



Interaction of Microorganisms with Metals and Minerals

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Deadline for manuscript submissions:
closed (31 August 2023)

Message from the Guest Editors

Dear Colleagues,

Microorganisms and metals are connected via a complex network of interactions. Metals can serve as electron donors and acceptors in microbial metabolism, and act as enzyme co-factors, while microbes catalyze a range of processes that can affect metal speciation, mobility and toxicity. Microbes catalyze redox transformations, as well as the solubilization, precipitation, sorption, and accumulation of metals, thus affecting metal biogeochemical cycling and mineral formation and/or dissolution.

For this Special Issue, we invite contributions on microbe-metal interactions. The articles in this collection demonstrate the complexity of microbial processes involved in metal(loid) transformations, metal-microbe interactions, metal(loid) biogeochemical cycling, and microbiology-based solutions for metal recovery and removal. This Special Issue covers topics including but not limited to, metal bioleaching and biorecovery, biomineralization, metal resistance, microbial adaptation, metal biotransformations, sulfate reduction, bioremediation, mine wastewater treatment and others.

We look forward to receiving your contributions.





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