



## Reactive Oxygen Species in Different Biological Processes—Second Edition

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Deadline for manuscript  
submissions:

**31 July 2024**

### Message from the Guest Editors

Reactive oxygen species (ROS) have an essential role in maintaining cellular redox homeostasis of any living organisms, from prokaryotes to plants and human beings. Although they are produced during normal metabolism, their enhancement causes oxidative stress that damages cellular structure and affects their functional integrity. Oxidative stress is considered to be a relevant direct or indirect cause in many adverse biological processes. For this reason, there is increasing interest amongst scientists and in the biotechnological industry to develop natural or synthetic antioxidants to counteract oxidative stress damage and prevent human disease.

This Special Issue will include both in vitro and in vivo studies clarifying the fundamental role of ROS and their modulation in cell signaling, cell metabolism, epigenetic regulation, or in other biological process in any living organism. Moreover, it is extended to the identification of natural antioxidants, isolated from vegetable and animal food matrices, that modulate cellular redox homeostasis. New methods to recover natural bioactive compounds from food waste and agricultural by-products will also be considered.





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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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**Journal Rank:** JCR - Q1 (*Food Science & Technology*) / CiteScore - Q1 (*Food Science*)

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