

Thematic Course: The kinetics and mechanism of the acyl transfer. Part 3.

Glycine and ammonia reactivity in acyl transfer reactions

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Abstract

Experimental investigation on ammonia and glycine reactions with benzoyl chloride, benzenesulfonyl chloride and its 3-nitro- and 4-methyl derivatives is carried out in water-1,4-dioxane system. Activation energy and entropy of the glycine reactions with sulfonyl chlorides are determined. The kinetic characteristics obtained are compared with other acylation reactions data. Linear correlations are established for logarithms of rate constants of glycine and a number of amines with different acylation agents. A conclusion is made about the determinative influence of the nucleophiles basicity on their reactivity in acylation.