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Title: Effect of PVDF blending on the structure and performance of PEI hollow fiber membrane in CO<sub>2</sub> separation process

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**Research Highlights**

- 1- PVDF polymer was blended in polyetherimide spinning dope and hollow fiber membranes were fabricated.
- 2- The surface hydrophobicity of PEI membranes was enhanced.
- 3- The pore size and surface porosity of PVDF blended membranes were increased which reduces the LEP<sub>w</sub> of membranes.
- 4- The PVDF blended polyetherimide membrane shows higher CO<sub>2</sub> absorption flux compared to neat PEI membrane.

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