

174
F 70

Volume 356, October 25 2013

ISSN 0378-3812



ELSEVIER

FLUID PHASE

EQUILIBRIA

AN INTERNATIONAL JOURNAL

FLUID PHASE

EQUILIBRIA

Fluid Phase Equilibria

Volume 356, Pages 1-374 (25 October 2013)

Editorial Board

Page CO2

Full Length Article

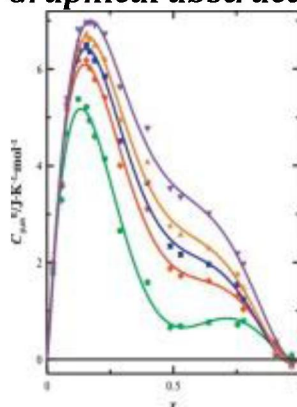
Excess volumes and excess heat capacities for alkanediol + water systems in the temperature interval (283.15–313.15) K

Original Research Article

Pages 1-10

Katerina Zemánková, Jacobo Troncoso, Luis Romani

Graphical abstract



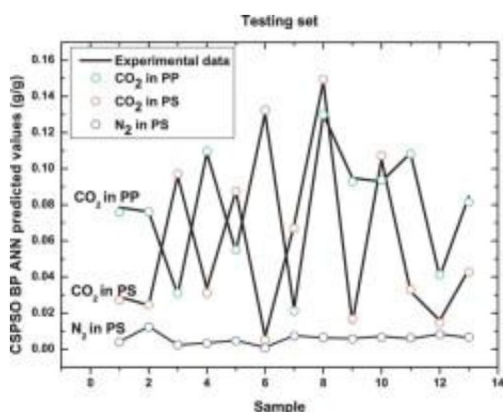
Prediction of gas solubility in polymers by back propagation artificial neural network based on self-adaptive particle swarm optimization algorithm and chaos theory

Original Research Article

Pages 11-17

Mengshan Li, Xingyuan Huang, Hesheng Liu, Bingxiang Liu, Yan Wu, Aihua Xiong, Tianwen Dong

Graphical abstract



Solubility of pharmaceutical compounds in ionic liquids

Original Research Article

Pages 18-29

Ana Duarte dos Santos, Ana R.C. Morais, Catarina Melo, Rafał Bogel-Lukasik, Ewa Bogel-Lukasik

Electrical conductivity of ammonium and phosphonium based deep eutectic solvents: Measurements and artificial intelligence-based prediction

Original Research Article

Pages 30-37

F.S. Ghareh Bagh, K. Shahbaz, F.S. Mjalli, I.M. AlNashef, M.A. Hashim

Measurement and correlation of the solubility of 4,4'-oxydianiline in different organic solvents

Original Research Article

Pages 38-45

Zengkun Liu, Qiuxiang Yin, Xinwei Zhang, Hui Zhang, Junbo Gong, Jingkang Wang

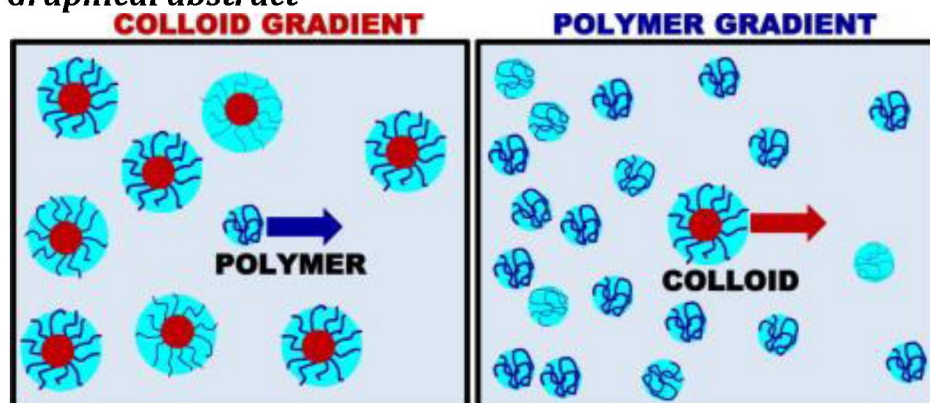
Cross-diffusion in a colloid-polymer aqueous system

Original Research Article

Pages 46-55

Michele S. McAfee, Onofrio Annunziata

Graphical abstract



Vapor-liquid equilibrium of isoamyl alcohol + isoamyl propionate and propionic acid + isoamyl propionate systems at 50.00, 101.33 and 150.00 kPa

Original Research Article

Pages 56-62

Fernando Leyva, Alvaro Orjuela, Iván Gil, Julio Vargas, Gerardo Rodríguez

Effects of single-wall carbon nanotube confinement on triazolium-based ionic liquid/water mixtures

Original Research Article

Pages 63-70

Mahtab A. Balazadeh, Masumeh Foroutan

Phase equilibrium of (water + formic or acetic acid + ethyl heptanoate) ternary liquid systems at different temperatures

Original Research Article

Pages 71-77

Çağla Demirel, Süheyla Çehreli

Temperature effects on the phase behaviour, mutual interactions and oil recovery of a light crude oil-CO₂ system

Original Research Article

Pages 78-89

Meng Cao, Yongan Gu

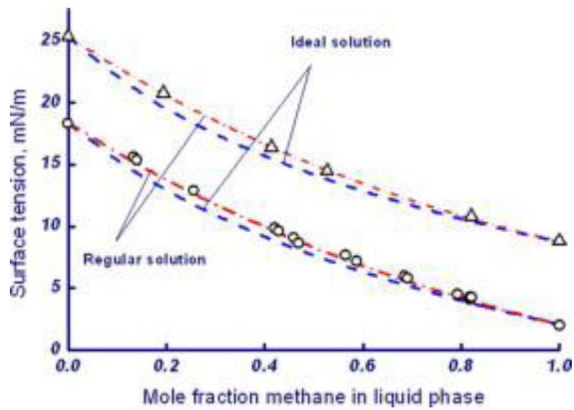
Surface tension of ethane-methane solutions: 1. Experiment and thermodynamic analysis of the results

Original Research Article

Pages 90-95

Vladimir G. Baidakov, Aleksey M. Kaverin, Maria N. Khotienkova

Graphical abstract



Surface tension calculations by means of a PCP-SAFT-DFT formalism using equation of state parameters from quantum mechanics

Original Research Article

Pages 96-101

Alexander von Müller, Kai Leonhard

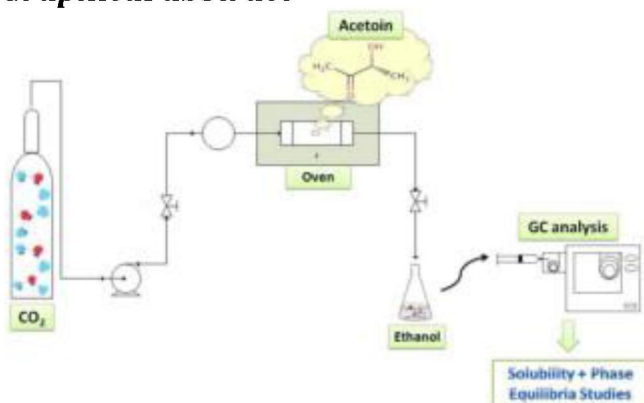
Measurement and mathematical modeling of solubility of buttery-odor substance (acetoin) in supercritical CO₂ at several pressures and temperatures

Original Research Article

Pages 102-108

Chintya Effendi, Margareth Shanty, Yi-Hsu Ju, Alfin Kurniawan, Meng-Jiy Wang, Nani Indraswati, Suryadi Ismadji

Graphical abstract



Prediction of thermodynamic properties of pure ionic liquids through extended SAFT-BACK equation of state

Original Research Article

Pages 109-116

Ali Maghari, Fatemeh ZiaMajidi

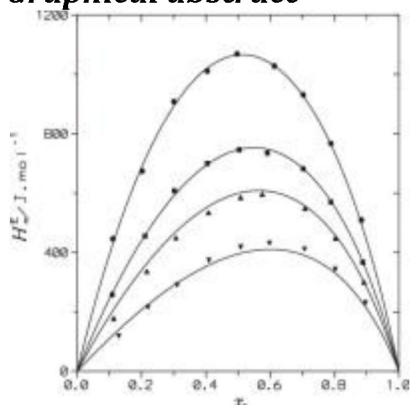
Thermodynamics of ketone + amine mixtures. Part X. Excess molar enthalpies at 298.15 K for N,N,N-triethylamine + 2-alkanone systems. Characterization of tertiary amine + 2-alkanone, and of amino-ketone + n-alkane mixtures in terms of DISQUAC

Original Research Article

Pages 117-125

Juan Antonio González, Iván Alonso, Isaías García De La Fuente, José Carlos Cobos

Graphical abstract



Desulfurization of fuels by liquid-liquid extraction with 1-ethyl-3-methylimidazolium ionic liquids

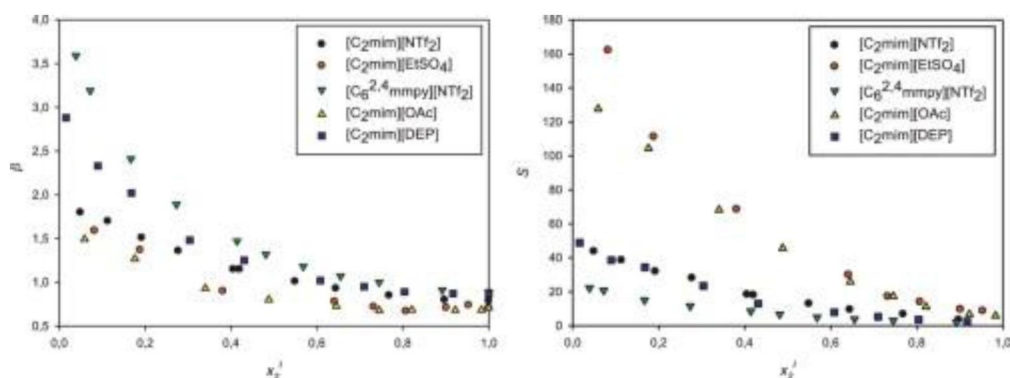
Original Research Article

Pages 126-135

Borja Rodríguez-Cabo, Alberto Arce, Ana Soto

Graphical abstract

Ionic liquid + thiophene + n-hexane.



Phase behavior of sour natural gas systems using classical and statistical thermodynamic equations of states

Original Research Article

Pages 136-145

Wael A. Fouad, Abdallah S. Berrouk

A quantum chemical study of the processes during the evaporation of real-life Diesel fuel droplets

Original Research Article

Pages 146-156

Vladimir M. Gun'ko, Rasoul Nasiri, Sergei S. Sazhin, Fabrice Lemoine, Frederic Grisch

Excess Gibbs energies and volumes of the ternary system ethanol + dimethylformamide + tetrahydrofuran at 298.15 K

Original Research Article

Pages 157-167

P. Gianni, L. Lepori, E. Matteoli, M.C. Righetti

Aggregation properties of the cetyltrimethylammonium bromide and Triton X-100 mixture with ethanol in aqueous media

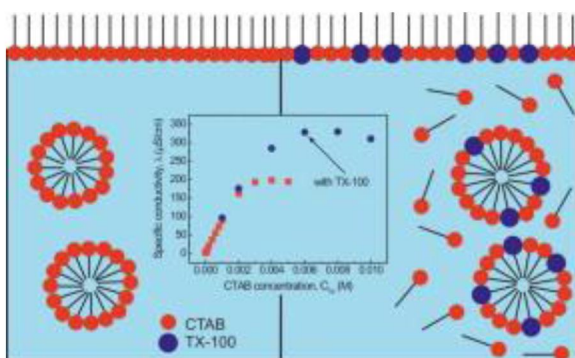
Original Research Article

Pages 168-175

Magdalena Bielawska, Bronisław Jańczuk, Anna Zdziennicka

Graphical abstract

The influence of TX-100 on the specific conductivity of CTAB in the mixed water + ethanol solvent.



The influence of TX-100 on the specific conductivity of CTAB in the mixed water+ethanol solvent.

Prediction of the specific volume of polymeric systems using the artificial neural network-group contribution method

Original Research Article

Pages 176-184

Majid Moosavi, Nima Soltani

Density and isothermal compressibility of ionic liquids from perturbed hard-dimer-chain equation of state

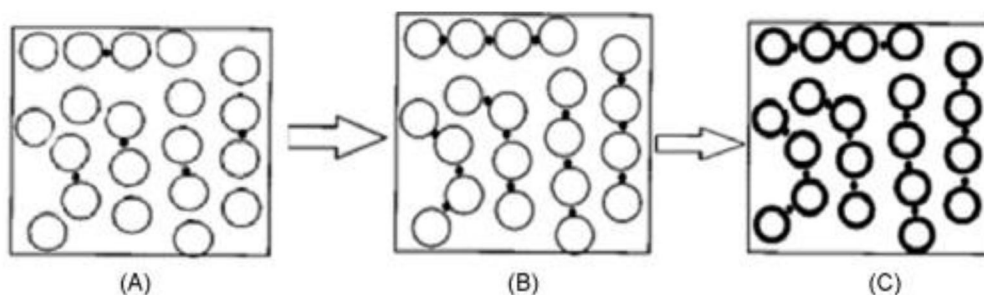
Original Research Article

Pages 185-192

S.M. Hosseini, M.M. Alavianmehr, J. Moghadasi

Graphical abstract

Schematic of the role of hard-dimers in presentation of perturbed hard-chain model for ILs.



Surface tensions, densities, and speeds of sound for aqueous solutions of lauryl ether ethoxylates

Original Research Article

Pages 193-200

José Luis López-Cervantes, Jesús Gracia-Fadrique, Encina Calvo, Alfredo Amigo

Study of the ionic equilibriums in aqueous solutions and coordination properties of Adefovir and Cidofovir used as antiviral drugs

Original Research Article

Pages 201-208

Hasan Atabey, Hayati Sari

Application of the cubic-plus-association (CPA) equation of state to model the fluid phase behaviour of binary mixtures of water and tetrahydrofuran

Original Research Article

Pages 209-222

Peter Jørgensen Herslund, Kaj Thomsen, Jens Abildskov, Nicolas von Solms

Vapour-liquid equilibrium data for the hydrogen sulphide (H₂S) + carbon dioxide (CO₂) system at temperatures from 258 to 313 K

Original Research Article

Pages 223-228

Antonin Chapoy, Christophe Coquelet, Haifan Liu, Alain Valtz, Bahman Tohidi

An improved Helmholtz energy model for non-polar fluids and their mixtures. Part 3: Application to natural gases and related systems

Original Research Article

Pages 229-245

Jorge F. Estela-Uribe

Bulk and surface properties of the ternary mixtures of hydrocarbon and fluorocarbon surfactants

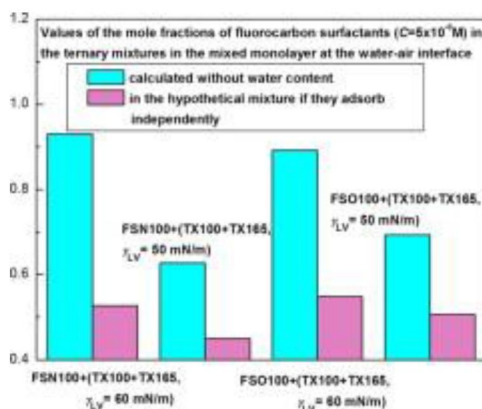
Original Research Article

Pages 246-255

Katarzyna Szymczyk

Graphical abstract

Values of the mole fractions of the fluorocarbon surfactants (FSN100 and FSO100) in the ternary mixtures with TX100 and TX165 in the mixed monolayer at the water–air interface calculated without the water content and in the hypothetical mixture if they adsorb independently at the concentration of the added, third fluorocarbon surfactant equal to 5×10^{-6} M.



Apparent molar volume and ultrasonic studies on some bile salts in water–aprotic solvent mixtures

Original Research Article

Pages 256-263

G. Ravichandran, G. Lakshiminarayanan, D. Ragouramane

Liquid–liquid equilibria for ternary systems acetic acid + n-butyl acetate + hydrocarbons at 293.15 K

Original Research Article

Pages 264-270

Romain Richard, Nicolas Ferrando, Marc Jacquin

Liquid–liquid equilibrium in binary systems of isomeric C_8 aliphatic monoethers with nitromethane

Original Research Article

Pages 271-276

Tadeusz Hofman, Mateusz Reda, Marek Gliński

A fractal approach on modeling gas hydrate phase equilibria in porous media

Original Research Article

Pages 277-283

Sheng-Li Li, Qing-Lan Ma, Chang-Yu Sun, Li-Tao Chen, Bei Liu, Xiu-Jun Feng, Xiao-Qin Wang, Guang-Jin Chen

Liquid-liquid equilibria for systems glycerol + sardine oil + tert-alcohols

Original Research Article

Pages 284-290

Ángela García Solaesa, Silvia Liliana Bucio, María Teresa Sanz, Sagrario Beltrán, Sara Rebolleda

A novel continuous flow apparatus with a video camera system for high pressure phase equilibrium measurements

Original Research Article

Pages 291-300

Meri Saajanlehto, Petri Uusi-Kyyry, Piia Haimi, Minna Pakkanen, Ville Alopaeus

Critical and supercritical properties of Lennard-Jones fluids

Original Research Article

Pages 301-308

David M. Heyes, Leslie V. Woodcock

Prediction of phase behaviors of ionic liquids over a wide range of conditions

Original Research Article

Pages 309-320

Bong-Seop Lee, Shiang-Tai Lin

Accurate prediction of H₂S and CO₂ containing sour gas hydrates formation conditions considering hydrolytic and hydrogen bonding association effects

Original Research Article

Pages 321-328

Bahman ZareNezhad, Mohammad Ziaee

Standard reference data for the air–liquid and vapor–liquid surface tension of benzene

Original Research Article

Pages 329-337

Monika Součková, Jaroslav Klomfar, Jaroslav Pátek

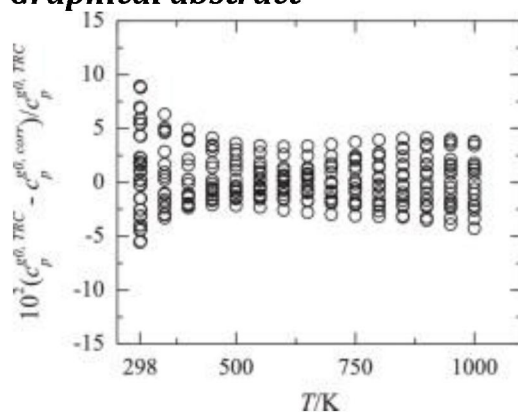
Predictive correlations for ideal gas heat capacities of pure hydrocarbons and petroleum fractions

Original Research Article

Pages 338-370

Vaclav Lastovka, John M. Shaw

Graphical abstract



Short Communication

SRK and PR alpha functions for ice

Pages 371-373

Claude F. Leibovici, Dan Vladimír Nichita

Corrigendum

Corrigendum to “Phase equilibria for the ternary systems ethanol, water + ethylene glycol or + glycerol at 101.3 kPa” [Fluid Phase Equilib. 341 (2013) 54–60]

Page 374

Jordi Pla-Franco, Estela Lladosa, Sonia Loras, Juan B. Montón

