

ACOUSTIC SPECTROSCOPY OF BINARY
SOLUTIONS NEAR THE CRITICAL
TEMPERATURE OF STRATIFICATION

V.S. Sperkach, A.D. Alekhin, O.I. Bilous

Taras Shevchenko Kyiv National University,
Faculty of Physics
(2, Academician Glushkov Prosp., Kyiv 03627, Ukraine)

S u m m a r y

Experimental study of nitromethane—n-amyl alcohol and nitrobenzene—hexane binary solutions near the critical temperature of stratification have been carried out by acoustic spectroscopy in a wide frequency range ($f=5\div 2800$ MHz). On the basis of the obtained experimental data, the frequency and temperature dependences of the sound absorption coefficient were studied in the range of low ($f=5\div 110$ MHz) and high ($f=1000\div 2800$ MHz) frequencies. The obtained results confirm the conclusions of the dynamic theory of critical phenomena.