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spectrum of organotin compounds adsorbed on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>. The hydroxyl groups of the surface play an important role in this adsorption, and active sites of two kinds are involved. The various possible chemisorption mechanisms are discussed.

## Recycle Pump for Studies of Kinetics of Heterogeneous Vapor-Phase Reactions

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A new glass recycle pump was designed. This pump allows maintaining in the thermostat any temperature needed for the prevention of the condensation of the starting materials (or products) during the process cycle.

## Gas-Chromatographic Study of Nonuniformities on the Surface of a Silica-Alumina Catalyst

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The authors propose a gas-chromatographic technique for differentiating between active and nonactive sites on the surfaces of adsorbents and catalysts. This technique is based on the difference which the two types of sites exhibit in adsorption and chemisorption activities.