

Supplementary Information

Improved filtration performance and antifouling property of polyethersulfone ultrafiltration membranes by blending with carboxylic acid functionalized polysulfone

Xing Wu^{a,b,c}, Zongli Xie^{*c}, Huanting Wang^d, Chen Zhao^d, Derrick Ng^e, Kaisong Zhang^{*a,b}

1. *Key Laboratory of Urban Pollutant Conversion, Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, 361021, China. Email: kszhang@iue.ac.cn;*
2. *University of Chinese Academy of Sciences, Beijing, 100049, China*
3. *CSIRO Manufacturing, Private bag 10, Clayton South, Victoria 3169, Australia. Email: zongli.xie@csiro.au*
4. *Department of Chemical Engineering, Monash University, Clayton, Victoria 3800, Australia*

Figure Captions

Table S1. The composition of PSF and PES/PSF-4 casting solutions.

Fig. S1. Differential scanning calorimetric (DSC) curves of PSF and PES/PSF-4 membranes under N₂ atmosphere.

Fig. S2. FTIR spectra of the PSF membrane and PES/PSF-4 membrane.

Table S2. Pure water flux, BSA rejection and contact angle of the PES/PSF-4 membrane.

Table S1. The composition of PSF and PES/PSF-4 casting solutions.

Membrane	PVP (wt.%)	PES (wt.%)	DMF (wt.%)	PSF (wt.%)
PSF	1.5	0.0	81.0	17.5
PES/PSF-4	1.5	13.5	81.0	4.0

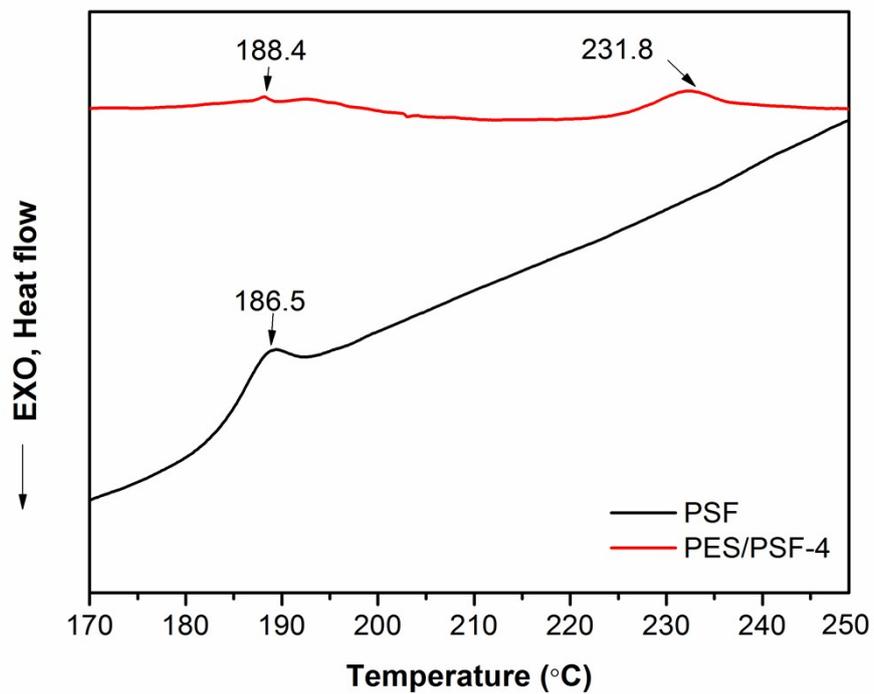


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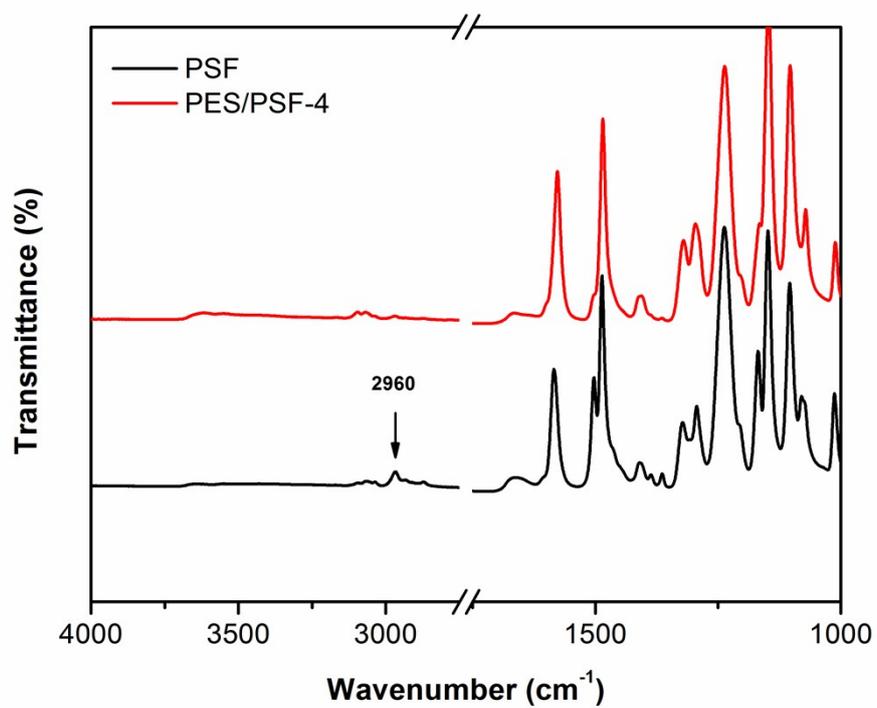


Fig. S2. FTIR spectra of the PSF membrane and PES/PSF-4 membrane.

Table S2. Pure water flux, BSA rejection and contact angle of the PES/PSF-4 membrane.

Membrane	Pure water flux ($\text{L}\cdot\text{m}^{-2}\cdot\text{h}^{-1}$) ^a	BSA rejection (%) ^b	Contact angles
PES/PSF-4	816.9 ± 25.0	43.8 ± 1.8	84.5 ± 0.92

^a Pure water flux was measured in a dead-end ultrafiltration testing system at 0.1 MPa and DI water was used as the feed solution.

^b BSA rejection was measured in a dead-end ultrafiltration testing system at 0.1 MPa and $1\text{g}\cdot\text{L}^{-1}$ BSA was used as the feed solution.