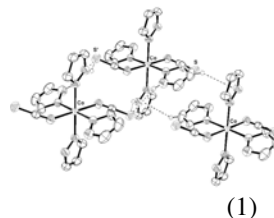


Self-Assemble of Hydrogen-Bonding and π -Stacking Polymers for Transitions Metals Complexes.

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This work presents the structural parameters of three complexes aiming to elucidate the presence of the non-covalent interactions. The diisothiocyanatetetrakis(pyrazol)cobalte(II) (1) and diisothiocyanatetetrakis(pyrazol)nickel(II) (2) self-assemble into linear infinite one-dimensional coordination polymers through intermolecular hydrogen bonding. Each pyrrolic nitrogen atom forms two hydrogen bonds with the sulfur atom of the adjacent monomer. In addition, the crystalline packing is influenced by both, C-H \cdots π and aromatic $\pi\cdots\pi$ stacking. In the other complex, trans-diisothiocyanatebis (pyrazol) copper(II) (3) two sulfur atoms of the pseudohalide ligands in neighboring units complete the elongated octahedral geometry around the copper atoms, building a two-dimensional polymer. The crystalline packing is influenced by both N-H \cdots π and aromatic $\pi\cdots\pi$ stacking.



(2)

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