

**Inverse bilayer structure of mononuclear Co(II) and Ni(II)  
complexes of type  $M(H_2O)_3(SO_4)(4-CNpy)_2$**

**Birinchi K. Das,\* Sanchay J. Bora, Manjit K. Bhattacharyya and Rama K. Barman#**

Department of Chemistry, Gauhati University, Guwahati 781 014, Assam, India

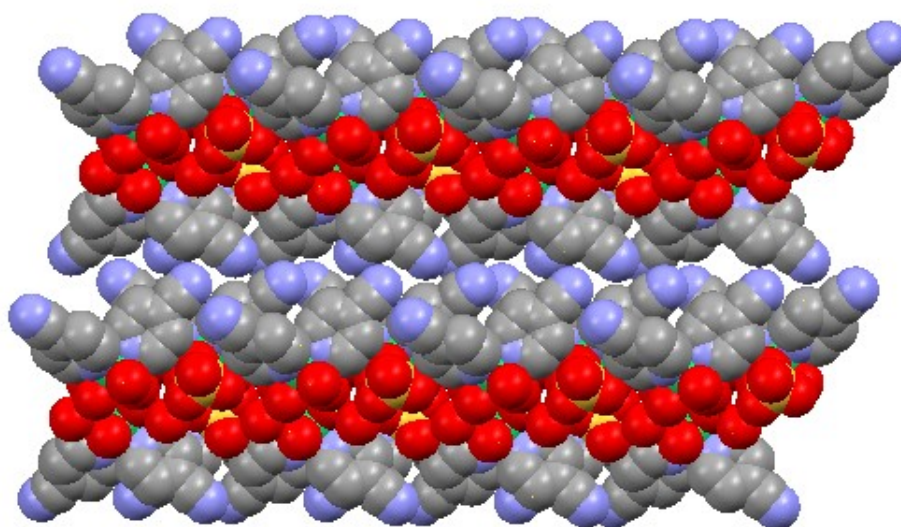
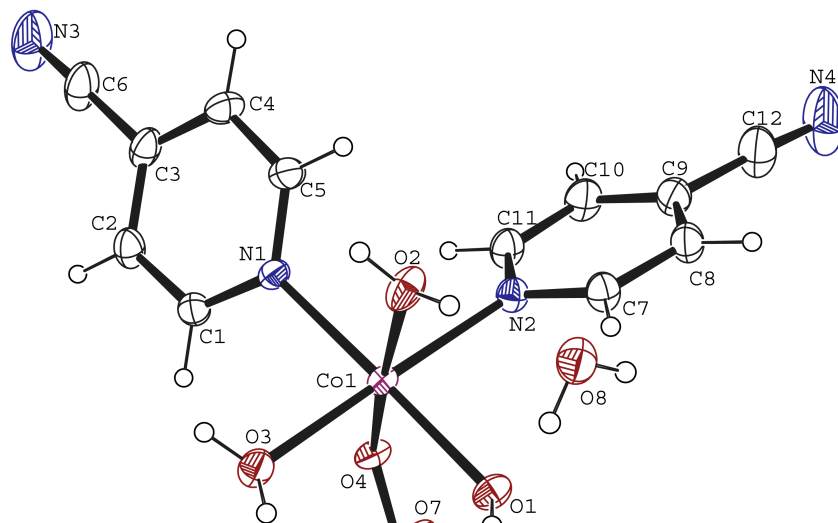
\*Corresponding e-mail: Birinchi.Das@hotmail.com; fax: +91 361 2700311

#Present address: Department of Chemistry, Sherubtse College, Royal University of Bhutan, Kanglung,  
Trashigang, Bhutan

Article Reference No.: **ZB5003**

**SUPPLEMENTARY INFORMATION**

1.

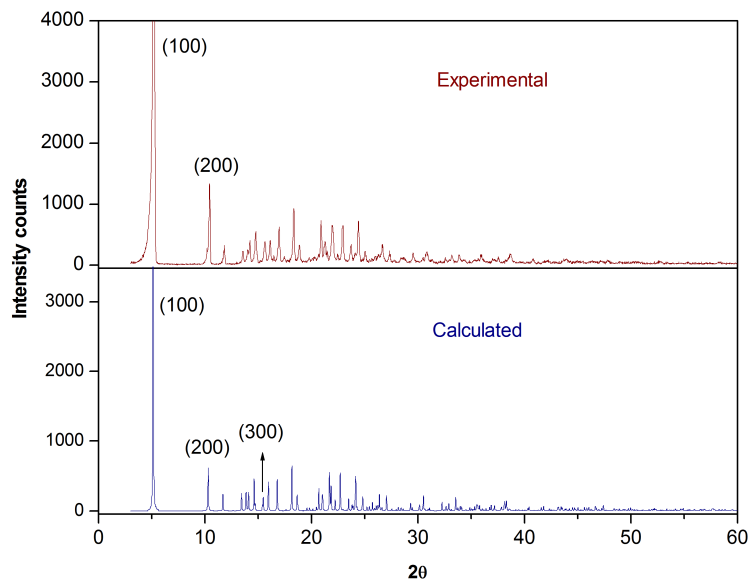


ORTEP of 2

2.

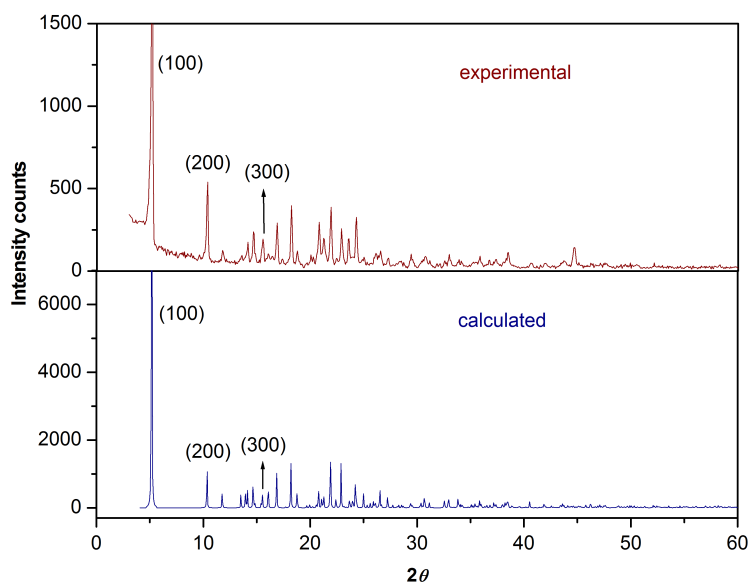
Space filling diagram showing the layered nature of 1 & 2

3.



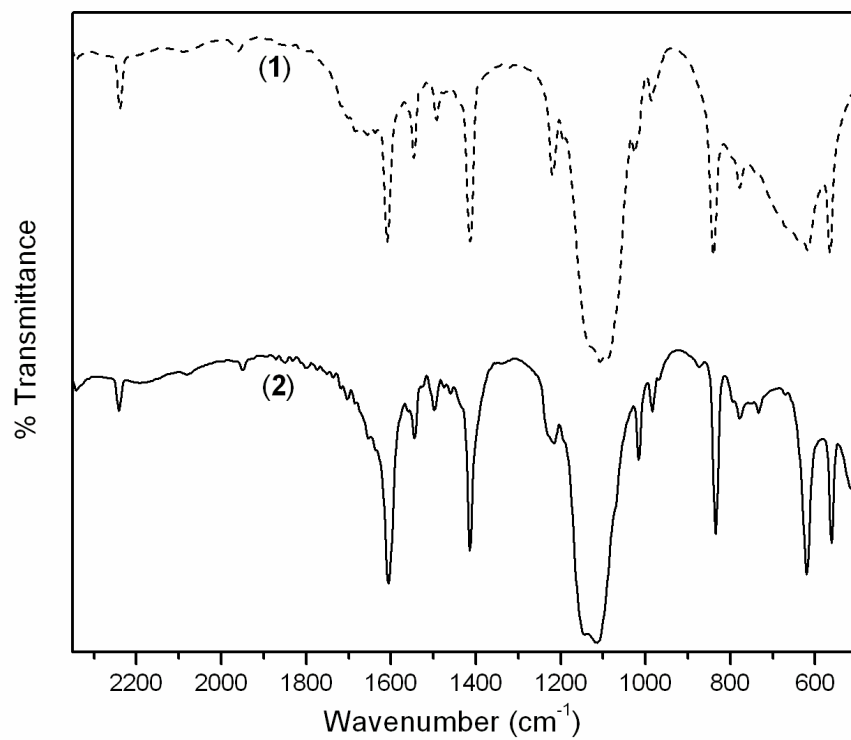
Powder XRD patterns of 1

4.



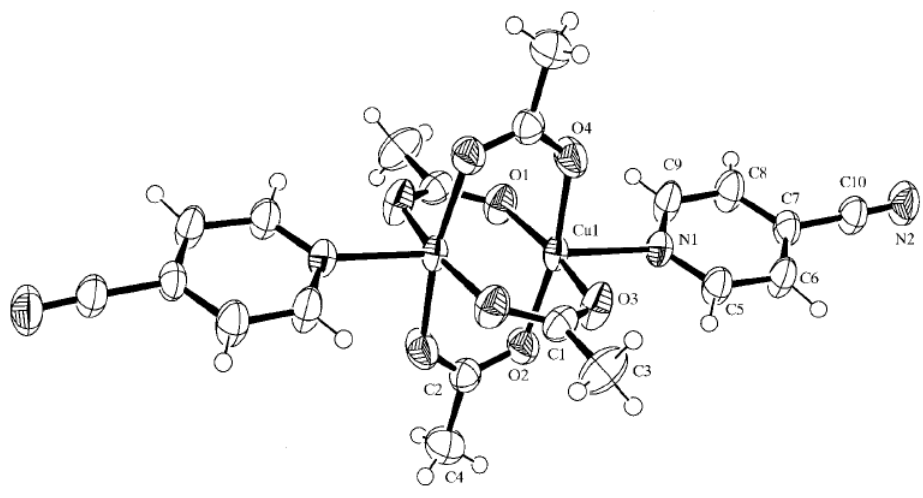
Powder XRD patterns of 2

5.

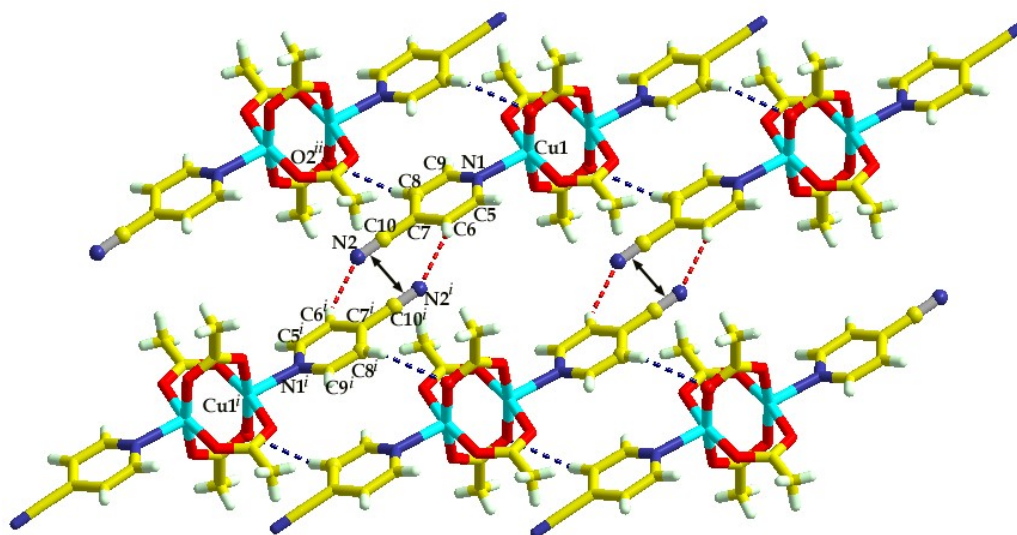


KBr phase IR spectra of 1 & 2

**6. Information on Compound 3,  $\text{Cu}_2(\mu\text{-O}_2\text{CCH}_3)_2(4\text{-CNpy})_2$**



ORTEP



Packing diagram showing  $\pi$ - $\pi$  & C-H...N interactions

#### C-H...N details

Compound <b>3</b>			
C6-H...N2 <sup>i</sup>	2.638(4)	3.433(5)	144.67(14)
C8-H...O2 <sup>ii</sup>	2.698(4)	3.362(4)	128.61(15)

*i*, 1-x, 1-y, -z; *ii*, -x, -y, -z.