

## **Abstract**

Drugs used in the pharmaceutical industry often occur as a mixture of several isomers with a different biological activity. In a case that some isomer provides an undesirable side effect, it is important to separate it from the mixture and check the chiral purity of a drug. Capillary zone electrophoresis plays a significant role in chiral separations. A different affinity of isomers to complexation reagent is used for their separation from each other. The extent of their interaction is characterized by the complexation constant. Most commonly the cyclodextrins are used for the chiral separations of  $\beta$ -blockers and they could be in neutral or charged form. They probably interact with them through the creation of inclusion complexes. A successful baseline enantioseparation of all the  $\beta$ -blockers that have been studied, labetalol, pindolol, alprenolol and atenolol, was provided by using the background electrolyte containing charged cyclodextrins. The highest resolution of peaks was observed using sulfated cyclodextrins.