



EGCON 2022: International Conference on Engineering Geology and Geotechniques for Safe and Sustainable Infrastructures

Novotel Hotel & Residences

CF-11, Action Area 1C, New Town, Rajarhat, Kolkata

700156

16-17 November, 2022



PROGRAM

Day #1 (16.11.2022)	
Time (hrs.)	Details
09.30-10.40	Inaugural Session
10.40- 11.00	Break for Tea

Day #1 (16.11.2022)	
Plenary Session – I (11.00-13.20 hrs.) Sustainable Development & Technological Advancements Chair: Dr. P. L. Narula, Dy.D.G, GSI (Retd.) Co-Chair: Shri Y. Deva, Director, GSI (Retd.) Rapporteurs: Shri Sourav Sen and Smt. Kavitha S.	
Time (hrs.)	Details
11.00-11.20	Keynote #1: Safe and sustainable infrastructure – A paradigm change Shri Balraj Joshi, Member (NCLT), & Ex-CMD, NHPC
11.20-11.40	Keynote #2: Renewable energy integration enhancement using renewable energy storage technologies such as pumped storage hydroelectric for zero C. Shri Pravin Mitter Nanda, Executive VP, Greenko
11.40-12.00	Keynote #3: Application of Geomorphology in Sustainable Engineering Practices: Examples from Hilly Areas Prof. Sunil Kumar De, NEHU & President, International Association of Geomorphologists (IAG)
12.00-12.20	Keynote #4: Power of an Engineering Geological Map Dr. Gopal Dhawan, Chairman, DDAG Ltd., Ex-CMD, MECL
12.20-12.40	Keynote #5: The Future of Engineering Geology Education Prof. Bhabesh C Sarkar, IIT (ISM), Dhanbad
12.40-13.00	Keynote #6: Minimizing Geological Uncertainties through Advanced Geophysical Technologies. Shri S. L. Kapil, ED, NHPC & President, ISEG
13.00-13.20	Keynote #7: Significance of geotechnical investigation for DPR of Hydroelectric projects in Himalaya-a case study Dr. Timir Baran Ghoshal, Director (Retd.), GSI
13.20-14.30	Break for Lunch
Plenary Session – II (14.30-16.10 hrs.) Geohazards and Climate Change Chair: Shri M. Raju, Ex-DG GSI (Retd.) Co-Chair: Dr. A. K. Sinha, Dy. D.G., GSI (Retd.) Rapporteurs: Shri. Rabishankar Karmakar and Smt. Gargi Singh	
14.30-14.50	Keynote #8: A review of seismic hazard status of the state of Bihar Dr. Prabhas Pande, ADG, GSI (Retd.)
14.50-15.10	Keynote #9: Recent effects of high-altitude geomorphological systems for

	triggering geodisasters in the Himalayas Prof. Ranjan Kumar Dahal, Tribhuvan University, Nepal & Vice President, Asia Elect, IAEG
15.10-15.30	Keynote #10: Multi-hazard Disaster Risk Reduction & Resilience: Challenges, Framework & Technologies Prof. Maneesha V Ramesh, Provost, Amrita University
15.30-15.50	Keynote #11: Climate Change and Imperatives for Safe and Sustainable Dr. Sudesh Kumar Wadhawan, Ex-DG, GSI, Adjutant Professor, Amrita University & Vice President, ISEG
15.50-16.10	Keynote #12: Climate Variability & Geohazards – A Threat for Sustainable Development In The Rohingya Refugee Camps of Ukhiya, Cox’s Bazar Prof. A.T.M. Shakhawat Hossain, Jahangirnagar University, Bangladesh & President Bangladesh National Group of IAEG
16.10-16.30	Tea Break
Plenary Session – III (16.30-18.10 hrs.) Emerging Challenges in Infrastructures Chair: Shri R. N. Mishra, Ex-CMD, SJVN Co-Chair: Shri A. K. Mishra, MD, MHPA Rapporteurs: Shri. Sunandan Basu and Smt. Sustava Bhattacharya	
16.30-16.50	Keynote #13: Static and Dynamic Stability Analyses of Chenab Bridge Abutments: Technical and Social Challenges Prof. K. S. Rao, IIT Delhi & Ex.-President, ISEG
16.50-17.10	Keynote #14: An Overview of the Success in Resolving the Years-lasting Problem of USBRLP’s T01 Tunnel in Himalayas’ MBT within the RT Zone by Employing I-System and (I)-TM Dr. Bineshian Hoss, Technical Director, Amberg Engineering AG & Vice President, ISEG
17.10-17.30	Keynote #15: Shear behaviour of natural rock discontinuities - insights from laboratory studies Prof. Arindam Basu, IIT Kharagpur Editor-in-Chief, Bull. Engg. Geol. & the Env.
17.30-17.50	Special Lecture (Ab.2/023): Geo Tools*3D Log: An App for estimating weak rock spans along tunnels and for much more Yogendra Deva, Dr. Gopal Dhawan, Mugdha Patwardhan
17.50-19.00	Annual General Meeting (AGM) of ISEG

POSTER PRESENTATION

Poster Session Day #1 (16.11.2022) (11.30 – 18.00 hrs.)	
Sl. No	Details
1.	Ab.1/008: Geological Risk Mitigation Plans and Strategies for Underground Construction Projects Narendra Singh Rana, Swapan Kumar Mohanty (L& T)
2.	Ab.1/009: Remediation of acid mine drainage Neelam Phougat, Sameer Vyas, U.S.Vidyarthi (CSMRS)
3.	Ab.1/011: Grouting to Arrest Water Seepage and Maintain Hydrodynamic Confinement in Strategic Storage of Crude Oil Project, Padur, Karnataka, India S. Shashank, Shekhar, Swapan Kumar Mohanty (L& T)
4.	Ab.1/015: Overview on engineering geological investigation for power house area of Polavaram Hydroelectric Project (80 x 12 MW), Andhra Pradesh, India L. G. Singh, A. K. Naithani, Prasanna Jain, D.S. Rawat (NIRM)
5.	Ab.1/019: An insight developed from the railway alignment project carried out in Himalayas Radhakrishnan S., P. K. Panda
6.	Ab.1/021: Challenges & Strategies in construction of Dyke embankment in marine foundation Vinod Mauriya
7.	Ab.1/024: Tunnel stability and their geological & non-geological controls: present status and future approach Jitendra Kumar, Mrinal Kanti Mukherjee (IIT-ISM, Dhanbad)
8.	Ab.1/027: Mitigation measure for seepages in the Barua Sagar Lake, Jhansi, Uttar Pradesh, India Ajay Shankar Pandey, Hemant Kumar, Joyesh Bagchi (GSI)
9.	Ab.1/032: Role of geotechnical investigation for hydropower development in Peninsular India - a case study from Purulia, West Bengal Sourav Sen, Kavitha S., Sunandan Basu, Timir Baran Ghoshal (GSI)
10.	Ab.1/033: Geotechnical appraisal of the proposed tunnels along Koderma-Tilaiya New Broad Gauge Railway line, Bihar. Kavitha S., Prithwiraj Maiti, Sunandan Basu, Mayukhee Ghosh, Sustava Bhattacharya (GSI)
11.	Ab.1/034: DPR stage geotechnical investigation of Balason Hydroelectric project, Darjeeling district, West Bengal Sustava Bhattacharya, Kavitha S., Timir Baran Ghoshal (GSI)
12.	Ab.1/039: DPR Stage geotechnical investigation of Damanganga-Vaitarna-Godavari Link Project, Palghar & Nashik districts, Maharashtra Anamitra Dey, Jeyabal S., Ashish Barsagade, D. Chakraborty (GSI)
13.	Ab.1/041: Engineering geological evaluation and design support system of draft tube tunnels of Palamuru-Ranga Reddy lift irrigation scheme, package-16 site-A case study P. Lingaswamy, D S Rawat, A K Naithani, G C Shekar, L K Rao (RVR Projects, Pvt Ltd, Hyderabad)
14.	Ab.1/044: Construction stage geotechnical problems of earth dam of Basawapur Balancing Reservoir, Kaleswaram Project, Package-16,

Poster Session Day #1 (16.11.2022) (11.30 – 18.00 hrs.)	
	Basawapur (V), Bhongir (M), Yadadri-Bhuvanagiri District, Telangana B. Ajaya Kumar, Bhushan D Kuthe, B. Venu Gopala Krishna (GSI)
15.	Ab.1/045: Construction stage geotechnical problems of the tunnel from Ramappa tank to Dharmasagar tank, J. Chokka Rao Devadula Lift Irrigation Scheme, Phase-III, Package-III, Warangal District, Telangana Shailendra Kumar Singh, B. Venu Gopala Krishna, B. Ajaya Kumar, S.K. Tripathi (GSI)
16.	Ab.1/047: Construction stage geotechnical assessment of Rock Mass Quality of Irrigation Tunnel, Package-65, Polavaram Irrigation Project East Godavari District, Andhra Pradesh B. Ajaya Kumar, Bhushan D Kuthe, B. Venu Gopala Krishna, S.K. Tripathi (GSI)
17.	Ab.1/048: Geotechnical assessment of part of cut off trench of earth dam of Udandapur Reservoir near Udandapur village, Jadcherla Mandal, Mahabubnagar District, Telangana B. Venu Gopala Krishna, Bhushan Dadaji Kuthe, B. Ajaya Kumar, S.K. Tripathi (GSI)
18.	Ab.1/049: Problems faced during Construction Stage Geotechnical Investigation of Pippalkoti Balancing Reservoir Under Lower Penganga Project, Bheempur Mandal, Adilabad District, Telangana Shailendra Kumar Singh, B. Venu Gopala Krishna, S.K. Tripathi (GSI)
19.	Ab.1/050: Strength improvement of expansive soil treated with jute fiber reinforcement Devagya Raman, Abhishek S. Maury, Anupam Mital (NIT-Kurukshetra)
20.	Ab.1/051: Load settlement behaviour of bamboo MAT reinforced sand bed Abhishek Singh Maury, Devagya Raman, Ashwani Jain (NIT-Kurukshetra)
21.	Ab.1/055: Geological and geotechnical evaluation of the proposed site of Song Dam Drinking Water Project, Dehradun, Uttarakhand -A case study Vinay, Neetu Chauhan, Dharmendra Kumar (GSI)
22.	Ab.1/059: Construction stage Geotechnical investigations for the design of Weirs and appurtenant structures, Kollimalai HEP, Namakkal District, Tamil Nadu Asrar Ahmed, A., Gaurav Chand., Vivek Kumar Singh, Aravind, K. (GSI)
23.	Ab.2/004: Stability assessment, numerical analysis and design of hydropower tunnel – a case study Pranali Salunke, Rahul Joshi, Rajib Sinharay (MIT WP University)
24.	Ab.2/009: Shear Strength Behaviour of Weak Rock Mass D. V. Sarwade, Senthil. P., K. K. Mishra, Pankaj Kumar, Hari Dev (CSMRS)
25.	Ab. 2/010: Evaluation of Ulusay Block Punch Index Model Efficacy in Predicting Uniaxial Compressive Strength of Anisotropic Rocks Kumar Nilankar, Hemant Kumar Singh (RGIPT)
26.	Ab.2/013: Assessment of sub surface water storage potential zone using geospatial and AHP technique in alluvial plain, North Maharashtra Region, India Ajay Kumar K. Kadam, S. N. Patil, V. M. Wagh, Bhavesh D. Patil, Nilesh S. Patil (KBC North Maharashtra University)

Poster Session Day #1 (16.11.2022) (11.30 – 18.00 hrs.)	
27.	Ab.2/016: Vegetation as a constraint in landslide change detection using multi-temporal LiDAR data <i>Megotsohe Chasie, P.K. Theophilus, A.K. Mishra (GSI)</i>
28.	Ab.2/017: Strategising Hydropower Generation in Meghalaya-evaluation of neotectonic deterrents <i>K. Nath, D. Gogoi, B. N. Mahanta, S. Halder, T. K. Goswami, R. K. Sarma (GSI)</i>
29.	Ab.2/021: Resistivity imaging technology for delineation of different structural geological features <i>Shweta, Vipul Nagar, Naveen Pandey (NHPC)</i>
30.	Ab.2/022: Assessment of health parameters for underground structures to evaluate the rockmass behavior <i>Narendra Kumar Singh Tomar (L&T)</i>
31.	Ab.2/027: Mechanical Behaviour of Carbonaceous Rocks from Lesser Himalayan Region <i>P. S. K. Murthy, Dharendra Kumar, Mahabir Dixit (CSMRS)</i>
32.	Ab.3/004: Geological cues from frequent earth tremors in Dakshin Kannada- Kodagu border areas of Southern Karnataka, India <i>R Sajeew & Rahul V (GSI)</i>
33.	Ab.3/019: Classification of slope forming mass along the proposed cut slope between Goilkera and Posoita, Chakradharpur Division, SE Railway, Jharkhand <i>Debasish Bhattacharya, Sudipto Nath, N.R. Bhattacharjee (GSI)</i>
34.	Ab.3/050: Identification of river bank failures in the erosion vulnerable areas of world's largest river island: Majuli <i>Mansum P. Kashyap, Baba Mrutyunjay Mahapatra., Bashab N. Mahanta (GSI)</i>

Day #2 (17.11.2022)			
ORAL PRESENTATIONS (Concurrent Sessions)			
Time (hrs.)	EIFEL #3	EIFEL #2	EIFEL #1
	Technical Session-TH-1A (Sustainable Development) Chair: Shri Prasanta Mishra, Dy. D.G. GSI (Retd.); Co-Chair: Dr. Joyesh Bagchi, Dy. D. G., GSI, GSI Rapporteurs: Shri Sourav Sen & Shri Ankur Srivastava	Technical Session-TH-2A (Technological Advancements) Chair: Shri Imran Sayeed, Ex-Chief GM, NHPC Co-Chair: Shri Arindam Chakraborty, DGM, NHPC Rapporteurs: Shri Dharmendra Kumar & Shri Seabratra Das	Technical Session-TH-3A (Geohazards) Chair: Dr. K. Jayabalan, Dy. D.G. GSI (Retd.); Co-Chair: Shri S. K. Tripathi, Dy. D.G., GSI Rapporteurs: Smt. Kavitha S. & Smt. Rakhi Gopal R
09.00-09.15	Ab.1/002: Influence of Paleo and Neo stresses on underground construction sites D S Subrahmanyam (NIRM)	Ab.2/001: Seismic Tomography between exploratory drifts for Dam Projects Sanjay Rana, Ashutosh Kaushik, Bhaskar Chendhoor (PARSAN Overseas Pvt Limited)	Ab.3/001: Catastrophic rockslides in the upper reaches of the Bhagirathi River valley: their past and future Alexander Strom, Nilratan Singh (JSC Russia/ CIMFR)
09.15-09.30	Ab.1/031: Challenges faced during construction at Left Bank of Diversion Tunnel (DT) Outlet Structure, Deonallah, High Level Road & Low Level Road in Subansiri 2000MW Lower Hydro Electric Project, India Biswajit Das, K. K. Barthakur (Soma Enterprise Ltd.)	Ab.2/003: Inflatable (Rubber) Dam across Phalgu River, near Vishnupad Temple, District Gaya, Bihar- A Geotechnical Perspective V. K. Sharma, GSI (Retd.)	Ab.3/003: Assessment of the various slope stabilization initiatives undertaken along the pathways of Shri Mata Vaishno Deviji of Jammu and Kashmir Himalaya, India A.K. Naithani, P.C. Nawani (NIRM)
09.30-09.45	Ab.1/035: Investigation of Block Toppling Failure in Sandstone Cut Slope Ashutosh Kainthola, Vishnu HR Pandey, Vikas Yadav (BHU)	Ab.2/006: Numerical stability analysis of a jointed rock slope in the Sikkim Himalaya Shubham Chaudhary, Suvam Das, Anindya Pain, Shantanu Sarkar (CBRI)	Ab.3/012: Landslides and slope stability assessment on Tarki-Tau Mountain (Eastern Caucasus, Russia) O.V. Zerkal, I.V. Averin, I.K. Fomenko, D.D. Shubina (Moscow State University)
09.45-10.00	Ab.1/042: Construction stage geotechnical studies of tunnel across Zoji-La Pass on Sonamarg-Kargil section of NH-01 in the Union Territories of Jammu & Kashmir and	Ab.2/007: The role of Geo-physical techniques in enhancing mine planning decision-making for open cast quarry in Basaltic Terrain	Ab.3/015: Assessment of road-cut slope stability as a function of geo-mechanical slope mass category, rock microstructure and geomorphic indices of ongoing tectonic

	Ladakh Mandapalli Raju, DG GSI (Retd.) Mehraj Ud Din Lone, Bilal Ahmad Mir (Megha Engg. and Infrastructures Ltd.)	S. N. Patil, B. D. Patil, A. K. Kadam, N. S. Patil (KBC North Maharashtra University)	activity: An example from Dharasu-Uttarkashi roadway (NH-108) section, Uttarakhand, Northern India Mrinal Kanti Mukherjee (IIT-ISM, Dhanbad)
10.00-10.15	Ab.1/043: SPT-Based Liquefaction Risks and Shear Strength Behaviour of Some Soils of Ukhiya, Cox's Bazar, Bangladesh Dutta T., Hossain ATMS., Mahabub M.S., Hossain Md. Sayem, Khatun M., Haque M.E., Imam H., Jafrin S.J., Khan. P.A, Bakali R., Hasan M (Jahangirnagar University, Bangladesh)	Ab.2/015: Measurement of hoop stress on Wye section during internal hydrostatic loading- Case history B. K. Gupta (SVNL, Shimla)	Ab.3/017: Review of trigger thresholds for landslides in tropical residual soils Nikhil Nedumpallile Vasu, Vanessa Banks, Christian Arnhardt, Majdi Mansour, Audrey Ougier-Simonin (BGS, UK)
10.15-10.30	Ab.1/058: Post construction foundation treatment at Bhimsagar Dam, district Jhalawar, Rajasthan V. K. Kasliwal, GSI (Retd.)	Ab.2/018: Prognosis and management of water ingress hazard in mined rock caverns for hydrocarbon storage Saikat Pal, Altaf Usmani, Debasish Biswas, Pavan Chakravarthy, (Engineers India Ltd.)	Ab.3/022: Study on implementable remedial measure for Landslide due to climate change and anthropogenic activities Joyita Golder, Koushik Shankhary, Gupinath Bhandari (Jadavpur University)
10.30-10.45	Ab.1/001: Importance of Foundation Geological map of major structures of any Hydroelectric Project-A case study from Himalaya Indranil Chakraborty, Bhanu Prakash Rawat (GSI)	Ab.2/019: Assessment of in-situ rockmass properties utilizing cross-hole Seismic Tomography S. L. Kapil, Vipul Nagar (NHPC)	Ab.3/045: Geological problems encountered in Diversion tunnel of Arun-3 HEP, Nepal (900MW) during excavation in Himalayan Geology Arun Dhiman, Rakesh Sehgal, R. K. Chauhan (SAPDC, Nepal)
10.45-11.00	Tea Break		

EIFEL #3	Technical Session-TH-3B (Geohazards) Chair: Dr. Y. P. Sharda, Director, GSI (Retd.) Co-Chair: Shri Niroj K Sarkar, DY. D.G., GSI (Retd.) Rapporteurs: Shri Mego Chasie & Shri Ankur Srivastava		
11.00-11.15 (EIFEL #3)	Keynote #16: Landslide forecasting and monitoring for disaster risk reduction Prof. Neelima Satyam (IIT-Indore)		
	Technical Session-TH-1B (EIFEL#1) (Sustainable Development) Chair: Shri Sekhar Sarkar, Dy. D. G., GSI (Retd.); Co-Chair: Shri B. K. Gupta, AGM, SJVN Rapporteurs: Shri Vipul Nagar & Shri Dhananjai Verma	Technical Session-TH-2B (EIFEL#2) (Technological Advancements) Chair: Shri D.C. Tripathi, GM, NHPC (Retd.); Co-Chair: Shri Fareeduddin, Director, GSI (Retd.) Rapporteurs: Shri Snehasish Bhattacharya & Dr. Soumitra Bhargab Dasgupta	Technical Session-TH-3B (Geohazards) (EIFEL#3) Chair: Dr. Y. P. Sharda, Director, GSI (Retd.) Co-Chair: Shri Niroj K Sarkar, DY. D.G., GSI (Retd.) Rapporteurs: Shri Mego Chasie & Shri Ankur Srivastava
11.15-11.30	Ab.1/003: Development of cracks and ground subsidence in Chota Rasulpur village, Purba Medinipur District, West Bengal – a deep concern associated with excessive exploitation of groundwater K.S Gupta, D. Bhattacharya (GSI)	Ab.2/024: High-accuracy long-range seismic prediction during tunnel construction phase using TSP and correlation with geotechnical/geomechanical calculations using I-System; A recommended prediction technique in (I)-TM Kripal Choudhary, H. Bineshian (AMBERG)	Ab.3/049: Assessment of Landslide Susceptibility and event based rockfall modelling in parts of Shimla and adjoining area: An Earth Observation Initiative Mohit Singh, Shovan L. Chattoraj, Suresh Kannaujiya (IIRS, Dehradun)
11.30-11.45	Ab.1/004: Occurrences of sub-vertical and sub-horizontal joints detrimental to tunnel stability - A case study from Chheligada Irrigation project, Odisha Debasis Mohanty, Sagar Mohanty (Govt. of Odisha)	Ab.2/026: Geotechnical Instrumentation and Monitoring of Excavation of Underground Power House Caverns of Mangdechhu Hydro-Electric Project Mishra, A.K., Punetha, P. (MHPA)	Ab.3/051: Impact Assessment of 2016 Pakistan Earthquake (M_w 5.5) Around Gulistan Region Shivam Saxena, Sandeep Kumar Mondal, Rishikesh Bharti (IIT Guwahati)
11.45-12.00	Ab.1/006: Critical wedges identification and their stabilization in underground Tunnel - A case study of Rammam III HEP Sanjib Kumar Bhakat, Satish	Ab.2/028: An Overview of the Success in Resolving the Years-lasting Problem of USBRLP's T01 Tunnel in Himalayas' MBT within the RT Zone by Employing I-System and (I)-TM	Ab.3/009: Effect of water content, initial volume, and grain size distribution on debris flow runout and deposition: an experimental study Rajesh Kumar Dash (CBRI)

	Upadhyay, Rajeev Ranjan, Vibhu Kaushal (NTPC)	S Mahi, H. Bineshian, S. Gupta, R. K. Hegde (AMBERG)	
12.00-12.15	Ab.1/007: Underground-unlined Crude Oil Strategic Storage Cavern Project, Visakhapatnam, Andhra Pradesh, India – Concept, Construction and Challenge S. K. Mohanty, Florian Krenn, Oskar Sig (L&T)	Ab.2/002: Comparative study of factor of safety of Tunnel segment by adding macro synthetic fibre using Ansys Prajakta Nanasaheb Kenjale (MIT WP University)	Ab.3/010: Terrain specific conditioning factors for Landslides in Western Maharashtra Prakash K. Gajbhiye (GSI)
12.15-12.30	Ab.1/010: Terrain Boundary shear zone and its bearing in Upper Kolab Multipurpose Project, Koraput District, Odisha Asim Kumar Basu, Jaydip Mukherjee (GSI)	Ab.2/005: A comprehensive review on the recent development of non-destructive empirical techniques in estimating geo-mechanical properties of shales Divyanshoo Singh, Hemant Kumar Singh (RGIPT)	Ab.3/021: Bank erosion in the largest inhabited river island Majuli: Neotectonic factors for protection strategies Bashab N. Mahanta, Mansoom P. Kashyap, Baba M. Mahapatra (GSI)
12.30-12.45	Ab.1/012: Review of Quality Control and Design Aspects of Asphaltic Concrete Core in Earthen/Rock Fill Dam Satyajit Roy, V K Jain, Manish Gupta, R. Chitra (CSMRS)	Ab.2/008: Reduce Time & Cost Overrun using Geotechnical Investigation during Survey & Investigation Stage of Hydro Power Projects, Luhri Stage –II (172MW), SJVN Ltd., Himachal Pradesh Sushil Sharma, Akshay Acharya, A.K. Pandey, Naveen Kumar Kanyan (SJVN)	Ab.3/023: A simple, quasi-quantitative approach for rapid landslide risk assessment to support regional landslide forecast in India Gargi Singh, Sumit Kumar (GSI)
12.45-13.00	Ab.1/013: Engineering geological evaluation of the large underground surge pool cavern of Kaleshwaram lift irrigation scheme package-6, Telangana State, India D S Rawat, A K Naithani, L G Singh, Prasanna Jain, R N S Babu, Padmaja Reddy, P. Allen. Samuel, K Ravindra Nath (NIRM)	Ab.2/011: Utilization of geotechnical studies and Electrical Resistivity Tomography for Soil characterization and Foundation Engineering Abul Aas, Satish Kumar Sinha (RGIPT)	Ab.3/024: Assessing the Landslide susceptibility of the Shri Amarnath Yatra route corridor along Pahalgam-Poshpatri track, Anantnag District, Jammu and Kashmir Mohd. Ibrahim, Abdul Q. Paul, Harish Bahuguna (GSI)
13.00-13.15	Ab.1/014: Stability Assessment of Tunnel Portal Excavations in varying Rockmass and Slope Geometries	Ab.2/012: Seismic activities in Palghar area of Maharashtra in the western part of Deccan Volcanic Province	Ab.3/025: Domain-based meso-scale Landslide Susceptibility Zonation with special emphasis on landslide management map: A

	Koushik Pandit, Shantanu Sarkar, Mohd. Shazan, Pankaj Uniyal (CBRI)	S. K. Bhattacharyya, A. K. Joshi, O. P. Singh (GSI)	case study from Darjeeling Himalaya Sunandan Basu, Suman Saha, Prithwiraj Maiti, Timir Baran Ghoshal (GSI)
13.15-13.30	Ab.1/016: Construction stage engineering geological investigations of the foundation of onsite emergency support centre of Kakrapar atomic power project units 1 to 4, Gujarat State, India Prasanna Jain, A. K. Naithani, L.G. Singh and D.S. Rawat (NIRM)	Ab.2/014: Evaluation of bond strength between rock surface and sprayed concrete Narendra Kumar Singh Tomar, Nitesh Kumar Rai (L & T)	Ab.3/035: Reactivation of an Old Landslide Zone at Piyakul in the Higher Himalayan Zone of Jammu and Kashmir: Caveat for the Future Planning <i>Imran Khan, Harish Bahuguna (GSI)</i>
13.30-13.45	Ab.1/018: Challenges on foundation evaluation for pre and post-dam construction: implications on dam performance Susmita Bal, Mrinal Kanti Mukherjee (IIT-ISM, Dhanbad)	Ab.2/020: Underground hydraulic conductivity measurements in underground structures importance and new developments Swetabh Singh, D.C Tripathi, Koteswara Rao. Kusunuri (CSC construction PVT.LTD)	
13.30-14.30	Lunch Break		
	Technical Session-TH-1C EIFEL #3 (Sustainable Development) Chair: Dr. P. C. Nawani, Director, GSI (Retd.); Co-Chair: Shri Pradeep Singh, Director (Tech.), Mines Rapporteurs: Shri Rabisankar Karmakar & Shri Ankur Srivastava	Technical Session-TH-2C EIFEL #2 (Climate Change) Chair: Dr. S. N. Patil, Professor, KBC NM University, Maharashtra Co-Chair: Dr. Gupinath Bhandari, Professor, Jadavpur University Rapporteurs: Shri Sunandan Basu & Shri Sumit Kumar	Technical Session-TH-3C EIFEL #1 (Geohazards) Chair: Shri Kalyan Surya Gupta, Dy.D.G. GSI (Retd.); Co-Chair: Shri Debasish Bhattacharya, Dy. D.G., GSI Rapporteurs: Smt. Kavitha S., Smt. Gargi Singh
14.30-14.45	Ab.1/023: Challenges of developing a railway alignment in outer and lesser Western Himalayas P. L. Narula (GSI, Retd.), Rajeev Soni, Deepali Saxena, Radhakrishnan S.	Ab.4/001: Sustainability Assessment of Passive House Retrofits of Residential Buildings in India - A Life Cycle Carbon Balance Bhanu Sowmya Andraju (L & T)	Ab.3/039: Geological assessment and geotechnical appraisal of the proposed National Institute of Technology at Sumari in Srinagar Garhwal, Uttarakhand Sebabrata Das, Harsharaj L. Wankhade, Neetu Chauhan, Vinay (GSI)
14.45-15.00	Ab.1/022: Geoenvironmental	Ab.2/025: Normal and Shear Stiffness from	Ab.3/038: Reappraisal of landslides

	investigation using Integrated Geophysical Methods: An Implication to geotechnical engineering Abul Aas, Satish Kumar Sinha (RGIPT)	Field Direct Shear Test Senthil P, D.V. Sarwade, K.K.Mishra, Hari Dev (CSMRS)	catastrophe and mitigation with special emphasis on geotechnical inputs for restoration of the distressed sites, Nilgiris district, Tamil Nadu K. Jayabalan, P. Jeevanantham (GSI)
15.00-15.15	Ab.1/025: Experimental Study of a Laterally Loaded Single Pile in Jointed Rock Mass Koushik Pandit, Mahendra Singh, Jagdish Prasad Sahoo (IIT Roorkee)	Ab.4/003: Understanding climate change impact on sustainable development of environmental resources in lower parts of Mandakini River valley, Rudraprayag District, Uttarakhand, India Fernanda Imada de Lima, Sudesh Kumar Wadhawan (Amrita Vishwa Vidyapeetham)	Ab.3/040: Surface deformation monitoring in and around Mangan area, North Sikkim, Sikkim with coherent point target interferometry Mrinmoy Kr. Das, Dhananjai Verma, P. K. Theophilus, M. Chasie, S. K. Das and A. K. Mishra (GSI)
15.15-15.30	Ab.1/037: Problems faced while driving tunnel below Mumbai city for water supply P.T. Sinha Roy, GSI (Retd.)	Ab.4/007: Shear Strength of Unsaturated Granite Residual Soils under Multiple Drying-Wetting Cycles Hossain Md. Sayem, Ling-Wei Kong (Jahangirnagar University, Bangladesh)	Ab.3/043: Geological investigation of Balianala Landslide: an altered perspective and engineering geological solution Mridul Srivastava, Seabrat Das, Adrija Chatterjee (GSI)
15.30-15.45	Ab.1/036: Ground assessment & Rehabilitation of decade-long abandoned Pressure Shaft-Rangit-IV HEP, West Sikkim Sahoo R. N, Rawat Pankaj, Lal S.P, Yadav Sudhir (JPCL)	Ab.4/008: Arsenic, posing water security issues for urban infrastructure in Bihar Akhouri Bishwariya, Shreya Singh, Divya (GSI)	Ab.3/048: Morpho-tectonics of Chamba Basin: A relation with Landslide occurrences Pankaj Kumar, Arpita Pankaj, Ajai Mishra (GSI)
15.45-16.00	Ab.1/038: Stabilization of Soft Coastal Soil of Matarbari Power Project, Bangladesh by Deep Mixing Method Md. Shakil Mahabub, Md. Raqibul Hassan, A.T.M. Shakhawat Hossain (Jahangirnagar University, Bangladesh)	Ab.4/010: Shared Himalayan Geotourism& Research: Panacea for Safety, Peace and affluence Arun Deep Ahluwalia (Shoolini University)	Ab.3/052: Drained triaxial experimental behaviour of some Landslide Hazard Site Soils of Ukhiya, Cox's Bazar, Bangladesh Khan PA, Hossain ATMS, Sayem HM, Haque ME, Mahabub MS, Khatu M, Imam MH, Jafrin SJ, Dutta T, Bakali R, Hasan M (Jahangirnagar University, Bangladesh)
16.00-16.15	Tea Break		

	Technical Session-TH-1D EIFEL #3 (Sustainable Development) Chair: <i>Dr. V. K. Sharma, Dy. D.G., GSI (Retd.);</i> Co-Chair: <i>Shri Sanjiv Kumar, Dy. D. G., GSI</i> Rapporteurs: <i>Shri Sebabrata Das & Shri Dharmendra Kumar</i>	Technical Session-TH-2D EIFEL #2 (Emerging Challenges) Chair: <i>Shri S. L. Kapil, ED, NHPC</i> Co-Chair: <i>Shri Vachaspati Pandey, DGM, NHPC</i> Rapporteurs: <i>Shri Sourav Sen & Shri Souvik Acharya</i>	Technical Session-TH-3D EIFEL #1 (Geohazards) Chair: <i>Dr. S. K. Som, Dy. D.G., GSI;</i> Co-Chair: <i>Shri Akshaya Kumar Mishra, Director, GSI</i> Rapporteurs: <i>Shri Ankur Srivastava & Smt. Sustava Bhattacharya</i>
16.15-16.30	Ab.1/026: Challenges in the Pre-construction Stage Geotechnical Investigation of Kharkai Barrage, Saraikela-Kharswan District, Jharkhand N. R. Bhattacharjee, D. Bhattacharya (GSI)	Ab.5/001: Dealing with saturated zone and ground water inflow in urban tunneling in rock with TBM Snehal Phadatare, Ganesh Ingale, Kshitiji Dhawale (MIT WP University)	Ab.3/042: Three dimensional numerical simulation using Strength Reduction Technique of Ambithang Landslide, Mangan, North Sikkim district, Sikkim, India Verma D., Chasie M., Rajkumar M., Kumar M. D., Theophilus P. K., Mishra A., K. (GSI)
16.30-16.45	Ab.1/040: Geotechnical Investigations for Underground Power House in Dul-Quartzite- A case Study of Dulhasti Stage-II HEP (260MW) Ajay Singh, Sumit Dabral(NHPC)	Ab.5/006: Restoration of Railway Embankment – A Case Study Somnath Banerjee, Aminul Islam, Sudip Kumar Koley, Prodyot Kumar (ITD Cementation Ltd., Kolkata)	Ab.3/054: Predicting landslide susceptibility zones and its controlling factors along NH44 of UT: J&K, a northwest Himalayan region Riyaz Ahmad Mir, Zahid Habib, Ajay Kumar (GSI)
16.45-17.00	Ab.1/060: Geo investigation & Tunnelling through Clay Rock Formation in middle-upper Siwalik group of rocks at outer boundary of Himalayan Region-A case history of 2.79 km long road transport Sungal Tunnel, Located in Jamnu and Kashmir, India Swetabh Singh, D.C Tripathi, Koteswara Rao Kusunuri (M/s ALTINOK India Ltd., New Delhi)	Ab.5/008: Cognizance of Green Building for Sustainable Construction in Smart Cities...Decision to Build Green P. Anupama (L&T)	Ab.3/056: Evaluation of the ground response of the Rangamati Landslide Hazard Sites, Bangladesh using field SPT & grain size data Mahmuda Khatun, A.T.M. Shakhawat Hossain, Hossain Md. Sayem (Jahangirnagar University, Bangladesh)
17.00-17.15	Ab.1/052: Comparative study of investigations of two mega dams of the	Ab.5/011: Sustainable Design of Reinforced Concrete Chimney for Smart	Ab.3/058: ML based Ensemble Spatial Landslide Initiation Forecasting in Darjeeling

	sub-continent: Tehri Dam, India and the proposed Kuri-Gongri HEP, Bhutan D. P. Dangwal, Ravi S. Chaubey (GSI)	Cities to Isolate Pollutants to Higher Atmosphere Mannava Yasaswini (L & T)	Himalayas, India Sumit Kumar, Mauro Rossi, A. K. Mishra, Gargi Singh, Rabisankar Karmakar, Rajkumar M. (GSI)
17.15-17.30	Ab.1/053: Ascertaining probable Hazard Scenarios under high cover during excavation of HRTs with TBM in Himalayan Geology at Pakal Dul HE Project (1000MW), J&K, India Sharma Vivek, Ganvir S. J. (NHPC)	Ab.5/013: Geology of Bangalore City and the challenges during tunnelling Fareeduddin, GSI (Retd.)	Ab.3/060: Regional rainfall threshold for shallow Landslide forecast in Rudraprayag district, Uttarakhand -a step towards disaster risk reduction Rabisankar Karmakar, Sumit Kumar, Ankur Kumar Srivastava, Adrija Chatterjee (GSI)
17.30-17.45	Ab.1/046: Problems faced during the construction stage in parts of cut off trench of earth dam of Sri Komuravelli Mallanna Sagar Reservoir, Kaleshwaram Project, Siddipet District, Telangana B. Ajaya Kumar, Bhushan D Kuthe, S.K. Tripathi (GSI)	Ab.5/002: Site Response Study Using H/V Ratios in and around Silchar City, Assam, India K. K. Mukherjee, Piu Dhibar, Pankaj Kumar Das, M. S. Kumar (GSI)	Ab.3/061: Establishing a pan-India network of GPS-Geodetic Observatories: An Overview, Objective and Perspective Soumitra Bhargab Dasgupta, Snehasis Bhattacharya, L.H. Moirangcha, A. K. Mishra (GSI)
17.45-18.00	Ab.1/057: Seismic site response study in Port Blair town, Andaman Nicobar Islands, India: a way for risk resiliency of infrastructure Bahadur Ram, Rajni, S. Dasgupta, L. H. Moirangcha (GSI)	Ab.5/012: Reappraisal of Urban Agglomerations and Prevention of Flood Inundations with Mitigations for Greater Chennai, Tamil Nadu, India K. Jayabalan, K. Aravind, S.B. Vijay Kumar, Asrar Ahmed (GSI)	Ab.3/063: Impacts of landslide hazards on society and sustainable development in Bangladesh Mohammad Feruj Alam, ATM Shakhawat Hossain, Mohammad Ashraful Kamal (Geological Survey of Bangladesh)
18.00-18.15	Ab.1/054: Geological assessment on the failure of part back slope of the powerhouse, Vyasi HEP, Uttarakhand Dharmendra Kumar, Vinay, Neetu Chauhan (GSI)	Keynote #17: Thermal effects on rocks (Video Lecture) Prof. Louis Wong, (University of Hong Kong, & Editor-in-Chief, Bull. Engg. Geol. & the Env.)	Ab.3/064: A comparison of Landslide Susceptibility map of Munnar area, Idukki district, Kerala State developed from three different models on GIS platform Rakhi Gopal R., Athira S.G. (GSI), Rajaneesh A. (Kerala University)
18.15-19.00	Wrapping up & Valedictory (EIFEL #3)		

Poster Session Day #2 (17.11.2022) (10.00-18.00 hrs.)	
Sl. No	Details
1.	Ab.3/005: Relationship between Structural Damage zone and Rock mass Classification for Natural slope stability-Hardiya Nala Landslide, Inner Kumaun Lesser Himalaya, Uttarakhand, India Priya Joshi, Mohit Kumar Puniya, Pitamber Dutt Pant, Rajeev Upadhyay (Kumaun University)
2.	Ab.3/006: Hysteretic Damping of Sands under Cyclic Loading and Its relation to Shear Modulus by Cyclic Simple Shear Testing Uday Bhanu Chakraborty (CSMRS)
3.	Ab.3/007: Stability analysis of lateritic soil slopes exposed near Rajapuri village, Mahabaleshwar, Maharashtra, India using limit equilibrium approach Bhushan D. Kuthe, Saikat Roy & Prakash K. Gajbhiye (GSI)
4.	Ab.3/008: Understanding the effect of discontinuities on the slope Instability along NH-03, Himachal Pradesh, India Prateek Sharma, Rajesh Singh, Rahul Kumar Verma, Kumar, Pranshu Mishra (University of Lucknow)
5.	Ab.3/011: Preliminary Slope Stability Appraisal of landslide in Amagarh Hill, Jaipur, Rajasthan- a serious concern for the adjacent densely populated area P.K. Sharma, Mohd. Ahmad, Debasish Bhattacharya (GSI)
6.	Ab.3/013: Landslide evaluation on the Planetary Bodies with special reference to the Earth Pranshu Mishra, Rajesh Singh (University of Lucknow)
7.	Ab.3/014: Slope Mass Rating (SMR) of the vulnerable slopes near Khairna, Uttarakhand, India Rahul Kumar Verma, Rajesh Singh, Prateek Sharma, Pranshu Mishra (University of Lucknow)
8.	Ab.3/016: Seismic hazard microzonation study in and around Kalyan, Dombivli and Badlaur area, Maharashtra Bhupesh B. Urkude, Harsharaj L. Wankhade, D. Chakraborty (GSI)
9.	Ab.3/018: Mapping Earthquake Induced Ground Rupture through Interferometric Synthetic Aperture Radar (InSAR): A case study of the 22 nd June 2022 Afghanistan earthquake (Mw 5.9) Snehasis Bhattacharya, Mrinmoy Kumar Das & Soumitra Dasgupta (GSI)
10.	Ab.3/020: Stability analysis of rock slopes along Manali-Marhi road corridor using Kinematic Analysis and Rock Mass Classification Jina Mandal, Kundan D. Rangari, Prashant T. Ilamkar (GSI)
11.	Ab.3/026: Site-specific geological and geotechnical investigation of Landslide incidences along road cut slopes from Dolwas to Peera road section, Jammu-Srinagar National Highway, District Ramban, Jammu and Kashmir Varun Mandotra, Parveen Kumar, Ajay Kumar (GSI)
12.	Ab.3/027: Slope instability Management around Batote town, District Ramban, Jammu and Kashmir

Poster Session Day #2 (17.11.2022) (10.00-18.00 hrs.)	
Sl. No	Details
	Abdul Qayoom Paul, Pankaj Kumar, Ajay Kumar (GSI)
13.	Ab.3/028: Impact of rock mass characteristics in inducing slope instability/subsidence along Namol to Dhanti road, Block Pancheri, District Udhampur, Jammu and Kashmir Parveen Kumar, Imran Khan, Harish Bahuguna (GSI)
14.	Ab.3/030: Influence of topography on landslide occurrence in and around Kodaikanal hills, Dindigul District, Tamil Nadu Souvik Acharya, Balaji B. (GSI)
15.	Ab.3/034: Factors influencing the design seismic coefficient of Shahpurkandi Dam Project, district Pathankot, Punjab, India Prashant Tukaram Ilamkar, Jina Mandal (GSI)
16.	Ab.3/036: Geological and geotechnical of Kuligarh-Drabshalla Landslide, Kishtwar district, UT: Jammu and Kashmir, Jammu Tarsam Kumar, Harish Bahuguna (GSI)
17.	Ab.3/037: Landslide hazard studies using bivariate statistical method in the Geoenvironments of Chamba Township, Northwestern Himalayas Wangshitula Ozukum, Manisha Biswal, Atul Kohli (GSI)
18.	Ab.3/041: Detailed geological investigation of Pulinda Landslide, Pauri Garhwal, Uttarakhand Ravi Negi, Seabrat Das (GSI)
19.	Ab.3/044: Remote sensing and GIS based landslide mapping for the assessment of the impact of hydropower projects on landslides in Himalayas Anish Mohan, Vipul Nagar, Naveen Kumar Pandey (NHPC)
20.	Ab.3/046: Seismic Hazard Microzonation in and around Kozhikode, Kerala, India - An integrated approach Rahul Dhiman, Animesh Thakur, Ali Asger, Sasmita Naik, Kunal Kumar Singh, A. B. Ekka, B.P. Rawat, D. Livingston, R. Balaji, S. K. Tripathi (GSI)
21.	Ab.3/047: Factors affecting slope stability for triggering rainfall induced landslide: A case study of Bhakra Dam, India Arpita Pankaj, Pankaj Kumar (GSI)
22.	Ab.3/053: A Geotechnical Appraisal on the Stability of slopes along the Road Section from Kanthan to Khanikot, District Reasi, Jammu Parveen Kumar, Harish Bahuguna (GSI)
23.	Ab.3/055: Influence of Mineralogy on the Geotechnical properties of some soil samples of the Rohingya Refugee Camps of Ukhiya-Teknaf, Cox's Bazar, Bangladesh Bakali R., Hossain Md. Sayem, Hossain ATMS., Imam H., Haque M.E., Khatun M., Dutta T., Jafrin S.J., Khan P.A., Mahabub M.S., Hasan M. (Jahangirnagar University, Bangladesh)
24.	Ab.3/057: Direct Shear Box Testing on Some Sand Samples of Balukhali Rohingya Refugee Camp, Cox's Bazar, Bangladesh Sheikh Jafia Jafrin, ATM Shakhawat Hossain, Hossain Md. Sayem, Md. Hasan Imam, Md. Emdadul Haque, Mahmuda Khatun, Ruma Bakali, Tanmoy Dutta, Purba Anindita Khan, Md. Shakil Mahabub (Jahangirnagar University, Bangladesh)
25.	Ab.3/059: Occurrences of creeping, sinking, and subsidence incidences in Himachal Himalaya-Generalized geoscientific and geomorphic causes

Poster Session Day #2 (17.11.2022) (10.00-18.00 hrs.)	
Sl. No	Details
	Kundan Digambar Rangari, Jina Mandal, Prashant T. Ilamkar (GSI)
26.	Ab. 3/062: Slope stability assessment of rock slide using empirical method in Nigulsari, District Kinnaur, Himachal Pradesh, India Tripti Baba, Wangshitula Ozukum, Prashant T. Ilamkar (GSI)
27.	Ab.4/002: Utilization of GGBS And Quarry Sand for Application as A Partial Replacement to Natural Sand in Construction: A Case Study S. B. Bhavsar, D. L. Chavan, N. S. Patil, S. N. Patil (North Maharashtra University)
28.	Ab.4/004: Decoding the recurrence of extreme weather events and their consequences vis-a-vis exogenic processes from Amarnath Ji Cave area, Kashmir Himalaya Abdul Qayoom Paul, Imran Khan, Harish Bahuguna (GSI)
29.	Ab.4/009: Fluoride contamination in groundwater in parts of Yadadri-Bhuvanagiri and Nalgonda districts, Telangana- Causes & long term remedial measures Satish B Chavan, Ramesh Guguloth, T. Vaideswaran, S.K.Tripathi (GSI)
30.	Ab.5/004: Applications of GIS Techniques in sustainable development of urban environment :An overview N. S. Patil, S. N. Patil, A. K. Kadam, B. D. Patil, V. J. Patil (KBC North Maharashtra University)
31.	Ab.5/005: Integrated geo-environmental appraisal of Guwahati city to assess the causes and remedies of urban flood Deepjyoti Gogoi, Suma C.S., Th. N.B. Singha (GSI)
32.	Ab.5/007: Route Optimization for Emergency Vehicles – A Review S. P. Rasagna (L&T)
33.	Ab 5/009: Urban Flooding Frequency Analysis – A Basis to Optimize Design Specification for Hydraulic Structures Yajjala Lakshmi Prasanna (L&T)
34.	Ab.5/010: Safe and Sustainable Design of Overhead Service Reservoir – Intze Tank for Water Supply Paidi Maneesha (L&T)
35.	Ab.5/003: Micro-Earthquake investigation in and around Vellore District, Tamil Nadu, India: An approach to infer seismicity level O. P. Singh, Praveen Allipelli, S. K. Bhattacharya (L&T)