

Studies on Mixed Ligand Complexes of Zinc (II) With Paracetamol and Amino Acids

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Abstract: *The Study was aimed at investigating the suitability of Paracetamol-amino acid novel metal (II) complexes. Synthesis of mixed ligand zinc (II) complexes of type $[M(par)(L)].2H_2O$ have been carried out by using Analgesic drugs Paracetamol (par) as a primary ligand and Amino acid (HL) such as L-Valine, L-Threonine and L-Serine as a secondary ligand. Synthesized metal (II) complexes have been characterized on the basis of elemental analysis, electrical conductance, room temperature magnetic susceptibility measurement and spectral analysis which include UV, IR and XRD techniques. An electrical conductance studies indicates non-electrolyte nature and magnetic susceptibility measurement revealed paramagnetic nature of the complexes. UV spectra shows intra-ligand, charge transfer and d-d transition and IR spectra confirm bonding of metal ion through O or N donor ligands which further indicates complexation. The agar cup method and tube dilution method have been used to study antibacterial activity of the complexes against pathogenic bacteria such as Aureus, C. Diphtheriae, S.Typhi and E.coli.*

Keywords: Mixed Ligand Complexes, Paracetamol, Amino Acids, Metal ion

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