Special Issue

Application of Membrane-Based Modern Solutions in Separation Techniques for the Recovery of Metal Ions and Critical Resources

Message from the Guest Editors

Nowadays, membrane techniques are used not only as industrial solutions for water or wastewater treatment but also as potential technologies for the separation liquid mixtures and recovery of critical metals and chemical compounds from waste in a circular economy. Resources such as metals, REEs (rare earth elements), salts, fertilizers, bio compounds, and energy, etc., can be recovered from various wastes using membrane technologies. The aim of this SI is to promote membrane technologies as innovative, environmentally friendly, and inexpensive technologies for liquid mixture separation, water treatment, wastewater treatment, and multi-resource recovery. Therefore, the scope of this Special Issue includes, but is not limited to, new approaches in membrane design and synthesis, novel membrane materials, mass transport and adsorption phenomena/mechanisms, mathematical modeling, modules and membrane reactors design, novel applications, and industrial exploitation of membrane techniques in water and wastewater treatment, biomedical and tissue engineering, drug delivery, recovery of all kinds of significant critical resources from industrial and medical wastes, etc.

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Deadline for manuscript submissions

31 December 2025

Membranes

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 7.9
Indexed in PubMed

mdpi.com/si/247791

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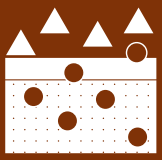

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Message from the Editor-in-Chief

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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