

Special Issue

Lipid Metabolism, Regulation and Biosynthesis of Microalgae

Message from the Guest Editors

Microalgae are attracting renewed interest from both the scientific and public communities owing to their potential applications as sustainable feed stocks for the production of biofuels and high-value compounds, and environmental remediation. For the commercial use of microalgal lipids to be feasible, many fundamental biological questions must be addressed based on detailed studies of algal biology, including how lipid biosynthesis occurs and is regulated. In order to better understand and manipulate microalgal lipid metabolism for improvements in lipid production, we set up this Special Issue, which will focus on the current knowledge on biosynthetic pathways, signaling regulation, and metabolic engineering of microalgal lipids. Moreover, this Special Issue will concern advanced technologies which have been applied in the enhanced lipid production of microalgae. These endeavors will point to new possible avenues of genetic engineering of lipid metabolism in this organism group, and may also inform studies of lipid metabolism in plants.

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