## Special Issue

## Development of High-Performance Polymers for Membranes Applied to Gas and Liquid Separations

## Message from the Guest Editors

Interest in membranes for liquid and gas separation has increased in recent decades due to their small size and energy-efficient separation capabilities in a number of separation processes. Organic polymers are preferred over membrane preparation due to their flexibility and the feasibility to tailor their properties to achieve the desired separation. Membranes from high-performance polymers may be tailored for gas, vapor, or liquid separation in order to overcome limiting situations. High-performance polymers for membrane preparation can also be designed to develop specific morphologies that, depending on their application, could be porous or microporous, phase-segregated, or modified with suitable functional groups to achieve flux and selective separation performance in a given process. Even though there is a large number of polymer materials reported, there is a need for research towards tailoring highperformance polymers for membrane selective performance for applications that require larger selectivity while maintaining the flux of a desired species in molecular gases, vapors, and liquids separation.

### **Guest Editors**

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### **Deadline for manuscript submissions**

closed (30 June 2025)



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I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

#### Editor-in-Chief

#### Prof. Dr. Alexander Böker

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