

Liquid-Liquid Phase Equilibria and Interfacial Tension Measurements of Mixtures Containing Ionic Liquids

A. Heintz,^C A. Tschersich,^S and C. Werts

Department of physical chemistry, University of Rostock, Rostock, Germany
andreas.heintz@uni-rostock.de

Thermodynamic data of the liquid two-phase systems [BMIM][NTf₂] + Cyclohexanol, [BMIM][NTf₂] + Hexandiol and [BMIM][NTf₂] + Toluene are presented.

LLE data of all three systems are presented in the temperature range 293 to 325 K, including the UCST of the Cyclohexanol and Hexandiol systems using a laser light scattering method for detecting the two phase equilibrium line. Critical coefficients are given for the Cyclohexanol- and Hexandiol-systems. Liquid-Liquid Interfacial Tension data for all 3 systems have been obtained in the same temperature range using a pendant drop method and, simultaneously, the two phase densities have been measured along the liquid-liquid coexistence curve using the vibrating tube technique.

The results are discussed in comparison with LLE and LL interfacial data of non-ionic systems, such as Dimethylformamide + heptane.