

Conformation effect in engineering new magnetic materials

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Description

Among all the potentialities of coordination chemistry, molecular magnetism is very promising as magnetic information can be stored on one molecule. In that sense we developed in our group several strategies in order to obtain such molecular magnets. The idea was to use Schiff base ligands and copper to generate high nuclear complexes. Complexation of different conformation Schiff bases with copper (II) has been investigated. Tetranuclear complex with a cubane like core have been synthesised with conformation DL (Schiff base). With the same base D conformation we obtain a single magnetic chain In this poster, we report the effect of the conformation of the ligand to obtain a different structure and properties, also we report synthesis, crystal structure and magnetic properties of the tetranuclear compound (Cu₄ L₄), and a single chain of copper (CuL).