

## Electronic supplementary information (ESI)

### **A COFs-coated polyamide membrane fabricated by vapor-assisted conversion for water-in-oil emulsions separation**

*Ying Chen<sup>a,#</sup>, Li Chen<sup>a,#</sup>, Chenyang Lu<sup>a,\*</sup>, Linghao Wang<sup>a</sup>, Lichun Dong<sup>a</sup>, Cailong Zhou<sup>a,\*</sup> and*

*Xiaowei Huang<sup>b,\*</sup>*

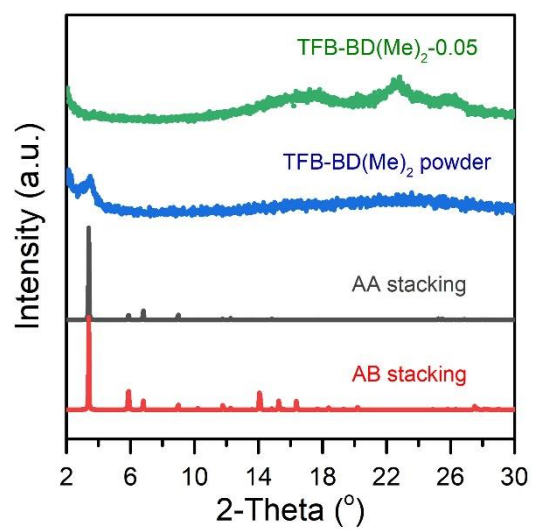
<sup>a</sup> School of Chemistry and Chemical Engineering, Chongqing University, Chongqing 400044, PR China

<sup>b</sup> Department of Pharmacy, Quanzhou First Hospital Affiliated to Fujian Medical University, Quanzhou 362000, PR China

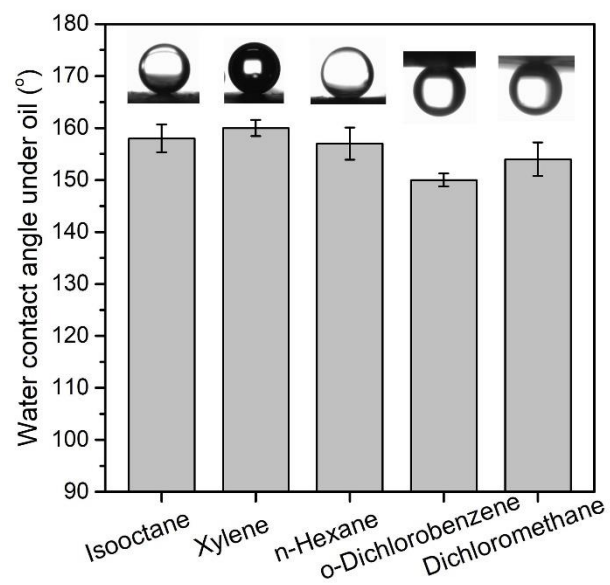
---

\* Corresponding authors: lcy210511@cqu.edu.cn (C. Lu); cezcl@cqu.edu.cn (C. Zhou); 79450057@qq.com (X. Huang)

# These authors contributed equally to this work.



**Fig. S1** Simulated AA and AB stacking models of TFB-BD(Me)<sub>2</sub>, PXRD pattern of the TFB-BD(Me)<sub>2</sub> COFs and XRD pattern of the TFB-BD(Me)<sub>2</sub>-0.05 membrane.



**Fig. S2** Contact angle of water under different oils on TFB-BD(Me)<sub>2</sub>-0.05 membrane.