



## Salinity Tolerance in Plants

Guest Editor:

**Dr. José Antonio Hernández  
Cortés**

Group of Fruit Biotechnology,  
Department of Fruit Breeding,  
CEBAS-CSIC, P.O. Box 164, 30100  
Murcia, Spain

Deadline for manuscript  
submissions:  
**closed (28 February 2019)**

### Message from the Guest Editor

Salinity stress is one of the major abiotic stresses that leads to significant losses in agriculture, especially in arid and semi-arid climates. Thus, it is critical to know the mechanisms of salinity tolerance so as to obtain plants that are more tolerant to this abiotic stress, necessary for more sustainable and more productive agriculture under a scenario of climate change.

Salt stress is first perceived by the root system impairing plant growth in the short term by inducing osmotic stress. In the long term, salinity-induced ion toxicity due to a nutrient imbalance in the cytosol. In addition, salt stress is also manifested as an oxidative stress at the subcellular level, mediated by ROS. All these responses to salinity result in deleterious effects on plants. Plants tolerant to NaCl implement a series of adaptations to acclimate to salinity, including morphological, physiological, biochemical and molecular changes.

The aim and scope of this Special Issue is to encourage the publication of review and/or experimental research dealing with physiological, biochemical and molecular aspects related to salt-tolerance mechanisms in plants, including in vitro culture conditions.





an Open Access Journal by MDPI

## 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

## 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.

## 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 (Inorganic Chemistry)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI