

Supporting Information

Fabrication of a superhydrophilic and underwater superoleophobic membrane via one-step strategy for high-efficiency semi-coking wastewater separation

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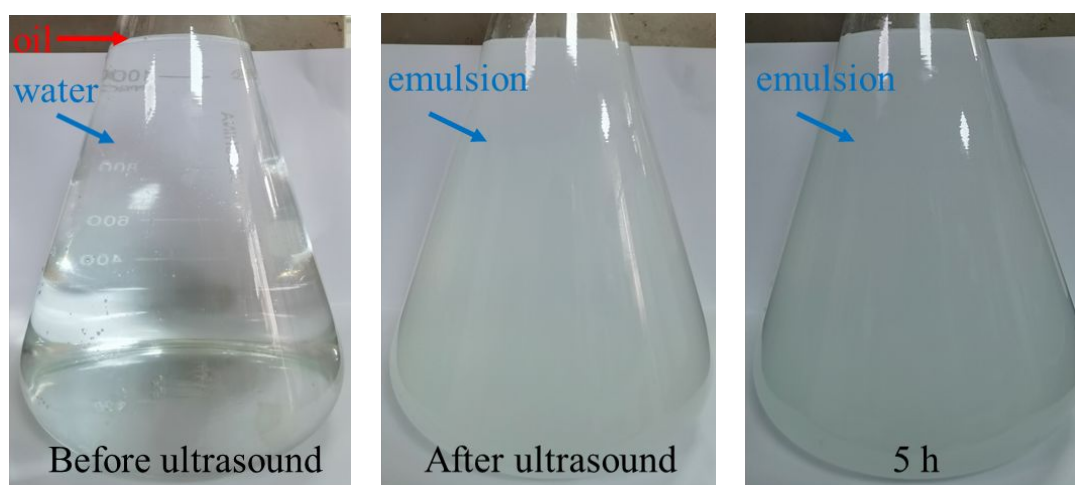


Figure S1. Before and after ultrasound of emulsion.

Table S1 Effect of coating concentration on membranes melt and crystallinity.

Membrane	Melting Enthalpy ΔH_m (J/kg)	Enthalpy crystallization ΔH_m (J/kg)	Melting temperature °C	Crystallization temperature °C
Pristine PVDF	16.80	14.06	164.24	127.44
DMA/APTES-PVDF- 0.1/0	18.69	14.65	164.60	129.22
DMA/APTES-PVDF- 0.1/0.015	15.70	12.47	164.71	129.24
DMA/APTES-PVDF- 0.1/0.05	14.41	12.38	165.22	131.62
DMA/APTES-PVDF- 0.1/0.1	18.50	13.00	165.15	137.33
DMA/APTES-PVDF-	19.01	11.77	166.06	136.99

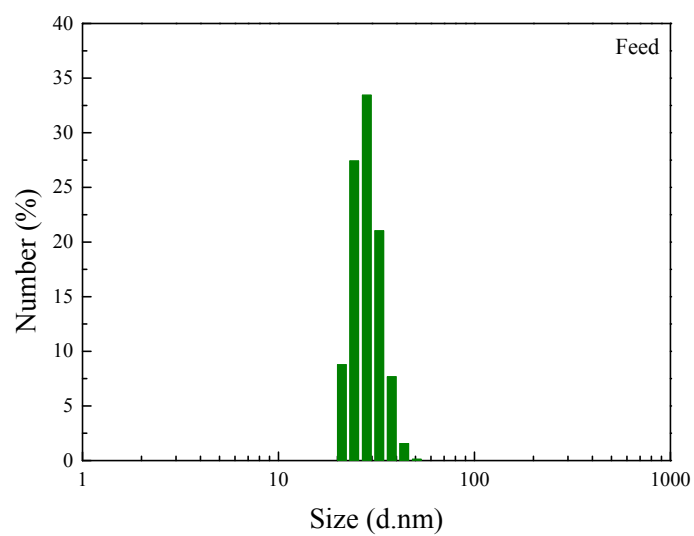


Figure S2. The particle size of 0.1 g/L Tween-80.



Figure S3. The dynamic images record the excellent antifouling performance of the DMA/APTES-PVDF membrane.