

Special Issue

Challenges in Microbial-Mediated Bioremediation

Message from the Guest Editors

Rapid urbanization and industrialization have resulted in the generation and disposal of a wide range of toxic pollutants into the environment, diminishing natural land resources. Therefore, it is critical to ensure the safe utilization of marginal and polluted lands, fulfilling the population's feed and fiber demands by adopting modern techniques, i.e., microbial-mediated bioremediation, to enhance per capita land availability. Microbial-mediated bioremediation is a collective phenomenon that purportedly uses biological processes to restore or clean up contaminants in the environment. Many soil microbes have potential for heavy metal remediation, and their active participation to increase land utilization needs further appraisal. The current Special Issue will provide researchers and environmental professionals with the opportunity to discuss challenges and achievements regarding bioremediation. Laboratory and field studies on bioremediation with novel research outcomes are warmly welcomed. Keywords:

- heavy metals
- microbial bioremediation
- heavy metal tolerant strain
- biofertilizer
- heavy metals translocation
- heavy metal and nitrogen interaction

Guest Editors

Dr. Qichun Zhang

College of Environmental and Resource Sciences, Zhejiang University, Hangzhou 310058, China

Dr. Touqeer Abbas

Department of Soil, Water, and Climate, University of Minnesota, 439 Borlaug Hall, St. Paul, MN 55108, USA

Deadline for manuscript submissions

closed (17 December 2022)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/113292

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

[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)



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 0C5, 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, CAPIus / SciFinder, and other databases.

Journal Rank:

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