

## Abstract

With regard to a fast development in the field of fluoroorganic chemistry, the intention of this diploma thesis is focused to utilize of organocatalysis by secondary amines as catalysts for preparation enantiomerically pure compounds containing fluorine atom in its structure. The preparation of these substances is realized by way of nucleophilic addition to  $\alpha,\beta$ -unsaturated aldehydes using suitable fluorine containing nucleophilic agent 1-(fluoronitromethylsulphonyl)benzene, to get appropriate 1,4-adduct.