

Supplementary materials for

Under-oil Superhydrophilic Salt Particle Filter for Efficient Separation of Water-in-oil Emulsions

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Materials and Methods

Reagent grade (99.5 %) NaCl was used as a water-in-oil emulsion filtration bed. The NaCl and the surfactant sodium dodecyl sulfate (SDS) were purchased from J&K Scientific and are utilized in their original form to produce surfactant stabilized water-in-oil emulsion. The n-decane was used as an oil compound in this study and was purchased from J&K Scientific. All the aqueous solutions produced in this study were made with deionized (DI) water. Methylene blue (AR grade) was purchased from Aladdin.

Supplementary Figures

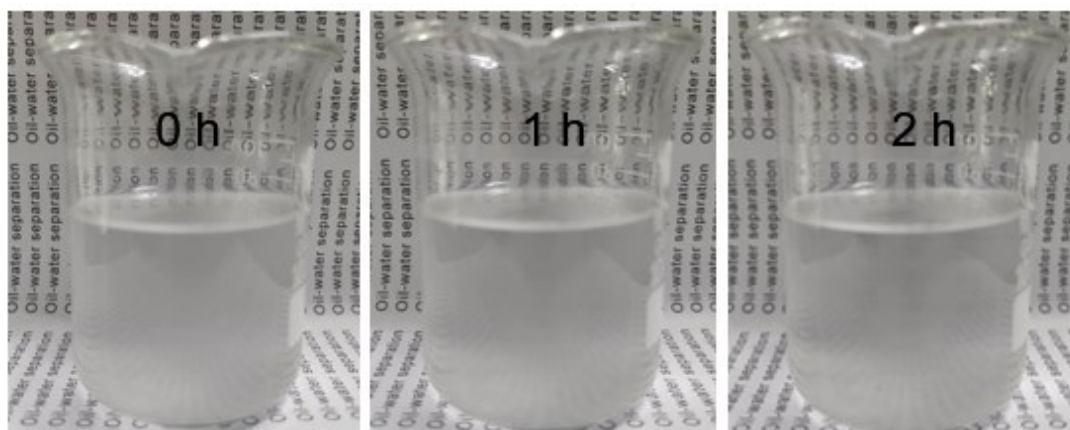


Figure S1 The stability tests of water-in-decane emulsion.

Supplementary Movies

Movie S1: Video shows different flux between the suction filtration and filtration by gravity.