

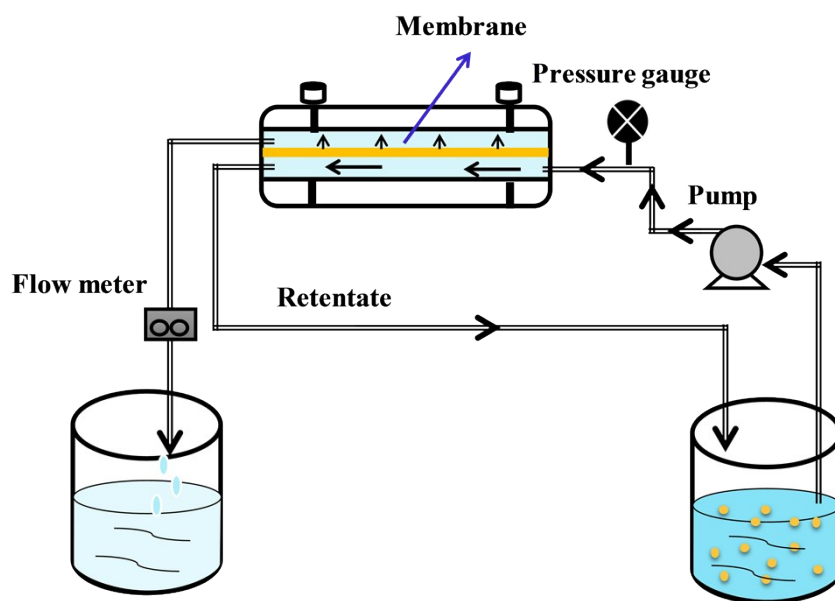
# **In situ converting ZnO to zeolitic imidazolate framework-8 in polyamide layer for well- structured high permeance thin film nanocomposite nanofiltration membrane**

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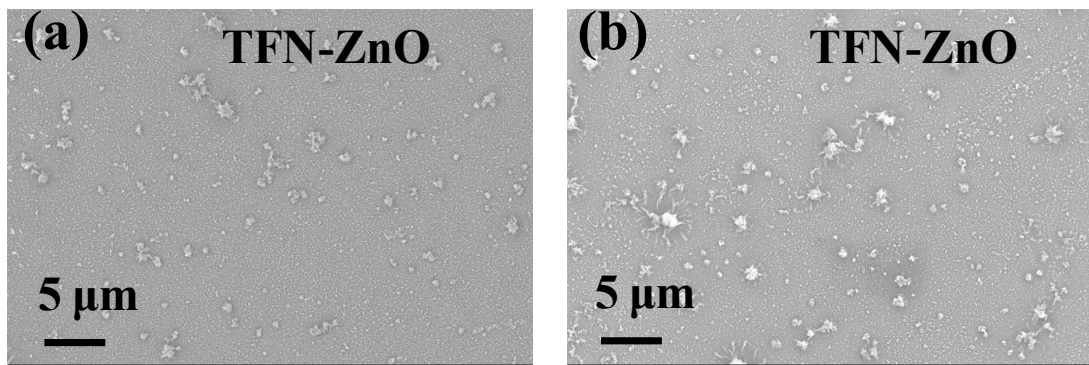
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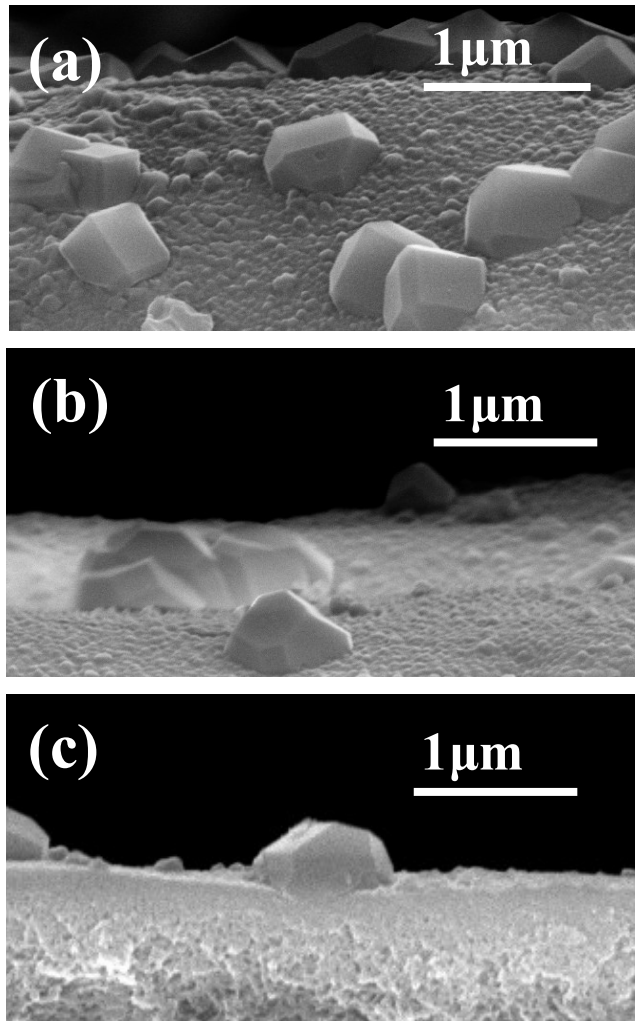
[hjlin@zjnu.cn](mailto:hjlin@zjnu.cn)



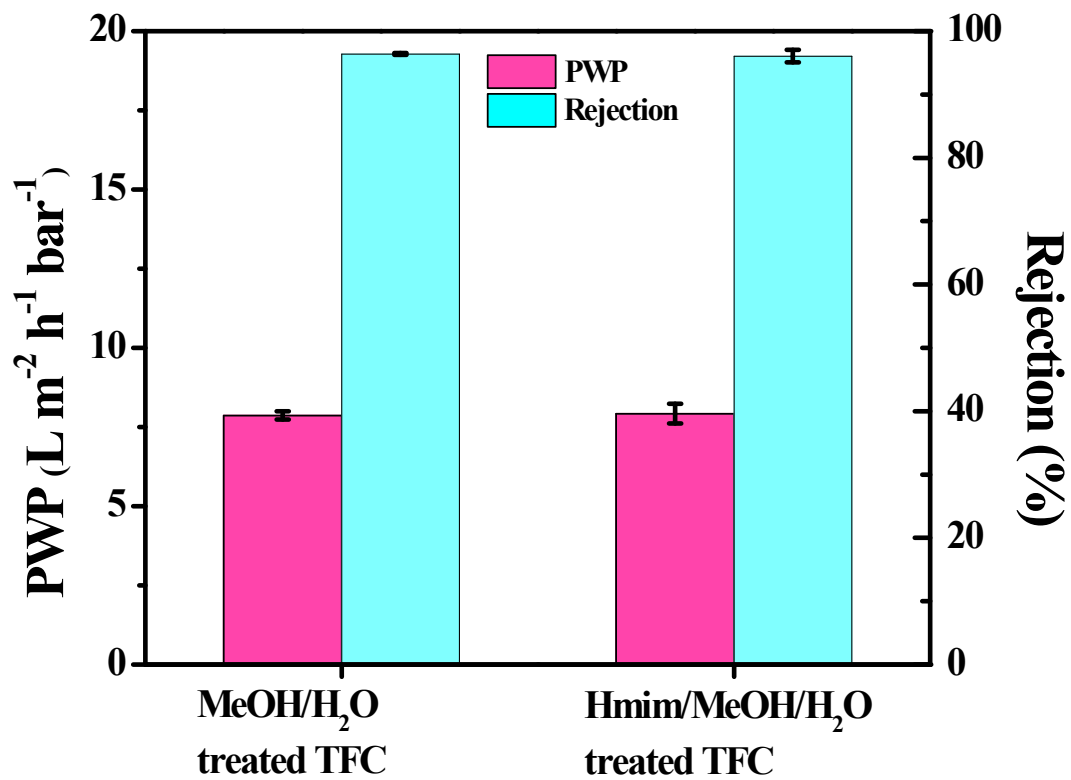
**Fig. S1.** Schematic graph of the separation platform in this study.



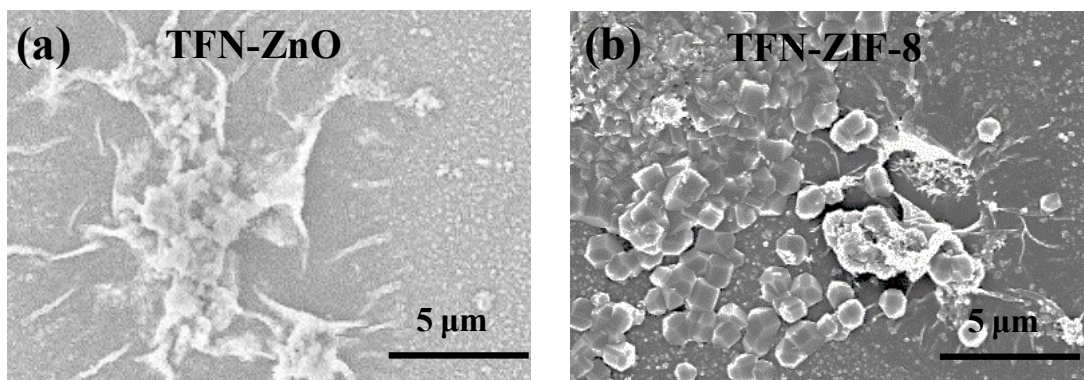
**Figure S2.** Top surface SEM images of TFN-ZnO membrane.



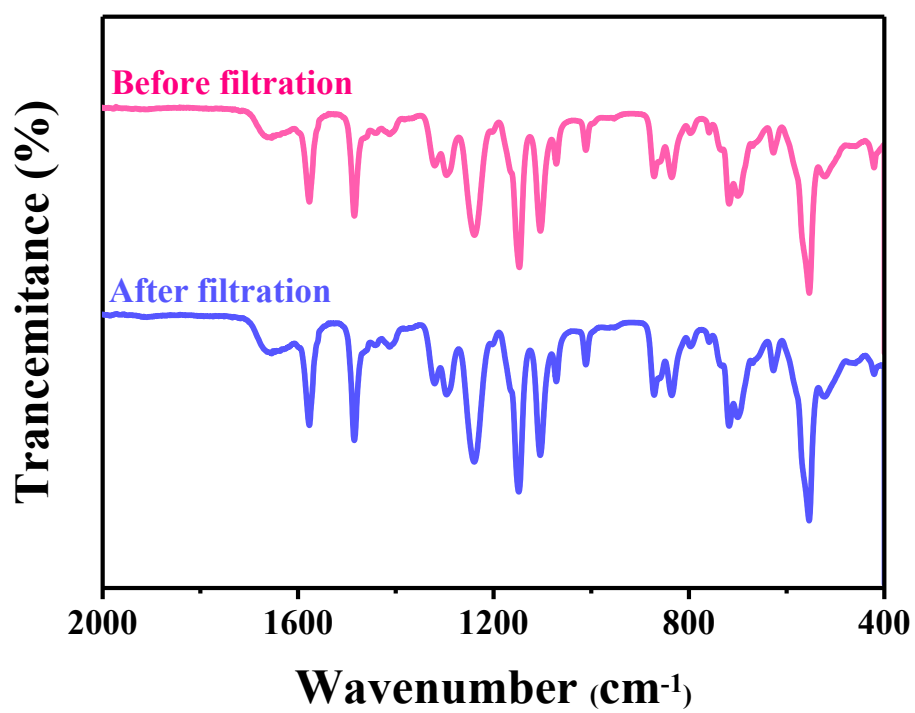
**Figure S3.** SEM images of TFN-ZIF-8 membrane.



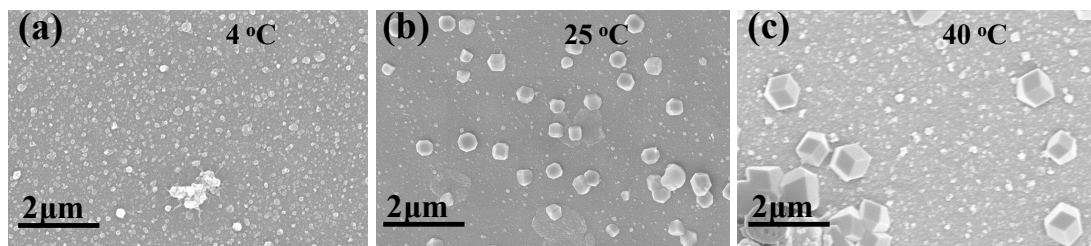
**Figure S4.** Separation performance of TFC membranes treated by a water/methanol solvent and a water/methanol solution of Hmim.



**Figure S5.** SEM images of TFN-ZnO and TFN-ZIF-8 membranes prepared at a ZnO concentration of 0.1%.



**Figure S6.** ATR-FTIR characterization of TFN-ZIF-8 membrane before and after filtration.



**Figure S7.** SEM images of TFN-ZIF-8 membranes prepared at different reaction temperature.