



## Ecology and Toxicology of Cyanobacteria and Cyanotoxins

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### Message from the Guest Editors

Cyanobacteria, or blue-green algae, are a primitive group of oxygenic photosynthetic bacterial microorganisms and can be found in all terrestrial and aquatic ecosystems. However, eutrophication and global warming are likely to increase the frequency, magnitude, intensity and duration of cyanobacterial blooms in many aquatic ecosystems globally. Cyanobacterial blooms can adversely affect water quality, including increased turbidity, hypoxia, anoxia and production of unpleasant odors and tastes. Cyanobacterial blooms are also a potential health hazard due to the ability of some species to produce toxins (e.g., microcystins) that are toxic to other living organisms, including humans.

### Keywords

- global climate change and eutrophication
- cyanobacteria
- harmful cyanobacterial blooms
- cyanotoxin diversity and production
- monitoring and detection
- occurrence and accumulation
- human and ecosystem health
- toxicokinetics and toxicodynamics
- toxic mechanisms
- risk assessment and management





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## Message from the Editor-in-Chief

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