



## Gas Transport across Membranes—Discoveries, Prospects and Innovations

Guest Editors:

**Dr. Guoxing Chen**

**Dr. XiaoYu Wu**

**Prof. Dr. Anke Weidenkaff**

Deadline for manuscript  
submissions:

**closed (30 September 2022)**

### Message from the Guest Editors

This Special Issue seeks contributions to assess the state-of-the-art technologies, latest discoveries and future opportunities of gas transport membranes. The scope of this Special Issue is gas transport via any kind of membrane technology or a combination of other technologies with membrane process. Topics include, but are not limited to, membranes for H<sub>2</sub> production, membranes for gas separation (O<sub>2</sub>, H<sub>2</sub>, CO<sub>2</sub>, etc.), membranes for CO<sub>2</sub> conversion, natural gas purification, membrane reactors for the production of chemicals, hydrocarbon separation in the petrochemical industry, cathode development for solid oxide fuel cells, protonic ceramic fuel cells, solar-driven evaporation process, electrolyzer cells for power-to-X technologies, separation process modeling and fundamental mechanism understanding, new material development, gas pollutant treatment, new fabrication techniques, industrial exploitation, and new technologies integrated with gas transport membranes. We welcome various original articles, perspectives and reviews dealing with gas transport membrane technology.





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 (*Polymer Science*) / CiteScore - Q2 (*Chemical Engineering (miscellaneous)*)

## Contact Us

Membranes Editorial Office  
MDPI, St. Alban-Anlage 66  
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