IS-Macau 2024

11th International Symposium of Geotechnical Aspects of Underground Construction in Soft Ground

June14-17, 2024 Macao SAR, China

	14/06/2024, Friday
15:00-18:00	Registration and welcome reception
	15/06/2024, Saturday
8:45-9:00	Opening Ceremony Honorary Chair: Dr. Ao Peng Kong, LECM TC204 Chair, Prof. Giulia Viggiani, University of Cambridge ISSMGE President/Representative
9:00-9:45 (45 mins)	Keynote Lecture: Exploiting the Renewable Energy Resources of Our Cities' Underground Prof. Lyesse Laloui Swiss Federal Institute of Technology (EPFL)
9:45-11:05 (80 mins)	Plenary Session 1:
	General report: Basic Properties and Soil Improvement in Soft Ground <i>Prof. Shuying Wang, Shenzhen University</i>
	Analysis of Soil Clogging of TBM Tunneling in Clayey Layers and the Role of Soil Compositions
	Gang Wang, Institute of Rock and Soil Mechanics, Chinese Academy of Sciences
	Improved Determination of the Constrained Modulus in Soft Soils Using the Flat Dilatometer Test
	Simon Oberhollenzer, Norwegian Geotechnical Institute
	Permeability and Strength of Sand-bentonite Mixture Stabilized By
	Different Binders for Construction of Two-phase Cut-off Walls Mattnew Zhi Yeon Ting, Nanyang Technological University
11:05-11:25	Coffee break
(20 mins)	Conce break
11:25-12:10 (45 mins)	Fujita Lecture: Interactions at the Front Face of EPB Shield When Drilling
	in Sand
	Prof. Adam Bezuijen Ghent University

12:10-12:45 (35 mins)	Bright Spark Lecture: Resilience Assessment of Tunnels: Framework and Application for Tunnels Exposed to Seismic Hazard Ass. Prof. Zhongkai Huang Tongji University
12:45-14:00 (75 mins)	Lunch break
14:00-15:20 (80 mins)	Plenary Session 2:General Report: Field Case StudiesAssoc. Prof. Daniela Boldini, Sapienza University of RomeModelling of Large Diameter TBM Tunnelling Beneath NewReclamationSiew Wei Lee, Golder Associates (Hong Kong) LimitedInvestigating Transient Tunnelling-induced Ground Surface ResponsesShuai Xue, Imperial College LondonCase Study of Soil-structure Interaction during Tunnelling for BarcelonaMetro: a Comparison between Conventional and Innovative DisplacementMeasurementsAlessandra Di Mariano,Universitat Politècnica de Catalunya · Barcelona Tech
15:20-15:40 (20 mins)	Coffee break
15:40-17:00 (80 mins)	Plenary Session 3:General Report: Constitutive and Numerical ModellingProf. Zhenyu Yin, The Hong Kong Polytechnic UniversityEffect of Infill Nonlinearity on Frame Response to TunnellingYalin Yu, Qilu Institute of Technology3D Numerical Modelling of a Compensation Grouting Field Trial inAlluvial SoilsEdoardo Lusini, Sapienza University of RomeA Continuum Analysis of Piles Affected by an Advancing TunnelExcavation during Centrifuge Tests with a Miniature TBMEugene Kwan Lok Wong, University of Cambridge
17:00-17:45 (45 mins)	Keynote Lecture: Learning from Failures in Shallow NATM Tunnel Prof. Wei Wu Universität für Bodenkultur (BOKU)
19:00	Conference Banquet

	16/06/2024, Sunday
8:45-9:30 (45 mins)	Keynote Lecture: Three Implementations to Reduce Geotechnical Risk on Underground Projects using Information Engineering and AI <i>Prof. Michael Mooney</i> <i>Colorado School of Mines</i>
9:30-10:50 (80 mins)	Plenary Session 4: General Report: Sustainability and Resilience of Underground Infrastructure Ass. Prof. Andrea Franza, Aarhus University Spatial Variability for Deep Cement mixing in Kallang Formation in
	Singapore. Review of Scale of Fluctuation and its Influence in Design Gerardo Agustin Pittaro, Mott MacDonald (Singapore) An ArcGIS Toolbox for the Probabilistic Performance-based Assessment of Surface Building Damage in Large-scale Urban Excavations
	Jinyan Zhao, UC Berkeley Structural Resilience Assessment Method for Tunnels under Seismic Hazards Chenlong Zhang, Tongji University
10:50-11:10 (20 mins)	Coffee break
11:10-11:55 (45 mins)	Keynote Lecture: Deformation of Shield Tunnels subjected to Underlying Tunneling <i>Prof. Renpeng Chen</i> <i>Hunan University</i>
11:55-12:35 (40 mins)	Poster presentations
12:35-13:50 (75 mins)	Lunch break
13:50-15:30 (100 mins)	Plenary Session 5:General Report: Innovative Analysis and Design in Tunneling and Underground ConstructionProf. Dongmei Zhang, Tongji University
	Algorithm on Setting Correction Alignment for TBM Meandering Huynh Le Chu An, Nagaoka University of Technology
	Dynamically Updating Geological Uncertainty Simulation with the Process of Tunnel Excavation <i>Jinzhang Zhang, Tongji University</i>
	Settlement Prediction of the Hong Kong-Zhuhai-Macau Bridge Tunnel Under the Effect of Typhoon Shuyu He, University of Macau
	Soil Disturbance Evaluation in a Typical Soft Clay Excavation Pit Muzhi Li, Zhejiang University

15:30-15:50 (20 mins)	Coffee break
15:50-17:10 (80 mins)	Plenary Session 6:
	General Report: Smart Monitoring and Visualization Technologies for Tunneling and Underground Construction Assoc. Prof. Mohammed Zein Elabidin Babiker Elshafie, Qatar University
	Control of Grouting in the Bedrock and Soil in Vicinity of Tunnels and Construction Pits, Case Study: E18, Oslo, Norway Siamak Feizi, Norwegian geotechnical Institute
	Least Squares Adjustment Approach in Real-time Monitoring of Existing Twin Tunnels <i>Khac Hai Phan, Geotech-Science Co., Ltd. (New Taipei City)</i>
	Coupled Centrifuge-numerical Modelling of Shallow Strip Foundations Chuanjin Tang, University of Nottingham
17:10-17:55 (45 mins)	Keynote Lecture: Smart Monitoring of Tunnels Prof. Wout Broere Delft University of Technology
17:55	Closing Ceremony
	17/06/2024, Monday
	Field trip