عنوان مقاله:

Prediction of Liquid-Liquid Equilibria of Binary Systems Using EoS-GE Models

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

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خلاصه مقاله:

The reliable prediction of liquid- liquid equilibrium (LLE) plays an important role for many kinds of separation technologies. In this work, predictions of Liquid- Liquid Equilibria (LLE) for three binary mixtures at 0.1 MPa have been done using the equations of state-excess Gibbs energy model (EoS-GE). The Peng–Robinson EoS modified by Stryjek and Vera (PRSV), and two mixingrules, MHV1 and MHV2, with UNIQUAC model have been applied to three binary systems including Nonane+Methanol, MethylCyclohexane+Methanol and Phenol+Hexane. The interaction parameters of UNIQUAC GE model have been optimized for these three binary systems from LLE data. The MHV2 excess Gibbs mixing rule shows more reliable agreement with experimental data

کلمات کلیدی:

Liquid–Liquid Equilibria, EoS, Mixing Rule, Excess Gibbs Energy

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