## **Special Issue**

### In Situ and Laboratory Tests for Analysis and Application in Soil Mechanics

### Message from the Guest Editor

Geotechnical engineers work closely with structural and environmental engineers. Understanding and applying the concepts of soil mechanics requires sound knowledge of the physics, statics, dynamics, mathematics, and mechanics of materials. For the purpose of correctly analyzing soil behavior, it is essential to possess appropriate knowledge of its mechanical characteristics. In this context, the execution of tests in situ or in the laboratory, both in static and dynamic fields, allows us to evaluate the basic behavior parameters for the subsequent processes of the problems present in the application field under study. 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 case studies. On the one hand, it is important to have in-depth knowledge of the materials being analyzed, and on the other hand, a mechanical analysis of the soils is necessary to define and understand the fields of application.

### Guest Editor

Dr. Antonio Cavallaro Institute of Heritage Science (ISPC)–Italian National Research Council (CNR), 95124 Catania, Italy

### Deadline for manuscript submissions

31 December 2025



# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/229239

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

mdpi.com/journal/

<u>applsci</u>





# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



<u>applsci</u>



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