

## Special Issue

# Molecular Metabolisms and Regulations of Algae

### Message from the Guest Editor

Eukaryotic algae are remarkably diverse in terms of habitat, morphology, physiology, and biochemistry, and they play a critical role in global ecology. Algae are useful models for studying metabolic processes in photosynthetic organisms and potential renewable platforms for the production of beneficial chemicals. Algae adapt to various environmental conditions by changing many aspects, from gene expression to cell physiology and morphology, through the regulation of primary and secondary metabolism. Characterizing algal metabolism and its regulation is the key to understanding their role in the environment and unlocking their potential for biotechnology applications. This Special Issue provides an open platform for the discussion of recent developments in this field, focusing on novel aspects of molecular metabolism in algae, from genes regulation and signal pathways to protein modification and enzyme activity control. Original papers, review articles, and perspectives from experts in the field are welcome.

### Guest Editor

Prof. Dr. Elena Ermilova

Biological Faculty, Saint-Petersburg State University, Saint-Petersburg  
199034, Russia

### Deadline for manuscript submissions

closed (31 August 2024)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/166843](https://mdpi.com/si/166843)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

---

### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, 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), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore  
- Q1 (Organic Chemistry)