



Ion-Exchange Membranes and Processes (Volume II)

Guest Editors:

Prof. Dr. Natalia Pismenskaya

Department of Physical
Chemistry, Kuban State
University, 149 Stavropolskaya
st., 350040 Krasnodar, Russia

Dr. Semyon Mareev

Physical Chemistry Department,
Kuban State University, 149
Stavropolskaya str., 350040
Krasnodar, Russia

Deadline for manuscript
submissions:

closed (28 February 2021)

Message from the Guest Editors

The aim of the Special Issue is to obtain a holistic picture of the latest advances in the synthesis of new ion exchange materials, the modification of known and experimental ion exchange membranes, the experimental and theoretical study of their characteristics, and the use of these membranes in various processes.

- Commercial, experimental, and modified ion exchange membranes (monopolar, bipolar, mosaic, composite, multilayer; organic, inorganic; homogeneous, heterogeneous, etc.);
- Their transport characteristics and structure–property relationships;
- The concentration polarization and coupled phenomena (water splitting, electroconvection, gravitational convection, etc.) that occur when an electric field is applied;
- The behavior of ion exchange membranes in various processes (dialysis, electrodialysis, electrolysis, capacitive deionization, fuel cells, microfluidic devices, bioreactors, potentiometric sensors, etc.);
- Ion exchange membrane fouling, scaling and ways to counter these phenomena;
- New methods of studying the properties of ion exchange membranes and membrane systems;
- New areas for the application of ion exchange membranes.





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