

# Our studies about chirality, chiral recognition mechanisms and enantioseparations in 2015

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Abstract:

In this presentation those of our current studies are discussed which were either published or accepted for publication in 2015 in the international journals with impact factor. These studies basically relate to chirality, chiral recognition mechanisms and separation of enantiomers by using various methods. In the first group of our studies the separation of enantiomers of chiral compounds representing various structural and pharmacological groups were studied by using high-performance liquid chromatography (HPLC) and polysaccharide-based chiral columns. In these studies especial attention was paid to the elution order of enantiomers [2, 3, 6]. Two published papers are devoted to separation of enantiomers in capillary electrophoresis [1] and capillary electrochromatography [8]. Another two papers were published about the preparation of a synthetic analogue of natural polyether with anticarcinogenic properties [4] and determination of absolute stereochemistry of its potential monomer [7]. One of the papers described the first chip-based system for ultra-fast separation of enantiomers based on high-performance liquid chromatography [5] and one paper was accepted for publication about the separation of enantiomers on the stationary phases prepared by covalent attachment of polysaccharide derivatives to the surface of silica [9].

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