Synthesis gas generation process: a noncatalytic process for producing synthesis gas (hydrogen and carbon monoxide) from gaseous or liquid hydrocarbons

Synthetic crude oil (syncrude) is a hydrocarbon product produced by the conversion of coal, oil shale, or tar sand bitumen that resembles conventional crude oil; can be refined in a petroleum refinery.

The system for reducing the toxicity of a car engine is a combination of means and devices that serve to reduce the content of harmful substances in engine emissions of a car.

Sulfurization is combining sulfur compounds with petroleum lubricants.

Suspension is a system with the liquid dispersive medium and a solid disperse phase with a size of particles of a disperse phase more than 10 μ m.

Т

Tableting is a method of forming powders by squeezing them under a press to form particles of the desired shape (tablets, rings, etc.). In many cases, the addition of plasticizers to the initial powder is required.

Tail gas is the lightest hydrocarbon gas released from a refining process.

Tar is the volatile, brown to black, oily, viscous product from the destructive distillation of many bituminous or other organic materials, especially coal; a name used for petroleum in ancient texts.

Technical progress is the most important geoecological factor, the whole complex of industries for processing natural resources and use of life support systems of Earth. The mankind annually processes about 100 billion t. raw materials, using huge power capacities.

Technological (process) standards are standards specifying design requirements or operating procedures applicable to fixed installations such as factories, or the means and methods of regulating activities such as hunting and fishing. A particular production process or technique may be imposed on operations. National laws commonly require installation of purification or filtration systems in production facilities. The ban of driftnet fishing can serve as example for international process standards. In contrast to emission standards, process standards impose means of production and generally do not allow the polluter to choose other methods to reduce risk of harm or emissions.

Territorial production complex (TPC) is an economic (interdependent) combination of enterprises in one industrial point or in the whole region, where a certain economic effect is achieved due to a successful (planned) selection of enterprises in accordance with the natural and economic conditions of the area, with its transport and economic-geographical position. The economic development of the TPK provides for the creation of an efficient structure for the production of basic types of products, infrastructure for ensuring the production of these products, protecting the environment and rational use of natural resources.

Tertiary structure is the three-dimensional structure of a molecule.

Tetraethyl lead (TEL) is an organic compound of lead, Pb(CH₃)₄ which, when added in small amounts, increases the antiknock quality of gasoline.

The texture of the catalyst is the geometry of the porous space in the particles of solid-phase catalyst.

Time of contact is time during which reactionary mixture contacts to the catalyst. For flowing reactors time of contact is determined by division of free volume of the reactor into the volumetric flow rate of initial reactionary mixture.

Thermal converter of the exhaust gases of the car engine is the thermo-accumulating device for neutralization of the exhaust gases of the engine of the automobile by the method of flameless oxidation.

Thermochemical activation is a thermal treatment of solid substance in nonequilibrium conditions with formation of the metastable structures having the increased energy and considerable reactionary ability. As a result of thermochemical activation some elements of