



## Emergent Materials for Membrane Preparation: From Circular Economy to Environmental Sustainability

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Deadline for manuscript  
submissions:

**closed (30 June 2023)**

### Message from the Guest Editors

Membrane technology offers several advantages such as a reduced environmental impact, a lower operation cost, and a safe and flexible scaling up. However, membranes' manufacturing via the traditional phase inversion techniques still requires the use of thermoplastic polymer based on petroleum resources and toxic solvents, often classified as "of very high concern" by the European regulation REACH. The focus of this Special Issue is to highlight the applications of emerging materials for membrane preparation such as polymers derived from biomass, bio-polymers, blends or composites from renewable resources. Examples of innovative membranes can include polymeric membranes from biorefinery concept, preparation of novel membranes from natural biopolymers or biodegradable polymers, advanced catalytic membranes, new generations of membrane for waste water treatment, air purification, self-cleaning surfaces and other pioneering themes. Moreover, additional topics related to use of non-toxic and environmentally friendly solvents for membranes production will also be included.





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## Message from the Editor-in-Chief

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