Special Issue

Microbial Bioremediation: New Approaches to Organic Pollutant Clean-Up

Message from the Guest Editor

This Special Issue on "Microbial Bioremediation: New Approaches to Organic Pollutant Clean-Up" seeks to compile research that explores all facets of microbial applications in bioremediation. It aims to present highquality studies on various aspects of microorganismbased remediation technologies, including their current state, challenges, and opportunities, particularly the transition from laboratory research to pilot-scale implementation. Topics may encompass, but are not limited to, the following:

- Microbial contributions to nutrient cycling in agroecosystems.
- Reduction in contaminants through innovative bioremediation methods.
- Microbes' ability to adapt to and absorb xenobiotics.
- Detoxification strategies employed by microbes in the bioremediation of environmental pollutants.
- The potential of genetically modified microorganisms (GEMs) for bioremediation.
- Contemporary metagenomic techniques for identifying active microbial communities in polluted environments, i.e., RNA-seq, proteomics, and genomics.
- Innovative methods for improving the bioremediation of contaminated environmental compartments.

Guest Editor

Dr. Qichun Zhang College of Environmental and Resource Sciences, Zhejiang University, Hangzhou 310058, China

Deadline for manuscript submissions

closed (10 April 2025)



Toxics

an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/222531

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

mdpi.com/journal/

toxics





Toxics

an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 6.4 Indexed in PubMed



toxics



About the Journal

Message from the Editor-in-Chief

Toxics (ISSN 2305-6304) is an international, peerreviewed, open access journal which provides an advanced forum for studies related to all aspects of toxic chemicals and materials. We aim to publish high quality work that furthers our understanding of the exposure, effects, and risks of chemicals and materials in humans and the natural environment as well as approaches to assess and/or manage the toxicological and ecotoxicological risks of chemicals and materials. Please consider publishing in *Toxics* when preparing your next paper.

Editor-in-Chief

Dr. Demetrio Raldúa Department Environmental Chemistry, IDAEA-CSIC, Jordi Girona 18, 08034 Barcelona, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Toxicology) / CiteScore - Q1 (Chemical Health and Safety)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.1 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).