Abstract

Intermolecular interaction studies using ultrasonic technique in the binary liquid mixtures of Acetone and bromobenzene at different temperatures 318. 15K and 323. 15K. Using the measured values of ultrasonic velocity and density, acoustical parameters and their excess values such as excess adiabatic compressibility ($\chi$), excess molar volume ($\gamma$) and excess free length ($\lambda$) has been are evaluated. From the properties of these excess parameters the nature and strength of the interactions in these binary systems have been discussed. The experimental ultrasonic velocities has been compared with the calculated values from the acoustic theories such as Free-length theory (FLT), Collision factor theory (CFT) and Nomoto theory (NOM) at temperatures 318. 15K and 323. 15K.
References

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Index Terms

Computer Science

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Keywords

Ultrasonic Parameters  Molecular Interaction And Ultrasonic Theories
Thermoacoustic Investigation of Intermolecular Interaction in Binary Solutions using Some Excess Thermoacoustic Parameters and its Theoretical Comparison