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# Acoustic resonance frequency of chemical reactions

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*Influence of acoustic oscillations is a relatively new method of studying physicochemical processes. Research in this boundary area of physics and chemistry has led to new scientific branches such as sound chemistry or acoustic chemistry. In this article we present analysis of sound chemistry research projects being carried out at Bauman Moscow State Technical University. The obtained results allow us to claim that for each chemical reaction there is such an acoustic resonance frequency that the rate of physicochemical interaction is maximal. Resonance frequency range for which main results are presented constitutes 1 ...100 Hz. Specific power of acoustic influence is 0,3...2 W/sm<sup>2</sup>.*

**Keywords:** *chemical kinetics, acoustic oscillations, homogeneous and heterogeneous, chemical reactions, resonance frequency*

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