



an Open Access Journal by MDPI

Cell Signaling in Model Plants

Guest Editors:

Prof. Dr. Jen-Tsung Chen

Department of Life Sciences, National University of Kaohsiung, Kaohsiung 811, Taiwan

Dr. Parviz Heidari

Faculty of Agricultural, Shahrood University of Technology, Shahrood, Iran

Deadline for manuscript submissions: closed (31 May 2020)

Message from the Guest Editors

Dear Colleagues,

Plants as sessile organisms are not able to move and must respond to adverse environmental conditions/stress such as high salinity, heat, cold, drought, oxidative stress, and pathogen attack. Signal transduction is a complex network of interactions that signal elements (physical and chemical) are transmitted through the plant cell to respond to environmental stimuli. Receptors, protein kinases, transcription factors, intracellular calcium, ROS, and hormones are the main components of signal transduction pathway that regulate or stimulate other cell signal components.

This Special Issue explores the role of signaling components in model plants, such as *Antirrhinum*, *Arabidopsis thaliana*, *Lotus japonicas*, *Medicago truncatula*, rice, tobacco, and *Zea mays*, which have led to adaptation and resistance against abiotic and biotic stresses, including but not limited to functional analysis of key genes, hormone contents, signal transduction networks, gene expression profiling, and post-translation modifications.



Specialsue





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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

International Journal of Molecular Sciences Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/ijms ijms@mdpi.com X@IJMS_MDPI