Special Issue

Advanced Research on Polymer Electrolytes for Membrane-Based Fuel Cells

Message from the Guest Editors

Fuel cells are promising energy storage systems for the achievement of zero emissions in the coming future. Powered by hydrogen or alcohols, fuel cells convert chemical energy into electricity. However, large-scale commercial applications of fuel cells are experiencing drawbacks because of the limits in the fundamental studies, the discovery of cheap but efficient catalysts, and the large-scale manufacturing of chemically stable electrolytes, primarily in the form of membranes. This Special Issue is dedicated to advancing research on all aspects of membranes electrolytes for fuel cells. Both experimental and theoretical studies are suitable as submissions. Research areas may include (but are not limited to) the following topics:

- Synthesis of materials for fuel cell membranes
- Anion-exchange membranes for fuel cells
- Proton-exchange membranes for fuel cells
- Theoretical studies and modelling of membranes at various scales
- Manufacturing of membranes materials at large scale
- Materials informatics for the discovery of novel material candidates
- Engineering applications of fuel cells driven by membranes

Guest Editors

Dr. Dengpan Dong

Chemical Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN 37831, USA

Dr. Xiaoyu Wei

Senior Materials Scientist, Bridgestone Americas Inc., Nashville, TN, USA

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Membranes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
membranes@mdpi.com

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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 accessjournal 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.

Editor-in-Chief

Prof. Dr. Spas D. Kolev
School of Chemistry, The University of Melbourne, Melbourne, VIC 3010, Australia

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