ISSMGE FOUNDATION
REPORT ON CONFERENCE ATTENDANCE

Your Name: Leonardo Marchiori	***Your Organization:*** University of Beira Interior	***Date of report:*** 03 July 2026
Conference Title: 21ICSMGE – 21st International Conference on Soil Mechanics and Geotechnical Engineering	***Location of Conference:*** Vienna - Austria	***Dates of Conference:*** 14-19 June 2026

What you learned:

My participation in the 21st International Conference on Soil Mechanics and Geotechnical Engineering (ICSMGE 2026) significantly expanded my knowledge of current developments in geotechnical and geoenvironmental engineering. The conference theme, "Geotechnical Challenges in a Changing Environment", highlighted the importance of sustainability, resilience, digitalization, and innovation in modern geotechnical practice. Particularly relevant to my research were the sessions on Geo-Environmental, Micro to Macro, Sustainability and Transportation, Ground Improvement, and Laboratory Testing. These sessions reinforced the growing interest in circular-economy approaches, including the reuse of industrial by-products and waste materials in geotechnical applications. I also learned about recent advances in low-carbon binders, sustainable ground improvement techniques, and innovative geoenvironmental barriers. The Sustainability Honour Lecture by Abir Al-Tabbaa ad TC215: R. Kerry Rowe Lecture by Krishna R. Reddy, were particularly inspiring, demonstrating how waste-derived materials, soil remediation technologies, and life-cycle assessment can contribute to more sustainable geotechnical infrastructure.

People you met:

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

- Dr. Mark Ballouz, ISSMGE President
- Prof. Pedro Seco e Pinto, past ISSMGE President
- Prof. Dimitrius Zekkos, Professor of Civil and Environmental Engineering at University of California, Berkeley
- Prof. Catherine O'Sullivan, Professor in Particulate Soil Mechanics at Imperial College London, UK
- Prof. Paulo Coelho and Prof. António Alberto Correia, Professor in Civil Engineering at the University of Coimbra, Portugal
- Prof. Castorina Vieira and Prof. Sara Rios, Professor in Civil Engineering at the University of Porto, Portugal
- Dr. Dimitrios Terzis, Researcher and Teaching Associate at Swiss Federal Institute of Technology, Lausanne (EPFL), Switzerland
- Dr. Marina Bortolloto, Fellow in Civil Engineering at Imperial College London and Postdoctoral Research Associate at the University of Cambridge, UK

- Prof. Fausto Gomez-Molina, Lecturer in Civil Engineering at Universidad Politécnica de Madrid, Spain
- Mr. Jorge Andrés Arriagada Triana, Civil Engineer and academic, Universidad de Valparaíso, Chile
- Dr. Stephen Thomas, Managing Director of OGI – Groundwater Specialists, UK
- Mr. João Machado, Geotechnical Engineer at Geocomp Inc., USA
- And many more …

Main features of conference:

- Almost a week of technical sessions, workshops, keynote lectures, and networking activities.
- Broad coverage of geotechnical engineering topics through ISSMGE Technical Committees.
- Strong emphasis on sustainability, climate adaptation, digitalization, and innovation.
- Oral, poster, and short-presentation formats encouraging discussion among delegates.
- Industry and technical committee workshops addressing monitoring technologies, data quality, digital workflows, and experimental methods.
- Opportunities to engage with international experts, young engineers, and industry representatives.

Your comments on the conference:

ICSMGE2026 was exceptionally well organized and provided an excellent environment for technical exchange and professional networking. The conference successfully connected academic research with engineering practice, while maintaining a strong focus on sustainability and future challenges facing the geotechnical profession. The opportunity to present my research allowed me to receive valuable feedback from international experts and discuss future collaborations in geoenvironmental engineering. My participation strengthened both my technical expertise and my professional network, which will contribute to future research and engineering activities. The financial support provided by the ISSMGE Foundation was therefore essential in enabling my attendance and active participation.

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

Thanks to the generous support of the ISSMGE Foundation, I had the opportunity to attend the 21st International Conference on Soil Mechanics and Geotechnical Engineering (ICSMGE2026), held in Vienna, Austria, from 14–19 June 2026. The conference brought together geotechnical researchers and practitioners from around the world under the theme "Geotechnical Challenges in a Changing Environment" to meet and discuss the state-of-the-art and state-of-the-practice.

During the ICSMGE2026, I presented my paper entitled "Hydraulic Conductivity of Waste-Based Liners: Valorization of Industrial By-products for Sustainable Systems". The research investigates the use of water treatment sludge, vegetal biomass ash, granitic mining waste, and blast furnace slag as sustainable alternatives for landfill liner applications. The work demonstrates that selected waste-based mixtures can achieve hydraulic conductivity values suitable for containment systems while promoting circular economy principles and reducing the consumption of virgin materials. Participation in the conference allowed me to attend several technical sessions specifically related to Environmental Geotechnics, Sustainability in Geotechnical Engineering, Ground Improvement, and Laboratory Testing. These sessions highlighted recent advances in sustainable geomaterials, low-carbon engineering solutions, waste reutilization, and resilient infrastructure design. Additionally, the conference exposed a very complete program within Terzaghi Oration, Keynote, Special and Invited Lectures from distinguished speakers, Parallel Oral and Poster presentations during 4 full days, in addition to a Welcome Reception, Workshops and Technical Visits.

The conference also provided excellent networking opportunities. I exchanged ideas with researchers, academics, and practitioners from different countries, discussing potential collaborations and future research directions in geoenvironmental engineering and sustainable waste management. These interactions offered valuable perspectives on emerging challenges and innovative approaches being developed internationally. ICSMGE 2026 demonstrated the growing importance of sustainability, resource efficiency, and climate resilience within geotechnical engineering. The event successfully combined scientific excellence with practical engineering applications, creating an ideal platform for knowledge sharing and professional development.

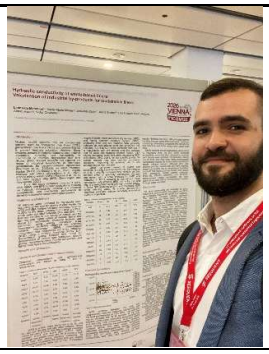
I am sincerely grateful to the ISSMGE Foundation for its financial support, which made my participation possible. The experience was highly beneficial both professionally and academically, and I look forward to applying the knowledge gained and maintaining the international connections established during the conference.

Photographs from Conference: Insert here or attach to email



Welcome Entrance





My Poster



Terzaghi Art



Welcome Reception



Terzaghi Oration



Industry Session



Poster Session



Parallel Session







Terzaghi Archives and Exhibition





ICSMGE2026





Exhibition Hall