Dr. Suraj A. Deshmukh: Schiff Base Ligands: Formation of a Thiadiazole Ring by Vanadium-Induced Cyclization of the Coordinated Ligand

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## Research and Development

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### Schiff Base Ligands: Formation of a Thiadiazole Ring by Vanadium-Induced Cyclization of the Coordinated Ligand

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#### Abstract

Heterocyclic compounds are cyclic compound with the ring containing carbon and other element, the component being oxygen, nitrogen and sulphur. The simplest of the five membered heterocyclic compound are pyrrole, furan and thiophene, each of which contains a single heteroatoms. The five membered ring containing more than one or two heteroatoms also such as azole, pyrrole, thiazole, thiadiazole, oxadiazole, triazene Synthesis of 2-amino -5-substituted -1, 3, 4-thiadiazole (ATDA) from 4-chloro benzoic acid and thiosemicarbazide. In the present investigations synthesis and characterization of Schiff bases synthesized along with transition metal (II) complexes have been attempted due to their wide range of applicability in various field.

Keywords: Schiff Base Ligands; Thiadiazole Ring; Vanadium-Induced Cyclization

#### Introduction

Heterocyclic compounds are cyclic compound with the ring containing carbon and other element, the component being oxygen, nitrogen and sulphur. The simplest of the five membered heterocyclic compound are pyrrole, furan and thiophene, each of which contains a single heteroatoms. The five membered ring containing more than one or two

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