

RESEARCH AND DEVELOPMENT

Name of the Researchers	Department	Research Topic	Year of Completion
Dr. K.R. Dixit Dr. Y.K. Meshram Ms. Jyoti Motiram Laghe	Department of Chemistry	Studies in Physico Chemical properties of some substituted Schiff bases in solution by analytical methods	Ongoing

BRIEF SUMMARY OF THE WORK: The field of Schiff bases and their complexes is fast developing because of the wide variety of possible structures for the legends depending on the aldehyde and amine used. The Chemistry of the carbon nitrogen double bond plays a vital role in the synthesis and medicinal use of metal complexes of Schiff bases. The condensation of primary amines with aldehyde and ketones has a numerous applications; for preparation, detection, determination and purification uses. These applications encourage the workers to prepare these imines for the last 10 decades Schiff bases are the compound containing azomethane group (-HC=N-). They are condensation products of ketone or aldehyde with pri-amines and were first reported by Hugo Schiff in 1864². Formation of Schiff base generally taken place under acids or base catalysis or with heat.

The common Schiff bases are crystalline solids which are feebly basic but at least some form insoluble salt with strong acids. Schiff bases are used as intermediates for the synthesis of amino acids or as ligands for preparation of metal complexes having a series of different structures.

RESEARCH OUTCOMES: Two Paper in Journals and one oral presentation in International. In National Conferences one poster presentation have been published on this work.