



## Membrane-based Technologies for Water and Energy Sustainability

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### Message from the Guest Editors

Membrane technology plays an important role in the advancement of sustainable water and energy demands. For example, substantial efforts have been carried out to integrate renewable energy (solar, wind, tidal, nuclear, and geothermal) with membrane-based desalination. In addition, emerging membrane technologies including pressure retarded osmosis (PRO) and reverse electrodialysis (RED) are applied to generate clean and sustainable electricity from various waste streams. Despite the promise, the successful industrial application of the above technologies depends largely on developing high-performance membranes, optimizing operating conditions, improving reliable and robust system design, and validating economic-energy competitiveness.

This special issue aims to provide comprehensive coverage on the recent development in membrane technology dealing with water and energy sustainability. The topics include but are not limited to, membrane fabrication, system design, fouling control, process modeling, life cycle analysis. We welcome all interested authors to submit your original articles, reviews, and perspectives on any of the topics above.





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## 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.

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