

Special Issue

Slag Valorization for Advanced Metal Production, 2nd Edition

Message from the Guest Editors

You are invited to contribute to this Special Issue, entitled Slag Valorization for Advanced Metal Production, 2nd Edition, and showcase your research. The increasing demand for rare earth and battery metals, the need for resilient supply systems for critical minerals, and the move toward carbon-neutral manufacturing further emphasize the importance of being able to beneficiate and utilize the slag and other waste streams generated. Hence, this Special Issue is organized for all to share their findings and advancements on (i) fundamental studies on liquid and solid slags and slag systems, (ii) hot-stage slag engineering, (iii) slag cleaning and metal recovery, (iv) slag treatment with pyrometallurgy, hydrometallurgy, and electrometallurgy, (v) slag conditioning, (vi) slag solidification, (vii) industrial case studies, (viii) process development and commercialization, (ix) environmental, economic, and life cycle analysis, and (x) production and evaluation of performance of slag-based products. We believe that this Special Issue is a great opportunity to provide a guideline for our research community to tackle current and future critical challenges.

Guest Editors

Dr. Basak Anameric

Department of Metallurgical & Materials Engineering, Montana Technological University, Butte, MT 59701, USA

Dr. Timothy C. Eisele

Department of Chemical Engineering, Michigan Technological University, Helena, MT 59701, USA

Deadline for manuscript submissions

closed (15 September 2025)



Minerals

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.4



mdpi.com/si/197636

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

[mdpi.com/journal/
minerals](https://mdpi.com/journal/minerals)





Minerals

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.4



[mdpi.com/journal/
minerals](https://mdpi.com/journal/minerals)



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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), GEOBASE, GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.

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).