

Synthesis of cross-linked amides and esters as thin film composite membrane materials yields permeable and selective material for water vapor/gas separation

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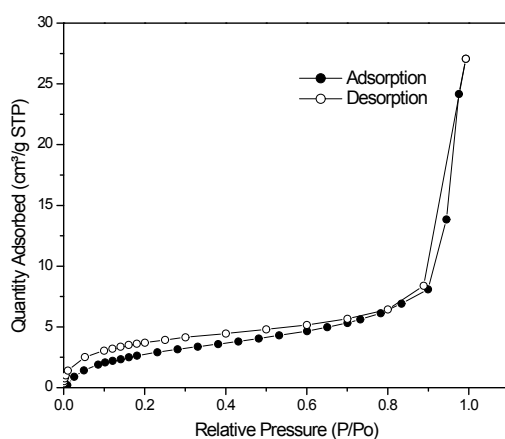


Fig. S1 The nitrogen sorption isotherm of membrane BA-2-15.

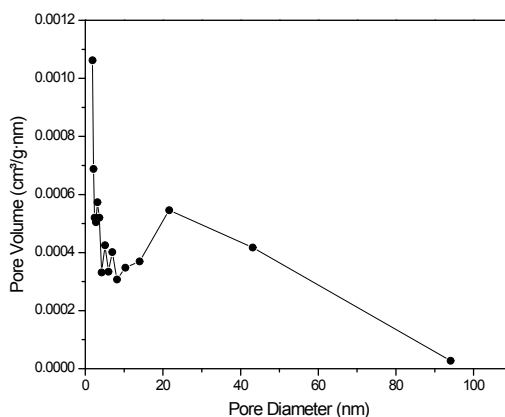


Fig. S2 The BJH pore size distribution of membrane BA-2-15.

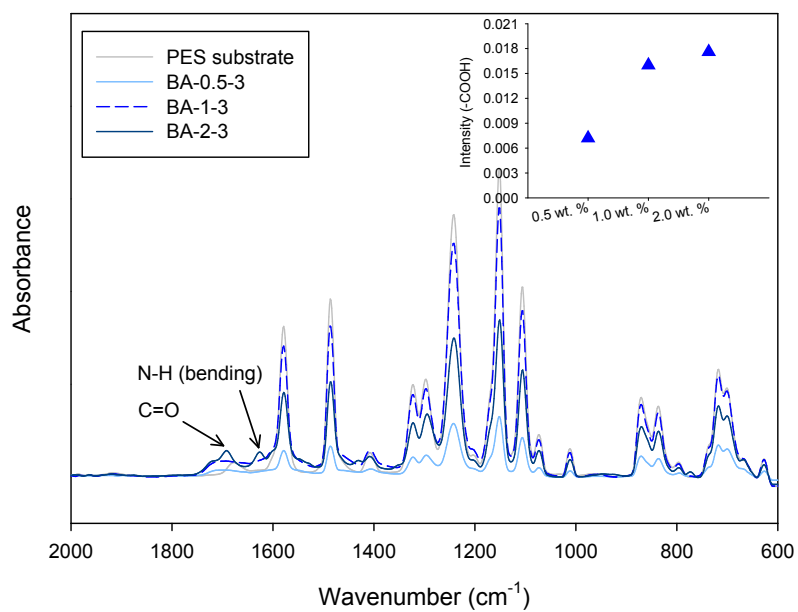


Fig. S3 Intensity of absorbance by ATR-FTIR for the change of 3,5-BA concentration at constant reaction time of 3 min.

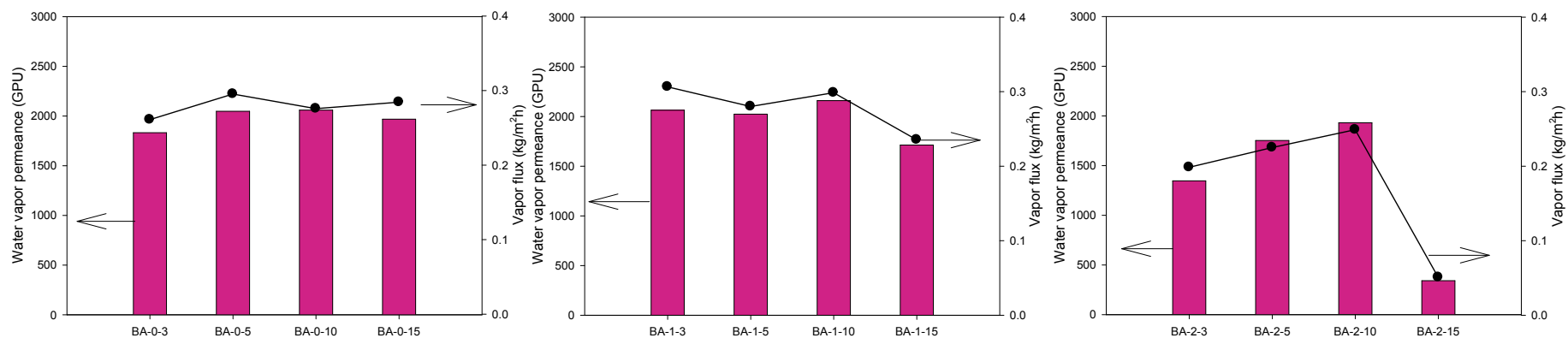


Fig. S4 Permeance and flux of water vapor for TFC membranes for the effect of reaction time at constant concentration of monomer at (a) 0.5 wt. %, (b) 1.0 wt. % and (c) 2.0 wt. %. This figure is useful to contrast between performances for thickness effect.

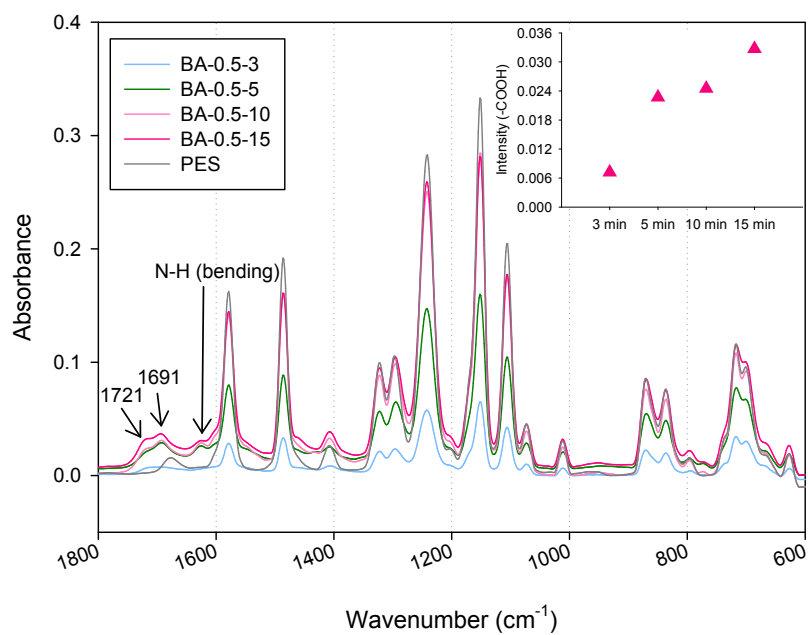


Fig. S5 Intensity of absorbance by ATR-FTIR for the change of reaction time at constant concentration of 3,5-BA as 0.5 wt. %.