Electronic Supplementary Information

Enhanced Surface Hydrophilicity of Thin-film Composite Membranes from N-(2-hydroxlethyl)ethylenediamine and Trimesoyl Chloride for Nanofiltration

Zhiwei Lv, Jiahui Hu, Xuan Zhang* and Lianjun Wang*

Key Laboratory of Jiangsu Province for Chemical Pollution Control and Resources Reuse, Nanjing University of Science & Technology, Nanjing 210094, China.

Corresponding author:

xuanzhang@mail.njust.edu.cn (Xuan Zhang), Tel./fax: +86 25 84315827

wanglj@mail.njust.edu.cn (Lianjun Wang)

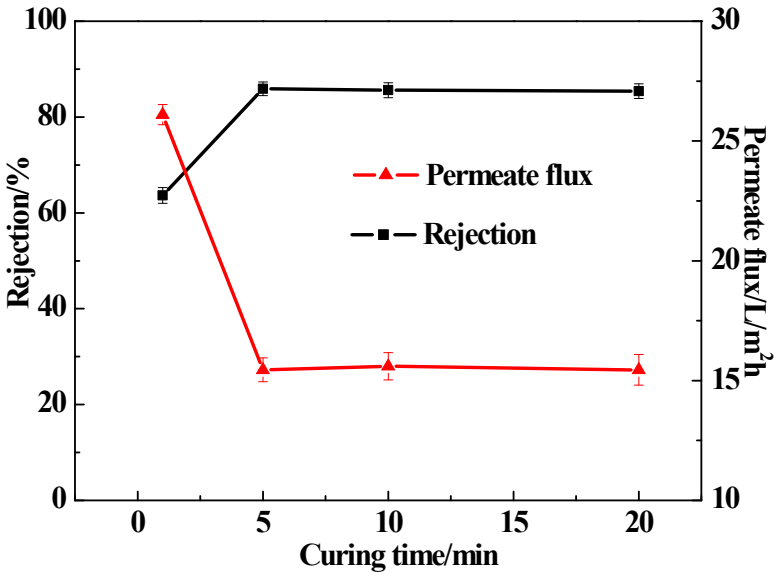

Fig.S1. Effect of curing time on the performance of the TFC membrane (X0.5Y0.1).

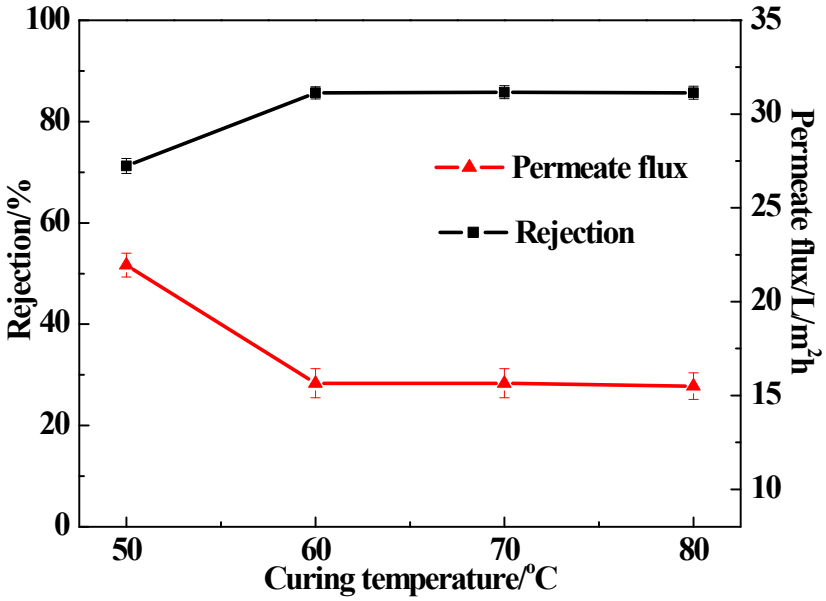

Fig.S2. Effect of curing temperature on the performance of the TFC membrane (X0.5Y0.1).

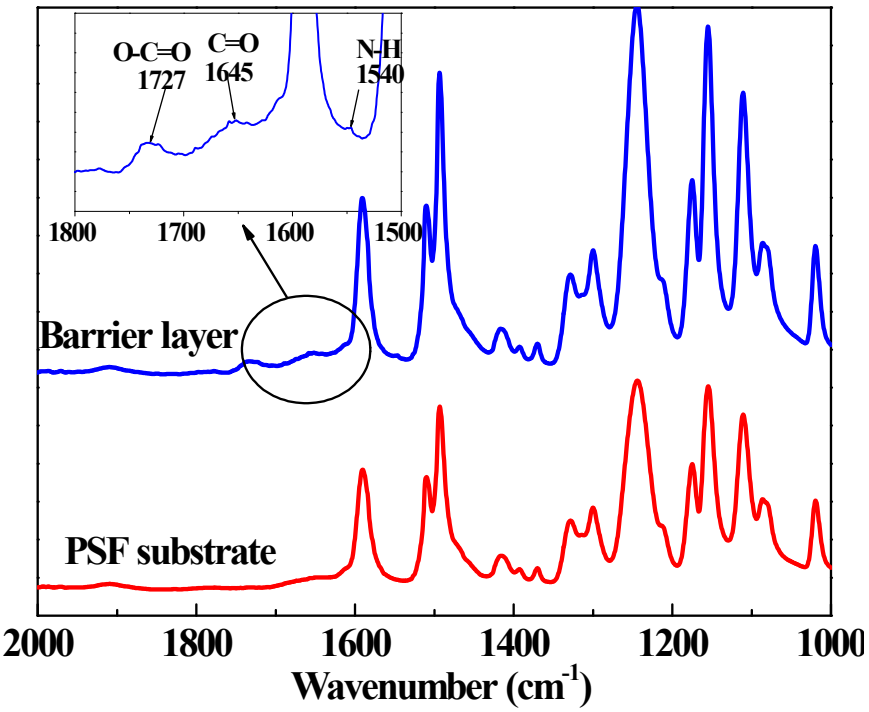

Fig. S3 FTIR spectra of the polyamide composite membrane and the support film.

Table S1 Solubility parameter of solvent, solute and polymer.

Name	Solubility parameter $(J/cm^3)^{1/2}$
Congo Red	36.6 [a)]
Rhodamine B	29.7 [a)]
Polyamide	25.9 [b)]
Water	47.9 [c)]

a) Obtained by MD method; b) Obtained by Synthia module; c) Obtained from ref. (1).

Reference

(1) Charles M. Hansen. Hansen Solubility Parameters A Users Handbook, 2nd Ed, CRC Press, Taylor & Francis Group, Boca Raton, 2007.