## Innovation in Geotechnical Engineering (Jan 23, 2024)

## **Online Zoom Webinar**

Time	Lecture
10:00-10:15	Registration
10:15-10:20	Welcoming address (Jong-Sub Lee, PI, Hyper-converged Forensic Research Center for Infrastructure)
10:20-10:30	Complimentary address (Young Uk Kim, President, Korean Geotechnical Society KGS)
Session 1: Geotechnical Modeling and Monitoring Chair: Jong-Sub Lee	
10:30-11:00	Predictive Groundwater Analysis Based on the Hydrogeological Model of Taichung Basin, Taiwan/ Keh-Jian Shou (Vice President Asia in ISSMGE, National Chung-Hsing University, Taiwan)
11:00-11:30	Monitoring of Peanut-shaped TBM Launching Shaft Excavation using Distributed Fibre Optics Sensing Technique/ Andy Leung (President in Hong Kong Geotechnical Society, The Hong Kong Polytechnic University, Hong Kong)
11:30-12:00	Text Mining from Geotechnical Report: Integrated Approach by Convolutional Neural Network and Rule-based Algorithm/ Tae Sup Yun ( <i>Professor, Yonsei University, Korea</i> )
12:00-13:00	Lunch
Session 2: Forensic Failure Assessment Chair: Tae Sup Yun	
13:00-13:30	<b>Evaluation Criteria for Safety of Agriculture Small Dams by AHP Method/</b> Eun Chul Shin ( <i>Former Vice President Asia in ISSMGE, Incheon National University, Korea</i> )
13:30-14:00	Intersecting Geo-Hazard Analysis and Infrastructure Planning for Sustainability/ Mandip Subedi ( <i>President of Nepal Geotechnical Society, Pokhara University, Nepal</i> )
14:00-14:30	Soil Stabilization Using a Novel Protein-based Biopolymer/
	Yong-Hoon Byun ( <i>Professor, Kyungpook National University, Korea</i> )
14:30-15:00	Yong-Hoon Byun ( <i>Professor, Kyungpook National University, Korea</i> ) Break
14:30-15:00 Session 3: Piling a	Break
	Break
Session 3: Piling a	Break and Foundations Chair: Yong-Hoon Byun Comparison of Bearing Capacity of Model Boring DDS and CFA Piles on Problematical Soil Ground of Kazakhstan/ Askar Zhussupbekov (Former Vice President Asia in ISSMGE, Eurasian National University,
Session 3: Piling a	Break         Ind Foundations       Chair: Yong-Hoon Byun         Comparison of Bearing Capacity of Model Boring DDS and CFA Piles on Problematical Soil       Ground of Kazakhstan/         Askar Zhussupbekov (Former Vice President Asia in ISSMGE, Eurasian National University, Kazakhstan)       Shallow Geothermal Energy: Energy Foundations in Buildings and Infrastructure Projects and the Impact of Groundwater Flow/

## Challenges in Geotechnical Engineering (Jan 24, 2024)

**Online Zoom Webinar** 

Time	Lecture
09:50-10:00	Preparation
Session 4: Advanced Characterization Techniques Chair: Tae Sup Yur	
10:00-10:30	Assessment of Geotechnical Properties using Exponential Compaction Model/ Jong-Sub Lee (Professor, Korea University, Korea)
10:00-10:30	Surface Wave Evaluation of Deep Soil Mixing/ Darren Chian Siau Chen (Vice President of the Geotechnical Society of Singapore, National University of Singapore, Singapore)
10:00-10:30	A holistic approach for data-driven probabilistic site characterization/ Jianye Ching (President of Chinese Taipei Geotechnical Society, National Taiwan University, Taiwan)
11:30-12:00	Deep Shear-Wave Velocity Profile: Case of Depok Campus UI/ Widjojo Adi Prakoso (President of the Indonesia Society for Geotechnical Engineering, Universitas Indonesia, Indonesia)
12:00-13:00	Lunch
Session 5: Safety and Serviceability I Chair: Yong-Hoon Byun	
13:00-13:30	Ethics and Dilemma in Engineering/ Ikuo Towhata (Former Vice President Asia in ISSMGE, Kanto Gakuin University, Japan)
13:30-14:00	Innovative Climate-Smart Nature-based Technology for Slope Protection/ Mohammad Shariful Islam ( <i>Professor, Bangladesh University of Engineering and Technology, Bangladesh</i> )
14:00-14:30	Overview on Ground Treatment Design for Electrified Double Track in Northern Part of Peninsular Malaysia/ Lee Peir-Tien ( <i>President in Malaysian Geotechnical Society, Malaysia</i> )
14:30-15:00	Break
Session 5: Safety and Serviceability II Chair: Jong-Sub Lee	
15:00-15:30	Towards to harmonizing using of the probabilistic seismic hazard assessment results in seismic codes/Pulod Aminzoda (President of Tajik Geotechnical Society, National Academy of Sciences of Tajikistan, Tajikistan)
15:30-16:00	Innovation in Geotechnical engineering from soil mechanics to geotechnical engineering/ Amjad Agha ( <i>President of Pakistan Geotechnical Engineering Society, Pakistan</i> )
16:00-16:30	Case Studies - Forensic Study of Foundation Failures and Monitoring Impact during High-rise Demolition/ Anil Joseph (President of Indian Geotechnical Society, Geostructurals Pvt Ltd., India)
Closing comments	