

Thematic course: The impact of environment on reactivity. Part 21.

Comparative study of reaction kinetics diene synthesis of indanocyclone with styrene for the thermally initiated reaction and in microwave field

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Abstract

The kinetics of the reaction of a diene with styrene indanocyclone synthesis in aromatic solvents in a thermally initiated reaction initiation and microwave radiation was investigated. It is shown that in the case of a thermally initiated reaction reactivity of addends changes symbatically value of the ionization potential of the solvent molecules. In the case of microwave radiation initiation reactivity of addends changes symbatically value of the dipole moment of the solvent molecules. The impact of microwave radiation contributes to the reorganization of the transition conditions of the electronic structure of the reactants in the electronic structure of the products from the liquid phase to the gas phase.