Electronic Supplementary Material (ESI) for Polymer Chemistry.

Electronic Supplementary Information

Synthetic modulation of micro- and mesopores in polycyanurate networks for adsorptions of gases and organic hydrocarbons

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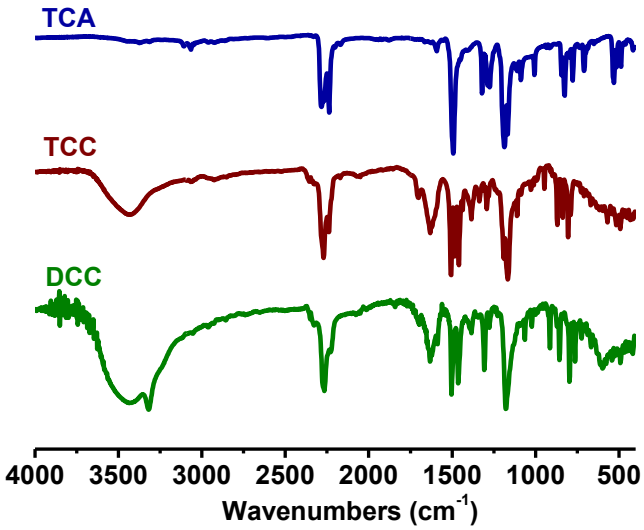

Figure S1. FTIR spectra of the thee cyanate monomers.

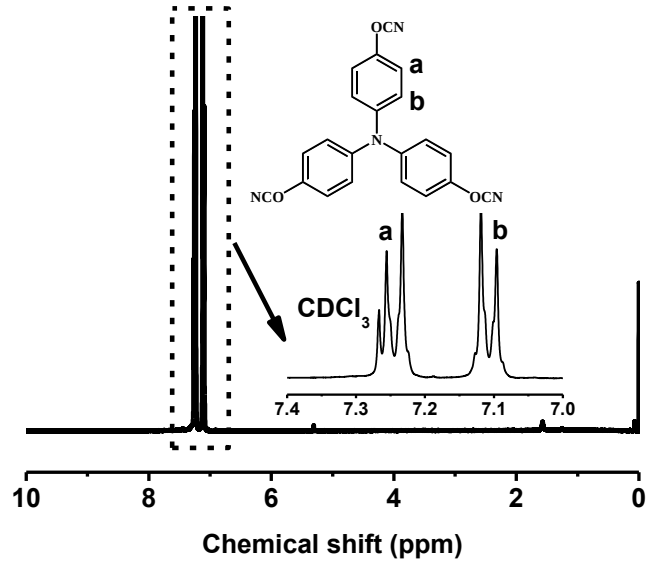

Figure S2. ^{1}H NMR spectrum of TCA.

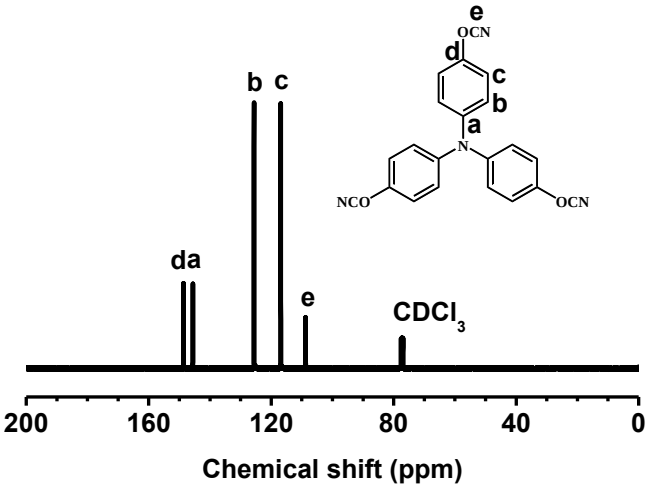

Figure S3. ^{13}C NMR spectrum of TCA.

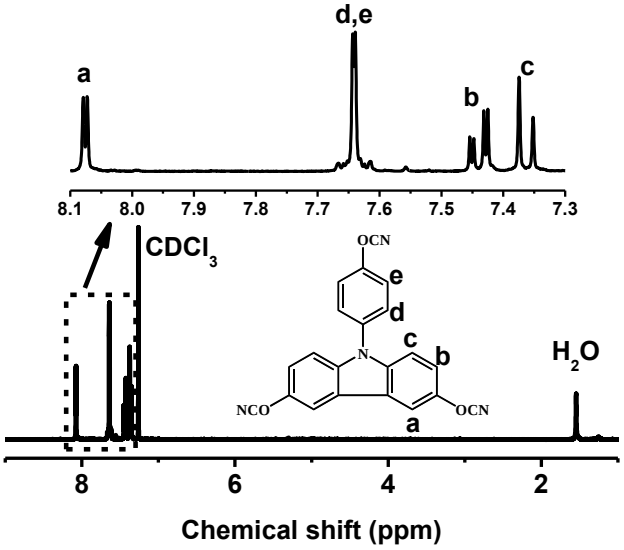

Figure S4. ^{1}H NMR spectrum of TCC.

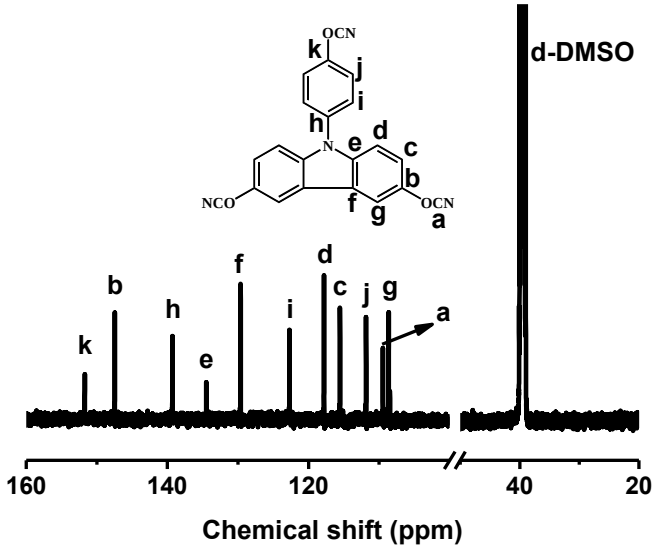

Figure S5. ^{13}C NMR spectrum of TCC.

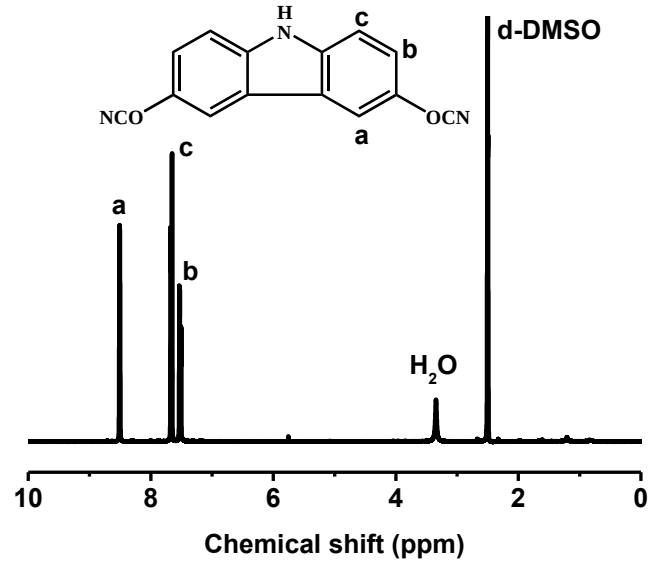

Figure S6. ^{1}H NMR spectrum of DCC.

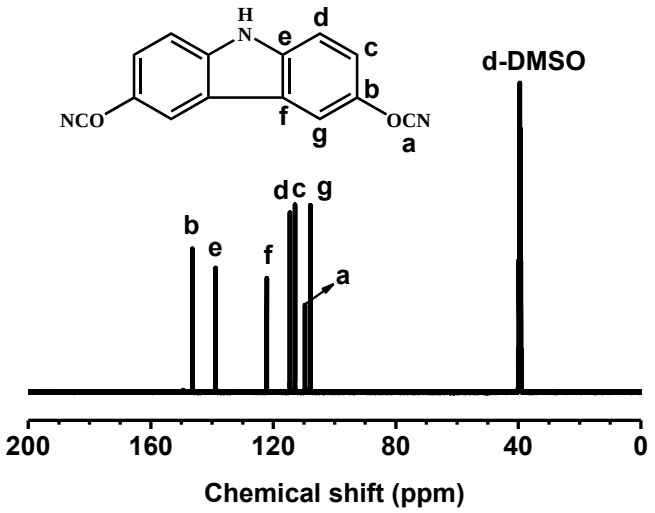

Figure S7. ^{13}C NMR spectrum of DCC.

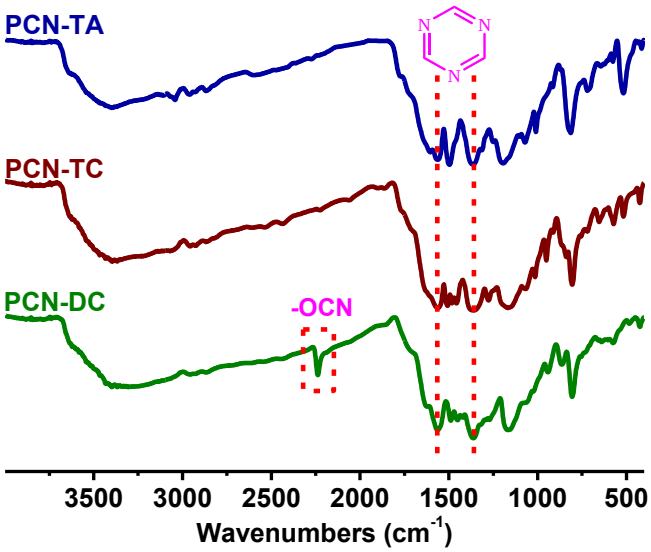

Figure S8. FTIR spectra of PCN-TA, PCN-TC and PCN-DC.

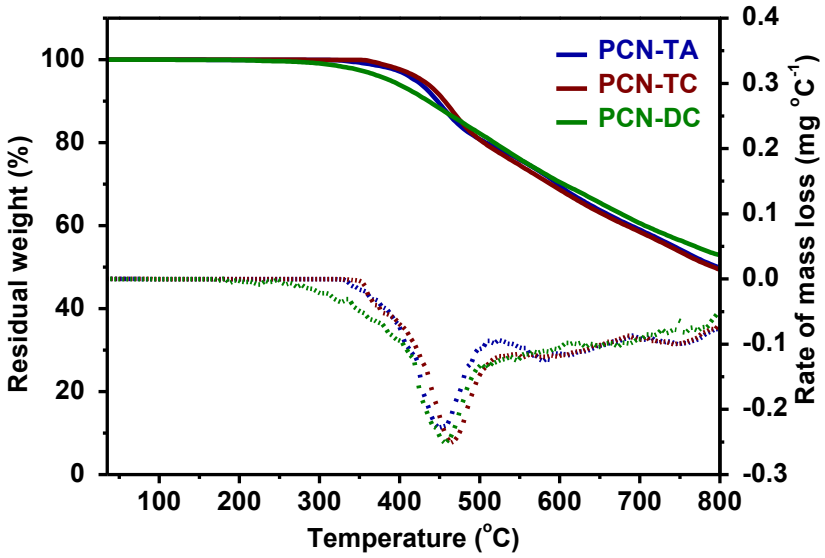

Figure S9. TGA and DTG curves of PCN-TA, PCN-TC and PCN-DC.

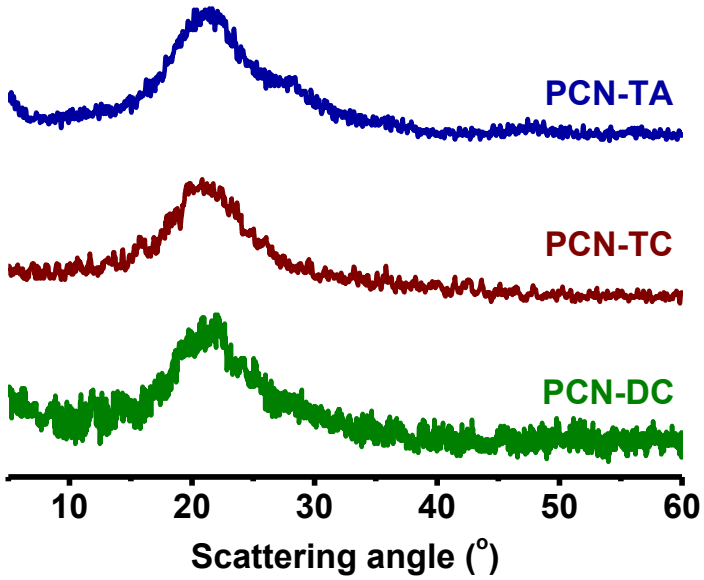

Figure S10. Wide angle X-ray diffraction patterns of PCN-TA, PCN-TC and PCN-DC.

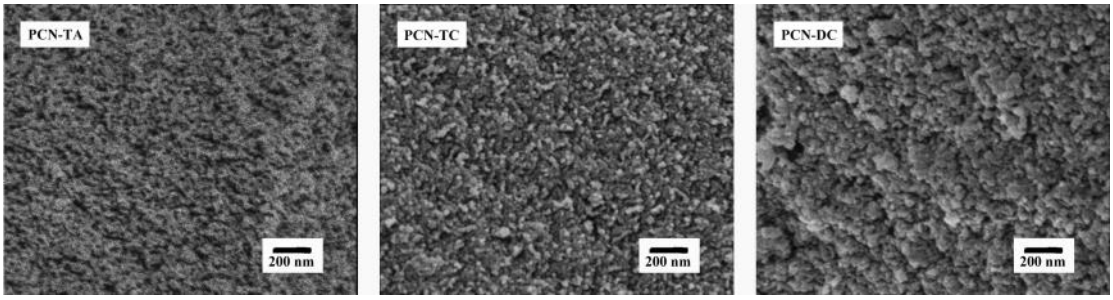

Figure S11. FE-SEM images of **PCN-TA, PCN-TC and PCN-DC.**

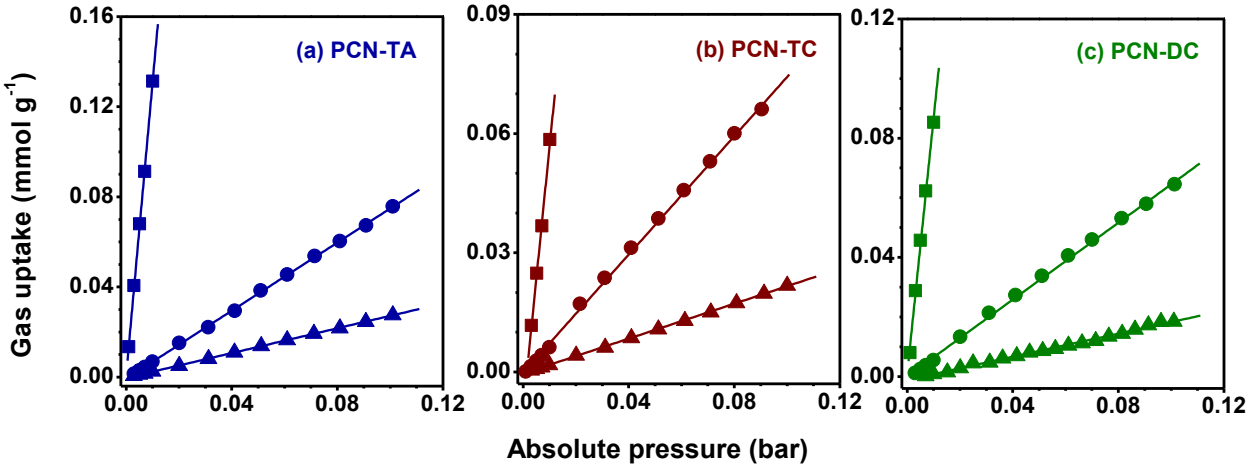

Figure S12. Adsorption selectivities of CO_2/N_2 and CO_2/CH_4 derived from the initial slopes of CO_2 (■), CH_4 (●) and N_2 (▲) adsorption isotherms at 273 K for PCN-TA (a), PCN-TC (b) and PCN-DC (c).

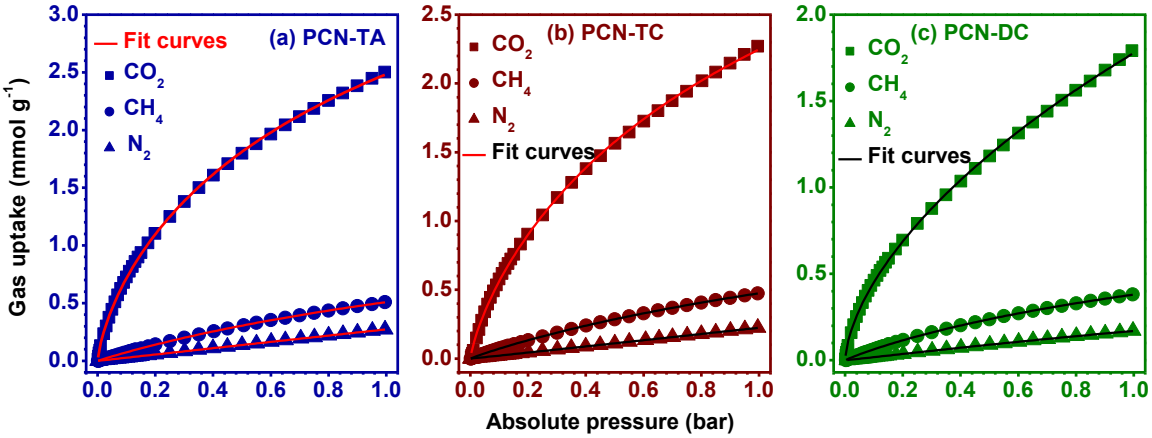

Figure S13. Experimental pure component isotherms for CO_2 (■), CH_4 (●) and N_2 (▲) at 273 K and their corresponding single-site Langmuir-Freundlich curves (solid black lines) for PCN-TA (a), PCN-TC (b) and PCN-DC (c).