



an Open Access Journal by MDPI

## Recent Progress in Synthesis and Application of Novel Membranes for Water Treatment

Guest Editor:

**Dr. Lili Xu**

Research Center for Eco-  
Environmental Sciences Chinese  
Academy of Sciences, Beijing,  
China

Deadline for manuscript  
submissions:

**closed (31 December 2022)**

### Message from the Guest Editor

Dear Colleagues,

Membrane separation has been widely applied to water/wastewater treatment in recent years due to high product water quality, little or no chemical/additive use and straightforward process handling. Recent researchers have focused on developing novel membranes for water treatment, aiming to solve membrane fouling and break through trade-off effect between permeability and rejection. The development of these novel membranes are expected to enlarge the application in membrane-based water treatment. We are seeking high-quality research and review papers in the special issue. The special issue will specifically cover all aspects associated with the fabrication of novel membranes, their modifications/functionalization, and their applications in membrane-based processes for water treatment. Topics include but are not limited to: recent progress in novel membranes by functional materials, as well as membrane fabrication, novel design principles, theoretical simulations and various applications including desalination, energy storage, and environmental remediation. State-of-the-art and critical reviews are also welcome.

Dr. Lili Xu  
Guest Editor



[mdpi.com/si/130199](https://mdpi.com/si/130199)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Spas D. Kolev

School of Chemistry, The  
University of Melbourne,  
Melbourne, VIC 3010, Australia

## 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 access journal 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.

## 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 (*Chemistry, Physical*) / CiteScore - Q2 (*Chemical Engineering (miscellaneous)*)

## Contact Us

---

Membranes Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/membranes](http://mdpi.com/journal/membranes)  
[membranes@mdpi.com](mailto:membranes@mdpi.com)  
[X@Membranes\\_MDPI](https://x.com/Membranes_MDPI)