Special Issue

Recent Advances in Membrane Technology for Water Treatment

Message from the Guest Editors

Membrane technology has emerged as a cornerstone in water treatment, offering efficient, scalable, and environmentally friendly methods for purifying water from various sources, including seawater, wastewater, and industrial effluents. Over the past few decades, significant advancements in membrane materials, fabrication techniques, and process optimization have revolutionized the field, enabling higher efficiency, lower energy consumption, and broader applicability. This Special Issue, aims to showcase the latest research and developments in this dynamic field. We invite contributions that explore novel membrane materials, such as nanocomposite membranes, biomimetic membranes, and graphene-based membranes, as well as innovative fabrication methods like 3D printing and electrospinning. Additionally, we welcome studies on membrane processes, including reverse osmosis, nanofiltration, ultrafiltration, and forward osmosis, with a focus on improving performance, fouling resistance, and sustainability. Research on hybrid systems integrating membrane technology with other treatment methods, such as advanced oxidation or biological processes, is also encouraged.

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

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