Supporting information

Open Diamondoid Amino-functionalized MOFs for CO_2 Capture

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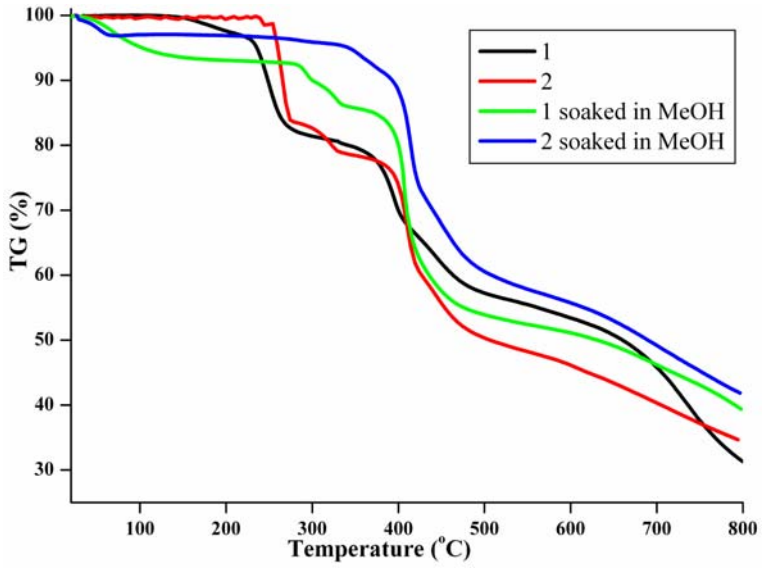

Figure S1. The TG plots of **1** and **2**.

The photoluminescence properties of **1** and **2** have been explored at room temperature in the solid state (Fig. s2). Compounds **1** and **2** display blue emission band with peak maximum at 428 nm (excitation at 350 nm). According to the previous reports about the Zn(II)-carboxyl metal-organic frameworks, the emission is tentatively assigned as originating from the ligand-to-metal charge-transfer (LMCT).

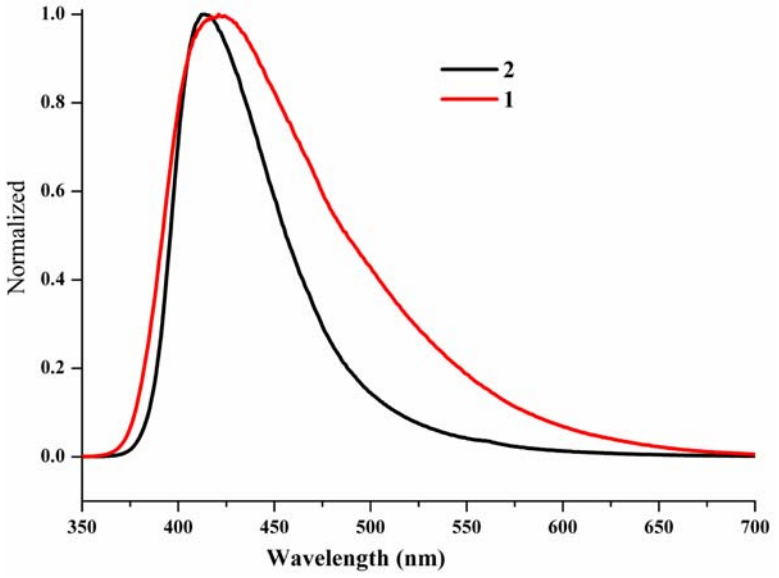

Figure S2. Emission spectra of **1** and **2** in solid state at room temperature.

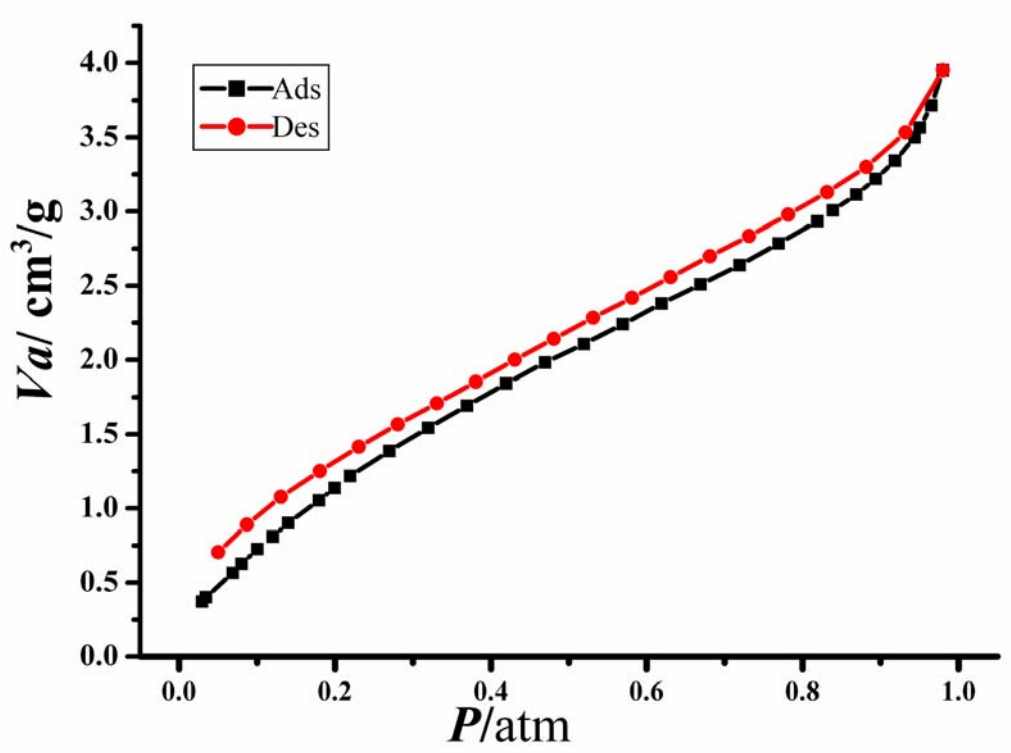

Figure s3 The N_2 sorption isotherms of **2a** at 77K.

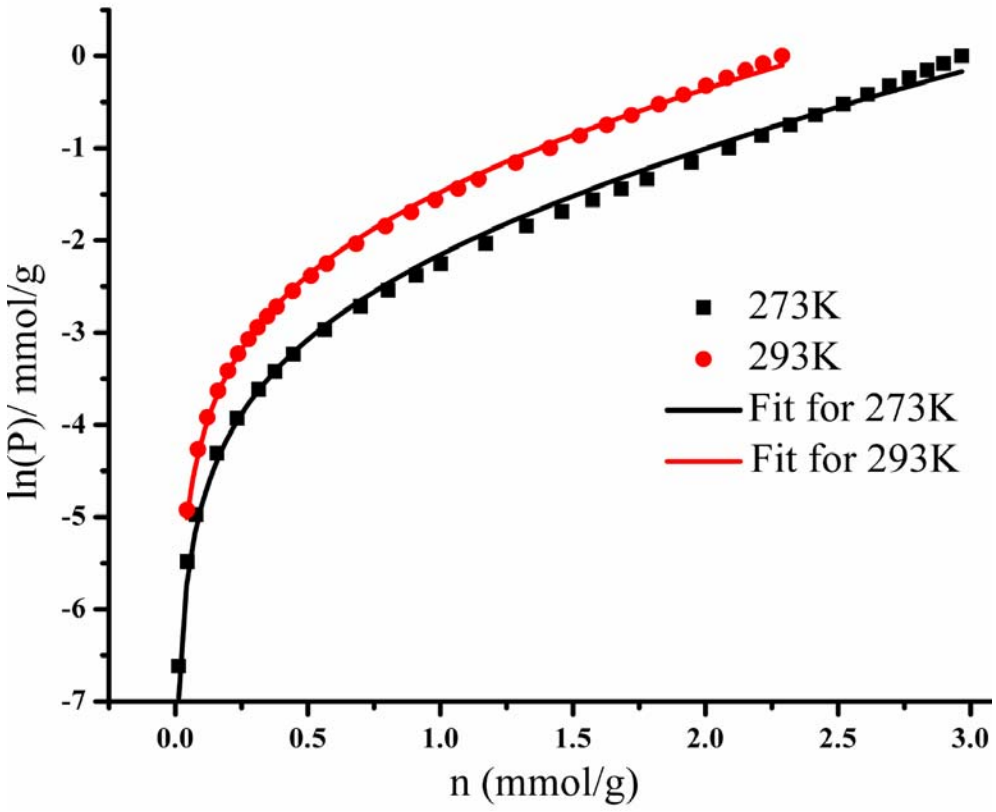

Figure S4. Virial analysis of the CO2 sorption data for **2a**. (a0=-2837.97715, a1= 124.91036, b0 = 7.78283).

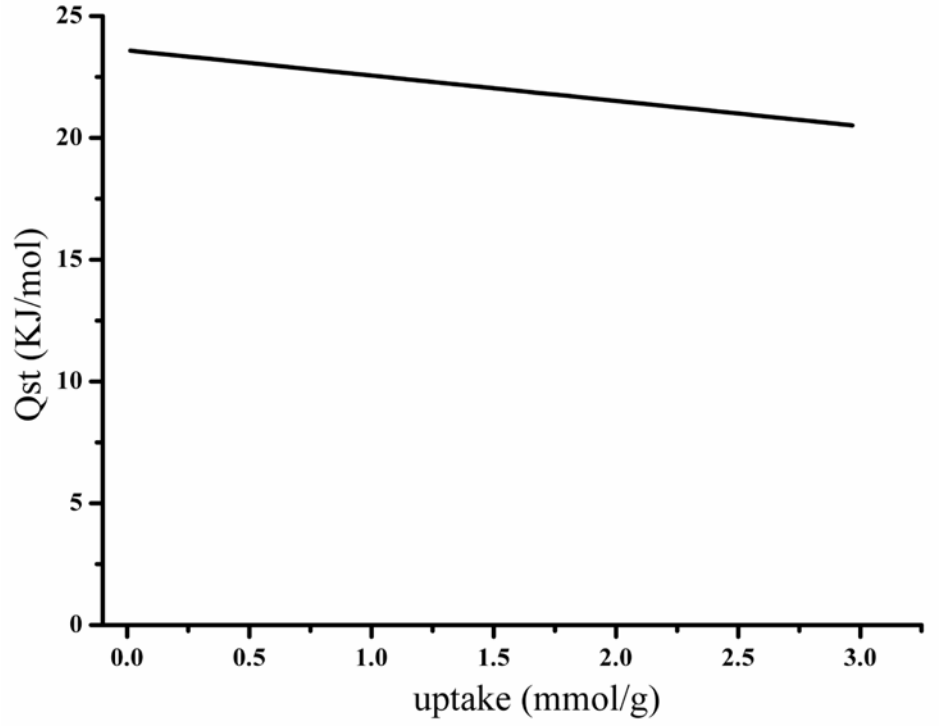

Figure S5. Heat of CO_2 adsorption for **2a** estimated by the virial equation.

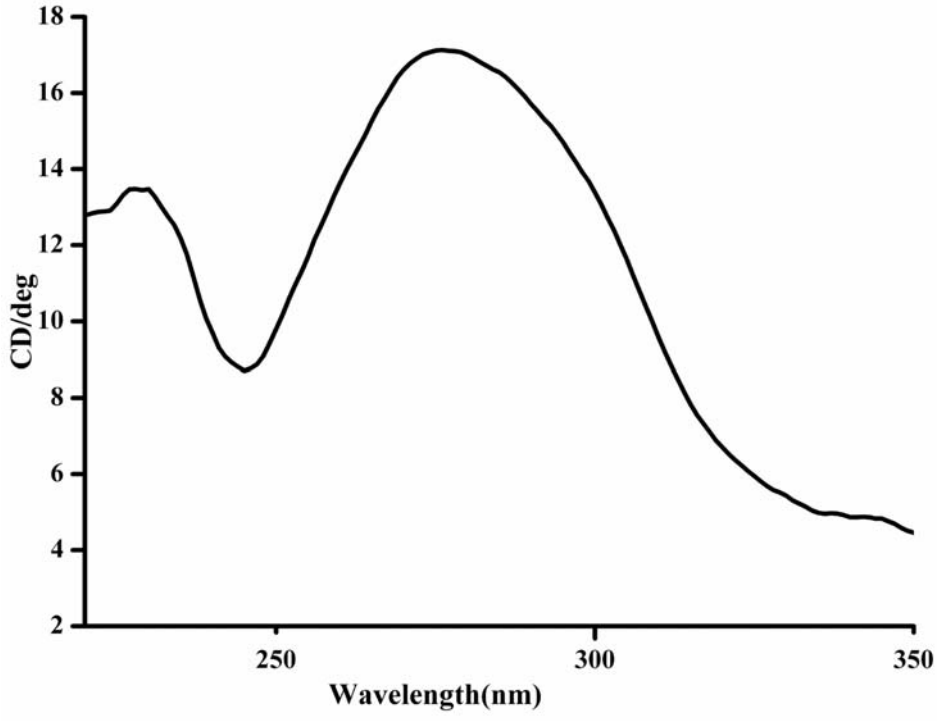

Figure S6. The solid state CD spectrum of odd crystals of **1**.