Special Issue

Soil Mechanics Analysis in Geotechnical Engineering

Message from the Guest Editor

Geotechnical Engineering is the study of applying the principles of soil and rock mechanics to real-world problems. Understanding and applying the concepts of soil mechanics requires a sound knowledge of physics, statics, dynamics, mathematics, and the mechanics of materials.

For a correct analysis of soil behavior, it is essential to outline the appropriate knowledge of the mechanical characteristics. In this context, the execution of tests in situ or in the laboratory, both in the static and dynamic field, allows us to evaluate the basic behavior parameters for the subsequent processes of study of the problems present in the application field. Subsequently, it is therefore possible to use numerical simulations, developed within different fields of soil behavior, which allow for the identification of the solutions necessary for solving the case studies. On the one hand, it is therefore important to have an in-depth knowledge of the materials being analyzed; on the other hand, a mechanical analysis of the soils is necessary to define and resolve the fields of application.

This Special Issue will be dedicated to soil mechanics analysis in geotechnical engineering.

Guest Editor

Dr. Antonio Cavallaro

Institute of Heritage Science (ISPC)—Italian National Research Council (CNR), 95124 Catania, Italy

Deadline for manuscript submissions

closed (20 December 2023)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/176451

Applied Sciences Editorial Office 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 5.5



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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

