



Hydration of urea and its derivatives from acoustic and volumetric methods.

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Streszczenie

A series of dilute aqueous solutions of ureas (urea, 1,3-dimethylurea, 1,1,3,3-tetramethylurea, 1,3-dimethylimidazolidin-2-one, and 1,3-dimethyltetrahydropyrimidin-2(1*H*)-one) was investigated by sound speed and density measurements. The results were interpreted in terms of hydration. In particular, the hydration numbers were determined using the compressibility data using Pasynski equation. Molar volume of solution was shown to reflect the hydration phenomena, too. Using this quantity, the contribution of carbonyl group, >CO, to the total observed hydration number was determined.

Adres publiczny

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