up the flotation process, the system is foamed by intensive mixing (mechanical flotation machines) or air bubbling through the system (pneumatic flotation machines). The result of flotation depends on the difference in the hydrophobicity (hydrophilicity) of the components of the enriched raw material.

The flowing reactor is the reactor of continuous action having a constant stream of reagents at the entrance to the reactor and a constant stream of products at the exit from the reactor.

The fluidized bed reactor is a reactor in which solid catalyst particles (0.01-0.1 mm in size) are suspended in an upward flow of gaseous reactants. The advantages of this type of reactor are the intensive heat exchange between the catalyst particles, the absence of external diffusion inhibition, and the ease of catalyst loading. The lack of a fluidized bed is an increased abrasion of the catalyst particles. Reactors of this type are suitable for reactions with very high heat release, or in cases where the catalyst needs frequent replacement. The fluidized bed reactor is a fluidized bed reactor containing a gas, liquid, and a solid phase.

Forming is a stage of preparation of catalysts which is responsible for the external sizes and a form of particles of the ready catalyst. Forming can be carried out by various methods (spray drying, extrusion, tabletting, granulation, etc.).

Fraction is one of the portions of fractional distillation having a restricted boiling range. It is the share of petroleum which is boiling away in a particular interval of temperatures.

Fraction C_{2+} is a mixture of hydrocarbons with the number of carbon atoms from 2 and above. Most often, this term means light hydrocarbons with a carbon number of up to 5.

Fractional composition is an important indicator of quality of petroleum. It is defined at laboratory distillation in the course of which at gradually the increasing temperature from petroleum are distillated the parts - the fractions differing from each other in range of boiling. Fractional composition of petroleum shows the content of various fractions in it which are boiling away in particular temperature intervals and shows the content of substanses in them.

Fractionating column is a process unit that separates various fractions of petroleum by simple distillation, with the column tapped at various levels to separate and remove fractions according to their boiling ranges.

Free sulfur is sulfur that exists in the elemental state associated with petroleum; sulfur that is not bound organically within the petroleum constituents.

A free-dispersing system is a dispersed system in which the particles of a dispersed phase freely participate in Brownian motion, for example sol.

Fuel Gas is refinery gas used for heating.

Fuel oil is also called heating oil, it is a distillate product that covers a wide range of properties.

Functional group is the portion of a molecule that is characteristic of a family of compounds and determines the properties of these compounds.

G

Gallon is a unit of measurement of volume, equal to ≈ 3,785 l.

Gas is a natural mixture of hydrocarbon, non-hydrocarbon compounds and elements that are in formation conditions in the gaseous phase, or dissolved in oil or water conditions, and under standard conditions - only in the gaseous phase.

Gas analyzers are devices for determining the qualitative and quantitative composition of gas mixtures contained in the atmosphere. Gas analyzers make it possible to obtain continuous air pollution characteristics and to identify maximum concentrations of impurities that may not be recorded during periodic sampling of air several times a day.

The gas cap is the accumulation of free oil gas in the most elevated part of the oil reservoir above the oil deposit.