

# Molecular and supramolecular structures of Cd(II) complexes with hydralazine-based ligands; A new example for cyclization of hydrazonophthalazine to triazolophthalazine

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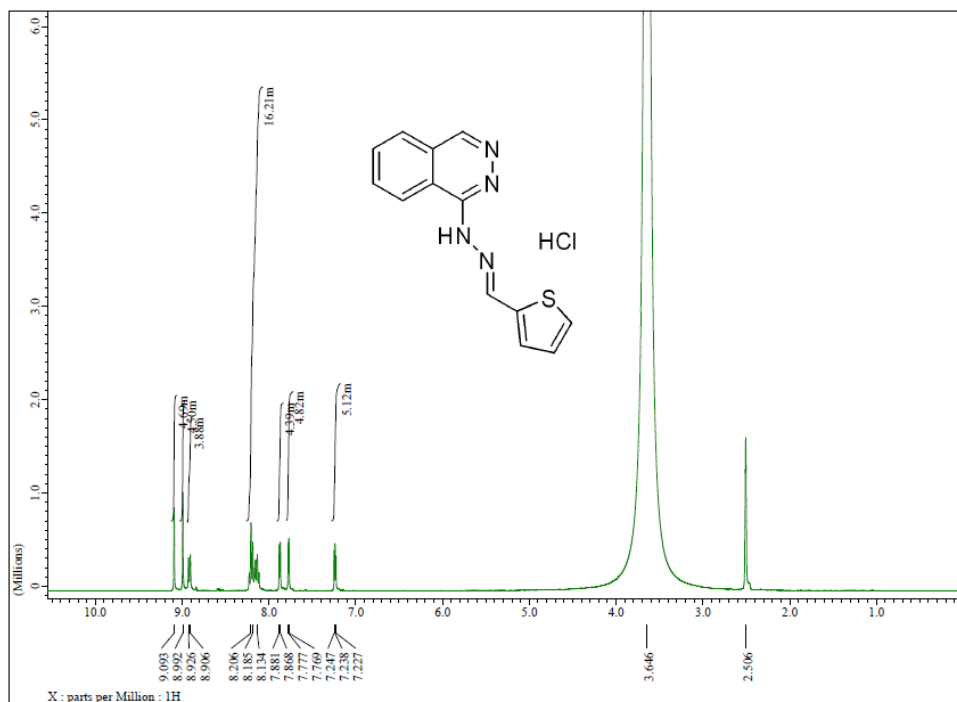
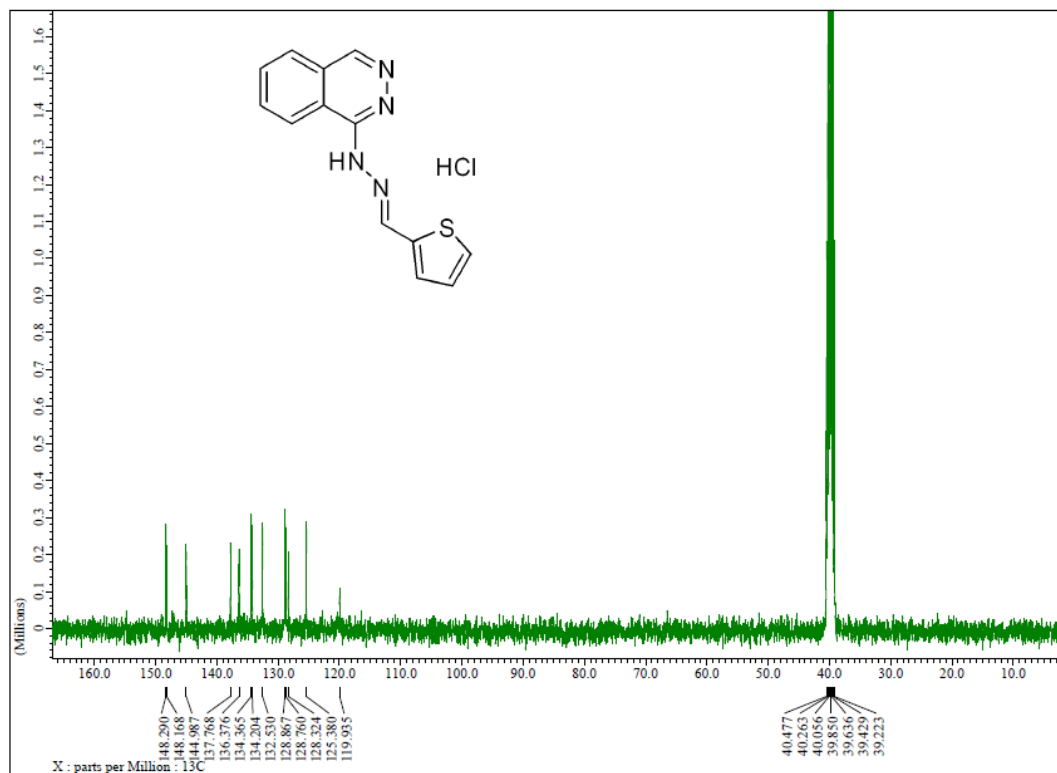


Figure S1. <sup>1</sup>H-NMR spectra of HL.



**Figure S2.**  $^{13}\text{C}$ -NMR spectra of HL.

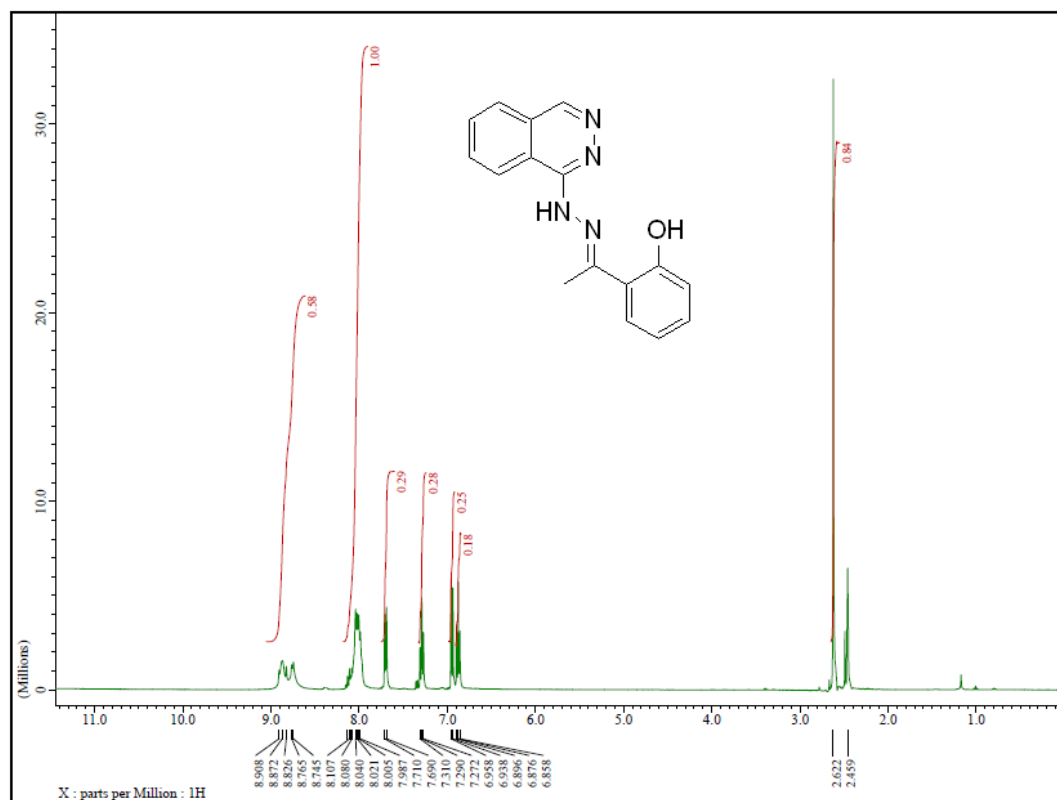
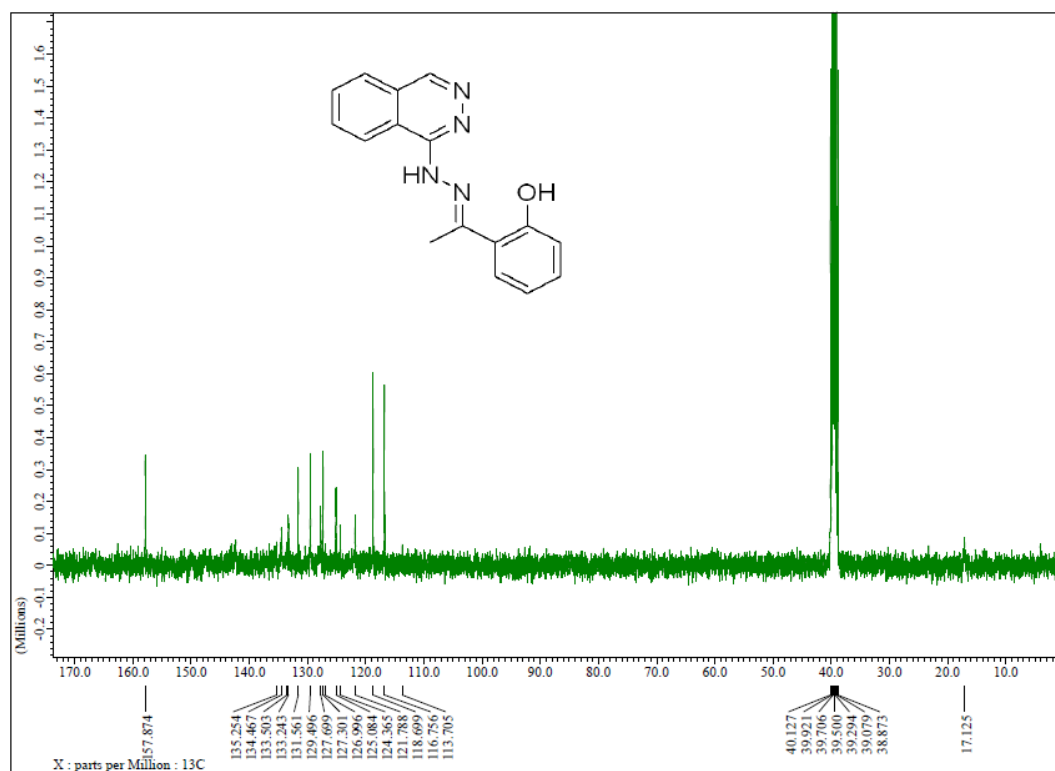
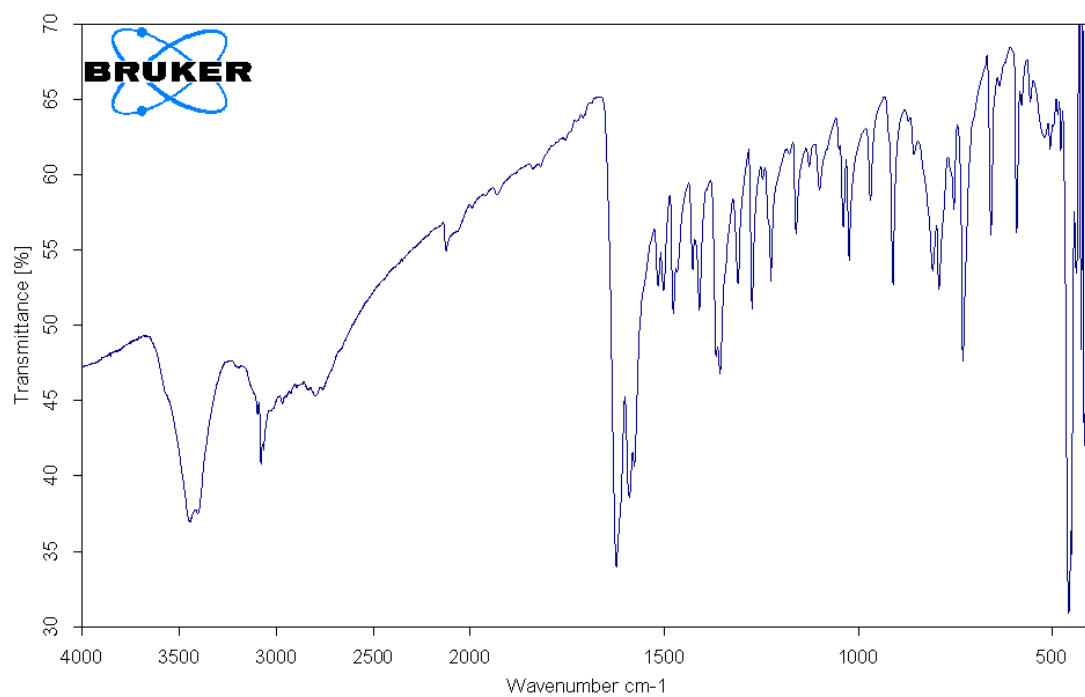


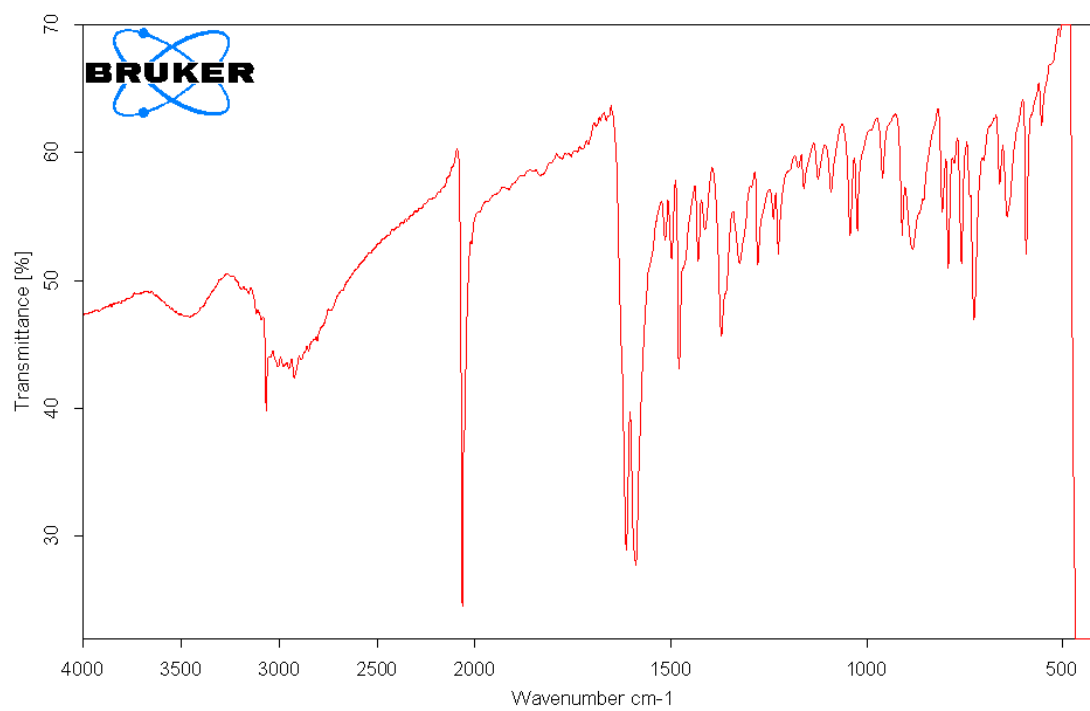
Figure S3.  $^1\text{H}$ -NMR spectra of  $\text{HL}^{\text{OH}}$ .



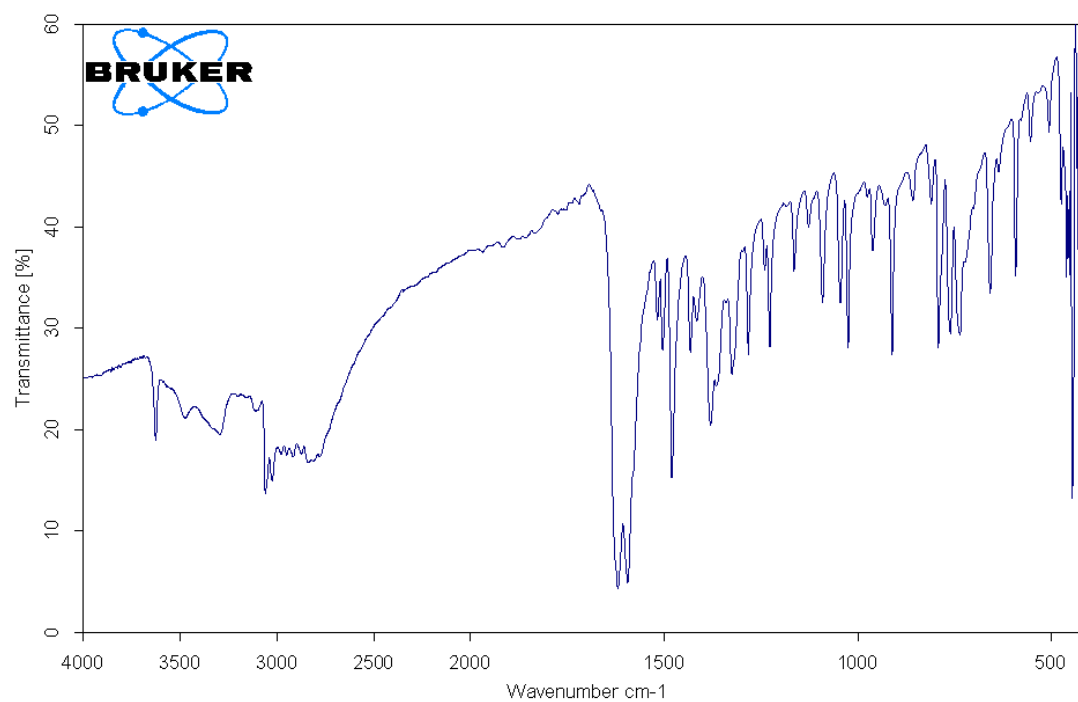
**Figure S4.**  $^{13}\text{C}$ -NMR spectra of  $\text{HL}^{\text{OH}}$ .



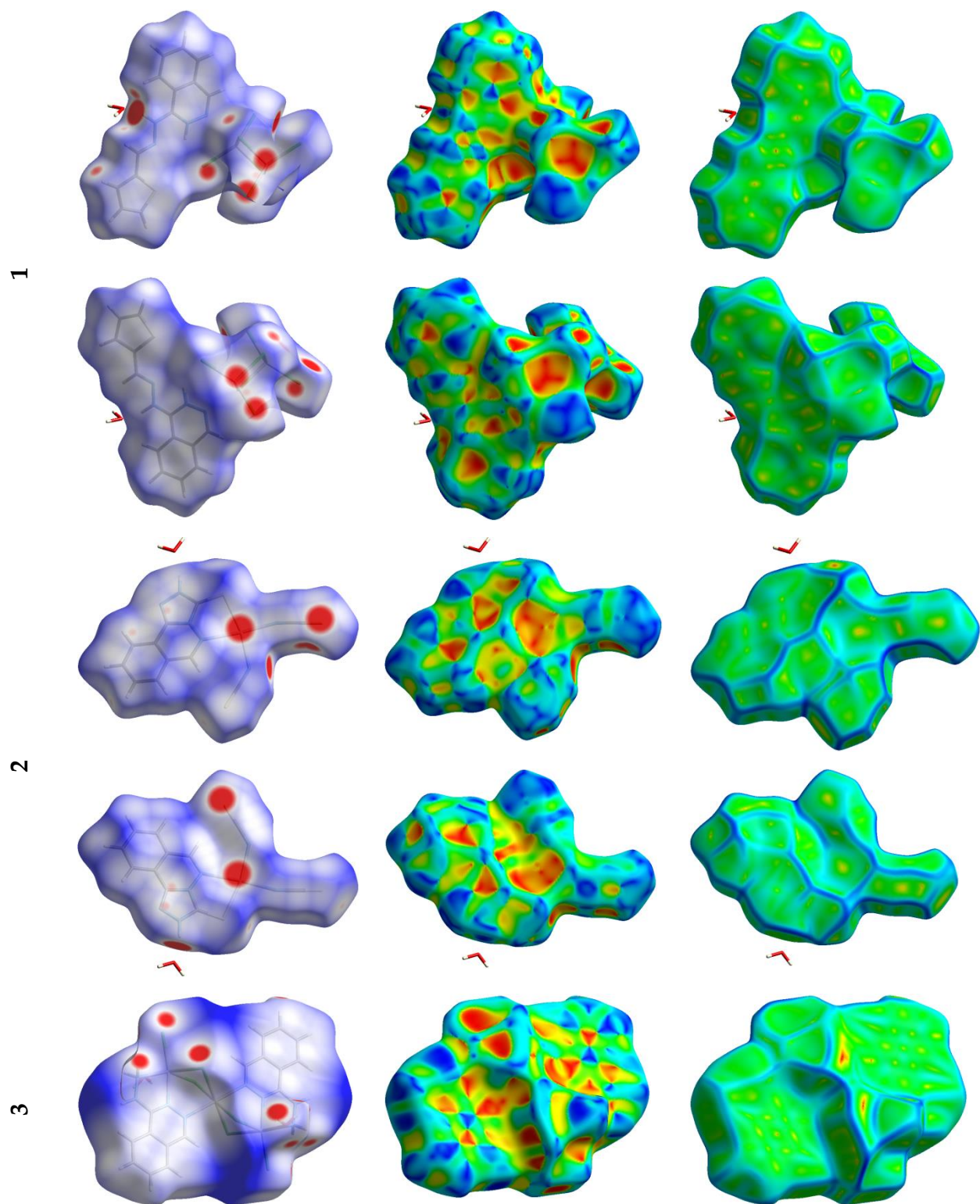
**Figure S5.** FTIR spectra of  $[\text{Cd}(\text{H}_2\text{L})\text{Cl}_3]_n \cdot \text{H}_2\text{O}$ ; **1**.



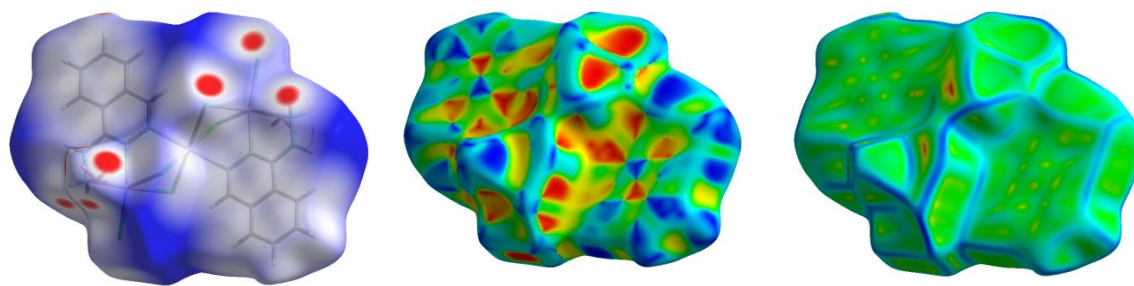
**Figure S6.** FTIR spectra of  $[\text{Cd}(\text{TPT})(\text{SCN})_2]_n \cdot \text{H}_2\text{O}$ ; **2**.



**Figure S7.** FTIR spectra of  $[\text{Cd}_3(\text{Hydralazine})_2(\text{H}_2\text{O})_2\text{Cl}_6]$ ; **3**.







**Figure S8.** Hirshfeld  $d_{\text{norm}}$  (-0.2-2.0), shape index (SI) and curvedness surfaces of the studied complexes.