

## Special Issue

# Mixed Matrix Membranes for Energy and Environmental Applications

### Message from the Guest Editors

Membrane processes have been widely applied in water treatment and gas separation. As organic–inorganic hybrid membranes, mixed-matrix membranes (MMMs) have the potential to maximize the advantages of both polymeric matrix and inorganic filler, and have attracted increasing interest in desalination, wastewater treatment, hydrogen separation and CO<sub>2</sub> separation. To advance the industrial application of MMMs, scientific gaps in membrane fabrication, configuration, filler development, characterization, mechanism analysis, modeling and the exploration of MMMs in different areas should be filled. The purpose of this Special Issue, is to focus on recent advancements in MMMs development and application in both water treatment and gas separation. Topics include but are not limited to: novel MMM development, structural adjustment and optimization, novel additive and filler development, upgrade of current MMM fabrication methods and separation processes, characterization techniques, transport and separation mechanisms, membrane fouling mitigation, process modelling and simulation, energy and economic analysis, and the exploration of new application areas.

### Guest Editors

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### Deadline for manuscript submissions

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## Membranes

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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 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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### Editor-in-Chief

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