Special Issue

Advanced Membrane Technologies for Wastewater Treatment: Low-Cost Materials, Characterization and Modeling

Message from the Guest Editors

Membrane-based wastewater treatment technologies are rapidly evolving due to increasing demands for sustainable, low-energy and cost-effective separation processes. Despite these advances, several scientific and industrial challenges remain unresolved, particularly regarding the development of bioinspired materials, low-cost membranes and the accurate characterization of hierarchical porous structures. This Special Issue aims to gather high-quality original research and reviews focusing on innovative membrane technologies for wastewater treatment, emphasizing:

- **Bioinspired and sustainable membrane materials**
- **Low-cost membrane fabrication routes**
- **Model-driven porosity and microstructure analysis**
- **Hybrid and multifunctional membranes**
- **Energy-efficient wastewater treatment**
- **AI and data-driven tools**

This Special Issue will address key academic and industrial needs by highlighting emerging techniques, new materials, modeling approaches and sustainable membrane processes.

Guest Editors

Dr. Abdelmjid Bouazizi

Materials, Membranes and Nanotechnology Laboratory, Faculty of Sciences, Moulay Ismail University of Meknès, Zitoune, Meknès 11201, Morocco

Dr. Mohamed Douma

Materials, Membranes and Nanotechnology Research Team, Faculty of Sciences, Moulay Ismail University of Meknès, Zitoune, Meknès 11201, Morocco

Deadline for manuscript submissions

31 December 2026

Membranes

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 7.9
Indexed in PubMed

mdpi.com/si/274293

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

mdpi.com/journal/membranes

Membranes

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 7.9
Indexed in PubMed

mdpi.com/journal/membranes

MDPI

About the Journal

Message from the Editor-in-Chief

You are cordially invited to contribute a research article or a comprehensive review for consideration and publication in *Membranes* (ISSN 2077-0375). *Membranes* is an international, peer-reviewed open accessjournal of membrane technology published monthly online by MDPI. The journal covers the broad aspects of the science and technology of both biological and non-biological membranes, including membrane dynamics and the preparation and characterization of membranes and their applications in water, environment, energy, and food industries. Articles contributing to better understanding of transport processes in all types of membranes are also welcome. The scientific community and the general public have unlimited and free access to the content as soon as it is published. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Spas D. Kolev
School of Chemistry, The University of Melbourne, Melbourne, VIC 3010, Australia

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, PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Polymer Science) / CiteScore - Q1 (Chemical Engineering (miscellaneous))