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# Metabolic Networks and Signaling by ROS, RNS and RSS in Higher Plants

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### Message from the Guest Editors

Higher plants are essential for life on Earth. Accumulating data indicate that the metabolism of reactive oxygen, nitrogen, and sulfur species (ROS, RNS and RSS, respectively) have a significant impact in all processes in higher plants. The mechanism of action of these reactive species is basically through posttranslational modifications (PTMs) of proteins such as carbonylation, *S*-nitrosation, nitration, or persulfidation, affecting the redox status and function of the target proteins. Thus, H<sub>2</sub>O<sub>2</sub>, NO, and H<sub>2</sub>S mediate several signaling networks which interact with each other, but they are also key regulatory elements in the biochemistry and physiology of plants.

The present Special Issue of *Antioxidants* has the aim to provide the most current findings on the function of these families of reactive species in higher plants, and it is open to different types of manuscripts, including original research papers, perspectives, or reviews where either H<sub>2</sub>O<sub>2</sub>, NO, H<sub>2</sub>S, or related molecules could be involved at biochemical or physiological levels.







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## **Editor-in-Chief**

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## 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.

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