



New Insights into Microalgae Metabolism

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Deadline for manuscript submissions:

closed (31 March 2026)

Message from the Guest Editors

Microalgal metabolism has garnered significant attention in recent years due to its potential applications in biofuels, bioremediation, and as a source of high-value compounds. The study of microalgal metabolism is rapidly evolving, with new insights paving the way for its use in sustainable agriculture, bioenergy, and food development and utilization. Continued research in genetic engineering, cultivation methods, and metabolic pathways is likely to unlock even more potential applications, making microalgae a cornerstone of future biotechnological advancements.

This Special Issue is dedicated to the topic of metabolism in microalgae, covering a range of subjects, including but not limited to the following: photosynthetic efficiency and carbon fixation, lipid metabolism, advances in research on microalgae as a nutritional source and their applications in animal feed and human nutrition, the biosynthesis of secondary metabolites, applications of synthetic biology in the regulation of microalgal metabolism, stress responses and adaptation mechanisms, and applications in bioremediation.





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Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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