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Poster Presentation

Interaction of N,N'-Disubstituted Thioureas with Maleimides as Synthetic Approach to 1,3-Thiazolidinones

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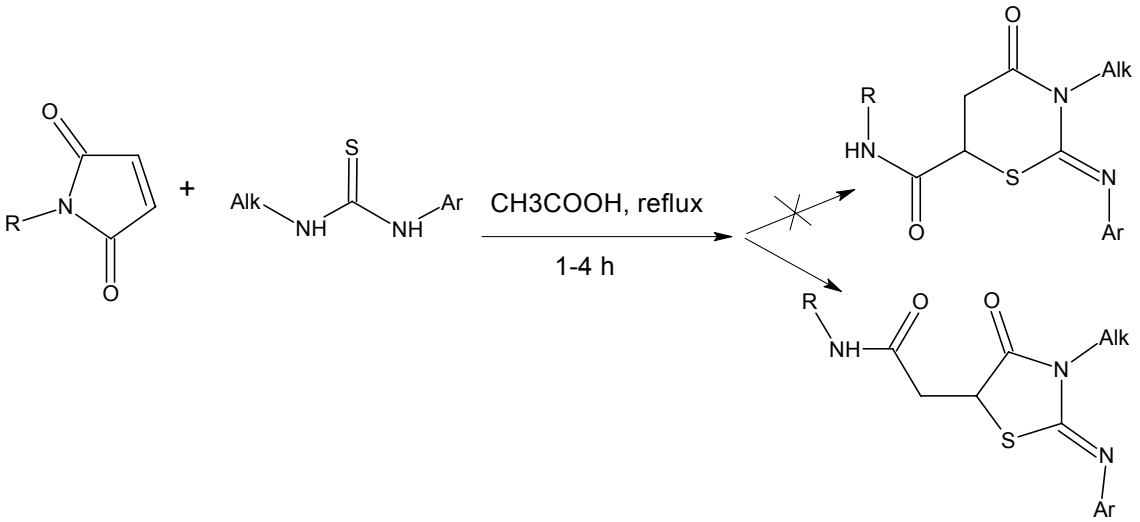
Reaction of N-substituted maleimides with dinucleophiles is well-known to result in recyclization of primary formed adducts. NMR investigations of addition products in reaction of maleimides with thioureas suppose a formation of dihydrothiazinone or thiazolidinone fragment. We showed that reaction of maleimides with thioureas results in formation of thiazolidinone ring. In case of unsymmetrical N-alkyl-N'-arylthioureas derivatives of 3-alkyl-2-arylimino-1,3-thiazolidin-4-one are formed. The reaction conditions were optimized which allowed to obtain more then 1000 compounds with high yields.



R= H, Alkyl, Aryl.

The obtained compounds were characterized by NMR methods, some of compounds were characterized by X-ray analysis.