

THERMODYNAMICS AND CHEMICAL.....

用NRTL方程推算高压汽液平衡并同时描述过量焓

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摘要 The non-random two liquids (NRTL) equation together with the Pitzer/Curl Virial equation of state are used to investigate the simultaneous representation of excess enthalpies (h^E) and vapour-liquid equilibria (VLE) and the VLE prediction from h^E data. The calculation strategy for properly determining NRTL parameters and the effect of their temperature dependence on the simultaneous correlation of h^E and VLE data and the VLE extrapolation are analysed in detail.

关键词 高压汽液 平衡性 过量焓 NRTL方程 热力学

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Extrapolation of High Pressure VLE Data and Simultaneous Representation of Excess Enthalpies by Using NRTL Equation

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Abstract The non-random two liquids (NRTL) equation together with the Pitzer/Curl Virial equation of state are used to investigate the simultaneous representation of excess enthalpies (h^E) and vapour-liquid equilibria (VLE) and the VLE prediction from h^E data. The calculation strategy for properly determining NRTL parameters and the effect of their temperature dependence on the simultaneous correlation of h^E and VLE data and the VLE extrapolation are analysed in detail.

Key words non-random two liquids (NRTL) equation, excess enthalpy, vapour-liquid equilibrium, prediction.

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