Special Issue

New Insights into Microalgal Biorefinery for Bioenergy Production

Message from the Guest Editors

The biorefineries may become of high relevance in the near future since microalgal biofuel can be a great alternative source of sustainable fuel. Another advantage is the possibility of integrating wastewater bioremediation and CO2 capture with bioenergy production. However, for multiproduct microalgal biorefineries to be a cost-effective approach at an industrial scale, research should focus on several aspects: (i) increasing process efficiencies in all steps involved in biorefinery; (ii) enhancing the product's value; (iii) mitigating negative impacts on the environment; and (iv) reducing capital and operational costs. This Special Issue aims to explore research perspectives and scientific approaches in the field of microalgal biorefinery for bioenergy production. The main research topics include microalgal cultivation systems and harvesting techniques, bioproduct extraction and recovery, wastewater bioremediation, CO2 capture, and production of microalgal biofuels.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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