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FULL PAPERS

Effect of Na^{+}, K^{+} and Ca^{2+} Ions on Physico-chemical Properties of Thymine, Cytosine, Thymidine and Cytidine in Aqueous Urea Solution

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摘要 Experimental determination of density, ultrasonic velocity and viscosity of two pyrimidine bases thymine and cytosine along with their respective nucleosides, thymidine and cytidine has been carried out in aqueous urea solutions in the presence of different concentrations of three salts, *viz.* NaCl, KCl and $CaCl_2$. The experimental data have been used for the

computation of various thermodynamic parameters, *viz.* apparent molar volume, apparent molar compressibility, coefficients *A* and *B* of the Jones-Dole equation, internal pressure, acoustic impedance, *etc.* Structural studies of solutions under investigation have also been carried out by ultraviolet spectroscopy, and an attempt has been made to collaborate the

findings of ultraviolet spectroscopy with results obtained thermodynamically.

关键词 interaction, bivalent ion, thermodynamic property, ultraviolet spectroscopy, ionic size

分类号

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Key words interaction bivalent ion thermodynamic property ultraviolet spectroscopy ionic size

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本刊中 包含“interaction, bivalent ion, thermodynamic property, ultraviolet spectroscopy, ionic size”的 相关文章

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