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Marine Nitrogen Fixation and Phytoplankton Ecology

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Message from the Guest Editors

Many oceans are currently undergoing rapid changes in environmental conditions. These changes could lead to dramatic changes in the biology and ecology of phytoplankton and consequently impact the entire marine ecosystems and global biogeochemical cycles. Marine phytoplankton is an important indicator for the changes in marine environments and ecosystems. Similarly, the only suppliers of biologically fixed N, the N₂ fixers (diazotrophs), are also vulnerable to changing environmental conditions. To tackle the perplexing response of diazotrophs, a detailed assessment of diazotrophic community response toward the changing environmental conditions need to be recorded thoroughly.

The rationale of this Special Issue is to collect various articles on N₂ fixation and phytoplankton ecology, such as biodiversity, distribution, biomass, photosynthetic traits, biochemical compositions, productivity, etc. of marine phytoplankton in various oceans, including polar oceans. We are especially seeking papers that present ecological and biogeochemical interactions among various phytoplankton communities, including N₂ fixers and environments.



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Special Issue



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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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