

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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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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