Special Issue

Hydrogen Sulfide and Reactive Oxygen Species, Antioxidant Defense, Abiotic Stress Tolerance Mechanisms in Plants

Message from the Guest Editors

Hydrogen sulfide (H2S), which was previously considered to be toxic, has now been regarded as a burgeoning endogenous gaseous transmitter. H2S plays a vital role in the mechanism of response/adaptation to adverse environmental conditions as well as crosstalk with other signaling molecules, including ROS, by affecting corresponding gene expression and subsequent enzyme activities. Both H2S and ROS are potent signaling molecules that can provoke reversible and irreversible oxidative posttranslational modifications on cysteine residues of proteins such as sulfenylation or persulfidation, affecting the redox status and function of the target proteins. The dynamic interplay between persulfidation and sulfenylation occurring on cysteine residues is of great importance in response to environmental changes. The present Special Issue of *IJMS* has the aim of providing the most current findings on the function of signaling molecules, including H2S and ROS, in higher plants, and it is open to different types of manuscripts, including original research papers, perspectives, or reviews where either ROS, H2S, or related molecules could be involved at biochemical or physiological levels.

Guest Editors

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Deadline for manuscript submissions

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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.

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