

Activity of Chromic Oxide Catalysts and the Chromium Valence State

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EPR studies show that the Cr^{+5} ions of aluminochromic catalysts are rapidly reduced in catalytic dehydrogenation of cyclohexane and that the optimum catalytic activity is established only after a certain on-stream period. It is believed that activity of the catalysts is linked-up with the chromium ions in trivalent state.

Kinetics of Isotopic Exchange Between Hydrogen and Water Vapor Over Nickel Catalysts: Effect of Pressure when Internal Diffusion Controls

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The isotopic exchange reaction, $\text{HDO} + \text{H}_2 \rightleftharpoons \text{HD} + \text{H}_2\text{O}$, over porous nickel-chromia catalysts was investigated at elevated pressures and inter-

nal diffusion-controlling conditions. The results show that activity of the catalysts is proportional to the square root of the pressure. The extent of retardation of the reaction by the internal diffusion depends upon the mass transfer rates within the pores of over 400 Å in radius.

Pulsed-Type Interrupter (Chopper) for Non-Gradient Reactors

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LETTERS TO THE EDITOR

Kinetics of Hexafluorobenzene-Sodium Methylate Reaction

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