

**SYNTHESIS AND CHARACTERIZATION OF MANGANESE (II)
COMPLEXES WITH N, O- DONOR SCHIFF BASE**

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ABSTRACT

SYNTHESIS AND CHARACTERIZATION OF MANGANESE (II) COMPLEXES WITH N, O- DONOR SCHIFF BASE

Two Schiff base ligand has been synthesized by the condensation of salicylaldehyde with aniline and 1,2-diaminocyclohexane which produced p-benzalaminophenol [SB1] and N,N'-bis(salicylidene)cyclohexanediamine [SB2] respectively. The ligands were further synthesized with manganese (II) acetate which produced [Mn(II){SB1}] and [Mn(II){SB2}] complexes. These ligands and complexes were then characterized by elemental CHN analysis, FTIR, UV-Vis, ¹H-NMR and ¹³C-NMR spectroscopies. FTIR, UV-Vis, ¹H-NMR and ¹³C-NMR spectroscopic data revealed that the ligands acted as bidentate ligand for [SB1] and tetradentate ligand for [SB2]. While FTIR and UV-Vis spectroscopic data showed that the ligands from [SB1] and [SB2] were coordinated to Mn atom through both the azomethine N atoms and phenolic O atoms to become as their complexes.