pankaj and Pankaj Kumar: Role of Soil Potential in City Planning- A case study of Rae Bareilly city, Uttar Pradesh, India</p>

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**Venue B: Block IV Lecture Theatre**

**Venue C: Block V Lecture Theatre**

**29<sup>th</sup> October 2015**

<b>09:30 am - 11:15 am</b>	<b>Venue A</b>	<p><b>Technical Session 9</b>            Chair: Shri M.R. Bhutiyani Director DTRL, DRDO;            Co-Chair: Dr. V. Balachandran, Formerly GSI  <b>Special Theme V: Stability</b>  <b>Keynote Lecture 23 Louis N. Y. Wong:</b> How do rocks fail? ("IAEG Richard Wolters' Prize 2014") .  <b>Keynote Lecture 24 Runqiu Huang:</b> Landslides in eastern Tibet in recent ten years and their implications on global climate changes.  <b>Keynote Lecture 25 M. J. Ahmed:</b> Rock cut slope stabilization – A systematic approach in the design and construction.  <b>Theme VIII: Landslide Studies Hazards and Seismicity</b>  <b>Paper I A. Strom:</b> Surface Faulting at Structures' Foundation: Assessment of Residual Risk after Implementation of Protection Measures.</p>
	<b>Venue B</b>	<p><b>Technical Session 8 (A)</b>            Chair: Shri M. Raju, GSI;            Co-Chair: Shri Imran Sayeed, NHPC  <b>Theme VIII: Landslide Studies Hazards and Seismicity</b>  <b>Paper I Mineo S.</b> and Pappalardo G, Infrared thermography for the detection of potentially unstable areas along a slope  <b>Paper II Alex Varughese, Ganesh W. Rathod &amp; K.S.Rao:</b> Three Dimensional Stability Analysis of Jointed Rock Slope –A case Study.  <b>Paper III Sanjeev Gupta,</b> Site Specific Design Earthquake Parameters for different Hydro Electric Projects located in the Himalayan belt - Case Studies.  <b>Paper IV S. Mohanty,</b> Seismotectonics of the Indian plate interior: insights from geodetic strain patterns.  <b>Paper V Pankaj Kumar,</b> Arpita Pankaj and Abhinandan Srivastava: Macro seismic study of the earthquake of 5th March 2012 in Delhi-Haryana region.  <b>Paper VI S. Sarkar, A. Pain, D. P. Kanungo and M. Samanta,</b> Hill slope stability based on Hoek-Brown and modified Mohr-Coulomb criterion - a case study from Sikkim Himalaya.</p>
	<b>Venue C</b>	<p><b>Technical Session 8 (B)</b>            Chair: Dr. Sujit Das Gupta, Formerly GSI            Co-Chair: Shri Ashok Kumar, DDG, GSI  <b>Theme VIII: Landslide Studies Hazards and Seismicity</b>  <b>Paper I P. V. S Rawat, A. P. Thapliyal, S. K. Tripathi, Harish Bahuguna, S. P. Shukla, Jina Mandal, K. Lakshmanan and T. S. Pangtey:</b> Qua Vadis Kedarnath: Post disaster 2013.  <b>Paper II Neil Monteiro,</b> D.P. Kanungo &amp; R. Anbalagan: Landslides in parts of Chamoli District: An Engineering Geological and Dimensional Assessment.</p>

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<b>09:30 am - 11:15 am</b>	<b>Venue C</b>	<p><b>Paper III Shovan L. Chatteraj</b>, Yateesh Ketholia, P. K. Champati Ray and Suresh Kannaujiya: Debris flow modelling and risk assessment of selected landslides from Uttarakhand.</p> <p><b>Paper IV Sanjiv Sharma</b>, Prasanta Mishra, G.C. Kandpal, Dhruva Chakraborty and Imtikumzuk: Geotechnical Assessment of twin landslides at Ramhlun area, Aizwal, Mizoram.</p> <p><b>Paper V Hamid Sana</b>, Gulzar Ahmad Mukhtar and Sankar Kumar Nath: Seismicity analysis of Chenab Valley Seismic Zone, NW Himalaya: the seismogenic source zone of Kirthai Hydro Electric Projects.</p> <p><b>Paper VI Indranil Chakraborty</b> and Sudipto Nath: Site Specific Study to evaluate the failure mechanism of Bojeck Landslide in West District, Sikkim</p> <p><b>Paper VII Hemant Kumar</b>, P.V.S. Rawat, A. P. Thapliyal and Harsharaj L. Wankhade: Geotechnical assessment of cracks and stability of slope around Garjia Devi temple, Ramnagar, Nainital district, Uttarakhand.</p>
<b>11:15 am - 11:35 am</b>	<b>Tea Break</b>	
<b>11:35 am - 13:35 pm</b>	<b>Venue A</b>	<p><b>Technical Session 8 (C) &amp; 8 (D)</b> Chair: Dr Scott Burns; Co-Chair: Shri Pradeep Singh, Director, GSI</p> <p><b>Technical Session 8 @ 11:35-13:05 hrs</b> <b>Special Theme III Geological Hazards</b> <b>Keynote Lecture 26 Scott Burns:</b> Urban landslides (speaker has indicated some modification in title) <b>Keynote Lecture 27 Ann Williams:</b> Groundwater drawdown and consolidation settlement effects of deep excavations in urban areas – predicted versus measured. <b>Keynote Lecture 28 Dr. Janusz Wasowski:</b> Satellite monitoring of road and railway infrastructure in landslide-prone areas</p> <p><b>Technical Session 8 (D) 13:05-13:35 hrs</b> <b>Theme VIII: Landslide Studies Hazards and Seismicity</b> <b>Paper I J. Wasowski</b>, F. Bovenga, R. Nutricato, D. O. Nitti and M. T. Chiaradia: Application of advanced satellite interferometry for monitoring road and railway infrastructure in landslide-prone areas. <b>Paper II Mohd. J. Ahmed</b> and Emad Sharif: Stability analysis of a +1000m high cliff for a resort project in the Hajar Mountains of Sultanate of Oman. <b>Paper III Dr. Irina Chesnokova:</b> Assessment of natural and anthropogenic processes for sustainable development</p>
<b>11:35 am - 13:35 pm</b>	<b>Venue B</b>	<p><b>Technical Session 11 (B) 11:35-13:35 hrs</b> Chair: Shri Rakesh Mahajan, Director, ICCS Ltd (formerly CWC) Co-Chair: Shri V. K. Sharma, GMR</p> <p><b>Theme VII: Hydrology, Groundwater and Geo-environment.</b></p>

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**29<sup>th</sup> October 2015**

<b>11:35 am - 13:35 pm</b>	<b>Venue B</b>	<p><b>Paper 0 R.C. Jain</b> Crucial Role of Aquifer Management for Inclusive Growth in India</p> <p><b>Paper I K. Rama Mohan</b>, A. Keshav Krishna, Irina V. Galitskaya, Olga N. Eremina and Gleb I. Batrak: Effect of industrialization and urbanization on hydrochemistry and contamination of groundwater from Kukatpally watershed, Southern India.</p> <p><b>Paper II Rajeev Aggarwal:</b> Reservoir Sedimentation for run of the river hydro electric schemes in Himalayan terrain.</p> <p><b>Paper III Pofali Pradip</b> and Mehul Petkar: Mitigating Industrial Development Impact on Water Resources through Surface and Subsurface Structures in Acute Condition.</p> <p><b>Paper IV Lalit Mohan Verma</b>, Navneet Kalia, Vinod Kumar and Vinay Guleria: Glacial Lake Outburst Flood (GLOF Studies – Impact and necessity.</p> <p><b>Paper V C. V. Sangewar:</b> Assessment of the impact of floods due to glacial lake outbursts flood (GLOF) and adaptation of mitigation measures.</p> <p><b>Paper VI A. D. Rao</b>, Sujatha Das and S. V. Babu: Variability of Coastal Ocean Processes during Pre-monsoon along East coast of India.</p> <p><b>Paper VII Sambit Sahoo</b> and Prof. Sarada Prasad Mohanty: Reactivation of fault systems of Jura dome, Kutch and their</p>
	<b>Venue C</b>	<p><b>Technical Session 9 (A)</b> Chair: Dr. Atul Nanda, EIL; Co-Chair: Dr Florian Krenn, Geo-Consultant India Ltd.,</p> <p><b>Theme VI: Large Caverns</b></p> <p><b>Paper I R. Rath</b>, M. Wippich, A. Nanda, F. Wilke: Underground Salt Cavern Storage for Crude Oil: A feasible alternative for India</p> <p><b>Paper II Saikat Pal</b>, Gopi Kannan, Chandan Kumar, Ranjit Rath and Atul Nanda: Adverse geological conditions and adopted interventions: A case study from an underground rock cavern storage project</p> <p><b>Paper III Gopi Kannan</b>, A. Usmani, Ranjit Rath and Atul Nanda: Geological considerations for large storage caverns</p> <p><b>Paper IV A. K. Mishra</b>, G. Baidya, P. Punetha, L. Krishna, and I. Ahmed: Numerical modelling and re-evaluation of support system while excavating underground cavern in weak rock.</p>
<b>13:35 pm - 14:35 pm</b>	<b>Lunch</b>	
<b>14:35 pm - 15:00 pm</b>	<b>Networking and Interaction</b>	
<b>15:00 pm - 16:00 pm</b>	<b>Valedictory Session</b>	
<b>16:00 pm - 16:30 pm</b>	<b>High Tea</b>	
<b>11:00 am - 16:00 pm</b>	<b>Poster Session 1 : 27<sup>th</sup> October 2015</b>	
<b>11:00 am - 16:00 pm</b>	<b>Poster Session 1 : 28<sup>th</sup> October 2015</b>	

*PS: For any clarification in the detailed Technical Program, please contact Shri Y. Deva, Convener or Shri Imran Sayeed, Co-Convener for Technical Sessions*

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