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AN EXPERIMENTAL STUDY AND MODELING OF L-HISTIDINE SOLUBILITY IN CHLORIDE SALTS AQUEOUS SOLUTIONS AT DIFFERENT TEMPERATURES

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Measurements were performed to determine the solubilities of L-histidine in aqueous solutions of various concentrations of chloride salts (NaCl and KCl) by using a thermostatted reactor and gravimetric method from (293.15 to 323.15 K) under atmospheric pressure. The effect of inorganic salts on the solubility of L-histidine was investigated and was found accordingly: sodium chloride > potassium chloride. Results showed that the solubility in pure water and in aqueous chloride solutions increased with increasing temperature. The experimental data were well correlated by the semi-empirical equation. Using the measured solubilities, the standard molar thermodynamic properties of transfer of GA ($\Delta_{tr}G^{o}$, ΔtrH^{o} and $\Delta_{tr}S^{o}$) from pure water to aqueous solutions of the chloride salts were estimated

Biography

Adel Noubigh has completed his PhD from Tunis El Manar University, Tunisia and Postdoctoral Studies from ENSTA ParisTech. He is serving as an Assistant Professor in the Department of Chemistry, Preparatory Institute for Engineering Studies of Gafsa, Gafsa University, Tunisia and in the Faculty of Science, Northern Borders University, Kingdom of Saudi Arabia. He has published more than 26 papers in reputed journals.

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