Planarity of tuberculostatic (aryl)heteroaryl- and heteroarocarbonimidyl-dithiocarbazonic acid esters

Keywords: planar, structural chemistry, interactions, SAR

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A cyano-bridged MnIII–FeIII complex, \([\text{Mn(L)}_2\text{Fe(CN)}_6\text{][Na}_2\text{Na}][\text{FeOH}_2]_2\) (1) (L=N,N-bis(5-bromo salicylidene)2,2-dimethyl-1,3-diaminopropane) was prepared and characterized. The compound 1 crystallizes in Trigonal space group P321 with a= 28.5554, b= 28.5554, c= 19.2155 Å, y= 120.00°. Single crystal X-ray analysis reveals that the complex assumes a cyano-bridged MnFe unit. The four CN in the equatorial plane of the \([\text{Fe(CN)}_6]^3-\) moiety bridge four Mn ions, each in the cis position, which results in a 3D neutral layered structure giving a \([-\text{Mn–NC–Fe-CN–Mn–}]+\) linkage. The Mn ion assumes an elongated octahedral geometry, in which the equatorial sites are occupied by N2O2 donor atoms of the Schiff base ligand, and the two axial positions are filled by two cyanide ion of \([\text{Fe(CN)}_6]^3-\). The magnetic measurement showed this complex to exhibit ferromagnetic behavior.

Keywords: fullerenes, low-temperature structures, magnetic structural phase transitions

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Structure and Magnetic transitions in ionic fullerene complexes with metalloporphyrins

Keywords: cyanide complexes, molecular magnets, crystal engineering