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## Enhancing Separation Performance of Mixed Matrix Membranes

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### Message from the Guest Editor

This Special Issue of *Membranes* aims to provide an overview of the latest challenges in the MMM embedding of novel functional porous materials such as zeolites, graphene derivatives, MOF, COF, etc.. It could be possible to control membranes' surface chemistry and textural properties to improve their separation ability while maintaining a good polymer integration. This issue covers the latest advances in MMM technology in academia, aiming at their large-scale industrial implementation. Some of the topics discussed include strategies to improve filler–polymer compatibility, dense flat-sheet or supported hollow fiber membrane configurations with special inputs in the preparation of thin-film composites, and the separation of mixtures under realistic industrial conditions (feed composition, pressure, temperature, etc.). Applications are focused on pre- and post-combustion CO<sub>2</sub> capture but are not limited to other gas- (hydrogen purification, the separation of volatile organic compounds, hydrocarbon separations, etc.) or liquid-phase separations (pervaporation, organic solvent nanofiltration, etc.). Both original research articles and reviews are welcome.



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# Special Issue



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## Editor-in-Chief

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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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