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# **Rock Mechanics: Current Challenges and Novel Technologies**

Guest Editor:

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Deadline for manuscript submissions:

20 June 2024

## **Message from the Guest Editor**

Rock mechanics, a branch of mechanics concerned with the response of rock to the force fields from its physical environment, plays an important role in natural resources exploration and exploitation activities, such as mining and petroleum engineering. This Special Issue focuses on the mechanic difficulties in mining exploration and exposition and relevant solutions. We invite submissions of original papers that investigate the mechanical problems in mining and advanced analysis monitoring technologies. This Special Issue covers aims to exhibit original articles that explore (but are not limited to) the following topics:

- Stress field in deep mines
- Mine tremors
- Focal mechanism analysis
- Fracture development
- Rockburst mechanism
- The influence of geological structure on stress field
- Mechanics characteristics of tight sandstone in coal strata
- Rock physics mechanics experiment and modelling
- Propagation and disppation characteristics of seismic waves
- Advanced analysis technology of seismic waves
- Seismic wave velocity tomography
- Microseismic monitoring











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### **Editor-in-Chief**

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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.

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