



Synthesis, Characterization and Antimicrobial Activity of Some Schiff Base Metal Chelates

Smita*

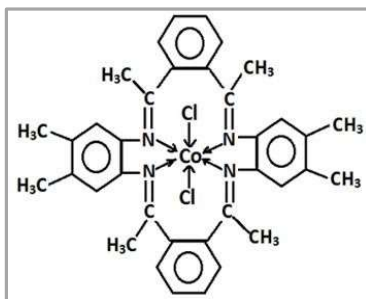
Department of Chemistry, MDDM College, B.R.A. Bihar University, Muzaffarpur, Bihar, **INDIA**
Email: drsmita1033@gmail.com; drpkvs27@yahoo.com

Accepted on 9th March, 2025

ABSTRACT

The aim of the study focuses on the synthesis of Schiff base metal complexes and their antimicrobial evaluation. A novel Schiff base was synthesized from 1,2-diacetylbenzene and 4,5-dimethyl-o-phenylenediamine, followed by complexation with Cu(II), Co(II), and Ni(II) ions. The resulting complexes were characterized using conductivity measurements, magnetic susceptibility, IR, and electronic spectroscopy. Their antibacterial activity was assessed using the disc diffusion method.

Graphical abstract:



Structure of the macrocyclic complex [Co(Mac)Cl₂]

Keywords: Coordination, Schiff base ligands, Infrared, UV-Vis, Antibacterial activity.