New import-substituting catalysts based on local raw materials have been developed in the republic

Hydrogen sulphide and other sulfur compounds are harmful toxic compounds, and their presence in gases or combustion leads to severe environmental consequences. For this reason, the sulfur compounds that are part of natural gas are extracted through several technological stages and converted into sulfur. Alumina catalysts are widely used in the production of sulfur from hydrogen sulfide (Claus process). The yield of sulfur formation directly depends on the efficiency of the catalyst.

Scientists of the Laboratory of Chemical Technology, Gas Processing and Surfactants of the Institute of General and Inorganic Chemistry of the Academy of Sciences of the Republic of Uzbekistan and specialists of the Mubarek Gas Processing Plant conducted pilot tests of an import-substituting alumina catalyst based on local raw materials. It was recommended to introduce an alumina catalyst into production.

The annual demand for alumina catalyst only at the Mubarek gas processing plant is about 200-250 tons. Currently, this catalyst is imported from a number of countries, such as Russia and China, at prices ranging from $ 1,000 to $ 1,200 per tonne. The cost of a catalyst from local raw materials can be estimated at about $ 300-400.