Special Issue

Microbial-Based Strategies for the Mitigation of Halogenated Pollutants

Message from the Guest Editors

Halo-organic compounds are an important class of compounds used in a myriad of applications. Given their general recalcitrant character, the natural attenuation of these xenobiotic pollutants by environmental microorganisms is difficult and may not be sufficient to neutralize their hazardous and pervasive nature. Still, microbial degradation of halo-organic molecules has shown to be possible.

This Special Issue aims to gather high-quality contributions in the form of original articles or literature reviews, expanding current knowledge on the microbial degradation of halo-organic molecules and enhancing our understanding of the interaction between microorganisms and these environmental pollutants, and how they can be functionalized into effective bioremediation solutions. Manuscripts detailing the strategies and pathways associated with the aerobic and anaerobic biodegradation of halogenated pollutants are welcome, particularly those employing multi-omics surveys, reporting disruptive nature-based solutions, or resorting to synthetic biology and/or metabolic engineering approaches for the fine-tuning of effective biocatalysts.

Guest Editors

Dr. Maria De Fátima Carvalho

Interdisciplinary Centre of Marine and Environmental Research (CIIMAR), Terminal de Cruzeiros de Leixões, AV. General Norton de Matos, s/n, 4450-208 Matosinhos, Portugal

Dr. Diogo A. M. Alexandrino

Interdisciplinary Centre of Marine and Environmental Research (CIIMAR), Terminal de Cruzeiros de Leixões, AV. General Norton de Matos, s/n, 4450-208 Matosinhos, Portugal

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

mdpi.com/journal/microorganisms





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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Toxicology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

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