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# Preparation and characterization of Manganese, Cobalt and Copper complexes of tetradentate N<sub>6</sub>-macrocyclic ligand

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**Abstract:** Macrocyclic complexes of Mn, Co and Cu via Schiff base reactions. These 12-membered tetradentate N<sub>6</sub>-macrocyclic complexes were characterized by elemental analysis, conductance, magnetic susceptibility measurements and the spectral studies like IR spectra, Electronic spectra and NMR spectra. Thus, the macrocyclic ligand coordinates through imine and secondary amine nitrogens of the macrocyclic ring. The spectral data suggest that the complexes of metal chlorides have octahedral and that of metal sulphates have tetrahedral geometry.

**Keywords:** Synthesis, Characterization, L-glycine, Complexes of Mn<sup>II</sup>, Co<sup>II</sup>, Cu<sup>II</sup>.

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