Special Issue

Advance in Thermal-Driven Membrane Processes

Message from the Guest Editors

Membrane-based technology represents an emerging strategy for energy-efficient liquid separation. Temperature differences across membranes drive thermal-driven membrane processes, including membrane distillation (MD) and pervaporation (PV). There are several configurations for (i) MD used in saline water desalination, wastewater volume reduction and resource recovery, e.g., direct contact MD, air gap MD, sweeping gas MD and vacuum MD, and (ii) PV used in organic solvent dehydration, hypersaline brine desalination and bioalcohol recovery, e.g., organophilic PV and hydrophilic PV. Thermal-driven membrane processes exhibit the unique advantages, where their driving force is not strongly influenced by the feed concentration/composition, and the operation conditions are mild without high pressures/temperatures. Hence, they are imperative to achieve superior industrial separation processes and reduce the capital and energy cost. This Special Issue aims to publish recent advances in thermal-driven membrane processes with both membrane distillation and pervaporation for various liquid separation.

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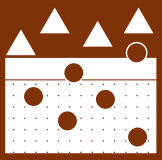

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Message from the Editor-in-Chief

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.

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