

ISSMGE FOUNDATION REPORT ON CONFERENCE ATTENDANCE

Your Name:	Your Organization:	Date of report:
Elena Angelova	Geohydroconsulting Ltd	04.09.2023
Conference Title:	Location of Conference:	Dates of Conference:
17 th Asian Regional Conference on Soil Mechanics and	Astana, Kazakhstan	Monday 14 August - Thursday 17 August
Geotechnical Engineering 2023		2023

What you learned:

The main theme of the conference was *Smart Geotechnics for Smart Societies*. It covered different types of topics such as: Numerical Modelling, Design and Modelling, Geosynthetics and Geoproducts, Geotechnical Infrastructures, Transportation Geotechnics, Tunneling, Earthquake Engineering, Ground Improvement, Soil characteristics, Slope, debris flow and embankments, Shallow and deep foundations, Geoenvironmental engineering, In-situ testing and monitoring, Underground space, Offshore, harbour geotechnics. The presented papers involved innovative results from the latest research and case studies.

Furthemore, there was a special session called *Turkey-Syria Earthquakes: A Disaster through interdisciplinary issues.* It was dedicated to detailed presentations by professors, researchers and engineers who have observed and analysed the effects of the earthquakes on different types of structures and slopes, one of which was the renowned Professor Ikuo Towhata.

Additionally, there were also Keynote, Special, Thematic and Invited lectures, given by highly valued professors and experts, about top level research, case studies and engineering examples. Among them I found especially interesting the lecture by Prof. Buddhima Indraratna on topic *Undrained Instability and Fluidization of Soft Subgrade Soils under Cyclic Rail Loading* considering that I have been involved on railway projects. In fact it presents a simple way to determine the possibility for the fluidization phenomenon, which can be checked in practice easily, so it is something which I can directly use in my projects.

Another presentation that I found related to my work on slope stability projects was Vegetation as a nature-based solution for slope stabilisation: revealing soil-root hydromechanical interaction given by Prof. Anthony Leung. I found the type of root appropriate for different locations on the slope very important detail on which I will definitely pay more attention when proposing vegetation as slope protection measure. In the Corporate Associates Presidential Group Session I found the presentation for Use of waste rubber inclusions for ballasted railway construction – A real-life case study by Arachchige et al. especially interesting from environmental aspect for use of waste materials.

The presentation by Prof. Lyesse Laloui titled *Energy Geotechnology: A New Era for Geotechnical Engineering Practice*, was another captivating topic related to design of sustainable and environmentally friendly structures.

Also, there were Bright Spark lectures given by prosperous young researchers which were very motivating for the youngest participants.

In the Heritage Time Capsule Session it was possible to hear about the progress of this ISSMGE project and the contributions by the member societies.

Considering the total number of papers published and presented in multiple parallel sessions, it can be said that the conference was very fruitful. It was attended by significant number of people, so it was possible to connect with new geotechnical professionals as well as meet prestigious professors, researchers as well as fellow engineers that I have met before. The networking between sessions contributed to exchange of experience and knowledge, as well as ideas for possible development of research projects with experts from other countries.

Moreover, I had the chance to present a paper on topic *Effects of fly ash on sand behaviour in monotonic triaxial tests*. After the presentation there was a discussion about my paper which has been highly beneficial for my further work in the same field of research. Furthermore, in the sessions for Ground Improvement it was possible to hear about other peoples' studies with fly ash, as well as new and innovative ways for improvement of the soil properties.

In addition, as President of the Division of Young Geotechnical Engineers within the Macedonian Association for Geotechnics (MAG) I was given the opportunity to be a delegate of MAG and attend the ISSMGE Council Meeting. During the Council Meeting I could hear about the many benefits that ISSMGE is offering to its members, which has motivated me to contribute more to the activity of MAG and inspired me with ideas for improvement of the activity of MAG in ISSMGE. In this regard, it was an extremely useful to discuss about the organization of EYGEC2024 with prominent ISSMGE members such as Prof. Lyesse Laloui and Prof. Dimitrios Zekkos.

Also, as a representative of MAG, I had the honor to sign a Memorandum for Cooperation with Prof. Askar Zhussupbekov, President of Kazakhstan Geotechnical Society and Prof. Mahdi Karkush, President of Iraqi Scientific Society of Soil Mechanics and Foundation Engineering. This Memorandum should improve the cooperation between the three societies and result in future common research and educational projects.

People you met:

During the Council Meeting of ISSMGE and the 17th Asian Regional Conference I had the opportunity to meet prominent members of ISSMGE and fellows. Some of them are listed below.

Dr. Marc Ballouz, ISSMGE President

Prof. Askar Zhussupbekov, Chairman, Organizing Committee of 17ARC, 2023, President of Kazakhstan Geotechnical Society

Prof. Lyesse Laloui, ISSMGE Vice President Europe

Prof. Dimitrios Zekkos, ISSMGE Appointed Board Member

Ashe Cooper, Chair of ISSMGE YOUNG MEMBER PRESIDENTIAL GROUP

Dr. Rasin Duzceer, President of Turkish National Society for Soil Mechanics and Geotechnical Engineering

Prof. Mahdi Karkush, President of Iraqi Scientific Society of Soil Mechanics and Foundation Engineering

Mladen Kapor, MSc Senior Teaching Assistant, Faculty of Civil Engineering, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

Main features of conference:

The conference was structured in a way that the first of half of the lectures were Keynote, Special, Thematic, Invited, Bright Spark, CAPG, HTC and *Turkey-Syria Earthquakes* lectures held in the Grandhall with a possibility for all participants to hear them. While the second half of the lectures were held in 6 parallel sessions, organized by different topics. After each presentation time was allocated for questions and discussion. There were also ceremonial events such as Opening Ceremony, Welcome Reception, Gala Dinner and Closing Ceremony. During the coffee breaks it was possible to visit the Poster Presentations, as well as the Exhibitors stands by companies offering variety of products used in geotechnical engineering. After the conference, a technical visit was organized in Astana, followed by a technical tour in Almaty.

This organizational aspect of the conference was of special importance for me as President of the Division of Young Geotechnical Engineers of the MAG, for the organization of EYGEC2024. In fact it resulted with ideas about the presentation sessions and sponsors' young representatives participating with papers related to their work.

Your comments on the conference:

The conference was very well-structured and organized in a way to accommodate a high number of researchers and experts from research groups with various topics of interest. This enabled many participants to hear about new results within their field of research or work, but also follow presentations on other topics which they find informative. The rich content of the conference significantly supports research and innovation, resulting in contribution to the advancement of geotechnical engineering. Consequently I found presentations beneficial for both my area of research as well as area of work. The format of the conference facilitated good networking through discussion and sharing experience and knowledge with professionals from different parts of the world. The conference hosted very interesting and informative presentations, which kept my attention until the last day of the conference. Moreover, the organizing committee was very professional and attentive, maintaining good communication with the participants for any arising questions. Last but not least, it is worth mentioning that the entire event was extremely beneficial and motivating for my further work in the field of my research, practical geotechnical engineering, as well as for my engagement as member of MAG and President of the Division of Young Geotechnical Engineers for the organization of EYGEC2024 and other future activities of MAG.



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

The 17th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering was organized in Astana, Kazakhstan, in the period 14 - 17 August 2023. The main theme of the conference was *Smart Geotechnics for Smart Societies*, covering different topics presented in parallel sessions, as well as lectures, given by prestigious professors and experts, about top level research and engineering examples.

The total number of papers published and presented in honorary lectures as well as the multiple parallel sessions, describe the conference as very fruitful.

The conference was very well-structured and organized in a way to accommodate a high number of researchers and experts with various topics of interest. This enabled many participants to hear about new results within their field of research or work, but also follow presentations on other topics. The rich content of the conference significantly supports research and innovation, resulting in contribution to the advancement of geotechnical engineering. Consequently I found presentations beneficial for both my area of research as well as area of work.

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Presentation of my paper on topic *Effects of fly ash on sand behaviour in monotonic triaxial tests* was directly related to the conference, which was followed by discussion which has been highly beneficial for my further work in the same field of research. Also, as a delegate of the Macedonian Association for Geotechnics (MAG) I attended the ISSMGE Council Meeting. I could hear about the many benefits that ISSMGE is offering to its members. Additionally, as a representative of MAG, I had the honor to sign a Memorandum for Cooperation between the Societies of North Macedonia, Kazakhstan and Iraq, that should improve the cooperation between the three societies. Last but not least, it is worth mentioning that the entire event was extremely beneficial and motivating for my further work in the field of my research, practical geotechnical

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Photographs from Conference:











