

## Supplementary Material

### Co(II) 1D coordination network constructed from 1,3-bisbenzyl-2-oxoimidazoline-4,5-dicarboxylic acid: crystal structure and magnetic properties

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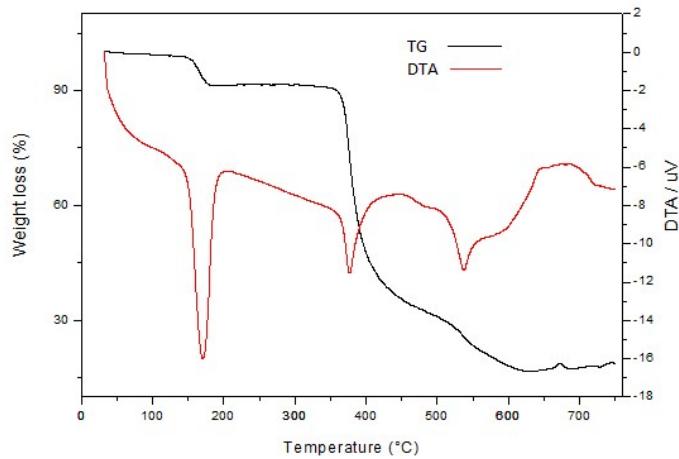


Figure S1. TG/DTA curves for  $[\text{Co}(\text{L})(\text{H}_2\text{O})_2]_n$  under  $\text{N}_2$  atmosphere.

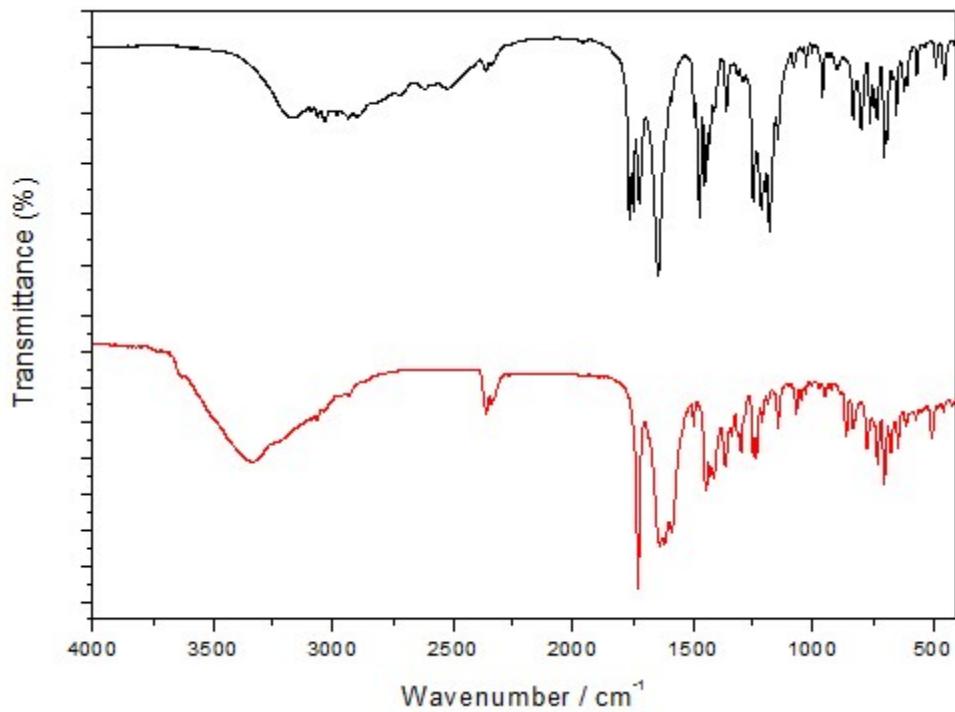
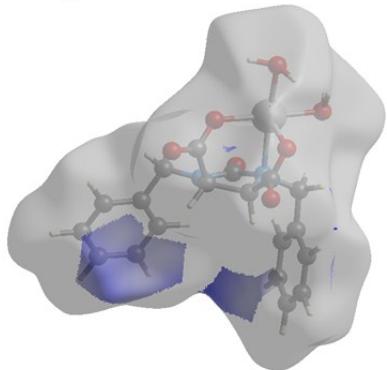
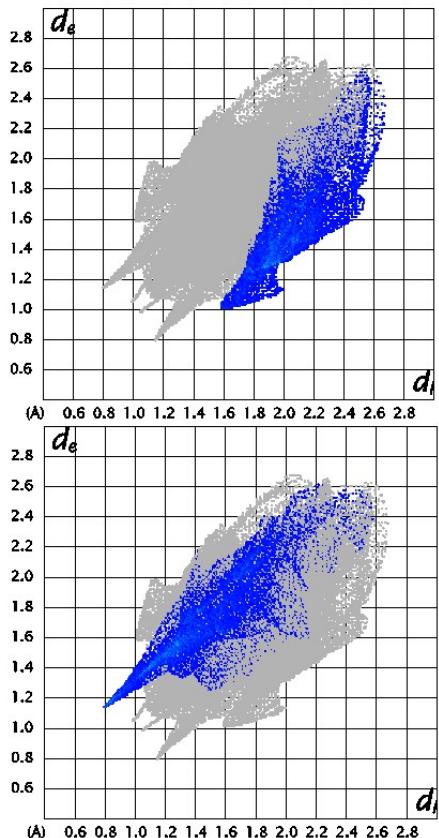
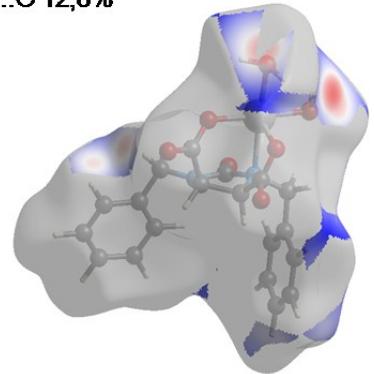


Figure S2. Infrared spectrum for  $\text{H}_2\text{L}$  (black line) and  $[\text{Co}(\text{L})(\text{H}_2\text{O})_2]_n$  (red line).

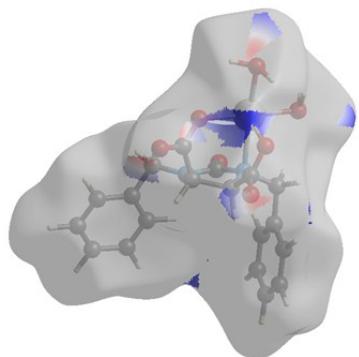
C...H 10,6 %



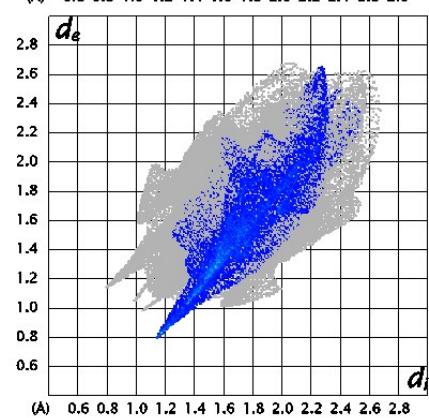
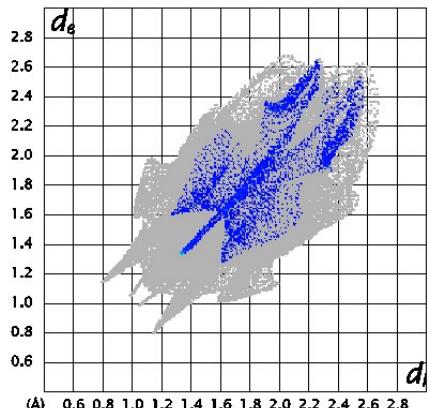
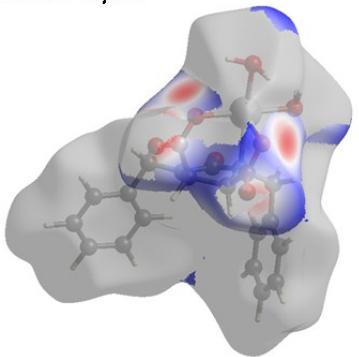
H...O 12,8%



O...O 4,4%



O...H 14,8%



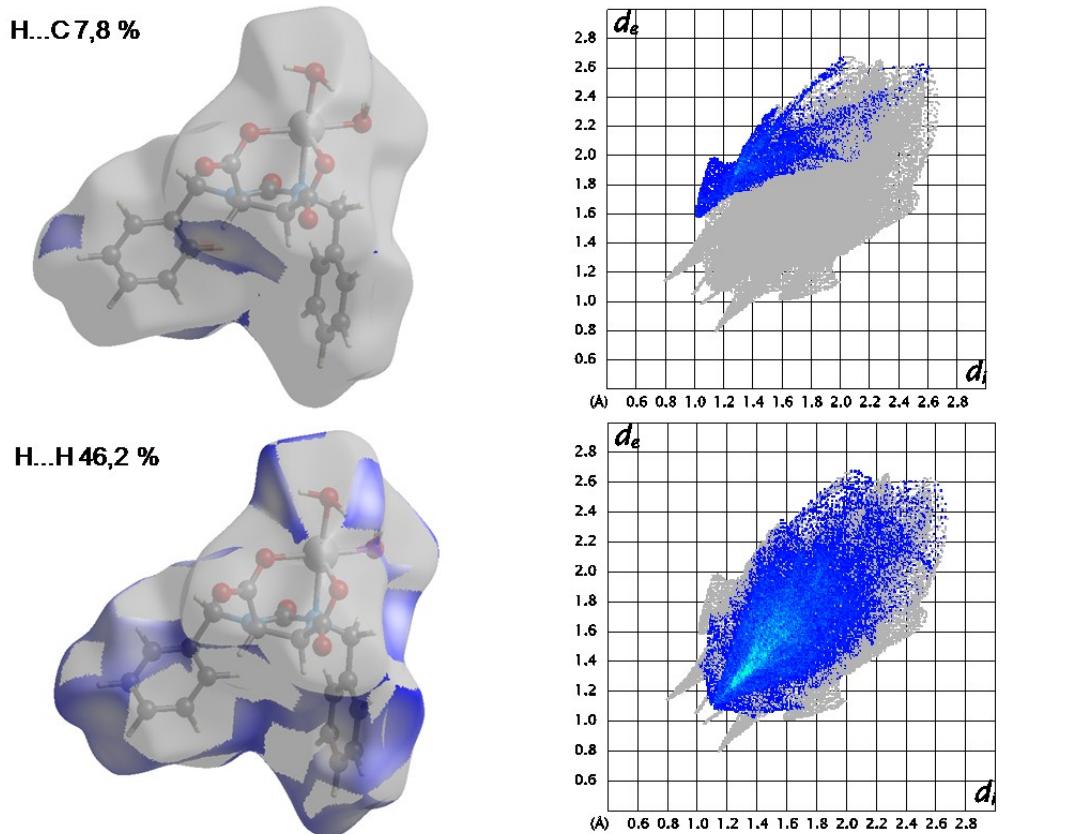


Figure S3. Hirshfeld surface and respective fingerprint plot marked with the correspondent interactions and percentages.

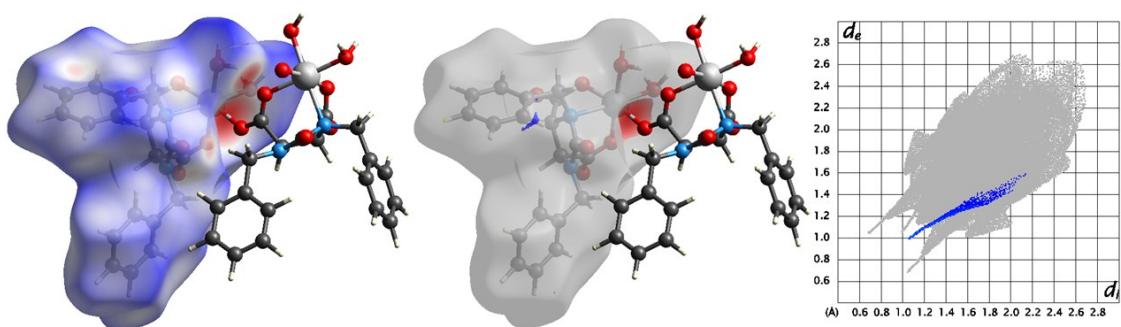


Figure S4. HS and the next molecule, selection of the metal ligand contact colored as red in the HS and the corresponding FPP with the highlighted contact. Color scale of 0.815 (red) to 1.468 Å (blue), and volume of 470.05 Å<sup>3</sup>.