



Biom mineralization and MICP in Wastewater, Reclaimed Water and Seawater

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Message from the Guest Editors

Dear Colleagues,

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.

Biom mineralization 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 CaCO_3 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.





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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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