

## Special Issue

# Oxidative Stress Response in Bacteria

### Message from the Guest Editor

Under various environmental stress conditions, oxidative damage occurs when organisms encounter increasing reactive oxygen species levels. Reactive oxygen species such as hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) and hydroxyl radical (OH<sup>•</sup>) can cause DNA mutations, enzyme inactivation, and membrane damage. Interestingly, bacteria appear to have diverse defense mechanisms evolved to remove the ROS and to protect the cellular biomolecules against oxidative stress. Recently, multi-omics investigation has enabled the discovery of a new molecular mechanism of the defense system, which expands our knowledge to understand complex oxidative stress responses in bacteria.

---

### Guest Editor

Dr. Jong-Hyun Jung  
Korea Atomic Energy Research Institute, Daejeon, Republic of Korea

---

### Deadline for manuscript submissions

closed (31 December 2023)



## Antioxidants

---

an Open Access Journal  
by MDPI

---

Impact Factor 6.6  
CiteScore 12.4  
Indexed in PubMed



[mdpi.com/si/165690](https://mdpi.com/si/165690)

*Antioxidants*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[antioxidants@mdpi.com](mailto:antioxidants@mdpi.com)

[mdpi.com/journal/  
antioxidants](https://mdpi.com/journal/antioxidants)





# Antioxidants

---

an Open Access Journal  
by MDPI

---

Impact Factor 6.6  
CiteScore 12.4  
Indexed in PubMed



[mdpi.com/journal/  
antioxidants](https://mdpi.com/journal/antioxidants)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Alessandra Napolitano  
Department of Chemical Sciences, University of Naples “Federico II”,  
Via Cintia 4, I-80126 Naples, Italy

---

### 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, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Chemistry, Medicinal) / CiteScore - Q1 (Food Science)