

## COMPREHENSIVE RESEARCH OF PETROLEUM FOR THE OPTIMIZED PLANNING OF PROCESSING

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The system of quality assessment of petro raw materials, including methodological and instrumentation, is being modernized and improved. Input control of crude oil coming for processing is limited to the definition of quality indicators in the framework of the normative documentation "Oil. General technical conditions" (GOST 9965, GOST R 51858, GOST 31378). For optimized production planning using software, initially required "filling" matrices of physical and chemical characteristics (PCC) of oil, narrow and target oil fractions of a particular object in the "petroleum managers" (Spiral Assay).

The Institute has many years of experience in complex physical and chemical studies of oils from "light" and traditional to heavy high-viscosity high-sulfur (bituminous), including oil fields in Russia, near and far abroad. Depending on the tasks assigned to the technological and commercial services of oil refineries, certain analytical support of technological processes is built. In case of receipt in processing of mixed raw materials each petroleum for the purpose of entering of data into a matrix of physical and chemical characteristics for the subsequent virtual rational mixing of petroleum and forecasting of quality of target raw materials and technological streams is investigated.

This area of activity of the Institute is in demand, because the results of complex studies of petroleum in combination with the capabilities of software packages allow to solve technological problems of oil refining enterprises.

### Literature

1. Zanozina I.I., Tyschenko V.A. and others. System of independent in-depth study of oil raw materials: problems, solutions, experienced. World of petroleum products, 2018, 6, 16.
2. Tyschenko V.A., Zanozina I.I. and others. Study of composition and properties of heavy high-viscosity oils. Oil Refining and petrochemistry, 2018, 4, 14.