

Electronic supplementary information

Cost-effective preparation of microporous polymers from formamide derivatives and adsorption of CO₂ under dry and humid conditions

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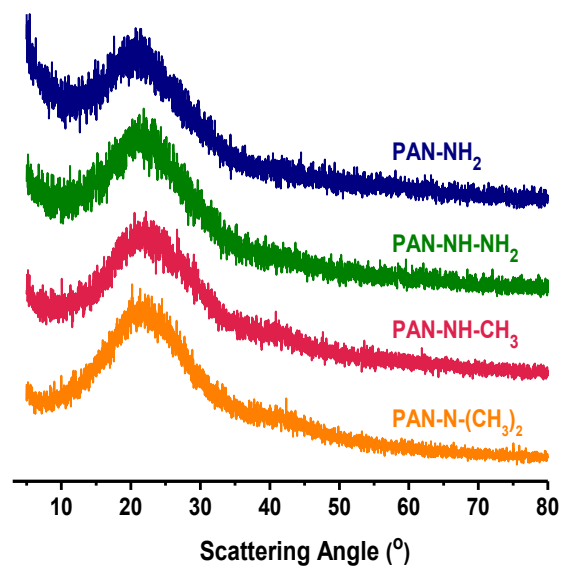


Fig. S1 Wide angle X-ray diffractions of polyaminals.

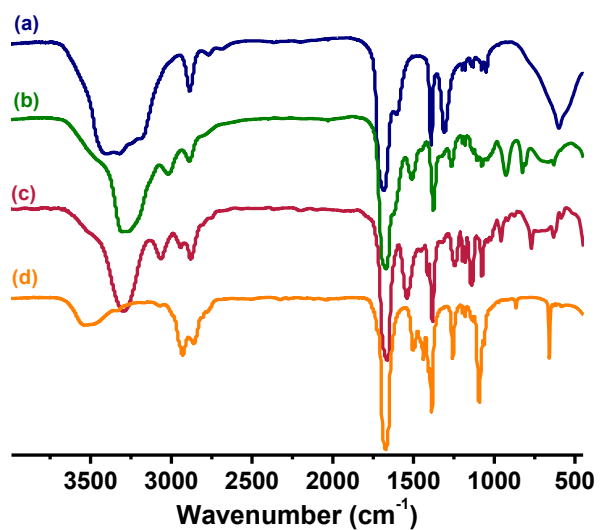


Fig. S2 FTIR spectra of formamide monomers for (a) formamide, (b) formohydrazide, (c) N-methylformamide and (d) N,N-dimethylformamide.

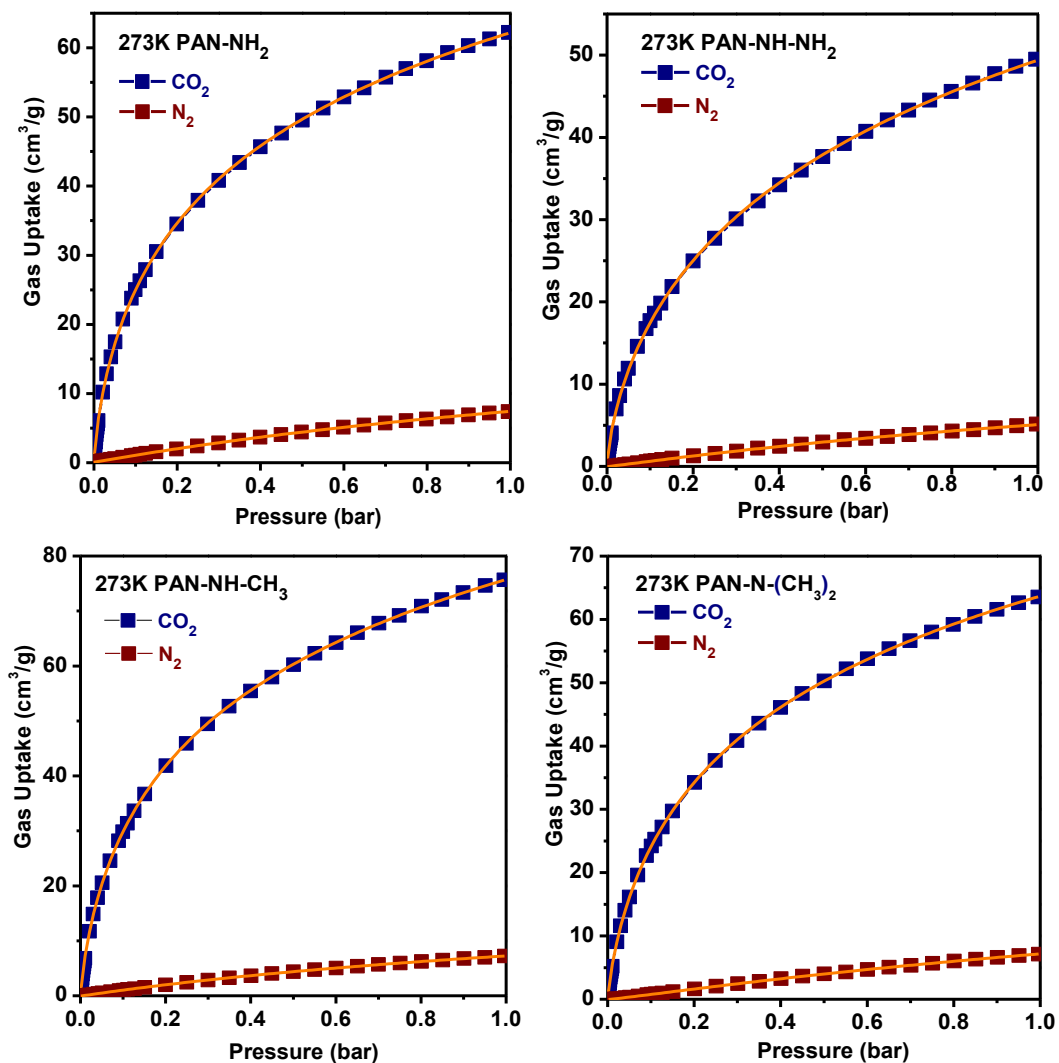


Fig. S3 Experimental adsorption isotherms for CO₂ and N₂ at 273 K, and their single-site Langmuir-Freundlich fitting curve(solid).

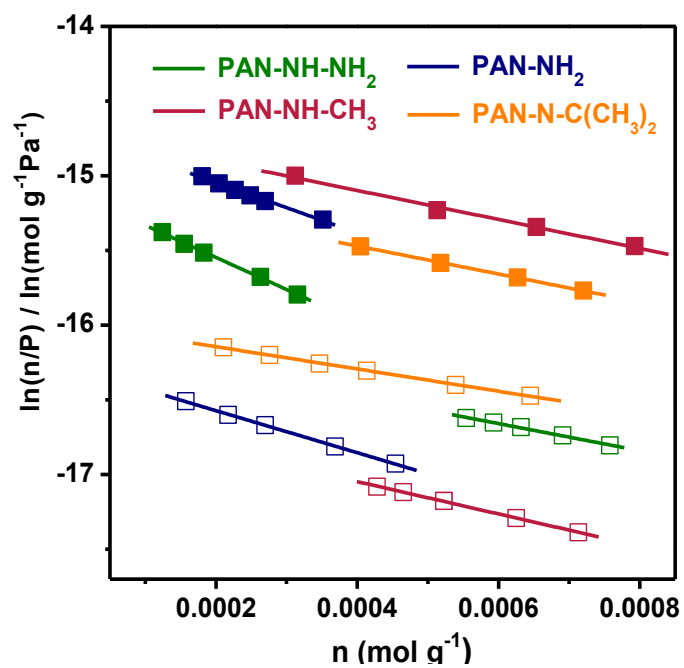


Fig. 4 Virial plots of CO₂ adsorption in PAN-NH₂, PAN-NH-NH₂, PAN-NH-CH₃ and PAN-N-(CH₃)₂ f at 273 and 298 K.