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Ultrasonic investigation of amino acids in aqueous electrolytes medium by ultrasonic method

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ABSTRACT

The ultrasonic velocity(u), density(ρ) and viscosity (η) have been measured for mixed aqueous systems (water +NaCl+ serine) & (water+ MgCl₂ + serine) at 303.15,308.15 &313.15K at 2MHz. From experimental data thermodynamic parameters such as adiabatic compressibility(β_a), acoustic impedance (z), intermolecular free length (L_f), relative association (R_A) have been estimated using the standard relations. The results have been analyzed on the basis of variations of thermodynamic parameters. These parameters were used to study the ion-solvent interaction present in each solution.

Keywords: ultrasonic velocity(u), density(ρ), viscosity (η), acoustical parameters.