

Special Issue

Biobased and Nature-Based Ground and Geomaterial Improvement and Soil Stabilisation

Message from the Guest Editor

This Special Issue invites contributions in the field of ground and geomaterial improvement and soil stabilisation, focusing on nature-based or biobased methods and materials, which are becoming increasingly important to achieve natural and man-made hazard mitigation, as well as remediation and valorisation of contaminated sites and geomaterials or soil-like waste, in an environmentally friendly and sustainable way.

Both fundamental research and application case studies of recently developed techniques are of relevance ranging from procedures and implementation to monitoring performance and quality assessments. For this Special Issue, we welcome submissions of laboratory or field studies, numerical modelling simulating treatment implementation and reaction evolution leading to physicochemical changes in the treated geomaterials, durability and resilience studies, life cycle analyses, and design guidelines as well as methodical literature reviews and outlook on future research directions related to sustainable bio-based, biomediated, and nature-inspired ground/geomaterial improvement and soil stabilisation practices.

Guest Editor

Prof. Dr. Maria Mavroulidou

School of Engineering and Design, London South Bank University,
London SE1 0AA, UK

Deadline for manuscript submissions

20 November 2025



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/203949

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls-ci@mdpi.com

[mdpi.com/journal/
appls-ci](https://mdpi.com/journal/appls-ci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



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)