



Membrane Distillation Process

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Message from the Guest Editor

The water stress that we are experiencing in last years is pushing towards the development of new technologies for the purification and recovery of water. With respect to Reverse Osmosis (RO) that is limited by the osmotic pressure and sometimes shows low rejection values for elements like As(III) and Boron, Membrane Distillation (MD) is able to produce fresh water from high-concentrated streams and provides 100% theoretical rejections for all non-volatiles present into the aqueous feeds. Despite these advantages, MD is far from a significant application at industrial scale, due to some still pending issues concerning membranes and modules design and the specific thermal energy consumption.

The aim of this Special Issue is to provide an overview of the last results obtained in the field for overcoming MD drawbacks and boosting its implementation at large scale.

Keywords

- Membrane Distillation
- Water and Wastewater Treatment
- Desalination
- Hydrophobic Membranes
- Specific Thermal Energy Consumption
- Renewable Energies
- Integrated Membrane Operations





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Message from the Editor-in-Chief

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