

## Special Issue

# New Horizons in Terrestrial Cyanobacteria: Advancing Fundamental Understanding of Physiology, Ecology and Genomics

### Message from the Guest Editors

Cyanobacteria are among the first organisms to colonize terrestrial ecosystems where they play crucial roles in ecosystem functioning, including C and N fixation, nutrient cycling and beneficial interactions with higher plants and other organisms that influence processes at a global scale. Cyanobacteria have also potential in industrial, restoration and agricultural practices as a result of their dynamism and adaptability. However, recent developments in cyanobacterial physiology and microbiomics have demonstrated a gap in the fundamental knowledge of cyanobacteria as ecosystem engineers. A deeper study is needed in areas such as their function in conjunction with soil characteristics, interactions with other organisms such as plants and metabolic capacity for human benefit. We welcome submissions of original research articles, modeling, communications, comprehensive reviews, comments, or perspectives. Topics of interest include but are not restricted to holistic studies of terrestrial cyanobacteria physiology, ecology and genomics as well as their use in restoration, agriculture and industry. Diversity studies of extreme or understudied environments are also encouraged.

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### Guest Editors

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### Deadline for manuscript submissions

closed (15 December 2023)



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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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### Editor-in-Chief

Dr. Nico Jehmlich

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