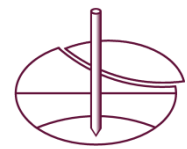


**ISSMGE FOUNDATION
REPORT ON CONFERENCE ATTENDANCE**

Your Name: Shade Sitwala Muluti	Your Organization: University of Cape Town	Date of report: 14 October 2024
Conference Title: 18 th African Regional Conference on Soil Mechanics and Geotechnical Engineering (ARCSMGE)	Location of Conference: <i>Algiers, Algeria</i>	Dates of Conference: <i>6 – 9 October 2024</i>
What you learned: <p>The 18th ARCSMGE 2024, themed “Geotechnical Engineering for Africa’s Sustainable Development,” covered a wide range of topics, including soil characterization, soil behaviour, analysis and modelling, foundation engineering, ground stabilization and improvement, slope stability, embankment and retaining structures, and environmental geotechnics. One of the standout aspects of the conference was the incredible depth and breadth of knowledge shared throughout the event. It featured 12 diverse keynote lectures along with 5 parallel sessions, covering innovative applications, cutting-edge research, and sustainability initiatives within soil mechanics and geotechnical engineering. I was particularly impressed by the keynote lecture delivered by Prof. Peter Day from South Africa on appropriate methods of design for geotechnical practice. He explained how current design methods, such as limit state design, reliability-based design, and working load methods, each influence geotechnical designs in practice.</p> <p>Another memorable lecture was given by Prof. Mounir Bouassida from the Université de Tunis El Manar (ENIT), Tunisia. He introduced a method for testing soil shear strength using the Cylindrical Shear Tool (CTS), which is considered an improvement over traditional triaxial and direct shear tests. Additionally, Prof. Daniele Antonio Cazzuffi presented on the applications of geosynthetics in tunnels and dams. He discussed the various types of geosynthetics (e.g., geotextiles, geomembranes, geogrids, geonets) and their functions—ranging from drainage and filtration to reinforcement and separation. I learned that geosynthetics were first used in the Valcros Dam in France in 1970 (geotextiles) and in the Contrada Sabetta Dam in Italy in 1959 (geomembranes). Prof. Cazzuffi highlighted the significant progress made in geosynthetics over the years and their continued contributions to the design of sustainable structures worldwide.</p> <p>The ISSMGE Heritage Time Capsule (HTC) session was another highlight for me, as it was my first introduction to this project. ISSMGE Vice President for Africa, Prof. Marawan Shahien, presented on the African contributions to the HTC Project. He traced Africa's early involvement in geotechnical engineering to the first international conference of the ISSMGE in Cambridge, Massachusetts, in 1936, where Prof. William S. Hanna (Egypt) and Jeremiah Jennings (South Africa) represented Africa. Jennings was, at the time, studying soil mechanics under the supervision of the renowned Karl Terzaghi. The session showcased the contributions of individuals from countries such as South Africa, Algeria, and Ghana and presented a roadmap for future involvement aimed at reducing the knowledge gap. The</p>		



HTC Project will be implemented in four phases: contribution, discovery, future focus, and 100 years on.

In total, the conference proceedings included 160 papers across multiple topics. Furthermore, the organizers arranged a technical tour to the Great Mosque of Algiers (prayer hall and minaret), allowing attendees to appreciate the architectural beauty and historical significance of Algiers.

Overall, the conference provided valuable insights into the latest advancements in soil mechanics and geotechnical engineering, emphasizing the importance of sustainable development in modern engineering and construction practices.

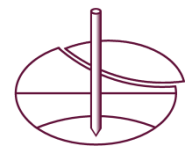
People you met:

The conference provided an opportunity to network and allowed me to meet new people from various countries across the world. I had the opportunity to meet and connect with Prof. Ramdane Bahar, the conference chair and ALGEOS President who showed us great hospitality and personally welcomed me and my supervisor Prof. Denis Kalumba to the conference and made sure we were comfortable throughout the conference. I had the opportunity to meet Prof. Marawan Shahien, who is the ISSMGE Vice President -Africa, with whom I discussed the potential of forming a Geotechnical Society in my home country Namibia to further expand the ISSMGE Society across Africa, showcasing the ISSMGE's eagerness to continue building a brighter future for Africa through togetherness. I also met and connected with Prof. Peter Day from Jones & Wagner/Stellenbosch University in South Africa, who is a well renowned Geotechnical expert in South Africa. I was also able to meet fellow Lecturers and PhD scholars from Kwame Nkrumah University of Science and Technology (KNUST) in Ghana and discussed various aspects of our research and exchanged ideas. These interactions not only expanded my knowledge but also broadened my global network, fostering potential collaborations and partnerships for future projects.

Main features of conference:

The 18th ARCSMGE stood out for several notable features. The conference took place at the famous Marriot (5 Star) Hotel, known for its exhilarating structure. The conference began with two courses offered by Pr. Melbouci Bachir and Pr. Akchiche Mustapha and was followed by the opening ceremony in the Ballroom of the Marriot Hotel. This was followed by various opening and welcome addresses ranging from the Conference chair and ALGEOS President, Pr. Ramdane Bahar to the ISSMGE President, Dr. Marc Ballouz. Thereafter, keynote lectures by world renowned professors were given. The conference had parallel sessions which include several keynote lectures and oral presentations spread across three venues within the Marriot Hotel. The conference also hosted an exhibition where a large diversity of companies presented their expertise and products.

Furthermore, the organisers arranged a gala dinner for willing participants which provided an opportunity for the conference participants to engage socially after a long day attending the very informative sessions and presentations. The gala dinner consisted of various performances by Algerian artists and a great taste of the Algerian food on the menu. The conference organizers also arranged a technical tour to the Great Mosque of Algiers (prayer



hall and minaret), allowing those attending the conference to immerse themselves in the beauty and history of the Algiers.

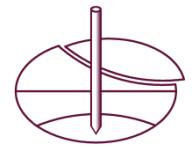
Your comments on the conference:

As a participant in the 18th ARCSMGE, I found the conference to be an exceptional platform for both learning and networking. It offered a unique opportunity to bridge the gap between theory and practice, with a strong focus on sustainability and environmental stewardship. The commitment of the organizing committee and the dedication of the presenters and attendees made the conference a resounding success. The conference deepened my understanding of Soil Mechanics and Geotechnical Engineering and connected me with fellow researchers and practitioners who share my passion.

Furthermore, it provided me with the platform to contribute my own insights through the presentation of two research papers:

1. *“Application of Dynamic Cone Penetration (DCP) Testing in Analysis of Shallow Foundations A Case Study of the Jose Eduardo Dos Santos (JEDS) Campus, Namibia.”*
2. *“Effect of Geotextile Static Puncture Strength Value on the Geotextile-Geomembrane interface shear characteristics.”*

Both presentations received positive feedback, further contributing to my professional growth. In conclusion, the 18th African Regional Conference on Soil Mechanics and Geotechnical Engineering was an invaluable experience that left me inspired and better equipped to contribute to the field. The knowledge gained, connections made, and the enthusiasm shared have undoubtedly enriched my professional journey. I eagerly look forward to the next instalment of this conference to be held in Cairo, Egypt in 2028 and the continued growth of the Soil Mechanics and Geotechnical Engineering community.



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

**18th African Regional Conference on Soil Mechanics and Geotechnical Engineering
(18th ARCSMGE)**

6 – 9 October 2024, Algiers, Algeria

The 18th African Regional Conference on Soil Mechanics and Geotechnical Engineering (ARCSMGE) was held in Algiers, Algeria, from 6th to 9th October 2024, under the theme “Geotechnical Engineering for Africa’s Sustainable Development.” The conference brought together experts, researchers, and professionals from across Africa and beyond to discuss key topics including soil characterization, foundation engineering, ground improvement, slope stability, and environmental geotechnics.

The event opened with specialized courses and a welcoming ceremony led by conference chair and ALGEOS President, Prof. Ramdane Bahar, followed by ISSMGE President, Dr. Marc Ballouz. The conference featured 12 keynote lectures from world-renowned geotechnical engineers, including Prof. Peter Day of South Africa, who presented on the impact of various design methods on geotechnical practice. Another highlight was Prof. Mounir Bouassida’s lecture on the Cylindrical Shear Tool (CTS), a novel approach to testing soil shear strength, and Prof. Daniele Antonio Cazzuffi’s presentation on the use of geosynthetics in tunnels and dams, emphasizing their evolution and critical role in modern infrastructure.

A notable feature of the conference was the ISSMGE Heritage Time Capsule (HTC) session, which highlighted the contributions of African geotechnical engineers and provided a roadmap for future advancements in the region. It was inspiring to learn about Africa’s early involvement in geotechnical engineering, dating back to the first international ISSMGE conference in 1936. I had the opportunity to present two research papers:

1. *“Application of Dynamic Cone Penetration (DCP) Testing in Analysis of Shallow Foundations: A Case Study of the Jose Eduardo Dos Santos (JEDS) Campus, Namibia”*
2. *“Effect of Geotextile Static Puncture Strength Value on the Geotextile-Geomembrane interface shear characteristics”*

Both presentations received valuable feedback, enhancing my research. Additionally, I had the pleasure of networking with experts such as Prof. Ramdane Bahar, Prof. Marawan Shahien, and Prof. Peter Day, enriching my professional connections. The conference also offered social highlights, including a gala dinner and a technical tour to the iconic Great Mosque of Algiers, providing an immersive cultural experience.

I am grateful to the ISSMGE Foundation for their generous support in making my participation possible. The 18th ARCSMGE was an exceptional platform for learning, collaboration, and growth. I look forward to the next conference in Cairo, Egypt, in 2028.

Photographs from Conference: Insert here or attach to email

