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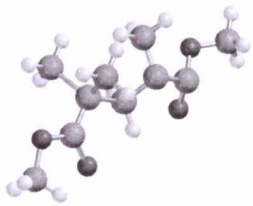

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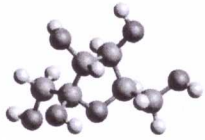

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ANTIMICROBIAL STUDIES OF SCHIFF BASED NOVEL LIGAND AND ITS COMPLEXES

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Abstract

The novel Schiff based ligand is expected to exhibit variety of characteristics such as biological and catalytic properties. Schiff bases are studied widely due to their synthetic flexibility, selectivity and sensitivity towards the central metal atom; structural similarities with natural biological compounds and also due to presence of azomethine group (-N=CH-) which imports in elucidating the mechanism of transformation and racemization reaction biologically. The imine group present in such compounds has been shown to be critical to their biological activities. This review concentrates on the synthesis and microbial properties of Schiff bases and their complexes. The main aim of the present work is to synthesise a novel ligand derived from hydroxypyrimidine and its complexes due to their wide range of application as antimicrobial agents. The Schiff base and metal complexes displayed good activity against the Gram-positive bacteria and Gram-negative bacteria. The antimicrobial results also indicated that the metal complexes displayed better antimicrobial activity. The synthesized ligand was characterized by various physical and chemical methods of analysis such as UV-Vis, FTIR, NMR, fluorescence, CV, TGA and elemental analysis.

Keywords: Antimicrobial Study, Schiff base, pyrimidine derivative.

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NOVEL & SMART SENSING OF ACETATE & HYPOCHLORITE IONS WITH FLUORESCENCE TURN-ON: APPLICATION IN REAL SAMPLE ANALYSIS

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