Special Issue

Advanced Membrane Technologies for Pollutant Removal and Resource Recovery

Message from the Guest Editors

In the context of global water scarcity and environmental degradation, advanced membrane technologies have emerged as pivotal tools for addressing the dual challenges of pollutant elimination and sustainable resource recovery. Conventional separation processes often face limitations in selectivity, energy efficiency, and scalability, particularly when targeting trace contaminants or recovering high-value components from complex matrices. This Special Issue aims to spotlight cutting-edge innovations in multifunctional composite membrane design and precision-driven pollutant recognition/separation mechanisms, bridging the gap between material science, environmental engineering, and circular economy principles. This Special Issue seeks high-quality contributions that explore rational design strategies for composite membranes and their selective molecular/ionic recognition capabilities toward pollutants (e.g., heavy metals, micropollutants, microplastics) and resource recovery targets (e.g., critical ions, organic acids, nutrients), etc.

Guest Editors

Dr. Chao Yu

Dr. Yao Zhu

Dr. Jia Gao

Deadline for manuscript submissions

31 August 2025

Membranes

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 7.9
Indexed in PubMed

mdpi.com/si/236118

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))