Special Issue

Microbially Induced Carbonate Precipitation (MICP) in Non-Conventional Waters: Innovative Circular Economy Solutions for Mineral Formation, Environmental Remediation, and Sustainable Energy Production

Message from the Guest Editors

This Special Issue is dedicated to exploring the potential of Microbially Induced Carbonate Precipitation (MICP) in non-conventional waters, such as wastewater, brine, contaminated waters, and seawater. MICP has proven to be a promising technology, as it not only facilitates mineral formation but also offers innovative solutions for environmental remediation and sustainable energy production. This Special Issue invites contributions that address the latest advancements in MICP, including, but not limited to, the following:

- Mechanisms and pathways of MICP.
- Applications of MICP in mineral recovery and value-added product formation.
- Strategies for using MICP in environmental remediation efforts.
- Successful implementation of MICP in sustainable energy production.
- Integrating MICP into circular economy frameworks for enhanced resource management.

We aim to provide state-of-the-art research and practical applications of MICP in non-conventional waters, fostering collaboration between academia and industry to advance sustainable practices and technologies.

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Deadline for manuscript submissions

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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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