Full Paper

Registration Code of Publication: 11-27-16-42 Publication is available for discussion in the framework of the on-line Internet conference "Butlerov readings". http://butlerov.com/readings/ Contributed: August 17, 2011.

Retention simulation by polystyrene sorbents in RPh HPLC

© Irina V. Frolova, Sergey V. Prokopov, and Svetlana V. Kurbatova*⁺

Department of Physical Chemistry and Chromatography. Samara State University. Acad. Pavlov St., 1. Samara, 443011. Russia. Fax: +7 (846) 334-54-17. E-mail: curbatsv@ssu.samara.ru

*Supervising author; ⁺Corresponding author

Keywords: Reversed-phase high performance liquid chromatography, hypercrosslinked polystyrene, octadecylsilica gel, retention models, correlations between retention and eluent content.

Abstract

A comparison of the retention characteristics of organic compounds of varying chemical nature on octadecylsilica gel and nanoporous hypercrosslinked polystyrene has been carried out. The applicability of the known models for the retention characteristics of the dependence of retention on the composition of mobile phase in the conditions of the reversed-phase high performance liquid chromatography has been studied.