Special Issue

Disaster Prevention and Control of Underground and Tunnel Engineering

Message from the Guest Editors

(1) Urban underground engineering, such as the problems associated with the rock and soil mechanics encountered by new urban underground engineering projects in special geological formations and the deformation and damage problems encountered by existing urban tunnel galleries and underground engineering when the groundwater level rises; (2) Conventional energy underground engineering, such as the ground subsidence and mining pressure disasters faced by coal underground mining and the problems associated with rock mechanics and rock fracturing in oil and gas (shale gas) mining; (3) Unconventional energy underground engineering, such as multi-field coupled rock mechanics problems in dry hot rock mining; (4) Geological energy storage engineering, such as the rock mechanics faced during the exploration, construction, and operation of compressed air storage facilities, natural gas underground storage facilities, and petroleum underground storage facilities; (5) Extreme environmental underground engineering, such as tunnel engineering in extremely cold regions and tunnel engineering in high-temperature regions. (6) The control of adverse geological conditions in deep areas.

Guest Editors

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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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