

## Supplementary Information

### **Synthesis of mono- and bis-tetrazolato complexes of Ni(II), Pt(II) and Cu(II) via 1,3-dipolar cycloadditions of 2-cyanopyridines with metal ligated azides in N,N,O-aminoiminophenolato complexes**

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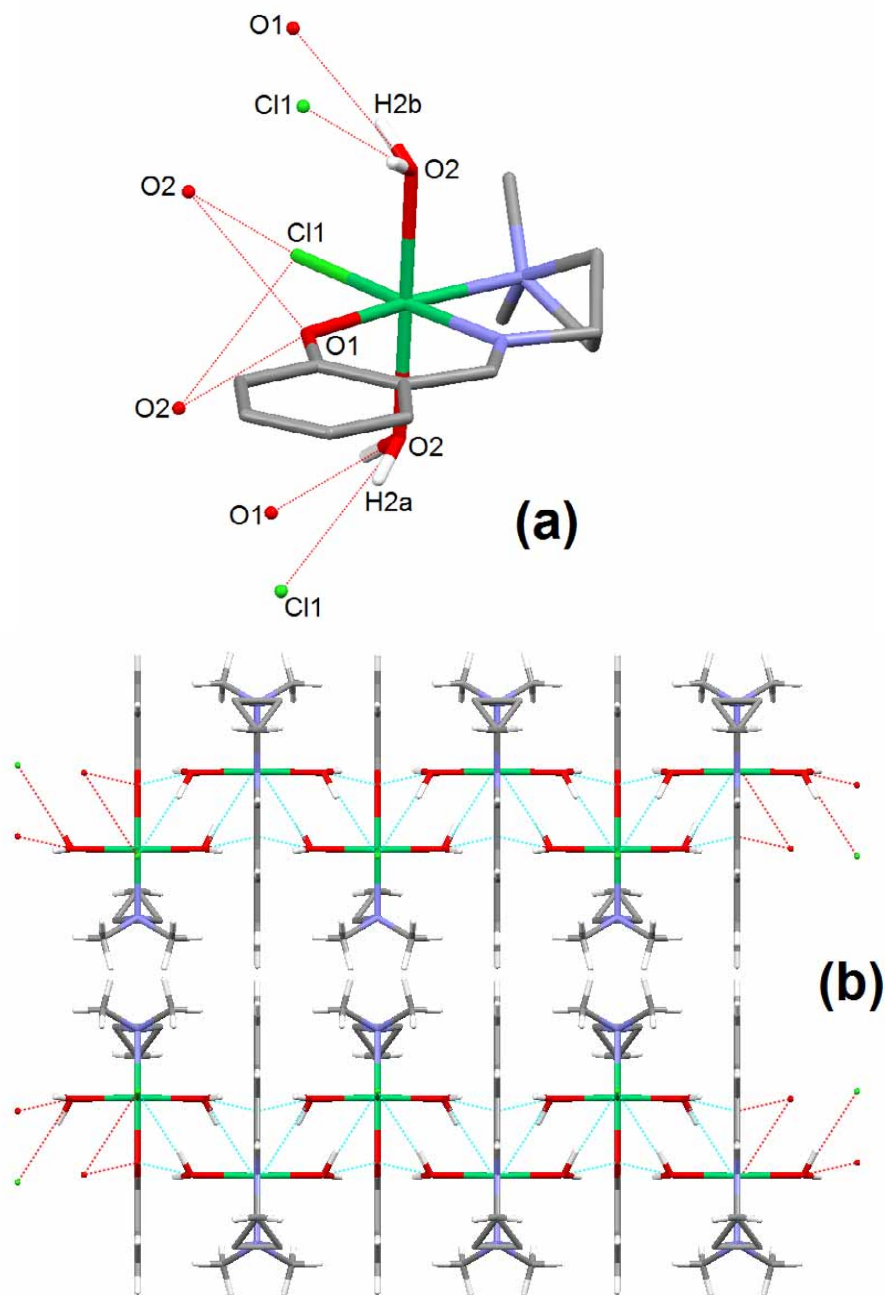


Figure S1 – (a) Hydrogen bond in molecule **1**, D–H...A [ $d(D\cdots A)$  Å;  $\angle(DHA)$  °]: O2–H2a...Cl1<sup>*i*</sup> [2.31 Å, 157.00 °], O2–H2b...O1<sup>*i*</sup> [1.92 Å, 161.00 °] (symmetry code: (i) 1–x, 1/2+y, –z).

(b) Fragment of the crystal packing diagram of **1** along the *a* axis showing the hydrogen bonds (dotted lines) between the chloride ligand and the coordinated water molecules of adjacent molecules resulting in the formation of 1D infinite chains.

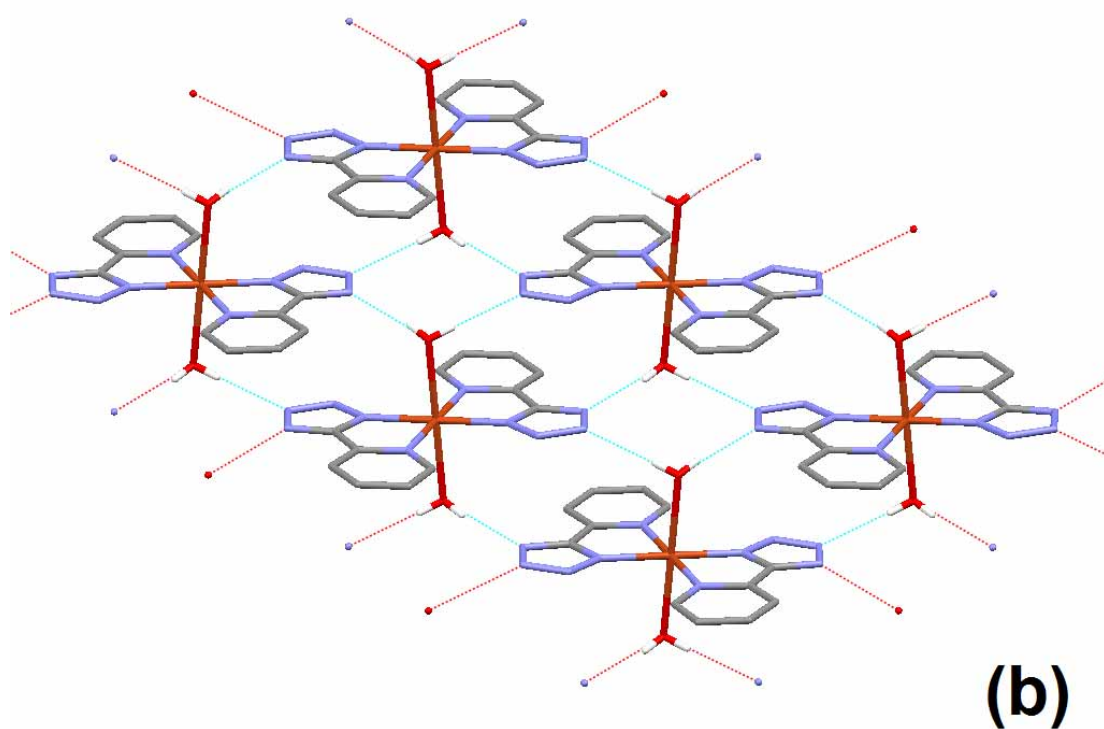
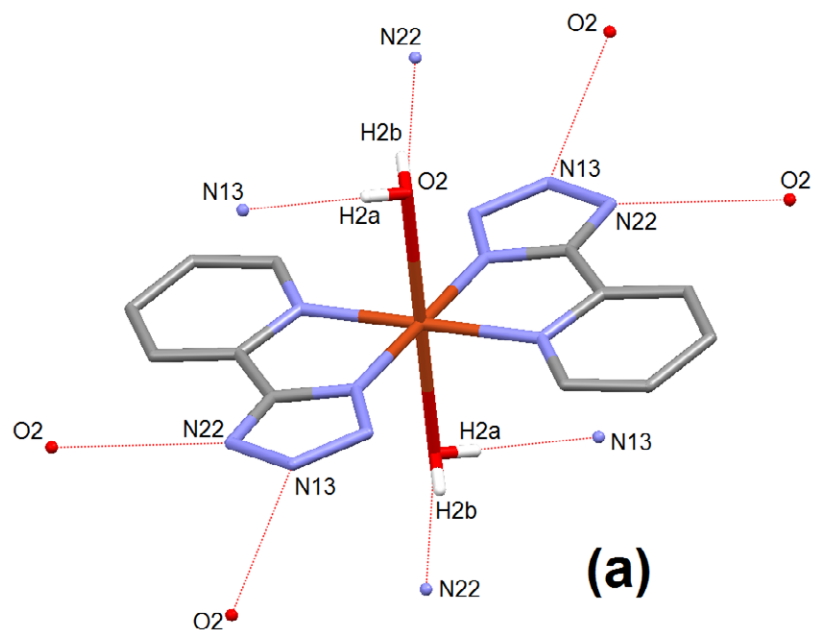


Figure S2 – (a) Hydrogen bond in molecule **8**, D–H...A [ $d(D\cdots A)$  Å;  $\angle(DHA)$  °]: O2–H2a...N13<sup>i</sup> [2.16 Å, 177.4(13) °], O2–H2b...N22<sup>ii</sup> [2.07 Å, 169 °] [symmetry code: (i)  $x, 3/2-y, -1/2+z$ ; (ii)  $-x, 1/2+y, 1/2-z$ ].

(b) Fragment of the crystal packing diagram of **8** along the  $a$  axis showing the hydrogen bonds (dotted lines) between the coordinated water molecules and the tetrazolate nitrogens of adjacent molecules resulting in the formation of 3D framework.