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### Acoustical Studies of Some Schiff Bases in 1,4-Dioxane and Dimethylformamide at 318.15 K

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**摘要** From experimental data of density, viscosity and ultrasonic velocity, the various acoustical properties, such as specific impedance ( $Z$ ), isentropic compressibility ( $\kappa_s$ ), Rao's molar sound function ( $R_m$ ), the van der Waals constant ( $b$ ), molar compressibility ( $W$ ), intermolecular free length ( $L_f$ ), relaxation strength ( $r$ ), internal pressure ( $p$ ), free volume ( $V_f$ ), solvation number ( $S_n$ ) etc., were calculated for three Schiff bases in 1,4-dioxane and dimethylformamide (DMF) at 318.15 K. The results are interpreted in terms of molecular interactions occurring in the solutions.

**关键词** [Schiff base](#) [1,4-dioxane](#) [DMF](#) [ultrasonic velocity](#) [density](#) [viscosity](#)

分类号

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**Abstract** From experimental data of density, viscosity and ultrasonic velocity, the various acoustical properties, such as specific impedance ( $Z$ ), isentropic compressibility ( $\kappa_s$ ), Rao's molar sound function ( $R_m$ ), the van der Waals constant ( $b$ ), molar compressibility ( $W$ ), intermolecular free length ( $L_f$ ), relaxation strength ( $r$ ), internal pressure ( $p$ ), free volume ( $V_f$ ), solvation number ( $S_n$ ) etc., were calculated for three Schiff bases in 1,4-dioxane and dimethylformamide (DMF) at 318.15 K. The results are interpreted in terms of molecular interactions occurring in the solutions.

**Key words** [Schiff base](#) [1,4-dioxane](#) [DMF](#) [ultrasonic velocity](#) [density](#) [viscosity](#)

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