# **Special Issue**

# Modeling and Simulation of Polymeric Membrane

### Message from the Guest Editor

This Special Issue aims to highlight the progress made with respect to the modeling and design of new polymeric membranes through the use of CFD simulation, atomistic modelling, kinetic modelling, the design of new micro- and nano- porous membranes. the analysis of new modification methods, and new data analytics approaches for the design/optimization of gas diffusion layers, etc. The aim is to have a collection of at least 10 articles, and the Special Issue may be printed in book form if this number is reached. In this Special Issue, original research articles and reviews are welcome. Research areas include (but are not limited to) the following: multi-phase fuel cell modelling; gas permeation; mass transfer modelling; methane harnessing: microporous membranes: CO2 separation: atomistic modelling; plasticization; polymer rearrangement; swelling; CO2 capture; and hydrogen production. I look forward to receiving your contributions.

### **Guest Editor**

Dr. Anton M. Manakhov

- 1. Research Institute of Clinical and Experimental Lymphology—Branch of the ICG SB RAS, 2 Timakova St., 630060 Novosibirsk, Russia
- 2. Aramco Innovations LLC, 119991 Moscow, Russia

### Deadline for manuscript submissions

closed (28 February 2023)



## **Membranes**

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 6.1
Indexed in PubMed



mdpi.com/si/116966

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

mdpi.com/journal/ membranes





## **Membranes**

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 6.1 Indexed in PubMed



### About the Journal

### 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

#### **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 (Chemistry, Physical) / CiteScore - Q2 (Chemical Engineering (miscellaneous))

