

Special Issue

Recent Advances in Biofuel Production from Microalgae Biomass

Message from the Guest Editor

The use of fossil fuels for energy production leads to increased pollution levels, including the amount of greenhouse gases emitted, and has global economic consequences. An alternative way to cover the increasing energy demand is to use renewable sources, including biomass. Conventional biomass use, the method of obtaining such feedstocks, and their availability raise concerns; therefore, a great deal of attention is focused on algal biomass. Biofuels from microalgae have the potential to promote energy diversification in the future and, due to the high level of carbon dioxide sequestration in biomass, to decarbonize transport. There is a need for economic analyses of microalgal biofuel production to indicate the current level of competitiveness compared to other conventional energy carriers. Sustainable production of microalgal biomass, integrated energy conversion technologies in biorefineries, and appropriate regulations are key areas for the development of commercial microalgal biofuel production.

Guest Editor

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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