

GEOTEC HANOI 2023: GENERAL PROGRAM

(Last updated: Dec 11, 2023; to be included in a full book of program)

Day 1: December 14, 2023

Time	Activity			
7:30 - 9:00	Reception			
9:00 - 9:45	Opening ceremony - Opening speech of the Co-chairman of the Organizing Committee, Chairman of the Scientific Committee, President of the VSSMGE (Dr. Phung Duc Long) - Speech of the president of the ISSMGE (Dr. Marc Ballouz) - Speech of a representative official of the Government and declaration of the conference opening			
9:45 - 10:15	SPECIAL INVITED LECTURE: Geotechnical philosophy and cases of site reuse (Dr. Marc Ballouz, ISSMGE President)			
10:15 - 10:45	SVEN HANSBO LECTURE: Applications of deep vertical vibratory compaction (Prof. Rainer Massarsch)			
10:45 - 11:15	Photo session and Tea break			
11:15 - 11:45	KEYNOTE LECTURE: Prediction of the hydraulic gradient for backward erosion piping in river levees (Prof. Mitsu Okamura)			
11:45 - 12:15	KEYNOTE LECTURE: Urban tunnelling – the challenges of creating underground space in historic cities (Prof. Giulia Viggiani)			
12:15 - 13:30	Lunch break			
	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 4
13:30 - 15:30	SESSION 1: Deep Foundations	SESSION 5: Geotechnical Modelling and Monitoring	SESSION 4: Landslide and Erosion	SESSION 3: Ground Improvement
15:30 - 16:00	Poster Session and Tea Break			
16:00 - 18:30	SESSION 1: Deep Foundations	SESSION 5: Geotechnical Modelling and Monitoring	SESSION 4: Landslide and Erosion	SESSION 3: Ground Improvement

GEOTEC HANOI 2023: GENERAL PROGRAM

Day 2: December 15, 2023

Time	Activity			
	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 4
8:00 - 10:00	SESSION 1: Deep Foundations	SESSION 5: Geotechnical Modelling and Monitoring	SESSION 6: Off-shore Wind Power and Coastal Geotechnics	SESSION 3: Ground Improvement
10:00 - 10:30	Poster session and Tea break			
10:30 - 12:00	SESSION 2: Tunnelling and Underground Spaces	SESSION 5: Geotechnical Modelling and Monitoring	SESSION 6: Off-shore Wind Power and Coastal Geotechnics	SESSION 3: Ground Improvement
12:00 - 13:00	Lunch break			
13:00 - 15:00	SESSION 2: Tunnelling and Underground Spaces	SESSION 5: Geotechnical Modelling and Monitoring	SESSION 6: Off-shore Wind Power and Coastal Geotechnics	SESSION 3: Ground Improvement
15:00 - 15:30	Poster session and Tea break			
15:30 - 16:00	SPECIAL INVITED LECTURE: On the landslide susceptibility and resilience with impact of climate change (Prof. Keh-Jian Shou, ISSMGE Vice-President for Asia)			
16:00 - 16:30	KEYNOTE LECTURE: Continuum and discrete modelling of penetration problems (Prof. Antonio Gens)			
16:30 - 17:00	KEYNOTE LECTURE: Time-dependent axial capacity of driven in clays and sands (Prof. Richard Jardine)			
17:00 - 17:30	KEYNOTE LECTURE: Pile foundations: 80 years of research and practice (1943-2023) (Prof. Alessandro Mandolini)			
17:30 - 18:00	Closing ceremony - Presenting appreciation souvenirs to keynote and special invited speakers - Presenting appreciation souvenirs to sponsors - Presenting awards to authors of best posters and best oral presentations - Presenting certificates and souvenirs from the president of the ISSMGE (Dr. Marc Ballouz) to young scientists - Vote of thanks and presenting bouques to committees and supporting organizations - Closing speech of the president of the JGS (Prof. Junichi Koseki) - Taking group photos (2 nd time)			
18:30 - 21:30	Gala dinner - Speech of the diamond sponsors - Banquet with music performance - The quintessence of the Northwest			

GEOTEC HANOI 2023: SESSION PROGRAM

Day 1: December 14, 2023

Conference Hall 1

Session 1: Deep Foundations

Chair: Prof. Alessandro Mandolini

Co-Chair: Dr. Phung Duc Long

Time	Presentation title
13:30 - 13:45	Stress distribution of pile group on Jakarta Diluvium Clay using 3D finite element method <i>Stefanus Diaz Alvi, Stella Liviana, Paulus P. Rahardjo</i>
13:45 - 14:00	FEM simulation of single pile load tests <i>Long Duc Phung</i>
14:00 - 14:15	The effects of ground anchor prestressing on pile group reaction force redistribution and settlement as permanent foundation of high-rise building using 3D FEM <i>Stefanus Diaz Alvi, Yiska Vivian C. Wijaya, Bondan W. Anggoro, Paulus P. Rahardjo</i>
14:15 - 14:30	Numerical study on behaviors of vertically-loaded Tender Net Foundations supported by piles <i>Han Vo-Cong, Kinji Takeuchi, Yasuo Tomono, Tatsunori Matsumoto</i>
14:30 - 14:45	An appraisal of the second-order pile buckling model according to the 2nd generation Eurocode 7 <i>Gary Axelsson, Fredrik Jansson</i>
14:45 - 15:00	Study on uplift capacity of belled pile in sandy soil <i>Toru Watanabe, Kentaro Hama, Yoshihiro Horii, Yoshitaka Nakanishi</i>
15:00 - 15:15	Modified β -method for pile design in partially saturated soils: Theoretical considerations for an effective stress framework <i>T. Matthew Evans, Josiah Baker, Tuyen Ngoc Tran</i>
15:15 - 15:30	Axial load bearing capacity solutions of PHC nodular pile: a new advancement in Vietnam engineering practice <i>Tuetakoun Aphisith, Duy-Khuong Ly, Tan Nguyen, Jim Shiau</i>
15:30 - 15:45	Enhancing rapid construction profitability of the monolithic steel structure of pile-pier for bridges in Vietnam <i>Hanh Quang Le, Trinh Thi Tuyet Nguyen, Masaya Higashi</i>
15:30 - 16:00	Poster session and Tea break
16:00 - 16:15	Design challenges of large diameter and long steel pipe pile in high plasticity clay at Patimban Port Development Project <i>Ryota MIZUNO, Le Phuong Dong, Aditya Karya, Thanh T. Nguyen</i>
16:15 - 16:30	The use of Rapid Load Test as alternative load test method of bored piles <i>Poh Hai Ooi, Yong Ping Oh</i>
16:30 - 16:45	Building up a dataset for investigation of the load transfer mechanism of bored piles from case histories in Vietnam <i>Phi Nguyen-Dinh, Tuetakoun Aphisith, Tan Nguyen, Jim Shiau</i>
16:45 - 17:00	Correlation between SPT indexes of soils to compression strength and settlement of concrete piles: An experimental study in Bac Giang, Vietnam <i>Van Tai Tang, Tran Khoa Vu, Praveen M Huded, Thuy Lan Chi Nguyen</i>
17:00 - 17:15	Comparative static and rapid load tests on steel pipe piles: A case study at Sashima test yard <i>Shihchun Lin, Koji Watanabe, Shuichi Kamei, Tatsunori Matsumoto</i>
17:15 - 17:30	Bearing-capacity assessment of the instrumented shaft grouting barrette pile by conventionally static loading test <i>Trung Thanh Le, Lan Vu Hoang Bach, Hai Minh Nguyen</i>
17:30 - 17:45	State of the practice - Dynamic load testing of driven piles in the United States <i>Thai Nguyen</i>
17:45 - 18:00	Case study: Dynamic load testing of a jointed concrete pile project in Malaysia <i>Thai Nguyen</i>
18:00 - 18:15	Bearing characteristics of sheet piles subjected to vertical monotonic and quasi-static cyclic load in saturated clay ground <i>Xi Xiong, Jiapeng Yu, Lua Thi Hoang, Tatsunori Matsumoto</i>
18:15 - 18:30	Load-displacement relations of a driven steel pipe piles from static and rapid load tests, and empirical formulas based on SPT and CPT -A case study at Sashima test yard <i>Shihchun Lin, Koji Watanabe, Yutaro Naka, Tatsunori Matsumoto</i>

Day 1: December 14, 2023

Conference Hall 2

Session 5: Geotechnical Modelling and Monitoring

Chair: Prof. Antonio Gens

Co-Chair: Dr. Le Viet Hung

Time	Presentation title
13:30 - 13:45	Monitoring strains and temperatures in a deep excavation base slab using fibre-optic bragg gratings <i>Peter J. Hensman, Brian B. Sheil</i>
13:45 - 14:00	Bridge condition survey of critical bridges in the Philippines <i>Rowena Garcia, Luis Ariel Morillo, Patrick Adrian Selda, John Alejandro Rivera</i>
14:00 - 14:15	Study on real-time monitoring of an actual slope and slope stability management criteria <i>Shota Yoshida, Xi Xiong, Tatsuro Nakai, Saiji Fukada</i>
14:15 - 14:30	Measurement results of lateral displacement of the earth retaining wall using 3-Axis MEMS inclinometer <i>Takao Kono, Toshiaki Sugawara, Teruhiko Sugimoto</i>
14:30 - 14:45	Shallow foundation design using dynamic cone penetrometer and taking into account liquefaction aspect <i>Tuan-Anh Luong, Miguel Angel Benz-Navarrete, Philippe Reiffsteck, Fabien Szymkiewicz</i>
14:45 - 15:00	Development of a digital twin system for retaining walls <i>Dong-Gun Lee, Ki-il Song, Kyung-Nam Kang, Joon-Sang An</i>
15:00 - 15:15	Intelligent framework for finite element analysis with machine learning and back analysis capabilities for geotechnical engineering <i>Chin Pang, Marco Liang, Zhenya Yang, Chia Weng Boon</i>
15:15 - 15:30	Sustainable dike adaptation measures using finite element method and optimization algorithm NSGA-II <i>Kacper Cerek, Elnaz Hadjiloo, Jürgen Grabe</i>
15:30 - 16:00	Poster session and Tea break
16:00 - 16:15	Comparative study on settlement of EPS road embankments by numerical method <i>Quoc-Bao Truong, Anh-Tuan Vu, Tatsunori Matsumoto, Duc-Long Phung</i>
16:15 - 16:30	Seismic evaluation and retrofitting of deficient masonry building considering SSI effects <i>Lakshmi Latha, Samit Ray-Chaudhuri, Prishati Raychowdhury</i>
16:30 - 16:45	Large-displacement numerical analysis of soil failure mechanism for soil-embedded cylinder interaction <i>Kien Trung Nguyen</i>
16:45 - 17:00	Coupled thermal-hydraulic-mechanical fluid simulation - An innovative tool for the design of grouting in soils <i>Conrad Boley, Yashar Forouzandeh, Lisa Wilfing</i>
17:00 - 17:15	Undrained bearing capacity of strip footing on clayey soil subjected to combined eccentric and inclined loads <i>Pham Ngoc Quang, Ohtsuka Satoru, Pham Ngoc Vinh</i>
17:15 - 17:30	Numerical simulations of pile foundations considering small and large deformations <i>Sascha Henke, Maliha Tasnim Tilat, Philipp Wiesenthal</i>
17:30 - 17:45	Scattering of seismic Rayleigh waves by a semi-circular basin with hysteresis material model <i>Kien Trung Nguyen, Hoang The Thao, Trong Nghia Le, Truong Son Bui</i>
17:45 - 18:00	Numerical shear band strengthening with contact modelling for the increase of load capacity of geotechnical structures <i>Elnaz Hadjiloo, Jürgen Grabe</i>
18:00 - 18:15	Calculation of pore pressure dissipated from a clay layer due to groundwater extraction using physics-informed neural network (PINN) with reference to land subsidence analysis <i>Giao Huy Pham, Hien Huy Doan</i>
18:15 - 18:30	Detection of cavities beneath concrete structures using acoustic wave in dry and saturated soils <i>Seonghun Kang, WooJin Han, Dongsoo Lee, Jong-Sub Lee</i>
18:30 - 18:45	Numerical study on the seismic behavior of narrow back to back geosynthetic reinforced soil walls with different reinforcement arrangements <i>Ramyasri Rachamadugu, Amit Prashant</i>

Day 1: December 14, 2023
Conference Hall 3
Session 4: Landslide and Erosion
Chair: Prof. Mitsu Okamura
Co-Chair: Prof. Trinh Minh Thu

Time	Presentation title
13:30 - 13:45	Spatially distributed mapping of soil erosion in a debris catchment after the 2018 Palu earthquake <i>I Gede Tunas, Sriyati Ramadhani</i>
13:45 - 14:00	Mechanism of large-scale landslide development and remedial methods - A case study in Vietnam <i>Manh Nguyen Duc, Thanh Vu Tien, An Ho Sy, Minh Khoa Vo</i>
14:00 - 14:15	A case study of volcanic soil embankment failure triggered by soil softening due to water infiltration and water seepage in Bandar Lampung, Indonesia <i>Albert Johan, Andy Sugianto, Paulus P. Rahardjo</i>
14:15 - 14:30	Rock planar slide - A case study at Tien Yen-Mong Cai expressway, Vietnam <i>Tuan-Nghia Do, Lan Chau Nguyen, Nguyen Quang Tuan, Trang Thi Ha Vu</i>
14:30 - 14:45	Rehabilitation and protection of bridge against landslides: Case histories at Semarang Ungaran bridge <i>Paulus P. Rahardjo, Muhrozi, Y. Wisanto</i>
14:45 - 15:00	Mechanism and rectification method on difficult Tomo landslide, Sumedang, West Java, Indonesia <i>Kirana Rongsadi, Albert Johan, Bondan W. Anggoro, Paulus P. Rahardjo</i>
15:00 - 15:15	The influence of K0 value on excavated slope stability: Case study Cisumdawu Toll Road, Indonesia <i>Delaneira Princess Seourin, Martin Wijaya, Bondan W. Anggoro, Paulus P. Rahardjo</i>
15:15 - 15:30	Finite element simulation for creep behavior actualized before the landslide due to groundwater fluctuations based on centrifuge model test <i>Yuanying Li, Ryogo Isokawa, Shun Tateya, Akihiko Wakai</i>
15:30 - 16:00	Poster session and Tea break
16:00 - 16:15	Effect of wind load according to foundation embedded depth in solar power plant in slope <i>Jong-Won Woo, Jeong-Yeon Yu, Jang-Hyun Park, Ki-Il Song</i>
16:15 - 16:30	Application of TAG_FLOW model for the simulation of slope disaster in central Vietnam caused by a typhoon in 2020 <i>Shota Fukushima, Nguyen Van Thang, Go Sato, Akihiko Wakai</i>
16:30 - 16:45	Effect of horizontal drain installation pattern on drainage performance and slope stability <i>S O A D Mihira Lakruwan, Hiromu Oikawa, Akiyoshi Kamura, Motoki Kazama</i>
16:45 - 17:00	Applicability of corkscrew extraction technique in strength characterization of Phragmites Australis rooted soil <i>Abhijith Kamath, Karine van Bergen, Geert Ravenshorst, Jan-Willem van de Kuilen</i>
17:00 - 17:15	Use of Electrical Resistivity Tomography for detecting quick clay in Norway <i>Thi Minh Hue Le, Saman Tavakoli, Jean-Sebastien L'Heureux, Iason Papaioannou</i>
17:15 - 17:30	Soil-water characteristic curve analysis of weathered granite soil according to fine content <i>Sangbeen Lee, Jeongyoun Lee, Jongwon Jung</i>
17:30 - 17:45	Shear properties and post-shear water content distribution of clayey soil under different loading conditions by ring shear tests <i>Kyoma Kusano, Motoyuki Suzuki</i>
17:45 - 18:00	Large slope disaster at Hakusan district in Japan and estimation of risk by rockfall <i>Hiroshi Masuya, Takanari Fuji, Yusuke Kurihashi</i>
18:00 - 18:15	Distributed optical fibre based pore water pressure sensor for early warning of geohazards <i>Kusumi Anjana, Madhubhashitha Herath, Jayantha Epaarachchi, Nadeej Priyankara</i>
18:15 - 18:30	

Day 1: December 14, 2023
Conference Hall 4
Session 3: Ground Improvement
Chair: Prof. Rainer Massarsch
Co-Chair: Dr. Nguyen Tien Dung

Time	Presentation title
13:30 - 13:45	Undrained shear strength increase of clay among SCPs examined in the triaxial cell <i>Yoichi Watabe</i>
13:45 - 14:00	Numerical analysis on deformation of soft organic soil improved and stabilized by sand columns <i>Viet Hung Le, Frank Rackwitz</i>
14:00 - 14:15	Comparison between 3D FEM analysis with static load test data of Downhole Dynamic Compaction: A case study of ground improvement works on volcanic soils, East Java, Indonesia <i>Ahmad Kemal Arsyad, Martin Wijaya, Paulus P. Rahardjo</i>
14:15 - 14:30	Fundamental study on application of artificial neural network model to the mixture design of soil treated with paper sludge ash-based stabilizer <i>Phuong-Anh T. To, Kimitoshi Hayano, Yoshitoshi Mochizuki</i>
14:30 - 14:45	Evaluation of reinforcement of a pile by cement-mixed soil improvement using model tests and 3D elasto-plastic FEM simulation <i>Saya Okabe, Toshiyuki Kamata, Atsushi Shimamura, Akihiko Wakai</i>
14:45 - 15:00	Design of sand moving operation: back analysis and settlement prediction <i>Chi T. Nguyen, Thang M. Vo, Quan A. Vu, Quy T. Truong</i>
15:00 - 15:15	Strength and verticality of Nordic dry deep mixing columns - A case study in Norway <i>Solve Hov, Markus Nikolai Berner, Sigbjørn Rønning, Bjørn Kristian Fiskvik Bache</i>
15:15 - 15:30	Tailing storage facilities with cemented berms for sustainable production of raw materials <i>António Viana da Fonseca, Isabela Caetano, Bernardo Meneses, Sara Rios</i>
15:30 - 16:00	Poster session and Tea break
16:00 - 16:15	A study of the anisotropy of improved clay using the Nordic dry deep mixing method <i>Solve Hov</i>
16:15 - 16:30	Effects of cement ratio and curing period on interface shear strength of cement treated soil <i>Thanh-Tu Nguyen, Minh-Duc Nguyen</i>
16:30 - 16:45	Construction challenges and quality control and assurance of wet deep soil mixing for an approach embankment of an overbridge <i>Kim Chan</i>
16:45 - 17:00	Mixture design of liquefied and stabilized soil using high-water-content cohesive soil as raw material and consistency of quality in on-site manufacturing <i>Akihiko Izumi</i>
17:00 - 17:15	Assessment of strength and compaction properties of clays treated with paper sludge-based stabilizers from laboratory mixture tests <i>Navila Tabassum, Kimitoshi Hayano, Hiromoto Yamauchi</i>
17:15 - 17:30	Reliability analysis of strength of stabilised soil <i>Ansu Thomas</i>
17:30 - 17:45	Geotechnical investigation and evaluation of steel slag mixed ground <i>Kosei Kawata, Kazuhiro Tsurugasaki, Tomoya Sato</i>
17:45 - 18:00	Preliminary evaluation of the viability of single-use face masks as a substitute nonwoven geotextile <i>Ella Jotojot, Donn Caryl Cabase, Marvin Lester Chu, Ryan Ramirez</i>
18:00 - 18:15	Behavior of encased stone column-reinforced soil under eccentrically inclined loads <i>Ashutosh Kumar Singh, Venkata Balaiah Kami, Anumita Mishra</i>
18:15 - 18:30	

Day 2: December 15, 2023

Conference Hall 1

Session 1: Deep Foundations

Chair: Prof. Alessandro Mandolini

Co-Chair: Dr. Phung Duc Long

Time	Presentation title
8:00 - 8:15	Development of t-z and q-z curves for driven piles and bored piles in alluvial clay soil based on fiber optic instruments - A case study in Bekasi, Indonesia <i>Prieschila C. Tamsir, Ricky Setiawan, Bondan W. Anggoro, Paulus P. Rahardjo</i>
8:15 - 8:30	Case history of soil-cement piles with H-shaped steels and vertical loading tests <i>Junji Hamada, Yuji Taya, Kiyoshi Yamashita, Hidemi Ikeda</i>
8:30 - 8:45	Forensic investigation of pile damages using dynamic load test and continuous monitoring, case study in Palembang, Indonesia <i>Stefanus Diaz Alvi, Paulus P. Rahardjo</i>
8:45 - 9:00	Geotechnical design of onshore wind turbine foundations: Some applications and lessons learned in Vietnam <i>Duc-An Ho, Trung-Kien Nguyen, Tien Dung Nguyen</i>
9:00 - 9:15	Analysing the suitability of the American Petroleum Institute filter press test for polymer support fluids <i>Daniel McNamara, Brian Sheil, Stephan Jefferis</i>
9:15 - 9:30	Studying on bending resistance of monolithic steel structure of pile-pier <i>Trinh Thi Tuyet Nguyen, Sayuri Kitaichi, Lam Duy Dao, Nobuyuki Matsui</i>
9:30 - 9:45	Prediction of ground surface settlements induced by deep excavation using a closed-form solution <i>Thanh Son Nguyen, Suched Likitlersuang, Van Qui Lai, Trung Nghia Phan</i>
9:45 - 10:00	Laboratory testing of open-dug caisson skin friction during sinking in sands <i>Alexander W. Swallow, Jack O. Templeman, Bryn M. Phillips, Brian B. Sheil</i>
10:00 - 10:30	Poster Session and Tea break

Day 2: December 15, 2023

Conference Hall 1

Session 2: Tunnelling and Underground Spaces

Chair: Prof. Giulia M.B. Viggiani

Co-Chair: Prof. Le Quang Hanh

Time	Presentation title
10:30 - 10:45	Ground movements in shield tunnelling for MRT Orange Line in Bangkok <i>Ochok Duangsano, Kangwan Kandavorawong, Auttakit Asanprakit, Pornkasem Jongpradist</i>
10:45 - 11:00	Evaluating interaction between structural supports and sedimentary rock for a tunnel with penstock at a hydropower plant in Laos <i>Le Thi Minh Giang, Le Quang Huy</i>
11:00 - 11:15	The design of mountainous and sub-sea tunnels as climate resilient infrastructures using the Norwegian Method of Tunnelling (NMT) <i>Rajinder Bhasin, Arnstein Aarset</i>
11:15 - 11:30	Trans-Tokyo Bay Highway (Submarine Auto-Route) <i>Yukitake Shioi</i>
11:30 - 11:45	Applying buttress wall to reduce displacement of a deep excavation adjacent to the Ben Thanh - Suoi Tien Metro tunnel <i>Nghia Trong Le, Kien Trung Nguyen, Trung Minh Nguyen</i>
11:45 - 12:00	
12:00 - 13:00	Lunch break

Time	Presentation title
13:00 - 13:15	Polynomial regression analysis method for predicting excavation-induced deformation in Shanghai soft soil <i>Hechen Zhou, Ruituo Wu, Xiaoqiang Gu, Zhaohui Qin</i>
13:15 - 13:30	FEM back-analysis of a deep excavation in Hanoi, Vietnam <i>Tuan Van Nguyen, Nam Quang Tran, Truong Xuan Dang</i>
13:30 - 13:45	Evaluation of retaining wall and surrounding ground behavior in soft cohesive soil by FEM analysis <i>Hiroto Kumagai, Takao Kono, Shou Nishiie</i>
13:45 - 14:00	Comparing prestressed wales system and traditional shoring system method for a deep excavation using bored piling wall in Ho Chi Minh City <i>Nghia Trong Le, Vien Ngoc Truong, Kien Trung Nguyen</i>
14:00 - 14:15	Effect of diaphragm wall stiffness for a deep excavation on adjacent tunnel deformation <i>Nghia Trong Le, Kien Trung Nguyen, Son Ngoc Nguyen, Trung Minh Nguyen</i>
14:15 - 14:30	Finite element analysis of buttress wall to reduce lateral deformation of deep excavation adjacent to tunnels in HCMC <i>Van Qui Lai, Thai Trung Le, Thi Thanh Hai Truong, Tran Anh Toan Le</i>
14:30 - 14:45	Numerical analysis on the performance of anchored diaphragm walls for a deep excavation in Hanoi <i>Thanh Son Nguyen, Quoc Khanh Nguyen</i>
14:45 - 15:00	Python-based visualization and characterization of subsurface profile for a long-distance subway alignment in Manila <i>Elaine Marie Z. Peña, Pham Huy Giao, Noppadol Phien-wej, Roy Anthony C. Luna</i>

Day 2: December 15, 2023

Conference Hall 2

Session 5: Geotechnical Modelling and Monitoring

Chair: Prof. Antonio Gens

Co-Chair: Dr. Le Viet Hung

Time	Presentation title
8:00 - 8:15	Exploring the mitigation measures of overhanging antidip slope by centrifuge tests and DEM modeling <i>Wen-Chao Huang, Pei-Syuan Wu, Mei-Wen Chen</i>
8:15 - 8:30	Numerical modeling of pull-out experiments on assembly of aluminum rods using DEM <i>Kohei GOHJI, Motoyuki SUZUKI, Minato GOYA</i>
8:30 - 8:45	Detection of voids in karstic terrains with 3D surface-based seismic waveform tomography <i>Majid Mirzanejad, Khiem T. Tran</i>
8:45 - 9:00	Utilization of geophysical methods for hazard assessment and risk management for various projects in the Philippines <i>Kate Trishia Papina, Arian John Fruto, Roy Anthony Luna, Ramon Quebral</i>
9:00 - 9:15	Investigation of buried objects in the ground by borehole radar surveys <i>Ishikawa Keiji, Sakaida Keito, Dyah Sri Utami, Karasawa Shinsuke</i>
9:15 - 9:30	Denoising ground penetrating radar images using generative adversarial networks <i>Ngoc Quy Hoang, Seonghun Kang, Jong-Sub Lee</i>
9:30 - 9:45	Comparison of reconstituted normally consolidated kaolinite and illite in CIU triaxial tests showcasing the influence of pore fluid's salinity <i>Maximilian Schröder, Jürgen Grabe</i>
9:45 - 10:00	Creep behavior for bentonite-sand mixture in unsaturated-saturated condition <i>Tomoyoshi Nishimura</i>
10:00 - 10:30	Poster Session and Tea break
10:30 - 10:45	Deformation properties of Red river sand in cyclic triaxial tests <i>Nguyen Hong Nam, Pham Van Manh</i>
10:45 - 11:00	Evaluation of marine clays' strain rate dependency during the unloading process <i>Zheng Fan, Yoichi Watabe</i>

Time	Presentation title
11:00 - 11:15	Strength-deformation behavior of sandy soil with different structures: layered structure vs. uniform structure <i>Satoshi Matsumura, Daiki Takano, Cyrille Couture</i>
11:15 - 11:30	Use of SWC-050 for measuring soil-water characteristic curves <i>Thi Phuong An Tran, Delwyn G. Fredlund, Tran Thanh Nhan</i>
11:30 - 11:45	Composite materials for soil improvement applied to saturated clays - Requirements for the material properties <i>Conrad Boley, Paul Pratter</i>
11:45 - 12:00	Numerical analysis of one-dimensional consolidation of unsaturated soil with non-Darcian fluid flow <i>Amit Singh, Manash Chakraborty</i>
12:00 - 12:15	Machine learning aided prediction of pile behaviour: the role of data quality <i>Thanh T. Nguyen, Thien Q. Huynh, Hadi Khabbaz, Khuong Le Nguyen</i>
12:00 - 13:00	Lunch break
13:00 - 13:15	Influence of rainfall on the stability of filtered tailings slope with waste rock inclusions <i>Hung Le, Thomas Pabst</i>
13:15 - 13:30	The simplified approach for estimating liquefaction-induced settlement incorporating viscous models and subgrade reaction <i>Chih-Wei Lu, Minh-Tam Doan, Jing-Cai Jiang, An-Jui Li</i>
13:30 - 13:45	Effect of fine particles content on earthquake-induced failure of volcanic embankments subjected to rainfall <i>Trong Nam Nguyen, Shima Kawamura, Minh Hieu Dao, Takumi Inaba</i>
13:45 - 14:00	Specific energy as indicator of liquefaction in dynamic centrifuge experiments <i>Andrei Dobrisan, Stuart Kenneth Haigh</i>
14:00 - 14:15	Role of drying and wetting soil-water characteristic curves and unsaturated permeabilities on slope stability at Almaty <i>Aiym Amantay, Alfredo Satyanaga, Sung-Woo Moon, Jong Kim</i>
14:15 - 14:30	A study on the shear strength characteristics of granite weathered soil using a ring shear apparatus <i>Daewon Lee, Siwon Ryu, Jongwon Jung</i>
14:30 - 14:45	Bayesian hierarchical model on crushability of pumice particle strength <i>I Wayan Ariyana Basoka, Kiyonobu Kasama, Zentarō Furukawa, Ahmad Rifa'i</i>
14:45 - 15:00	Automatic detection model for underground pipelines using FDTD analysis and convolution neural network <i>Sang Yun, Lee, Ki-il, Song, Weiwei, Zhang, Joo Yeol, Bae</i>

Day 2: December 15, 2023

Conference Hall 3

Session 6: Offshore Wind Power and Coastal Geotechnics

Chair: Prof. Richard Jardine, UK

Co-Chair: Prof. Pham Huy Giao

Time	Presentation title
8:00 - 8:15	MMALE simulations of vibro-installation of offshore monopiles <i>Lisa Berki, Daniel Aubram, Frank Rackwitz</i>
8:15 - 8:30	FE modelling of monopiles in sand under monotonic and cyclic lateral loads <i>Hung Manh Ho, Ilaria Del Brocco, Zheng Li, Federico Pisanò</i>
8:30 - 8:45	DEM analysis on soil horizontal support mechanism of monopile subjected to cyclic lateral loading <i>Shogo Ishii, Hirokazu Akagi, Rikito Hayashida</i>
8:45 - 9:00	Model tests to investigate the influence of the spread angle on the pull-out resistance of the belled pile <i>Chinatsu Mitsuoka, Shun Nomura, Hitaki Inaba, Kazuo Tani</i>
9:00 - 9:15	Experimental investigation on the time variation of the relationship between the resistance at the end of installation and the vertical capacity of pressed-in piles <i>Yukihiro Ishihara, Stuart Haigh, Junichi Koseki</i>

Time	Presentation title
9:15 - 9:30	Pullout capacity of suction anchors via 1G model tests assuming liquefied sandy ground <i>Ryosuke Komuro, Masayuki Tomita, Akiyoshi Kamura, Motoki Kazama</i>
9:30 - 9:45	Effect of scour depth on natural frequency of offshore wind turbine with tripod suction bucket foundation <i>Kyeong-Sun Kim, Byong-Youn Hwang, Min-Ho Lee, Sung-Ryul Kim</i>
9:45 - 10:00	Deformation analysis of laterally loaded bucket foundation of offshore wind turbines using HSS model <i>Jiandong Xiao, Xiaoqiang Gu, Zhenhao Shi, Yifeng Lin</i>
10:00 - 10:30	Poster Session and Tea break
10:30 - 10:45	Experimental investigation of bucket foundations subjected to vertical pullout loading in sand <i>Seongho Hong, Quang Thien Buu Nguyen, Woong-Jong Park, Sung-Ryul Kim</i>
10:45 - 11:00	Bearing capacity of circular footing on c- ϕ slope <i>Minh Nhat Tran, Tirawat Boonyateer, Anh Tuan Le, Van Qui Lai</i>
11:00 - 11:15	Long-term lateral cyclic response of shallow onshore wind turbine foundations resting on dense sand <i>Chisom Ifeobu, Christelle Abadie, Stuart Haigh</i>
11:15 - 11:30	Effect of foundation tip shape on penetration mechanism visualized by transparent model ground <i>Rikuto Fujikata, Shun Nomura, Kazuo Tani</i>
11:30 - 11:45	The competitive advantage of onshore lidar: Lessons from the offshore wind industry applications <i>Matt Smith, Euan Macdonald</i>
11:45 - 12:00	Numerical investigation of drag embedment anchor model reduction for FOWTs in coarse and fine-grained Baltic Sea soil <i>Duy A. Dao, Konrad Dicke</i>
12:00 - 13:00	Lunch break
13:00 - 13:15	Seabed morphological characterization and shallow geohazards at offshore Binh Thuan wind farm sites, southern Vietnam shelf <i>Bui Viet Dung, Pham Quy Ngoc, Doan Huy Hien, Do Van Chanh</i>
13:15 - 13:30	Assessing the wind energy potential of Bach Ho field through high-resolution downscaling approach <i>Nga Thi Thanh Pham, Thang Van Vu, Anh Lam Nguyen, Han Trong Bui</i>
13:30 - 13:45	Modeling of scholte wave for offshore seismic survey <i>Quoc Kinh Tran, Chih-Ping Lin, Ernian Pan, Tsai-Jung Wu</i>
13:45 - 14:00	Evaluation of the potential for reusing dredged material for beach nourishment in Vietnam <i>Dung Duc Le, Tung Thanh Tran</i>
14:00 - 14:15	Soil reaction around laterally loaded monopiles used by offshore wind turbines <i>Weichao Li</i>
14:15 - 14:30	Scour protection with geotextile sand containers on foundation structures of offshore wind turbines <i>Janne Kristin Pries, Hoang Nguyen Ngoc</i>
14:30 - 14:45	Offshore CPTU and DMT testing with a seabed penetrometer <i>Diego Marchetti</i>
14:45 - 15:00	

Day 2: December 15, 2023

Conference Hall 4

Session 3: Ground Improvement

Chair: Prof. Rainer Massarsch

Co-Chair: Dr. Nguyen Tien Dung

Time	Presentation title
8:00 - 8:15	The use of innovative geocomposite drainage system - draitube to achieve optimal drainage efficiency at Pantai Nyanyi, Bali, Indonesia <i>Saikat Chatterjee, Rocky Leroy</i>

Time	Presentation title
8:15 - 8:30	Design of ultimate resistance of geogrid-reinforced working platforms for tracked plant over cohesive subgrade <i>Jörg Klompaker, Lars Vollmert, Hoang Ngoc Nguyen</i>
8:30 - 8:45	Effects of sand cushion with geotextile reinforcement on improving consolidation behavior of soft clay <i>Minh-Duc Nguyen, Thanh-Tu Nguyen, Van-Hiep Nguyen, Hoang-Tuan Nguyen</i>
8:45 - 9:00	Effectiveness of reclamation technology by combining cement deep mixing method (CDM) and cement pipe mixing method (CPM) on Patimban port development project in Indonesia <i>Tatsuru Aoyama, Yoshimitsu Yamada, Aditya Karya, Hiromi Namiki</i>
9:00 - 9:15	Evaluation of instrumented preloading with PVD in deep soft Bandung Lacustrine Soil <i>Mikael Rafael, Stefanus Diaz Alvi, Paulus P. Rahardjo</i>
9:15 - 9:30	Centrifugal model tests on soil behavior during preload removal from ground improved with vertical drains <i>Daisuke Niina, Yoichi Watabe</i>
9:30 - 9:45	Impact of microbial metabolic products on the cone penetration and liquefaction resistance of sand <i>Saswati Datta, Debasis Roy</i>
9:45 - 10:00	Using enzyme induced calcite precipitation (EICP) to improve strength of sandy soils <i>Mohsin Usman Qureshi, Azad Alshibli, Umayma Alshibli, Ghassan Alkindi</i>
10:00 - 10:30	Poster Session and Tea break
10:30 - 10:45	Design and lesson-learnt of the eco-friendly bamboo pile foundation in soft soil - A case study in Patimban deep seaport <i>Le Phuong Dong, Ryota Mizuno, Wahyu Trihadi ST, Thanh T. Nguyen</i>
10:45 - 11:00	Strength and deformation characteristics of soft ground stabilized by bamboo piles and bamboo mats <i>Akio Takada, Masato Wada, Yuki Odagiri, Kazuhiro Tsurugasaki</i>
11:00 - 11:15	The characteristics of soft clay for ground improvement distributed at Patimban port development area in Indonesia <i>Yoshimitsu Yamada, Tatsuru Aoyama, Ryota Mizuno, Aditya Karya</i>
11:15 - 11:30	Liquefaction and undrained cyclic behaviour in fully and partially saturated sands <i>Fausto Molina-Gómez, António Viana da Fonseca, Cristiana Ferreira, Bernardo Caicedo</i>
11:30 - 11:45	Assessing the strength and failure mechanism of cement-filled metamorphic rock <i>Hoang-Khanh Le, Meng-Chia Weng, Thi Kim Thoa Ho</i>
11:45 - 12:00	
12:00 - 13:00	Lunch break
13:00 - 13:15	How to recover soil from mixed wastes? Separability of soil and wastes <i>Atsushi Takai, Tomohiro Kato, Takeshi Katsumi</i>
13:15 - 13:30	Deep vibro techniques performances and carbon emission savings from selected industrial projects in Vietnam <i>William Chong, Cao Van Nghia, Kam Weng, Leong</i>
13:30 - 13:45	Effect of fiber material on cyclic behavior of Liquefied Stabilized Soil under cyclic loading <i>Hung Khac Le, Yukihiro Kohata, Hung Quang Duong</i>
13:45 - 14:00	Biopotential response of plants on irrigation, wind, and tensile stimuli <i>Rina Takeda, Kiyonobu Kasama, Zentaro Furukawa</i>
14:00 - 14:15	Research and application of key technologies in high-speed high-pressure stirring spray composite pile <i>Song Weijie</i>
14:15 - 14:30	Applications of DMT/SDMT test results in ground improvement <i>Sara Amoroso</i>
14:30 - 14:45	
14:45 - 15:00	