# Special Issue

# Advances in Membrane Fouling and Cleaning

### Message from the Guest Editors

Fouling is a ubiquitous challenge in membrane systems. On the one hand, fouling is a clear indicator that the membrane system is functioning well, as the phenomenon is intrinsically linked to the removal of undesirable pollutants or contaminants in raw water from the permeate of the membrane system. The assessment of the fouling mechanism (hydraulically vs. chemically reversible, irreversible, particular, adsorptive, biological, etc.) is key for recovering the membrane permeability. While polymeric membranes currently dominate the market, there is also an increasing interest in ceramic membranes, which provides an opportunity to explore both systems and assess their differing capacities with respected to fouling and cleaning. As such, it is necessary that researchers have the capacity to develop novel methodologies for assessing membrane fouling and subsequent cleaning regimes in order to ensure the successful integration of membrane systems into the growing challenges of water treatment.

**Keywords**

- membrane fouling
- fouling indices
- novel cleaning
- chemically enhanced backwash
- nanomaterial modifications

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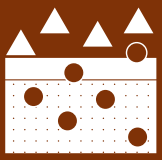

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### Message from the Editor-in-Chief

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 accessjournal 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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