

## Electronic Supporting Information

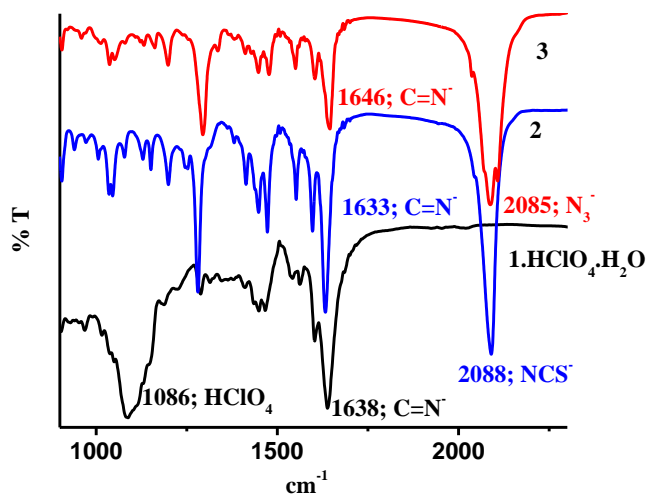
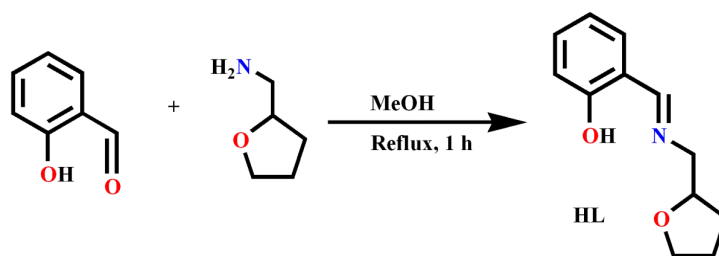
### **Thiocyanato and Azido Coordination Induced Structural Diversity in Zinc(II) Complexes with Schiff Base Containing Tetrahydrofuran Group: Synthesis, Characterization, Crystal Structure and Fluorescence Study**

Haridas Mandal, Sukanta Chakrabartty and Debashis Ray\*

*Department of Chemistry, Indian Institute of Technology, Kharagpur 721 302, India*

*Fax: (+91) 3222-82252; Tel: (+91) 3222-283324; E-mail: [dray@chem.iitkgp.ernet.in](mailto:dray@chem.iitkgp.ernet.in)*

#### **Scheme S1.** Synthesis of ligand HL



**Figure S1.** Comparative FTIR spectra of 1, 2 and 3.

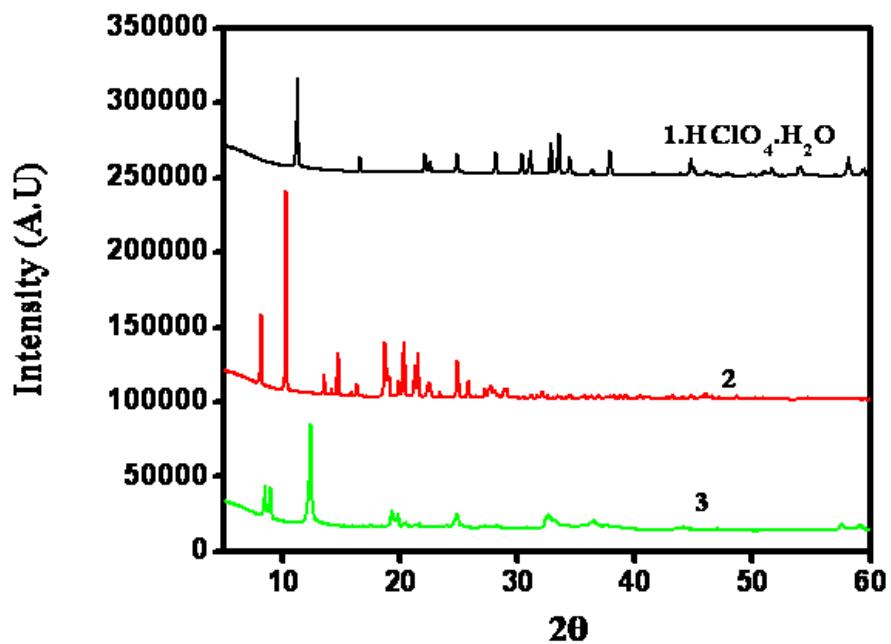
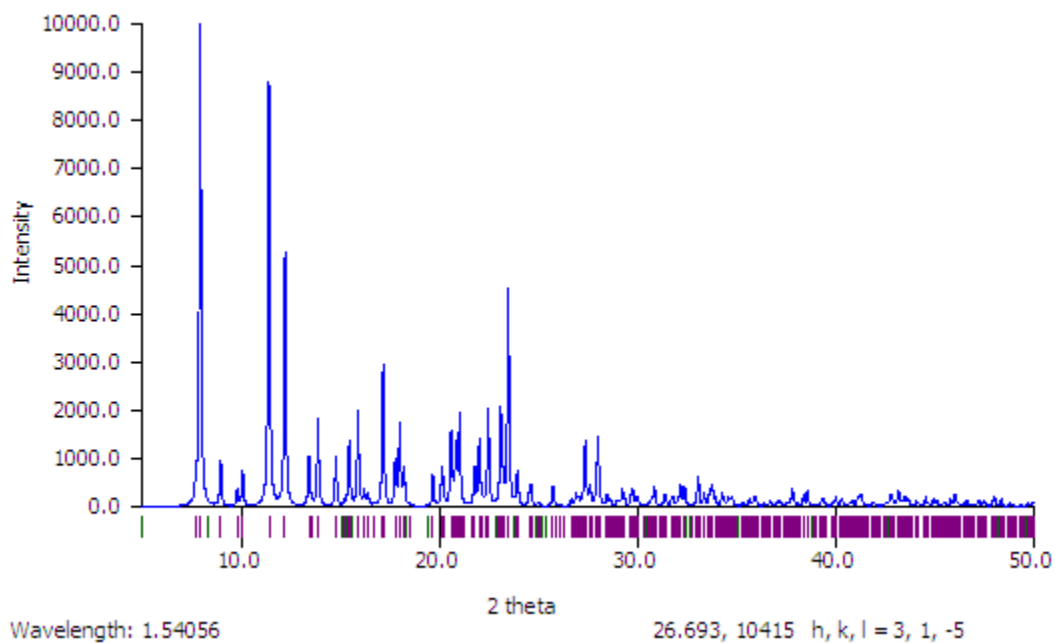
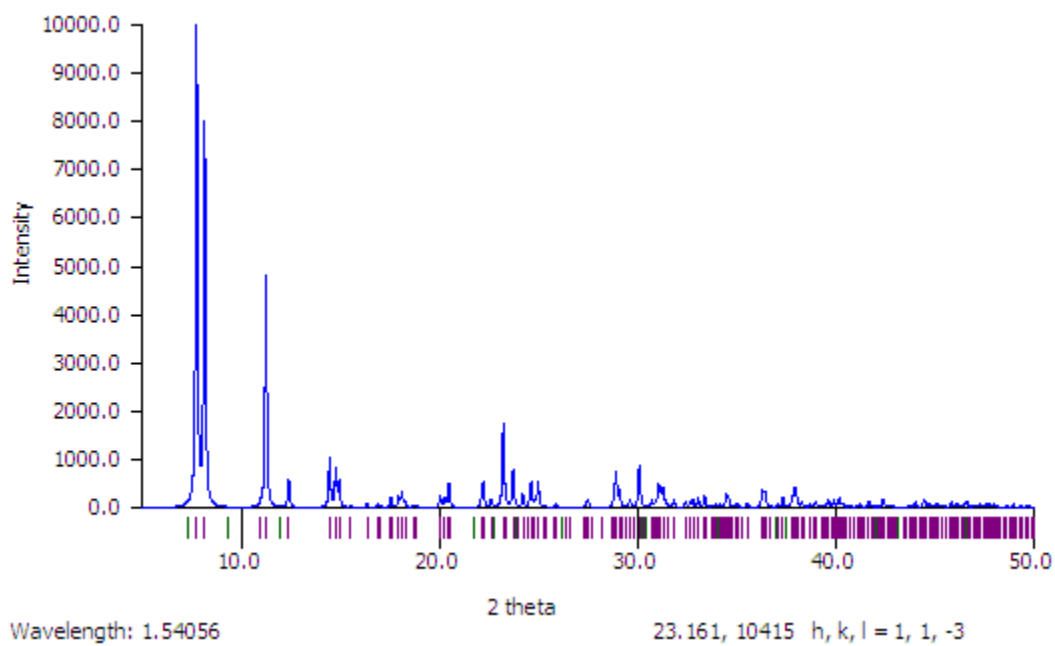
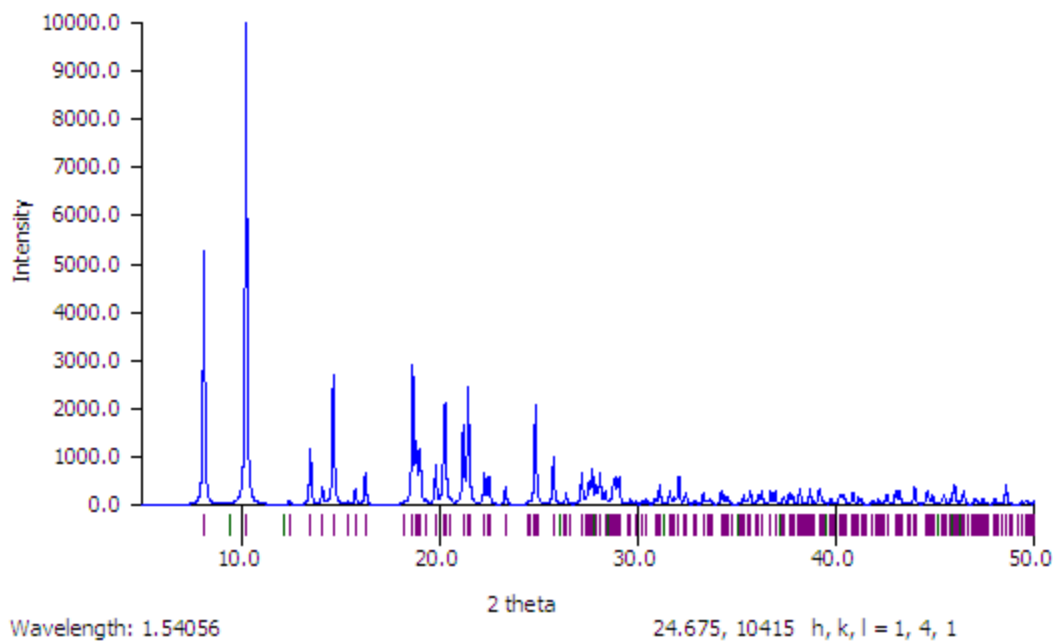
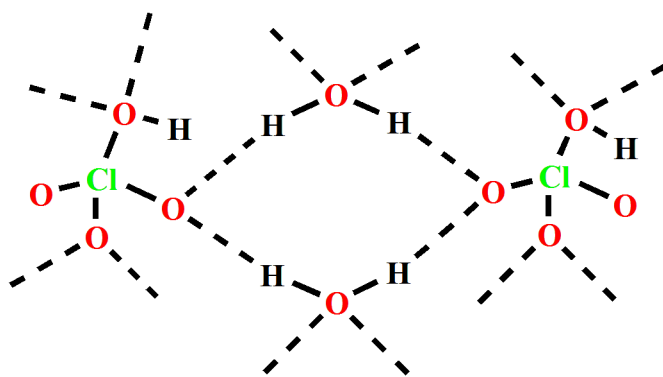


Figure S2. Experimental powder X-ray diffraction patterns for 1, 2 and 3.

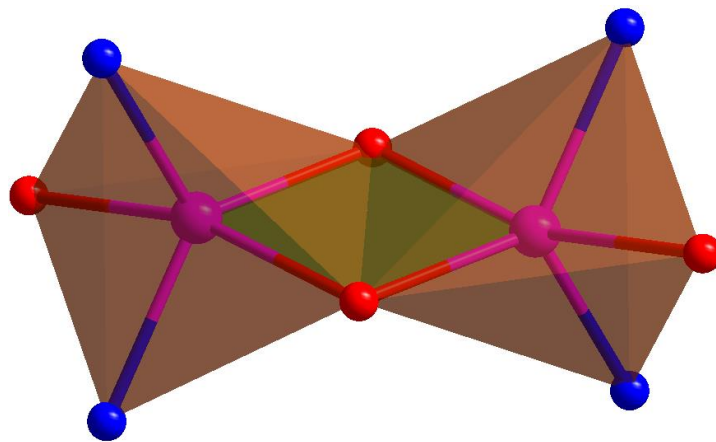




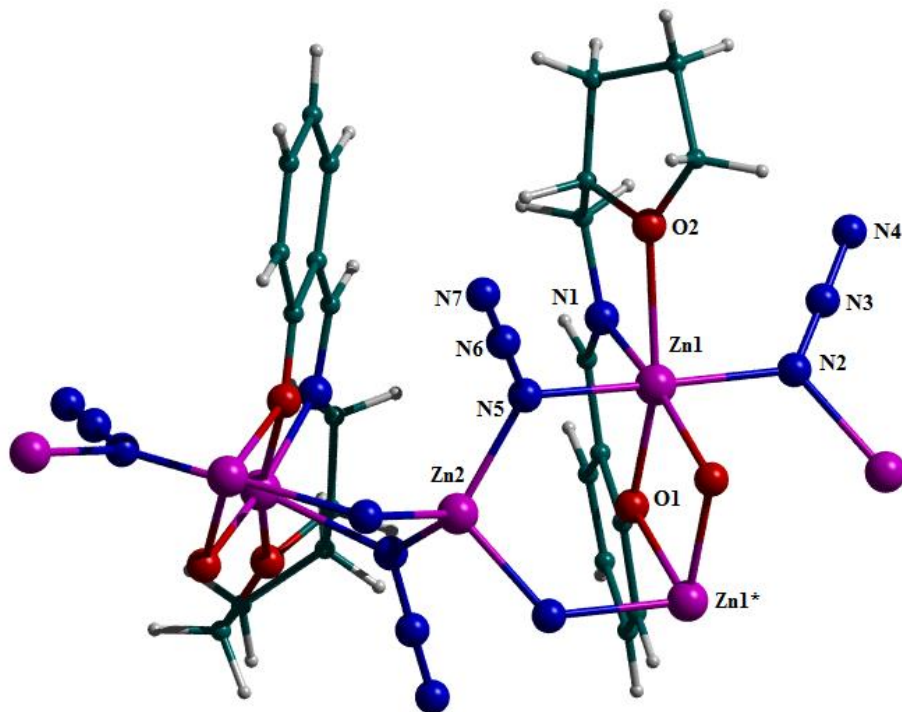
**Figure S3.** Simulated powder X-ray diffraction patterns for **1** (above), **2** (middle) and **3** (below).



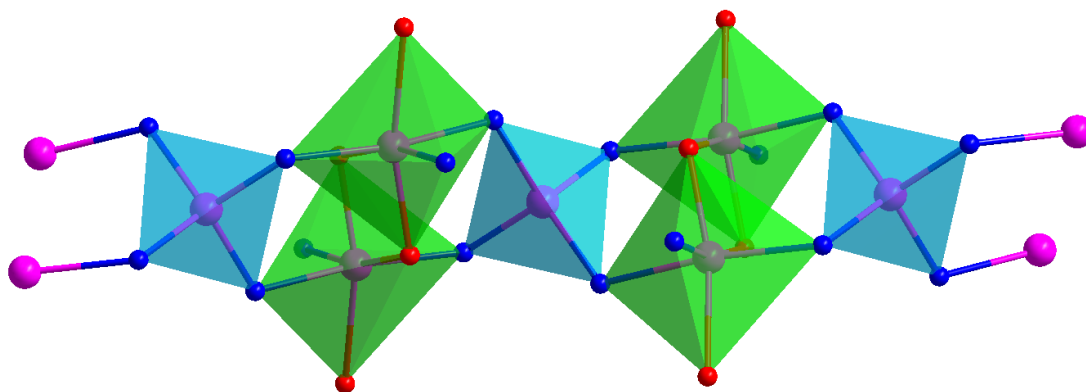
**Figure S4.** Hydrogen bonding interactions connecting two water and two perchloric acid molecules in **1**.



**Figure S5.** Core structure of complex **2** with edge sharing square pyramidal environment.



**Figure S6.** Basic unit of complex **3** with atom number scheme. Color code. C, teal; H, white, N, blue; O, red; Zn, pink. Symmetry code: \* = (-x, -y, -z).



**Figure S7.** Core structure of complex **3** with vertex sharing octahedral followed by tetrahedral units.