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Verification of propranologenesis on catalyzed platinum based on alumina

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In this study, the kinetics of hydrogenation of propane on catalyzed platinum based on aluminum has been verified. The experiments were carried out on the propagation of hydrogenation of propylene on a commercial platinum-based alkaline aluminum containing Pt of 0.6%, 0.8% Sn and 0.85% of K, in a 10-millimeter diameter quartz laboratory at three temperatures of 580, 600 and 620°C and an atmospheric pressure of molar ratio Hydrogen was made to Propane 0.8 and for each experiment, the conversion rate was calculated based on laboratory results. According to a previous study carried out in this field, the resistance of external and internal mass transfer is in a test case and can be considered. Several kinetic models were extracted based on hypothetical mechanisms and the coefficients of these models were determined based on laboratory results and optimization performed by MATLAB software and minimizing the sum of squared errors. For evaluation of the cystic model, the F-test was used and based on this method, for each model, an analysis of variance was made. The results of this method indicate that all models are statistically acceptable. Finally, a number of models were selected based on the parameters calculated in the variance analysis table, such as Mean of Squares Erro, as the Hyberter model.

Biography

Shahab Khameneh Asl has completed his PhD at the age of 28 years from Materials and Energy Research Center of Iran. He is the director of Xceramic Lab. And Assistance prof. Of mechanical eng. In university of Tabriz. He has published more than 30 papers in reputed journals and has been serving as an editorial board member of Eng., Materials and Ceramic Journals in Iran, He has more than 80 papers in national and international conferences.

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