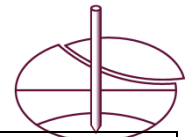


ISSMGE FOUNDATION  
REPORT ON CONFERENCE ATTENDANCE

Your Name: Thao Doan	Your Organization: University of Technology Sydney	Date of report: 25/08/2023
Conference Title: 17 <sup>th</sup> Asian Regional Conference (ARC) on Soil Mechanics and Geotechnical Engineering	Location of Conference: Astana, Kazakhstan	Dates of Conference: 14/08/2023- 18/08/2023
<b>What you learned:</b>		
<p>Attending the conference in person and getting to know so many people from different countries were eye-opening and memorable for me. I got a chance to talk to many people from different backgrounds and different sectors and learnt what they do and what are their stories, which were really inspiring for me. As I was awarded the Bright Spark Lecture Award and invited to give a lecture about my research topic, I learnt to the importance of communicating the research to a wider range of audience and making the topic more engaging by introducing images, animations, and a logical flow within the lecture. I learnt to manage the nerves while being on stage in front of a large audience and to ask for tips from seasoned speakers who are always happy to help.</p>		
<b>People you met:</b>		
<p>A wide range of people from the industry and academic community worldwide: Prof Askar Zhussupbekov (President of Kazakhstan Geotechnical Society), Dr Marc Ballouz (President of ISSMGE), Prof Fauziah Admad (Malaysia), Ashe Cooper (YMPG), Clayton Dodd (Sale Director, GDS Equipment), Tamara Wainwright (GDS), colleagues and friends from Kazakhstan companies and universities, colleagues and friends from Nepal Geotechnical Society, and colleagues and friends from India Geotechnical Society.</p>		
<b>Main features of conference:</b>		
<p>It is surprising to me when I realised that the conference was mainly organised by students</p>		

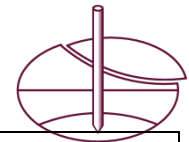


and research fellows from the Kazakhstan Geotechnical Society since the conference was organised and displayed beautifully and professionally with color-coded conference program and well-organised programme. The conference attracted a wide range of delegates (500-600 or so) and daily program was a collection with a number of keynote lectures, special lectures, thematic lectures on diverse geotechnical topics. Other features of the conference:

- The conference decorations and hall were beautiful.
- The conference was centrally located in Astana as it is very convenient to walk to many iconic places such as the building of Future Science which is the largest spherical building around the world.
- The keynote speakers are experts from around the world, hence, their perspectives are diverse and inspirational.
  - A huge number of parallel sessions.
- Workshops, panel discussion, Heritage Time Capsule are nice to listen to.

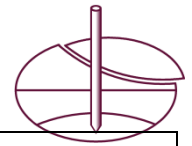
Your comments on the conference:

I really enjoyed going to Kazakhstan for the first time and was being welcomed by the warmth and friendliness of Kazakhstan people. The organising committee from 17<sup>th</sup> ARC conference had the same spirit as well when they made sure that every guest felt welcomed and comfortable in this beautiful country. From the technical perspective, I learnt a lot from the lectures of Dr Helmut F. Schweiger about FEM models with clear examples, which gave me inspirations for my own research. I also enjoyed the lectures by Prof. Fauziah Ahmad about the landslides in Malaysia and Indonesia and by Emeritus Prof. Leung Chun Fai about the creep behaviour of reclamation materials in Singapore. The collection of invited speakers in this conference was impressive.



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

The Bright Spark Lecture Award stands as one of the most esteemed honours for young members of ISSMGE, offering them the valuable opportunity to deliver a keynote lecture and publish an associated paper. In the recent 17<sup>th</sup> Asian Regional Conference (ARC) in Astana, Kazakhstan, I am humble to be selected to present my research work in both a lecture and a technical paper. I am thankful to be supported and nominated by my mentor and supervisor, Distinguished Professor Buddhima Indraratna and Prof Askar from Kazakhstan Geotechnical Society. This opportunity serves as a form of recognition for my research work as a female researcher and provides a valuable platform to inspire other female colleagues and friends to involve in geotechnical engineering. In the Grand Hall of the conference, I delivered my first ever lecture which offered a microscale perspective into the macro-behaviour of soil with the influence of the microscale cohesive forces. My lecture was motivated by my own interest to learn more about the soil behaviour and to answer a simple but perplexed question of what makes a soil fail or becomes unstable. My proposal is that if we can better understand the behaviour of soil with complex frictional and cohesive interactions at the fundamental particle-scale level, we can better manage and mitigate devastating failures at the macro-scale. I presented that in the development of DEM for over 20 years, it still has a big gap as most studies ignored the cohesive behaviour of soil due to the complex surface forces and therefore resulted in inadequate analysis. When cohesion is involved, it can significantly change the macroscale and microscale behaviour of soil in terms of its flowing, loading and interaction with fluid response. Therefore, more effort is needed to capture the microscale cohesive forces more realistically in DEM. The full paper about this research has been published in the Conference Proceeding and available to public. Given the chance to communicate my research to a large crowd in a foreign country, this opportunity undoubtedly stands as a pivotal milestone in my journey as a young and aspiring researcher.



**Photographs from Conference:** Insert here or attach to email



Fig. 1: Meeting up with Dr Marc Ballouz, President of ISSMGE society.



Fig. 2: Photos with my supervisors, Distinguished Prof. Buddhima Indraratna, Prof. Cholachat Rujikiatkamjorn

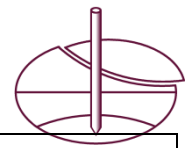


Fig. 3: Photos with these amazing women Prof Fauziad and Yuli from ISSMGE



Fig. 4: Photo with friends from Almaty, Kazakhstan.