



## Hydrogen Sulfide Signaling in Biological Systems

Guest Editors:

### Dr. Angeles Aroca

Instituto de Bioquímica Vegetal y Fotosíntesis, Consejo Superior de Investigaciones and Universidad de Sevilla, 41092 Seville, Spain

### Dr. Cecilia Gotor

Institute of Plant Biochemistry and Photosynthesis (IBVF), Spanish National Research Council (CSIC), Seville, Spain

Deadline for manuscript submissions:

**closed (31 May 2024)**

### Message from the Guest Editors

Hydrogen sulfide (H<sub>2</sub>S) has always been considered a toxic gas for life. However, over the last decade, it has emerged as an important cell-signaling molecule capable of regulating diverse physiological processes in plants and animals. However, how H<sub>2</sub>S regulates all these different processes and how persulfidation is achieved in various targets still need to be deciphered. Differentiating between the signaling fate, from the metabolic result of H<sub>2</sub>S is also an interesting aspect in plants where, unlike animal systems, H<sub>2</sub>S is also generated, during the photosynthetic sulfur assimilation in chloroplasts, as an essential nutrient. This Special Issue of Antioxidants will focus on studies that highlight recent advances in the mechanism of action of hydrogen sulfide in plant biology, the relationship with plant sulfur metabolism, and how H<sub>2</sub>S helps plants adapt to adverse environmental conditions, which is helpful for future agricultural sustainability to cope with inevitable climatic change.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Alessandra Napolitano

Department of Chemical  
Sciences, University of Naples  
"Federico II", Via Cintia 4, I-80126  
Naples, Italy

## Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

## 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, FSTA, PubAg, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Chemistry, Medicinal) / CiteScore - Q1 (Food Science)

## Contact Us

---

*Antioxidants* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/antioxidants](http://mdpi.com/journal/antioxidants)  
[antioxidants@mdpi.com](mailto:antioxidants@mdpi.com)  
[X@antioxidants\\_OA](https://twitter.com/antioxidants_OA)