

Special Issue on **Biological Efficacy of Medicinal Plant Extracts in Preventing Oxidative Damage**

CALL FOR PAPERS

Reactive oxygen species (ROS), such as peroxides, superoxide, hydroxyl radicals, and singlet oxygen species and reactive nitrogen species (RNS), such as nitroxyl anion, nitrosonium cation, higher oxides of nitrogen, S-nitrosothiols, and dinitrosyl iron complexes, at physiological levels, are important signaling molecules maintaining cellular homeostasis. Redox imbalance is characteristic in the pathogenesis and pathophysiology of many diseases. Excessive ROS/RNS is either a cause or an important mediator of a number of pathologies. It results in oxidative damage to various biological macromolecules including DNA, lipids, and proteins, thereby altering several signaling pathways that ultimately promote cellular damage and death.

Many natural compounds and natural product mimics are potential antioxidants that protect against oxidative damage in chronic diseases such as neurodegenerative diseases, cardiovascular diseases, inflammatory conditions, and cancer. Understanding and validating the bioactivities of the natural compounds and the molecular mechanisms in preventing oxidative stress will provide solid scientific foundation to use the natural compounds for the prevention and treatment of oxidative stress-related diseases.

We invite researchers to contribute original research articles as well as review articles that will highlight the role of natural compounds or mimics that can ameliorate oxidative stress and reduce pathological complications associated with chronic diseases.

Potential topics include but are not limited to the following:

- ▶ Dietary supplements/nutraceuticals mediated regulation of noncoding RNAs (miRNAs, lncRNAs, and circRNAs) for reducing oxidative and DNA damage
- ▶ Novel antiageing compounds targeting oxidative stress
- ▶ Medicinal extracts having potent immunomodulatory effects
- ▶ Metabolomic characterization of naturally derived antioxidants
- ▶ Efficacy of naturally derived antioxidants on tissue injury repair, diabetes, and cancer

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/omcl/bnso/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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