

عنوان مقاله:

Thermodynamic modeling of solubility of hydrogen sulfide and carbon dioxide in aqueous diisopropanolamine+ N-(2-aminoethyl) ethanolamine solution

محل انتشار:

سومین کنفرانس سراسری نوآوری های اخیر در شیمی و مهندسی شیمی (سال: 1395)

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خلاصه مقاله:

Natural gas as a clean source of energy contains several contaminants such as CO₂ and H₂S that is treated through a natural gas purification unit in gas industry. Moreover, for design and construction of gas contactor equipment, it is necessary to obtain experimental values of solubility for H₂S and CO₂ in aqueous amine/alkanolamines. In this work the Electrolyte-NRTL activity coefficient function is applied to the correlation and prediction of the partial pressure of CO₂ and H₂S versus the acid gas loading through the absolute average deviation percent, the results show that the present modeling was successful to correlate and predict the binary, ternary, quaternary and five component amine/alkanolamine systems

کلمات کلیدی:

Acid gas, Electrolyte-NRTL, Thermodynamic modeling

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