Special Issue

Advanced Coal Processing: Comminution, Concentration, Desulphurization and Process Optimization

Message from the Guest Editors

The Special Issue will highlight advancements in contemporary processing equipment and machinery, particularly solutions that measurably improve energy efficiency, reduce reactive power consumption, and enhance waste disposal in coal preparation plants, thereby enhancing environmental perspective and sustainability. Additionally, process modeling, stochastic and precise optimization, artificial intelligence, and machine learning methods are transforming plant recovery through recent advances and digital transformation applications.

The Special Issue covers the entire coal value chain, including comminution, classification, wet beneficiation (gravity or flotation), dry beneficiation, acid or basic leaching, desulphurization, and waste management, with a focus on feasible solutions and measurable impacts (clean ash content, recovery, reactive optimization, energy efficiency, environmental and sustainability metrics, and emissions). We encourage articles on methods that integrate direct control and optimization under challenging plant operating conditions. Submissions of novel tools that demonstrate reliable technical, economic, and environmental benefits will be particularly welcome.

Guest Editors

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Dr. Xiangning Bu
Dr. Sunil K. Tripathy

Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

Editor-in-Chief

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Journal Rank:

JCR - Q2 (Mining and Mineral Processing) / CiteScore - Q1 (Geology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.7 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).

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