Supplementary Information

Dynamic photo-switching in light-responsive JUC-62 for CO_2 capture

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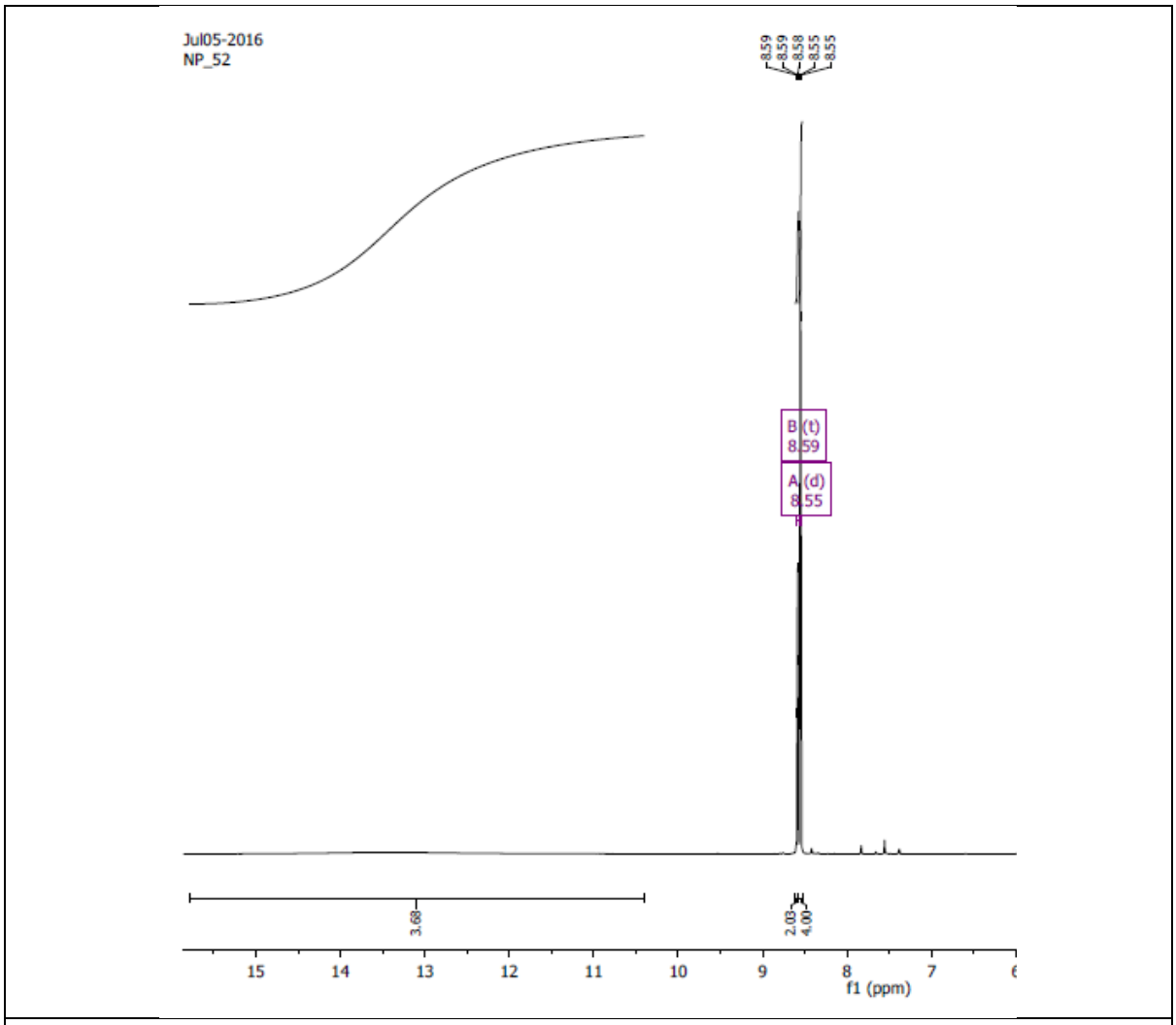
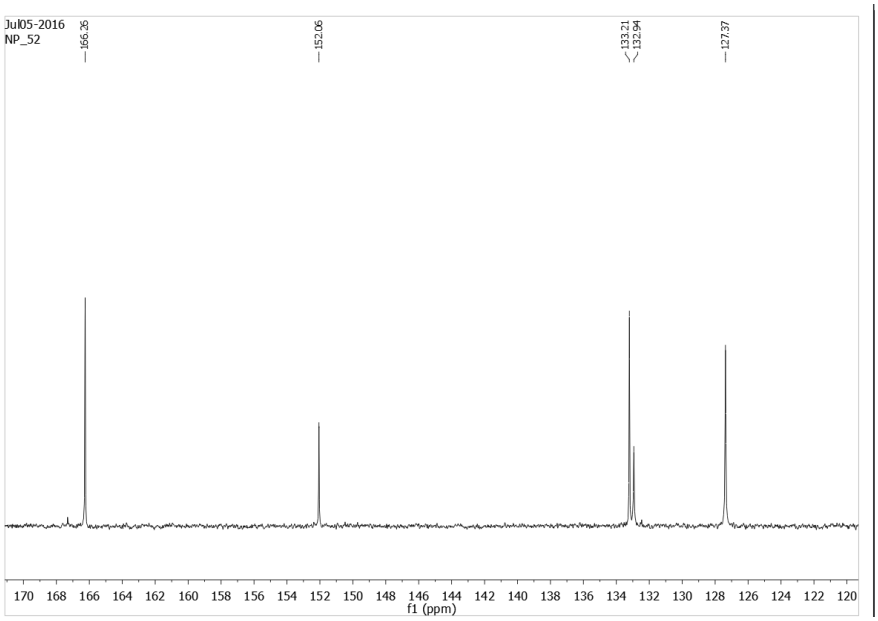
1. H-NMR Spectrum of 3,3’-5,5’-azobenzene tetracarboxylic acid



(a)

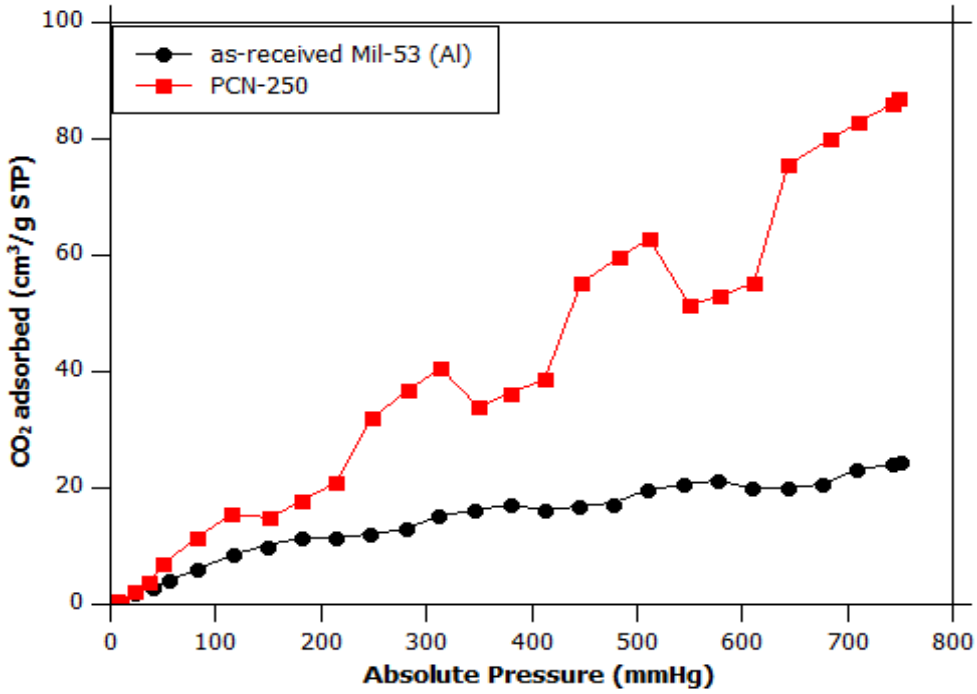
Supplementary Figure S 1. H-NMR spectrum of 3,3’-5,5’-azobenzene tetracarboxylic acid (d6-DMSO) (^{1}H NMR (400 MHz, DMSO) δ 8.61-8.57 (t, *J* = 1.6 Hz, 2H), 8.56-8.54 (d, *J* = 1.6 Hz, 4H))

2. C-NMR spectrum of 3,3-5,5'-azobenzene tetracarboxylic acid



Supplementary Figure S 2. C-NMR Spectrum of 3,3'-5,5'-azobenzene tetracarboxylic acid (^{13}C NMR (101 MHz, DMSO) δ 166.26, 152.06, 133.21, 132.94, 127.37)

3. CO_2 adsorption control experiment



Supplementary Figure S 3. CO_2 adsorption dynamic photoswitching experiment using as-received Mil-53(Al) BASF and PCN-250