



Metal-Organic Framework Membranes for Molecular Separations

Guest Editor:

Message from the Guest Editor

Deadline for manuscript
submissions:
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Metal-organic frameworks (MOFs) are a class of crystalline microporous/mesoporous materials consisting of metal clusters coordinated to organic linkers. The well-defined pore structure with diverse chemical environment allow MOFs for addressing several critical issues in membranes for various chemical separations, such as gas separations, organic solvent purification, desalination, and removal of dyes or heavy metals in wastewater. The research for MOF membranes in all kinds, involving pure MOF membranes, mixed matrix membranes, and MOF-derived membranes is growing, as commercialized products of MOF membranes have yet been available.

This Special Issue covers the most recent advance in pure MOF membranes, MOF-containing mixed matrix membranes, and MOF-derived membranes for various types of molecular separations. We survey the state-of-the-art computational or experimental developments of MOF-based membranes for gas separation (molecular sieves or membrane adsorbers), pervaporation, vapor permeation, desalination, and dye removal.





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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 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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