

Influence of sulfur-containing substances on catalytic activity of the reforming catalyst

© **Raisa I. Kuzmina**,*⁺ **Valeriy T. Liventsev**, **Tat'yana K. Vetrova**, **Alexey A. Kabkov**,
Anton A. Afonin, and **Maxim P. Frolov**

*Department of Oil and Gas Chemical Technology. N.G. Chernyshevsky Saratov State University.
Astrakhanskaya St., 86. Saratov, 410026. Russia. Phone: +7 (845) 251-26-75. E-mail: kuzminaraisa@mail.ru*

*Supervising author; ⁺Corresponding author

Keywords: *catalytic reforming of hydrocarbons, aluminium-platinum-rhenium catalyst, catalyst poisons, hydrocracking, aromatization, n-hexane.*

Abstract

In the work there has been investigated the industrial bimetallic aluminium-platinum-rhenium catalyst ПП-71 for normal hexane transformation. Pulsed poisoning has been used for studying catalytic resistance of this catalyst to the action of poisons. Poisoning by the reaction of hydrocracking has irreversible character, and the activity is recovered by aromatization reaction, which allows to increase the activity of the catalyst by its dozed treatment with catalytic poison.