



## Redox Effects of Molecular Hydrogen and Its Potential for Preventive and Therapeutic Applications

Guest Editors:

**Dr. Cheol-Su Kim**

Department of Convergence  
Medicine, Wonju College of  
Medicine, Yonsei University,  
Wonju 26426, Republic of Korea

**Prof. Dr. Kyu-Jae Lee**

Department of Convergence  
Medicine, Wonju College of  
Medicine, Yonsei University,  
Wonju 26426, Republic of Korea

Deadline for manuscript  
submissions:

**closed (10 March 2024)**

### Message from the Guest Editors

Molecular hydrogen serves as a scavenger to modify ROS and maintain metabolic oxidation–reduction reaction in various biomedical areas. It can also neutralize and convert highly active oxidants such as hydroxyl radical and peroxynitrite into water. Thus, the redox effect of molecular hydrogen is crucial to find preventive and therapeutic applications. Recently, molecular hydrogen has begun to be applied to various diseases based on the academic mechanism of regulating the immune system and removing free radicals. Our goal here is to determine how to improve the ability to use molecular hydrogen in oxidative stress using various enzymes in cells, animals, or humans. This issue could help with the development of new therapies and biomarkers with underlying molecular hydrogen mechanisms. It is expected to contribute to the use of molecular hydrogen in health promotion through the report of excellent research results related to molecular hydrogen.





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, Grosspeteranlage 5  
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)