

ON THE COVER: The images shown on the cover were taken from papers in this issue: (left top) Pressure-temperature curves depicting accurate measurements of hydrogen-enriched natural gas carried out with a two-sinker densimeter (see DOI: 10.1021/je500181v). (right top) Walden plot from 298 K to 343 K of the pure imidazolium-based ionic liquids in this study (see DOI: 10.1021/je400841s). (left bottom) Solid-liquid equilibria phase diagram of the system $\text{Na}_2\text{SO}_4 + \text{H}_2\text{NCH}_2\text{CH}_2\text{SO}_3\text{H} + \text{H}_2\text{O}$ at $T = 293.15$ K (see DOI: 10.1021/je5003303). (right bottom) 3D nonlinear surface plot for solubility of trehalose versus temperature at different solvent compositions (see DOI: 10.1021/je5000428).

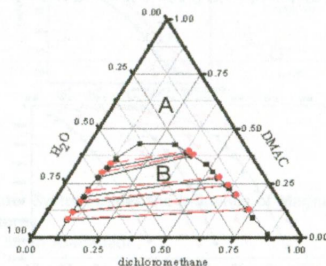
Articles

1733

dx.doi.org/10.1021/je401001z

Determination and Correlation of Liquid–Liquid Equilibrium Data for the Ternary Dichloromethane + Water + *N,N*-Dimethylacetamide System

Chengxue Wang,* Xiaojing Liu, Peng Wang, and Pengfei Yang

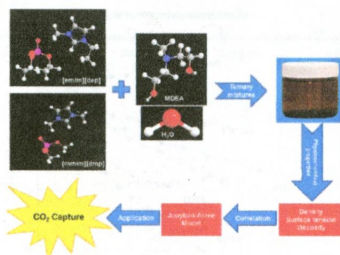


1737

dx.doi.org/10.1021/je400562z

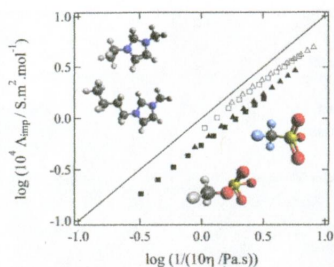
Density, Surface Tension, and Viscosity of Ionic Liquids (1-Ethyl-3-methylimidazolium diethylphosphate and 1,3-Dimethylimidazolium dimethylphosphate) Aqueous Ternary Mixtures with MDEA

Noraini Abd Ghani, Nor Asrina Sairi,* Mohamed Kheireddine Aroua, Yatimah Alias, and Rozita Yusoff



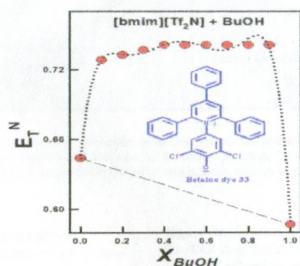
Transport Properties and Ionic Association in Pure Imidazolium-Based Ionic Liquids as a Function of Temperature

B. E. Mbondo Tsamba, S. Sarraute, M. Traïkia, and P. Husson*



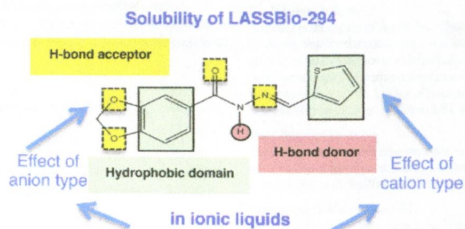
Solvatochromic Absorbance Probe Behavior within Mixtures of the Ionic Liquid 1-Butyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide + Molecular Organic Solvents

Anwar Ali,* Maroof Ali, Nisar Ahmad Malik, Sahar Uzair, and Abbul Bashar Khan

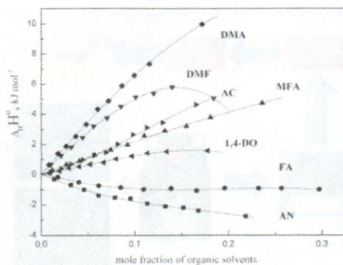


Solubility of a New Cardioactive Prototype Drug in Ionic Liquids

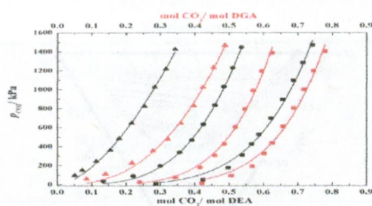
Jacqueline Resende de Azevedo, Jean-Jacques Letourneau, Fabienne Espitalier,* and Maria Inês Ré



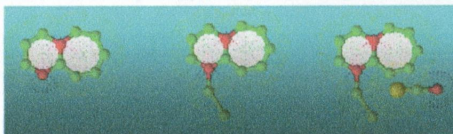
Enthalpies of β -Alanine Dissolution in Some Water + Organic Mixtures at 298.15 K
Valeriy I. Smirnov* and Valentin G. Badelin



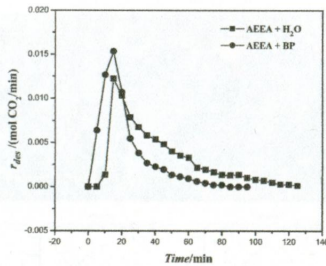
Solubility of CO_2 in the Mixed Solvent System of Alkanolamines and Poly(ethylene glycol) 200
Jun Li, Lifang Chen, Yinmei Ye, and Zhiwen Qi*



Synthesis, Characterization, and Thermophysical Properties of 1,8-Diazobicyclo[5.4.0]undec-7-ene Based Thiocyanate Ionic Liquids
Kallidanthiyil Chellappan Lethesh,* Syed Nasir Shah, and M. I. Abdul Mutalib



Solubility of CO₂ in Nonaqueous Absorption System of 2-(2-Aminoethylamine)ethanol + Benzyl Alcohol
Chao Guo, Shaoyun Chen,* Yongchun Zhang,* and Guangbo Wang

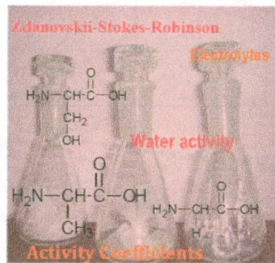


1802

dx.doi.org/10.1021/je401034k

Water Activity in Aqueous Amino Acid Solutions Containing Ammonium Sulfate at 298.2 K

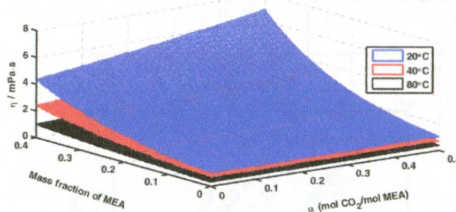
Mário F. Vilarinho, Isa C. Fernandes, and Simão P. Pinho*

1808 5

dx.doi.org/10.1021/je401081e

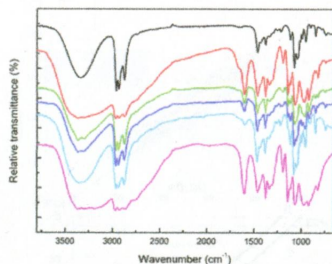
Physical Properties of Partially CO₂ Loaded Aqueous Monoethanolamine (MEA)

Ardi Hartono, Emmanuel Orji Mba, and Hallvard F. Svendsen*



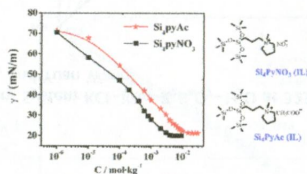
Densities, Refractive Indices, Viscosities, and Spectroscopic Study of 1-Amino-2-propanol + 1-Butanol and + 2-Butanol Solutions at (288.15 to 333.15) K

Vuk D. Spasojević, Bojan D. Djordjević, Slobodan P. Šerbanović, Ivona R. Radović, and Mirjana Lj. Kijevčanin*



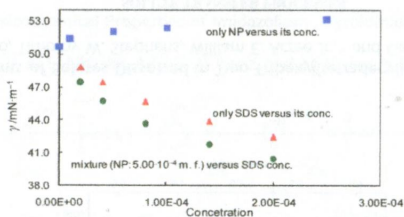
Effect of Counterions on Micellization of Pyrrolidinium Based Silicone Ionic Liquids in Aqueous Solutions

Jinglin Tan and Shengyu Feng*



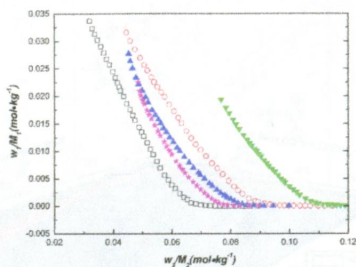
Interfacial Tension of the *n*-Hexane–Water System under the Influence of Magnetite Nanoparticles and Sodium Dodecyl Sulfate Assembly at Different Temperatures

Javad Saien,* Azadeh Rezvani Pour, and Simin Asadabadi



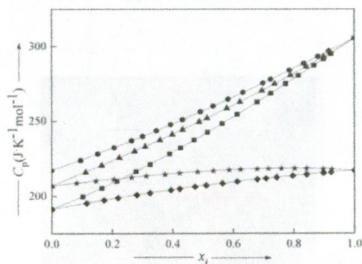
Measurement and Correlation of Phase Equilibria in Aqueous Two-Phase Systems Containing Polyoxyethylene Lauryl Ether and Tartrate Salt at Different Temperatures

Yang Lu, Tongfan Hao, Ming Yan, Juan Han, Zhenjiang Tan,* and Yongsheng Yan*



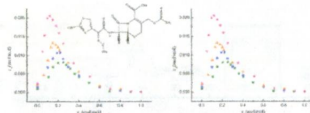
Excess Heat Capacities of Binary and Ternary Mixtures Containing 1-Ethyl-3-methylimidazolium Tetrafluoroborate and Anilines

V. K. Sharma,* S. Solanki, and S. Bhagour

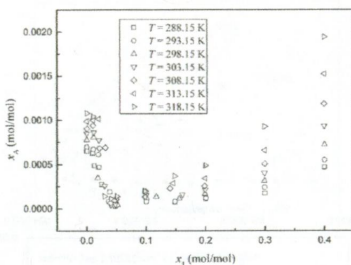


Solubility of Cefotaxime Sodium in Ethanol + Water Mixtures under Acetic Acid Conditions

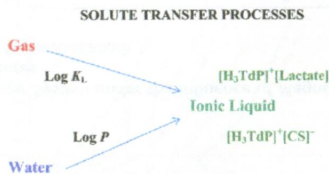
Yongheng Yin, Ying Bao,* Zhenguo Gao, Zhao Wang, Dong Liu, Hongxun Hao, and Yongli Wang



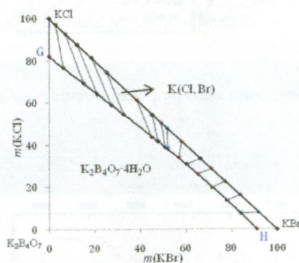
Solubility of Trehalose in Water + Ethanol Solvent System from (288.15 to 318.15) K
 Peng Wang,* Jinxia Jiang, Xiao'an Jia, Linjie Jiang, and Suye Li



Infinite Dilution Activity Coefficients of Solutes Dissolved in Two Trihexyl(tetradecyl)phosphonium Ionic Liquids
 Fabrice Mutelet, Dominique Alonso, Timothy W. Stephens, William E. Acree Jr.,* and Gary A. Baker

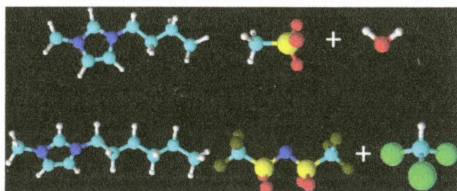


Solid-Liquid Equilibria in the Quaternary System KCl-KBr-K₂B₄O₇-H₂O at 323 K
 Yong-Xia Hu, Shi-Hua Sang,* Rui-Zhi Cui, and Yuan Wang



Comparing Composition- and Temperature-Dependent Excess Molar Volumes of Binary Systems Involving Ionic Liquids

Elise A. Cade, David R. Saeva, and Markus M. Hoffmann*

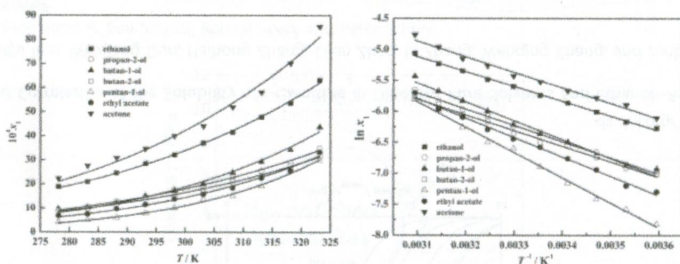


1915

dx.doi.org/10.1021/je5000605

Determination and Correlation of Solubility Data and Dissolution Thermodynamic Data of Cefixime Trihydrate in Seven Pure Solvents

Tianwei Zhang, Quan Liu, Zhiping Xie, Xiaopeng Song, and Junbo Gong*

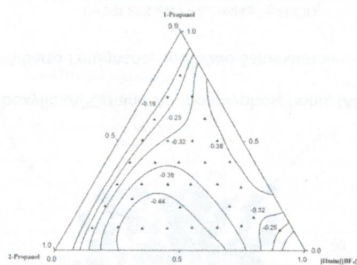


1922

dx.doi.org/10.1021/je401101u

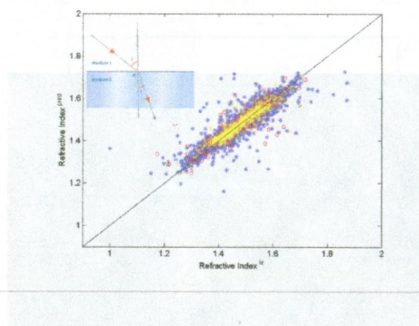
Measurement and Correlation of the Excess Properties of Ternary Mixture of $\{x_1[\text{Hmim}][\text{BF}_4] + x_2\text{1-Propanol} + x_3\text{2-Propanol}]\}$ at Different Temperatures

F. Kermanpour* and T. Sharifi



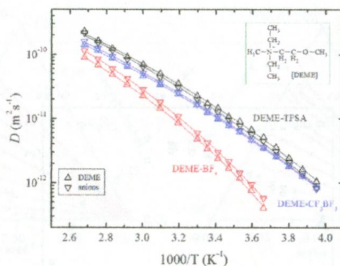
Group Contribution Model for the Prediction of Refractive Indices of Organic Compounds

Farhad Gharagheizi, Poorandokht Ilani-Kashkouli, Arash Kamari, Amir H. Mohammadi,* and Deresh Ramjugernath*



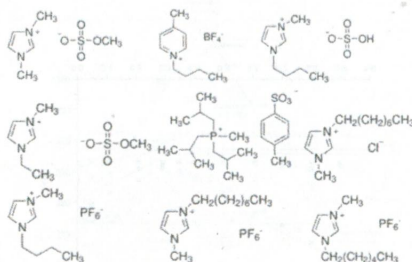
Transport and Electrochemical Properties of Three Quaternary Ammonium Ionic Liquids and Lithium Salts Doping Effects Studied by NMR Spectroscopy

Kikuko Hayamizu,* Seiji Tsuzuki, and Shiro Seki



Temperature Dependence of Physicochemical Properties of Imidazolium-, Pyrrolidinium-, and Phosphonium-Based Ionic Liquids

Mohammad S. AlTuwaim,* Khaled H. A. E. Alkhalidi, Adel S. Al-Jimaz, and Abubaker A. Mohammad

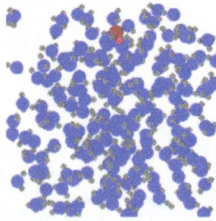


1964

dx.doi.org/10.1021/je500096r

High Temperature Diffusion Coefficients for O₂, H₂, and OH in Water, and for Pure Water

Dimitrios T. Kallikragas, Andriy Y. Plugaty, and Igor M. Svishchev*

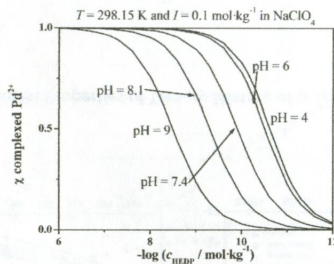


1970

dx.doi.org/10.1021/je500109m

Sequestering Ability of Aminopolycarboxylic (APCs) and Aminopolyphosphonic (APPs) Ligands Toward Palladium(II) in Aqueous Solution

Concetta De Stefano, Gabriele Lando,* Alberto Pettignano, and Silvio Sammartano

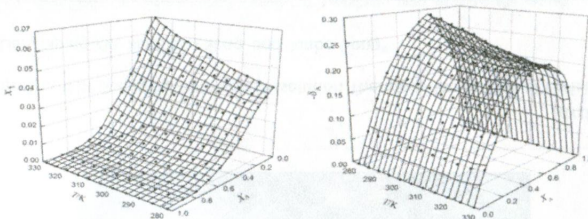


1984 5

dx.doi.org/10.1021/je500078n

Measurement and Correlation of the Solubility of L-Carnitine in Different Pure Solvents and Ethanol–Acetone Solvent Mixture

Dengqiong Sun, Riju Ren, Weiqiang Dun, Haihong Zhang, Lijun Zhao, Li Zhang, Wenqing Zhang, and Junbo Gong*

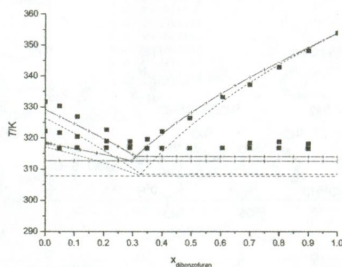


1991

dx.doi.org/10.1021/je5001389

Phase Equilibria in the Ternary System Hexacosane + Dibenzofuran + Biphenyl: Experimental Data and Prediction with DISQUAC Model

Abdelaziz Chikh Baelhadj,* Omar Dahmani, Rachid Mahmoud, Fabrice Mutelet, Mohammed Bouroukba, and Michel Dirand

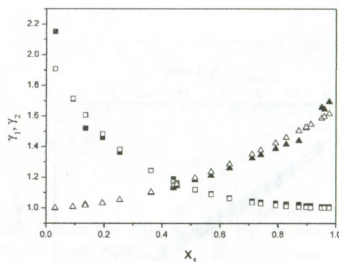


1998

dx.doi.org/10.1021/je500160t

Investigation on Isobaric Vapor–Liquid Equilibrium for Water + Acetic Acid + *sec*-Butyl Acetate

Qing Chai, Hui Wan,* Lei Wang, and Guofeng Guan*

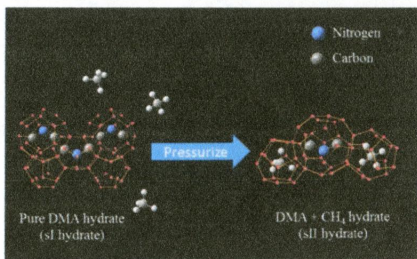


2004

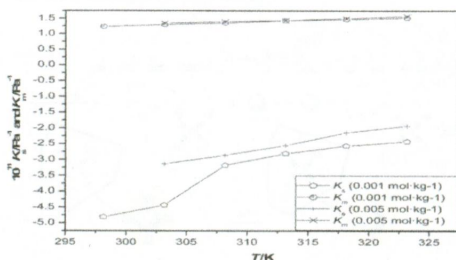
dx.doi.org/10.1021/je500167n

Structural Transition Induced by CH₄ Enclathration and Cage Expansion with Large Guest Molecules Occurring in Amine Hydrate Systems

Yeobum Youn, Jiwoong Seol,* Minjun Cha, Yun-Ho Ahn, and Huen Lee*

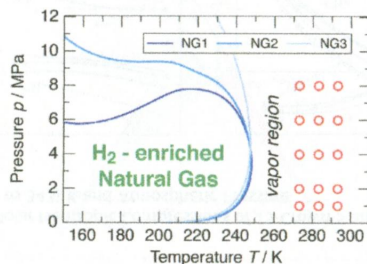


Effect of Electrolyte and Temperature on Micellization Behavior of *N*-Ethyl-*N,N*-dimethyl-1-hexadecanaminium Bromide
 Parvaiz Ahmad Bhat,* Fayaz Ahmad Sheikh, and Haris Izhar Tantry



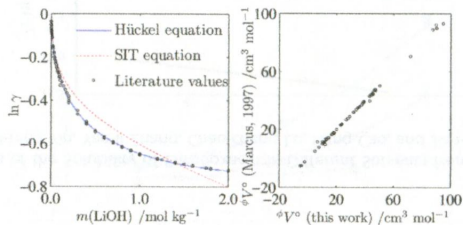
Accurate (p , ρ , T , x) Measurements of Hydrogen-Enriched Natural-Gas Mixtures at $T = (273.15, 283.15, \text{ and } 293.15) \text{ K}$ with Pressures up to 8 MPa

Markus Richter,* Mohamed A. Ben Souissi, Roland Span, and Peter Schley



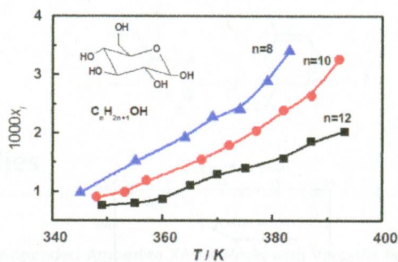
Thermodynamics of Strong Aqueous Electrolyte Solutions at $t = 25 \text{ }^\circ\text{C}$ Described by the Hückel Equations

Darren Rowland* and Peter M. May



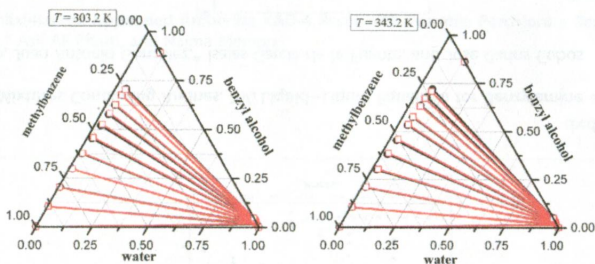
Solubility Determination and Correlation of (2*R*,3*S*,4*S*,5*S*)-6-(Hydroxymethyl)-tetrahydro-2*H*-pyran-2,3,4, 5-tetraol in Fatty Alcohol

Yongzhao Zhang, Xia Guo, and Jianbing Ji*



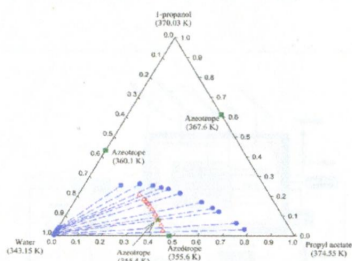
Liquid–Liquid Equilibria for the Ternary System Water + Benzyl Alcohol + Methylbenzene at (303.2 to 343.2) K

Hui Wang, Qinbo Wang,* Zhenhua Xiong, and Chuxiong Chen



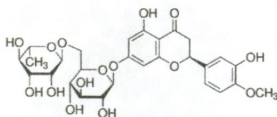
Isobaric Vapor–Liquid–Liquid Equilibria for the Ternary Systems Ethanol + Water + Propyl Acetate and 1-Propanol + Water + Propyl acetate

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



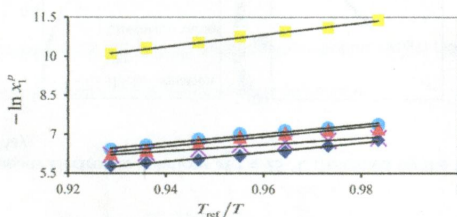
Solubility of Bioactive Compound Hesperidin in Six Pure Solvents at (298.15 to 333.15) K

Md Khalid Anwer,* Ramadan Al-Shdefat, Shahid Jamil, Prawez Alam, Maged S. Abdel-Kader, and Faiyaz Shakeel

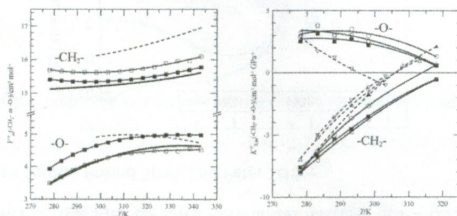


Measurement and Correlation of the Solubility of Enrofloxacin in Different Solvents from (303.15 to 321.05) K

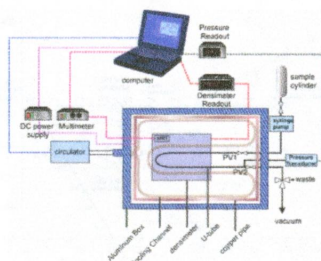
Meng-jiao Liu, Hua-lin Fu,* Dai-ping Yin, Yan-li Zhang, Chao-cheng Lu, Hang Cao, and Jian-yu Zhou

Partial Molar Volumes and Partial Molar Isentropic Compressions of 15-Crown-5 and 18-Crown-6 Ethers at Infinite Dilution in Water at Temperatures $T = (278 \text{ to } 343) \text{ K}$ and Atmospheric Pressure

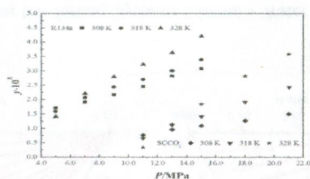
Ivan Cibulka*



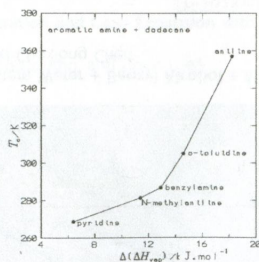
Compressed-Liquid Density Measurements of 3-Ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-trifluoromethylhexane
Stephanie L. Outcalt*



Solubility of 4-Aminosalicylic Acid in Supercritical Carbon Dioxide and Subcritical 1,1,1,2-Tetrafluoroethane
Jun-su Jin,* Xing Fan, Haifei Zhang, Yi-wei Wang, and Ze-ting Zhang



Thermodynamics of Mixtures Containing Amines. XV. Liquid-Liquid Equilibria for Benzylamine + CH₃(CH₂)_nCH₃ (n = 8, 9, 10, 12, 14)
Cristina Alonso-Tristán, Juan Antonio González,* Isaías García de la Fuente, and José Carlos Cobos

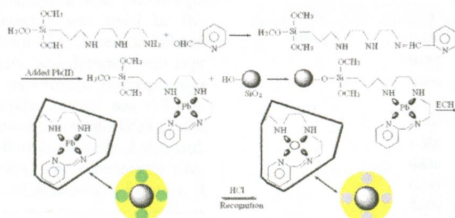


2106

dx.doi.org/10.1021/je500328t

Selective Removal of Lead(II) from Aqueous Solution by an Ion-Imprinted Silica Sorbent Functionalized with Chelating N-Donor Atoms

Hong-Tao Fan,* Xiao-Tong Sun, Zhi-Gang Zhang, and Wen-Xiu Li*

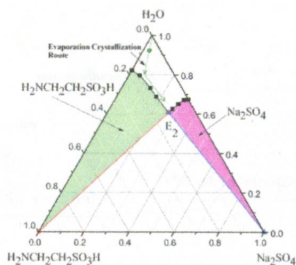


2115

dx.doi.org/10.1021/je5003303

Solid-Liquid Equilibria of the $\text{Na}_2\text{SO}_4 + \text{H}_2\text{NCH}_2\text{CH}_2\text{SO}_3\text{H} + \text{H}_2\text{O}$ System from (288.15 to 328.15) K

Jie Lu,* Xun Zhou, Lian-Wei Chen, Li-Juan Zhang, and Sohrab Rohani

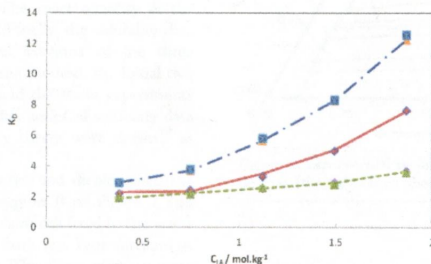


2120

dx.doi.org/10.1021/je5003362

Distribution of Penicillin G from the Aqueous Phase to the Organic Phase Using Amberlite LA-2 Extractant in Different Diluents

Hasan Uslu,* Seyhan Günyeli, Zeynep İlbay, and Ş. İsmail Kırbaşlar

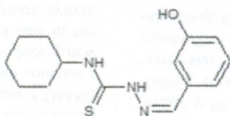


2126

dx.doi.org/10.1021/je5003708

Solubility of (2Z)-N-Cyclohexyl-2-(3-hydroxybenzylidene) Hydrazine Carbothioamide in Different Pure Solvents at (298.15 to 338.15) K

Faiyaz Shakeel,* Mashooq A. Bhat, and Nazrul Haq



Comments and Replies

2131

dx.doi.org/10.1021/je5001632

Comment on "New Calix[4]arene Appended Amberlite XAD-4 Resin with Versatile Perchlorate Removal Efficiency"

Yuh-Shan Ho*

Additions and Corrections

2132

dx.doi.org/10.1021/je500213r

Correction to New Calix[4]arene Appended Amberlite XAD-4 Resin with Versatile Perchlorate Removal Efficiency

Shahabuddin Memon,* Asif Ali Bhatti, and Najma Memon