

Special Issue

Biom mineralization and MICP in Wastewater, Reclaimed Water and Seawater

Message from the Guest Editors

The development of new technologies that facilitate improved water quality or obtaining of new products via biomineralization has aroused great scientific interest in recent years. Biomineralization performed by various types of organisms. Bacteria from the internal metabolism change their surrounding environment, inducing the precipitation of crystals such as calcium carbonate, struvite, etc. One of the most extensively studied processes is the precipitation of carbonates induced microbiologically or via MICP in the presence of urea. MICP plays a relevant role due to its involvement in the removal of heavy metals through coprecipitation with CaCO₃ and in biocementation, among other biotechnological applications. Topics within the scope of this Special Issue include (but are not limited to):

- Isolation or use of new biomineralizing bacteria from extreme environments, including anaerobic, aerobic, acidophilic and halophilic bacteria applied to water.
- New applications of MICP to water.
- Application of biomineralization in heavy metals and metalloids removal processes from water.
- Formation of biominerals in acidic environmental waters.

Guest Editors

Dr. Mariella Rivas

Laboratorio de Biotecnología Ambiental Aplicada, Departamento de Biotecnología, Facultad de Ciencias del Mar y Recursos Biológicos, Universidad de Antofagasta, Avda. Angamos 601, Antofagasta 1270300, Chile

Dr. Dayana Arias

Departamento Biomédico, Facultad de Ciencias de la Salud, Universidad de Antofagasta, Antofagasta 1240000, Chile

Deadline for manuscript submissions

closed (31 October 2023)



Minerals

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.4



mdpi.com/si/166696

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).