



Synthesis, Characterization and Biological Evaluation of Mixed Ligand Complexes of Co(II) and Cu(II)

P. Shabana and K. Sudhakar Babu*

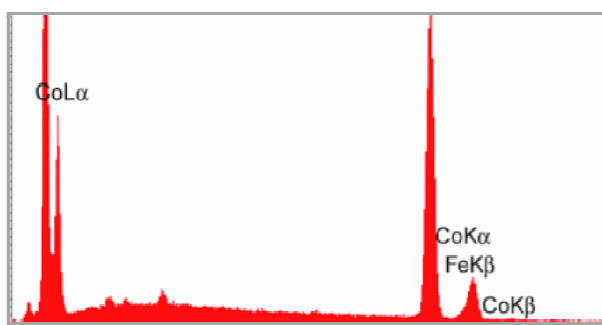
Department of Chemistry, Sri Krishnadevaraya University, Anaparthi 515-003, A.P. **INDIA**
Email: shabanajara18@gmail.com

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ABSTRACT

The Schiff base prepared from condensation between (3,4,5-Trimethoxy benzaldehyde) and 4-Amino antipyrine. [4-(3,4,5-Trimethoxy-benzylideneamino)-1,2-dihydro-2,3-dimethyl-1-phenylpyrazol-5-one] (TMBAAP) is taken as primary ligand and an amino acid L-Tryptophan is added as Co-ligand through refluxation to form mixed ligand metal complex. The mixed ligand complexes $[M(TMBAAP)(Try)(H_2O)_2]$ where (M= Co, Cu metal ions) were characterized employing elemental analysis, UV-visible, FTIR, and SEM spectral techniques. The characterization elucidates structural features and suggested octahedral geometry with respect to the obtained metal complexes. The invitro antibacterial and antifungal assay of mixed ligand was evaluated. The details of results pertaining to Synthesis, Characterization and Biological evaluation of Mixed Ligand Complexes of Co(II) and Cu(II) are well presented in the present research investigation.

Graphical Abstract



EDAX graph of Cobalt mixed ligand complex
 $[Co(TMBAAP)(Try)(H_2O)_2]$

Keywords: Schiff base, Mixed ligand metal complex, SEM-EDAX, Anti-bacterial, Anti-fungal assay.