

Special Issue

New Challenges in the Biodiversity and Ecosystem of Phytoplankton

Message from the Guest Editor

Phytoplankton is a key component of the structure and function of marine ecosystems. It represents one of the paradigm systems for studies on the maintenance of species diversity. However, a complete understanding of the relative importance of different environmental drivers regulating the phytoplankton biodiversity is still lacking, and about how future global warming might alter the associated ecosystem functioning.

In this Special Issue, we would like to understand how climatic variations interact with or override anthropogenic changes, affecting phytoplankton by eliciting physiological and adaptive responses, and indirectly by inducing hydrological and biological changes that influence both bottom-up and top-down processes. Besides, considering the capabilities of phytoplankton to synthesize bioactive metabolites with properties of interest for biotechnological and biomedical applications, we would like to provide a snapshot of the exciting research currently happening and a comprehensive overview on current studies and also the available solutions to produce and exploit novel natural marine phytoplankton products.

Guest Editor

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Editor-in-Chief

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