PREFACE

The present work is related to the test method development for the toxic aryl amines (Azo Dyes) and to study on Natural dyes as a possible substitute of Synthetic Dyes.

The thesis consists of two parts. The first part reflects the introduction of azo dyes (synthetic dyes). It’s included classification of azo dyes, introduction of synthetic dyes and mechanism of toxic aryl amines. The list of toxic aryl amines is also included in this part. Thin Layer Chromatography, High Performance Liquid Chromatography with Diode Array Detector and Mass Spectrometry Detector, Gas Chromatography-Mass Spectrometry, carries out the identification of toxic aryl amines. The results are compared. The degradation of toxic aryl amines during extraction and its remedy are also given. Determination of some allergenic and carcinogenic disperse dye (synthetic dyes) are also given.

The second part of thesis reflects the introduction and chemical classification of natural dyes. It also consists of class of dyes. The most important work of this thesis is extraction of dyes from Pomegranate, Manjith and Tesu flower and study on isolation and structure determination of isolated compound from Himalayan rhubarb (rheum emodi).