minerals

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 4.1

Bioleaching of Metals from Waste/Wastewater

Guest Editors:

Dr. Adegoke Isiaka Adetunji
Centre for Mineral Biogeochemistry, University of the Free State, Bloemfontein 9301, South Africa

Prof. Dr. Paul Johan Oberholster
Centre for Mineral Biogeochemistry, University of the Free State, Bloemfontein 9301, South Africa

Dr. Mariana Erasmus
Centre for Mineral Biogeochemistry, University of the Free State, Bloemfontein 9301, South Africa

Deadline for manuscript submissions:
31 December 2024

Message from the Guest Editors

This Special Issue invites submissions of original scientific research relating to the bioextraction of metals from solid wastes and wastewater. It focuses on the following topics:

- Bioleaching of precious metals, base metals, and rare earth elements from industrial solid waste and wastewater, using pure or consortium microorganisms;
- Exploration of the metal leaching potential of extremophiles;
- Optimization strategies for large-scale bioleaching of metals using genetically engineered organisms;
- The roles of enzymes, mutagens, metal, and non-metal ion catalysts, surfactants, and biochar in enhancing metal recovery from solid waste and wastewater;
- Bioreactor designs and applications for waste valorization for enhanced metal recovery;
- Application of innovative and emerging technologies, including the Internet of Things (IoTs) and machine learning for sustainable and efficient metal recovery;
- Techno-economic and environmental sustainability studies of metal biorecovery technologies.

minerals

IMPACT FACTOR 2.2

CITESCORE 4.1

an Open Access Journal by MDPI

Editor-in-Chief

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.
Journal Rank: JCR - Q2 (*Geochemistry and Geophysics*) / CiteScore - Q2 (*Geology*)

Contact Us

Minerals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/minerals
minerals@mdpi.com
𝕏@Minerals_MDPI/