

Integrated approach of the structural-group composition and oil type analysis study at the Udmurtia fields

© Lyudmila V. Ivanova,* Veronika K. Miller,⁺ Olga V. Primerova, Vladimir N. Koshelev, and Egor A. Byrov

*Department of Organic Chemistry and Petrochemistry. I.M. Gubkin
Russian State Oil and Gas University. Lenin Pr., 65. Moscow, 119991. Russia.
Phone: +7 (499) 507-84-11. E-mail: ivanova.l@gubkin.ru, n_mitry@rambler.ru*

*Supervising author; ⁺Corresponding author

Keywords: IR-spectrometry, spectral coefficients, study of oil, the molecular weight distribution of n-alkanes.

Abstract

A detailed analysis of crude oils from different deposits of the Udmurtia using complex of physico-chemical and instrumental methods is carried out. Basic properties and structural composition are determined by means of HPLC, GC and IR-spectroscopy the distribution of structural groups contamination and spectral coefficients are identified for crude oils and different fractions, which allowed us to describe the composition of cruds and identify the most important relations between pour point, tendency to the formation of deposits and the hydrocarbon composition.