Special Issue

Innovative Strategies for Solid Waste Minimisation in the Mining and Minerals Industry

Message from the Guest Editors

The evolution of the mining and minerals industry has been accompanied by a substantial increase in the amount of solid waste (i.e., mine tailings, coal gangue, coal fly ash, slag). The solid waste can come from numerous sources, from the exploration of prospective sites to the refining of minerals. Due to its high potential to cause widespread environmental damage, the treatment of solid waste has been one of the most daunting problems encountered by the mining and minerals industry. The purpose of this Special Issue is to bring together important works that have been carried out in the field of solid waste minimisation in the mining and minerals industry. The key areas that have been concentrated on include, but are not limited to, the following:

- Fundamental studies on solid waste generation;
- Advanced minimisation strategies during waste generation;
- Innovative recovery and removal techniques for heavy metals in solid waste;
- Fundamental studies on solid waste utilisation;
- Co-recycling of solid waste from various sources;
- Artificial intelligent-aided methods in solid waste minimisation;
- Other improvements to conventional solid waste strategies

Guest Editors

Dr. Chongchong Qi

Prof. Dr. Guichen Li

Prof. Dr. Hakan Basarir

Dr. Qiusong Chen

Dr. Yuantian Sun

Deadline for manuscript submissions

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Minerals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
minerals@mdpi.com

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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

Prof. Dr. Leonid Dubrovinsky
Bayerisches Geoinstitut, University Bayreuth, D-95440 Bayreuth, Germany

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Journal Rank:

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

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.2 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

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