

## عنوان مقاله:

Estimation of NRTL Binary Parameters in the Sulfur Compounds Extractive Process by Ionic Liquids Using Genetic Intelligent Optimization Algorithm

## محل انتشار:

ششمین کنفرانس تخصصی ترمودینامیک (سال: 1401)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

In this work using Liquid-liquid equilibrium experimental data of ternary system by ionic liquid (1-ethyl-3-methylimidazolium ethylsulfate +thiophene+hydrocarbons) has been estimated NRTL binary parameters using genetic intelligent optimization algorithm as a high-precision model for investigating phase equilibria and separation of sulfur compounds from liquid hydrocarbons. The NRTL activity equations were used to correlate the experimental data, and the binary interaction parameters were determined. finally the experimental data were correlated using the NRTL equation with RMSE 0.0061651 and 0.024715 for hydrocarbons of the n-Nonane and n-Decane, respectively and the NRTL binary interaction parameters have been estimated. The phase diagrams for the ternary two phase system (LLE) have been reported

## کلمات کلیدی:

Sulfur Compounds, NRTL, Ionic Liquids, LLE, GA

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1467229>

