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Predicting of molar physical and chemical properties of ternary mixtures by data for the binary mixtures, presented by model of contribution balance of imaginary endo- and exotherms

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Abstract

The comparative analysis of symmetric, asymmetric models of interrelation of isotherms of properties of binary and ternary mixtures, including Show's model (1997) with weighing contributions has been carried out. For asymmetric models on the basis of structuredness criterion of components the simple quantitative way of a choice of asymmetric top is offered. On the basis of Show's method of using paired integrated weighing of the difference of isotherms of properties of initial binary mixtures, the way of weighing with use of the invariants, counted for initial binary mixtures on the model of contributions balance of imaginary endo- and exotherms is offered. Calculations are made on an example of the analysis of temperature dependences of molar volume of mixtures «varied primary alcohol – chloroform – benzene».