

Abstract

Due to the wide use of spirocyclic compounds containing heterocycles, especially in medicinal chemistry, this bachelor thesis deals with the preparation of 4-alkylidenepyrazolones and their use to prepare pyrazolone-derived spirocyclic compounds using organocatalysis with tertiary amines. 4-Alkylidenepyrazolones were prepared by Knoevenagel condensation of pyrazolones and aldehydes, the preparation of spiropyrazolones was carried out by the cyclization reaction of 3-nitropropyl-mesylate with suitable 4-alkylidenepyrazolone derivatives.

Key words

4-alkylidenepyrazolones, α,β -unsaturated pyrazolones, Knoevenagel reaction, 3-nitropropyl-mesylate, spirocyclic compounds, spiropyrazolones, organocatalysis