



an Open Access Journal by MDPI

Electrospun Nanofiber Membranes: From Synthesis to Applications

Guest Editors:

Prof. Dr. Yu-Kaung Chang

Department of Chemical Engineering, Ming Chi University of Technology, New Taipei City 243303, Taiwan

Dr. Chien Wei Ooi

Advanced Engineering Platform, Monash Univeristy, Jalan Lagoon Selatan, 47500 Bandar Sunway, Selangor 47500, Malaysia

Deadline for manuscript submissions: closed (31 May 2022)

Message from the Guest Editors

Electrospinning is a popular technique used in the preparation of nanofiber membranes. The electrospun nanofibrous membranes provide large surface-to-volume ratio, high mechanical robustness and excellent pore interconnectivity, making them highly versatile in many applications. In particular, they can serve as a powerful filtration matrix for wastewater treatment, desalination. gas separation, and recovery of valuable compounds. Other noteworthy applications of electrospun nanofibrous membranes include tissue engineering, packaging, energy generation and storage, as well as sensors. The performance of nanofiber membranes in these applications is governed by their chemical as well as physical properties such as hydrophilicity, hydrophobicity, morphology, nanofiber membrane porosity and mechanical strength. The advances in material engineering has also unlocked the vast choice of materials for the fabrication of nanofibers, which can be used in the synthesis of nanofiber membranes with a wide variety of surface topography and morphology









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Spas D. Kolev

School of Chemistry, The University of Melbourne, Melbourne, VIC 3010, Australia

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 nonbiological 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.

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Chemistry, Physical*) / CiteScore - Q2 (*Chemical Engineering* (*miscellaneous*))

Contact Us

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