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Antifouling Special Wettable Membranes for Oil-Water Separation

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Message from the Guest Editor

Membrane techniques have been widely employed for water purification and are very effective in separating stabilized oil, emulsions, produced water, and oily wastewater treatment. However, traditional membranes suffer from membrane fouling on surfaces and internal structures, which significantly limits their service time and degrades separation performance in practical operations. Recently, the concept of adopting biomimetic hierarchical roughness in membrane design has aroused great interest, and extensive research has been observed in designing special wettable membranes. The membrane separation efficiency and antifouling behavior can be significantly improved if the surface textured of the membranes is rationally designed according to the emulsion type. Based on bionics, this new generation of membranes has opened a new door to antifouling oil/water separation.

With the help of leading scientists and researchers, this Special Issue would bring possible solutions and advanced membranes which can be used to decontaminate the oily wastewater and provide a possible solution to reuse the oily wastewater. Authors are also encouraged to submit initial research works or review papers.



Specialsue





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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).

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