Abstract

Charles University

Faculty of Pharmacy in Hradec Králové

Department: Department of Pharmaceutical Chemistry and Pharmaceutical

Analysis

Candidate: Jakub Burda

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

Title of Thesis: The employment of HPLC in the field of chiral separations V.

Continuously growing requirements of regulatory authorities for the quality and safety of medicines put a high pressure on manufacturers. Last decades are marked by optically pure drugs, whose developement goes hand in hand with developement of chiral syntheses and separations. The most used method in the field of separations are direct separations using chiral stationary phases. The most often used carrier for these stationary phases is silica, which may contain metal impurities on its surface, negatively impacting separation process. The focus of this thesis was testing of influuence of chromatographic conditions on chiral and achiral interactions of seven selected analytes with stationary phase. Column with native β -cyclodextrin as chiral selector was used for the testing.