

## Special Issue

# Liquid-Liquid, Oil-Water Energy Efficient Separations

### Message from the Guest Editor

Liquid-liquid separation is at the cornerstone of clean water supply due to the ever-increasing water pollution from oil exploitation activities, as well as the massive production of wastewater in industrial processes including in pharmaceutical, mining, metallurgical, paper-making, food, and textile production. Membrane-based separation of oil-water mixtures is favored over conventional methodologies as they require no regeneration of spent media, chemical additives, and thermal inputs. Among them, high-pressure membranes (e.g., reverse osmosis, ultrafiltration) and the membranes with wettability remain the most widely used in liquid separations. However, challenges such as permeability-selectivity trade-off, chemical and mechanical robustness, upscaling limitations, susceptibility to fouling, and the resulting increased operation costs have partly counterbalanced their advantages.

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### Guest Editor

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### Deadline for manuscript submissions

closed (15 December 2021)



## Energies

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### Message from the Editor-in-Chief

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### Editor-in-Chief

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