



an Open Access Journal by MDPI

Research on Rock Mechanics and Backfilling Materials for Underground Mining

Guest Editors:

Message from the Guest Editors

Prof. Dr. Chunlai Wang

Prof. Dr. Shaojie Chen

Prof. Dr. Weijian Yu

Prof. Dr. Guangjin Wang

Prof. Dr. Xiaoshuang Li

Deadline for manuscript submissions: closed (28 February 2023) Mining-induced rockmass stability is essential for controlling rock movement and mastering mine pressure. Currently, the prevention and control of rock mass instability focus primarily on the mechanisms of rockmass instability and early warning, enhancing rock mass strength, and optimizing mining design.

This Special Issue, titled 'Research on Rock Mechanics and Backfilling Materials for Underground Mining', aims to provide an opportunity for researchers around the globe to conduct a broader scientific and technological discussion on such advances to improve the prevention and control level of the disasters encountered during underground resource mining. Original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- The mechanics of underground mining rockmass;
- Mechanisms of rockburst;
- Dynamic disaster monitoring of rock engineering;
- Mechanical behavior of rockmass;
- Rockmass mechanics tests;
- Constitutive models and instability criteria;
- Underground mining with backfill;
- The key technologies of preventing and controlling rockmass instability using backfilling;





mdpi.com/si/139619





an Open Access Journal by MDPI

Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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.

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)

Contact Us

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/applsci applsci@mdpi.com X@Applsci