

Special Issue

Membrane Fouling Control: Mechanism, Properties, and Applications

Message from the Guest Editors

This Special Issue aims to advance our understanding of membrane fouling mechanisms and explore innovative strategies for effective fouling control. Topics of interest include the development of antifouling and self-cleaning membrane materials, advanced pretreatment techniques, and hybrid processes that enhance filtration performance. Particular emphasis is placed on contributions that illuminate the physicochemical and biological mechanisms of membrane fouling through the use of advanced diagnostic tools, modeling techniques, and machine learning approaches. Additionally, this Special Issue highlights practical and scalable solutions tailored to industrial applications. By integrating diverse disciplinary perspectives, this Special Issue aims to deepen our understanding of membrane fouling mechanisms and promote innovative strategies for fouling control. It seeks to provide researchers, engineers, and industry professionals with a comprehensive overview of cutting-edge advancements and practical insights, driving progress and innovation in membrane filtration technologies.

Guest Editors

Prof. Dr. Rui Miao

Dr. Pei Wang

Dr. Miaolu He

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

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About the Journal

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.

Editor-in-Chief

Prof. Dr. Spas D. Kolev
School of Chemistry, The University of Melbourne, Melbourne, VIC
3010, Australia

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