

## Supporting Information

### **Fabrication of microporous polymers for selective CO<sub>2</sub> capture: the significant role of crosslinking and crosslinker length**

Sachin Mane, Zhen-Yu Gao, Yu-Xia Li, Ding-Ming Xue, Xiao-Qin Liu and Lin-Bing Sun\*

State Key Laboratory of Materials-Oriented Chemical Engineering,  
Jiangsu National Synergetic Innovation Center for Advanced Materials (SICAM),  
College of Chemistry and Chemical Engineering,  
Nanjing Tech University, 5 Xinmofan Road, Nanjing 210009, China.

\*E-mail: lbsun@njtech.edu.cn; Tel.: +86-25-83587177.



**Fig. S1.** The digital photos of the resultant NUT polymers.

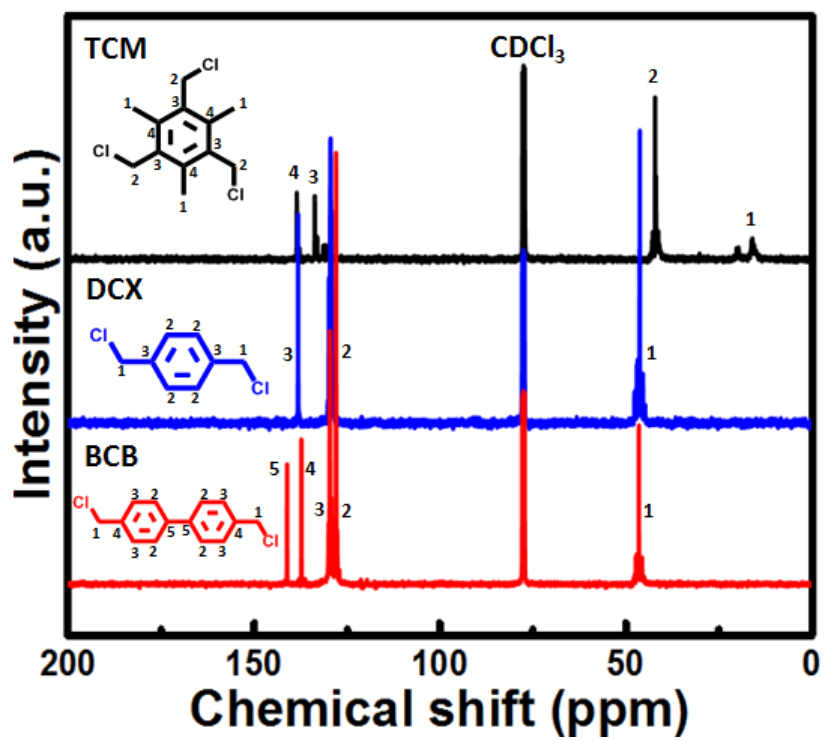
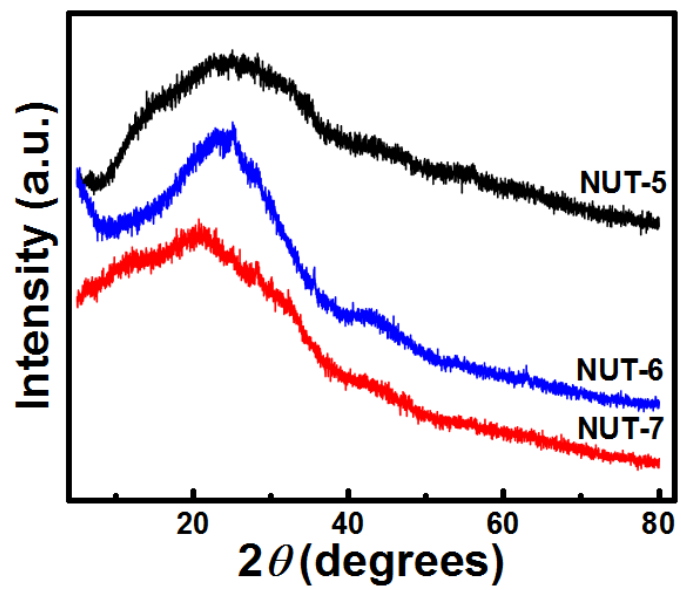


Fig. S2.  $^{13}\text{C}$  NMR spectra of the monomers.



**Fig. S3.** X-ray diffraction patterns of the resultant NUT polymers.

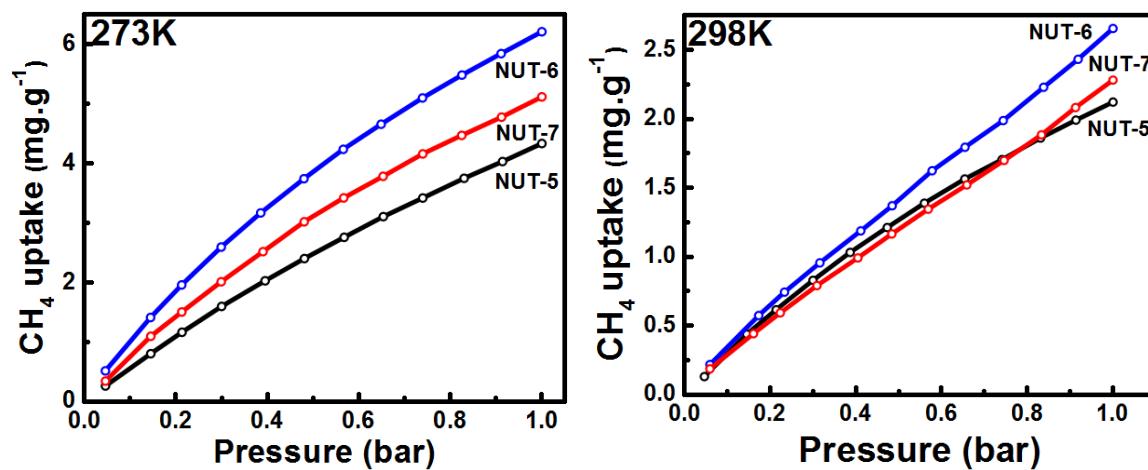


Fig. S4. Adsorption isotherm of CH<sub>4</sub> on the NUT polymers at 273 and 298 K.

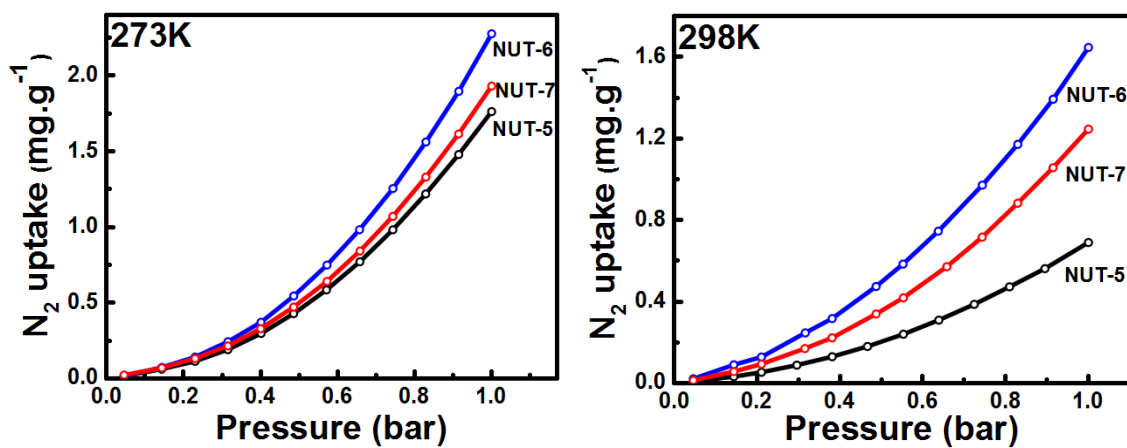


Fig. S5. Adsorption isotherm of N<sub>2</sub> on the NUT polymers at 273 and 298 K.

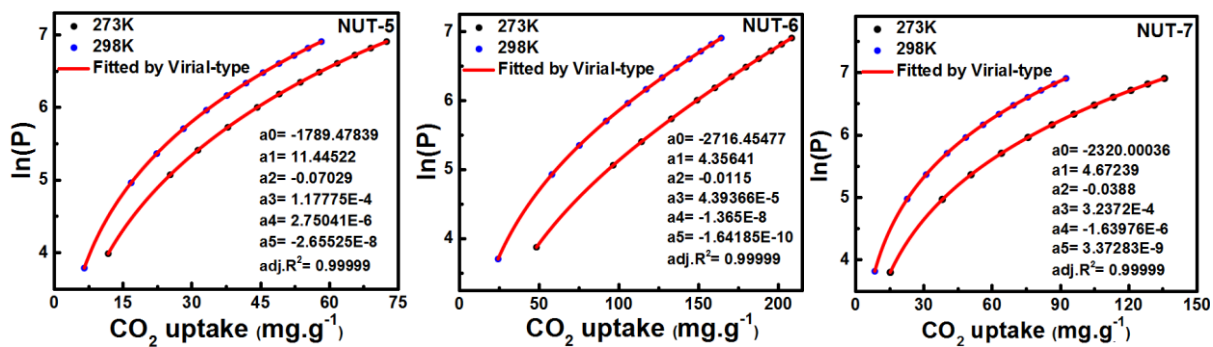


Fig. S6. Nonlinear curve fitting of the NUT polymers at 273 and 298 K.