ISSMGE FOUNDATION
REPORT ON CONFERENCE ATTENDANCE

Your Name: Soha Emad Said Mohamed Salem	***Your Organization:*** Faculty of Engineering Ain Shams University	***Date of report:*** 10th of May 2026
Conference Title: 10TH AFRICAN YOUNG GEOTECHNICAL ENGINEERS CONFERENCE (AYGEC'26)	***Location of Conference:*** University of Lagos, Lagos, Nigeria.	***Dates of Conference:*** (26-29 April 2026)

What you learned:

I learned about many innovations and best practices in geotechnical engineering for Africa's development, as well as the importance of the relationship between theory and practice when making geotechnical decisions. I also benefited from discussions on soil stabilization with different techniques using bio-based materials, the use of AI and machine learning in geotechnical engineering, new advances in supported deep excavation, problems associated with soil liquefaction and peat. The importance of geogrids in geotechnical engineering for retaining walls, slope stability and failure prevention.

People you met:

I met many prestigious members in the geotechnical society such as Dr. Marc Ballouz, the president of the ISSMGE, Prof. Marawan Shahien, VP Africa ISSMGE, Prof. Samuel Ejezie, past VP Africa ISSMGE, Dr. Fatma Baligh, past VP Africa ISSMGE, Eng. Sebastian Ozoamalu, VP Africa ISSMGE Elect, Eng. Yuli Doulala-Rigby, Chair, BGA and Dr. Chris Menkiti, Former Chairman BGA

I also interacted with many other intelligent minds such as Precious Osagie, Secretary, AYGEC'26 organizing committee, Bridget Lokoe, YPMG-ISSMGE and young presenters such as Favour Oluwadare, Jariyat Hamzat and Ethelbert Mezie.

Main features of conference:

- Participation of many prestigious members of the geotechnical society, as well as many postgraduate and undergraduate students from Africa.
- Presentation of 23 Technical Papers by young talented geotechnical engineers from Africa
- Keynote lectures by Dr. Marc Ballouz, Prof. Marawan Shahien, Eng. Yuli Doulala-Rigby, Dr. Chris Menkiti and Prof. Samuel Ejezie.
- Empowering panel discussions by Dr. Fatma Baligh, Prof Samuel Ejezie, Eng. Tonye Warmate, Eng. Barry Esimone, Eng. Olukorede.
- Presentation of many awards such as the Lifetime Achievement Medal and Bright Sparks Lecture Award
- A technical visit to Eko Atlantic project

Your comments on the conference:

The 10th African Young Geotechnical Engineers Conference in Lagos was a valuable and enriching experience that provided excellent opportunities for learning, networking, and exchanging ideas with professionals and researchers from across Africa. The technical sessions were insightful and well organized, and the conference successfully encouraged collaboration and innovation in geotechnical engineering. I appreciate the efforts of the organizers and participants in making the event both professionally rewarding and memorable.

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

I had the privilege to attend The 10th African Young Geotechnical Engineers Conference, held in Lagos, Nigeria from the 26th to the 29th of April 2026. This event gathered bright minds from Africa as well as prestigious members of the ISSMGE.

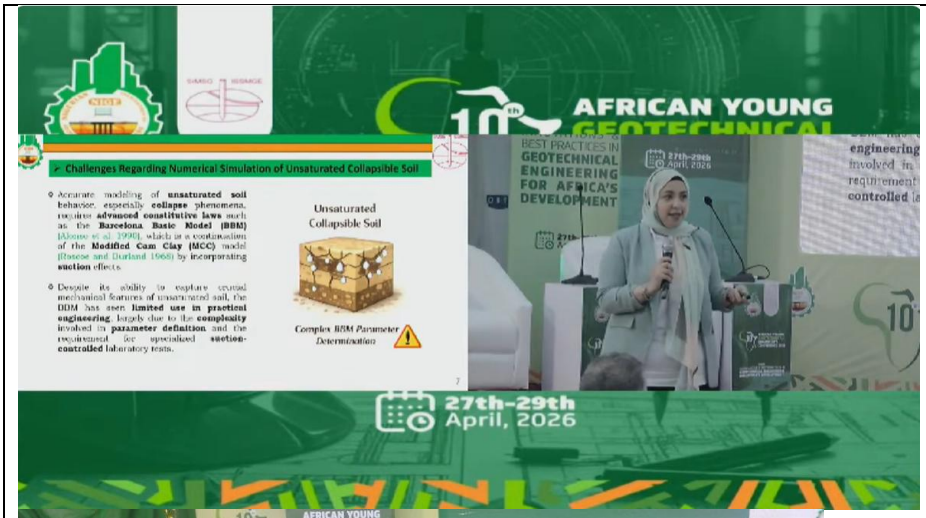
I presented my paper "A Robust Framework for Barcelona Basic Model Parameter Calibration based on Conventional Oedometer Tests on Egyptian Collapsible Arid Soils" based on my current Ph.D. studies aiming to facilitate the use of the Barcelona Basic Model in practical geotechnical engineering on partially saturated soils. My presentation was well received and led to engaging discussions with peers and experts. I was also granted the Bright Sparks Lecture Award by Dr. Marc Ballouz in recognition of my presentation which was a great honour and had an immediate impact on my academic and professional career.

Beyond my own session, I benefited from a variety of presentations covering topics such as innovations in geotechnical engineering, ground improvement, fuzzy logic, foundation engineering, and sustainable geotechnical practices. The keynote lectures were particularly insightful, highlighting current challenges and innovative solutions in geotechnical engineering across Africa and beyond, while emphasizing the importance of sustainability and resilient infrastructure.

The conference also provided an excellent opportunity for networking and professional exchange. I had the chance to meet young engineers, researchers, and professionals from different countries, share experiences, and discuss potential future collaborations. The welcoming and professional atmosphere reflected the strong spirit of the ISSMGE community and encouraged the development of young engineers.

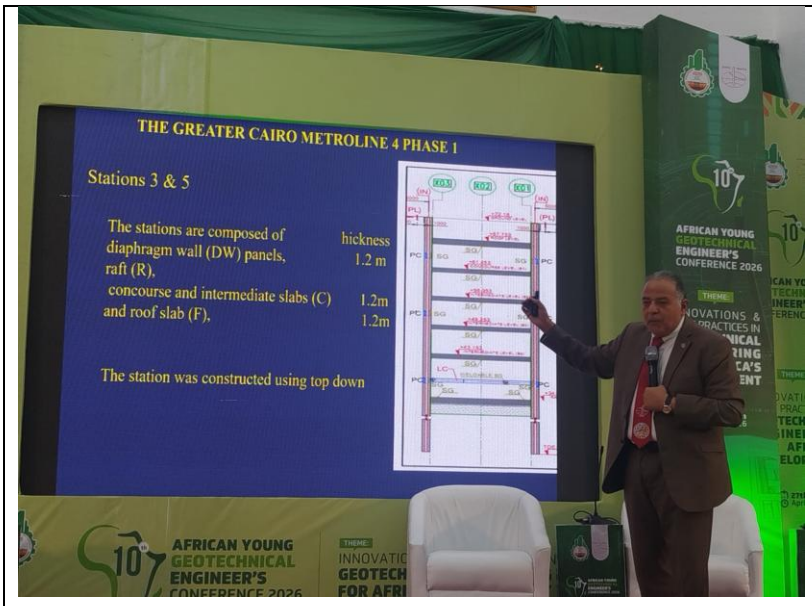
Overall, attending the 10th African Young Geotechnical Engineers Conference was an enriching experience that expanded my technical knowledge, strengthened my professional network, and further motivated my interest in advances and innovations in geotechnical engineering.

Photographs from Conference: Insert here or attach to email


AFRICAN YOUNG
GEOTECHNICAL
Challenges Regarding Numerical Simulation of Unsaturated Collapsible Soil
Accurate modeling of unsaturated soil behavior, especially collapse phenomena, requires advanced constitutive laws such as the Barcelona Basic Model (BBM) (Alonso et al. 1990), which is a continuation of the Modified Cam Clay (MCC) model (Roscoe and Burland 1968) by incorporating suction effects.
Despite its ability to capture crucial mechanical features of unsaturated soil, the BBM has seen limited use in practical engineering, largely due to its complexity involved in parameter definition and the requirement for specialized suction-controlled laboratory tests.
Unsaturated Collapsible Soil
Complex BBM Parameter Determination
BEST PRACTICES IN GEOTECHNICAL ENGINEERING FOR AFRICA'S DEVELOPMENT
27th-29th April, 2026


AFRICAN YOUNG GEOTECHNICAL ENGINEER'S CONFERENCE 2026
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Geotechnical Engineering for Africa's Future
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THE GREATER CAIRO METROLINE 4 PHASE 1
Stations 3 & 5
The stations are composed of diaphragm wall (DW) panels, raft (R), concourse and intermediate slabs (C) and roof slab (F),
hickness
1.2 m
1.2m
1.2m
The station was constructed using top down
AFRICAN YOUNG GEOTECHNICAL ENGINEER'S CONFERENCE 2026