

PECULIARITIES OF OIL SHALE DIRECTED PREPARATION FOR EXTRACTING FUEL COMPONENTS

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ABSTRACT

The results of studied methods applied in preparation of oil shale for pyrolysis and their impact on quality and selection of obtained matter were stated in the article. The researches showed that alkaline treatment caused removal of reduction ability of sulfur forms. Most effective removal of these forms emerged at 1% NaOH concentration. It was revealed that oil shale treatment with sulfur acid and bacteria of *Asiditibacillus ferrooxidans* led to increased output of oil shale to 2.3% of and 7% from the weight of burned material). It was shown that studied methods of preliminary treatment of oil shale before pyrolysis made in accordance with fuel variant of oil shale processing should be selected with the purpose of direct effect on degradation processes of organic, mineral and organic – mineral shale substances contributing to decreasing the sulfur content and conditioning maximal extraction of oil shale for obtaining motor fuel components.

KEY WORDS: Pyrolysis, oil shale, alkalization, liquid fractions, volatile compounds, shale tar, acidophilus, autotrophic microorganisms, oxidant, oxide, proteins, peptides, organic acids, fatty acids

