



Modeling and Design of Membrane Reactors

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Message from the Guest Editors

Membrane reactors are attracting increasing interest because of the opportunity they represent in increasing the efficiency of small-scale systems. The modeling of membrane reactors is essential to exploit all the benefits that can be derived from their optimal design, but it represents an ongoing challenge because of the complexity of describing systems in which the transport of mass, momentum, and energy are strongly coupled. With reference to mass transport, the effects of convection, dispersion, reaction, and permeation should, in principle, be simultaneously accounted for. The purpose of this Special Issue is to publish research papers on advances in membrane reactor modeling and design, as well as review papers. Potential topics include the modeling of:

- Membrane reactors for enhanced conversion / product selectivity
- Membrane reactors for controlled feed distribution
- Membrane reactors for coupled reactor systems
- Catalytic membrane reactors





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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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