

GeoMandu 2024 Conference Program Schedule

Day 1: 28 November 2024

Opening Keynote Lecture Session (8:30 - 9:50)		Main Hall
8:30 - 8:35	Opening Address: Netra Prakash Bhandary, Chair, GeoMandu 2024 Organizing Committee	
		Session Chairs: Dr. Anil Joseph, Dr. Dhundi Raj Pathak
8:40 - 9:05	Keynote Lecture I: Spatial Assessment and Mitigation of Landslide Hazards in Mountain Area Prof. Dr. Keh-Jian (Albert) Shou (Vice President, ISSMGE/Professor, National Chung-Hsing University, Taiwan)	
9:05 - 9:30	Keynote Lecture II: Net Zero Initiatives: A Geomechanical Perspective Prof. Dr. Devendra Narain Singh (Indian Institute of Technology, Bombay, India)	
9:30 - 9:35	Q&A	
9:35 - 9:45	Sponsor presentations (HEICO, Terre Armee)	
Conference Inauguration Program (10:00 - 11:00)		Main Hall
10:00 -	Details to be notified separately	
Keynote Lecture Session II (11:05 - 12:40)		
Main Hall		Session Chairs: Prof. Dr. Netra Prakash Bhandary, Dr. Mandip Subedi
11:05 - 11:40	Keynote Lecture III: <i>30th Buchanan Lecture</i> “Geotechnical Engineering Marriage between Theory and Practice” Dr. Marc Ballouz (President, International Society for Soil Mechanics and Geotechnical Engineering - ISSMGE, USA)	
11:40 - 12:05	Keynote Lecture IV: <i>Impact mechanisms and rational design of debris flow resisting multiple barriers</i> Prof. Dr. Charles W. W. Ng (Vice-President, Hong Kong University of Science and Technology - HKUST, Hong Kong)	
12:05 - 12:30	Keynote Lecture V: <i>Thoughts on Faults and Slope Instability</i> Prof. Dr. Ikuo Towhata (Visiting Professor, Kanto Gakuin University, Japan)	
12:30 - 12:35	Q & A	
12:35 - 12:40	Sponsor presentation (DYWIDAG Bridgecon)	
12:40 - 13:40	Lunch Break	
Keynote Lecture Session III (13:45 - 15:10)		
Main Hall		Session Chairs: Er. Keshab Kumar Sharma, Assoc Prof. Dr. Ranjan Kumar Dahal
13:45 - 14:10	Keynote Lecture VI: <i>Landslide Risk Evaluation: Tools and Tips for Risky Decisions</i> Dr. Alex Strouth (Principal Geological Engineer, BGC Engineering Inc., Canada)	

14:10 - 14:35	Keynote Lecture VII: Bio-stabilisation of Soil for Ground Improvement Prof. Dr. Md. Mizanur Rahman (Professor, University of South Australia, Australia)
14:35 - 15:00	Keynote Lecture VIII: Forensic Analysis in Infrastructure Projects and Vibration Measurement in the Construction Industry: Case Studies Dr. Anil Joseph, President, Indian Geotechnical Society
15:00 - 15:10	Q & A

Day 1 Parallel Sessions (15:15-18:05)

Hall \ Time	Hall A	Hall B	Hall C	Hall D
15:15-16:55	Parallel Session I	Parallel Session II	Parallel Session III	Parallel Session IV
17:10-18:05	Parallel Session V	Parallel Session VI	Parallel Session VII	Parallel Session VIII

Parallel Session I: Seismic Design of Geotechnical Structures

Hall A

Session Chairs: Dr. Keshab Sharma,
Er. Sujan Maka

15:15 - 15:30	Distinguished Lecture I: Ethical Geotechnical Practices by Engineering Consulting Firms for Sustainable and Resilient Infrastructure Er. Thakur Prasad Sharma (President, Society of Consulting Architectural and Engineering Firms, Nepal - Member Association of FIDIC)
15:30 - 15:45	Distinguished Lecture II: Planning of infrastructures on the Dynamic landscape of Himalayas Dr. Mohan Prasad Acharya (Senior Geotechnical Engineer, NEA Engineering Company)
15:45 - 15:55	ID: 150 Multiple Linear Regression-Derived Stability Equations for MSE Walls against Base Sliding Failure: Insights from Static and Pseudo-Static Analyses <i>Tulika Rani, Saikat Kuili, Ravi S. Jakka</i>
15:55 - 16:05	ID: 190 Evaluation of Retaining Wall with Compressible Inclusion Under Static Loading Using PLAXIS 2D <i>Priya Basnet, Pramisa Adhikari, Subasna B.K., Suvarna Singh Raut</i>
16:05 - 16:15	ID: 284 The modified approach to address the dynamic behavior of retaining wall <i>Sushree Paritwasha Pradhan, Amrendra Thakur, Vishwas Sawant</i>
16:15 - 16:25	ID: 045 Slope Stability Studies in IGM at a High-Altitude Site in Pakistan - A Case Study <i>Sohail Kibria, Sadaf Saeed</i>
16:25 - 16:35	ID: 106 Effects of Tire Waste Type on Seismic Performance of Retaining Wall with a Tire Waste-Sand Cushion Layer <i>Ayşe Edinçliler, Bilge Sultan Demirtaş</i>

16:35 - 16:45	ID: 309 Stability Analysis of Gabion Revetment for River Bank Protection Based on Field Investigation <i>Suresh Laudari, Tadashi Hara, Hiroshi Hakazawa</i>
16:45 - 16:55	ID: 031 A Case Study of Design and Construction of a GeoTrel® Reinforced Earth® Retaining Structure for a Land Development Project in Chhaling, Nepal <i>SK Dilip, Sunip Barman, Kunal Sarkar</i>

Parallel Session II: Ground Improvement

Hall B

Session Chairs: Prof. Dr. Jong-Sub Lee,
Dr. Ramamohan Pokhrel

15:15 - 15:30	Distinguished Lecture III: Roadside Slope Stability in Nepal: Challenges and Way Forwards Er. Keshab Kumar Sharma (Secretary, Government of Nepal)
15:30 - 15:40	ID: 023 Enhancing the Geotechnical Properties of Micaceous Sand using Bentonite Slurry: An Eco-Friendly Substitute for Traditional Stabilizers <i>Anjali S, Seethalakshmi P</i>
15:40 - 15:50	ID: 038 Assessing the impact of the polyethylene terephthalate on subgrade properties of high-plasticity clay soil <i>Yafet Samuel Olmedo Lara, Mauricio Joaquin Cano Nieto, Marko Antonio Lopez Bendezu</i>
15:50 - 16:00	ID: 062 An Experimental Study on Enhancement of Bearing Capacity of Soft Soil using Stone Column with Composite Material of Jute-Geotextile and Cane-Geogrid <i>Saggela Bala Raju, Shantanu Dutta, Nirmali Borthakur</i>
16:00 - 16:10	ID: 093 Implementation of poultry waste as a calcium source for Microbial-induced calcite Precipitation (MICP) treatment of Ganga River sand <i>Abhishek Tarun, Arvind Kumar Jha</i>
16:10 - 16:20	ID: 102 Optimal PVDs Spacing for Enhancing Soft Ground: A Review of Previous Analytical Studies <i>Khrawboklang Kharsyiemiong, Vishwas Sawant, Satyendra Mittal</i>
16:20 - 16:30	ID: 234 Laboratory Evaluation of Stiffness in Prefabricated Vertical Drains for Consolidation of Soft Kaolin Soil under Radial Flow <i>Dr. Ruchi Pankaj Shrivastava</i>
16:30 - 16:40	ID: 209 Internal stability analysis of geosynthetic reinforced soil wall using pseudo-static method with non-linear failure surface compared with finite element analysis <i>Gopal Das, Manojit Samanta</i>
16:40 - 16:50	ID: 178 Use of Construction Waste to Enhance the Performance of Soft Clay

Srijan Srijan, Abhijeet Gupta, Gautam Narula, Shashwat Singh, Rohit Kumar, Rishikesh Kanitker

Parallel Session III: Geohazards and Climate Change

Hall C

**Session Chairs: Dr. Bhesh Raj Thapa
Er. Emily Mark**

15:15 - 15:30	Distinguished Lecture IV: <i>Engineering Geomorphology and Geotechnics in Roads of Nepal</i> Dr. Ranjan Kumar Dahal (Vice President, IAEG; Associate Professor, Tribhuvan University)
15:30 - 15:45	Distinguished Lecture V: <i>Safeguarding the Himalayas: leveraging geohazard investigation for sustainable risk mitigation</i> Dr. Basanta Raj Adhikari (Director, Centre for Disaster Studies, IOE, Tribhuvan University, Nepal)
15:45 - 15:55	ID: 082 A national-scale automated landslide map for Nepal in Google Earth Engine: Challenges and future outlook <i>Erin Harvey, Nick Rosser, Mark Kinsey, Alex Densmore, Dammar Singh Pujara, Ram Shrestha, David Milledge, Alex Dunant, Max Van Wyk de Vries, Katherine Arrell, Katie Oven, Gopi Basyal</i>
15:55 - 16:05	ID: 142 Effect of Heavy Rainfall on the Reinforced Structure of a Earthfill Dam Using Double Steel Sheet Pile Walls <i>Hiroyoshi Yamazaki, Tadashi Hara, Namihiko Tanaya</i>
16:05 - 16:15	ID: 251 Geotechnical assessment of a failed slope in Udampur, Jammu and Kashmir <i>Mohmmad Umar Rasool, Prasun Halder, Riya Bhowmik</i>
16:15 - 16:25	ID: 265 Geotechnical Deformations during February 6, 2023 Earthquakes in Kahramanmaraş-Türkiye <i>Ayfer Erken, Aytaç Yaşargün, Gülçin Şengül Nomaler, Selda Atarod</i>
16:25 - 16:35	ID: 270 Stability Analysis of a Typical Landslide Under Rainfall Event: Triggering Mechanism and Remedial Measure <i>Aman Alok, Surender Singh, Abhishek Kumar</i>
16:35 - 16:45	ID: 281 Exploring the use of remote sensing to enhance geo-disaster management in Nepal <i>Prabin Acharya, Fangzhou Liu</i>
16:45 - 16:55	ID: 162 Effects of Gravel on Strength Characteristics of Clay on Slip Surface in Ring Shear Test <i>Ryusei Takeda, Motoyuki Suzuki</i>

Parallel Session IV: Geotechnical Engineering for Sustainable Transportation System

Hall D

Session Chairs: Dr. AP Singh,
Er. Rajendra Raj Sharma

15:15 - 15:30	Distinguished Lecture VI: <i>Development of risk reduction strategies for transportation corridors using cost-benefit and lifecycle cost analysis</i> Er. Lauren Hutchinson (Senior Geotechnical Engineer, R&D Lead BGC Engineering Inc.)
15:30 - 15:40	ID: 003 Strength and Durability Characteristics of Reclaimed Pavement Material using Full Depth Reclamation (FDR) Technique <i>Shilpa Mary Sam, Prateek Negi, Seethalakshmi Palanisamy</i>
15:40 - 15:50	ID: 047 Performance outcome of geosynthetic stabilized pavement constructed on expansive subgrade <i>Sagun Shrestha, Md Mizanur Rahman, Md. Rajibul Karim, Hoang Bao Khoi Nguyen</i>
15:50 - 16:00	ID: 054 Determining the optimal location of geogrid and modulus improvement factor using finite element analysis <i>Rakesh Peaka, S U S Sai Bhaskar Kalyanapu, Umesh Chandra Sahoo</i>
16:00 - 16:10	ID: 091 Performance of geopolymer and cement stabilized expansive soil as road materials <i>Datla Neeraj Varma, Suresh Prasad Singh</i>
16:10 - 16:20	ID: 126 Finite Element Based Design of Unreinforced Unpaved Roads Resting on Deformable Marginal Soil Subgrade <i>Nayan Sarma, Anu Tamang, Arindam Dey</i>
16:20 - 16:30	ID: 132 Bio-enzymatic stabilization of subgrade soil for road construction <i>Nelson Sanasam, Arunaditya Das, Monowar Hussain</i>
16:30 - 16:40	ID: 009 Enhancing Strength Behaviour of Fly Ash Using Geopolymerization Technique as a Replacement of Cement in Producing Construction Material <i>Uday Yadav, Arvind Kumar Jha</i>
16:40 - 16:50	ID: 216 Design of Geomats for erosion control using RUSLE equation <i>Ratnakar R Mahajan, Manab Rijal, Piyush Parikh</i>

Parallel Session V: Environmental Geotechnics

Hall A

Session Chairs: Dr. Saurav KC,
Er. Ujjwal Niraula

17:10 - 17:25	Distinguished Lecture VII: <i>Application of PSHA in High-Seismicity Areas: A Case Study from the Sichuan-Yunnan Region</i> Prof. Dr. Hu Zheng (Director, Institute on Environmental Engineering Geology, Tongji University, China)
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17:25 - 17:35	ID: 195 Probabilistic Assessment of Water Table Variation in Engineered mine Waste dump <i>Rahul Shende, Srinivasan V, Omkar Navagire, Harshit Gupta</i>
17:35 - 17:45	ID: 269 Characterizing Tropical Indian Peat: In Situ and Laboratory Analysis <i>Ashim Kanti Dey</i>
17:45 - 17:55	ID: 312 Settlement Behaviour of Municipal Solid Waste Fines Below Foundation on Staged Loading: A FEM Approach <i>Abhay Kumar Verma, Bini Samal, Shivani Dhriyan, Prof. Arun Prasad</i>
17:55 - 18:05	ID: 310 A Comprehensive Review on Characterization and Utilization of Industrial By-products and Municipal Solid Waste <i>Bibek Chand, Prithvendra Singh, Surender Singh, Devendra N. Singh</i>

Parallel Session VI: Geohazards and Climate Change

Hall B

Session Chairs: Dr. Basanta Raj Adhikari,
Er. Sohail Kibria

17:10 – 17:25	Distinguished Lecture VIII: Translating multi-hazard risk assessment to compounding and cascading disaster risk management for resilient infrastructure Dr. Bhesh Raj Thapa (Principal, Universal Science and Engineering College)
17:25 – 17:35	Road Tunnel Construction in the Himalayan Orogenic Belt – Countermeasures for Geotechnical Problems <i>Sagar Paudel, Masashi Nakaya, Kenichi Inoue</i> Hazama Ando Corporation, Nagdhunga Tunnel Construction Project, Nepal
17:35 – 17:45	ID: 286 GMS3 (GPR Mobile mapping System 3D) a unified surface and subsurface spatial information system <i>José Maria Rodrigues Neto, Jun Shinohara</i>
17:45 – 17:55	ID: 240 Numerical investigation of suction profiles under cracked soil conditions <i>Bikash Devkota, Md Rajibul Karim, Md Mizanur Rahman, Hoang Bao Khoi Nguyen, Donald A Cameron</i>
17:55 – 18:05	ID: 254 Post-Event Monitoring of 2024 Catastrophic Liangshui Landslide (China) using Time Series of Sentinel-1 Imagery with Persistent Scattered Interferometry <i>Diwakar Khadka, Jie Zhang, Atma Sharma, Shuangyi Wu</i>

Parallel Session VII: Earthquake Geotechnical Engineering

Hall C

Session Chairs: Dr. Narayan Prasad Marasini,
Dr. Subeg Man Bijukchhen

17:10 – 17:25	Distinguished Lecture IX: Dam Safety Emergency Management Program for Residual Risk Reduction Global Perspective with Nepalese Context Dr. Keshab Sharma (Geotechnical Engineer, BGC Engineering Inc., Canada)
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17:25 – 17:35	ID: 267 Integrated Seismic Hazard Assessment of Moradabad Region, Northern India <i>Anurag Tiwari, Shashank Shekhar, J L Gautam, G P Singh, Shikha Verma</i>
17:35 – 17:45	ID: 259 Comparative study of non-linear and equivalent linear Site Response Analysis in Kathmandu valley soil <i>Saroj Adhikari, Ram Chandra Tiwari, Rajan Karki</i>
17:45 – 17:55	ID: 287 Static liquefaction under constant shear drained conditions: an evaluation in direct simple shear space <i>Mohammad Emdadul Karim, Md Mizanur Rahman, Md Rajibul Karim</i>
17:55 – 18:05	ID: 222 Analysis of Nonlinear Elastic Behaviour of Fibre-reinforced Expansive Soil under Cyclic Loading using Theoretical Analytical Models <i>Muthukumar Mayakrishnan, S Reehana</i>

Parallel Session VIII: Geohazards and Climate Change

Hall D

Session Chairs: **Dr. Md Rajibul Karim**
Er. Udaya Raj Neupane

17:10 – 17:25	Distinguished Lecture X: Maintenance Matters Most: Long-term Performance of Geohazard Risk Management Er. Emily Mark (Senior Geological Engineer, BGC Engineering Inc., Canada)
17:25 – 17:35	ID: 083 Multi-temporal clustering method to detect individual landslide response to the 2015 Gorkha Earthquake <i>Ram Shrestha, Erin Harvey, Mark Kincey, Nick Rosser, Katherine Arrell, Gopi Basyal, Dammar Singh Pujara, Sarmila Paudyal, Alex Densmore, Max Van Wyk de Vries, Ganesh K. Jimiee</i>
17:35 – 17:45	ID: 215 Slope stability and Landslide Mitigation Approach for Structures on Slope – A Case Study <i>Vishnu G, Tadikonda Venkata Bharat</i>
17:45 – 17:55	ID: 283 Potential for Landslide Dam Breaching and the Effectiveness of Jure Debris Flow Channel Structures <i>Sudip Bastola, Aanchal Tiwari, Ram Chandra Tiwari</i>
17:55 – 18:05	ID: 224 Understanding the Soil Geology in Landslide-Prone Areas in Mauritius <i>Chetan Keshav Bhuckory, Raj Kumar Dreepaul, Slobodan B. Mickovski</i>

18:30 – 20:30 **Reception Dinner**

Day 2: 29 November 2024

Day 2 Parallel Sessions (8:30 – 11:05)

Time \ Hall	Hall A	Hall B	Hall C	Hall D
8:30-9:45	Parallel Session IX	Parallel Session X	Parallel Session XI	Parallel Session XII
10:00-11:05	Parallel Session XIII	Parallel Session XIV	Parallel Session XV	Parallel Session XVI

Parallel Session IX: AI in Geotechnical Engineering

Hall A

Session Chairs: Dr. Albert Liu,
Dr. Manita Timalisina

8:30 – 8:45	<p>Distinguished Lecture XI: Challenges in foundation design of long elevated highway corridor in soft soil Dr. AP Singh (Honorary Secretary, Indian Geotechnical Society)</p>
8:45 – 8:55	<p>ID: 032 Assessing Landslide Susceptibility in Central Nepal Himalaya: A Comparative Study of Frequency Ratio and Random Forest Machine Learning Approaches <i>Tulasi Ram Bhattarai, Netra Prakash Bhandary</i></p>
8:55 – 9:05	<p>ID: 052 Estimation of Swelling Pressure of Buffer Material Under Adverse Chemical Conditions Using Machine Learning <i>Sharad Dadhich, Bharat Venkata Tadikonda</i></p>
9:05 – 9:15	<p>ID: 130 Development of Prediction Equations for Static and Pseudo-static Stability of Slopes using Regression and Machine Learning Techniques <i>Rubi Chakraborty, Farquan Ahmad, Arindam Dey, Pijush Samui</i></p>
9:15 – 9:25	<p>ID: 172 Application of Bivariate Statistical and Multicriteria Decision Analysis Models for Landslide Susceptibility Mapping: A Case of Palungtar, Gorkha <i>Shreya Maharjan, Pratik Singh Thakuri</i></p>
9:25 – 9:35	<p>ID: 233 Application of CDW materials to enhance the compressive and microstructural characteristics of flexible pavement structure using artificial neural network (ANN) <i>Krishnaraj Khatri, Shailendra Kumar, Chandresh Solanki</i></p>
9:35 – 9:45	<p>ID: 263 Predictive Modeling of Site Amplification using Machine Learning: A Linear Regression Approach <i>Jaisingh Verma, Aniket Desai, Ravi S. Jakka</i></p>

Parallel Session X: Ground Improvement

Hall B

Session Chairs: Prof. Dr. Binod Tiwari,
Er. Mandakini Karki

8:30 – 8:45	Distinguished Lecture XII: <i>Developing a Framework for Sustainable and Scientific Extraction of Riverbed Materials from the Chure-Terai Rivers in Nepal</i> Er. Saroj Karki (Ministry of Water Supply, Irrigation and Energy, Koshi Province, Nepal)
8:45 – 8:55	ID: 183 Curtain Grouting in the Himalayan Rockmass – the Upper Tamakoshi Dam Case Study, Nepal <i>Sanjib Sapkota</i>
8:55 – 9:05	ID: 276 Evaluation of stone column as liquefaction mitigation <i>Bishal Bimali, Bishal Mahara, Aditya Baniya, Laxmi Adhikari, Bhim Dahal</i>
9:05 – 9:15	ID: 242 Reliability Assessment of Stone Column Improved Soft Ground Using the First Order Reliability Method <i>Aditya Kr. Rai, Subhadeep Metya, Gautam Bhattacharya</i>
9:15 – 9:25	ID: 247 Soil Embankment Stability Improvement by Using Stone Column: A Review <i>Nitesh Bhange, Prasad Dahale</i>
9:25 – 9:35	ID: 249 Uplift Behavior of Granular Anchor Pile in Sandy Soil <i>Shweta Singh, Vishwas Sawant</i>
9:35 – 9:45	ID: 258 Utilisation of Sand as a Reinforcing Material for Improving the Capacity of Soft Soil <i>Kevin Somra, Pooja Kharra, Srijan Srijan</i>

Parallel Session XI: Sustainable Foundation Design and Construction

Hall C

Session Chairs: Dr. Rajan Suwal,
Er. Kamal Raj Regmi

8:30 – 8:45	Distinguished Lecture XIII: <i>Climate change and geotechnical structures on expansive soils, challenges and opportunities – An Australian perspective (ID: 313)</i> Dr. Rajibul Karim (Senior Lecturer, University of South Australia)
8:45 – 8:55	ID: 014 Evaluation of settling behavior of sand particles in stabilizers for cast-in-place piles <i>Sudip Shakya, Shinya Inazumi, Nakao Koki</i>
8:55 – 9:05	ID: 066 Finite Element Analysis of Piled Raft Foundation System <i>Kamalika Das, Akhileshwar Kumar Singh, Yadavendra Pratap</i>
9:05 – 9:15	ID: 070 Understanding the Effect of Soil Types in Bearing Capacity for Shallow Square Footings

	<i>Ujjwal Niraula, Shreya Shrestha, Upendra Shrestha, Meera Neupane, Suresh Raj Joshi</i>
9:15 – 9:25	ID: 133 Bearing Capacity of Bored Pile Using Semi-Analytical and Numerical Modeling <i>Amit Kumar Varma, Sanjay Jha</i>
9:25 – 9:35	ID: 232 Effect of Pile Diameter on the Response of Combined Pile Raft Foundation <i>Shailja Gupta, Vishwas Sawant, P K Gupta</i>
9:35 – 9:45	ID: 244 A Review on Geothermal Energy Piles – An Alternative Geotechnical Solution for Sustainable Infrastructure <i>Hari Krishna P, Sai Venkata Bharath Puppala</i>

Parallel Session XII: Tunnel Engineering and Underground Construction

Hall D

Session Chairs: Dr. Gyanendra Lal Shrestha,
Er. Sanjeeb Baral

8:30 – 8:45	Distinguished Lecture XIV: Assessment of Water Leakage in Low-Pressure Headrace Tunnel: A Case Study of the Sanjen Hydroelectric Project Dr. Chhatra Basnet (Chief Executive Officer, Clean Energy Consultants, Nepal) With: <i>Darshan Babu Adhikari, Arpan Bahadur Singh</i>
8:45 – 8:55	ID: 123 Integration of Adaptive Design, Construction & Instrumentation for Underground structure: A case study of Surge Tank of Tanahu Hydropower Project, Nepal <i>Raja Bhai Shilpakar</i>
8:55 – 9:05	ID: 128 Impact zoning and construction control technology for cross operation tunnels during the construction of new tunnels <i>Lianjin Tao, Bohan Song, Guangyao Cui</i>
9:05 – 9:15	ID: 134 Review of D Wall Trench Stability for an Underground Metro Shaft based on Analytical and 2D & 3D Numerical Methods <i>Sowmiyaa V S, Doraswamy Raju</i>
9:15 – 9:25	ID: 223 Impact of Multilayered Fiber Reinforced Shotcrete on Structural Integrity: A Study in Underground Mining <i>Greg You, Thomas Hocking</i>
9:25 – 9:35	ID: 299 Assessment of Underground Powerhouse for Seti Nadi-3 Hydroelectric Project <i>Darshan Babu Adhikari, Mohan Prasad Acharya, Gyanendra Lal Shrestha</i>
9:35 – 9:45	

Parallel Session XIII: Earthquake Geotechnical Engineering

Hall A

Session Chairs: Dr. Bijaya Jaishi,
Er. Rajan KC

10:00 – 10:15	Distinguished Lecture XV: Data-driven post-earthquake recovery estimation Dr. Albert Liu (Assistant Professor, University of Alberta, Canada)
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10:15 – 10:25	ID: 049 Attenuation of seismic waves through geogrids <i>Ashutosh Adhikari, Bibek Maharjan, Bineet Raj Kuikel, Laxman Koirala, Rajendra Pangeni, Anup Lamichhane, Ram Chandra Tiwari, Anchal Tiwari</i>
10:25 – 10:35	ID: 257 Enhancing Flexible Pavement Performance through Geogrid Reinforcement in 3D Finite Element Analysis <i>Lokraj Pant, Anchal Tiwari, Arjun Poudel, Ram Chandra Tiwari</i>
10:35 – 10:45	ID: 136 Seismic Response Analysis of Typical Rectangular Sections of Underground Metro Stations <i>Sudhir Bikram KC, Guobo Wang, Udaya Raj Neupane, Kreeti Bajracharya</i>
10:45 – 10:55	ID: 140 Seismic Performance Evaluation for Continuous Use of an Existing Bridge in Nepal <i>Amit Kumar Varma, Tatsuya Azuhata</i>
10:55 – 11:05	ID: 175 Evaluating Seismic Impact on Vertical Pipelines Using Laminar Shear Box Modeling <i>Himanshu Jangir, Anirban Mandal, Srinivasan V</i>

Parallel Session XIV: Ground Improvement

Hall B

Session Chairs: **Er. Lauren Hutchinson,
Er. Darshan Babu Adhikari**

10:00 – 10:15	Distinguished Lecture XVI: <i>Impact Assessment of Overlooking Geotechnical Risk on sustainable road design and construction in challenging terrain throughout the project cycle – A Practice based Approach</i> Er. Mandakini Karki (Technical Director, Soil Test (P) Ltd.)
10:15 – 10:25	ID: 260 Evaluation of the shear resistance of stone columns using construction demolition waste <i>Prashant B.Mali, Nithin Jacob John, Amit H Padade, Anjan Patel</i>
10:25 – 10:35	ID: 264 Performance Evaluation of Expansive Soil Treated with MICP and Industrial waste Materials <i>Abhay Dhorey, Shreyash Nikose, Anjan Patel</i>
10:35 – 10:45	ID: 278 Analysis of Jet Grouting Performance in Heterogeneous Alluvial Deposits <i>Akhilesh Chandra Joshi, R D Garg, V A Sawant, Madhukar Agarwal</i>
10:45 – 10:55	ID: 285 Behaviour of Shallow Footing Rested on Fly Ash-Lime-Clay Stabilized Layer over Deep Seated Cohesive Soil Bed <i>Sitanshu Rajak, Nirmali Borthakur</i>
10:55 – 11:05	ID: 308 Characterization and Stabilization of Dispersive Soils in Irrigation Projects <i>Binod Pun, Mohan Acharya, Rajan KC, Kabin Lamichhane</i>

Parallel Session XV: Sustainable Foundation Design and Construction

Hall C

Session Chairs: Er. Birendra Mahaseth
Er. Kalpana Adhikari

10:00 – 10:15	Distinguished Lecture XVII: Construction of Pilot Low-Cost High Performance (Base Isolation) School Building in Nepal Dr. Narayan Prasad Marashini (Deputy Executive Director, NSET)
10:15 – 10:25	ID: 283 Potential for Landslide Dam Breaching and the Effectiveness of Jure Debris Flow Channel Structures <i>Sudip Bastola, Aanchal Tiwari, Ram Chandra Tiwari</i>
10:25 – 10:35	ID: 288 Benefits of Including CPTu in Geotechnical Investigation Program – A Case Study <i>Ravi Sundaram, Sorabh Gupta, Sanjay Gupta</i>
10:35 – 10:45	ID: 061 Geotechnical Study, Design of Landslide Mitigation Measure at CH 27+00 of Pokhara – Baglung Highway <i>Manab Rijal</i>
10:45 – 10:55	ID: 303 Behavior of Axially and Laterally Loaded Pile in Layered Soil <i>Sushil Acharya, N.P. Kaushik, Bhashkar Pathak</i>
10:55 – 11:05	ID: 304 Seismic Bearing Capacity Analysis of Skirted Footing on Cohesive-Frictional Soil Slopes <i>Neelagiri Vallaba Datta, Sunil Khuntia</i>

Parallel Session XVI: Geotechnical Engineering for Sustainable Transportation System

Hall D

Session Chairs: Prof. Dr. Padma Bahadur Shahi,
Er. Bhimarjun Adhikari

10:00 – 10:10	ID:296 Stability Analysis of Roadside Landslide: A Case Study of Bajura <i>Udaya Raj Neupane, Samana Bhattarai, Achyut Koirala, Bhashkar Pathak, Rajan KC</i>
10:10 – 10:20	ID: 200 Characterization of Mine Overburden Materials for Pavement Applications: A Microstructural and Small-Scale Study <i>Jagdish Gouda, Ayush Dudhabaware, Rahul Shende, Sita Rami Reddy, Srinivasan V</i>
10:20 – 10:30	ID: 248 Numerical Analysis of Highway Embankment constructed using a lightweight fill: A Case Study <i>Vaibhav Butle, Parvathi G. S, Anirban Mandal, Srinivasan V</i>
10:30 – 10:40	ID: 250 Towards enhancing durability of hill roads: numerical investigations on modulus improvement of geocell confined Jammu soil <i>Aman Sharma, Prasun Halder, Riya Bhowmik</i>
10:40 – 10:50	ID: 266

	Comparative Study on the Effectiveness of Granulated Blast Furnace Slag (GBFS) and Steel Slag (SS) in Improving Engineering Properties of Black Cotton Soil <i>Anurag Khadse, Amit Padade, Anupam Pande, Prashant Mali</i>
10:50 – 11:00	ID: 291 Mitigation of railway induced vibrations: A state of art <i>Utkarsh Mishra, Vishwas Sawant, Jagdish Sahoo</i>
11:00 – 11:10	Road tunnel construction in the Himalayan orogenic belt -Convergence measurement and ground behavior <i>Sanjil Khanal Masashi Nakaya, Kenichi Inoue</i> Hazama Ando Corporation, Naghdhunga Tunnel Construction Project, Nepal

11:15 – 12:45 | Poster Session

12:15 – 13:00 | Lunch Break

Keynote Lecture Session IV (13:00 – 14:30)

Main Hall

Session Chair: Prof. Dr. Amod Mani Dixit,
Dr. Mohan Prasad Acharya

13:00 – 13:25	Keynote Lecture IX: The Experience of Geotechnical Construction and Testing of Piles of Megastructures on Problematical Soil Ground of Kazakhstan Prof. Askar Zhussupbekov (President/Professor, L.N. Gumilyov Eurasian National University, Kazakhstan)
13:25 – 13:50	Keynote Lecture X: <i>Lightweight Cellular Concrete (LCC) – Sustainable Solution to Geotechnical Applications</i> Prof. Dr. Binod Tiwari (Associate Vice President, California State University, Fullerton, USA)
13:50 – 14:15	Keynote Lecture XI: <i>Sustainable gabion technology adapted to developing countries</i> Prof. Dr. Tadashi Hara (Professor, Kochi University, Japan)
14:15 – 14:25	Q & A
14:25 – 14:30	Sponsor Presentation (NIKKARI)

Keynote Lecture Session V (14:30 – 16:05)

Main Hall

Session Chairs: Assoc. Prof. Dr. Indra Prasad Acharya,
Er. Prabhat Kumar Jha

14:30 – 14:55	Keynote Lecture XII: Physical and numerical modeling of Debris Flow Behavior, Runout, and Deposition: Insights from Indian Case Studies Prof. Dr. Neelima Satyam (Professor, Indian Institute of Technology – IIT, Indore, India)
14:55 – 15:20	Keynote Lecture XIII: <i>Comprehensive Subsurface Characterization in Extreme Regions</i> Prof. Dr. Jong-Sub Lee (Professor, Korea University, South Korea)
15:20 – 15:45	Keynote Lecture XIV: <i>Key aspects of the liquefaction potential of gravelly soils: insights from laboratory investigations</i>

	A/Prof. Dr. Gabriele Chiaro (Associate Professor, University of Canterbury, New Zealand)
15:45 – 15:55	Q & A
15:55 – 16:00	Sponsor Presentation (A & T Engineering)
16:00 – 16:03	Sponsor Presentation (AIMIL India)

HTC Special Session (16:10 – 17:20)

Main Hall		Session Chair: Prof. Dr. Neelima Satyam
16:10 – 16:20	Introduction to HTC Project of ISSMGE Prof. Dr. Neelima Satyam	
16:20 – 17:00	Status of HTC project (focusing at Geohazards) with the participating national member societies (India, Japan, Korea, Nepal, Pakistan, Sri Lanka, etc.), 3-minute one slide presentation by each representative	
17:00 – 17:15	Floor Discussion	
17:15 – 17:20	Closing Remarks Prof. Dr. Neelima Satyam	

Closing Session (17:20 -17:50)

17:20 – 17:50	Details to be notified later.
Gala Dinner (18:00 – 20:30)	
18:00 – 20:30	Details to be notified later.

Poster Presentation Papers

Title and Authors	
ID: 018	Lessons Learned from the 2023 Jajarkot Earthquake (Mw 5.7): Insights for Future Major to Mega-Scale Earthquake Preparedness <i>Kabin Lamichhane, Rajan KC, Mandip Subedi, Jibendra Misra, Keshab Sharma, Keshab Sharma</i>
ID:079	Effect of Dielectric Constant of pore fluids on free swell potential of bentonite and kaolinite clays <i>Unnikrishnan S, N. K. Samadhiya</i>
ID: 297	Liquefaction Hazard Mapping in Terai Region of Nepal <i>Richa Pokhrel, Santosh Pokhrel, Luna Pokhrel, Kishor Paudel, Rajan KC</i>
ID: 198	Parametric Optimization of Design Factors for Driven Soil Nail Structure using Finite Element Method Framework <i>Ram Chandra Tiwari, Prabhat Kumar Jha, Niraj Chapagain, Samyak Shrestha, Prashant Bist, Mahesh Khanal, Mohammad Baseer Miya, Manoj Mukhiya, Aanchal Tiwari</i>
ID: 245	The relationship between a power plant site's 1D site-specific analysis conducted prior to and following ground improvement. <i>Anan Das Bristi</i>
ID: 268	

Geological Mapping and Rock Mass Classification along Barghat to Dumkibas Road Tunnel (Part of Mahendra Highway)

Bhim Raj Neupane, Bishwas Sharma, Prakash Das Ulak, Narayangopal Ghimire

ID: 294

Analysis of Roadside Landslides in Nepal: A Case Study of the Inarpani Landslide on the Midhill Highway

Kalpana Adhikari, Kiran Kumar Maharjan, Rajan KC, Susmita Timalsina, Biraj Ojha

ID: 246

Slope Stability in Colluvial soil: Understanding the problems and solutions

Kumar Bhandari

ID: 277

Prediction of Rock spalling or rock bursting problem in Tunnel

Chet Nath Neupane, Trilok Chandra Bhatta, Bhagawan Shrestha

ID: 164

Design and Case Studies of Polymeric Strip Reinforced Soil True Abutment

Harshith PS, Manab Rijal, Ratnakar R Mahajan

ID: 300

A case study on stability and economic analysis of earthen dam

Milan Paudel, Bikash Devkota

ID: 272

Improving Soil Strength with Plastic Materials: A Study on California Bearing Ratio (CBR) Tests using Advanced Techniques

Vijay Shalini Gondwal, Bhishm Singh Khati, Ashish Gupta

ID: 202

Deep Excavation Support in Soft Ground with Parametric Variations for Adjacent Structures.

Madan Puri, Ujjwal Niraula, Bhim Dahal

ID:311

Regarding Ground Disasters Caused by the 2024 Noto Peninsula Earthquake

Nobuaki Kitamura, Nishikawa Toru

ID: 293

Slope Stability Assessment in Cut Slope: Kanti Lokpath Road Section Case Study

Karan Budhathoki, Laxman KC, Samana Bhattarai, Bichin KC, Bala Mahar, Avishek Karki, Survarna Singh Raut

ID: 065

Performance of Ordinary and Geotextile Encased Stone Columns in Soft Soil – Laboratory Experiment and Numerical Modelling

Imalka Weerawardana

ID: 087

Jute Reinforced Geo-Structures – A Critical Review Towards Sustainability

Sk Ajfar Hossain, Sarkar Tanmoy, Arghadeep Biswas, Rahaman Obaidur

ID: 149

Exploring the Influence of Fly Ash, Rice Husk Ash, and Recycled Concrete Aggregates on Sustainable Concrete Production

Uday Yadav, Prashanta Poudel, Kishor Paudel, Ujjwal Upadhyay

ID: 298

Stability Analysis of Transmission tower foundation in hilly area of Nepal

Bhashkar Pathak, Udaya Raj Neupane, Prakash Dhungana

ID: 148

Durability Assessment of River Aggregate in Natural, Immersed, and Chemically Treated Conditions

Uday Yadav, Prashanta Poudel, Kishor P Paudel, Ujjwal Upadhayay

ID: 067

Stress and Deformation in Twin Tunnel and Support Design Optimization at Sanga Pass – Nepal using Numerical Modeling

Susmita Aryal, Satyam Yadav, Swostika Dhakal, Tanuj Bhatta, Sudarshan Gautam

ID: 273

Combined Piled Raft Foundation (CPRF) on the Soft Ground Improved Prefabricated Vertical Drain: Review

Shweta Sagole, Prasad Dahale

Road tunnel construction in the Himalayan orogenic belt -Study of supports using 2D FEM analysis-
Susmita Aryal, Mikio Ikemura, Kenichi Inoue

Hazama Ando Corporation, Nagdhunga Tunnel Construction Project, Kathmandu, Nepal

Road tunnel construction in the Himalayan orogenic belt – NATM theory and geological characteristics

Sajal Shrestha, Masashi Nakaya and Kenichi Inoue

Hazama Ando corporation, Nagdhunga Tunnel Construction Project, Kathmandu, Nepal

ID: 290

Slope Stability Techniques for Old dump sites in Developing Countries

Sudepta Malakar, Abhishek Kumar, Anil Kumar Mishra

ID: 295

Possibilities of Geo-phones in Slope Failure and Landslide Monitoring

Saiichi Sakajo, Netra Prakash Bhandary and Takashi Kato

ID:306

Soil Structure Interaction Effect In Foundations

Khemraj Pokharel, Sushan Prajapati, Unisha Ghimire, Kundan Sharma, Ramesh Karki, Prem Nath Maskey

ID:180

Use of Waste Fly Ash as a Reinforcing Material for Soft Clay

Srijan, Shashwat Singh, Gautam Narula, Rohit Kumar, Abhijeet Gupta, Rishikesh Kanitker

ID:209

Internal stability analysis of geosynthetic reinforced soil wall using pseudo-static method with non-linear failure surface

Gopal Das, Manojit Samanta

ID:122

Development Of Mechanistic-Empirical Seismic Design Method For Estimation Of Low Volume Flexible Road Pavement Thickness Without Bituminous Binder Base

Sourav Paul, Partha Pratim Biswas, Manoj Kumar Sahis

ID: 074

Determine the Criteria Weights of Geotechnical Parameters of Over Burden Dump Slope by Implementation of Fuzzy Analytic Hierarchy Process – A Case Study

Prasad Dahale, Sumit Geete, K. H. Singh, TN Singh

ID: 127

Improving Embankment Performance Built on Soft Clay: Influence of Vehicle Characteristics

Balbir Kumar Pandey, Vinod Kumar

ID: 131

Performance Assessment of Jute-Cell Reinforced Sand Bed Under Circular Footing

Tanmoy Sarkar, Sk Ajjar Hossain, Arghadeep Biswas

ID: 184

Effectiveness of driving a pilot tunnel coaxially to the main tunnel in low-permeability ground

Alexandros Nordas, Thomas Leone, Georgios Anagnostou

ID: 005

Effect of Liquefaction on Pile-Raft Foundation

Manendra Singh, Mahipal Singh

ID:231

Enhancing Sanitary Landfill Liners: Investigating the Suitability of Sone Sand and Bentonite Composite

Rajiv Kumar, Sunita Kumari
