

Introduction to Unsaturated Soil Mechanics and its importance in Geotechnical Practice

An event in support of non-expert delegates attending the 8th International Conference on Unsaturated Soils, Milos, Greece



Fundamental characteristics and shear strength of unsaturated soils, by Dr Michael Bardanis (6:30-7:20pm)

Michael Bardanis is the Director of Laboratory of EDAFOS Engineering Consultants S.A., a geotechnical consultancy based in Athens, Greece. He holds a Diploma in Civil Engineering from the National Technical University of Athens (NTUA), an MSc in Soil Mechanics from Imperial College, London, and a PhD degree in Unsaturated Soil Mechanics from NTUA.

Michael has worked as a geotechnical engineer since 1998 on projects in Greece, Cyprus and Bulgaria, including large landslide remediation projects, highways, dams, airports, investigation and restoration of historical monuments. Between 2018 and 2021 he was a Visiting Lecturer at Neapolis University Paphos, Cyprus. He has been elected several times on the Executive Committee of the Hellenic Society of Soil Mechanics and Geotechnical Engineering (HSSMGE), serving as its Secretary General between 2015 and 2019, and as its President since 2019. He is the Chairman of the 8th International Conference on Unsaturated Soils, Milos, Greece.

Swelling and collapse due to partial saturation changes, by Assoc. Prof. Dimitrios Loukidis (7:30-8:20pm)

Dimitrios Loukidis is Associate Professor of Geotechnical Engineering in the Department of Civil & Environmental Engineering of the University of Cyprus. Upon completion of his undergraduate studies in Civil Engineering at the National Technical University of Athens (NTUA), he pursued graduate studies at Purdue



University in the area of geotechnical engineering, where he received his Master's and PhD degrees. His main research interests focus on foundation engineering, and the use of the finite element method in geotechnical engineering. He has performed research on pile foundations, advanced constitutive modelling of sands and clays, fault rupture propagation through soils and its impact on pipelines, simulation of large deformation problems in geotechnical engineering, and the impact of swelling soils on foundations. Since 2009, he has been the head of the Geomechanics Laboratory of the University of Cyprus. He has served as President of the newly founded Cypriot Society of Soil Mechanics and Geotechnical Engineering (2016-2022).