

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.

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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.

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