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Advances and Challenges in Rock Mechanics and Rock Engineering

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Message from the Guest Editors

Dear Colleagues,

The mining activities disrupt the balance of the in situ stress, resulting in the instability and collapse of the rock formation, as well as the surface subsidence. Mining-induced rock mass stability is essential for controlling rock movement and mastering mine pressure. The roadway support design, working face support selection, and dynamic disaster prevention measures, for example, are closely related to the mechanical properties, fracture mechanism and stability form of rock mass. Currently, the prevention and control of rock mass instability focus primarily on backfilling goaf, enhancing rock mass strength, and optimizing mining design. As the mining depth increases, the mechanism underlying rock mass instability and fracture formation will become more complicated. Consequently, novel methods for preventing and controlling rock mass instability are critical for ensuring the safety and efficiency of mining activities.

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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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