



*energies*



an Open Access Journal by MDPI

## Novel Trends in Microalgal Bioprocess and Its Biochemical Conversion into Value-Added Products and Fuels

Guest Editors:

**Dr. Mirela Ivančić Šantek**

Faculty of Food Technology and  
Biotechnology, University of  
Zagreb, Pierottijeva 6, 10 000  
Zagreb, Croatia

**Prof. Dr. Tonči Rezić**

Department of Biotechnology,  
Faculty of Food Technology and  
Biotechnology, University of  
Zagreb, 10000 Zagreb, Croatia

Deadline for manuscript  
submissions:

**31 July 2024**

### Message from the Guest Editors

Dear Colleagues,

This Special Issue addressess various topics, including the isolation and characterization of novel microalgal strains, cultivation, biomass/product isolation, purification, and process optimization.

The scope of this Special Issue includes, but is not limited to, the following:

- Optimization of growth conditions, composition of growth media and cultivation strategies for improved biomass production and/or product synthesis (e.g., lipids as feedstocks for biodiesel production);
- Conversion of microalgal biomass to biofuels;
- Valorization of microalgal biomass as a potential feedstock for the production of biofuels and value-added products in biorefinery;
- Microalgae biorefinery for the production of biofuels and value-added products;
- Downstream processing of microalgal biomass: harvesting, dewatering/drying, cell disruption, extraction;
- Modelling and optimization of microalgal biofuel production;
- Life cycle assessment and techno-economic analysis of microalgal biorefinery.



[mdpi.com/si/196964](https://mdpi.com/si/196964)

# Special Issue



# energies



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Enrico Sciubba**

Department of Mechanical and  
Aerospace Engineering,  
University of Roma Sapienza, Via  
Eudossiana 18, 00184 Roma, Italy

## Message from the Editor-in-Chief

*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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** CiteScore - Q1 (*Engineering (miscellaneous)*)

## Contact Us

---

*Energies* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/energies](http://mdpi.com/journal/energies)  
[energies@mdpi.com](mailto:energies@mdpi.com)  
[X@energies\\_mdpi](https://twitter.com/energies_mdpi)