



Biological and Biomimetic Membranes: New Materials and Emerging Processes

Guest Editor:

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Message from the Guest Editor

The last decade has witnessed a rapid increase in new membrane materials and processes for research and development. A particularly promising area is research within membrane materials and membrane processes where new technologies are inspired directly and indirectly from the natural membrane realm. Biological membranes are capable of intricate transport of water, solutes, and gasses across thin bimolecular films and can serve as an inspirational showcase for designing tailored permeability properties in polymeric matrixes.

The aim with this Special Issue is to deliver insights in the recent advances in membrane designs and applications within biology, biotechnology, biomimetics, and biomedical areas. We look forward to receive submissions describing original research or focused reviews related to design, materials, synthesis methods, and process developments.

Keywords

- biomimetics
- membrane proteins
- selective permeability
- biomolecular sensing
- de novo functional membrane design
- passive and active transport





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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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