

Special Issue

Microbes at the Root of Solutions for Anthropocene Challenges

Message from the Guest Editors

We are living in the Anthropocene, the human-dominated era in which anthropogenic activities are dramatically threatening ecosystem biodiversity and natural resource consumption by driving and exacerbating climate warming dynamics.

Microorganisms represent an untapped reservoir of functionalities still to be understood. There is an urgent need to improve basic and applied knowledge on the potentialities of the diversity, functionality and dynamics of microbes and microbial assemblages to alleviate the anthropogenic pressure on our planet. The aim of this Special Issue is to host researchers' contributions on the exploitation of microbial resources to face Anthropocene-driven issues, including:

- Improving sustainable agriculture practice (reducing the input of chemical fertilizers, saving irrigation water, and microbiome engineering)
- Sustaining aquatic and terrestrial ecosystem biodiversity (for pollination, nutrient uptake, weed control, disease suppression, symbiosis)
- Promoting pollutant clean-up (xenobiotics and new emerging contaminants)
- Counteracting antibiotic resistance spread

Guest Editors

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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.

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