ENANTIOSELECTIVE SEPARATION OF SUBSTITUTED AMINO ACIDS UTILIZING CINCHONA ALKALOID-BASED CHIRAL STATIONARY PHASES

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Applying chiral stationary phases is a highly favored choice for enantioseparation purposes due to its versatility both in analytical and preparative scales. Among others, *Cinchona* alkaloid-based ion-exchanger type chiral stationary phases are particularly noteworthy in the case of enantioseparation of amino acids and their derivatives.

The changes in the chromatographic parameters were investigated by varying of the methanol and acetonitrile content of the bulk solvent, the nature of the acid and base additives, and the temperature of the stationary phase. The stoichiometric displacement model was used to study ionic interactions by varying the concentration of the additives. Evaluation of structureretention relationships was done on the basis of the effects of the various structures of the applied analytes and the elution order of their stereoisomers utilizing different selectors as stationary phases.

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