

Supporting Information

The Effects of PEI Hollow Fiber Substrate Characteristics on PDMS/PEI Hollow Fiber Membranes for CO₂/N₂ Separation

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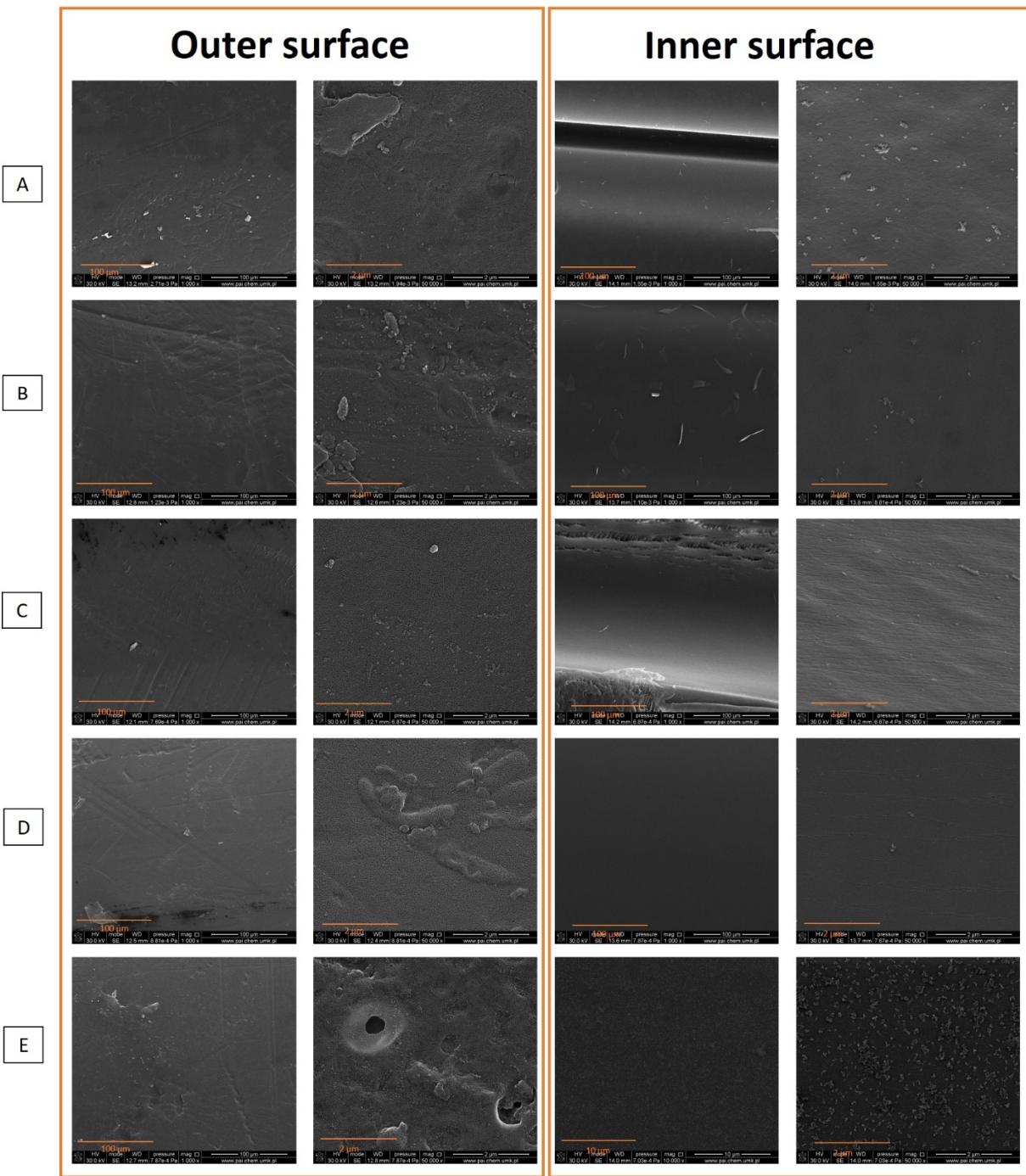
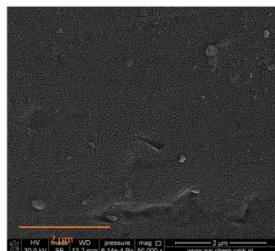
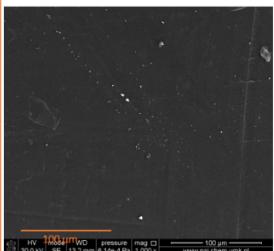


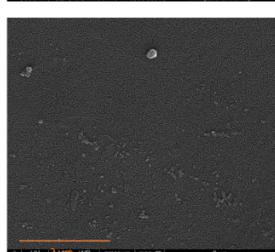
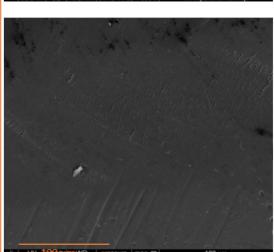
Figure S1. SEM micrographs of outer and inner surfaces of PEI hollow fibers spun from different concentrations of polymer solution—(A) HF1—16 wt.%, (B) HF2—18 wt.%, (C) HF3-2—20 wt.%, (D) HF4—22 wt.%, (E) HF5—24 wt.%.

Outer surface

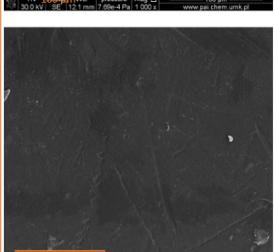
A



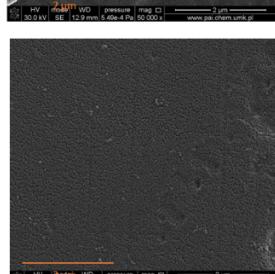
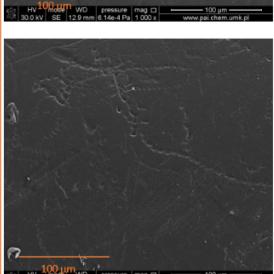
B



C



D



Inner surface

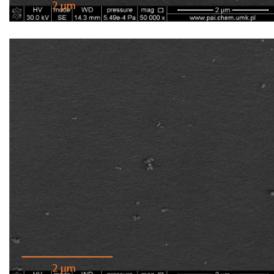
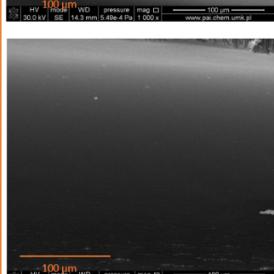
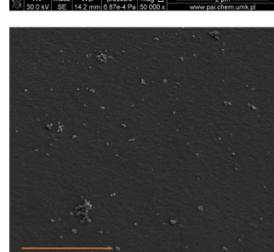
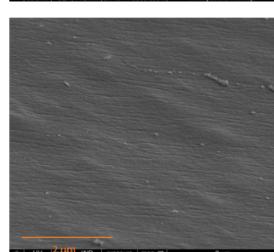
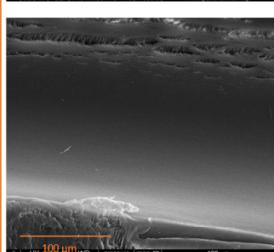
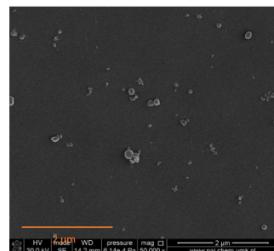


Figure S2. SEM micrographs of outer and inner surface of PEI hollow fibers spun at different flow rates of bore fluid. (A) HF3-1—3 cm³/min, (B) HF3-2—6 cm³/min, (C) HF3-3—9 cm³/min, (D) HF3-4—12 cm³/min.

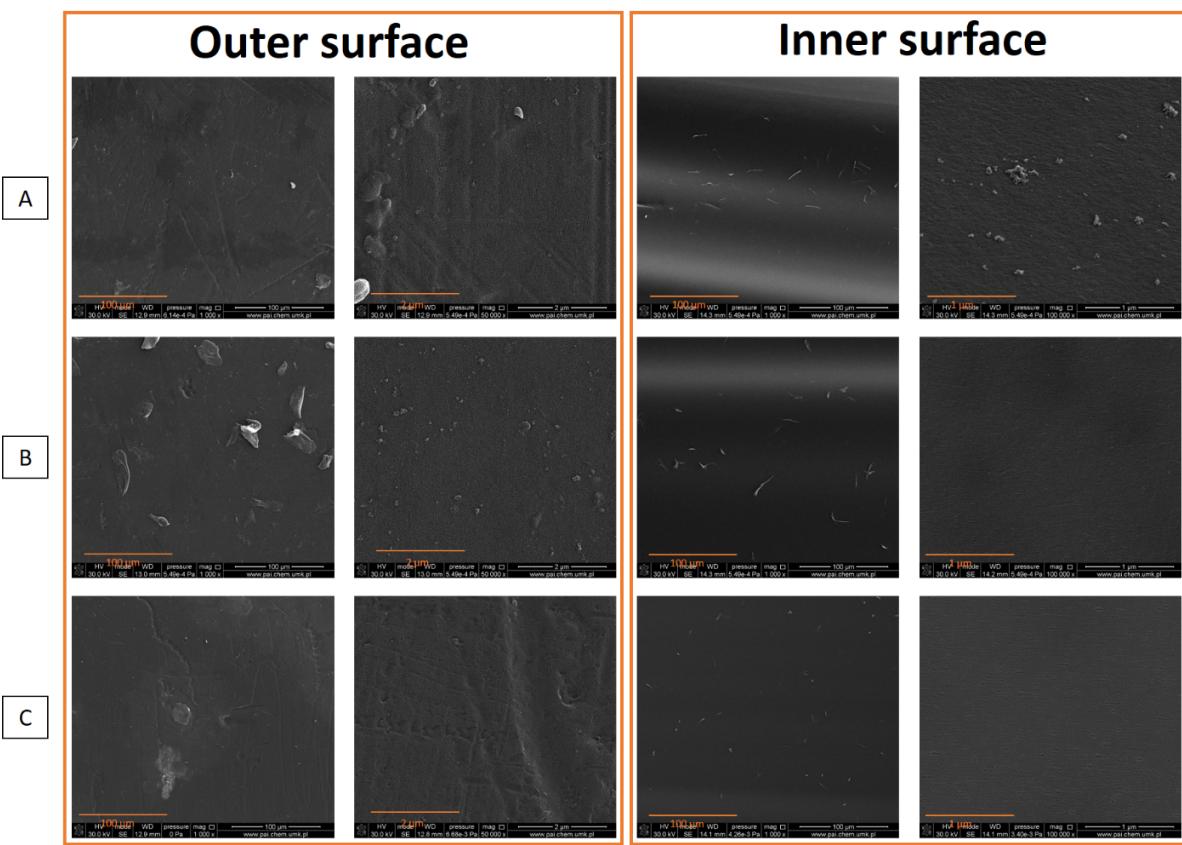


Figure S3. SEM micrographs of outer and inner surfaces of PEI hollow fibers spun with different compositions of bore fluid. (A) HF3-3—H₂O, (B) HF3-5—H₂O/NMP 50/50 wt.%, (C) HF3-6—H₂O/NMP 30/70 wt.%.