

Special Issue

Advanced Oxidation Processes (AOPs) in Treating Organic Pollutants

Message from the Guest Editors

Advanced oxidation processes (AOPs) are crucial in modern environmental chemistry for addressing organic pollutants. These processes generate highly reactive compounds, like hydroxyl radicals, that degrade a wide range of contaminants. Key AOPs include methods such as Fenton's reaction, photocatalysis, and ozonation, as well as the use of advanced nanomaterials. These methods are essential for treating both persistent and emerging pollutants in water and wastewater. This Special Issue of *Molecules* aims to collect cutting-edge research and comprehensive reviews on the latest advancements in AOPs. We invite contributions exploring innovative methodologies, novel catalytic materials, and optimization strategies to enhance the efficiency and selectivity of AOPs. Studies on the mechanistic understanding of degradation pathways, intermediate product identification, and toxicity reduction are particularly welcome, providing insights into the holistic impact of AOPs on environmental health and sustainability.

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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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