Special Issue

Advanced Backfill Mining Technology

Message from the Guest Editors

Underground mining of a mine can cause the overlying rock layer to appear suspended, sink, and collapse, which will introduce instability to the surrounding rock and may cause destruction of the water system, surface subsidence, and other problems. In backfill mining technology, solid or fluid backfill material is filled at the roadway or gob position via belt conveying or pipeline transportation, and it is an effective method to solve the above problems. Backfill mining technology is mainly based on the “compensation principle” to maintain or change the sinking or collapse state of the overlying rock layer. In addition, if the backfill material is based on waste from mining, the mine can reduce waste emissions. Thus, backfill mining technology is beneficial to promoting mining safety, resource recovery rate, and the environmental protection. This Special Issue is dedicated to new advanced backfill mining technology.

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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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