

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 high-quality studies on various aspects of microorganism-based 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

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Deadline for manuscript submissions

closed (10 April 2025)



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About the Journal

Message from the Editor-in-Chief

Toxics (ISSN 2305-6304) is an international, peer-reviewed, 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

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