Registration Code of Publication: 12-29-3-120 Subsection: Petrochemistry. Publication is available for discussion in the framework of the on-line Internet conference "Butlerov readings". http://butlerov.com/readings/ Contributed: April 11, 2012

IR-spectrometry in oil analysis (Volgograd oils were taken as example)

© Lyudmila V. Ivanova,*⁺ Vladimir N. Koshelev, Alexey A. Vasechkin, and Olga V. Primerova

Department of Organic Chemistry and Petrochemistry. I.M. Gubkin Russian State Oil and Gas University. Lenin Pr., 65. Moscow, 119991. Russia. Phone: +7 (499) 233-92-30. E-mail: ivanova.l@gubkin.ru, koshelev.v@gubkin.ru

*Supervising author; ⁺Corresponding author

Keywords: oil analyses, group chemical oil composition, infrared-spectrometry, spectral coefficients.

Abstract

This work is dedicated to the group chemical composition study of oils with the use of IR-spectrometry in the medium IR-area. To characterize the group chemical oil composition the spectral coefficients have been used which allowed to characterize with high reliability the presence of various structural fragments in oil, as well as their distribution per fractions. Comparison with high-efficiency fluid chromatography has been performed.