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Synthesis, characterization and Antimicrobial Activity of Schiff base complexes of Sn(IV)

Pratibha Choudhary¹*, Sushila Dhaka¹ and Sonlata Bargotya²

Department of Chemistry, S.K. Government, P.G. College, Sikar – 332001, INDIA
Department of Chemistry, Govt. P. G. College, Dausa– 303303, INDIA

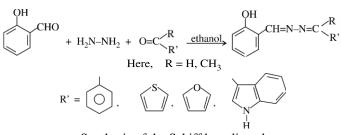
Email: gangadharsaran@gamil.com, b.sonlata@gmail.com

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ABSTRACT

M(IV) complexes of Sn with Schiff base derived from mixed azines were synthesized, characterization by several techniques, including elemental analysis (C,H,N,S), molar conductance, measurements, electronic, IR and NMR spectral studies. A few representative complexes have also been screened for their bactericidal and fungicidal activity and found to be quite active in this respect against bacteria (Escherichia coli, staphylococcus, pseudomonas capacicola), Fungi (Fusarium oxysporum, Aspergillus flavus and Rhizoctonia Phaseoli). The metal complexes were found to be more potent as compared to the ligands.

Graphical Abstract:



Synthesis of the Schiff base ligand

Keywords: Organotin (IV) complexes, mixed azines, NOH donor, antibacterial and antifungal activity.