Special Issue

Innovative Analytical Pathways: Exploring Phytochemical Profiles and Bioactivities Through Advanced Instrumentation

Message from the Guest Editors

Submissions are encouraged from diverse fields, addressing innovative methods for the extraction, isolation, and structural characterization of antioxidants, including those considering advanced fingerprinting and profiling of antioxidants. Topics may include the biosynthesis and biological activities of redox-active compounds, advanced protocols for evaluating antioxidant capacities, and novel delivery systems for natural antioxidants. Additionally, studies on redox modulation, reactive species dynamics (ROS, RNS, and RSS), and the pharmacodynamics and pharmacokinetics of bioactive compounds are welcome. This Special Issue also seeks contributions that highlight the practical applications of antioxidants, from safe food preservatives and dietary supplements to their role in combating oxidative degradation in industrial materials. By exploring phytochemicals and their bioactivities through cutting-edge instrumentation, this collection aims at providing a comprehensive understanding of antioxidants' potential in improving human, plant, and environmental health.

Guest Editors

Dr. Igor Piotr Turkiewicz

Department of Fruit, Vegetable and Plant Nutraceutical Technology, Faculty of Biotechnology and Food Science, Wrocław University of Environmental and Life Sciences, 37 Chełmońskiego Str., 51-630 Wrocław, Poland

Dr. Karolina Tkacz

Department of Fruit, Vegetable and Plant Nutraceutical Technology, Faculty of Biotechnology and Food Science, Wrocław University of Environmental and Life Sciences, 37 Chełmońskiego Str., 51-630 Wrocław, Poland

Deadline for manuscript submissions

25 August 2025



Antioxidants

an Open Access Journal by MDPI

Impact Factor 6.6 CiteScore 12.4 Indexed in PubMed



mdpi.com/si/228212

Antioxidants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antioxidants@mdpi.com

mdpi.com/journal/ antioxidants





Antioxidants

an Open Access Journal by MDPI

Impact Factor 6.6 CiteScore 12.4 Indexed in PubMed



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, CAPlus / SciFinder, and other databases.

Journal Rank:

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

