

ISSMGE FOUNDATION REPORT ON CONFERENCE ATTENDANCE

Your Name:	Your Organization:	Date of report:
Leonardo Marchiori	University of Beira Interior	10 July 2023
Conference Title:	Location of Conference:	Dates of Conference:
9ICEG – 9 th International Congress	Chania, Crete - Greece	25-28 June 2023
on Environmental Geotechnics		

What you learned:

I'm a PhD student and young research over environmental geotechnics, focusing on the valorisation of industrial wastes for geotechnical application as alternative and sustainable geomaterials. This congress provided a wide knowledge in my area of research inserted in the scope of circular economy and reutilization of "non-valuable" resources which needed a better solution than disposal. Exposing my work was a great opportunity to exchange expertise within the best scientists in the world, giving to me a better understand of how I am going to contribute with my research for these more sustainable future predictions.

The Special Plenary Session "If I started my career in Environmental Geotechnics now, I would..." has open my mind to valuable tips and ideas which the moderator Prof. Kristin Sample-Lord and the distinguished speakers, Prof. S. Burns, L-T. Zhan, R.K. Rowe, and M. Manassero have provided. Their main objectives were to expose the human side of research and how to develop science mitigating errors, mathematical or neurological ones, due to the capacity of retaining knowledge and apply it the better way possible. It was extremely ennobling for young geotechnical research as I am.

People you met:

It was possible to met the greatest scientist among the world in the congress, exchanging ideas, experiences and some advices. It was my pleasure to meet academics and practitioners, namely:

- Dr. M. Ballouz, ISSMGE President
- Prof. D. Zekkos, Professor of Civil and Environmental Engineering at University of California, Berkeley
- Prof. R. Kerry Rowe, Professor of Geotechnical and Geoenvironmental Engineering at Queen's University, Canada
- Prof. C. Shackelford, Professor of Civil and Environmental Engineering at Colorado State University
- Prof. M.E.G. Boscov, Professor of Structural and Geotechnical Engineering at University of São Paulo, Brazil
- Prof. G. Mondelli, Professor of Environmental Geotechnics at University Federal of ABC, Brazil
- Prof. A. Thomé, Professor of Geotechnics at University of Passo Fundo, Brazil
- Prof Bo Xu, Research Fellow of Civil and Environmental Engineering at Nanyang Technological University

 Erica Guerreiro, PhD candidate of Energy Engineering at University of São Paulo, Brazil

Main features of conference:

In the front page of 9ICEG, the highlighted points to explore in the event were "global challenges, from warming to devastating calamities from increasing natural disasters – there is no denying that we are facing the worst environmental crisis of all time, besides there is an unique opportunity where environmental geotechnics is more than ever in the spotlight of global research, paving the way towards a green, circular economy that promotes the use of sustainable and management practices, and the main purpose of 9ICEG is collaborations when reinforce dialogue among geoenvironmental engineering professionals and researches envisioning new methods, tools and infrastructure to address the global challenges. And the congress made what proposed.

The main feature of the conference for me was created by the president of ISSMGE, Dr. Mark Ballouz, which he embraces all the geotechnical society and called it Geotechnical Family. With this, he and all the participants, who have confirmed and supported his idea, created in me that spirit of family where we can collaborate and contribute for a more sustainable improvement and development of environmental geotechnics topics. In addition, scientifically speaking, several of the main researchers and professionals of environmental geotechnics lectured providing a true state-of-the-art within the state-of-practice in this theme. Besides, the social and network part was amazing since the Opening Cerimony to the last minute of the Conference Beach Party.

Your comments on the conference:

I would like to thank very much for the 9ICEG organization for the excellent event due to scientifical and social attractions. Besides, the ISSMGE Foundation for granted me the opportunity to participate with funding support. And all the Geotechnical Family which have created an exceptional environment for science development.

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

The 9ICEG is a congress on environmental geotechnics where geotechnical and geoenvironmental researchers and engineers met to exchange idea and develop sustainability actions. It took place from 25th to 28th June 2023 and was organized by Technical Committee TC215 of the ISSMGE and the Hellenic Society for Soil Mechanics and Geotechnical Engineering.

It was an opportunity for academics and practitioners to meet and discuss the state-of-theart and state-of-practice in the congress' theme scopes, and the current challenges highlighted were the subtitle "waste doesn't need to be waste", from the re-entry of construction wastes and marine sediments into the production cycle, to the reuse of existing foundations and the use of re/upcycled geotextiles, environmental geotechnics are laying the ground for greener circular economy in constructions; "management of hazardous substance", despite the improvements in living conditions over the last century, pollution continues to have profound effects on human health with over 9 million deaths worldwide be attributed to disease from exposure to pollution. Hazardous substances, unregulated contaminants, and medical waste in the era of a pandemic are global threats, that call for innovation in soil remediation techniques; "access to clean energy", access to energy is increasingly recognized as a basic human need. One of the UN Sustainable Development Goals is to "ensure access to affordable, reliable, sustainable and modern energy for all" by 2030. Exploiting the potential of green sources of energy and energy recovery from waste can ensure secure and affordable energy supplies for more people while supporting global climate change objectives; and "designing in extreme environments", we live in a challenging era of increasing flooding events create havoc across the world, droughts seriously threaten water supplies and extreme heat creates unliveable conditions in major city centres, designing infrastructure to withstand such extreme conditions while safeguarding community resilience remains an open challenge for environmental engineers.

The conference exposed a very complete program within keynote lectures from distinguished speakers, special sessions, discussion panels, Bright Spark lectures, and parallel oral and posted presentations during 3 full days. These sessions encouraged talks, dialogues and exchange of ideas looking to detail a sustainable path for the future of environmental geotechnics.

Photographs from Conference: Insert here or attach to email









