

Triptycene based 1,2,3-Triazole linked Network Polymers (TNPs) : Small Gas Storage and Selective CO₂ Capture

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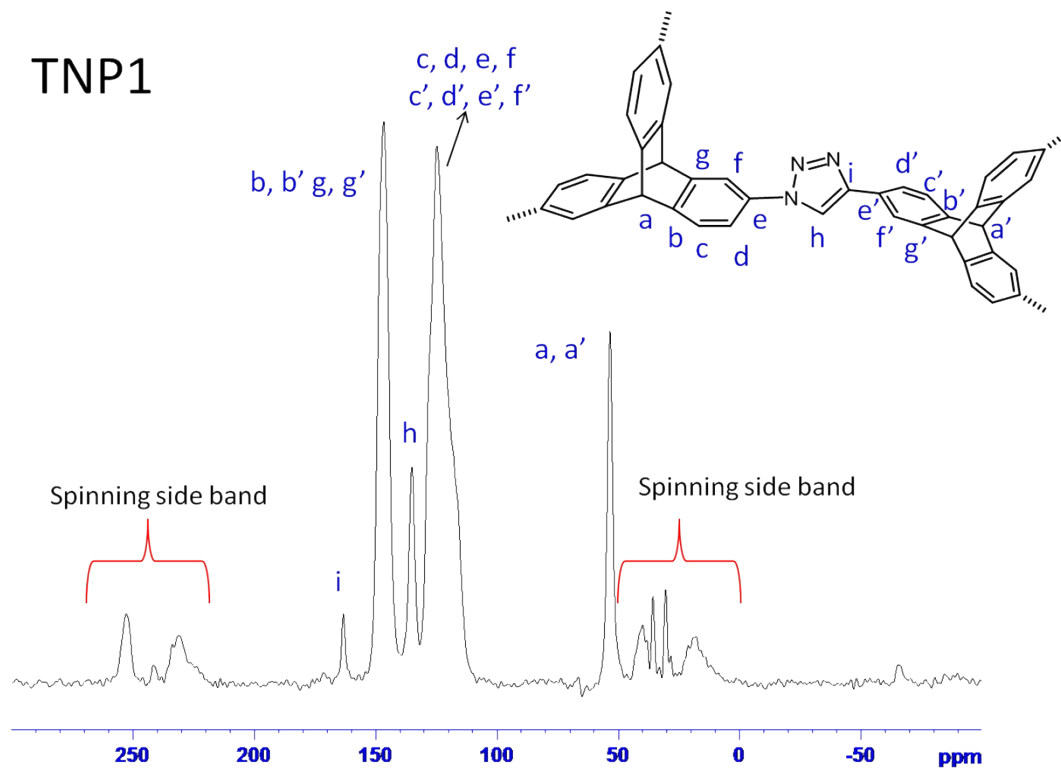
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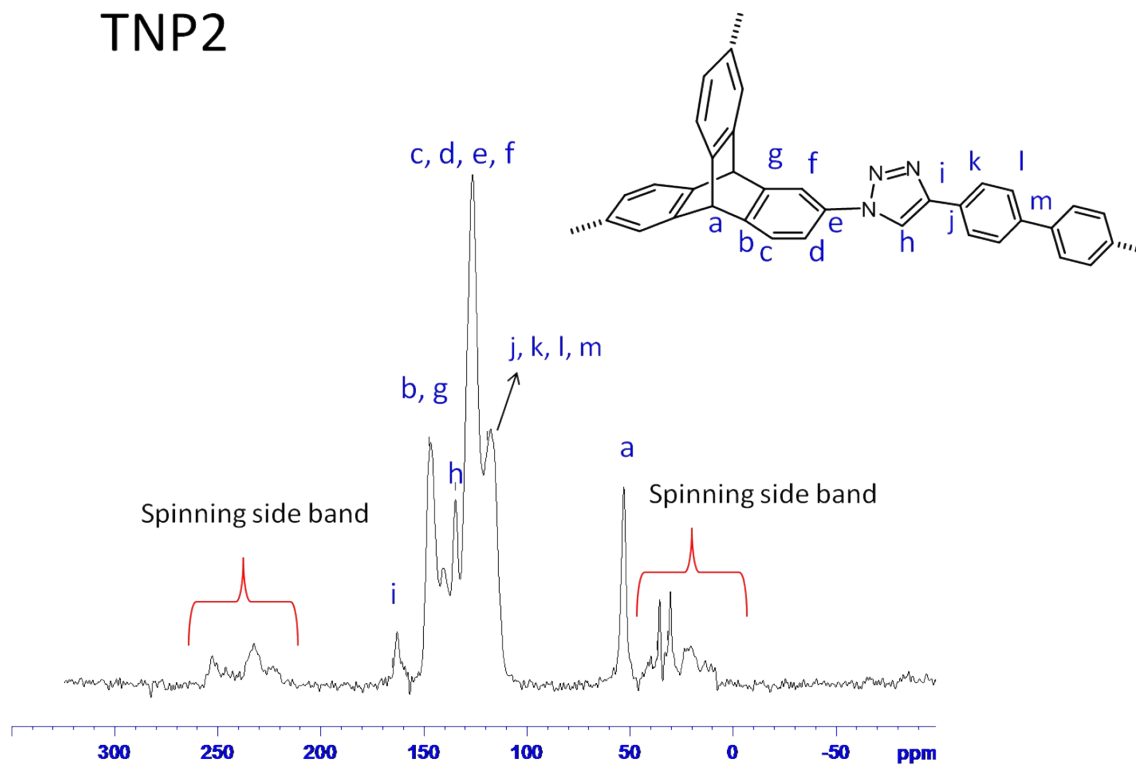
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TNP1



TNP2



TNP3

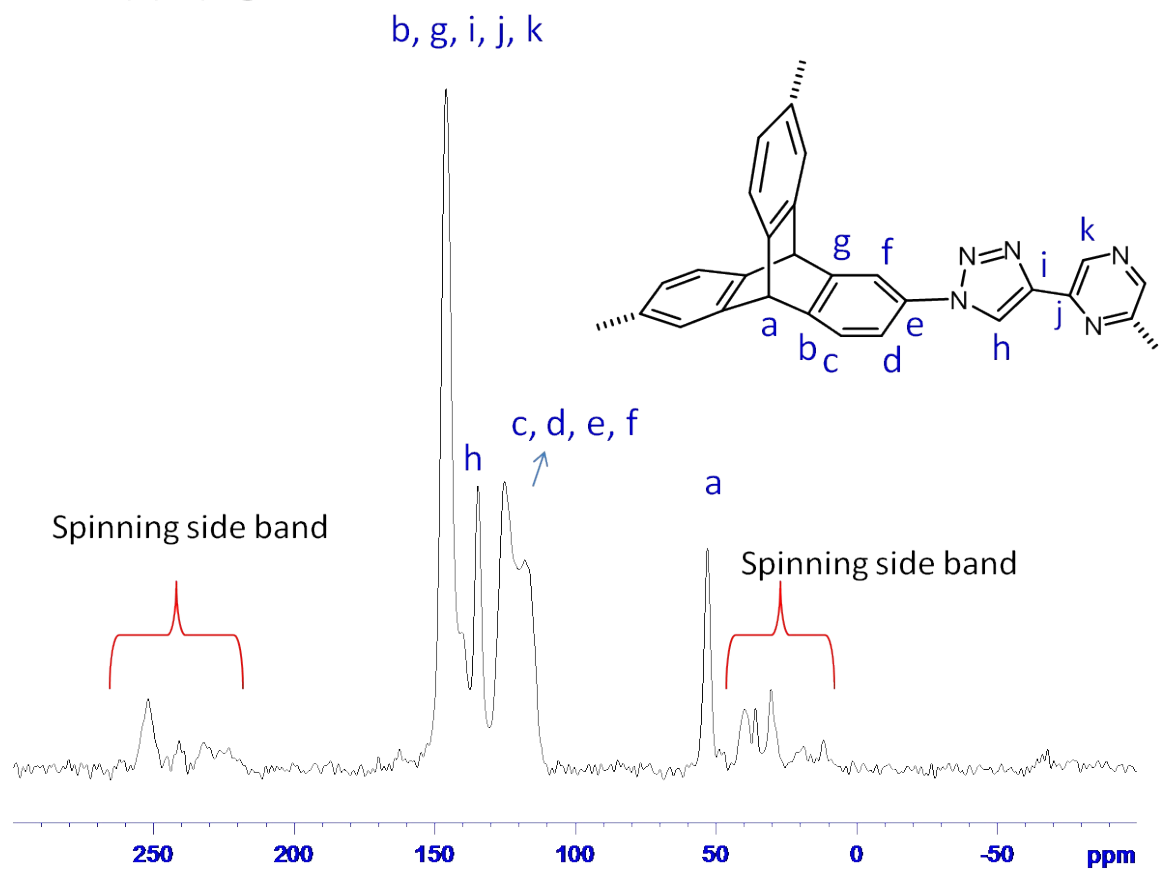


Figure S1: ^{13}C CP-MAS NMR spectra of TNP1-TNP3

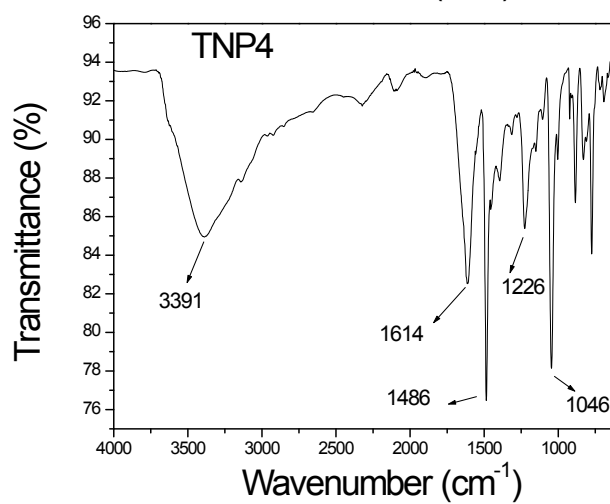
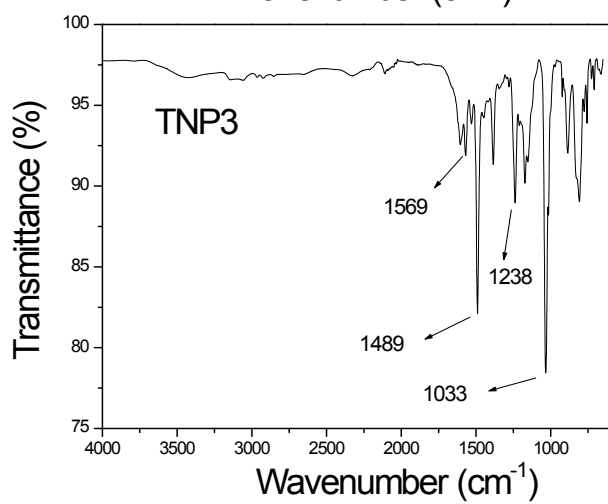
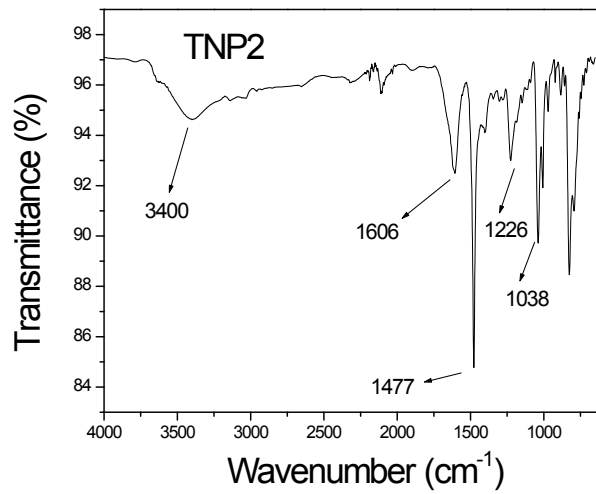
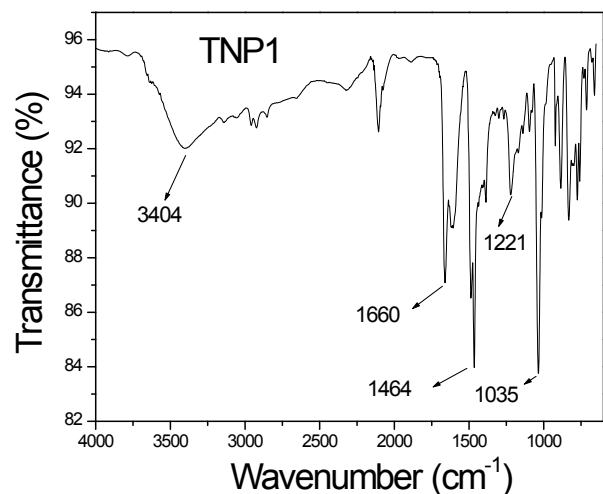


Figure S2: FT-IR spectra of TNP1-TNP4

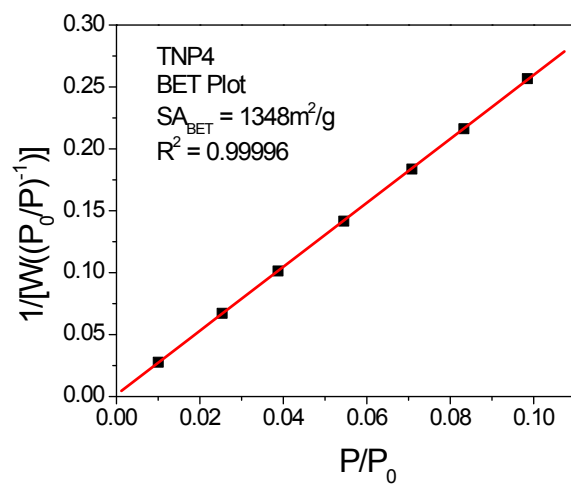
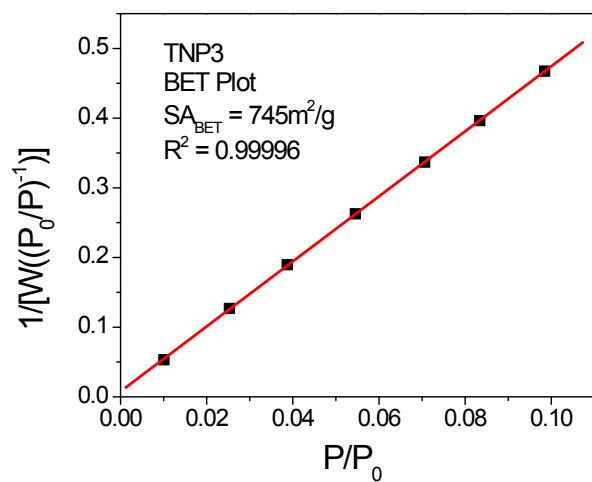
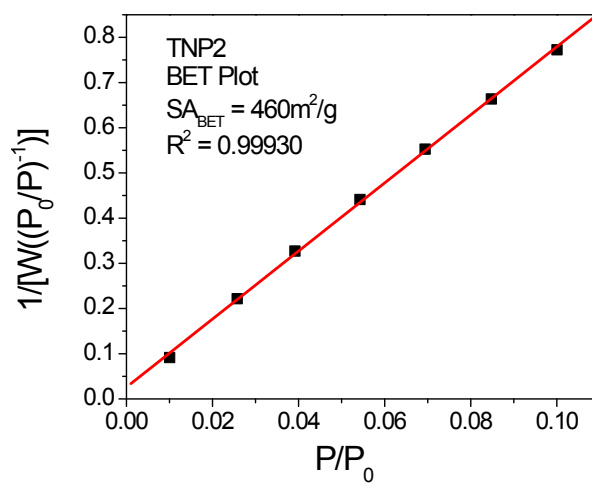
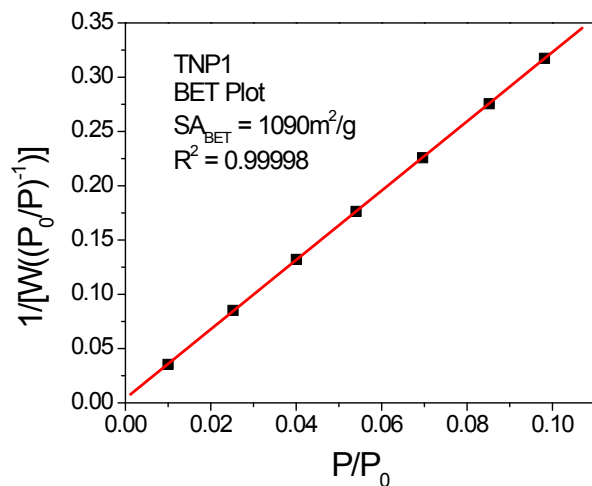


Figure S3: BET plot of TNP1-TNP4

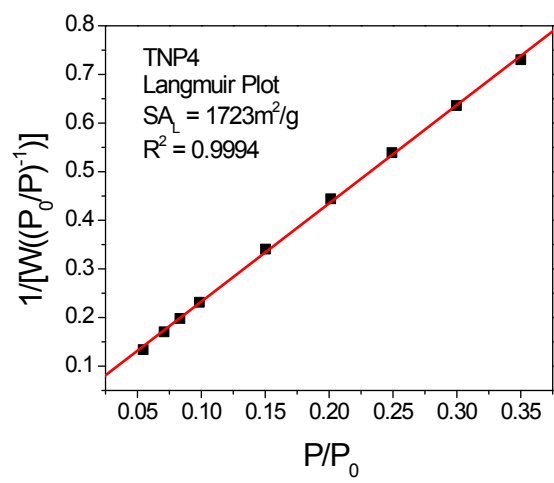
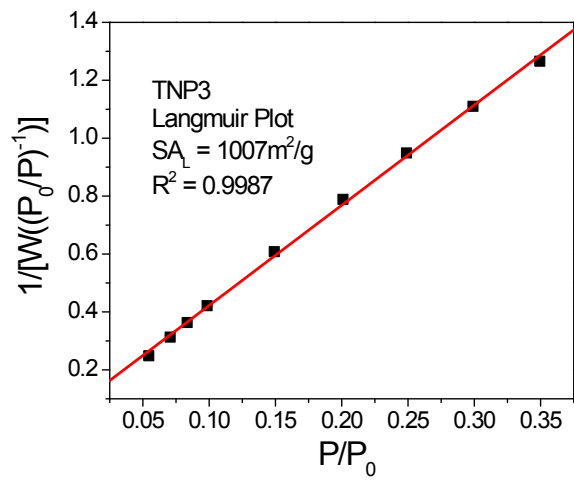
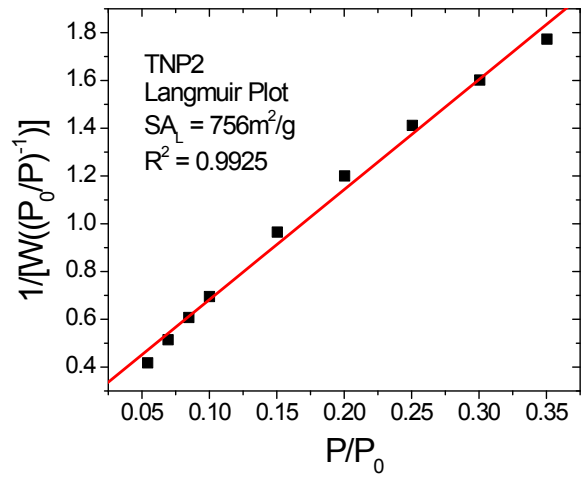
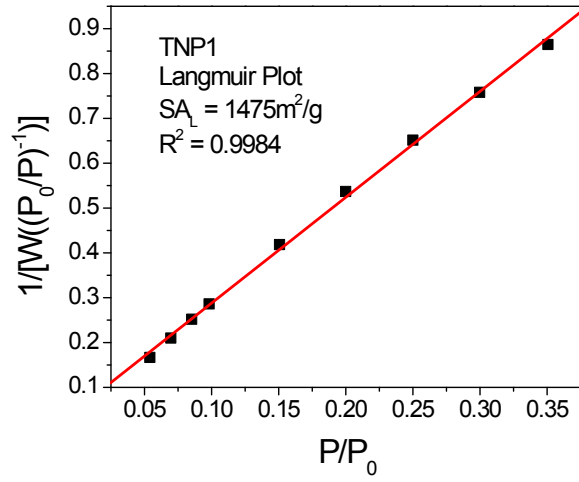


Figure S4: Langmuir plot of TNP1-TNP4.

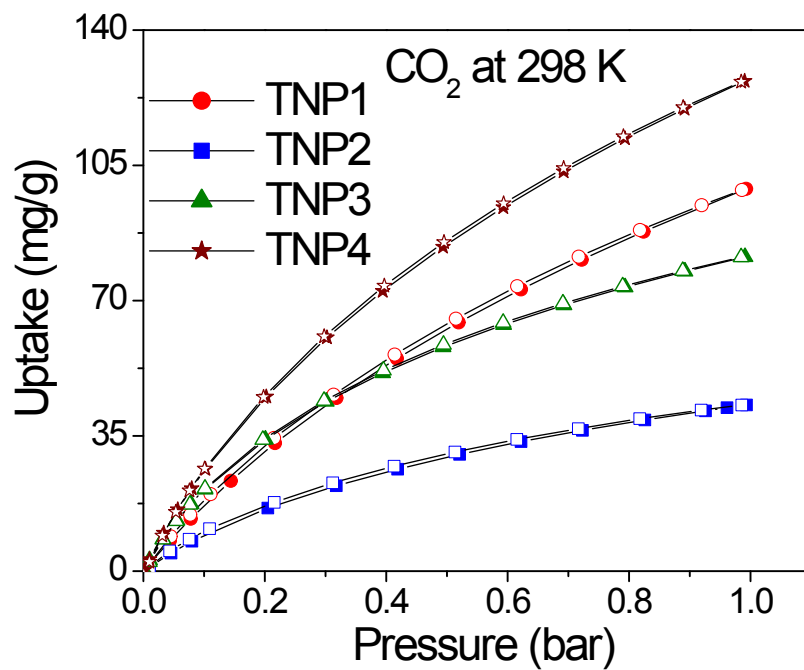
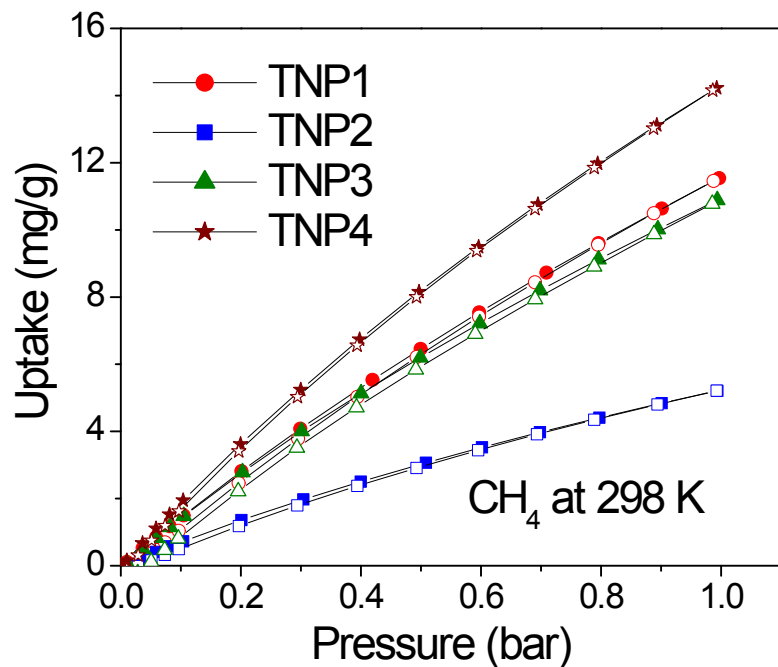


Figure S5: Methane uptake isotherm of TNP1-TNP4 at 298K (top) and CO₂ uptake isotherm of TNP1-TNP4 at 298K (bottom).

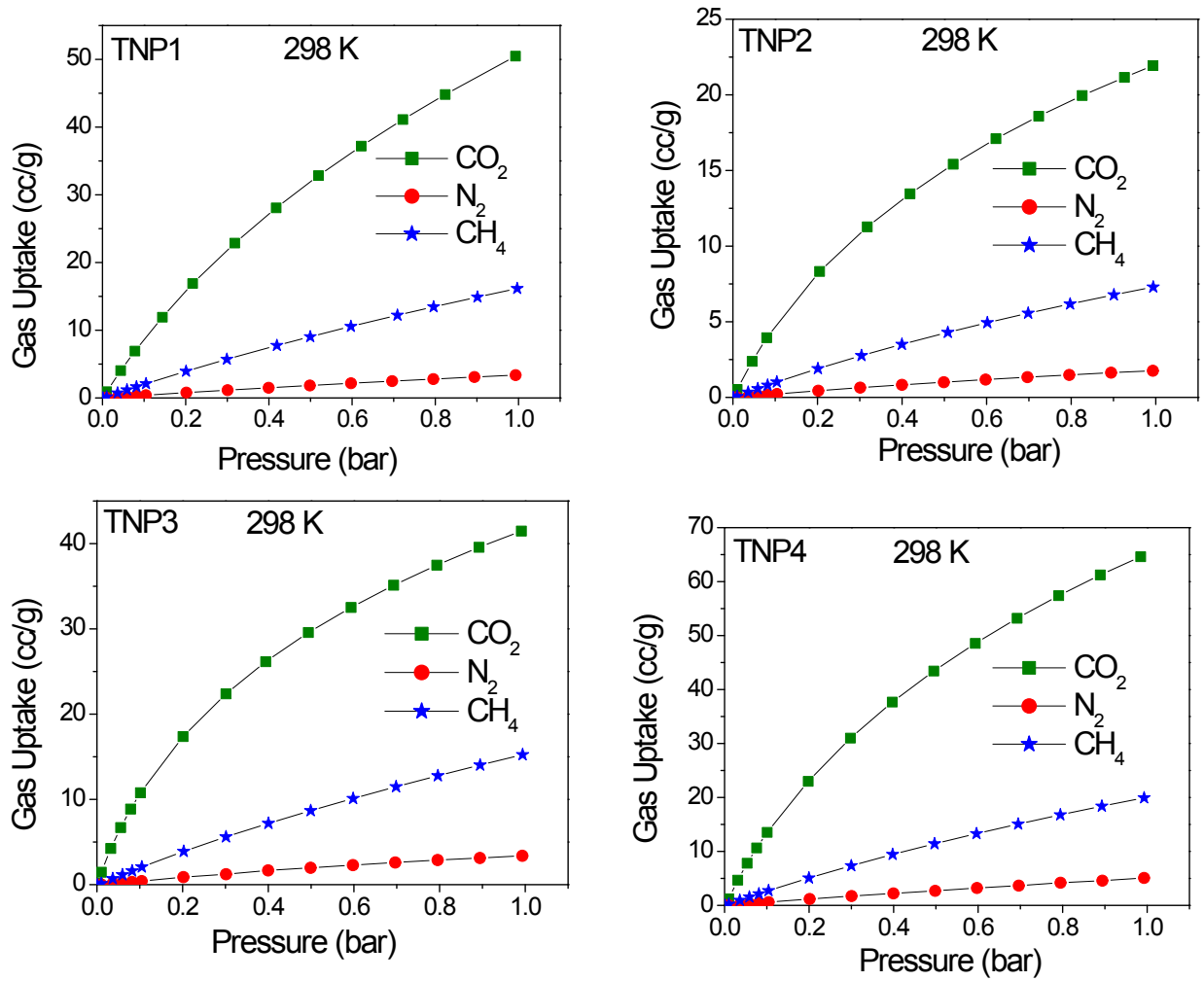


Figure S6: Gas uptake capacities for TNP1-TNP4 at 298 K, CO₂ (green square), CH₄ (blue star), and N₂ (red circle).

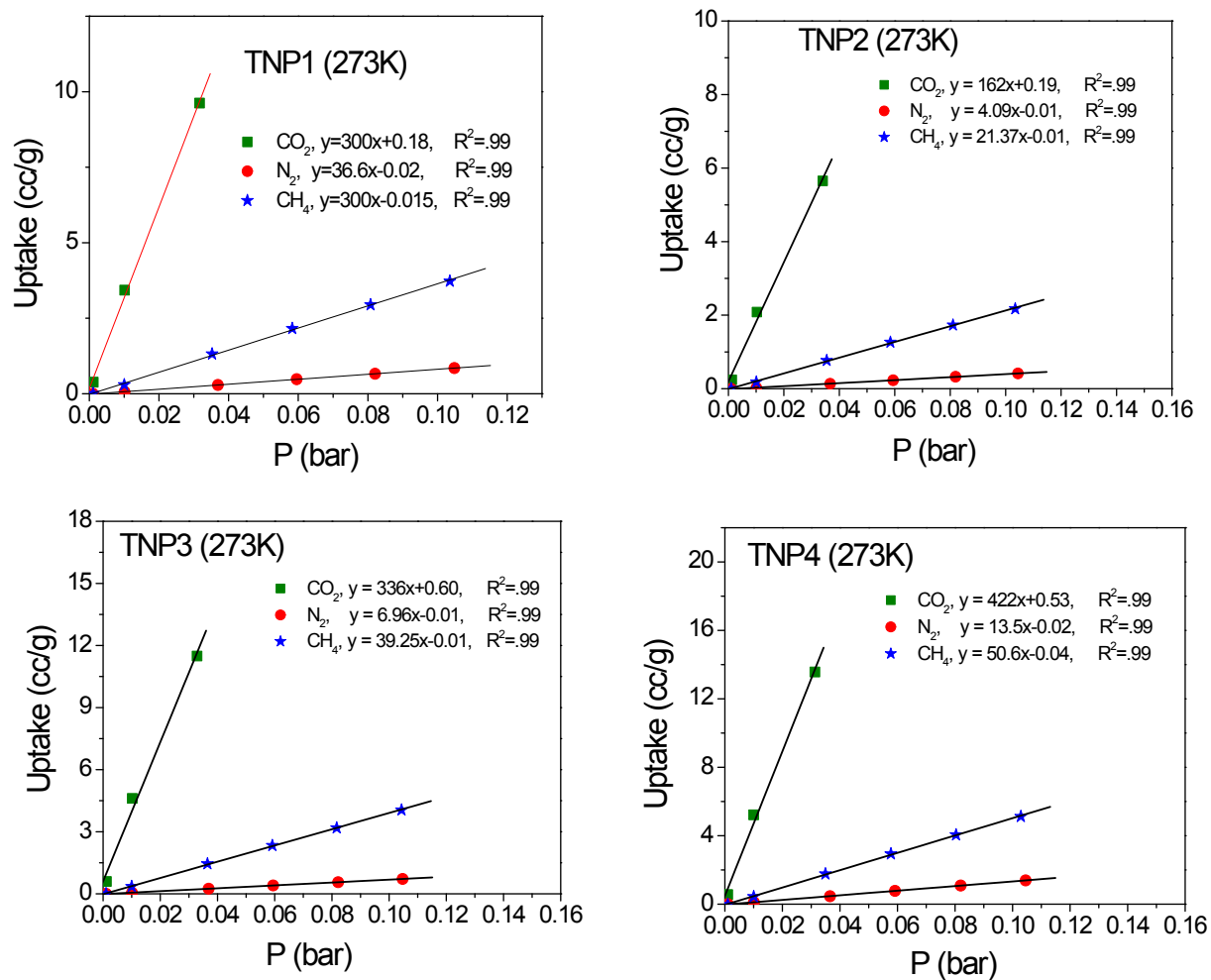


Figure S7: Initial gas uptake slopes of **TNP1-TNP4** for CO₂/CH₄ and CO₂/N₂ at 273 K

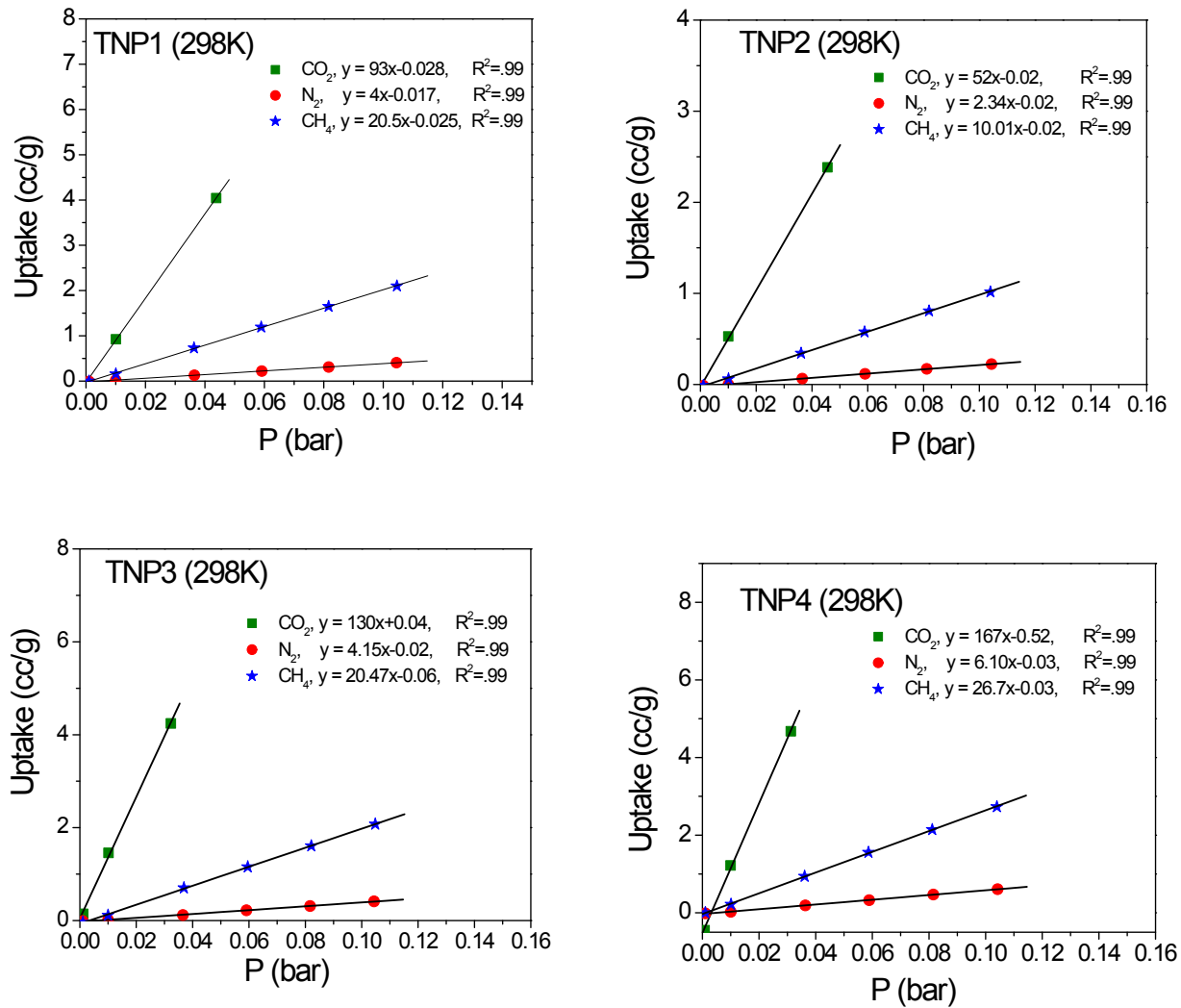


Figure S8: Initial gas uptake slopes of **TNP1-TNP4** for CO₂/CH₄ and CO₂/N₂ at 298 K.