Special Issue

Applications of Marine Microalgal Biotechnology

Message from the Guest Editor

Marine microalgae hold great biotechnological potential. They are natural reservoirs of industrially relevant chemicals, metabolites, and bioactive compounds. Carotenoids, fatty acids, amino acids, and bioactive peptides derived from marine microalgae have promising applications in food, pharmaceuticals, nutraceuticals, biofuels, and oleochemicals. This Special Issue explores cutting-edge research on marine microalgae, their potential for bioactive compound production, and novel drug discovery. We invite articles focusing on multidisciplinary marine drug research, from basic biotechnological studies to translational research, including studies on upstream and downstream microalgae bioprocessing; the fermentation, extraction, and characterization of bioactive compounds; the enhancement in strain efficiency through advanced synthetic biology and metabolic engineering tools; and the evaluation of their potential in medicines and health applications. Articles combining advanced molecular and synthetic biology techniques with innovative strategies to optimize microalgae as biofactories for producing high-value bioactive compounds are especially welcome.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

During the past few decades there has been an ever increasing number of novel compounds discovered in the marine environment. This is exemplified by the robust preclinical and clinical pipeline that currently exists for marine natural products. *Marine Drugs* is inviting contributions on new advances in marine biotechnology, pharmacology, chemical ecology, synthetic biology, and genomics approaches related to the discovery of therapeutically relevant marine natural products. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

Editor-in-Chief

Prof. Dr. Bill J. Baker

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