Special Issue

Advances and Technologies in Rock Mechanics and Rock Engineering

Message from the Guest Editors

The field of rock mechanics and rock engineering is undergoing rapid advancements, driven by the increasing demand for efficient resource extraction and infrastructure development. By integrating high-precision experimental techniques, multi-scale numerical simulation methods, and data-driven intelligent analysis approaches, it is possible to more accurately reveal the mechanical behavior and evolutionary mechanisms of rocks under complex stress environments. This Special Issue aims to collect original research articles, comprehensive reviews, and case studies that address the challenges and opportunities in rock mechanics and rock engineering. Topics of interest for this Special Issue include, but are not limited to, the following:

- Mechanical behavior and modeling of rocks under multi-field coupling conditions;
- Applications of artificial intelligence and machine learning in rock mechanics and rock engineering;
- Applications of advanced monitoring technologies in rock mechanics and rock engineering;
- Challenges and solutions in deep rock engineering.

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Deadline for manuscript submissions

20 August 2025

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/229947

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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

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