Special Issue

Membrane Separation Technology for Water Treatment

Message from the Guest Editors

Our Special Issue is focused on recent developments in the technology involved in water treatment, particularly membrane separation. Membrane separation technologies, including reverse osmosis, nanofiltration, ultrafiltration, and forward osmosis, are increasingly recognized for their ability to achieve high-efficiency separation with minimal environmental impact. This Special Issue explores cutting-edge developments in membrane materials, such as hybrid membranes, polymer-inorganic composites, and biomimetic designs, which enhance selectivity, permeability, and fouling resistance. Special attention is given to electro-enhanced and energy-efficient membrane processes. Key themes include the role of membranes in addressing industrial wastewater, brine management, and municipal water reuse, alongside strategies to improve cost-effectiveness and scalability. Case studies from global applications highlight the transition from conventional treatment methods to membrane-based systems, emphasizing their role in achieving sustainable water management.

Guest Editors

Dr. Jiajian Xing
School of Environment, Dalian University of Technology, Dalian, China

Dr. Haiguang Zhang
School of Environmental Science and Engineering, Shandong University, Qingdao, China

Deadline for manuscript submissions

closed (20 July 2025)

Separations

an Open Access Journal by MDPI

Impact Factor 2.7
CiteScore 4.5

mdpi.com/si/224335

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

mdpi.com/journal/separations

Separations

an Open Access Journal by MDPI

Impact Factor 2.7
CiteScore 4.5

mdpi.com/journal/separations

MDPI

About the Journal

Message from the Editor-in-Chief

Separations offers the scientific community a high-quality, open-access journal option with rapid time-to-publication without any sacrifice of a rigorous peer-review process. We invite contributions ranging from fundamental characterization and instrumentation development through application of techniques to shed light on a broad spectrum of separation science needs. Since inception, *Separations*, has become unique in its combination of rapid publication and thorough scientific content. We invite you to consider us for your next contribution.

Editor-in-Chief

Prof. Dr. Frank L. Dorman
Department of Chemistry, Dartmouth College, Hanover, NH 03755, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.3 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.