Abstract

This bachelor thesis deals with the characterization of the anion exchange column by the linear solvation energy relationship (LSER) model. The aim of this bachelor thesis was to find optimal conditions suitable for separation of thiazide diuretics (trichlormethiazide, bendroflumethiazide, buthizide, chlorthalidone, mefrusid) on PhenoSphereTM 5μm SAX 80 Å column. These experimental conditions were used for measuring the retention factors of LSER analytes. The multiple linear regression was consequently applied to the retention factors to calculate the LSER regression coefficients, describing the interactions between the stationary phase, the mobile phase and the analytes.