Title:	Polymeric Hg(II) and dimeric oxo-bridged manganese(II) complexes derived from N′-(2-methyl-benzoyl)-hydrazinecarbodithioic acid methyl ester: Synthesis, spectral and structural characterization
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Abstract:	Reaction of N′-(2-methyl-benzoyl)-hydrazinecarbodithioic acid methyl ester (H2mbhe) with HgCl2 and Mn(OAc)2. 4H2O yielded the polymeric [Hg3(tot)2(μ-SCH 3) 4] n (1) and dimeric [Mn2(Hmbhe)2(μ-mbmst)2] CHCl3 (2), respectively. These complexes have been synthesized and their structures investigated by elemental analyses, NMR, IR, UV-Vis and single crystal X-ray data. In one unit of the polymeric structure of complex 1, two Hg(II) are similar bonded to an exocyclic sulfur of oxadiazole and three sulfur of SCH3 whereas one Hg(II) is two coordinate linked to two SCH3 fragments. Thus, complex 1 shows the presence of tetrahedral as well as linear Hg(II) in the same molecule. The dimeric octahedral complex 2 contains thiadiazolyl hydrazide moiety (mbmst) formed from H2mbhe under thermal condition which is bonded in a tetradentate manner by two nitrogens and one bidentate bridged oxygen between two Mn(II) centers. In the solid state both complexes are stabilized by intermolecular hydrogen bonding and form supramolecular architecture.
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