European Chemistry Congress

June 16-18, 2016 Rome, Italy

Phase densities determination in the mixtures of carbon dioxide and ethanol under high pressure

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The phase behaviour of carbon dioxide + ethanol system has been investigated mainly in terms of the variables pressure, temperature and composition. With few exceptions the densities of the coexisting phases are neglected and even when measured, they range in temperatures between 291,15 K to 313,15 K. For a complete description of the phase equilibrium in this system further measurements are needed, up to temperatures in the neighbourhood of the critical temperature of ethanol. In this study the densities and mutual solubility of carbon dioxide and ethanol were determined at the temperatures 333,15 K, 353,15 K, 413,15 K and 453,15 K and pressures from 4 MPa up to 14,5 MPa. The critical densities curve was constructed for the whole concentration range.

Biography

Jona Keri is a Doctorate student and she has finished her MSc studies in Chemistry Department, Faculty of Natural Sciences at University of Tirana, and is currently working, since two years in the field of adsorption/desorption equilibrium study of different active compounds as diclofenac, mefenamic acid, meclofenamic acid etc. on the montmorillonite clays.

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