

## Special Issue

# Underground Mechanism to Enhance Stress Tolerance in Rice

### Message from the Guest Editor

Rice (*Oryza sativa* L.) is not only a major staple food for the world's population, but also a model crop plant for studying the mode of action of agronomically valuable traits, suggesting ideas for application to other crop plants. The roots have a lot of essential functions, including the acquisition of water and nutrient and structural support. A molecular and genetic understanding of the mechanism to enhance abiotic stress tolerance in rice, a model crop plant, is very important for crop productivity. Advances in integrating omics studies using the genome, transcriptome, proteome, metabolome, and phenome will provide valuable insights to cope with the challenges of climate changes for crop plants. Papers submitted to this Special Issue must report high novelty results and/or plausible and testable new models. This Special Issue includes studies involving physiological and chemical analysis of the transcriptome, proteome, metabolome, network, integrating omics, and abiotic stress tolerance crops through the improvement of root traits using natural variation, biotechnology and gene editing techniques. In addition, relating database issues are also welcome.

### Guest Editor

Prof. Dr. Ki-Hong Jung

Graduate School of Green-Bio Science, Kyung Hee University, Yongin, Republic of Korea

### Deadline for manuscript submissions

closed (28 February 2020)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/23323](https://mdpi.com/si/23323)

*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)