



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

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Deadline for manuscript submissions:

**closed (31 May 2022)**

### Message from the Guest Editors

Hydrogen sulfide (H<sub>2</sub>S), which was previously considered to be toxic, has now been regarded as a burgeoning endogenous gaseous transmitter. H<sub>2</sub>S 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 H<sub>2</sub>S 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 H<sub>2</sub>S and ROS, in higher plants, and it is open to different types of manuscripts, including original research papers, perspectives, or reviews where either ROS, H<sub>2</sub>S, or related molecules could be involved at biochemical or physiological levels.





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