Special Issue

Interaction of Microorganisms with Metals and Minerals

Message from the Guest Editors

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 adaption, metal biotransformations, sulfate reduction, bioremediation, mine wastewater treatment and others. We look forward to receiving your contributions.

Guest Editors

Dr. Eva Pakostova

Centre for Manufacturing and Materials, Institute of Clean Growth and Future Mobility, Coventry University, Coventry CV1 5FB, UK

Dr. Ana Santos

Natural History Museum, London SW7 5BD, UK

Deadline for manuscript submissions

closed (31 August 2023)



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/150430

Sustainability Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 sustainability@mdpi.com

mdpi.com/journal/ sustainability





Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G OC5, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

