



an Open Access Journal by MDPI

Development and Applications of Polymeric Membranes for Separation

Guest Editors:

Dr. Konstantin V. Pochivalov

G. A. Krestov Institute of Solution Chemistry, Russian Academy of Sciences, Ivanovo, Russia

Dr. Alexey V. Volkov

A.V. Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Leninsky Prospect 29, 119991 Moscow, Russia

Dr. Andrey V. Basko

G. A. Krestov Institute of Solution Chemistry, Russian Academy of Sciences, Ivanovo, Russia

Deadline for manuscript submissions: closed (30 March 2024)



Message from the Guest Editors

Dear Colleagues,

As a sustainable approach, the membrane separation is playing an increasingly important role for the processing and recovery of target compounds from various gas and liquid streams due to its lower energy cost, footprint, and flexibility in operation. The majority of membranes used in separation processes are based on amorphous and semicrystalline polymers. This Special Issue entitled "Development and Applications of Polymeric Membranes for Separation" will cover both the fundamental and applied aspects of polymeric membrane preparation and application, including but not limited to:

- The structure evolution and phase behavior of the polymeric systems during the membrane formation by nonsolvent- and vapor-induced phase separation (NIPS, VIPS) methods, as well as the thermally induced phase separation (TIPS) method, and their combination;
- Mechanisms of structure formation of the membranes in the phase separation processes;
- Novel approaches to the formation of polymeric membranes;
- Novel membrane materials, including mixed matrix membranes and polymer–polymer blends;
- Gas and liquid separation and membrane contactors.







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and highquality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)

Contact Us

Polymers Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/polymers polymers@mdpi.com X@Polymers_MDPI