

**The enantiomeric analysis of chiral derivatives of phenoxypropionic acid by HPLC using polysaccharide chiral stationary phases**

**Chair of Physical and Analytical Chemistry, Faculty of Exact and Natural Science, Iv.Javakhishvi Tbilisi State University**

The derivatives of phenoxypropionic acid are widely used as agrochemicals (mostly herbicides). Most of above mentioned derivatives are chiral substances and nowadays the aspects of their action, accumulation in agrochemical plants and their degradation is mostly unknown.

The aim of this work is the development of new methods of analysis by HPLC using new types of polysaccharide chiral stationary phases and polar-, organic-, normal- and reversed phase eluents. Especial attention in the present project will be paid to the enantioseparation mechanisms. The effect of the composition of the stationary and mobile phase, as well as separation conditions on the enantiomer elution order will be studied. At the present stage the screening of enantiomer separations only with polar-organic mobile phases are performed. The results of these studies are highlighted in the presentation.