



membranes



an Open Access Journal by MDPI

Modeling and Prediction of the Performance of Membrane Processes

Guest Editors:

Dr. Julio López Rodríguez

Chemical Engineering
Department and Barcelona
Research Center for Multiscale
Science and Engineering, UPC-
BarcelonaTECH, 08930
Barcelona, Spain

**Dr. Marc Fernández de
Labastida Ventura**

Chemical Engineering
Department and Barcelona
Research Center for Multiscale
Science and Engineering, UPC-
BarcelonaTECH, 08930
Barcelona, Spain

Dr. Andrea Cipollina

Department of Engineering,
University of Palermo, Palermo,
Italy

Deadline for manuscript
submissions:

closed (20 November 2022)

Message from the Guest Editors

Dear Colleagues,

Over the last few years, the application of membrane technologies has been preferred over traditional methods because of their higher selectivity, production rate, and lower energy consumption, among others. Several non-ideal phenomena can occur during membrane operation, such as polarization, fouling, and/or scaling or changes in the feed composition. In order to overcome these limitations, mathematical models can be used to anticipate them and implement suitable technical solutions. Apart from that, models can also be used for the optimization of membrane processes, scaling up, system design, and cost estimation.

This Special Issue aims to expand the knowledge of mathematical models for the prediction and simulation of membrane processes. Within this topic, expected contributions include models from fundamental to applied approaches dealing with any kind of limitation, prediction and/or optimization of membrane processes, membrane characterization, fouling and/or scaling prediction, and cost estimation under different scenarios.



mdpi.com/si/95323

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 (*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

mdpi.com/journal/membranes
membranes@mdpi.com
X@Membranes_MDPI