

ISSMGE FOUNDATION REPORT ON CONFERENCE ATTENDANCE

<i>Your Name:</i>	<i>Your Organization:</i>	Date of report:
Ruan Murison	University of Pretoria	2022/11/01
Conference Title: 10 th International Conference on Physical Modelling in Geotechnics (ICPMG 2022)	<i>Location of Conference:</i> Daejeon, South Korea	<i>Dates of Conference:</i> 19-23 September 2022

What you learned:

Physical modelling is a tool used to push the boundaries of geotechnical research, and the scope of work being done around the world far exceeds what I had imagined. The conference featured work on model mine tailings, 3D-printed rocks, cyclic loading on piles, earthquakes and much more. Large-scale testing, centrifuge modelling and laboratory floor tests were discussed. Complex problems in saturated and unsaturated soil mechanics were covered. The experience was an eye-opener, filled with inspiring ideas for future research.

People you met:

Experienced researchers like Prof. Jason de Jong and Prof. Bruce Kutter from UC Davis, Prof. Giulia Viggiani from Cambridge, Prof. Orestis Adamidis from Oxford, Prof. Paulo Coelho from Coimbre and Kim Nam-Ryong, the acting TC104 chair. In addition, up-and-coming researchers from all over the world were a joy to meet with and share ideas and experiences.

Main features of conference:

The conference was presented over three days in a hybrid format, but was well-attended in-person by international and local delegates. It took place at the impressive KAIST campus in Daejeon. There were 11 keynote/special lectures presented by delegates from 9 different countries over a vast array of topics, showing just how broad the scope of physical modelling in geotechnics can be. A tour of the KAIST centrifuge facility showed some of the research being conducted in Korea. A welcome reception, conference dinner and cultural tour allowed delegates to connect on a social level, and experience new cultures.

Your comments on the conference:

The conference was well-organised, especially given the difficulties that a global pandemic had brought over the past few years. The technical content was engaging: many topics were within my fields of interest and scope of my research, and topics far beyond what I had imagined were incredibly interesting to listen to. The international pull of the conference gave me opportunities to speak to like-minded researchers from all over the world. The memorial session for the late Professor Kim Dong-Soo was a nice touch, with heartfelt tributes to his technical and personal contributions to geotechnical engineering in Korea.



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

After making a nearly 24-hour-long journey from Johannesburg to Daejeon, the University of Pretoria delegation was met with friendly faces and exceptional Korean hospitality. Being the only African delegation at the 10th International Conference on Physical Modelling in Geotechnics gave us the responsibility and opportunity to represent our university, country and continent, which we took on proudly. The conference featured the 5th Schofield lecture by Prof. Osamu Kusakabe, in which he spoke fondly of his connection with Prof. Schofield and past Schofield lecturers, and highlighted the key contributions that the Japanese geotechnical community has made to physical modelling. Keynote lectures featured topics from simulation of mechanised tunnelling to offshore wind turbines, from earthquake loading on earth embankments to modelling the behaviour of mine tailings in the centrifuge. The wide array of topics made the conference a great experience for both young researchers and experts in the field.

The work presented by the University of Pretoria delegation was well-received, and included centrifuge modelling of tailings slopes, modelling of soil arching in unsaturated sands, large-scale reinforced concrete piles and scaled-down reinforced concrete for centrifuge modelling. A personal highlight was delivering my first international conference presentation to a packed parallel session hall, and receiving questions and insights from Prof. Jason DeJong and Prof. Bruce Kutter, both of whom have incredible research portfolios and whom I have great respect for. Prof. SW Jacobsz, who is my supervisor, was mentioned extensively throughout the conference, highlighting the contribution that he and the South African community have made to physical modelling in recent history.

The greatest part of attending an international conference was meeting researchers from across the world and connecting on a technical and social level, experiencing new food and cultures, and seeing a part of the world that would not have been possible under any other circumstance. A particular highlight was meeting the Korean delegation and conference organisers by chance at a Korean barbecue restaurant on the final evening of the conference. They gave a true insight into the nature of Korean hospitality, and we shared wonderful conversations over food and drinks.

My first international conference was a brilliant one, and would not have been possible without the generosity of the ISSMGE Foundation. I'd like to personally express my gratitude to the Foundation for sponsoring my travel and conference expenses, and for the immense contribution to my development as a researcher and geotechnical engineer.

Photographs from Conference:



Figure 1: The University of Pretoria team



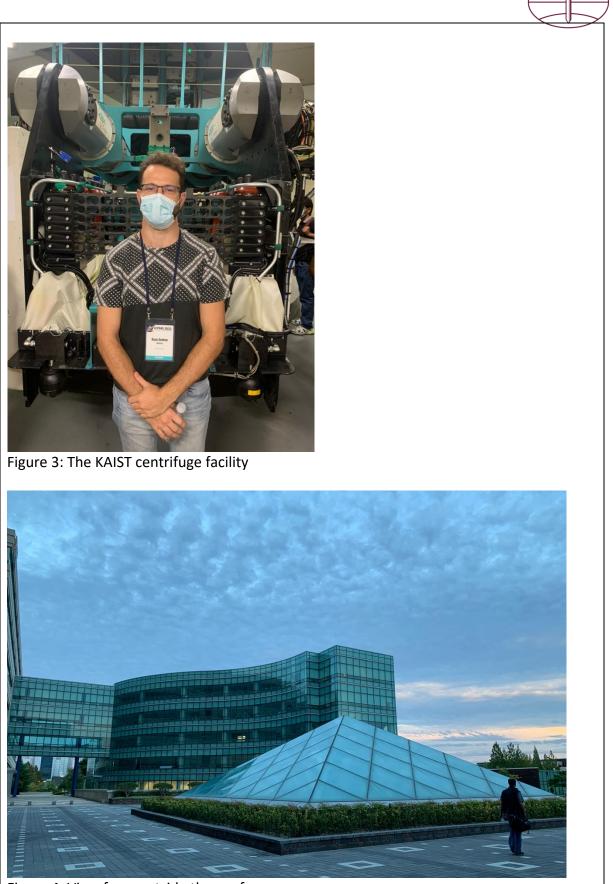


Figure 4: View from outside the conference venue

