Manganese(II) *β*-diketonate complexes with pyridin-4-one, 3-hydroxypyridin-2-one and 1-fluoropyridine ligands: molecular structures and hydrogen-bonded networks

Anže Čavić, Franc Perdih*

Faculty of Chemistry and Chemical Technology, University of Ljubljana, Večna pot 113, SI-1000 Ljubljana, Slovenia

STATEMENT OF NOVELTY

Herein, we describe a preparation and XRD structure of novel manganese(II) bis(4,4,4-trifluoro-1-phenylbutane-1,3-dionate) complexes with pyridin-4-one (pyon), 3-hydroxypyridin-2-one (hpyon), 1-fluoropyridine (pyF) and methanol. Molecular structures are discussed and supramolecular aggregations are presented showing several non-covalent interactions present such as N–H···O, C–H···O, C–F···π and π···π interactions leading to 2D or 3D supramolecular structures. This study provides an insight on the influence of different types of ligands on the molecular structure and crystal architecture. Such cases are valuable examples that can help to understand the covalent and non-covalent factors governing the supramolecular aggregation important for crystal engineering and crystal structure prediction.