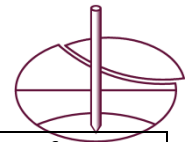


**ISSMGE FOUNDATION
REPORT ON CONFERENCE ATTENDANCE**

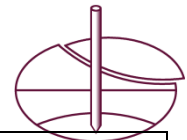
Your Name: Agostino Walter Bruno	Your Organization: University of Genoa	Date of report: 19/05/2023
Conference Title: 8 th International Conference on Unsaturated Soils (UNSAT2023)	Location of Conference: Milos (Greece)	Dates of Conference: 2-5 May 2023
What you learned: The UNSAT 2023 covered several research topics ranging from fundamentals of unsaturated soil behaviour to recent advances in geo-environmental applications, from thermo-hydro-mechanical coupling to soil-atmosphere interactions and role of unsaturated soil behaviour in rammed earth materials. The conference also offered a great opportunity to learn about novel experimental works and recent advances in both constitutive and numerical modelling. More in details, I gained new insights into the following aspects: <ul style="list-style-type: none">- Interpretation of Computed Tomography scans to investigate the retention behaviour of granular soils- Soil-atmosphere interactions from triaxial testing to numerical modelling- New sensors to measure/monitor both capillary suction and water content in soils- Modelling of the coupled thermo-hydro-mechanical behaviour of soils- Effect of microstructural properties on mechanical and retention behaviour of soils- Role of unsaturated soils in hygrothermal behaviour in rammed earth materials- The Blight Lecture delivered by Pr. Alonso highlighted the importance of considering errors as opportunities to learn and tackle a scientific problem from different (multi-disciplinary) perspectives.		
People you met: I had the chance of meeting numerous colleagues and friends. Among these: Joao Mendes (Northumbria University), Marti Lloret-Cabot (Durham University), Alessandro Tarantino (Strathclyde University), Enrique Romero, Laura Gonzalez-Blanco (UPC), Katerina Tsiampousi (Imperial College), Marianna Pirone (University of Naples), Giuseppe Pedone (University of Trento). I also had the chance for new encounters: Alessia Losini (Université Savoie – Mont Blanc), Anita Laera (Plaxis), Sergio Lourenço (University of Hong Kong), Bernardo Caicedo (Universidad de los Andes), Tacio de Campos (PUC-Rio de Janeiro), Claudia Zapata (Arizona State University), Marius Milatz (University of Hamburg), David Encalada (UPC), Rafail Panagiotou (University of Cyprus).		
Main features of conference: The UNSAT2023 covered a broad range of topics: fundamental unsaturated soil mechanics (numerical and constitutive modelling), experimental advances in testing techniques, methods and equipment up to engineering and geo-environmental applications. The themed lectures were of high interest and delivered by eminent researchers in the field of		



unsaturated soils. Interestingly, the conference also included introductory lectures for non-specialists and a very useful Panel discussion that gave interesting insights into the best approaches to teach unsaturated soil mechanics to undergraduate students.

Your comments on the conference:

The UNSAT2023 conference was very well organised and planned. The talks were delivered in two parallel halls and this gave the opportunity of attending numerous presentations, which would have been more difficult with more parallel sessions. Coffee breaks also gave a great opportunity to exchange with colleagues about potential research collaborations.



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

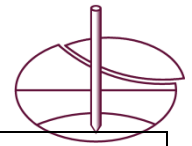
The UNSAT2023 Conference was held in Milos (Greece) and it was such a great experience meeting colleagues working on unsaturated soils after a couple of years of forced pause from 'in-presence' events. Researchers from all around the world attended the Conferences and delivered exciting talks on a rich variety of topics, including:

- Long-term measurement of soil suction in the field and its modelling
- Fundamental of soil behaviour
- Shrinkage and swelling, collapse
- Cyclic and dynamic behaviour
- Advances in testing techniques, methods and equipment
- Effect of climate change on infrastructure through unsaturated soil behaviour
- Soil-water retention curves and effect of microstructure
- Physical, numerical and constitutive modelling
- Coupled thermo-hydro-mechanical behaviour of soils – geo-environmental applications
- Unsaturated soil in the preservation of historic monuments
- Several engineering applications of unsaturated soil mechanics: foundations, fills, embankments, dams, roads, tailings
- Role of partial saturation in rammed earth materials

Each session was well managed by the Chairs while the Q&A sessions engaged both the presents and the audience in fruitful discussions.

The 3rd Blight lecture delivered by Pr. E. Alonso together with other themed lectures made the UNSAT2023 conference a unique event. Moreover, the conference also offered an introductory course to non-specialist and a highly interesting Panel discussion on the best approaches to teach unsaturated soil mechanics to undergraduate students.

The informal discussions, during coffee breaks and social dinner, have been a great opportunity to explore potential collaborations, expand the network and exchange research ideas. The UNSAT 2023 Conference was a fantastic opportunity to meet new and old colleagues after the Covid pandemic. During the Conference, I had an invaluable opportunity to learn from renowned professors with decades-long experience. I also had the chance of engaging fruitful discussion with leading researchers, which will surely lead to future research collaborations. I wish to thank Michael Bardanis and his team for the huge effort spent in organising such a great event. Finally, I express my gratitude to the ISSMGE Foundation Trustees for the financial support, without which attending this conference would not have been possible.



Photographs from Conference: Insert here or attach to email



Me delivering a talk on incorporating a scaled stress variable into Modified Cam-Clay model