

## Supporting Information

### Crystal structure and Hirshfeld surface analysis of a new mononuclear copper(II) complex: [bis(pyridin-2-yl- $\kappa N$ )amine](formato- $\kappa O$ )(*m*-hydroxybenzoato- $\kappa^2 O, O'$ )copper(II)

Wanassanan Chaisuriya<sup>a</sup>, Kittipong Chainok<sup>b</sup> and Nanthawat Wannarit<sup>a,b\*</sup>

<sup>a</sup> Department of Chemistry, Faculty of Science and Technology, Thammasat University, Pathum Thani, 12120, Thailand

<sup>b</sup> Thammasat University Research Unit in Multifunctional Crystalline Materials and Applications (TU-MCMA), Faculty of Science and Technology, Thammasat University, Pathum Thani 12120, Thailand

### List of Figures

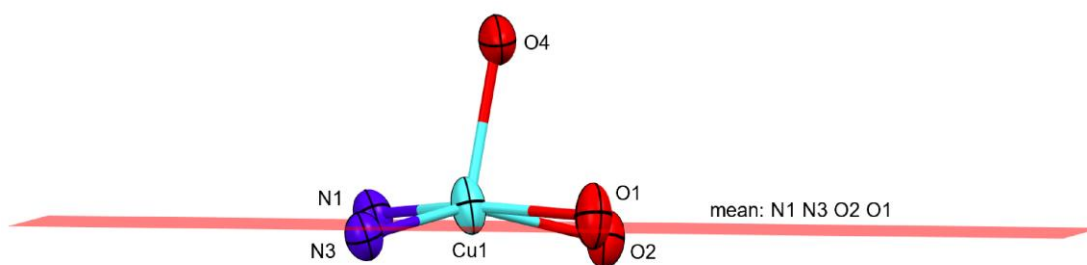
**Fig. S1** Views of (a) the Cu<sup>II</sup> atom lies above the basal plane towards the apical oxygen atom of the formato ligand and (b) the  $\tau_5$  parameter of Cu<sup>II</sup> center in the title complex.

**Fig. S2** Quantitative results of different intermolecular contacts contributing to the Hirshfeld surface of the title complex.

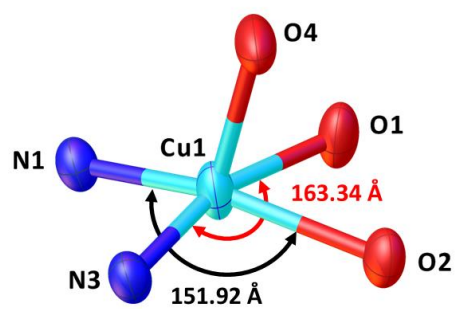
**Fig. S3** The FT-IR spectrum of the title complex.

**Fig. S4** The solid-state diffuse reflectance spectrum of the title complex.

**Fig. S5** The powder X-ray diffraction patterns of the title complex.



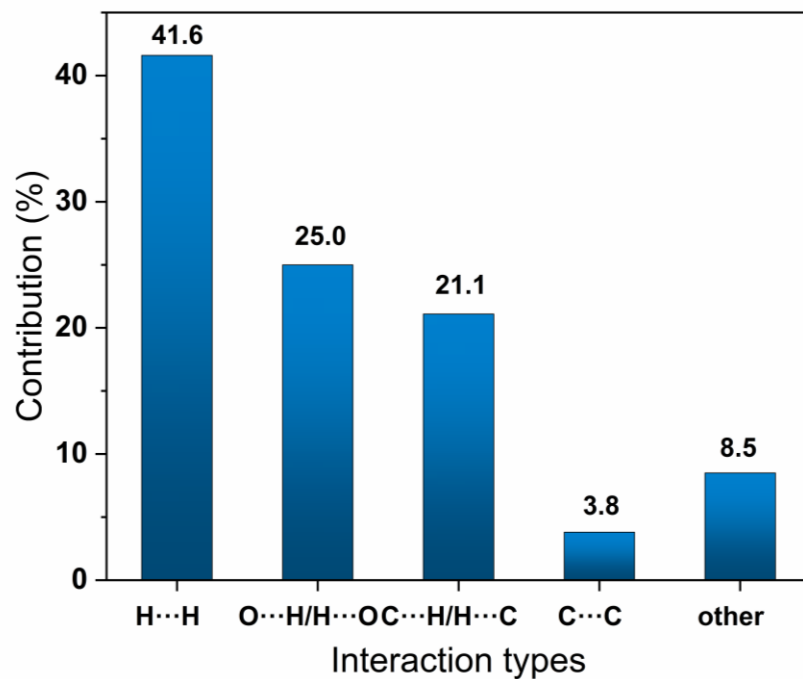
(a)



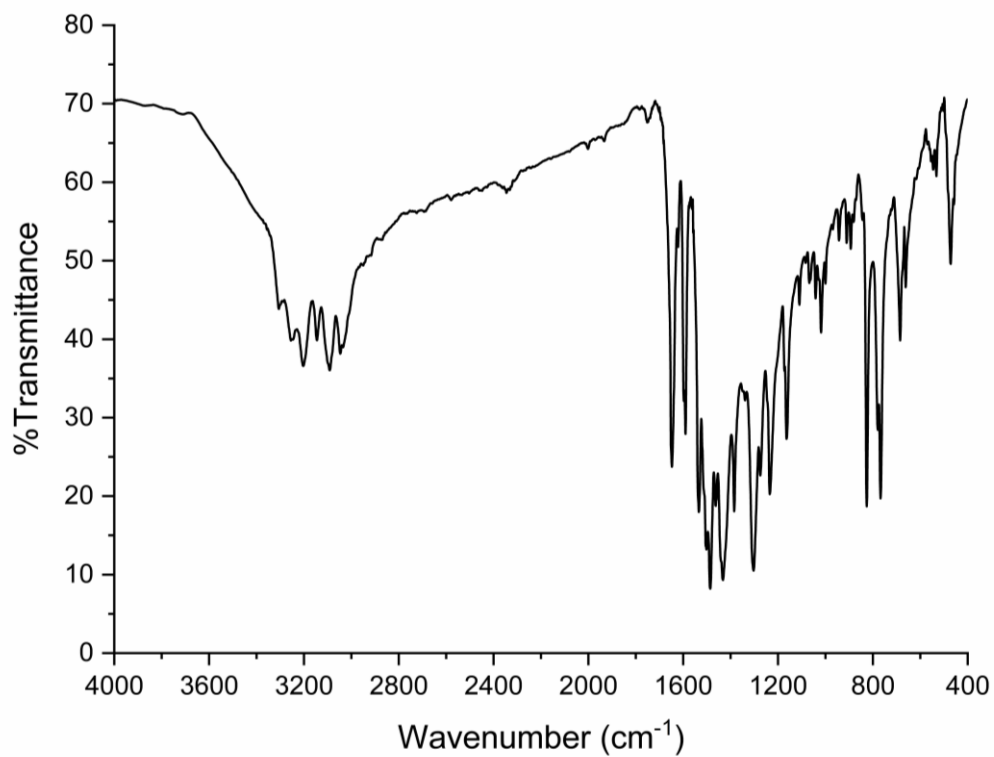
$$\tau = \frac{163.34 - 151.92}{60} = 0.19$$

(b)

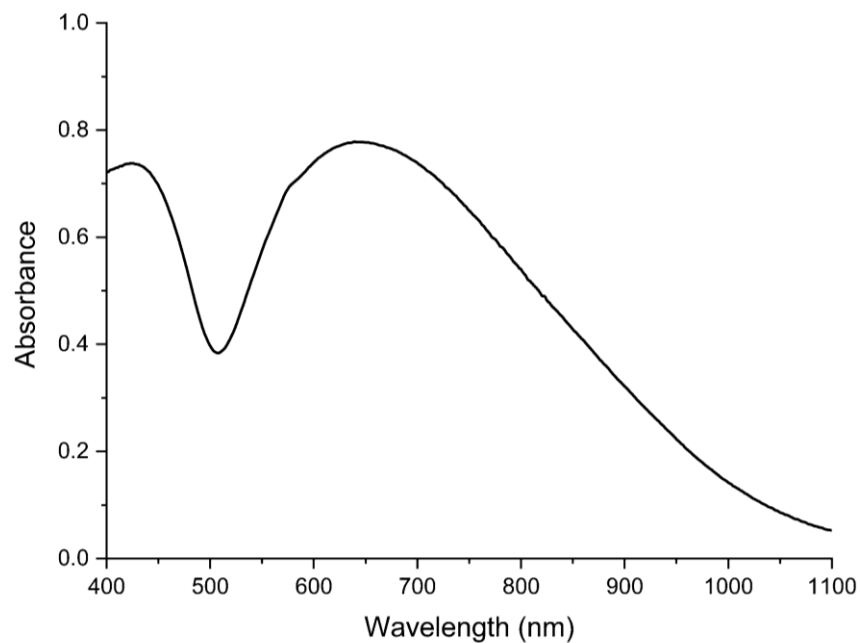
**Fig. S1** Views of (a) the Cu<sup>II</sup> atom lies above the basal plane towards the apical oxygen atom of the formate ligand and (b) the  $\tau_5$  parameter of Cu<sup>II</sup> center in the title complex.



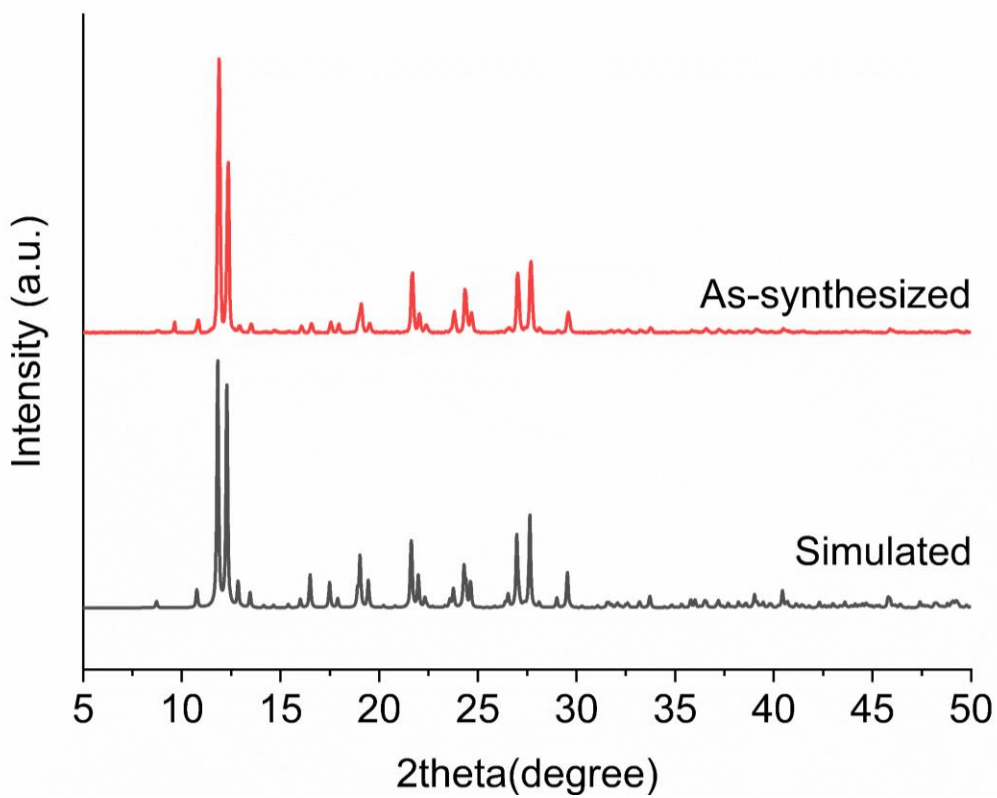
**Fig. S2** Quantitative results of different intermolecular contacts contributing to the Hirshfeld surface of the title complex.



**Fig. S3** The FT-IR spectrum of the title complex.



**Fig. S4** The solid-state diffuse reflectance spectrum of the title complex.



**Fig. S5** The powder X-ray diffraction patterns of the title complex.