**Novel Synthesis of 4-Thiazolidinone Derivatives of Indole**

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Abstract

A new series of indole-based thiazolidinone derivatives have been synthesized by one pot cyclocon-densation reaction of 2-aryl-3-formylindole, 2-aminopyridine and mercaptoacetic acid catalyzed by glacial acetic acid in presence of toluene as solvent. Easy experimental procedure, high yield and shorter reaction time are the imperative features of this method. Thiazolidinone and its derivatives are used for its biological activities such as antiviral, antibacterial, antifungal, antitubercular, anticancer, anti-inflammatory, analgesic etc. 4-thiazolidinones are very interesting bioactive heterocyclic compounds due to their important application in many biological, pharmaceutical and analytical field. All the synthesized compounds have been characterized by their elemental analysis as well as on the basis of their spectral studies (IR, 1H NMR and Mass).

Key words :- 2-Aminonpyridine, Heterocycles, Indole, One pot synthesis, 4-Thiazolidinone.

[Poster presentation]