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
9:00-9:30	Opening Ceremony Honorary Chair: Dr. Ao Peng Kong, LECM TC204 Chair, Prof. Giulia Viggiani, University of Cambridge ISSMGE President/Representative
9:30-10:15 (45 mins)	Keynote Lecture: Exploiting the Renewable Energy Resources of Our Cities' Underground Prof. Lyesse Laloui Swiss Federal Institute of Technology (EPFL)
10:15-11:35 (80 mins)	Plenary Session 1:General report: Basic Properties and Soil Improvement in Soft GroundProf. Shuying Wang, Shenzhen UniversityAnalysis of Soil Clogging of TBM Tunneling in Clayey Layers and theRole of Soil CompositionsGang Wang, Institute of Rock and Soil Mechanics, Chinese Academy ofSciencesImproved Determination of the Constrained Modulus in Soft Soils Usingthe Flat Dilatometer TestSimon Oberhollenzer, Norwegian Geotechnical InstitutePermeability and Strength of Sand-bentonite Mixture Stabilized ByDifferent Binders for Construction of Two-phase Cut-off WallsMattnew Zhi Yeon Ting, Nanyang Technological University
11:35-11:55 (20 mins)	Coffee break
11:55-12:40 (45 mins)	Fujita Lecture: Interactions at the Front Face of EPB Shield When Drilling in Sand Prof. Adam Bezuijen Ghent University

12:40-13:15 (35 mins)	Bright Spark Lecture: Resilience Assessment of Tunnels: Framework and Application for Tunnels Exposed to Seismic Hazard Ass. Prof. Zhongkai Huang Tongji University
13:15-14:30 (75 mins)	Lunch break
14:30-15:50 (80 mins)	Plenary Session 2:General Report: Field Case StudiesAssoc. Prof. Daniela Boldini, Sapienza University of RomeModelling of Large Diameter TBM Tunnelling Beneath New ReclamationSiew Wei Lee, AECOM Asia Company 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
15:50-16:10 (20 mins)	Coffee break
16:10-17:30 (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
17:30-18:15 (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>

	Plenary Session 4:
	General Report: Sustainability and Resilience of Underground
	Infrastructure
	Ass. Prof. Andrea Franza, Aarhus University
9:30-10:30	Post-tensioned Waler System (PWS) as Supporting Structure for Deep
(60 mins)	Excavations
	Kalyanasundaram Balamonica, Singapore Institute of Technology
	An ArcGIS Toolbox for the Probabilistic Performance-based Assessment
	of Surface Building Damage in Large-scale Urban Excavations
10 20 10 50	Jinyan Zhao, UC Berkeley
10:30-10:50	Coffee break
(20 mins)	
	Keynote Lecture: Deformation of Shield Tunnels subjected to Underlying
10:50-11:35	Tunneling
(45 mins)	Prof. Renpeng Chen
	Hunan University
11:35-12:15	
(40 mins)	Poster presentations/Roundtable forum
12:15-13:50	
(95 mins)	Lunch break
	Plenary Session 5:
	General Report: Innovative Analysis and Design in Tunneling and
	Underground Construction
	Prof. Dongmei Zhang, Tongji University
	Algorithm on Setting Correction Alignment for TBM Meandering
	Huynh Le Chu An, Nagaoka University of Technology
13:50-15:30	Dynamically Updating Geological Uncertainty Simulation with the
(100 mins)	Process of Tunnel Excavation
	Jinzhang Zhang, Tongji University
	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
	Yan-Guo Zhou, Zhejiang University
15:30-15:50	Coffee break
(20 mins)	Conce break
	Plenary Session 6:
	General Report: Smart Monitoring and Visualization Technologies for
15:50-17:10 (80 mins)	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 <i>Chuanjin Tang, University of Nottingham</i>
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