ISSMGE FOUNDATION
REPORT ON CONFERENCE ATTENDANCE

Your Name:	***Your Organization:***	***Date of report:***
Rara Dwi Noviarti	AECOM Singapore	19 July 2026
Conference Title:	***Location of Conference:***	***Dates of Conference:***
21th ICSMGE & 8th iYGEC	Vienna & Graz, Austria	*11th to 19th June 2026*

What you learned:

I attended two events that provided valuable learning opportunities. Below, I briefly summarize the presentations and technical topics that particularly captured my attention.

1. 8th iYGEC

Speaker	Topic	Summary
Sergei Terzaghi	From sandpit to AI: Forty years as a practising Geotechnical Engineer	One project presented in the lecture demonstrated that suction pressure induced wall movements of approximately 70 mm, as recorded through instrumentation and monitoring. During the design stage, several factors should be considered when assessing potential movements caused by suction pressure: (1) soil type, as sandy soils tend to have higher suction potential; (2) the presence of trees in the surrounding area, which may contribute to suction effects; and (3) long-term environmental conditions like area with long wet season.
Lidija Zdravkovic	Evaluation of the numerical approach for lifecycle assessment of geotechnical infrastructure	To simulate realistic slope behaviour, three stages should be considered: short-term, transitional, and long-term conditions. During the transitional stage, two key aspects require evaluation: (1) the soil - atmosphere - vegetation interaction and (2) projected rainfall patterns throughout the asset lifecycle. The first aspect involves assessing changes in hydraulic conditions, as well as incorporating appropriate soil-water retention and permeability models into the mechanical analysis.
Dominguez-Alfaro Ruben	Numerical modelling of a box-type foundation with control piles, pile number effect	This research focused on the development of numerical models for box-type foundations with control piles and their interaction with regional ground subsidence in Mexico. The study showed that the number of control piles significantly influences the development of skin friction. Therefore, design requires a careful balance between structural performance, safety, and long-term ground behaviour.
Hwang Yu wei	Liquefaction and its associated damage to gravity-type wharves in the 2024 Hualien Earthquake	This research investigated the seismic performance of gravity-type wharves at Hualien Port during the 2024 Hualien Earthquake. Numerical simulations closely matched field observations, predicting settlements of approximately 60–80 cm and lateral displacements of 50–65 cm.
Martin Carlos	Underpinning of ten-storey	The new Lisbon Metro circular line crosses a densely

	buildings over the new tunnel of the Lisbon metro circular line	urbanized area on the right bank of the Tagus River. Along one section of the alignment, the tunnel intersects the pile foundations of reinforced-concrete residential buildings comprising nine storeys above ground and one basement level. As a result, an extensive underpinning solution was required to ensure structural stability throughout construction.

2. 21st ICSMGE

Speaker	Topic	Summary
Kenichi Soga (TC103)	Large deformation modelling of pile installation in clay and comparison with cavity expansion analysis	Design parameters should be selected within the range defined by the most favourable and most unfavourable conditions. The presentation highlighted the value of beginning with "critical condition" design and subsequently refining it using instrumentation and monitoring data. This observational approach enables engineers to identify realistic design conditions and optimize solutions while maintaining safety.
Buddhima Indraratna (UTS)	Sustainaibility solution 'Rubber Tie For ground improvement' for road construction	The research demonstrated that recycled rubber tyres can provide a sustainable ground improvement solution for railway and road construction projects. Several studies and case histories showed how the inclusion of rubber materials can enhance soil performance under both static and cyclic loading conditions.
Eurocode 7 second generation	1st session – Overview and general changes in Eurocode 7 2nd session – Case study in country that use eurocode	The presentations introduced several new approaches in the second generation of Eurocode 7. These updates provide designers with greater flexibility to optimize designs through improved use of site investigation data, monitoring systems, and observational methods, while maintaining appropriate levels of safety and reliability.
Christian Moorman (Invited lecturer)	Human and organisational factors influencing safety in underground construction – Consequences for quality assurance and risk management based on analysis of a metro station box failure	This lecture presented lessons learned from a failure that occurred during construction of the Madrid Metro. The investigation involved detailed assessment of ground conditions and diaphragm wall integrity using PIT. Prior to the failure, water leakage had been observed near one of the diaphragm wall panels. The case demonstrated that the incident might have been prevented through timely intervention, such as sealing the void using jet-grouting techniques.

People you met:

The conference brought together many well-known geotechnical professionals from around the world, far too many to list individually. Some notable figures whom I had the opportunity to meet include

1. Marc Ballouz
2. Sergei Terzaghi
3. Kenichi Soga
4. Jie Han
5. Steven Kramer

Main features of conference:

1. I had the opportunity to present my paper at the 21st ICSMGE and represent Indonesia at the 8th iYGEC.
2. I visited the Terzaghi Laboratory at TU Wien following the iYGEC event together with fellow young engineers.
3. The conference provided an excellent platform to exchange ideas on current geotechnical challenges, country-specific issues, and future developments in the profession.
4. Networking was one of the most valuable aspects of the events. I connected with engineers and researchers from many countries and met numerous experts who inspired me to continue growing both professionally and personally.

Your comments on the conference:

I cannot recommend conferences like these highly enough. Our industry continues to evolve through innovative research, technological advancements, and groundbreaking discoveries. Being able to participate in these discussions and learn directly from leading experts is incredibly rewarding. For an engineer who is passionate about learning and constantly seeking new knowledge, this was truly a once-in-a-lifetime experience. I am sincerely grateful to the ISSMGE Foundation for its support, which made this opportunity possible and means a lot to me.

Please attach short report (maximum 400 words) suitable for publication in the ISSMGE Bulletin:

I was honoured to attend the 8th International Young Geotechnical Engineers Conference (iYGEC) and the 21st International Conference on Soil Mechanics and Geotechnical Engineering (ICSMGE), held in Austria from 11–19 June 2026. Through the generous support of the ISSMGE Foundation, I had the opportunity to represent Indonesia as a young geotechnical engineer, present my technical paper, and engage with leading professionals from around the world.

Both conferences provided exceptional opportunities for technical learning and professional development. At iYGEC, I attended a wide range of presentations covering topics such as numerical modelling, sustainability, geotechnical infrastructure assessment, and many other emerging areas of geotechnical engineering. Particularly insightful were discussions on suction-induced ground movements, lifecycle assessment of geotechnical assets, and liquefaction-related damage observed during recent earthquake events.

During ICSMGE, I participated in keynote lectures, technical sessions, and discussions on the future of geotechnical engineering. Highlights included presentations by Kenichi Soga on observational methods and pile installation modelling, Buddhima Indraratna on the sustainable use of recycled rubber materials for ground improvement, and sessions introducing the second generation of Eurocode 7. In addition to these presentations, many other distinguished speakers shared valuable insights into practical engineering applications, innovative technologies, and emerging research developments.

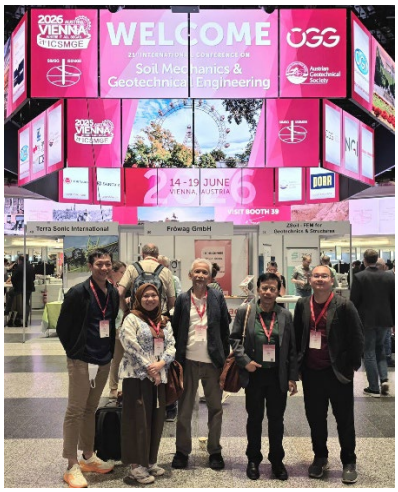
Beyond the technical programme, I had the privilege of visiting the Terzaghi Laboratory at TU Wien together with fellow young geotechnical engineers. The conferences also provided an excellent opportunity to connect with researchers, consultants, academics, and industry leaders who share a common passion for advancing geotechnical engineering. These interactions broadened my perspective on the challenges faced by different countries and highlighted the importance of international collaboration in addressing engineering problems.

One of the most rewarding aspects of this experience was the opportunity to exchange ideas, build lasting professional relationships, and learn from experts whose work has significantly influenced the geotechnical profession. The enthusiasm, knowledge, and generosity of the global geotechnical community were truly inspiring. I am sincerely grateful to the ISSMGE Foundation for its support. This experience has strengthened my technical knowledge, expanded my professional network, and inspired me to continue contributing to the geotechnical engineering community throughout my career.

Photographs from Conference:

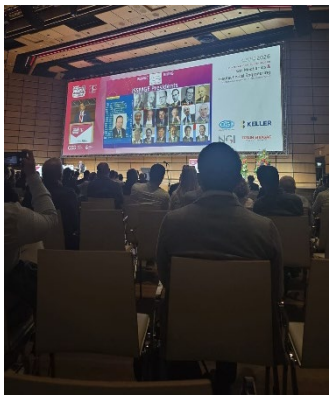
ICSMGE Photo











IYGEC Photo










Effect of Rainfall Pattern on
Slope Stability in Indonesia
Noviarti, Rara D.
Sagitaningrum, Fathiyah H.
Pratama, Okinawa S. P.
AECOM Singapore
University of Indonesia
8th IYGEC
GRAZ 2026







