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Investigation of intermolecular interaction of binary mixture of acrylonitrile with bromobenzene

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In this paper, study of binary mixture of Acrylonitrile (ACN) with Bromobenzene (BB) has been carried out at eleven concentrations at room temperature. The determined density (ρ) and refractive index (n_D) values of binary mixture are used to calculate the excess properties of mixture over the entire composition range. The aforesaid parameters are used to calculate excess parameters and fitted to the Redlich-Kister equation to determine the b_j coefficients. From the above parameters, intermolecular interaction and dynamics of molecules of binary mixture at molecular level are discussed. The Conformational analysis of the intermolecular interaction between Acrylonitrile and Bromobenzene is supported by the FTIR spectra.

Topics

[Optical properties](#), [Intermolecular forces](#), [Organic compounds](#)

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