

## Special Issue

# Microalgae: Physiology, Biotechnology, and Industrial Applications

### Message from the Guest Editors

The rise of the human population together with city swelling have increased the demand for natural resources to a point where alternative resources need to be developed to sustain future development. While autotrophic organisms constitute an alternative choice for the development of these new resources, trials with land plants have mostly resulted in a counterproductive competition for agricultural land use while rocking the inflation of food prices. To get around this, microalgae have been considered because (1) they can be grown in farmland-less systems, (2) they have a higher productivity than crop plants, (3) they produce a variety of unique compounds interesting for many industries, and (4) they can be used as cell factories in production platforms. To reach this goal, a deeper knowledge of microalga functioning from molecular biology to physiology is crucial. This Special Issue welcomes manuscripts dealing with both basic and applied science related to the production of bioactive compounds from microalgae, including cyanobacteria.

---

### Guest Editors

Prof. Dr. Benoît Schoefs

Metabolism, Bioengineering of Microalgal Molecules and Applications (MIMMA), Mer Molécules Santé, Le Mans University, 72085 Le Mans, France

Dr. Justine Marchand

Metabolism, Bioengineering of Microalgal Molecules and Applications (MIMMA), Mer Molécules Santé, Le Mans University, 72085 Le Mans, France

---

### Deadline for manuscript submissions

closed (20 September 2024)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.3



[mdpi.com/si/101388](https://mdpi.com/si/101388)

*Applied Sciences*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[appls@mdpi.com](mailto:appls@mdpi.com)

[mdpi.com/journal/  
appls](https://mdpi.com/journal/appls)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.3



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### Message from the Editor-in-Chief

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

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### 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, Inspec, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)