Special Issue

Design and Characterization of Proton Exchange Membrane Fuel Cells (PEMFCs)

Message from the Guest Editors

Proton exchange membrane fuel cells (PEMFCs), as a key technology for hydrogen energy utilization, are considered a primary power source for future new energy vehicles due to their environmental benefits, high energy density, and fast start–stop response. However, with the advancement of technology and the growing demand for applications, PEMFCs still face critical challenges related to lifespan, cost, and performance. These bottlenecks require further exploration by researchers.

This Special Issue will focus on the challenges related to the performance of the PEMFCs, discussing the latest advancements and innovative solutions in the preparation and characterization of proton exchange membranes; heat and mass transfer; and design optimization. We look forward to your contributions and to fostering innovation in the field of proton exchange membrane fuel cells.

We eagerly anticipate your participation and submissions.

Guest Editors

Dr. Guobin Zhang
Prof. Dr. Nan Li
Dr. Shuanyang Zhang

Deadline for manuscript submissions

closed (28 February 2026)

Membranes

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 9.4
Indexed in PubMed

mdpi.com/si/219198

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

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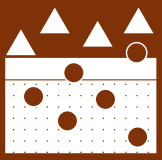

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Message from the Editor-in-Chief

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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