paraffinic hydrocarbons in the presence of a composite based on mesoporous aluminosilicate and bentonite occurs as follows: paraffins → olefins →naphthenes → aromatic hydrocarbons. It has been established that the optimal temperature of the process for the hydroisomerisation of n-hexadecane is of 300 °C. The yield of the total amount of isoparaffins is of 45%.

ЛИТЕРАТУРА

[1] Миначев Х.М., Кондратьев Д.А. Свойства и применение в катализе цеолитов типа пентасил // Усп. химии. – 1983. – Т. 52, № 12. С. 1921-1973.

[2] Kitaev L.E., Yushchenko V.V., Nesterenko N.S., Bukina Z.M. Structure and catalytic properties of dealuminated zeolites // Petroleum Chemistry. – 2006. – Vol. 46, N 6. – P. 398-404.

[3] Коваль Л.М., Коробицына Л.Л., Восмериков А.В. Синтез, физико-химические и каталитические свойства высококремнеземных цеолитов. – Томск: Том. гос. ун-т, 2001. – 50 с.

[4] Seung-Woo Lee, Son-Kilhm. Hydroisomerization and hydrocracking over platinum loaded ZSM-23 catalysts in the presence of sulfur and nitrogen compounds for the dewaxing of diesel fuel // Fuel. – 2014. – Vol. 134. – P. 237-243.

[5] Gagea B.C., Lorgouilloux Y., Altintas Y., Jacobs P.A., Martens J.A. Bifunctional conversion of n-decane over HPW heteropoly acid incorporated into SBA-15 during synthesis // Journal of Catalysis. – 2009. – Vol. 265. – P. 99-108.

[6] Pham T., Le T.H., Nam Huyena, Q. Vinh Tran, Martínez C., Parvulescu V.I. ZSM-5/SBA-15 versus Al-SBA-15 as supports for the hydrocracking/hydroisomerization of alkanes // Catalysis Today. – 2018. – Vol. 306. – P. 121-127.

[7] Jaroszewska K., Masalska A., Czycz D., Grzechowiak J. Activity of shaped Pt/AlSBA-15 catalysts in n-hexadecane hydroisomerization // Fuel Processing Technology. 2017. Vol. 167. P. 1-10.

[8] Lee E., Yun S., Park Y.-K., Jeong S.-Y., Han J., Jeon J.-K. Selective hydroisomerization of n-dodecane over platinum supported on SAPO-11 // Journal of Industrial and Engineering Chemistry. – 2014. – Vol. 20. – P. 775-780.

[9] Lee H.W., Jeon J.-K., Jeong K.-E., Kim C.-U., Jeong S.-Y., Han J., Parka Y.-K. Hydroisomerization of n-dodecane over Pt/Y zeolites with different acid characteristics // Chemical Engineering Journal. – 2013. – Vol. 232. – P. 111-117.

[10] Величкина Л.М., Коробицына Л.Л., Восмериков А.В., Радомская В.И. Синтез, физико-химические и каталитические свойства СВК-цеолитов // ЖФХ. – 2007. – Т. 81, № 10. – С. 1814-1819.

[11] Korkuna O., Leboda R., Skubiszewska-Zieba J., Vrublevs'ka T., Gun'ko V.M., Ryczkowski J. Structural and physicochemical properties of natural zeolites: Clinoptilolite and mordenite // Microporous and Mesoporous Mater. – 2006. – Vol. 87. – P. 243-254.

[12] Köhler E.O. Catalytic dewaxing with zeolites for improved profitability of ULSD production // Stud. Surf. Sci. Catal. – 2007. – P. 1292-1299.

[13] Belinskaya N.S., Frantsina E.V., Ivanchina E.D. Mathematical modelling of "reactor-stabilizer column" system in catalytic dewaxing of straight run and heavy gasoils // Chemical Engineering Journal. – 2017. – Vol. 329. – P. 283-294.

[14] Mihalyi R.M., Lonyi F., Beyer H.K., Szegedi A., Kollar M., Pal-Borbely G., Valyon J. N-Heptane hydroconversion over nickel-loaded aluminum- and/or boroncontaining BEA zeolites prepared by recrystallization of magadiite varieties // J. Mol. Catal. A: Chem. – 2013. – Vol. 367. – P. 77-88.

[15] Henry R., Tayakout-Fayolle M., Afanasiev P., Lorentz C., Lapisardi G., Pirngruber G. Vacuum gas oil hydrocracking performance of bifunctional Mo/Y Zeolite catalysts in a semi-batch reactor // Catal. Today. 2014. Vol. 220-222. P. 159-167.

[16] MuthuKumaran G., Garg S., Soni K., Kumar M., Gupta J.K., Sharma L.D., Rama Rao K.S., MuraliDhar G. Synthesis and characterization of acidic properties of Al-SBA-15