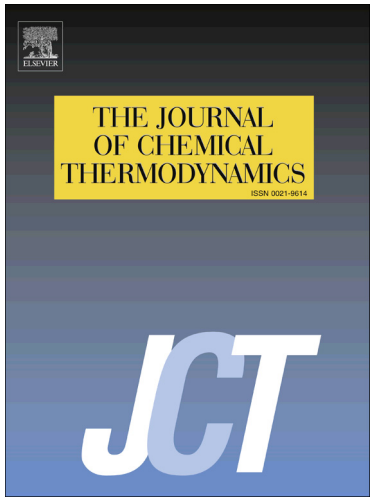

Commentary regarding "Solubilities of evodiamine in twelve organic solvents from T = (283.2 to 323.2) K"

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Commentary regarding "Solubilities of evodiamine in twelve organic solvents from T = (283.2 to 323.2) K"

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Abstract

Errors are discovered regarding the published equation coefficients of Fan and co-workers [J. Chem. Thermodynamics 58 (2013) 288–291] for mathematically describing the solubility behavior of evodiamine in neat solvents using the modified Apelblat equation. The back-calculated values using the published equation coefficients are not the mole fraction solubility as stated in the published paper. What's more, the parameters in the modified Apelblat equation were re-analysed according to the experimental solubility data.

Keywords: Evodiamine; Solubility; Apelblat equation

In a paper published in the Journal of Chemical Thermodynamics Fan and co-workers reported the solubility of evodiamine in twelve neat solvents namely chloroform, dichloromethane, acetone, ethyl acetate, 1-butanol, isopropanol, ethanol, methanol, ethyl ether, cyclohexane, *n*-pentane and *n*-hexane. Solubility data was determined within the temperature range from 283.2 K to 323.2 K using a high-performance liquid chromatography (HPLC) analysis method. As an important part of