Electronic Supplementary Material (ESI) for Environmental Science: Advances.

Preparation of two kinds of membranes with reverse wettability from waste masks for continuous oil/water separation

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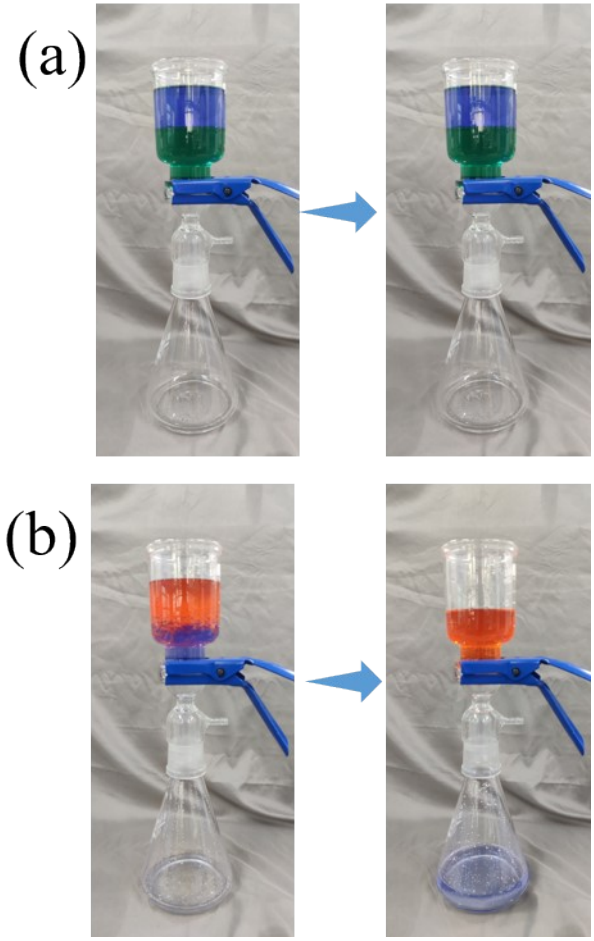

Fig. S1. Photographs before and after the oil /water separation process using PP-SiO_2/DA-1.0 membrane. (a) CCl_4 (stained green)/water (stained blue), (b) soybean oil (stained red)/water (stained blue)

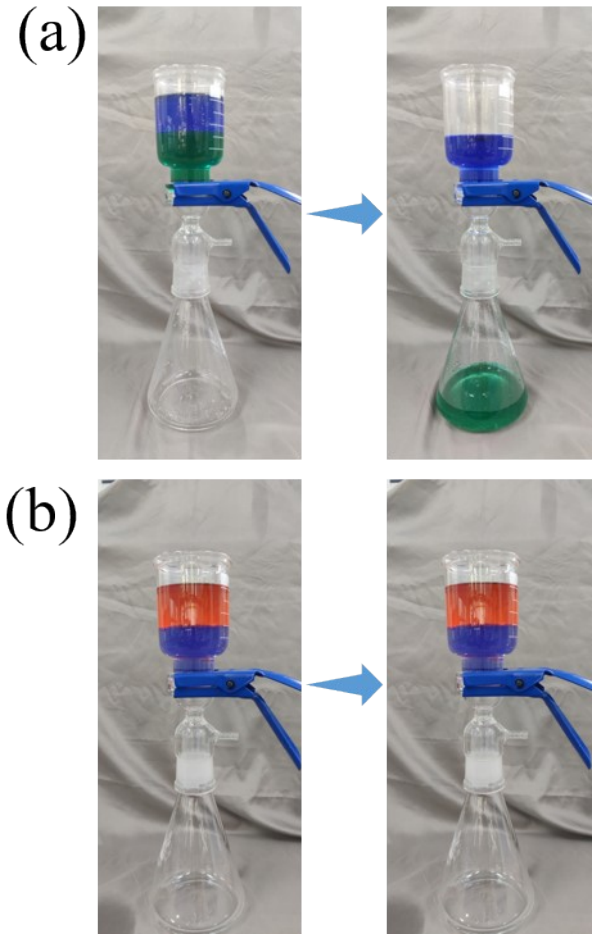

Fig. S2. Photographs before and after the oil/water separation process using PP-SiO_2/OTS-1.0 membrane. (a) CCl_4 (stained green)/water (stained blue), (b) soybean oil (stained red)/water (stained blue)

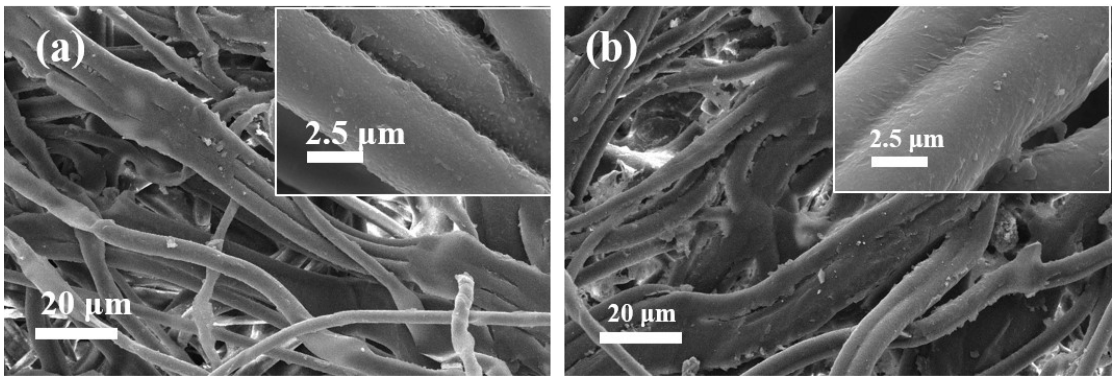

Fig. S3. SEM images of (a) WM-SiO_2/DA-2.5 membranes and (b) WM-SiO_2/OTS-2.5 membranes.

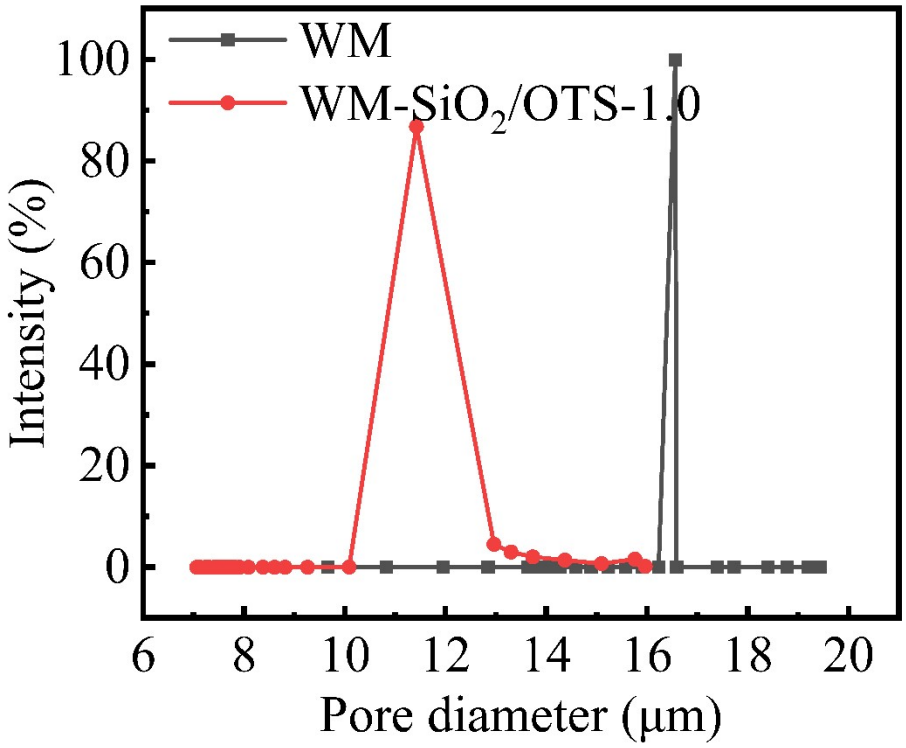

Fig. S4. Pore distribution of WM and WM-SiO_2/OTS-1.0.

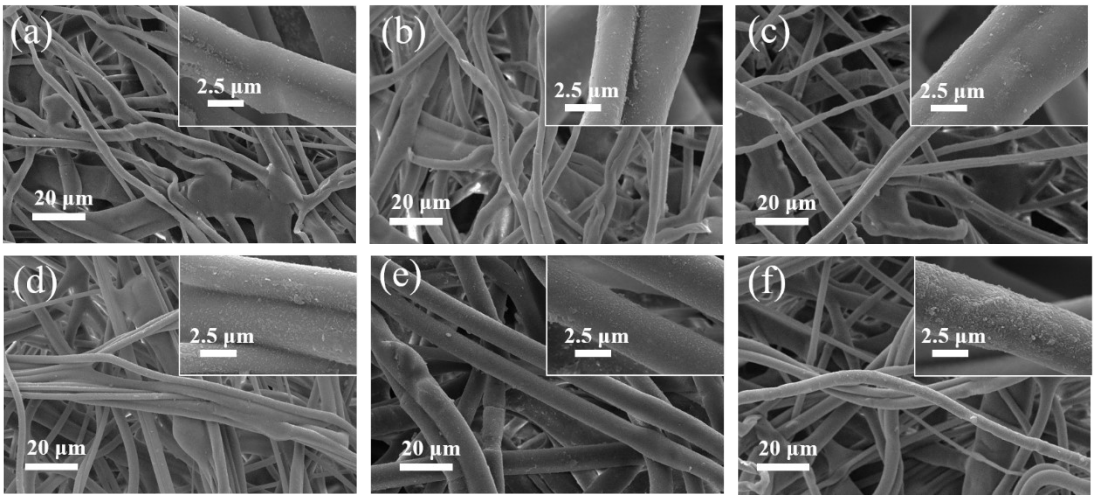

Fig. S5. SEM images of WM-SiO_2/DA-1.0, (a) soaking in NaCl solution, (b) soaking in pH=2 solution, and (c) soaking in pH=14 solution; SEM images of WM-SiO_2/OTS-1.0, (a) soaking in NaCl solution, (b) soaking in pH=2 solution, and (c) soaking in pH=14 solution.