

SYNOPSIS

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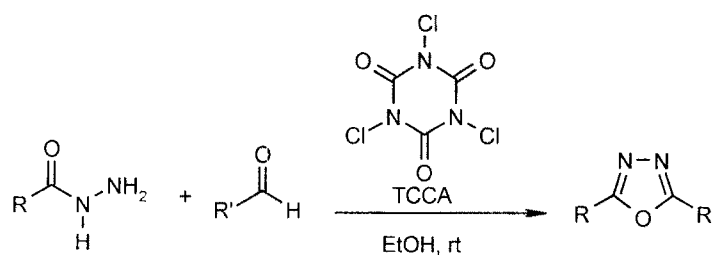
of the dissertation entitled

APPLICATIONS OF TRICHLOROISOCYANURIC ACID IN ORGANIC SYNTHESIS

The dissertation entitled, “ Applications of Trichloroisocyanuric acid in Organic Synthesis” is divided into two Chapters. Chapter I describes a brief review on trichloroisocyanuric acid and Chapter II includes a novel protocol for one-pot synthesis of unsymmetrical 1,3,4-oxadiazoles.

A brief review on trichloroisocyanuric acid [Chapter I] includes the introduction, synthesis, properties and applications of trichloroisocyanuric acid as an oxidizing agent, chlorinating agent, in protection / deprotection chemistry and in miscellaneous reactions.

Chapter II of the dissertation encompasses the introduction, preview of reported methods and scope for one pot synthesis of 1,3,4-oxadiazoles while the other part of it is devoted to the trichloroisocyanuric acid catalyzed one-pot synthesis of unsymmetrical 1,3,4-oxadiazoles by oxidative cyclization of acylhydrazones that are obtained by condensation of aldehydes and acylhydrazines.



All the synthesized 1,3,4-oxadiazoles have been characterized by spectral techniques. (IR, PMR, CMR and MS). The work embodied in chapter II has been accepted for publication in “Synthetic Communications” 2008.

Miss S. M. Mahadik
Research Student

Dr D. M. Pore
Research Guide