



Novel Materials for the Preparation and Application of Desalination Membranes

Guest Editor:

Dr. Kecheng Guan

Research Center for Membrane and Film Technology,
Department of Chemical Science and Engineering, Kobe University, 1-1 Rokkodaicho, Nada, Kobe 657-8501, Japan

Deadline for manuscript submissions:

closed (31 March 2022)

Message from the Guest Editor

Membrane-based desalination technology enables a reliable and sustainable supply of freshwater. Higher productivity with reduced cost has been long pursued to make the desalination process even more promising. Materials used in the membrane fabrication and application play a key role in fulfilling this goal. Recent advances in the development of novel materials have provided inspiration for the control of membrane structure and water/ion transport processes. Furthering the study of materials development, microstructure manufacturing, transport behavior, and the relationship between them for membrane-based desalination processes thus becomes necessary.

This Special Issue welcomes original research articles and reviews on innovations in materials development for the preparation and application of desalination membranes. It covers various desalination processes, including, but not limited to, nanofiltration, reverse osmosis, forward osmosis, electrodialysis, membrane distillation, pervaporation desalination, and solar water evaporation.





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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.

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Membranes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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