

Abstrakt v anglickém jazyce

Charles University

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Title of diploma thesis: Use of silica sorbents for on-line solid phase extraction in flow methods.

The diploma thesis is devoted to the extractions of substances such as Methylparaben, Butylparaben, α -tocopherol, Cholecalciferol, Sudan I, II and IV, β -estradiol, Estriol, Estrone using on-line solid phase extraction with sorbent for Supported Liquid Extraction automated by Sequential Injection Analysis method. Substances of different chemical properties were selected, and extraction parameters were optimized to achieve the highest possible extraction recovery. The following parameters were tested: the volume of sample loaded in the column, sample loading flow rate, analyte concentration, effects of pH and kind of solvent of sample, time interval for sample adsorption. Under optimized conditions, the repeatability of the method and calibration curves of selected analytes were measured