Special Issue

The Role of Oxidative Stress in Neurodegenerative Diseases

Message from the Guest Editor

Oxidative stress is known to play an important role in the pathogenesis of many diseases. The neurodegenerative disease include diseases such as Alzheimer's disease, Parkinson's disease, etc.

Singlet oxygen is an excited state of oxygen O2 which readily oxidizes cellular components such as lipids, proteins, nucleic acids and others. The energy needed for the excitation of oxygen from the ground to the first excited state 1Δg, indicating singlet oxygen, is equal to 92 kJ mol−1. For proteinaceous diseases, the calculated ΔG≠ values vary between 92.8 and 127 kJ mol−1 at 310K. The similarity of the ΔG≠ values is an indication that a common mechanism may be taking place in the above disorders. We may attribute this common mechanism to the (same) role of the oxidative stress and specifically to that of singlet oxygen (1ΔG).

This Special Issue aims to present the latest research regarding oxidative stress and neurodegenerative diseases. Both original research articles and reviews are welcomed.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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