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Effect of activation conditions and a contact time on the *n*-hexane conversion over Ga-modified surface of high-silicon zeolite systems type ZSM-5

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Abstract

Modifying high-silicon zeolite system ZSM-5 by Ga and study of chemical conversion directions of *n*-hexane over surface of this system depending on activation conditions and feed rated were carried out. Comparative analysis of modified and unmodified system showed that the catalyst modifying by Ga make it possible to increase the yield of aromatic hydrocarbons, to reduce intensity of cracking reactions. Based on the experimental data for the conversion products and depending on the process conditions, and the obtained data about a structure and a surface of the studied system. A scheme of conversion of hydrocarbons over surface of this catalytic system was suggested.