Special Issue

Granulation and Heat Recovery from Metallurgical Slags

Message from the Guest Editors

Slag granulation with heat recovery is an essential and emerging technology for sustainable metal production. This technology has been developing for a few decades with much technical and commercial success. Despite such good progress, there are still some challenges in optimizing the performance of the process and maximizing waste heat recovery in the form of highgrade heat. In response to these challenges, significant R&D has taken place worldwide, where process fundamentals and engineering have been investigated through experiments, modeling, and simulation, as well as piloting. In this Special Issue of the journal of Minerals, we aim to highlight recent progress and breakthroughs through invited papers from international experts. The invited papers will cover the fundamentals of atomization/granulation of molten slags, heat transfer and granule formation, phase transformations in liquid and solid states, reactor engineering for efficient heat recovery, utilization and characteristics of granulation products, process design and implementation in pilot and industrial scales, etc.

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Deadline for manuscript submissions

closed (31 December 2022)



Minerals

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Impact Factor 2.2 CiteScore 4.4



mdpi.com/si/129176

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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.

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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).

