

Technical Session I
Innovation, Excavation and Machine Learning

Time	Paper ID	Paper Title and Authors
10:00~10:12	3	Thermo-Hydro-Mechanical Analyses of an Energy Raft Foundation in Taipei <i>I. T. Pratama, C. C. Huang, K. H. Yang, J. P. Tsai, S. Q. Yang</i>
10:12~10:24	8	Development of a Low-carbon (low-cement content) Fibre Concrete for Underground Infrastructures in Singapore <i>C. C. Gan, H. S. Lim, F. H. Heng, S. H. Tan, T. Higuchi</i>
10:24~10:36	11	Engineering Design and Construction Monitoring Feedback of Large-Scale Deep Excavation Projects <i>Y. K. Lee, J. R. Chiou</i>
10:36~10:48	14	Rock Drilling Performance using Abrasive Waterjet in Urban Area <i>Jun-Sik Park, Ki-Il Song, Eun-Soo Hong, Tae-Min Oh</i>
10:48~11:00		Q&A
11:00~11:12	13	3D Geological Model and Hazard Susceptibility Assessment for Urban Area <i>C. W. Hsu, H. K. Chuang, C. Y. Yang, T. H. Chen</i>
11:12~11:24	20	Application of DEM Simulation with Machine Learning for Cutter Wear Performance Prediction in Shield Tunneling <i>H.M. Okari, B.-C. Benson Hsiung, Yi Sian He, Rex Teng</i>
11:24~11:36	23	Prediction of Deep Excavation Performance using Data-Driven Model-based Stacking Ensemble Learning Framework <i>Ari Surya Abdi, Jianye Ching</i>
11:36~11:48	32	Intelligent Virtual Sensing of Wall Deflection in Deep Excavations Using Graph Neural Networks <i>Zhi-Bin Li, Wan-Huan Zhou</i>
11:48~12:00		Q&A

Technical Session II

Geophysical Methods and Numerical Simulations

Time	Paper ID	Paper Title and Authors
10:00~10:12	10	Dielectric Constant Analysis for Enhancing GPR Data Quality <i>Haeju. Do., Tae-Min. Oh., Hee. Hwan. Ryu.</i>
10:12~10:24	19	Porous Block Monitoring using Electrical Resistivity in Urban Areas <i>Dong-Hyun Lee, Hae-Ju Do, Jun-Sik Park, Tae-Min Oh</i>
10:24~10:36	31	Risk Assessment of Urban Buried Water Pipelines through Integration of Geological Models and InSAR Observations <i>Shi-Lan Wei, Wan-Huan Zhou, Ping Shen</i>
10:36~10:48	16	Numerical Analysis and Design of Cascading Excavation Pits for a Pipe Alignment Installed Using Horizontal Directional Drilling <i>B. N. L. Vitalicio, A. M. U. Alcantara, P. A. Y. Selda, G. B. Vizcarra</i>
10:48~11:00		Q&A
11:00~11:12	26	Bearing Capacity Analysis of Sheet Pile Foundation on Different Joint Conditions and Bending Strength by Rigid-Plastic Finite Element Method <i>Ryuto Shikakura, Hidetoshi Nishioka, Yuki Yamakuri, Shun-ichi Kobayashi</i>
11:12~11:24	27	Numerical Investigation on a Strut-Free Excavation System with Buttress Wall in Sandy Soil <i>M. D. A. Prakasa, A. S. Abdi</i>
11:24~11:36	36	Innovative Trenchless Crossing: Pipe Jacking with Horizontal Grouting Under an Existing Expressway <i>Victor CW Ong, LG Lee, KT Koh, David CC Ng, YH Ong, YY Phuah, JD Sin</i>
11:36~11:48	37	Study on Pile Stress Distribution in Layered Soils with Different Stiffness Using Finite Element Method <i>Albert Johan, Aswin Lim</i>
11:48~12:00		Q&A

Technical Session III

Tunnel, Innovation and Geophysical Methods

Time	Paper ID	Paper Title and Authors
15:15~15:27	15	Prediction and Assessment of Ground-Borne Impacts from Tunneling Works for a Proposed Hydropower Project Headrace Tunnel <i>P. A. Y. Selda, R. D. Quebral, R. A. C. Luna</i>
15:27~15:39	17	Engineering Challenges and Mitigation Approaches for Shield Tunnelling along Sharp Horizontal Curves beneath Existing Buildings in Taipei <i>Watchirawit Laopongcharoen, Tseng Hsiao-Chin, Huang Yi-Chao</i>
15:39~15:51	30	An Integrated Real-Time Monitoring Framework for Large-Diameter Slurry Shield Tunnelling Beneath Structures <i>Jiazheng Zhong, Wanhuan Zhou</i>
15:51~16:03	33	Evaluation of the Backfill Condition behind the Steel Plate Lining using Impact-Echo <i>Hong-Joo Lee, Ki-il Song</i>
16:03~16:15		Q&A
16:15~16:27	34	Aluminum Rod Ground Model Test used to Determine Vertical Displacement of Tunnel in Longitudinal Direction due to Ground Heave <i>Moe Yagawa, Hidetoshi Nishioka, Satoshi Sakata, Shinji Konishi</i>
16:27~16:39	46	An Enhanced Convergence Monitoring by Computer Vision in NATM Construction <i>Anurak Puengrostharn, Suttisak Soralump</i>
16:39~16:51	44	GIS-Based Hazard Zoning for Deep Excavations in Urban Areas: A Case Study of Shiraz Municipality <i>A.H. Boushehrian, S. Afarid</i>
16:51~17:03	9	Case Study on Investigating Seepage Path by Electrical Resistance Tomography <i>Chihping Kuo, Meichiun Liu, Chun-Hung Lin</i>
17:03~17:15		Q&A

Technical Session IV

Excavation

Time	Paper ID	Paper Title and Authors
15:15~15:27	2	Performance of Jet Grout Slab at City Hall Station <i>L.W. Wong</i>
15:27~15:39	7	Case Study- Excavation Around Heritage Buildings in Urban Area <i>P. H. Lim, J. J. Loo, C. Y. Lim</i>
15:39~15:51	18	Underground Metro Station D-Wall Structure Behaviour after Partial Demolition for Extension of Habitable Area, Case Study: MRT Jakarta North-South Line, Bundaran HI Station <i>Mochammad Elan Septaji Nusantara, Visakhadevi Sutandhi</i>
15:51~16:03	21	A Case Study on the Excavation of Underground Corridors Near an Operational High-Speed Rail Station <i>Xin-Hua Lin, Li-Hsuan Chen, Jhih-Yong Jhang</i>
16:03~16:15		Q&A
16:15~16:27	29	Development and Validation of a Semi-Automatic Inclinometer System for Excavation Monitoring <i>Yu-Hsien Lee, Fu-Hsuan Yeh, Jui-Ting Lee, Jen-Feng Lin</i>
16:27~16:39	38	Performance Evaluation of Monitoring Data from Closely Spaced Deep Excavation: A Case Study in Jakarta Clayey Soil <i>R. A. Lyman, A. Lim, B. C. B. Hsiung</i>
16:39~16:51	43	Case History of a 35m High Contiguous Bored Piles Wall supported by Temporary Removable Ground Anchors in Jurong Formation of Singapore <i>Katherine Wong</i>
16:51~17:03	45	Optioneering Temporary Excavation Protection System for a Space-Constrained Basement Parking in the Southern Part of Metro Manila, Philippines <i>A. M. U. Alcantara, B. N. L. Vitalicio, J. M. B. Gargullo, E. P. Kasilag II</i>
17:03~17:15		Q&A

Oral Presentation Format

Duration: 12 minutes

Slide size: 16:9 (widescreen)

Slide submission: Please email your PowerPoint file to “asrtc6.2025.paper@gmail.com” by 19 October 2025.