Special Issue

The Metabolic Balance of Planktonic Communities

Message from the Guest Editor

The metabolic balance of planktonic communities (gross primary production, GPP vs. respiration, CR) is a piece of essential knowledge for understanding the ocean ecosystem. The carbon originated from planktonic primary production fuels marine food webs with organic matter, however, the diverse pool of organisms operationally grouped as phytoplankton displays ample ranges of sizes, nutrient acquisition, and growth strategies, and much work is still necessary to properly quantify primary production in the ocean, which lacks measurements in several regions in the globe. Through ocean warming, increase of UV radiation, ocean acidification, anthropogenic activities and etc, climate change may affect directly and indirectly and change the metabolic balance of planktonic communities enhancing heterotrophic (CR) or autotrophic activities (GPP). Considering the major role of the metabolic balance of planktonic communities on marine biogeochemical cycles and particularly on carbon budget, this Special Issue will aim to contribute to improve our understanding and our knowledge of planktonic metabolism and its role on the global carbon cycle

Guest Editor

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Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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