Abstract

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Preparation and Characterization Silica loaded with Vanadia Nanoparticle

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Abstract

In this research, a group of silica Vanadia catalysts was prepared, by loading vanadium pentoxide at a different percentage of loading on silica using the wet-impregnation method, after the prepared catalysts were heat-treated at 500 oC. The prepared catalysts were characterized by the following techniques: Physical adsorption of N2, SEM, scanning electron microscopy, EDS analysis, XRD, FT-IR and Raman spectroscopy, titration, total surface acidity, and acid Density was determined using pyridine adsorption. Then, the catalytic activity of the catalysts prepared by the reaction of acetic acid esterification with n-butanol has been studied in a heterogeneous system was studied.

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Biography

Postgraduate student - PhD and lecturer in physical chemistry - specializing in surfaces and catalysis - Aleppo university - Faculty of Basic Sciences - holds a master's degree in physical chemistry with specialization in surfaces and catalysis with an excellent grade of 90 and 13 percent. Research title: Preparation and Characterization of Sulfated Iron Oxide. I am currently working on the preparation and characterization of silica vanadia nanocatalysts using various techniques. Through my research, I am looking forward to obtaining a scholarship that will help me continue my education, given the bad conditions in my beloved country, Syria. I have a great interest in the sciences of nano-catalysts, their preparation methods and their uses in various industries.

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