



ESI 2 Temperature influence on the separation of selected sugar phosphates. Analysis was carried out on LC MS/MS system utilizing PGC analytical column and 1% (v/v) formic acids solution as mobile phase at 1 ml min^{-1} flow rate in isocratic mode. Chromatographic selectivity (α) was calculated for anomer separation. In case of S7P, selectivity was calculated for two most abundant peaks. At equilibrium G6P in solution exists in 40% pyranose α -anomer and 60% pyranose β -anomer³², therefore two peaks were observed. However substitution group on C1 atom influences ratio between α - and β - anomers. Bulkier substitution group favor in occurrence of α - anomer, consequently G1P is only in alpha form in solution resulting in one peak. Fructose in solution at equilibrium mainly forms 65% β - anomer of pyranose and 25% β -anomer of furanose. For F6P one peak was observed because C6 is substituted with the phosphate group and therefore formation of the pyranose cycle is not possible. S7P also can form pyranose cycle with α - and β - anomer around hemiacetal carbon. The third peak could correspond to the open chain form of S7P.