Poster Presentation

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Twinned crystal of copper (II) complex [Cu $(H_2O)_2(CH_3{\neg}OC_6H_4COO)_2$]

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A new twinned crystal of complex,(Cu(H2O)2[Cu(H2O)2(CH3OC6H4COO)2]1 has been synthesized by direct reaction of copper acetate monohydrate with anisic acid (CH3OC6H4COOH) in presence of triethylamine in methanol. Complex [1] was characterized by elemental analysis, TGA, IR and UV-visible spectroscopies and X-ray crystallography. It crystallizes in triclinic system, space group P21 with lattice parameters, a = 7.3391(10) Å, b = 5.797(9) Å, c = 19.642(3) Å, β = 93.93(5) °, Z = 2, V= 833.603(4) Å3. Each copper (II) ion is tetrahedrally coordinated by two O atoms of two 4-methoxybenzoate ligands and two O atoms of water molecules. The compound contains two crystallographically independent molecules noted as A and B with both Cu1A and Cu1B being almost in perfect tetrahedral environment. The antimicrobial study of the synthesized complex 1 was investigated and showed higher antibacterial activity against test –organisms comparing with ligand.

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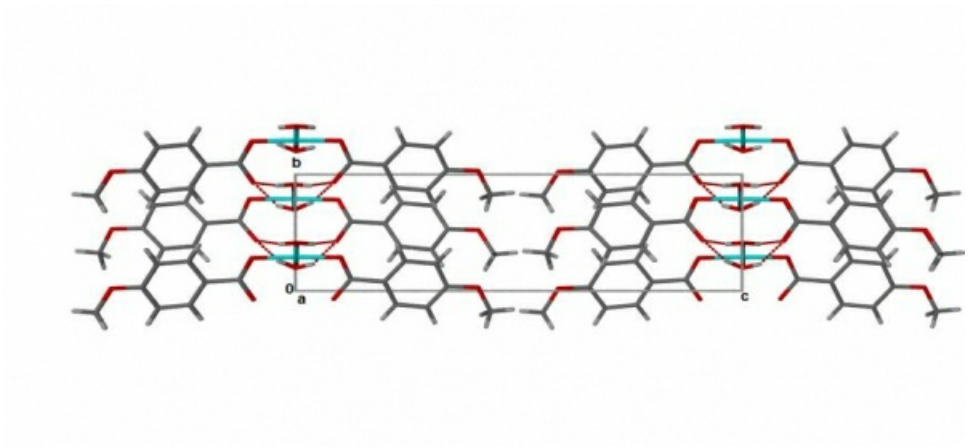

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