GEOTEC HANOI 2026

ORGANIZED BY

FECON VSSMGE CISMGE-CCES

PATRONIZED BY

SIMSG ISSMGE NIC



CONFERENCE PROGRAM Book

SUPPORTED BY

OC GLOBAL

GEOTEC HANOI 2026

Table of Contents

Introduction & Conference themes 03

Master plan 04

Keynote and Invited Speakers 05

General Program 06

Parallel Technical Sessions 10

List of Poster Presentations 32

Enterprise Showcase Program 37

Workshop Program 41

Technical Tour 42

List of Exhibitors 43

List of Sponsors 46

Introduction

Following the success of the five previous events, the 6th International Conference on Geotechnics for Sustainable Infrastructure Development, GEOTEC HANOI 2026 (https://geotechn.vn/), will be organized on November 26-27, 2026 at the National Convention Center (NCC) in Hanoi, Vietnam. The Conference is co-organized by FECON Corporation, the Vietnam Society for Soil Mechanics and Geotechnical Engineering (VSSMGE), and the Chinese Institution of Soil Mechanics and Geotechnical Engineering (CISMGE), with the honorable patronage and support of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) and the National Innovation Center (NIC) of Vietnam. Building on its strong legacy, GEOTEC HANOI 2026 promises to be another landmark event, bringing together high-profile academics, researchers, and industry professionals from around the world. The conference will feature six traditional themes, i.e., Deep Foundations, Tunnelling and Underground Spaces, Ground Improvement, Landslide and Erosion, Geotechnical Modelling and Smart Monitoring, Offshore Wind Power and Coastal Geotechnics, and especially two emerging and highly relevant themes: Artificial Intelligence (AI) in Geotechnical Engineering and Geotechnics for High-speed Railways.

A hallmark of every GEOTEC HANOI conference is its lineup of outstanding keynote lectures delivered by world-leading experts. This year, the keynote lectures are presented by Prof. Raffaele Di Laora (Italia), Prof. Xiangsheng Chen (China), Prof. Stefan Larsson (Sweden), Prof. Limin Zhang (Hong Kong China), Prof. Byron Byrne (UK), Prof. David M. Potts (UK), Prof. Gang Zheng (China), and Prof. Tatsuya Ishikawa (Japan). We also have invited lectures given by Prof. Arnold Dix (Australia), Prof. Erol Tutumluer (USA) and Prof. Bai Yun (China).

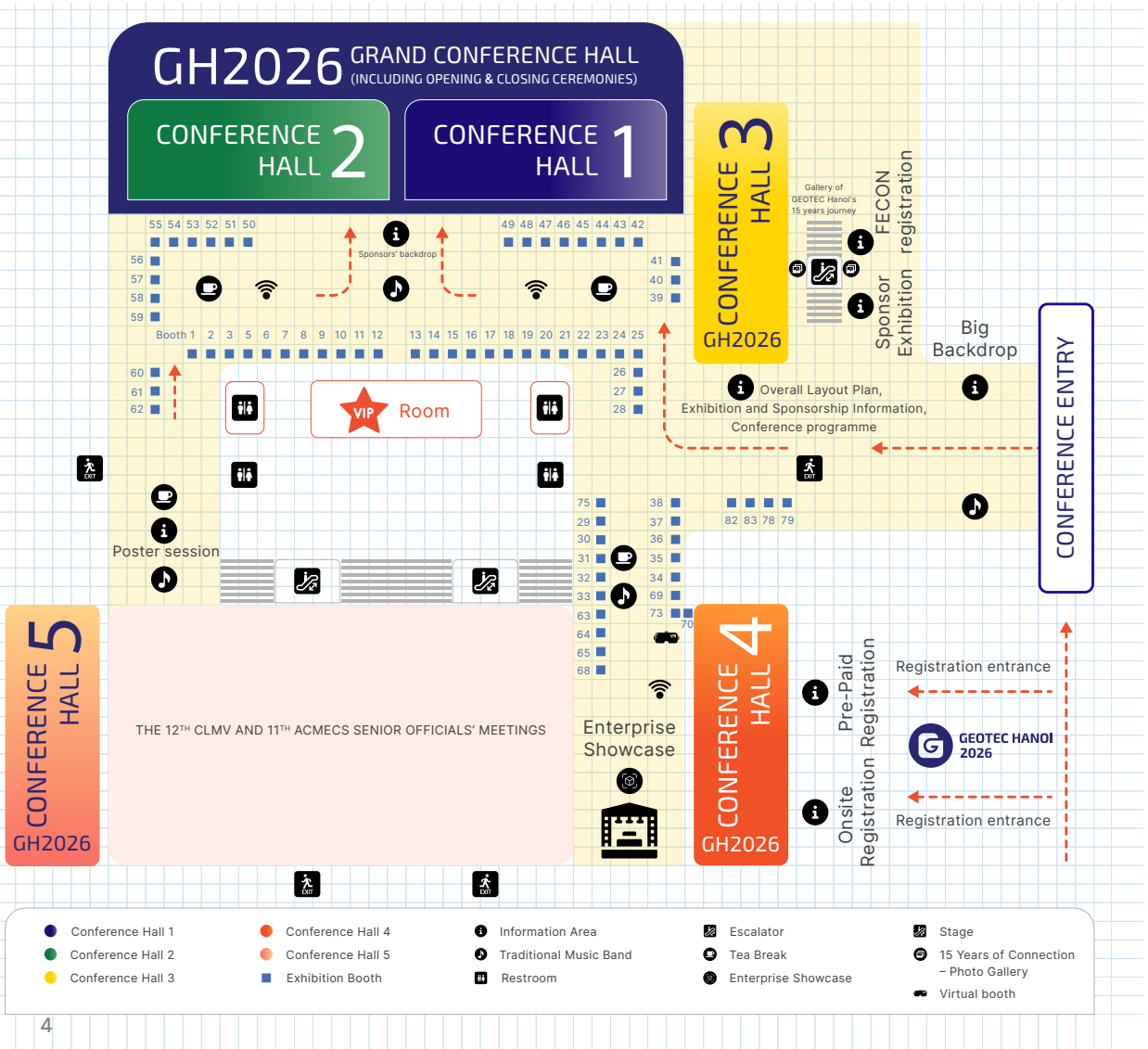
During the two-day conference, there will be a total of 205 oral presentations in 5 conference halls, 45 poster presentations. In addition, the conference also includes a half-day pre-conference workshop on Geotechnics for High-speed Railways, a half-day pre-conference technical tour to Tran Hung Dao bridge construction site. Besides the technical programs, the exhibition program is also highly expected with the participation of 75 physical booths from many well-known enterprise in geotechnical and civil engineering and more than 40 exclusive presentations from the sponsors and exhibitors in the two-day enterprise showcase. Details of the programs are provided in this program book.

The Organizing Committee warmly welcomes you to GEOTEC HANOI 2026 to share your valuable insights, engage with global experts, and experience the vibrant culture and hospitality of Hanoi and Vietnam, and would like to sincerely thank you very much for your valuable contribution to the conference.

Conference themes

1.	DEEP FOUNDATIONS
2.	TUNNELLING AND UNDERGROUND SPACES
3.	GROUND IMPROVEMENT
4.	LANDSLIDE AND EROSION
5.	OFFSHORE WIND POWER AND COASTAL GEOTECHNICS
6.	GEOTECHNICAL MODELLING AND MONITORING
7.	AI IN GEOTECHNICAL ENGINEERING
8.	GEOTECHNICS FOR HIGH-SPEED RAILWAYS

Master plan



Keynote speakers



Prof. Raffaele Di Laora
Univ. of Campania, Italy



Prof. Xiangsheng CHEN
Shenzhen University, China



Prof. Stefan Larsson
Royal Institute of Technology (KTH), Sweden



Prof. Limin ZHANG
Hong Kong Univ. of Science and Technology, HK China



Prof. Byron Byrne
Oxford University, the UK



Prof. David M. Potts
Imperial College London, the UK



Prof. Gang Zheng
Tianjin University, China



Prof. Tatsuya Ishikawa
Hokkaido University, Japan

Invited Speakers



Prof. Arnold Dix
Immediate Past President of ITA-AITES, Australia



Prof. Erol Tutumluer
University of Illinois at Urbana-Champaign, the USA



Prof. Bai Yun
Tongji University, China

DAY 1 · THURSDAY, 26 NOVEMBER 2026

PLENARY SESSION

Grand Conference Hall

7:30 — 9:00	**RECEPTION**
9:00 — 9:45	**OPENING CEREMONY** • **Speech by Dr. Phung Duc Long** *Co-Chair of the Organizing Committee, Chair of the Scientific Committee, President of the Vietnam Society for Soil Mechanics and Geotechnical Engineering (VSSMGE)* • **Speech by Dr. Anil Joseph** *Vice President of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)* • **Speech by Mr. Pham Gia Tuc** *Member of the Politburo and Permanent Deputy Prime Minister of the Socialist Republic of Vietnam* • **Speech by Mr. Pham Viet Khoa** *Chair of the Organizing Committee, President of FECON Corporation*
9:45 — 10:15	**SVEN HANSBO LECTURE:** Innovative Methods for Foundation Design under Generalized Loading **Prof. RAFFAELE DI LAORA**
10:15 — 10:45	**KEYNOTE LECTURE:** State-of-the-Art Tunnel Engineering in Mainland China **Prof. XIANGSHENG CHEN**
10:45 — 11:15	**Photo Session and Tea Break**
11:15 — 11:45	**KEYNOTE LECTURE:** The Nordic Dry Deep Mixing Method for Infrastructure Development: Practice, Design and Future Needs **Prof. STEFAN LARSSON**
11:45 — 12:15	**KEYNOTE LECTURE:** AI & Digital-twin Empowered Landslide Risk Management **Prof. LIMIN ZHANG**
12:15 — 12:25	Introduction to New Asian Regional Technical Committee on Biogeotechnics (AsRTC 22) and Launch of Young Biogeotechnics Group (YBG)

PARALLEL TECHNICAL SESSIONS

	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 4	Conference Hall 5
12:25 — 13:30	**Lunch break**				
13:30 — 15:45	**Session 1.** Deep Foundations	**Session 2.** Tunnelling and Underground Spaces	**Session 5.** Offshore wind and Coastal Geotechnics	**Session 3.** Ground Improvement	**Extra Session** Geotechnical Modelling and Case Studies
15:45 — 16:00	**Poster Session and Tea Break**				
16:00 — 18:30	**Session 1.** Deep Foundations	**Session 2.** Tunnelling and Underground Spaces	**Session 5.** Offshore Wind Power and Coastal Geotechnicss	**Session 3.** Ground Improvement	**Extra Session** Geotechnical Modelling and Case Studies

DAY 2 · FRIDAY, 27 NOVEMBER 2026

PARALLEL TECHNICAL SESSIONS

	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 4
8:00 — 10:00	**Session 4.** Landslide and Erosion	**Session 7.** AI in Geotechnical Engineering	**Session 6.** Geotechnical Modelling and Monitoring	**Session 3.** Ground Improvement
10:00 — 10:15	**Poster Session and Tea Break**			
10:15 — 12:30	**Session 4.** Landslide and Erosion	**Session 7.** AI in Geotechnical Engineering	**Session 6.** Geotechnical Modelling and Monitoring	**Session 3.** Ground Improvement
12:30 — 13:30	**Lunch break**			
13:30 — 15:45	**Session 4.** Landslide and Erosion	**Session 8.** Geotechnics for Highspeed Railway	**Session 6.** Geotechnical Modelling and Monitoring	**Session 3.** Ground Improvement
15:45 — 16:00	**Poster Session and Tea Break**			

PLENARY SESSION

Conference Hall 1	
16:00 – 16:30	**KEYNOTE LECTURE:** Design of Monopiles for Offshore Wind Turbines **Prof. BYRON W. BYRNE**
16:30 – 17:00	**KEYNOTE LECTURE:** Simulating Strain Softening Behaviour and Progressive Failure in Geotechnical Analysis **Prof. DAVID M. POTTS**
17:00 – 17:30	**KEYNOTE LECTURE:** Artificial Intelligence in Excavations: Progress, Challenges, and Future Trends **Prof. GANG ZHENG**
17:30 – 18:00	**KEYNOTE LECTURE:** Transportation Geotechnics toward Sustainable and Resilient High-Speed Railways **Prof. TATSUYA ISHIKAWA**
18:00 – 18:30	**CLOSING CEREMONY** • Closing Remarks **Prof. Xiangsheng Chen** - *Representative of the CISMGE* • Other closing activities
18:45 — 21:00	**GALA DINNER** **Vietnamese Folk Music**



DAY 1 · THURSDAY, 26 NOVEMBER 2026

Conference Hall 1

Chairman: **Prof. Raffaele Di Laora**

Co-Chairman: **Dr. Phung Duc Long**

Session 1. Deep Foundations

TIME	ID	PAPER · AUTHORS
13:30 – 13:45	297	**Displacement-Based Seismic Design for Offshore Bridge Foundations in Davao, Philippines** *Enrico Luis Abcede, Patrick Adrian Selda, Francis Jenner Bernales, Adrian Benedict Mauricio, Roy Anthony Luna*
13:45 – 14:00	126	**Evaluation of Pile Foundation Capacity Due to Lateral Displacement during Construction** *Duyet Nguyen*
14:00 – 14:15	511	**Static Load Test on Super Long and Large Steel Pipe Pile in Soft Soil with Limited Rest Period after Pile Driving** *Ryota Mizuno, Thanh T. Nguyen, Hadi Khabbaz, Phuong Dong Le*
14:15 – 14:30	173	**Experimental Study on Soil-Cement Retaining Walls with H-Shaped Steel Sections under In-Plane Horizontal Loading and Resistance Mechanism** *Junji Hamada, Yuji Taya, Takao Kono*
14:30 – 14:45	207	**Comparative Assessment of Laterally Loaded Piles in Soft Soils of the Mekong Delta** *Huu Ha Giang Pham, Ngoc Tan Le, Duc Khanh Tran, Van Choi Quach, Nguyen Huyen Tram, Tan Hung Nguyen, Van Hiep Huynh*
14:45 – 15:00	139	**Correction Methods for Vertical Displacement of A Pile Using A High-speed Camera in A Rapid Pile Load Test** *Ram Krishna Mandal, Masahiro Yoshikuni, Shihchun Lin, Shuichi Kamei, Isaku Yamamoto, Tatsunori Matsumoto*
15:00 – 15:15	466	**Influence of Soil-Raft Stiffness on the Performance of Piled Raft Foundation in Cohesionless Soil** *Nikita Chauhan, Manojit Samanta*
15:15 – 15:30	298	**Advanced Interpretation of Bidirectional Pile Load Tests via Metaheuristic-Enhanced Nonlinear Load Transfer Models** *Minh Tam Doan, Chih Wei Lu, San Shyan Lin*
15:30 – 15:45	153	**Fundamental Study on Strain Measurement Methods in Pile Load Tests** *Nakazato Akihito, Minoru Okuno, Masatoshi Hirai, Koji Watanabe*
15:45 – 16:00		**Tea break & Poster session**
16:00 – 16:15	446	**Optimized Bridge Foundations using the Combined Pile-Raft Foundation** *Steffen Leppla, Janin Christin Paninski, Rolf Katzenbach, Markus Scholz*
16:15 – 16:30	316	**Seismic Fragility Assessment of Symmetric and Asymmetric combined Piled Raft Foundations under Bi-Directional Motions** *Atul Raj, Sumanta Haldar, Patra Shantanu*
16:30 – 16:45	184	**Numerical Simulation of the Installation Process and the Monotonic and Cyclic Axial Load-Bearing Behaviour of Helical Piles** *Markus Meier, Conrad Boley*
16:45 – 17:00	301	**Modeling Deep Excavation with Deep Cement Mixing Piles: 3D vs 2D Simplification** *Jung Jung Yang, Ya Han Hsu, Jia Rong Pan, Kuo Chieh Chao, Louis Ge*
17:00 – 17:15	246	**Toe-Piles Stabilization Method for Cut-Off Diaphragm Walls in Deep Excavations: A Case Study in Ho Chi Minh City** *Minh Trung Nguyen, Bao Nhu Bui, Minh Thu Le Tran, Hoang Quan Le, Trong Nghia Le*
17:15 – 17:30	333	**Numerical Investigation of the Mechanical Behavior of Topbase Foundations using the Finite Element Method** *Diep Truong Minh Trieu, Anh Tuan Vu, Hoang Quoc Gia, Duc Thang Do, Truong Quoc Bao*
17:30 – 17:45	152	**Numerical Study on Behaviors of Various Piled TNFs Under Seismic Loading Considering Building Stiffness** *Han Vo Cong, Kinji Takeuchi, Le Duc Duy Chuong, Yasuo Tomono*
17:45 – 18:00	454	**Dynamic Soil-Pile Interaction under Vertical Loading using Steady-State Dynamic Analysis** *Shi Jun-Yang, Nguyen Van Duong*
18:00 – 18:15	252	**Effects of Anchor Failure on Secant Pile Wall Displacement in Deep Excavation** *Hoang Thanh Hau Nguyen, Khac Tan Da Nguyen, Phuoc Hoai Tien Vo, Minh Trung Nguyen, Trong Nghia Le*
18:15 – 18:30	592	**Analysis of effectiveness of shaft grouting bored piles for clay and silty sand in HCMC** *Nguyen Duy Quang, Tran Hoai Nam, and Nguyen Tien Dung*

DAY 1 · THURSDAY, 26 NOVEMBER 2026

Conference Hall 2

Chairman: **Prof. Xiangsheng Chen**

Co-Chairman: **Prof. Bai Yun**

Session 2. Tunnelling and Underground Spaces

TIME	ID	PAPER · AUTHORS
13:20 – 13:45	605	**What the Mountain Does Not Forgive: Disaster Risk, Communication Failure, and the Human Conditions for Safe Underground Construction in Vietnam's Infrastructure Era** *Arnold Dix*
13:45 – 14:00	273	**Building Response to Tunnelling in Sandy Soil of Line 1 Ben Thanh - Suoi Tien** *Binh Le, Sam Divall, R Neil Taylor, Jamie Standing*
14:00 – 14:15	318	**Continuum-Based Interaction Modelling of Embedded Buildings under Excavation-Induced Ground Movements** *Emma Gulløv, Andrea Franza*
14:15 – 14:30	334	**Tension Piles as A Sustainable and Resilient Solution for Seismic Tunnel Uplift in Liquefiable Ground** *Zhengyao He, Gopal S. P Madabhushi*
14:30 – 14:45	112	**Mechanized Construction of Urban Tunnel Cross Passages: System Innovation and Engineering Practice in Complex Ground Conditions** *Huan Zhu, Yaohong Zhu*
14:45 – 15:00	369	**Presentation and Comparative Analysis of CO2 Emission Estimation Equations for Tunnel Excavation Methods using Korea-Specific Emission Factors** *Haechan Lee, Kiil Song, Minsu Kang*
15:00 – 15:15	418	**Testing the Anti-icing Performance of an Energy Retrofitted Motorway Tunnel for Sustainable Infrastructure Management** *Simone De Feudis, Alessandra Insana, Marco Barla*
15:15 – 15:30	433	**Load Analysis of Shield Tunnel Segments Considering Soil Arching Effect** *Ying Hsuan Chen, Louis Ge*
15:30 – 15:45	378	**Time-Critical Replacement of A Railway Undergrade Structure Applying the Observational Method According to EC7** *René Schäfer, Lukas Mölleken*
15:45 – 16:00		**Tea break & Poster session**
16:00 – 16:25	606	**Learning from Tunnelling Accidents** *Bai Yun*
16:25 – 16:40	607	**Waterproofing and Durability Enhancement of Tunnels and Underground Structures with Xypex Crystalline Technology** *Rob James*
16:40 – 16:55	482	**Advanced TBM Launching and Arrival Techniques in Bangkok: A Case Study of the MRT Purple Line South Extension Integrating Rapidjet Grouting** *Minju Li, Ricky K.N. Wong, Morris I-Min Wang, S.H. Cheng, Kuo Chieh Chao, Prasert Chantawiboon*
16:55 – 17:10	480	**Deformation Assessment and Control for Shield Tunnels** *Renpeng Chen*
17:10 – 17:25	368	**Excavation of Hard Rock Vertical Shafts using VSM: Optimization of Pick Cutter Parameters with Auxiliary Preconditioning** *Hong Joo Lee, Ki Il Song, Hee Hwan Ryu*
17:25 – 17:40	300	**Three-Dimensional Load Transfer Mechanisms in Wide Underground Caverns Supported by Concrete Pillars** *Khoa D.V. Huynh, Roger Olsson, Hans Petter Jostad*
17:40 – 17:55	360	**Cyclic Performance of Welded Steel Linings in Underground Energy Storage Caverns** *Wenbin Fei, Haoxuan Li, Aohui Zhou, Peng Li, Wei Xu*
17:55 – 18:10	366	**Machine Learning-Based Disc Cutter Wear Prediction for EPB Shield TBMs using Operational Sensor Data: RF–ET Ensemble Approach** *Seon Woo Lee, Ki Il Song*
18:10 – 18:25	374	**Conceptual Analysis of Intelligent Steering Control Mechanisms for Autonomous TBM** *Jang-Hyun Park, Ki Il Song*

DAY 1 · THURSDAY, 26 NOVEMBER 2026

Conference Hall 3

Chairman: **Prof. Byron W. Byrne**

Co-Chairman: **Prof. Frank Rackwitz**

Session 5. Offshore Wind Power and Coastal Geotechnics

TIME	ID	PAPER · AUTHORS
13:30 – 13:45	215	**Seismic Response of Offshore Wind Turbine Monopiles in Dense Sand using A Pseudo-Static Finite Element Approach** *Ashish Verma, Narendra Kumar Samadhiya*
13:45 – 14:00	132	**Residual Ultimate Bending Strength of Monopile Offshore Wind Turbine Foundations Subjected to Ship Collision: Effects of Striker Header Shape and Collision Velocity** *Han Nguyen Van, Hung Tran Doan, Thang Do Quang*
14:00 – 14:15	610	**From Bridges to Offshore Wind Turbines: Scour Mechanism, Prediction and Mitigation** *Wang Chen*
14:15 – 14:30	206	**Investigation on the Effectiveness and Costs of Using Solidified Soils as Remediation for Scour Around Monopiles Considering Its Dynamic Evolution** *Yajing Meng, Chen Wang, Fayun Liang, Li Han, Jing Wang, Li Chen*
14:30 – 14:45	398	**Equation - Based Hybrid ANN for Predicting Uplift Capacity of Cassion in Clays** *Duc Quy Le, Quang Thanh Truong, Van Qui Lai*
14:45 – 15:00	364	**Bearing Capacity Degradation of Suction Bucket Foundations in Sand under General Scour** *Sung-Min Song, Kyeong-Sun Kim, Hyeong-Seung Yu, Yunbyeong Chae, Sung-Ryul Kim*
15:00 – 15:15	444	**Effect of Scour on Natural Frequency and Bearing Performance of Offshore Wind Turbines with Tripod Suction Bucket Foundation** *Seungwon Oh, BeomSoo Kim, Sungryul Kim*
15:15 – 15:30	200	**Creep Behaviors of Soft Haiphong Soft Clay and Its Influence on Settlement Prediction of Sea Dike** *Ta Minh Hieu, Nguyen Quang Huy, Duong Bao Phuc, Tuan-Nghia Do, Lua Hoang*
15:30 – 15:45	389	**Trend-Level Analysis of Salinity and Surfactant Factors Affecting $scCO_2$ Flow Behavior in A Rock Micromodel** *Juyeong Lee, Jongwon Jung*
15:45 – 16:00		**Tea break & Poster session**
16:00 – 16:15	401	**Soft Computing to Estimate the Uplift Capacity of Offshore Anchors in Clays** *Nguyen Huy Tong Dao, Bui Truong Son, Duy Tan Tran, Hoang Nghi Le, Van Qui Lai*
16:15 – 16:30	412	**Helical Anchors for Mooring Systems of Floating Offshore Wind Turbines** *Wenbin Fei, Wenzhe Gao, Fei Wang*
16:30 – 16:45	159	**Semi-Analytical Finite Element Analysis of Laterally Loaded Floating Pipe Piles With Emphasis on Interface Elements** *Hizia Zerarka, Djillali Amar Bouzid*
16:45 – 17:00	571	**Installation Methods for Monopiles - A Case Study for Impact and Vibratory Driving** *Viet Hung Le, Duc Long Phung, Frank Rackwitz*
17:00 – 17:15	229	**Evaluation of the Shear Properties of Dewatered Clay: Causes of Differences Between Triaxial Compression and Direct Shear Test Results** *Yoichi Watabe, Hana Kobayashi*
17:15 – 17:30	307	**Engineering Principles and Construction Practices for Breakwater Rock Bunds** *Muthusamy Karthikeyan*
17:30 – 17:45	347	**Nonlinear Seismic Ground Response Analysis of the Coastal Area of Bengkulu City, Indonesia** *Muhammad Disa Syafrizal, Lindung Zalbuin Mase, Weeradetch Tanapalungkorn, Suched Likitlersuang*
17:45 – 18:00	410	**Assessment of Tidal Impact on Storm Surges in the Northern Coastal Areas of Vietnam** *Thu Trang Ninh, Huong Giang Le Thi*
18:00 – 18:15	294	**Characterization of Shear Strength and Small-Strain Stiffness of Diatomaceous Soil** *Ngoc Quy Hoang, Quang Hung Truong, Khoa Minh Tran, Jong Sub Lee*
18:15 – 18:30	496	**Integrated UAV Based Inspection and Finite Element Approach for Structural Condition Assessment of Hybrid Wind Turbine Towers** *Thien Mai Tu, Punchet Thammarak*

DAY 1 · THURSDAY, 26 NOVEMBER 2026

Conference Hall 4

Chairman: **Prof. Stefan Larsson**

Co-Chairman: Dr. Nguyen Tien Dung

Session 3. Ground Improvement

TIME	ID	PAPER · AUTHORS
13:30 – 13:45	358	**Effect of Waste Glass Powder-Based Geopolymer on the Liquefaction Resistance of Sand** *Shaswat Shaswat, Rolando Orense*
13:45 – 14:00	325	**Effect of Deep Soil Mixing–Bedrock Transition Zones on Global Stability** *Siamak Feizi, Stefan Ritter, Marit Skaug Løyland*
14:00 – 14:15	332	**Centrifuge Model Tests on Seismic Resistance of Earth-Fill Dam with A Low-Permeability Core of PSAS-Stabilized Soil** *Yuho Hasuo, Nazuki Hashioka, Akira Izumi, Hiromoto Yamauchi, Daisaburo Koga, Mariko Suzuki, Yusuke Sonoda, Yutaka Sawada*
14:15 – 14:30	584	**Influence of Surface Roughness and Moisture on Clay Interfaces with Binder Modified Coir Geotextiles** *Achal Dhakad, Abitha Babu, Parvathi Geetha Sreekantan, Mariya Dayana Pj*
14:30 – 14:45	447	**An Enhanced Hardening Soil Model with Small-Strain Stiffness for Practical Applications** *Hung M. Ho, Ricardo J. N. Azeiteiro, Ilaria Del Brocco, Tuan A. Bui*
14:45 – 15:00	106	**Stabilization of Expansive Clay by Different Sand Types** *Svetlana Melentijevic, Lorenzo Berardi, Sol López-Andrés*
15:00 – 15:15	136	**Evaluation of Hydraulic Cement Admixture for Reducing Heave in Expansive Soils** *Kuo Chieh Chao, Aung Phyo Kyaw*
15:15 – 15:30	150	**Carbon Capture and Utilization in Ground Improvement: Application of Carbonated Recycled Concrete Fines for Soil–Cement Stabilization** *Sho Nishiie, Takao Kono, Shohei Yamamoto*
15:30 – 15:45	191	**Enhancing Collapse Resistance of Silty Soil Using Geopolymer and Sand Stabilization** *Thanh-Tu Nguyen*
15:45 – 16:00		**Tea break & Poster session**
16:00 – 16:15	158	**In-Situ Experiment of Jet Grouting Method Reducing the Volume of Spoil in Sand Soils** *Ryu Yamanaka, Yuji Taya, Hiroyuki Abe, Kazuhiko Komatsu*
16:15 – 16:30	263	**Stabilization of Soft Soils Under the Skidway by Soil-Cement Columns: Field and 3D Numerical Investigation on the Load-Bearing Capacity** *Huong To Le, Le Ba Vinh, Nguyen Thanh Dat*
16:30 – 16:45	264	**Load-Bearing Capacity of Floating Stiffened Deep Cement Mixing Columns With Variable Diameters** *Tran Huy Nam Hung, Le Ba Vinh, To Le Huong*
16:45 – 17:00	320	**Durability Performance of Soft Soil Stabilized Using Ggbs-Dolomite-Based Alkali-Activated Binder** *Sanjoli Gupta, Suresh Kumar*
17:00 – 17:15	202	**Particle-Scale Evaluation of Bonding Behavior and Moisture Durability in Biopolymer-Treated Silica Sand** *Sangbeen Lee, Jongwon Jung*
17:15 – 17:30	506	**Field Investigation on CDM-Induced Ground Upheaval in Offshore Soft Soil at Patimban Port** *Phuong Dong Le, Thanh T. Nguyen, Ryota Mizuno, Kenichi Iwama*
17:30 – 17:45	386	**Mechanical and Hydraulic Performance of a Fly Ash-Based Low-Cement Water-Sealing Joint Material for Underground Structures** *Hyungbin Park, Munkyeong Baek, Ilhan Chang*
17:45 – 18:00	583	**Geosynthetic Solutions in A River Revetment: A Case Study in Sg. Tiram, Johor, Malaysia** *Muhammad Hazmi Bin Ilias, Muhammad Azim Bin Hamidun, Janne-Kristin Pries*
18:00 – 18:15	146	**Vacuum Preloading Performance Assesment Using Monitoring Data Interpretation and Finite Element Modelling** *Ganny Saputra, Andryan Suhendra*
18:15 – 18:30	175	**A Two-Stage Approach to Optimal Design of Vibro-Compaction Stone Columns** *Luan Nguyen, Yashar Forouzandeh, Conrad Boley*

DAY 1 · THURSDAY, 26 NOVEMBER 2026

Conference Hall 5

Chairman: **Prof. David M. Potts**

Co-Chairman: **Dr. Le Viet Hung**

Extra Session. Geotechnical Modelling and Case Studies

TIME	ID	PAPER · AUTHORS
13:30 – 13:45	367	**Numerical Analysis of Slurry Wall Behavior Due to Blasting** *Choi Sung-Gue, Ki-Il Song, Hyeon-Su Nam*
13:45 – 14:00	143	**Cyclic Shear Testing and Discrete Element Modeling of the Sandbag Component in the T-BAGS Seismic Isolation System** *Joshua Panganiban, Ali Vakilazadsarabi, Kinji Takeuchi, Yasuo Tomono*
14:00 – 14:15	244	**3D Spatial Analysis of Rock Mass Domains Using Leapfrog Geo to Support Geotechnical Characterization** *Kezia Villareal, Sean Paolo Canapi, Elaine Marie Peña, Marceliano Cruz III, Ramon Quebral, Roy Anthony Luna*
14:15 – 14:30	609	**Smart technologies for geological forecasts using 3D-Tunnel Seismics during tunnelling.** *Patrick Furrer*
14:30 – 14:45	421	**Probabilistic Stability Assessment of Footings on Slopes Considering Spatial Variability of Undrained Shear Strength** *Thinh Pham, Tran Vu Hoang, Tan Nguyen*
14:45 – 15:00	425	**Experimental Evaluation of Mid-Rise Building Response Using Quarry Blast Records and Microtremor Array Measurements** *Erdenebold Bayar, Tsoggerel Tsamba, Battulga Batkhuu, Erdenebayar Nyamsuren, Gansukh Erdenedelger, Orkhon Lkhamjav, Oyun Byamba*
15:00 – 15:15	400	**Measurement and Correlation Analysis of Thermal Properties of Granite and Gneiss in Korea** *Jaewon Lee, Jongwon Jung*
15:15 – 15:30	440	**Optimising the configuration and operation of heat exchanger pipes in thermo-active piles** *Shuaijie Zhang, Wenjie Cui, Lidija Zdravkovic, David M. Potts, Chenghao Dai*
15:45 – 16:00		**Tea break & Poster session**
15:45 – 16:00	174	**Risk assessment of vibration effects resulting from pile driving in the vicinity of the railway embankment** *Conrad Boley, Luan Nguyen, Paul Pratter*
16:00 – 16:15	237	**Geotechnical Hazards Susceptibility Evaluation using GIS for Coastal Barangays in Legazpi City, Albay, Philippines** *Anna Bilaro, Hana Myka Dulay, Carmela Mirandilla*
16:15 – 16:30	289	**Assessment of Climate Change Impacts on Landslide Risk in Southern Hokkaido, Japan** *Haruka Yamada, Tatsuya Ishikawa, Hiroki Okachi*
16:30 – 16:45	608	**From Avalanche to Cascading Disaster: Field Reconnaissance of the 2026 Rasuwa Bhotekoshi–Trishuli Event, Nepal** *Kalpana Adhikari, Khemraj Pokharel*
16:45 – 17:00	486	**Engineering Evaluation of HAT+H Retaining Wall System for Tunnel Projects in Vietnam** *Tuyet Trinh Nguyen Thi, Masaya Higashi*
17:00 – 17:15	417	**Anisotropic Effect of Fractional Viscoelastic Rock on The Behavior of Deep Tunnel Supported by A Double Flexible/ Concrete Liner** *Nam-Hung Tran, Duc-Phi Do, Minh-Ngoc Vu, Anh-Tuan Vu, Minh-Ngan Vu*
17:15 – 17:30	188	**Relationship between Walkability and Strength Properties of Muddy Soil for Utilization** *Iori Tominaga, Rongguang Yu, Tomohiro Kato, Atsushi Takai, Takeshi Katsumi*
17:30 – 17:45	488	**Micro–Macro Strength Relationship of Gelatin Treated Soil** *Hyukil Park, Sangbeen Lee, Jongwon Jung*
17:45 – 18:00	163	**Changes in Liquefaction Severity of Beijing with Groundwater Level Rise** *Li Yuan, Wang Rui, Zhang Jian Min*
18:00 – 18:15	131	**Results of Research on the Influence of Pit-Type Reinforced Concrete Wall in the Ground on the Soil Settlement in the Base of the Raft Foundation of a High-Rise Building** *Adiyajav Ganbold, Narantuya Batmunkh*
18:15 – 18:30	213	**Trinh Tuong Debris Flow Triggered by Typhoon Yagi: Morphological Characteristics and Formation Mechanisms** *Nguyen Cong Dinh, Nguyen Chau Lan, Do Tuan Nghia, Nguyen Quang Tuan*

DAY 2 · FRIDAY, 27 NOVEMBER 2026

Conference Hall 1

Chairman: **Prof. Limin Zhang**

Co-Chairman: **Co-chair: Prof. Do Minh Duc**

Session 4. Landslide and Erosion

TIME	ID	PAPER · AUTHORS
8:00 – 8:15	164	**Utilization of Field Investigation Data and Hydraulic Modeling Results for Risk Assessment of a Proposed Power Plant in a Geothermal Facility in the Philippines** *Angelika Mae Custodio, Mariel Alejandro, Anne Jeanette De La Rosa, Arian John Fruto, Kate Trishia Papina, Ramon Quebral, Roy Anthony Luna*
8:15 – 8:30	114	**Assessing Rainfall-Induced Shallow Landslides in Relation to Change in Surface and Groundwater: A Case Study in Thai Nguyen, Vietnam** *Le Minh Vu, Daiki Nakano, Hajime Matsumoto, Akihiko Wakai*
8:30 – 8:45	151	**Enclosing Dam Stability of the Lead-Zinc Enterprise Tailing Dump** *Alan Lolaev, Stanislav Dzeboev, Aleksan Oganesyan, Gurgen Mirzoev, Alana Margieva*
8:45 – 9:00	177	**An Overview of the Main Causes and Impacts of the Recent Landslides and Debris Flows Occurred in the Dong Phuc and Thuong Minh Commune, Thai Nguyen Province in Northern Vietnam** *Akihiko Wakai, Viet Hung Hoang, Go Sato, The Viet Tran, Toru Koike, Van Thang Nguyen, Le Minh Vu, Kengo Osada*
9:00 – 9:15	223	**Characterization and Analysis of Observed Deep-Seated Landslides in A Limestone Quarry Mine in The Philippines** *Dennis Gabriel Jr. Velasco, Andre-jean Pineda, Gian Paulo Reyes, Elaine Marie Peña, Ramon Quebral, Roy Anthony Luna*
9:15 – 9:30	311	**Understanding How Terracing Practices Influence Landslide Hazards in Mountain Environments, with Examples Applied to Sites in Vietnam and China** *Paul Santi, Gonzalo Ronda, Pablo Garcia*
9:30 – 9:45	535	**Submarine Landslides Risk Assessment after the Mega-Earthquake** *Yanlong Li*
9:45 – 10:00	278	**Application of Load and Resistance Factor Design Method (LRFD) in Slope Stabilization by Soil Nail Wall** *Duy Toan Nguyen, Quoc Hung Nguyen, Trung Kien Nguyen*
10:00 – 10:15		Tea break & Poster session
10:15 – 10:30	521	**Slope Stabilization in Conglomeratic Geologies: Geotechnical and Seismic Design Challenges in a Mountain Resort Development in the Philippines** *Jose Carlo Eric Santos, John Michael Gargullo, Abrahm Raphael Ortega, Jose Miguel Ballecer, Manuel Miguel Lenin Muhi*
10:30 – 10:45	141	**Assessment of Debris-flow Hazards using the RAMMS Model: The Case Study at Noc Ong De, Hamlet 1, Tra Leng Commune, Da Nang City** *Kien Vu Van, Lan Nguyen Chau, Nghia Do Tuan*
10:45 – 11:00	194	**Probabilistic Landslide Susceptibility Mapping Considering Soil Parameter Uncertainty** *Quoc My Dang, Viet Dat Le, Huu Nghia Bui, Quang Huy Tran, Van Qui Lai*
11:00 – 11:15	199	**Geological-Geotechnical Stability Assessment of a Proposed Sublevel Open Stope Mine in Northern Philippines using a 3D Information Model Framework** *Desz Justinne Ocampo, Francis Jenner Bernales, Patrick Adrian Selda, Roy Anthony Luna, Marceliano Cruz, Ramon Quebral*
11:15 – 11:30	399	**Improvement of Debris Flow Hazard Assessment Techniques and Hazard Mapping Considering Impact of Wildfire** *Bumsik Hwang, Sangmuk Seok, Young-Ho Kim*
11:30 – 11:45	562	**Rainfall-Induced Unsaturated Slope Failure using the Material Point Method with Porewater Pressure and Effective Stress Response** *Tatag Yufitra Rus, Kuo-Hsin Yang, Wei-Lin Lee*
11:45 – 12:00	180	**Slope Stabilization of a Rainfall-Induced Landslide in Hydrothermally Altered Soils: A Case Study from a Geothermal Facility in Southern Philippines** *Charissa Allyana Chua, Arian John Fruto, Arlene Paulino, Roy Anthony Luna, Elaine Marie Peña*
12:00 – 12:15	265	**Slope Stability Analysis under Limited Site Characterization: A Sensitivity-Calibrated Approach for a Serpentinite Quarry in Western Philippines** *Roodney C. Ortal, Laurenz L. Alibuyog, Marian Therese R. Legaspi, Rhey T. Gonzales, Elaine Marie Z. Peña, Patrick Adrian Y. Selda, Gian Paulo D. Reyes, Roy Anthony C Luna*

DAY 2 · FRIDAY, 27 NOVEMBER 2026

TIME	ID	PAPER · AUTHORS
12:15 – 12:30	563	**Study on the Development of Tensile Force in Reinforced Layers of Reinforced Soil Wall: A Physical Test** *Bui Le Duy Anh, Nguyen Quang Huy, Le Thi Ngoc, Luong Minh Huyen, Doan Huu Hieu, Tuan Nghia Do, Hoang Thi Lua*
12:30 – 13:30		**Lunch break and Poster session**
13:30 – 13:45	341	**Experimental Study on the Effectiveness of Baffle Structures in Mitigating Debris Flow Impacts** *Thanh Son Nguyen, Duc Hung Dam, Van Nguyen Dinh, Thi Nga Phan, Tuan Anh Le*
13:45 – 14:00	344	**Effectiveness of Drainage Well Systems for Groundwater Control and Rainfall-Induced Landslide Mitigation: A Flume Experimental Study** *Thanh-Son Nguyen*
14:00 – 14:15	393	**Interaction between Anchored Retaining System and Adjacent** *Buildings on Colluvial Slopes: A Case Study in Sapa, Vietnam* *Manh Luc Bui, Tuan Nghia Do, Chau Lan Nguyen*
14:15 – 14:30	449	**A Case Study on Landslide Stabilization of a Roadway Cut near Kırıkkale, Türkiye** *Serkan Ucer, Bahadir Sadik Bakir*
14:30 – 14:45	181	**Research Activities to Improve Design Procedures for Bank Protection Measures at German Waterways** *Oliver Stelzer, Lena Mengel, Julia Rothschink, Bahaeldeen Zaid*
14:45 – 15:00	270	**The Influence of Sandbar Migration on the Local Scour and Erosion Around the River Bridge Pier** *Tasuku Tanaka, Kenji Watanabe*
15:00 – 15:15	345	**Early-Stage Above-ground and Below-ground Herbivory Influence of Lemongrass as a Nature-Based Erosion Protection System** *Mohamad Syazwan Mohd Roslee, Vynotdni Rathinasamy, Ahmad Zharfan Ahmad Husaini, Anis Adriana Mohd Rashid, Mastura Azmi, Mohd Firdaus Md Dan, Dayang Zulaika Abang Hasbollah, Mariatul Kiftiah Ahmad Legiman*
15:15 – 15:30	346	**Seismic Vulnerability of Riverbank Stability under Flood Conditions: A Case Study of the Muara Bangkahulu River, Bengkulu, Indonesia** *Ahmad Arif Apriadi, Lindung Zalbuin Mase, Weeradetch Tanapalungkorn, Phadungsak Hong-in, Veerayut Komolvilas, Suched Likitlersuang*
15:30 – 15:45	395	**Quantitative Rock Mass Characterisation of the Semantan Formation Shale Using GSI and Q-System for Underground Excavation Feasibility** *Ahmad Zharfan Ahmad Husaini, Vynotdni Rathinasamy, Mohamad Syazwan Mohd Roslee, Mohd Ashraf Mohamad Ismail, Ramesh Murlidhar Bhatawdekar, Eka Kusmawati Suparmanto*

Conference Hall 2

Chairman: **Prof. Gang Zheng**

Co-Chairman: **Assoc. Prof. Chao Kuo Chieh**

Session 7. AI in Geotechnical Engineering

TIME	ID	PAPER · AUTHORS
8:00 – 8:15	474	**PINN-based Pore Pressure and Subsidence Analysis under the Seasonal Groundwater Drawdown Conditions** *Pham Huy Giao, Doan Huy Hien, Pham Quy Ngoc, Bui Xuan Hanh*
8:15 – 8:30	522	**Bearing Capacity of Pile-reinforced Foundations: A Prediction Model** *Alireza Ahangar Asr, Masoud Yaghobian*
8:30 – 8:45	228	**Machine Learning Based Polynomial Regression for Predicting Pile Load Capacity: Advanced Analysis of Pile Driving Forces and Depths in Urban Ho Chi Minh City Construction Sites** *Hieu Tran Trung, Vinh Le Ba, Tran Thanh Danh*
8:45 – 9:00	239	**Dynamic Soil–structure Interaction Under Seismic Excitation: FEM Modeling, Parametric Analysis, and ANN-Based Response Prediction** *Le Ngoc Vinh An, Le Gia Bao, Pham Bao Huy, Nguyen Hoang Quan, Nguyen Trung Tin, Dang Vuon Thinh, Nguyen Trung Kien*
9:00 – 9:15	464	**Analytical-informed hierarchical modelling of helical anchors** *Stefano Collico, Spagnoli Giovanni, de Sousa Oliveira Caio César, De Hollanda Cavalcanti Tsuha Cristina*
9:15 – 9:30	277	**AI-Based Framework for Tunnel Defect Detection, and Structural Assessment Using the TSI Index: A Case Study in Brazil** *Leandro Silva De Assis, Bernardo Lopes Poncetti, Melquiades Choquepuma Sahuinco, Marcos Massao Futai*
9:30 – 9:45	350	**Slope Soil Depth Prediction by Ensemble Deep Learning Models** *Jaya Bahadur Bista, Netra Prakash Bhandary*
9:45 – 10:00	155	**Landslide Susceptibility Assessment Using SHAP Enhanced Machine Learning under Weight Uncertainty: Case Study in Thailand** *Pham Gia Huy, Tirawat Boonyatee, Van Qui Lai*
12:30 – 13:30		**Lunch break and Poster session**

DAY 2 · FRIDAY, 27 NOVEMBER 2026

TIME	ID	PAPER · AUTHORS
10:15 – 10:30	580	**City-Scale Ground Models and Smart Geotechnics: Technical Innovation and Strategic Enablement of AI in Geotechnical Engineering** *Rodrigo E Betanzo*
10:30 – 10:45	165	**Physics-Informed Neural Network Modeling of Rainfall-Induced Infiltration in Unsaturated Slopes** *Chao Kuo Chieh, Kaenpuek Napattarapong, Terdkiad Nontapot*
10:45 – 11:00	402	**Establishing a Slope Stability Evaluation Framework in South Korea: Integrating Factor Reclassification and Machine Learning Analyses** *Teawan Bang, Wanjei Cho*
11:00 – 11:15	343	**Compaction Quality Assessment Based on Machine Learning with Small Datasets** *Wenjun Hua, Carl Wersäll, Stefan Larsson*
11:15 – 11:30	217	**Applying the Graph Network Simulator to MPM-DDA framework for Fast Simulation of Construction Machinery–Soil Interaction** *Shinnosuke Matsumi, Toshiro Hata, Ryota Hashimoto, Ryota Sekizuka, Yasuhiko Shimazu, Takayuki Doi*
11:30 – 11:45	468	**Reliability-Based Settlement Assessment of Shallow Foundations over Cavity Using ANN Surrogate Modelling** *Kumar Shubham, Subhadeep Metya, Arindam Dey, Budhaditya Hazra*
11:45 – 12:00	501	**Automated Thermal Stress Analysis in Massive Concrete Structures using Python and AI-Assisted MCT Generation** *Ngoc-Tuyen Tran, Tien-Toi Pham, Chi-Cong Vu, Hong-Lam Dang, Duc-Phi Do*
12:00 – 12:15	122	**Uncertainty-Aware Surrogate-Based Bayesian Inference for THM Parameter Identification in COx Claystone Heater Experiments** *Pham Quang Hieu, Do Duc Phi, Vu Minh-Ngoc, Hoxha Dashnor*
12:30 – 13:30		**Lunch break and Poster session**

Conference Hall 2

Chairman: **Prof. Tatsuya Ishikawa**

Co-Chairman: **Dr. Nguyen Trung Thanh**

Session 8. Geotechnics for High-speed Railways

TIME	ID	PAPER · AUTHORS
13:20 – 13:45	355	**Advanced Sensing and Modeling of Ballasted Track Deformation Behavior** *Erol Tutumluer, Youssef Hashash, Bin Feng, Zhongyi Liu, Yuamar Basarah, Xuecheng Bian*
13:45 – 14:00	219	**From Risk Inspection to Practical Solutions: A Case-Based Evolution of Consulting Services for Rail Transit in Soft Coastal Deposits** *Jizheng Huang, Yun Bai*
14:00 – 14:15	187	**Design Method of High-speed Railway Subgrade Structure based on Dynamic Theory** *Yangsheng Ye, Degou Cai, Hongye Yan, Zongqi Bi, Ke Su, Shimin Li*
14:15 – 14:30	189	**Physical Modeling of Geosynthetic-Reinforced Pile-Supported Embankments for High-speed Railways on Soft Soil Under Cyclic Dynamic Loading: Experimental Evidence from Vietnamese Geological Conditions** *Thuan Tran Van, Hung Nguyen Van, Lan Nguyen Chau*
14:30 – 14:45	140	**Evaluating the Unsaturated Mechanical Properties of Stabilized Marginal Subgrade Material for Sustainable Pavement** *Michael Sarpong, Tatsuya Ishikawa, Samuel Kingangai, Tetsuya Tokoro*
14:45 – 15:00	154	**Effect of the Stiffness Ratio Between the Subgrade Layer and Ballast Layer on the Performance of High-speed Train** *Danh Huy Nguyen, Hoang Khang Pham, Ngoc Truong Nguyen, Quoc Bao Nguyen, Thanh Son Nguyen, Van Qui Lai*
15:00 – 15:15	419	**Type-Geology Guided Geotechnical-Geophysical Integration for Railway Site Characterisation in Southern Sweden** *Joakim Robygd, Tina Martin*
15:15 – 15:30	287	**Geotechnical Diagnosis and Management of Land Subsidence and Slopes for High-speed Railways: Lessons from the Taiwan High-speed Rail Corridor** *Hanwei Yang, Huai Ju Tu, S. J. Kigoshi, Y. C. Tseng, C.L Ong*
15:30 – 15:45	125	**Degradation Assessment of Ballasted Track Substructure Using Ground Penetrating Radar** *Shunsuke Nakajima, Kimitoshi Hayano, Takahisa Nakamura*
15:45 – 16:00	260	**The Effect of the Dynamic Modulus of Deformation during Thawing Permafrost Soils at the Base of the High-speed Railway** *Petriaev Andrei, and Sviatogorova Anastasiia*

DAY 2 · FRIDAY, 27 NOVEMBER 2026

Conference Hall 3

Chairman: **Prof. David M. Potts**

Co-Chairman: **Co-chair: Dr. Le Viet Hung**

Session 6. Geotechnical Modelling and Monitoring

TIME	ID	PAPER · AUTHORS
8:00 – 8:15	473	**Possible Contributions of Microtremor Measurements in Geotechnical Characterization of the Subsurface underlying a Railway Line** *Pham Huy Giao, Bui Xuan Hanh, Nguyen Tien Hung, Doan Huy Hien*
8:15 – 8:30	483	**Characterizing the Coupled Thermo-Hydro-Mechanical Behavior of Saline Sand** *Lizhen Feng, Jiyun Nan, Lee Jong-Sub*
8:30 – 8:45	328	**3D SPT-Seismic Testing for Geotechnical Site Characterization** *Khiem Tran, Bingkun Yang*
8:45 – 9:00	456	**An Estimation Procedure for Determination of Site Amplification Factor at a Site in Mandalay City by Microtremor Observations** *Aung Aung Soe, Yoshimitsu Yamada, Tatsuru Aoyama, Tomoyuki Kaneko, Teppei Iwai*
9:00 – 9:15	245	**On the Feasibility of GPR Assessment for Non-contact Landmine Detection** *Ushma Garg, Silky Agrawal, Amit Prashant*
9:15 – 9:30	226	**Development of an ERT-Based Modelling Framework for Thickness Profiling in Pavement** *Merlin Sindhiya J, Amit Prashant*
9:30 – 9:45	591	**DEM-Derived Pore-Network Modelling of Void-Ratio and Grain-Size Effects on Soil-Water Retention Curves** *Nazanin Mahboobi Motlagh, Arman Khoshghalb, and Nasser Khalili*
9:45 – 10:00	423	**Detection of Bored Pile Defects Based on Time Domain Reflectometry Considering Electromagnetic Energy Distribution** *Younghoon Lee, Jong-Sub Lee, Hyunseon Yu, Dongsoo Lee*
10:00 – 10:15		**Tea break and Poster sess ion**
10:15 – 10:30	478	**High-Precision GNSS for Slope Displacement Monitoring in Vietnam: From Experimental Validation to Field Application** *Trung Kien Nguyen, Tomoharu Iwasaki, Kazuki Nakayama, Kento Otani, Chikako Araya, Quang Tuan Nguyen, Quang Tu Pham, Norikazu Shimizu*
10:30 – 10:45	211	**Assessment of Slope Stabilization Measures for an Open-Pit Mine Aided by Real-Time Radar Monitoring Data** *Neiza Minette D. Cartin, Hannah Andrea P. Romerosa, Alfrelinda Lee Grace B. Mopas, Francis Arlo G. Phi, Elaine Marie Z. Peña, Gian Paulo D. Reyes, Patrick Adrian Y. Selda, Ramon D. Quebral, Roy Anthony C Luna*
10:45 – 11:00	403	**Numerical Study on Embedment and Resistance Behavior of a Korean Homi-Type Drag Anchor in Different Clay Profiles** *Hyeong-Seung Yu, Yong-Sung Park, Sung-Ryul Kim*
11:00 – 11:15	322	**Rigid-Body Displacement of Buildings Subjected to Three-Dimensional Excavation-Induced Ground Movements** *Adriana Hernandez-Guardado, Francesco Petrella, Andrea Franza*
11:15 – 11:30	443	**Liquefaction-Induced Settlement of Buildings with Shallow Foundations on Stratified Soil Deposits with Liquefiable and Non-Liquefiable Layers** *Tae-Hun Hwang, Tae-Wan Kim, Quang-Thien-Buu Nguyen, Sung-Ryul Kim*
11:30 – 11:45	459	**Finite Element Modeling of Scenario-Driven Land Subsidence in Hiep Binh District, Ho Chi Minh City** *Lua Hoang, Vinh Pham, Viet Tran, Dung Pham*
11:45 – 12:00	529	**Shear-Induced Ultrasonic Wave Evolution and Fracture Development of Rock Bridges with Varying Lengths: Experimental and DEM Study** *Hoang-Khanh Le, Hung-Hui Li, Meng-Chia Weng, Wen-Chao Huang, Huy Hoang Phan*
12:00 – 12:15	178	**Extension of the Hydro-Geotechnical TAG-FLOW Model for Urban Flood Analysis: A Preliminary Study in the Chatuchak District, Bangkok, Thailand** *Takako Ochi, Akihiko Wakai, Kazuho Nakayama, Chatuphorn Somphong, Detchphol Chitwatkulsiri, Yume Inoue, Haruki Yoshino, Minori Miyauchi, Nika Kumano, Yuta Shimamoto, Yui Yanagida*
12:15 – 12:30	561	**Development of a Carbon Calculator for Ground Engineering Applications in the Middle East** *Mohamed H. Mahmoud, Omar Hamza*
12:30 – 13:30		**Lunch break and Poster session**

TIME	ID	PAPER · AUTHORS
13:30 – 13:45	168	**Evaluation of Retaining Wall and Surrounding Ground Behavior in Soft Cohesive Soil using the Hardening Soil Model in FEM Analysis** *Hiroto Kumagai, Takao Kono, Shou Nishiie*
13:45 – 14:00	157	**Near Real-Time Shallow Landslide Risk Assessment Based on Numerical Simulation Considering Time-History Rainfall Intensity: A Case Study in Central Vietnam** *Yuzuka Hoshi, Takako Ochi, Tomoyuki Wada, Akihiko Wakai*
14:00 – 14:15	161	**Finite Element Analysis of Monopiles Supporting OWTs in Sand Using a Nonlinear Vertical Slices Model: Emphasis on Soil-Monopile Stiffness Charts** *Djillali Amar Bouzid, Lalahoum Otsmane, Subhamoy Bhattacharya, Suresh Dash*
14:15 – 14:30	149	**Use of Mini Disk Infiltrometer with Merging Particle Filter in Rapid Estimation of Soil Hydraulic Properties** *Xuesen Li, Kiyonobu Kasama, Yuichi Yahiro*
14:30 – 14:45	156	**An Optimal Sensor Placement on Rainfall-induced Slope Failure** *Lin Nuofeng, Kasama Kiyonobu, Hu Lihang*
14:45 – 15:00	293	**Micromechanical Behaviors of Soluble Granular Media under Direct Shear Test** *Quy Hoang N., Jong-Sub Lee, Khoa Tran M., Hung Truong. Q.*
15:00 – 15:15	365	**Effect of Hammer Energy on SPT N-Values and Soil Properties** *Anbazhagan Panjamani, Yadhunandan M E, Ayush Kumar*
15:15 – 15:30	377	**Microstructural Evolution and Mechanical Behavior of Clay Aggregates: Insights from Coarse-Grained Molecular Dynamics** *He-Mei Sun, Xin Kang*
15:30 – 15:45	479	**Advances in Dynamic Centrifuge Modeling of Geotechnical Systems** *Mohamed Ghazy, Tarek Abdoun, Waleed El-Sekelly*

Conference Hall 4

Chairman: **Prof. Stefan Larsson**

Co-Chairman: **Dr. Nguyen Tien Dung**

Session 3. Ground Improvement

TIME	ID	PAPER · AUTHORS
8:00 – 8:15	284	**Performance Evaluation of Stone Columns for Soft Ground Improvement using PLAXIS 3D Approach** *Dinesh Kumar Malviya, Xiong Xi, Chung Nguyen Van*
8:15 – 8:30	130	**Sustainable Geosynthetic Solutions for Soil Reinforcement** *Allam Saikumar, Gali Madhavi Latha, Hasthi Venkateswarlu*
8:30 – 8:45	288	**An Experimental Study on the Effect of Cement Type and Seawater on the Properties of Soil Cement Mixing** *Dinh Cuong Nguyen, Trung Kien Nguyen*
8:45 – 9:00	445	**Stability Analysis of Newly Constructed Road Embankments over Subsurface Karst Cavities: A Case Study in Cao Bang, Vietnam** *Manh Nguyen Duc, An Ho Sy, Dinh Nguyen Cong*
9:00 – 9:15	183	**Comprehensive Evaluation of Lyophilized Sporosarcina pasteurii for Driving Microbial-Induced Calcite Precipitation (MICP) on Bangkok Soft Clays** *John Allan Gulles, Kuo Chieh Chao, Louis Ge, Yu Syuan Jhuo, Ekbordin Winijkul, Jayzon Bitacura*
9:15 – 9:30	338	**Mechanical Properties and Performance of Cement-Stabilized Sea Sand: A Review** *Ngoc Son Be, Van Quan Tran, Lanh Si Ho*
9:30 – 9:45	385	**Image-Based Quantification of Time-Dependent CaCO3 Precipitation in Biopolymer–EICP Treatment** *Sae-Bom Kim, Suhyuk Park, Ilhan Chang*
9:45 – 10:00	104	**Behavior of A Road Embankment under Increased Loading using Material Point Method** *Hung-Thoi Do*
10:00 - 10:15		**Tea break and Poster session**
10:15 – 10:30	384	**Strength Characteristics and Microstructural Analysis of Soil Treated with a Biopolymer-based Soil Treatment (BPST) and Enzyme-Induced Calcite Precipitation (EICP) Hybrid Method** *Dongcheon Lee, Suhyuk Park, Ilhan Chang*

TIME	ID	PAPER · AUTHORS
10:30 – 10:45	261	**Cyclic Undrained Triaxial Tests for Investigating the Effect of Soil Particle Self-Weight on Liquefaction Behavior Using Lightweight Sand** *Rena Kawasaki, Hailong Wang, Tokio Morimoto*
10:45 – 11:00	317	**Non-Destructive Testing for Evaluation of Improved Soil with Alternative Binders** *Priscilla Paniagua, Filip Karlsen, Steinar Sund-Olsen, Sølve Hov, Stefan Ritter*
11:00 – 11:15	182	**Long-Term Weathering Testing and Field Performance of Geotextile Containment Systems in Coastal Infrastructure Projects** *Lum Kong Lim, Yit Huan Loh, Soon Hoe Chew*
11:15 – 11:30	327	**A Study on Physical and Mechanical Properties of Municipal Incinerator Bottom Ash as a Road Backfill Material in Vietnam** *Dai-Binh Phung, Anh-Tuan Vu, Duc-Phong Pham, Duc-Tiep Pham, Van-Tu Nguyen, Van-Tuan Vu, Tuong-Lai Nguyen*
11:30 – 11:45	234	**Application of Non-Invasive Geophysical Methods for Assessing Bridge Approach Deformation: Case Studies from the Philippines** *Sean Paolo Canapi, Kate Trishia Papina, Monica Panes, Elaine Marie Peña, Ramon Quebral, Roy Anthony Luna*
11:45 – 12:00	441	**Measurement of Saturated Hydraulic Conductivity of Soil Using a Consolidometer and Flow Pump System** *Yu-Chiao Wang, Louis Ge*
12:00 – 12:15	359	**Mechanical Properties of Cement-Treated Laterite Soil Reinforced with Natural and Synthetic Fibers** *Quan Hong Pham, Hieu Trung Tran, Lanh Si Ho*
12:15 – 12:30	302	**Negative Skin Friction on Piles Adjacent to Vacuum-Preloading Improved Ground** *Huan Vo*
12:30 – 13:30		**Lunch break and Poster session**
13:30 – 13:45	268	**Ground Improvement Design for a Container Terminal Berth Constructed over Challenging Subsurface Conditions in the Philippines** *Kirsten Julia Cruz, John Michael Tanap, Gian Paulo Reyes, Roy Anthony Luna*
13:45 – 14:00	280	**Characteristics of Fluidized Soil Using CCU Material Derived from Ground Improvement Soil Spoils** *Takao Kono, Minami Sugimoto, Yuta Onuki*
14:00 – 14:15	461	**Criteria for Foundation Treatment of Mine Waste Dumps in Brazil** *Gino Omar Calderon Vizcarra*
14:15 – 14:30	105	**Hybrid Ground Improvement for a 90 m High Tailings Dam on Soft and Loose Foundations: From Jet Grouting to Vibro-Replacement with Cement-Treated Stone Columns** *Braz Da Silva, Nuno Alexandre Lopes, Miriam Silva Fabio*
14:30 – 14:45	171	**Long-Term Settlement Characteristics of Test Course Construction using the Vacuum Consolidation Method** *Toru Sasaki, Ono Atsishi*
14:45 – 15:00	504	**Dynamic Behavior of Biopolymer-Treated Soil in Varying Environmental Conditions** *Thien Q. Huynh, Tung T. Hoang, Kien C. Nguyen, Thanh T Nguyen*
15:00 – 15:15	396	**Prediction Settlements of Improved Ground by Preloading/PVD Using Analytical Solution: A Case Study in Viet Nam** *Quoc Bao Nguyen, Van Duc Lam, Thai Trung Le, Van Qui Lai*

SESSION 1
Deep Foundations

ID	PAPER · AUTHORS
497	**The calculation of axial and bending loads in laterally loaded piles from strain gauge measurements** *Van der Berg Franco*
291	**Shaft-Grouted Bored Piles: The Optimization of the Pile Length in Fine Sand** *Dao Thi Van Tram, Tran Huy Hung, Nguyen Cong Oanh*
429	**Application and Research on Composite Pile Foundation in High-rise Residences** *Zhang Li*
167	**In-situ Full Scale Compression Load Tests for ST-Micropile** *Toushiba takashi*
304	**Performance of Ocell Tested Drilled Shafts Interpreted Based on Measured Rebar Gage Data** *Wang Yi Fang*
323	**An Analysis of Brazilian Practice for Global Methodological Convergence in Deep Foundations** *Aanias de Mendonça Antônio, do Nascimento Alves Marcelo Henrique, Pinto Soares de Mendonça Ecidinéia, Lobato de Paula André, de Souza Villar Lúcio Flávio*

SESSION 2
Tunnelling and Underground Spaces

ID	PAPER · AUTHORS
387	**Design and Performance Assessment of an Environmentally Sustainable Hydrogel Grout for Tunnel Backfilling Applications** *Juyoung Kim*
329	**Control Of Surface Settlement During Tunnel Construction By The Tunnel Boring Machine Method- A Case Study Of The Hanoi Metro Line 3 Project** *Nguyen Van Quang, Trinh Quoc Tuan, Luu Hoang Phuong, Nguyen Trung Kien, Phan Trung Nghia, Nguyen Tien Dung, Van Nguyen Dang, Nguyen Anh Tuan*
144	**Experiences in Managing and Mitigating Major Incidents during the Construction of Hanoi Metro Line 3** *Hoang Phuong Luu, Tien Dung Nguyen, Van Quang Nguyen, Tran Thi Phuc*
388	**Determination of Fire and Gas Sensor Spacing in Utility Tunnels Using Computational Fluid Dynamics** *Kong Suk-Min, Byun Yoseph, Lee Gi-Jun, Kim Ah-Ram, Park Jae-Hyun, Lee Seong-Won*
169	**Evaluating Influences of Groundwater Level in Deep Excavations with Irregular Configurations** *Yoon Jong Hyeog*
348	**Properties of Ho Chi Minh City soft clay for analysis of deep and tunnelling excavation** *Nguyen Kiet Hung*
247	**Influence of Construction Gaps between Sheet-Pile Walls and CDM Grids on Lateral Wall Displacement of Bottom-Up Excavations in Soft Clay** *Bui Bao Nhu, Le Tran Minh Thu, Le Hoang Quan, Nguyen Huynh Huy, Nguyen Minh Trung, Le Trong Nghia*
490	**Evaluation of Two-Dimensional Detached Eddy Simulation for Ventilation Flow in Underground Spaces** *Xuan Ho Truong, Quoc Nguyen Y, Anh Tran Minh*

SESSION 3
Ground Improvement

ID	PAPER · AUTHORS
117	**Application of the CSM (Cutter Soil Mixing) Method to Soil–Cement Steel Diaphragm Walls** *Sakuma Seiya*
243	**Effect of Spatial Variability of CDM-Improved Soil Stiffness on Deep Excavation Wall Performance** *Nguyen Huynh Huy, Tran Minh Thach, Nguyen Nhut Duy, Bui Bao Nhu, Nguyen Trung Kien*
275	**Influence of Surface Films on the Effectiveness of Soil Stabilization by Resin Injection** *Letunovskaya Svetlana, Samarin Eugene*
281	**Chemical Piles as an Effective Method for Strengthening Water-Saturated Clay Soils** *Margarita Gravis, Evgeniy Samarin*
415	**A Study on the Application of Ground Mixing Method for Soil Stabilizer Using Industrial By-products(in the Can Tho Area of Vietnam)** *Seo Se Gwan*
305	**Numerical and Analytical Assessment of D-Box Bag Ground Improvement for Soft Soil in Dong Thap Province** *Le Bao Quoc*
531	**Time-Dependent Evolution of Bearing Capacity and Microstructural Characteristics of Soft Soil Stabilized with GGBFS–WFN** *Nguyen Ba-Phu*
487	**Impact of Biochar on Improvement of Saline Soils** *Shah Syed Kamran Hussain, Ahmad Numan, Malik Adnan Anwar, Ali Umair*
271	**Understanding Properties of Loess Soil in Tajikistan and Improving the Properties of Loess Soils** *Shanina Violetta*

SESSION 4
Landslide and Erosion

ID	PAPER · AUTHORS
121	**Landslide Susceptibility Mapping Using Geological and Geomorphological Analysis in Hoang Su Phi District, Tuyen Quang Province, Vietnam** *Nguyen Thi Ha*
203	**Characteristics of Shallow Landslides Distribution based on Geographic and Geological Analysis in Lao Cai Province, Northern Vietnam** *Yamaguchi Akari*
214	**Rock Landslides in Dagestan: Unraveling Genesis through Geological Structure** *Shubina Daria, Fomenko Igor, Strom Alexander, Naumov Mikhail, Idrisov Idris, Gorlov Andrey*
564	**Back Analysis of the Highway Embankment Slopes during the 2007 and 2024 Noto Peninsula Earthquakes** *Jiang Jingcai, Yuasa Yasufumi, Li An-Jui, Nguyen Bao Viet*
128	**GIS-Based Multi-Criteria Analysis (MCA–AHP) for Coastal Erosion Susceptibility Mapping in Eastern Ca Mau, Vietnam** *Dao Hong Hai, Pham Xuan Duc*
250	**Investigate the Role of Physochemical Composition in Basaltic Soil on the Landslides Disaster** *Nguyen Huu Son, Khau Thi Ly, Huynh Trung Tin*
110	**Determining the Shear Parameters of the Coal Seam and Claystone Contact based on the Performance of In-situ Large-scale Shear Tests** *Kostal Jiri, Cernoch Petr*
331	**Investigation of Bio-mediated Treatment Effect on Rainfall-Induced Shallow Landslide with Large-Scale Model Tests** *Teng Fuchen, Sie Yong-Cheng, Yeh Fu-Hsuan, Kuo Chihping, Lin Chun-Hung, Chen Wei-Chih, Chung Chih-Chung*
611	**Nepal Rasuwa Bhotekoshi flood 2026 and its impact on Engineering, Social and Economic conditions** *Khemraj Pokharel*

SESSION 6

Geotechnical Modelling and Monitoring

ID	PAPER · AUTHORS
242	**Multi-platform modeling strategy for the seismic coupling Soil-Structure Interaction: Deviations from the traditionally fixed-support analysis** *Nguyen Minh Trung, Nguyen Khac Tan Da, Nguyen Huynh Huy, Nguyen Trung Kien*
176	**Numerical Analysis of the Failure Envelopes for Tetrapod Suction Caisson** *Kang Sangwook*
240	**Stochastic Load-Settlement Behaviour of CDM Piles with Spatially Variable Deformation Modulus** *Nguyen Khac Tan Da, Tran Minh Thach, Nguyen Minh Trung, Nguyen Huynh Huy, Nguyen Trung Kien*
118	**Cable Duct Excavation using a Mechanised Shield – Autonomous Geotechnical Monitoring during Excavation** *Mixa Miroslav, Košťál Jiří, Černoch Petr*
324	**Thermal Characterization And Field Performance Assessment Of Shallow Geothermal Systems For Building Heating And Cooling In Hanoi, Vietnam** *Quach Duc Tin, Shiga Tsuyoshi, Nguyen The Duc, Vu Hong Dang, Tran Trong Thang, Nguyen Trong Hien, Huynh Van Thuan, Mai Phu Luc*

SESSION 7 & SESSION 8

AI in Geotechnical Engineering & Geotechnics for High-speed Railway

ID	PAPER · AUTHORS
227	**Deep Learning-Based Prediction of Consolidation Settlement in Soft Clay Incorporating Embankment Loading History** *Seungjin Lee*
525	**From Data-Rich to Decision-Smart: A Geotechnical Value Chain for Intelligent and Risk-Informed Infrastructure Management** *Tuan A. Pham*
108	**Chinese Railway Tunnel Design Practices and Their Implications for Vietnam** *Dinesh Kumar Malviya, Ang Chen*
426	**Numerical analysis of railway embankment performance on soft ground improved by PVDs–SC columns** *Nguyen Ba-Phu, Nguyen Thanh T, Mridakh Ahmed Hamza, PradhanAnanta Man Singh*
236	**Cyclic Strength of Compacted Cohesive Soil for Railway Embankments Under Varying Seismic Loading Frequencies** *Majumder Soumik, Sachan Ajanta*

DAY 1 · THURSDAY, 26 NOVEMBER 2026

TIME	#	COMPANY · PRESENTATION
10:00 – 10:20	1	**Maccaferri & Vinh Hung Trading, Consulting and Construction Joint Stock Company** *Presentation topic to be confirmed*
10:20 – 10:35	2	**MC-Bauchemie Müller GmbH & Co. KG** *TBM Innovations by MC-Bauchemie*
10:35 – 10:50	3	**Xuan Mai Investment and Construction Corporation** *Introduction to Xuan Mai Corp (video)*
10:50 – 11:05	4	**Okuyama Boring Co., Ltd.** *Okuyama Boring Technologies - Advanced Landslide Monitoring and Groundwater Drainage Solutions in Viet Nam*
11:05 – 11:20	5	**Xypex Chemical Corporation** *The Benefits of Xypex Crystalline Technology*
11:20 – 11:35	6	**Sunward** *Innovation and Application of Dual-Mode Shield Machines Under Complex Geolo*
11:35 – 11:50	7	**Solmax Geosynthetics Asia Sdn. Bhd.** *Elevating Vietnamese Infrastructure Performance – Innovative Geosynthetic Solutions by Solmax*
11:50 – 12:05	8	**ICG Innovative and Creative Geotechnical Engineering JSC** *Presentation topic to be confirmed*
12:30 – 13:30		**Discussion & lunch break**
13:30 – 13:45	9	**Geotech International Pte Ltd (Worldsensing)** *Advancing Sustainable Infrastructure – Enabling Smarter Decisions Through Wireless IoT in Geotechnical Monitoring*
13:45 – 14:00	10	**Shandong Geosky Technology Co., Ltd.** *Presentation topic to be confirmed*
14:00 – 14:15	11	**FECON Raito Underground Construction Joint Stock Company** *Presentation topic to be confirmed*

DAY 1 · THURSDAY, 26 NOVEMBER 2026

TIME	#	COMPANY · PRESENTATION	BOOTH
10:00 – 10:20	1	**Maccaferri & Vinh Hung Trading, Consulting and Construction Joint Stock Company** *Sustainable Solutions for Railway Infrastructure*	37 & 38
10:20 – 10:35	2	**MC-Bauchemie Müller GmbH & Co. KG** *TBM Innovations by MC-Bauchemie*	57 & 58
10:35 – 10:50	3	**Xuan Mai Investment and Construction Corporation** *Introduction to Xuan Mai Corp (video)*	Bronze sponsor
10:50 – 11:05	4	**Okuyama Boring Co., Ltd.** *Introduction to Okuyama Boring Co., Ltd.*	06
11:05 – 11:20	5	**Xypex Chemical Corporation** *Xypex Crystalline Waterproofing Technology & Solutions*	25
11:20 – 11:35	6	**Sunward** **Innovation and Application of Dual-Mode Shield Machines Under Complex Geology**	Silver sponsor
11:35 – 11:50	7	**Solmax Geosynthetics Asia Sdn. Bhd.** *Dual-Mode Shield Machines*	50
11:50 – 12:05	8	**Minh Duc Construction Engineering Joint Stock Company** *Under Complex Geology*	48
12:30 – 13:30		**Discussion & lunch break**	
13:30 – 13:45	9	**Geotech International Pte Ltd** *Advancing Sustainable Infrastructure: Enabling Smarter Decisions Through Wireless IoT in Geotechnical Monitoring*	13
13:45 – 14:00	10	**Shandong Geosky Technology Co., Ltd.** *Geosky Company Introduction*	12
14:00 – 14:20	11	**Star-Continent Construction Co., Ltd.** *New Methods for Underground Construction*	03
14:20 – 14:35	12	**Techfab India Industries Ltd.** *Introduction to Techfab India Industries Ltd and Solutions*	15
14:35 – 14:50	13	**Green Dragon Solution Company Limited** *GEO5 - Geotechnical Software for Everybody*	14

ENTERPRISE SHOWCASE PROGRAM
GEOTEC HANOI 2026 • NOVEMBER 26-27 • HANOI, VIETNAM

TIME	#	COMPANY · PRESENTATION	BOOTH
14:50 – 15:05	14	**SE Corporation – Representative Office in Hanoi** *ASEAN Ground Anchor*	20
15:05 – 15:20	15	**Geoquest Product Vietnam and Geoquest Product Asia** *Geoquest Presentation*	08
15:20 – 15:35	16	**Gold-Joint Industry Co., Ltd.** *ACE Geosynthetics Corporate Introduction (Video)*	42
15:35 – 15:50	17	**SISGEO** *About SISGEO*	52
15:50 – 16:10	18	**DMT GmbH & Co. KG – Geotomographie** *Various products for site and subsoil investigation, tunnelling surveying, safety and monitoring; Geophysical Instruments to detect cavities and to determine soil dynamic parameters*	40
16:10 – 16:25	19	**Wenzhou Zhenzhong Foundation Construction Machinery Technology Co., Ltd.** *Connecting Advanced Piling Technologies to Vietnam*	16

DAY 2 · FRIDAY, 27 NOVEMBER 2026

TIME	#	COMPANY · PRESENTATION	BOOTH
9:00 – 9:15	20	**Tensar International Limited** *Introduction to Tensar*	18
9:15 – 9:30	21	**Beijing Samyon Instruments Co., Ltd.** **Application of Ultrasonic Technology in the** *Testing of Drillhole and Groove*	10
9:30 – 9:45	22	**Thai Chau Import – Export Co., Ltd. – APT Geotextile Factory (Branch)** *Introduction to Thai Chau*	21 & 22
9:45 – 10:00	23	**Nator Lubrication (Shanghai) Co., Ltd.** *Introduction to NATOR Company and its Products*	07
10:00 – 10:15	24	**Jiangyin Haida Rubber and Plastic Co., Ltd.** *Waterproofing for segment joints of shield tunnels*	68

DAY 2 · FRIDAY, 27 NOVEMBER 2026

TIME	#	COMPANY · PRESENTATION	BOOTH
10:15 – 10:30	25	**SShenzhen Municipal Design & Research Institute Co., Ltd.** *Super large pipe jacking machine: An example at San Sa Sation*	–
10:30 – 10:45	26	**Strata Geosystems** *Geotechnical solutions for modern infrastructure*	49
10:45 – 11:00	27	**JBD Brothers (M) Sdn. Bhd.** *Application of Dynamic Compaction in Ground Improvement*	73
11:00 – 11:15	28	**Vietnam Geotextile JSC (ARITEX)** *Introduction to the Capabilities of Vietnam Geotextile JSC (ARITEX)*	54 & 55
11:15 – 11:30	29	**Shenzhen Weishunda Intelligent Technology Co., Ltd.** *Axial Force Servo System & Integrated Jack*	59
11:30 – 11:45	30	**Soilmechanics Spain S.L.** *Introduce about Soilmechanics*	–
12:00 – 13:30		**Discussion & lunch break**	
13:30 – 13:45	31	**GE & Dingyi** *Dingyi - Intelligent Monitoring Solution Provider*	33
13:45 – 14:00	32	**Geobrugg AG** *Geobrugg Introduction*	45
14:00 – 14:15	33	**NAUE Asia Sdn. Bhd.** *Engineering Resilient Infrastructure with Geosynthetics*	09
14:15 – 14:30	34	**Phu Thanh Phat Import Export Company Limited** *Introduce about Phu Thanh Phat*	69
14:30 – 14:45	35	**BOSTD Geosynthetics Qingdao Ltd.** *Concentrator for Comprehensive Utilization of Porcelain Stone (Containing Lithium) for CATL Yichun Fengxin - Site Leveling Project*	39
14:45 – 15:00	36	**Shanghai Toehold Engineering Technology Co., Ltd.** *An Automated Robotic Inclinometer System for Geotechnical Monitoring*	36
15:00 – 15:15	37	**SWuxi Anman Construction Machinery Co., Ltd.** *Development of Large-Diameter Jet Grouting Rig*	61
15:15 – 15:30	38	**Ecodrill Technology Sdn. Bhd.** *Water Jet Core Barrel*	64

PRE-CONFERENCE WORKSHOP

Geotechnics for High-Speed Railways (HSR):
Practice and Lessons Learned from Japan and China

25 November 2026 · Wednesday • 8:00 – 12:00 • National Convention Center (NCC), Hanoi, Vietnam

— SPEAKERS —



Dr. Yoshitsugu Momoya
Railway Technical Research Institute, Japan



Dr. Susumu Nakajima
Railway Technical Research Institute, Japan



Dr. Cai Degou
China Academy of Railway Sciences Co., Ltd, China

SESSION 1 Geotechnics for High-Speed Railways in Japan

Presenters: Dr. Yoshitsugu Momoya & Dr. Susumu Nakajima — Railway Technical Research Institute, Japan

TIME	TOPIC	KEY POINTS
8:00 – 8:15	**Introduction of HSR in Japan and design practice**	• Overview of HSR development and design specifications/standards in Japan
8:15 – 9:00	**Design of ballasted tracks, slab tracks and subgrade**	• Comparison between ballasted track and slab track systems • Challenges of ballasted tracks on soft roadbeds and subgrades • Roadbed and subgrade design and specifications • Applications of slab track systems on earth structures
9:00 – 9:15 · Q&A and Tea Break		
9:15 – 9:45	**Case studies of Japanese HSR (Shinkansen)**	• Natural environment of Japan — seismic-prone country, frequent heavy rain • Geotechnical challenges in Shinkansen construction, especially on weak subsoil • Composition ratio of HSR structures — drastic reduction of earth structures and its recovery following new technology • Lessons from the first-generation Shinkansen (Tokaido Shinkansen) — demanding maintenance from continuous settlement/deformation due to rainfall and earthquakes
9:45 – 10:15	**Evolution of geotechnical structures for HSR in Japan**	• Development of Geosynthetics Reinforced Soil (GRS) structures — GRS wall, GRS bridge abutment, GRS integral bridge • Application of reinforced soil structures in recent Shinkansen construction — Hokuriku, Kyushu and Hokkaido lines
10:15 – 10:30 · Q&A and Tea Break		

SESSION 2 Geotechnics for High-Speed Railways in China

Presenter: Dr. Cai Degou — China Academy of Railway Sciences Co., Ltd, China

TIME	TOPIC	KEY POINTS
10:30 – 11:00	**Introduction of HSR in China and design practice**	• Overview of China's HSR development • Core requirements for HSR lines in China — smoothness, stability and deformation/settlement control • Core challenges in geotechnical engineering • Functions and performance requirements • Deformation control-based design
11:00 – 11:45	**Foundation methods and case studies**	• Foundations for different ground conditions — soft/loose soils, expansive soils, karst formation • Foundation methods for 2 case studies: (1) Beijing–Shanghai HSR line; (2) Shanghai–Kunming HSR line
11:45 – 12:00 · Q&A		

Technical Tour

Project brief introduction



Construction progress of Tran Hung Dao bridge (as of October 2026)

The Tran Hung Dao bridge crosses the Red River in Hanoi capital and it is named after Tran Hung Dao (1228 – 1300), a Vietnamese royal prince, statesman and military general of Dai Viet military forces during the Trần dynasty. The bridge is a steel arch truss type designed to be a symbolic infrastructure structure of the city. The main bridge consists of 6 spans with a standard length of 145 m long and of 43 m width. Instead of standing independently, the arch system comprises two continuously undulating steel curves designed to touch, cross, and intersect with one another to efficiently distribute torsional moments. The entire structure consumes over 26,275 tons of high-grade structural steel, creating a stable, permanent load-bearing frame. At this stage, the construction of piers and superstructure is in progress as typically illustrated in the following picture.

Tour agenda

Time	Activity
13:00 – 13:30	Reception at the National Convention Center (NCC), the conference venue
13:30 – 14:15	Project introduction at the National Convention Center (NCC)
14:15 – 15:00	Move to the Tran Hung Dao bridge construction site
15:00 – 15:30	Welcome remarks, Safety briefing, and Group photo
15:30 – 16:30	Onsite technical briefing, Site visit
16:30 – 17:30	Return to National Convention Center (NCC), the conference venue

Booth	
1&2	RAITO KOGYO CO., LTD. FECON RAITO UNDERGROUND CONSTRUCTION COMPANY
3	STAR-CONTINENT CONSTRUCTION CO., LTD.
5	JFE GROUP
6	OKUYAMA BORING CO., LTD.
7	NATOR LUBRICATION (SHANGHAI) CO., LTD
8	GEOQUEST PRODUCTS ASIA PTE. LTD.
9	NAUE ASIA SDN BHD
10	BEIJING SAMYON INSTRUMENTS CO., LTD.
11	KCT E&C CO., LTD.
12	SHANDONG GEOSKY TECHNOLOGY CO., LTD
15	TECHFAB INDIA INDUSTRIES LTD.
16	WENZHOU ZHENZHONG FOUNDATION CONSTRUCTION MACHINERY TECHNOLOGY CO., LTD.
17	HAINING GERUN COMPOSITE MATERIAL CO.,LTD.
18	TENSAR INTERNATIONAL LIMITED
19	KAO VIETNAM CO., LTD.
20	SE CORPORATION - THE REPRESENTATIVE OFFICE IN HANOI
21&22	THAI CHAU IMPORT – EXPORT CO., LTD - APT GEOTEXTILE FACTORY
23	ICG INNOVATIVE AND CREATIVE GEOTECHNICAL ENGINEERING JSC
24	HOCK TECHNOLOGY
25	XYPEX CHEMICAL CORPORATION

Booth	
26	GODAI KAIHATSU CO., LTD. KAIHATSU CO., LTD
27	SHANDONG HARMONY INTERNATIONAL BUSINESS CO., LTD
28	GLOBAL DIGITAL SYSTEMS LIMITED
29	TECHNICAL LINK CONSTRUCTION JOINT STOCK COMPANY
30	FEICHENG LIANYI ENGINEERING PLASTICS CO.,LTD
31	THE BEST PROJECT MATERIAL CO.,LTD
32	ZHEJIANG DING YE FOUNDATION ENGINEERING LTD
33	GOLDEN EARTH CO., LTD. HONGKONG DINGYI CO., LTD. FECON INSTITUTE OF UNDERGROUND ENGINEERING
34	IKO-AXTER, SAS
35	FALCON GEOTEX PVT LTD
36	SHANGHAI TOEHOLD ENGINEERING TECHNOLOGY CO., LTD
37 & 38	VINH HUNG TRADING, CONSULTING AND CONSTRUCTION JOINT STOCK COMPANY
39	BOSTD GEOSYNTHETICS QINGDAO LTD
40	DMT GMBH & CO. KG
41	BENTLEY SYSTEMS INTERNATIONAL LTD. CIC TECHNOLOGY AND CONSULTANCY JOINT STOCK COMPANY
42	GOLD-JOINT INDUSTRY CO., LTD

Booth	
43&44	ZHONGQIU SHIELD (VIETNAM) COMPANY LIMITED
45	GEOBRUGG AG
46&47	LUOYANG DE-DAO PLASTICS SCIENCE & TECHNOLOGY CO. LTD
48	MINH DUC CONSTRUCTION ENGINEERING JOINT STOCK COMPANY
49	STRATA GEOSYSTEMS
50	SOLMAX GEOSYNTHETICS ASIA SDN. BHD
51	GEOKON (S) PTE LTD
52	SISGEO
53	SHANGHAI JOZO MACHINE & ELECTRIC EQUIPMENT CO.LTD
12	SHANDONG GEOSKY TECHNOLOGY CO., LTD
15	TECHFAB INDIA INDUSTRIES LTD.
16	WENZHOU ZHENZHONG FOUNDATION CONSTRUCTION MACHINERY TECHNOLOGY CO., LTD.
54&55	VIETNAM GEOTEXTILE JSC (ARITEX)
56	ACE INSTRUMENT CO., LTD.
59	SHENZHEN WEISHUNDA INTELLIGENT TECHNOLOGY CO., LTD.

Booth	
60	UNIVERSITY OF FLORIDA ENGINEERING SCHOOL OF SUSTAINABLE INFRASTRUCTURE & ENVIRONMENT
61	WUXI ANMAN CONSTRUCTION MACHINERY CO., LTD.
62	RAISING MEASUREMENT (SHANGHAI) CO., LTD.
63	GEOSITTER INSTRUMENTS LIMITED OUGAN GROUP
64	ECODRILL TECHNOLOGY SDN BHD
65	HENAN SANSONG NEW MATERIAL TECHNOLOGY CO., LTD
68	JIANGYIN HAIDA RUBBER AND PLASTIC CO., LTD.
69	PHU THANH PHAT IMPORT-EXPORT CO., LTD.
70	CGEO INTERNATIONAL LTD.
73	JBD BROTHERS (M) SDN BHD
75	KOKUSAI KOGYO CO.,LTD
78&79	VIETNAM YANGTZE TRUNG QUOC CONSTRUCTION CO., LTD
82&83	FECON CORPORATION

Booth No. 01 & No. 02 · Booth No. 03 · Booth No. 05 · Booth No. 06 · Booth No. 07 · Booth No. 08

Booth No. 09 · Booth No. 10 · Booth No. 11 · Booth No. 12 · Booth No. 13 · Booth No. 14

Booth No. 15 · Booth No. 16 · Booth No. 17 · Booth No. 18 · Booth No. 19 · Booth No. 20

Booth No. 21 & No. 22 · Booth No. 23 · Booth No. 24 · Booth No. 25 · Booth No. 26

Booth No. 27 · Booth No. 28 · Booth No. 29 · Booth No. 30 · Booth No. 31

Booth No. 32 · Booth No. 33 · Booth No. 34 · Booth No. 35 · Booth No. 36

Booth No. 37 & 38 · Booth No. 39 · Booth No. 40 · Booth No. 41 · Booth No. 42

Booth No. 43 & 44 · Booth No. 45 · Booth No. 46 & 47 · Booth No. 48 · Booth No. 49

Booth No. 50 · Booth No. 51 · Booth No. 52 · Booth No. 53 · Booth No. 54 & 55 · Booth No. 56

Booth No. 57 & 58 · Booth No. 59 · Booth No. 60 · Booth No. 61 · Booth No. 62 · Booth No. 63

Booth No. 64 · Booth No. 65 · Booth No. 68 · Booth No. 69 · Booth No. 70 · Booth No. 73

Booth No. 75 · Booth No 78 & 79 · Booth No. 82 & 83

LIST OF SPONSORS

GEOTEC HANOI 2026 • NOVEMBER 26-27 • HANOI, VIETNAM

DIAMOND SPONSORS

ZQS 中球盾构

Raito

AN THÁI · THAI CHAU · APT GEOTEXTILE

GOLD SPONSORS

VĨNH HƯNG · MACCAFERRI

XYPEX

ICG — We created green engineering solutions

FECON Raito UNDERGROUND

FECON PILING & CONS

FECON Invest

FECON South

SILVER SPONSORS

SUNWARD 山河机器

中国建筑第三工程局有限公司 CHINA CONSTRUCTION THIRD ENGINEERING BUREAU GROUP CO.,LTD

BRONZE SPONSORS

XUAN MAI CORP

BRUGG Geobrugg

SUPPORTING SPONSORS

OKUYAMA BORING CO., LTD. — A leading company for landslide countermeasure

FMS MACHINERY

GREEN LOTUS

FECON IC

FECON Power

GEOTEC HANOI
2026

geotechn.vn