

The determination of fatty acids in liquids using piezoelectric sensors based on molecular imprinting polymers

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Abstract

Molecular imprinting oleic and palmitic acids polymers (MIPs) on the basis of polyimides PAA, RD, DFO were synthesized on the surfaces of piezoelectric sensors. The analysis of model solutions of fatty acids was conducted in the concentration range: oleic acid 0.16-0.86 g/dm³; palmitic acid 0.14-0.34 g/dm³. The imprinting factor and the selectivity coefficient of defined acid in relation to the chemicals of the same class were calculated. These piezoelectric sensors tested in the analysis of vegetable oils.