Special Issue

Unsaturated Soils: Testing and Modelling, 2nd Edition

Message from the Guest Editor

This Special Issue invites contributions dealing with multi-scale laboratory and field testing and monitoring of unsaturated soils, as well as the development and application of theoretical and computational tools to model the behaviour of unsaturated soils and earthworks. The topics for submission include, but are not limited to, the following:

- Fundamental theory and constitutive modelling;
- Multiphysics and coupled phenomena modelling;
- Hydromechanical properties and behaviour;
- Advances in multiscale experimental evidence and techniques (laboratory and in situ);
- Development and application of numerical modelling tools for engineering analysis and design;
- Quantification of climatic effects and soil-vegetationatmosphere models;
- Shrinking-swelling soils;
- Unsaturated soil mechanics for hazardous and nuclear waste repositories;
- Waste geomaterial behaviour and applications in geoengineering

Guest Editor

Prof. Dr. Maria Mavroulidou

Division of Civil and Building Services Engineering, London South Bank University, London SE1 OAA, UK

Deadline for manuscript submissions

10 April 2025



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/203203

Applied Sciences MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/ applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

