

## **Abstract**

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Title of diploma thesis: Synthetic studies on 5,6-dihydro-2*H*-pyran-2-ones

My aim of the diploma thesis was to enrich library of new derivatives containing the basic skeleton which supposed to be 5,6-dihydro-2*H*-pyran-2-ones, six-membered lactone rings, prepared previously as the leading group of the novel compounds, possessing the influence to play a significant role in anticancerous products. The basic way of synthesis intended was proposed to carry out the reactions, already mentioned in the literature and improve the conditions of them. My further afford was to establish protocol yielding to enrich library of novel substituted 5,6-dihydro-2*H*-pyran-2-ones. However, all my attempts did not to suit out any suggested model of the reactions.

Key words: 5,6-dihydro-2*H*-pyran-2-ones, Pd catalyst, Migita-Stille coupling