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## Electrochemical and Biochemical Investigations of Some New Coordination Compounds of Ni (II) with Azomethines Derived from Sulfa Drugs

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## **ABSTRACT**

Some new coordination compounds of nickel (II) have been synthesized by the reaction of nickel (II) acetate with azomethines (Schiff bases) in 1:2 molar ratio using methanol as a reaction medium. Azomethines used in these studies have been prepared by the condensation of 1-acetyl-2-naphthol and 2-acetyl-1-naphthol with sulphadimidine, sulphaguinidine and sulphadiazene in ethanolic medium. An attempt has been made to probe their bonding and structures on the basis of elemental analyses, IR spectral evidences and Cyclic Voltametric studies. Ni (II) compounds have been found to be more active than their uncomplexed ligands as both of them were screened for antibacterial and antifungal studies. Anti-inflammatory activity studies showed the test compounds are comparable to the standard drug Diclofenac sodium.

**Keywords:** Azomethine, Nickel (II) complexes, Antibacterial and Anti-inflammatory activities, Spectral evidences.