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HYPERACOUSTIC PARAMETERS OF A SERIES OF ALCOHOLS AT DIFFERENT STATE PARAMETERS

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ABSTRACT

A great contribution to the study of the liquid state can be made by elucidating the nature of the structural changes in liquid molecules at various parameters of the state. Optical methods will enable us to obtain more complete information about the nature of structural changes in a liquid molecule. The aim of this work is to study the manifestation of changes in the structure and intermolecular interaction in the spectra of Mandelstam-Brillouin scattering of light and in hyperacoustic parameters at various parameters of state in a number of alcohols. The experimental results showed that with increasing temperature, the speed of hypersound in normal alcohols decreases nonlinearly, and at high temperatures the ends of the curves depending on T at 450 K approaches each other. If you build a graph of the dependence on pressure (P), you will notice that at high pressures, these curves for alcohols also approach each other. We associate this tendency in the case of an increase in temperature with destruction, and with an increase in pressure, apparently with an increase in the probability of the formation of H - bonds.

KEYWORDS: *Hypersound, Scattering, Liquid, Alcohols, Temperature, Pressure, Spectrum, Intermolecular Interaction,*

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