Special Issue

Advanced Oxidation Processes for Water and Wastewater Treatment: Developments, Challenges, and Opportunities

Message from the Guest Editors

Water scarcity and contamination are pressing issues that pose substantial threats to human health, ecosystems, and socio-economic stability. Effectively addressing these crises necessitates efficient water management, wastewater treatment, and promotion of water reuse. Advanced oxidation processes (AOPs) play a pivotal role in these efforts by efficiently breaking down contaminants, ensuring the safety of water for various uses, and enabling environmentally responsible discharge. AOPs present a promising alternative to conventional treatment methods, especially in their capacity to remove persistent pollutants, pharmaceutical residues, and emerging contaminants, which often challenge traditional treatment processes. While AOPs hold substantial potential for water treatment, they encounter various challenges. These encompass selecting the appropriate AOPs, optimizing catalysts, enhancing energy efficiencies, reducing costs, managing the generation of byproducts, and seamlessly integrating with existing treatment processes.

Guest Editors

Dr. Jayaprakash Saththasivam Qatar Environment and Energy Research Institute, Hamad Bin Khalifa University, Doha, Qatar

Prof. Dr. A. M. Mimi Sakinah Faculty of Engineering Technology, Universiti Malaysia Pahang, Pekan, Malaysia

Deadline for manuscript submissions

closed (20 May 2025)



Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



mdpi.com/si/186310

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

mdpi.com/journal/

processes





Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



processes



About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, 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), Ei Compendex, Inspec, AGRIS, and other databases.

Journal Rank: CiteScore - Q2 (Chemical Engineering (miscellaneous))