# Special Issue

# Advances in Metal-Organic-Framework (MOF) Membrane for Sustainable Separation

### Message from the Guest Editors

Metal–organic frameworks (MOFs), constructed by organic linkers and metal centers, have emerged as a novel class of crystalline porous materials featuring well-defined and highly designable porosity and pore structures, and thus show great potential in membrane-based separation applications. The past decade has witnessed substanitial progress and exciting breakthroughs in the fabrication and application of MOF membranes. This Special Issue aims to seek contributions to assess the state of the art and future developments in the field of MOFs as advanced materials for membrane-based separation, both as pure-phase MOF films and as fillers in a polymer matrix to create mixed-matrix membranes, to solve the challenges faced by MOF membranes. Topics include (but are not limited to) the fabrication methodology, application, and transport theory of MOF membranes in gas separation, nanofiltration, desalination, stimuli responsiveness, and catalysis. Manuscripts and communications are considered in this Special Issue for publication.

### Guest Editors

Dr. Yanchao Xu

Dr. Yanqiu Zhang

Dr. Xiaobin Yang

### Deadline for manuscript submissions

closed (31 December 2022)

**Membranes**

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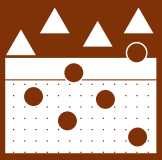

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## About the Journal

### 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

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