Abstract

Study on the variation of surface properties at high temperatures of transition metal oxides on an alumina support for their use in catalytic reactions involving gas adsorption. At present, there is very little information about the behavior of surfaces such as transition metal oxides under temperatures between 600 °C and 1000 °C, which are very common in industrial processes. In these project, metal oxides like Vanadium, Chrome, Manganese, Iron, Cobalt, Molybdenum and Nickel. These solids must be characterized before and after use at different temperatures. The characterization implies Surface BET determination, X-Ray Diffraction (XRD), chemical analysis by AAS and X-Ray Photo-electronic Spectroscopy (XPS). The results obtained in the above mentioned project are presented here.

Keywords

BET Surface, XRD, XPS, AAS.