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Synthesis and Characterization of Some Novel Amino Acid Schiff Base Fe(II) Complexes

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ABSTRACT

New Fe(II) complexes of N-salicylidene- and N-naphthylideneamino acids (H_2L) were prepared and characterized by elemental, electronic and IR spectral analyses, conductance and magnetic moment measurements and spectrophotometric determination of the stoichiometry. The stability and solubility of the prepared complexes were determined. The investigated Schiff bases exhibited monodentate divalent tridentate coordination and formed chelates of octahedral structures of the general formulae $[Fe(HL)_2] \cdot nH_2O$ and $[FeL(H_2O)_3]$ where HL = mono-anion and L = dianion of amino acid Schiff base ligand.

Key Words: Amino acid; Schiff base; Fe(II); Complexes.

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