



Monitoring, Process Control, Simulation, and Optimization in Coal Mining

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Message from the Guest Editors

Coal plays an important role in the world economy and industrial development. Shallow coal resources have been gradually exhausted, and coal mining has entered the stage of deep mining. In this environment, the geological conditions are more complex, with high temperatures, high ground stress, high gas pressure and low permeability, which pose a threat to the safety of workers mining coal. Problems such as coal and gas outburst, rock burst pressure and gas dust explosion are more likely to occur in the deep mining stage. It is thus of great significance to study the underlying mechanisms of coal mine disasters and how to prevent them for the safe and efficient mining of coal resources.

This Special Issue solicits original research articles and review papers reflecting the advances in research concerning process safety in coal mining. Topics of interest include, but are not limited to:

- Mechanisms and preventions of dynamic disasters;
- Prevention of coal mine gas and fire coupling disasters;
- Gas extraction technology of low permeability coal seams;
- Coal mine gas explosions;
- Coal bed gas adsorption and desorption and diffusion.





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Message from the Editor-in-Chief

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