## **Abstract**

## **Charles University**

## Faculty of Pharmacy in Hradec Králové

Department of Pharmaceutical Chemistry and Pharmaceutical Analysis

Candidate: Alois Daněk

Supervisor: doc. PharmDr. Radim Kučera, Ph.D.

Title of thesis: The employment of HPLC in the field od chiral separations IV.

The requirements for the quality and safety of medicines are constantly growing at present. Drugs are often chiral substances. Therefore, the importance of chiral separations is increasing. Direct separations using chiral stationary phases are the most used in this field. Silica gel, which is most often used as a carrier for chiral selectors, may contain metal impurities on its surface, which may negatively affect the separation process. This thesis focuses on testing the influence of chromatographic conditions on chiral and achiral interactions of nine selected analytes with the stationary phase. A column with β-cyclodextrin as chiral selector was used for the testing.