Electronic Supplementary Information (ESI) for:

Co-axial electrospun polystyrene/polyurethane fibres for oil collection from water surface

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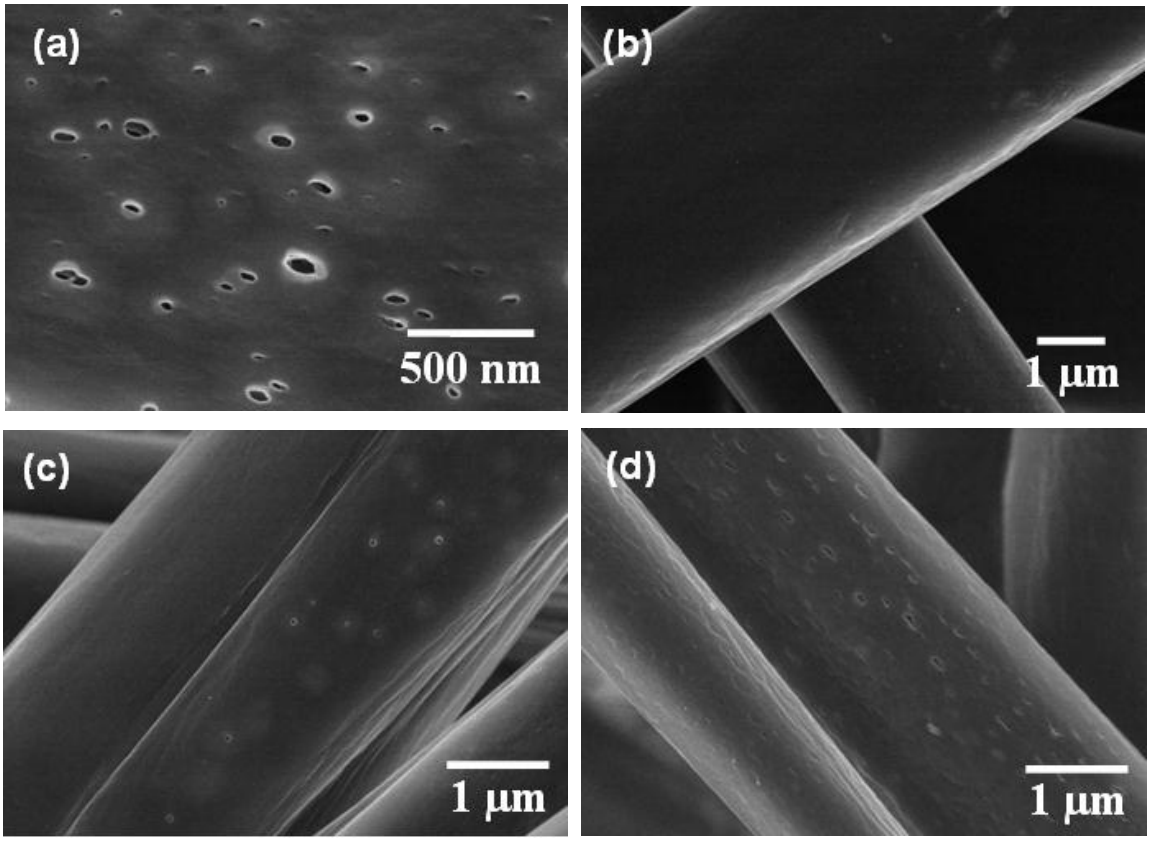

Figure S1. FE-SEM images in high resolution of the samples shown in Fig. 2b, Fig. 3a, Fig. 4a and Fig. 4e, respectively.

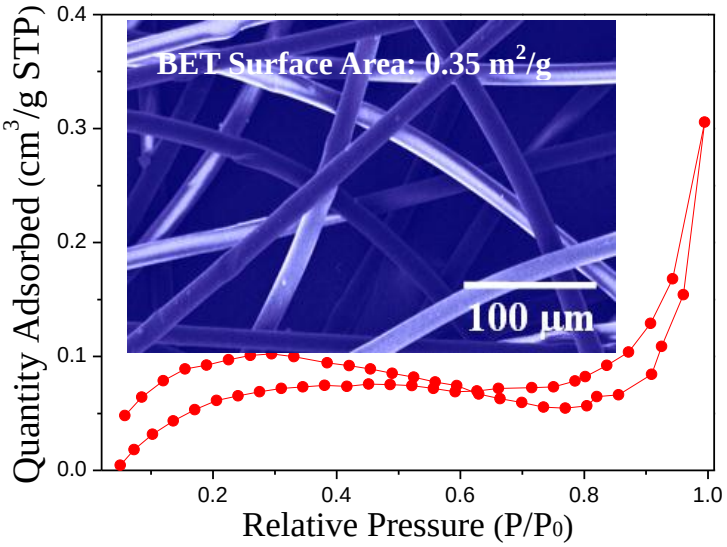

Figure S2. Nitrogen adsorption-desorption isotherm and FE-SEM image (inset) of the conventional PP fibers.

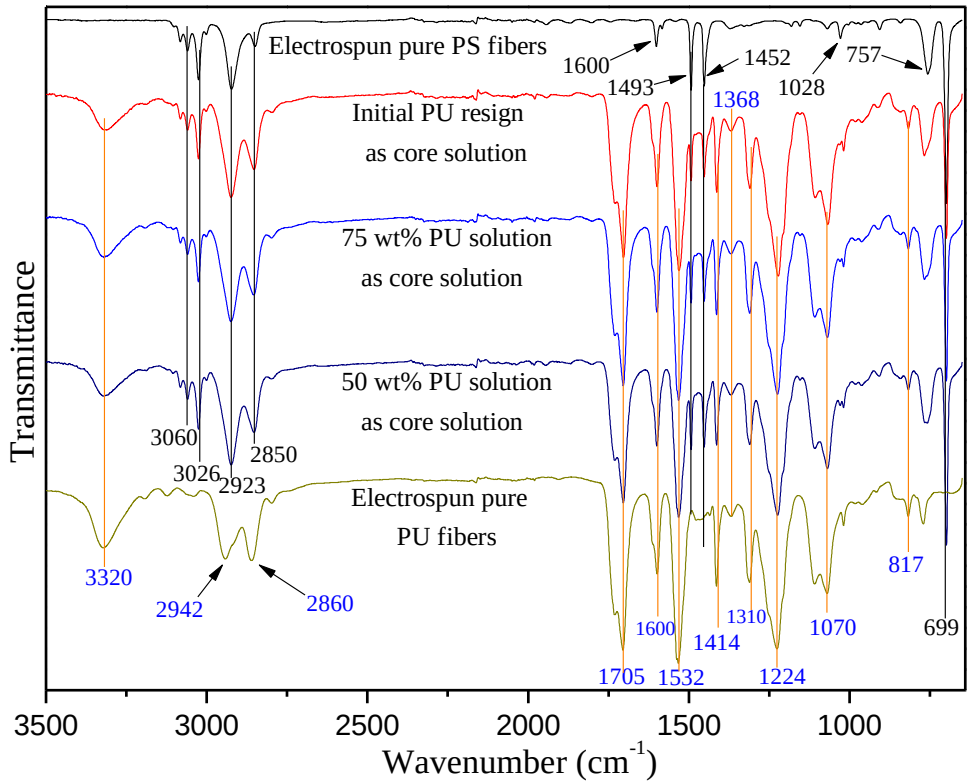

Figure S3. FT-TR spectra of the selected fibrous mats formed under different conditions.

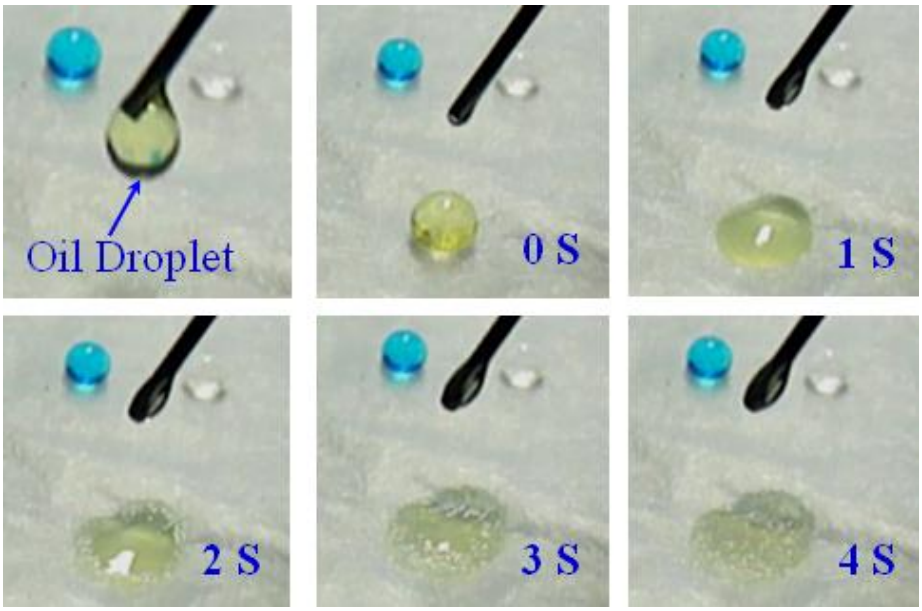

Figure S4. Hydrophobicity-oleophilicity of the composite PS/PU fibrous mat.

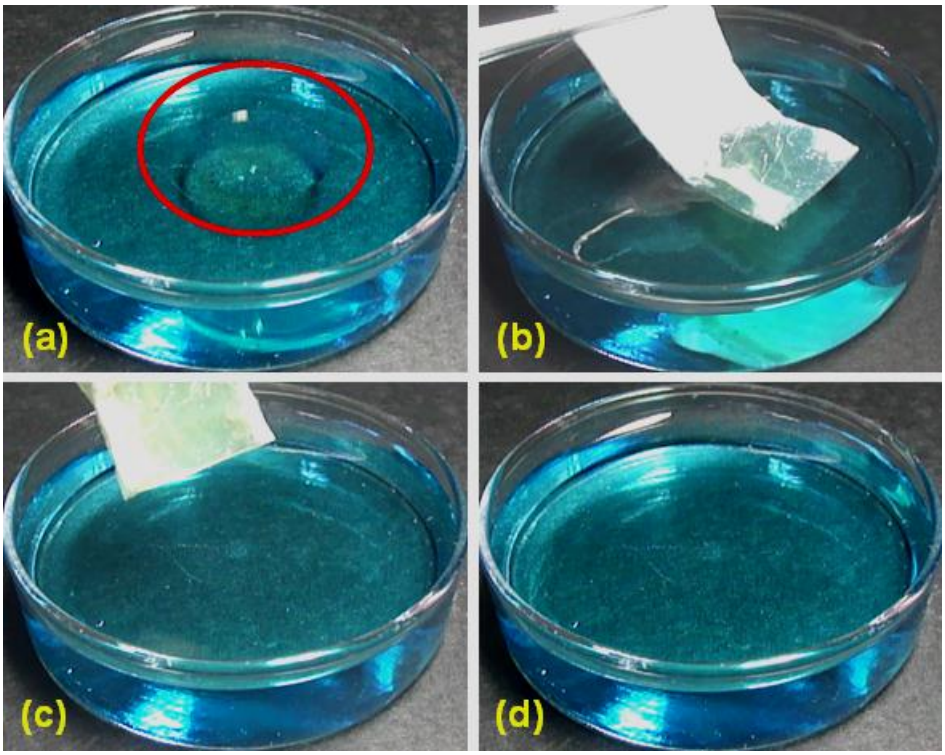

Figure S5. A dynamic process of oil cleanup from the water surface by using a composite PS/PU fibrous mat.

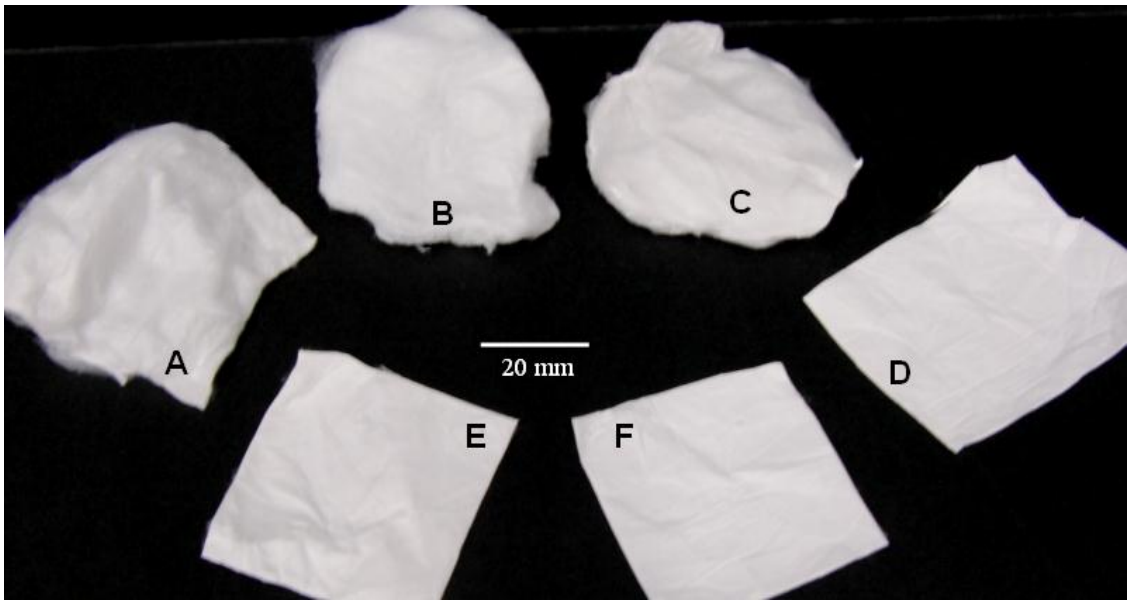

Figure S6. Optical images of the electrospun composite PS/PU fibrous mats. The samples A to F are the corresponding fibers shown in Table 2.

Table S1. Mechanical properties of the electrospun composite PS/PU fibrous mats.

Samples	Break strength (MPa)	Elongation at break (%)	Yield stress (MPa)
A	2.06±0.09	97.42±12.14	1.60±0.14
B	1.48±0.28	224.86±67.63	1.39±0.27
C	1.81±0.10	154.63±11.25	1.75±0.11
D	0.91±0.14	147.24±14.14	0.88±0.141
E	1.93±0.13	62.87±9.36	1.35±0.21
F	1.70±0.22	52.58±3.96	1.52±0.12

The samples A to F are the corresponding fibers shown in Table 2.