



**Spectroscopic Analysis And Antibacterial Evaluation of
Some Mixed Ligand Complexes of Zn(II)**

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ABSTRACT

Mixed ligand complexes of Zn(II) with 5-nitrosalicylaldehyde (HL) as primary ligand and various secondary ligands (HL') like salicylaldehyde, substituted salicylaldehyde, 2-hydroxyaryl ketones or β -diketones have been synthesized in 1:1:1 molar ratios. The resulting complexes have been characterized by various physical and spectral studies. From the analytical and spectral data the stoichiometry of these complexes have been found to be $[M(L)(L')(H_2O)_2]$. It has been found that complexes exhibited octahedral geometry. At the same time, above mentioned complexes and ligands were studied for in vitro antimicrobial properties and found to be more potent bactericides than parent ligands.

Keywords: Mixed ligand complexes, β -diketones, octahedral geometry, antimicrobial properties.
