

Electronic Supporting Informations

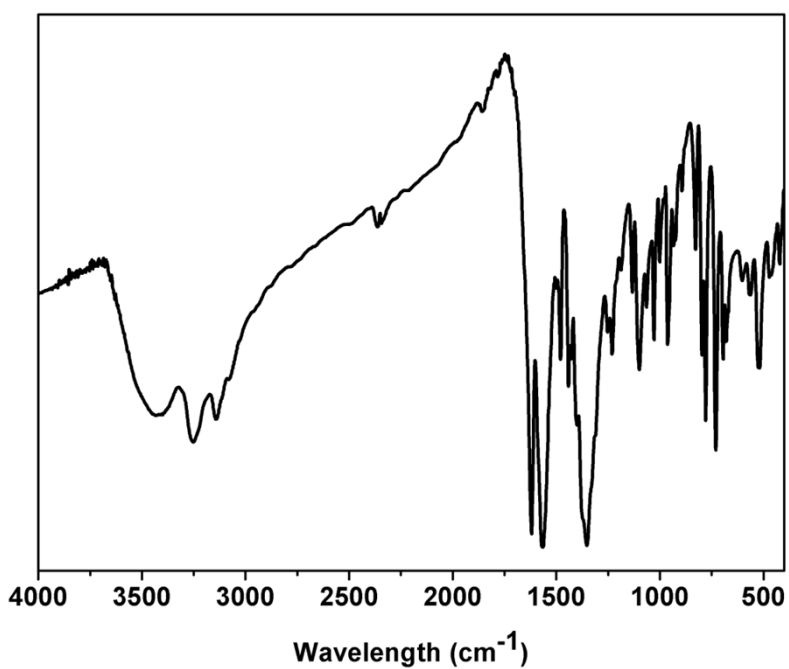


Fig. S1 IR spectrum for compound 1.

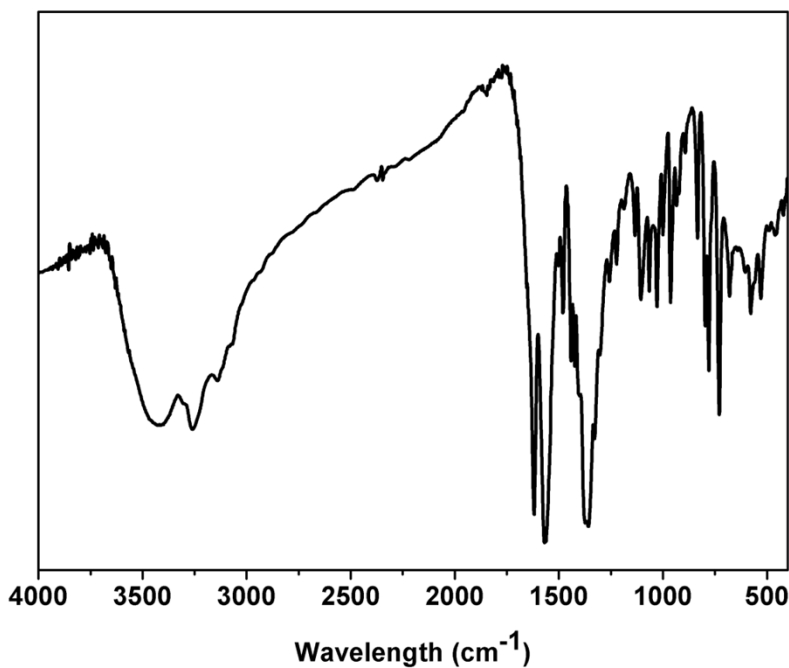


Fig. S2 IR spectrum for compound 2.

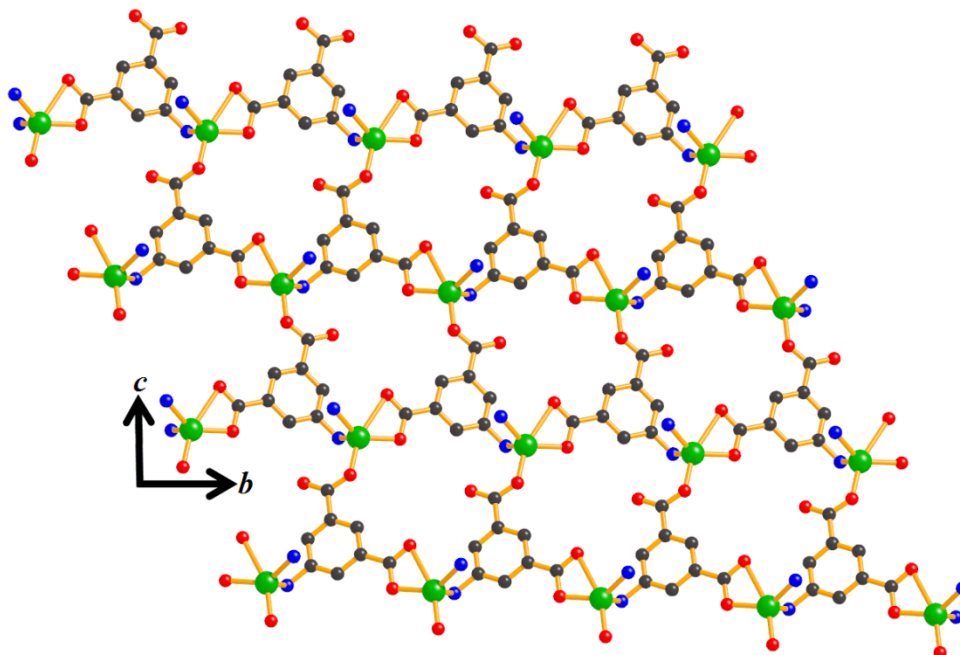


Fig. S3 View of the 2D [Zn(NH₂-bdc)]_n sheet of **2** in the crystallographic *bc* plane.

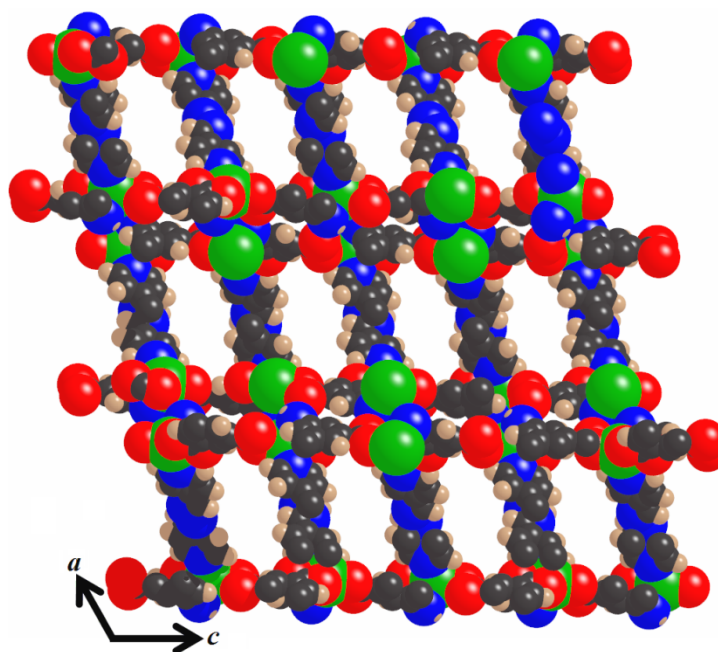


Fig. S4 Space-filling model showing one dimensional channel ($8.3 \times 3.8 \text{ \AA}^2$) along the crystallographic *b* axis in **1**. Guest water molecules have been removed for clarity.

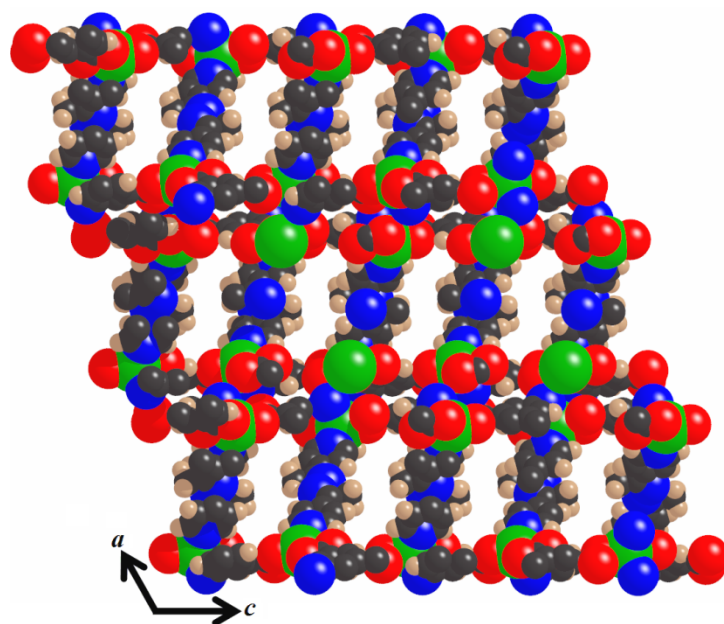


Fig. S5 Space-filling model showing one dimensional channel ($8.0 \times 1.6 \text{ \AA}^2$) along the crystallographic b -axis **2**. Guest water molecules have been removed for clarity.

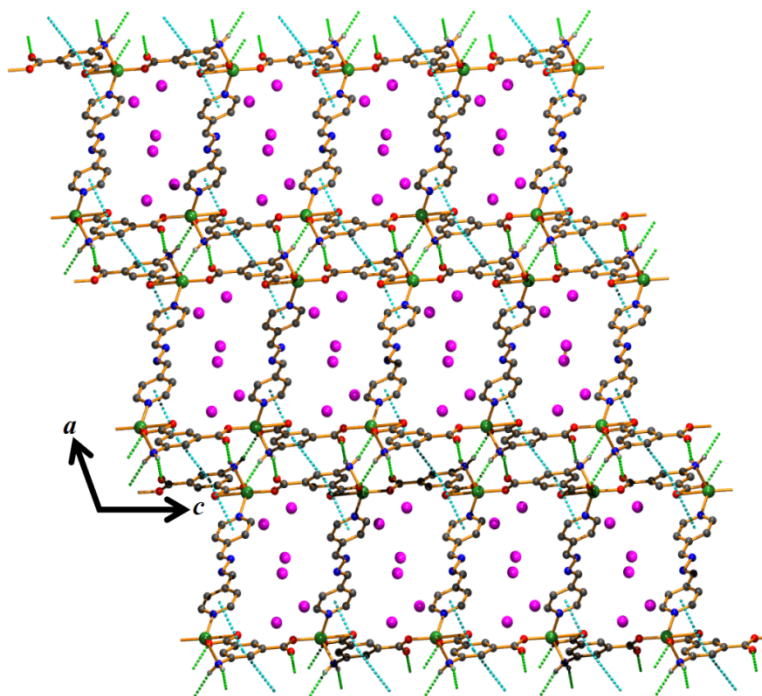


Fig. S6 View of the 3D supramolecular framework structure of **1** (π - π interactions: Cyan dotted lines and H-bonding: Green dotted lines) along the crystallographic b -axis.

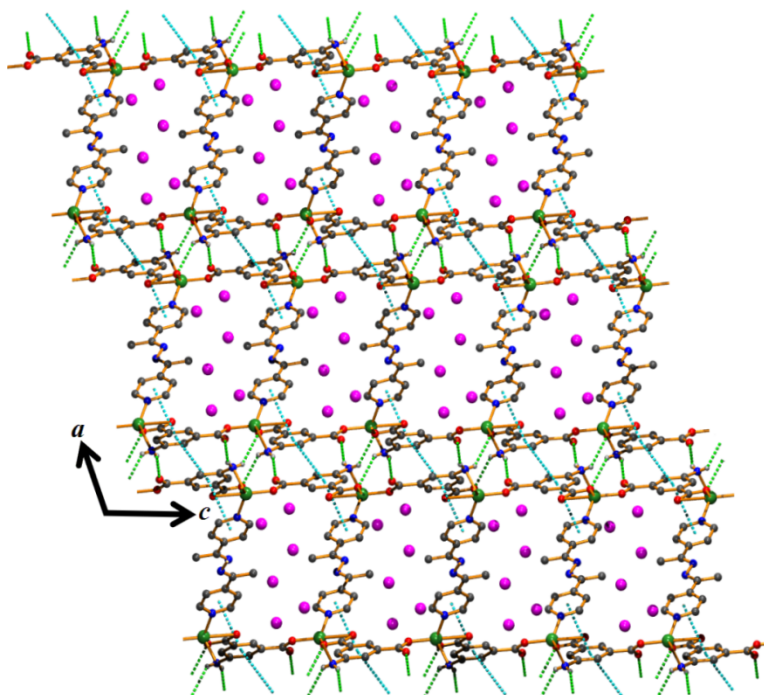


Fig. S7 View of the 3D supramolecular framework structure of **2** (π - π interactions: Cyan dotted lines and H-bonding: Green dotted lines) along the crystallographic b -axis.

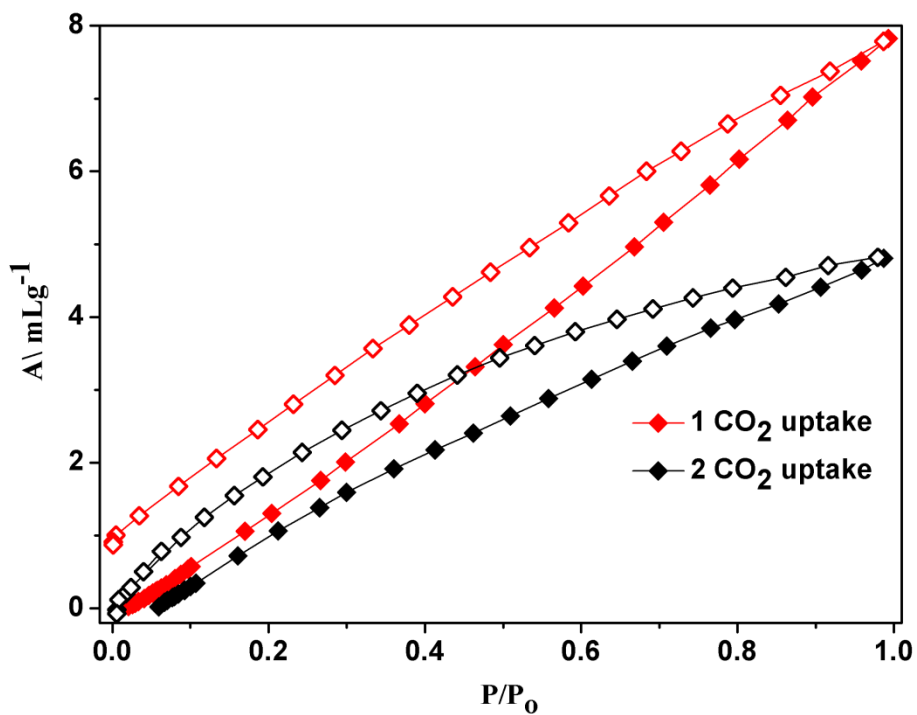


Fig. S8 CO₂ adsorption isotherms for **1** and **2** at 298 K: adsorption (filled circles), desorption (open circles).