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Antimicrobial applications of Cadmium (II) complexes derived from substituted 1, 8- Naphthyridines: Synthesis, Characterization and effect on Bacterial strains

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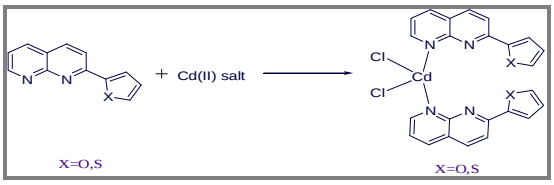
ABSTRACT

Two new monomeric Cd(II) complexes of Substituted 1, 8-Naphthyridines with general formula $[Cd(L)_2Cl_2]$ have been synthesized (where $L=L_1$ or L_2). The structural assignment of complexes thus prepared was based on Elemental analysis, IR, Mass, UV, NMR spectra and thermal analysis. The above studies revealed the tetrahedral geometry around the metal centre. The current compounds were screened for their in vitro antimicrobial activity against Bacillus and Pseudomonas strains, the obtained results shows that complexes exhibit better activity compared to that of free ligand.

Graphical Abstract



Keywords: 1, 8 Naphthyridine derivatives, Cd(II) complexes, spectral studies, Antimicrobial activity.