

Chromatographic Studies of Chemical Reactions in Static Phase

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A chromatographic method to determine chemical reaction kinetics is described. This involves contacting reaction mixtures in static liquid phase with a column of sorbent. The products with desired properties are obtained by controlling the composition of reaction mixtures. The reaction rate constant for oxidation of benzaldehyde to benzoic acid by this method of $4.7 \times 10^{-3} \text{ min}^{-1}$ is practically identical with the value of the constant obtained by a volumetric oxidation technique.

Polarographic Determination of Kinetics and Equilibria of Aminoacids-Formaldehyde Reactions

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The experimental results show that in acid media, the aminoacids containing primary amino-groups react with formaldehyde to form mono-methylol derivatives. The reaction is of the first

order with respect to both the aminoacids and the formaldehyde. The rate and equilibrium constants of this bimolecular reaction were also determined. The experimentally-found equilibrium constants are compared with the values calculated from the independently-determined rate constants of the forward and the reverse reactions.

LETTERS TO THE EDITORS:

Properties of the Oxides to Effect Ionization of Vaporized Organic Substances Over Oxidized Molybdenum

O. K. FOMEEN, M. V. TEEKHOMEEROV

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Adsorption of Oxygen on Gold

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Effect of Organic Additives of Conjugated Bond Type on Rates of Thermal Decomposition of Solids

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