Special Issue

Microalgae Secondary Metabolites-Bioactivity Determination using Innovative Approach of Omics

Message from the Guest Editors

Microalgae have kept developing new adaptation features and defense mechanisms; one of these survival strategies is the production of a vast variety of secondary metabolites, exhibiting a broad spectrum of biological activities and properties, including peptides. lipopeptides, polyketides, alkaloids, lipids, and terpenoids. When growth conditions are advantageous, microalgae proliferate, resulting in overgrown populations known as algal blooms, which can be harmful for aquatic life as well as for human health because of the toxins they produce. The recent advancement in the field of metabolomics and genomics has accelerated the discovery of new bioactive molecules and toxins. Additionally, the role of bacterial-microalgal interactions on the physiological control of metabolite production towards the development of co-habitation in non-axenic microalgae are scantly reported.

The current Special Issue of *Molecules* welcomes any research highlighting natural algal products, including the molecular mechanism behind the regulation of metabolite production. Moreover, studies describing the biosynthesis of these compounds are especially encouraged.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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