

ON THE COVER: The images shown on the cover were taken from papers in this issue: (top left) Solutions of the isoactivity equations for the CCl_4 (1) + 2-propanol (2) + H_2O (3) system (see DOI: 10.1021/jeS00204v). (top right) Cell potential residuals for a Pt, H_2 | H_2SO_4 | PbSO_4 , Pb cell as a function of temperature and molality of the aqueous H_2SO_4 solution (see DOI: 10.1021/je4011147). (bottom left) Solubility of calcium-L-lactate pentahydrate (CLLP) in the CLLP (A) + ethanol (B) + water (C) system as a function of temperature and the initial mole fraction of ethanol in the ethanol/water solvent mixture (see DOI: 10.1021/jeS00416k). (bottom right) Direct-current conductivities of DMSO + KI electrolyte mixtures with different KI mole fractions (x) at different temperatures (see DOI: 10.1021/je4010678).

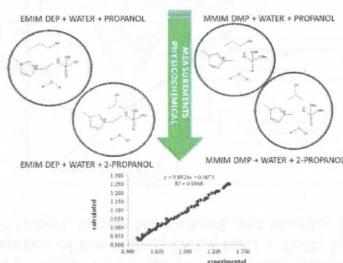
Articles

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dx.doi.org/10.1021/je400576e

Composition and Temperature Dependence of Density, Surface Tension, and Viscosity of EMIM DEP/MMIM DMP + Water + 1-Propanol/2-Propanol Ternary Mixtures and Their Mathematical Representation Using the Jouyban–Acree Model
 Wan Melissa Diyana Wan Normazlan, Nor Asrina Sairi,* Yatimah Alias, Asrul Farrish Udaiyappan, Abolghasem Jouyban, and Mehry Khoubnasabjafari

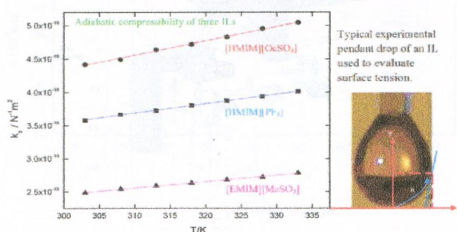


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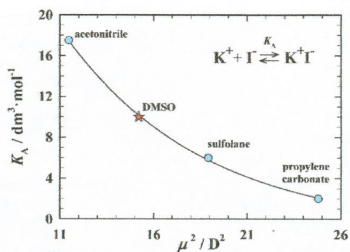


dx.doi.org/10.1021/je5000617

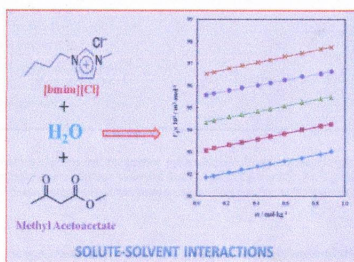
Viscoelastic, Surface, and Volumetric Properties of Ionic Liquids [BMIM][OCSO₄], [BMIM][PF₆], and [EMIM][MeSO₃]
 Manish Pratap Singh, Satish Kumar Mandal, Yogendra Lal Verma, Abhishek Kumar Gupta, Rajendra Kumar Singh,* and Suresh Chandra



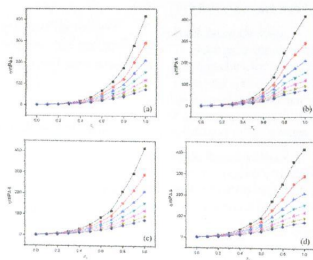
Electrical Conductivity in Dimethyl Sulfoxide + Potassium Iodide Solutions at Different Concentrations and Temperatures
Iwona Płowaś,* Jolanta Świergiel, and Jan Jadzyn



Solute–Solvent Interactions of Alkyl Acetoacetates in Aqueous {1-Butyl-3-methylimidazolium Chloride [bmim][Cl]} Ionic Liquid Solutions in the Temperature Interval (288.15–308.15) K
Amalendu Pal,* Harsh Kumar, Ritu Maan, and Harish Kumar Sharma

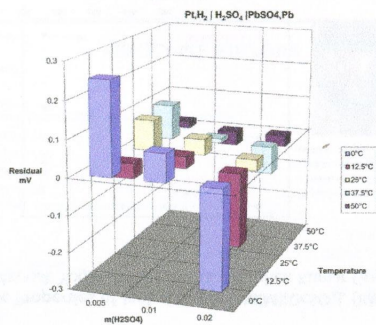


Densities and Viscosities of Binary Mixtures Containing 1,3-Dimethylimidazolium Dimethylphosphate and Alcohols
Zhibo Zhang, Qing Zhou, Xingmei Lu, Congzhen Qiao,* and Suojiang Zhang*

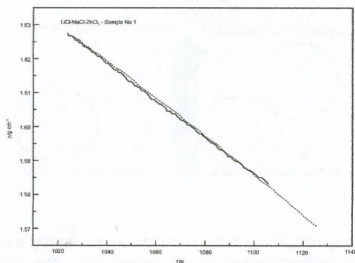


Thermodynamic Properties of Aqueous Sulfuric Acid

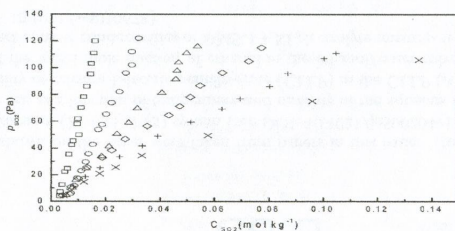
Hannu Sippola* and Pekka Taskinen

Phase Equilibrium and Density Investigation of the Molten $\text{LiCl} + \text{NaCl} + \text{ZnCl}_2$ System

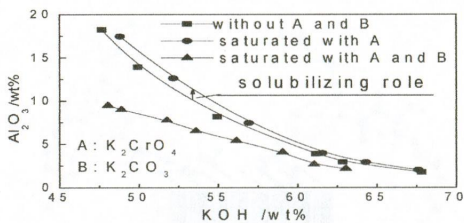
Blanka Kubiková,* Vladimír Danielík, Eric Robert, Jarmila Mlynáriková, and Miroslav Boča

Solubility of Dilute SO_2 in the Binary System Poly Ethylene Glycol 300 + Dimethyl Sulfoxide at $T = 298.15$ K and $p = 123.15$ kPa and Mixtures' Excess Properties at $T = (298.15, 303.15, 308.15, 313.15, \text{ and } 318.15)$ K

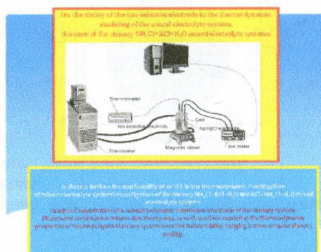
Bo Guo, Jianbin Zhang,* Qiang Li, Lihua Li, Huiyan Ma, and Qiancheng Zhang*



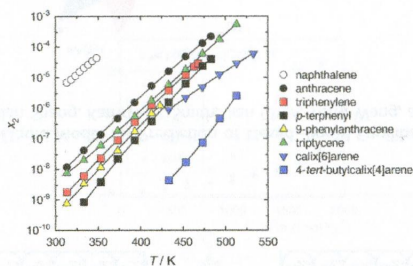
Solubility of the System $\text{KOH}-\text{K}_2\text{CrO}_4-\text{K}_2\text{CO}_3-\text{Al}_2\text{O}_3-\text{H}_2\text{O}$ at 150 °C in the High Alkali Concentrated Region
Chunhua Du,* Shili Zheng, and Yi Zhang



Ability of the Ion-Selective Electrode in the Thermodynamic Modeling of the Mixed Electrolyte System: The Case of the Ternary $\text{NH}_4\text{Cl} + \text{KCl} + \text{H}_2\text{O}$ Mixed Electrolyte Systems
Farzad Deyhimi, Maryam Abedi, and Zohreh Karimzadeh*

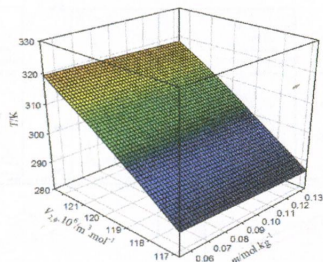


Solubilities of Calix[6]arene and 4-*tert*-Butylcalix[4]arene in Pressurized Hot Water
Pavel Karásek, Josef Planeta, and Michal Roth*



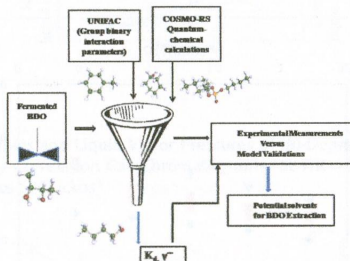
Studies on the Interactions of Saccharides and Methyl Glycosides with Lithium Chloride in Aqueous Solutions at (288.15 to 318.15) K

Parampal K. Banipal,* Amanpreet K. Hundal, Neha Aggarwal, and Tarlok S. Banipal



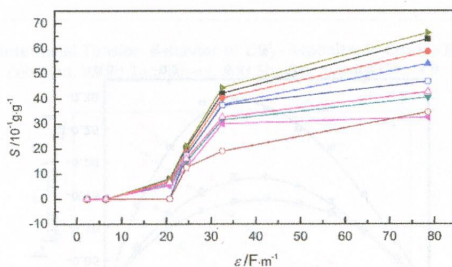
Rapid Solvent Screening Using Thermodynamic Models for Recovery of 2,3-Butanediol from Fermentation by Liquid-Liquid Extraction

Snehal D. Birajdar, Sasisanker Padmanabhan,* and Srinivasan Rajagopalan*



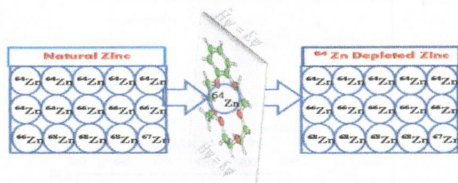
Investigation of Surface Properties and Solubility of 1-Vinyl-3-alkyl/Esterimidazolium Halide Ionic Liquids by Density Functional Methods

Yimei Tang,* Xiaoling Hu, Ping Guan, Tian Tian, and Shuangjie Wang

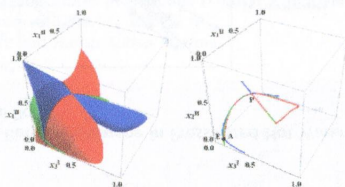


Nano Cavity Induced Isotope Separation of Zinc: Density Functional Theoretical Modeling

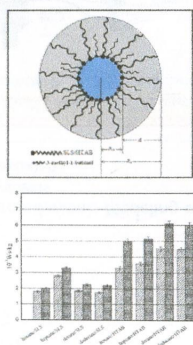
A. K. Singha Deb, Sk. M. Ali,* K. T. Shenoy, and S. K. Ghosh

**Analysis of the Nonrandom Two-Liquid Model for Prediction of Liquid–liquid Equilibria**

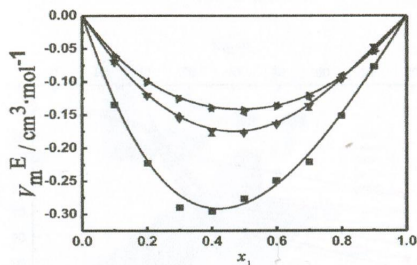
Zheng Li, Kathryn A. Mumford, Yidan Shang, Kathryn H. Smith, Jian Chen, Yong Wang, and Geoff W. Stevens*

**Physicochemical Characterization of Anionic and Cationic Microemulsions: Water Solubilization, Particle Size Distribution, Surface Tension, and Structural Parameters**

Achinta Bera,* Ajay Mandal,* and T. Kumar



Density, Viscosity, Refractive Index, and Freezing Point for Binary Mixtures of 1,1'-Bicyclohexyl with Alkylcyclohexane
Xiaodong Jiang, Guijin He, Xi Wu, Yongsheng Guo, Junjun Fang, and Li Xu*

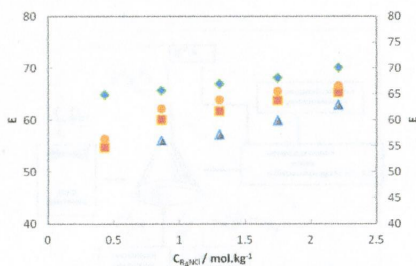


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dx.doi.org/10.1021/je500280j

Intensification of Pyridine-3-carboxylic Acid Extraction Using *N*-Methyl-*N,N*-dioctyloctan-1-ammonium Chloride in Different Type of Diluents

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

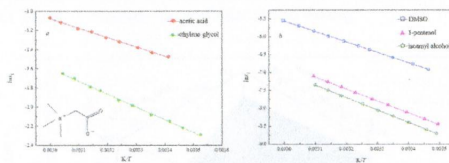


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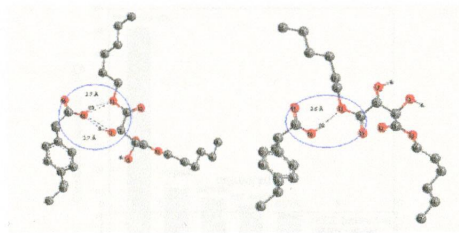
Solubility Measurement and Modeling for Betaine in Different Pure Solvents

Shui Wang, Yingying Zhang, and Jidong Wang*



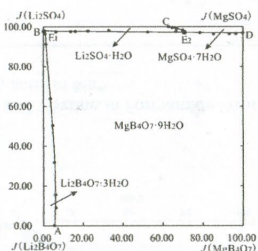
Enantioselective Liquid–Liquid Extraction of Racemic Ibuprofen by L-Tartaric Acid Derivatives

Zhongqi Ren,* Yong Zeng, Yutao Hua, Yongqi Cheng, and Zhimin Guo



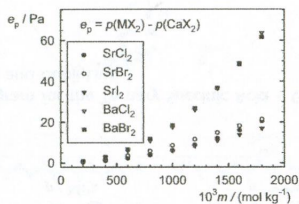
Phase Equilibrium of the Quaternary System Containing Lithium, Magnesium, Sulfate, and Borate in Aqueous Solution at 308 K

Hongcan Li, Shijun Ni, and Ying Zeng*



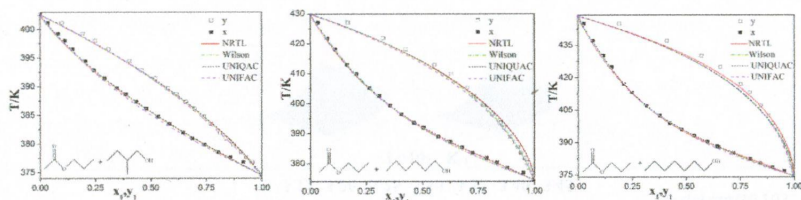
Traceable Activity and Osmotic Coefficients in Pure Aqueous Solutions of Alkaline Earth Metal Bromides and Iodides at 25 °C

Jaakko I. Partanen*



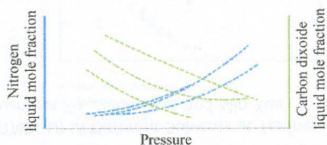
Isobaric Vapor–Liquid Equilibria of Binary Systems (Propyl Acetate + 2-Methylbutan-1-ol), (Propyl Acetate + Hexan-1-ol), and (Propyl Acetate + Heptan-1-ol) at 101.3 kPa

Ye Qi, Yulong Liu, Jingwei Xie, and Mingqing Zhang*



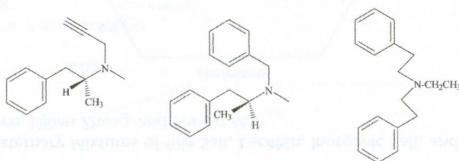
Solubility Measurements for the $N_2 + CO_2 + H_2O$ System under Hydrate–Liquid–Vapor Equilibrium

Francis Lang and Phillip Servio*



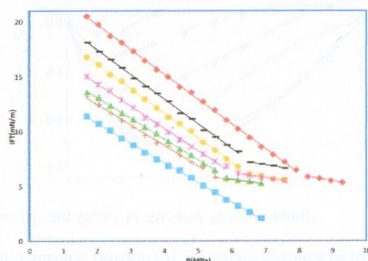
Evaluation of the Vaporization Enthalpies and Liquid Vapor Pressures of (*R*)-Deprenyl, (*S*)-Benzphetamine, Alverine, and a Series of Aliphatic Tertiary Amines by Correlation Gas Chromatography at $T/K = 298.15$

Chase Gobble, John Vikman, and James S. Chickos*

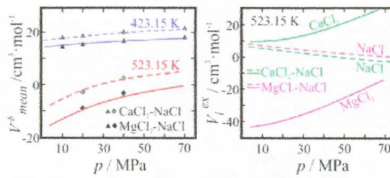


Effects of Paraffinic Group on Interfacial Tension Behavior of CO_2 –Asphaltenic Crude Oil Systems

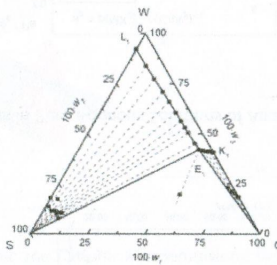
Ehsan Mahdavi, Fatemeh Sadat Zebarjad, Vahid Taghikhani, and Shahab Ayatollahi*



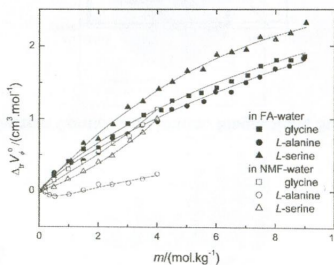
Volumetric Properties of Mixed Electrolyte Aqueous Solutions at Elevated Temperatures and Pressures. The Systems $\text{CaCl}_2\text{-NaCl-H}_2\text{O}$ and $\text{MgCl}_2\text{-NaCl-H}_2\text{O}$ to 523.15 K, 70 MPa, and Ionic Strength from (0.1 to 18) $\text{mol}\cdot\text{kg}^{-1}$
 Denis Zezin,* Thomas Driesner, Samuel Scott, Carmen Sanchez-Valle, and Thomas Wagner



Solid-Liquid Equilibrium and Phase Diagram for the Ternary Succinic Acid + Glutaric Acid + Water System
 Yijie Deng, Xiaobo Sun, Li Xu,* Zhixin Ma, and Guoji Liu*

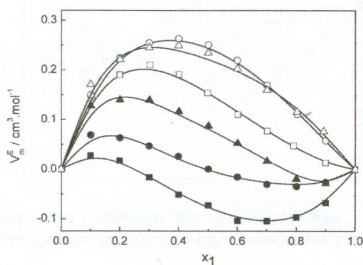


Volumetric Properties of Glycine, L-Alanine, and L-Serine in Formamide-Water Mixtures at 298.15 K
 Zhijie Kong, Chunli Liu, Li Jiang, Junyong Mo, and Lin Ma*

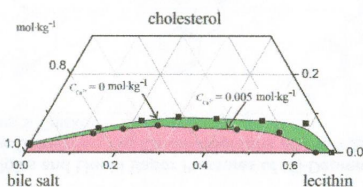


Density, Viscosity, Refractive Index, and Surface Tension for Six Binary Systems of Adamantane Derivatives with 1-Heptanol and Cyclohexylmethanol

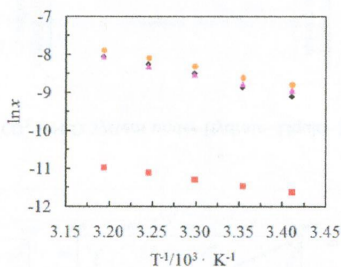
Xiaofang Cao, Xiaomei Qin, Xi Wu, Yongsheng Guo,* Li Xu, and Wenjun Fang*

**Solubility of Cholesterol in Quaternary Mixtures of Bile Salt, Lecithin, Inorganic Salt, and Water at 310.2 K**

Jie Lu,* Danhui Wu, Lianwei Chen, Lijuan Zhang, and Shimin Mao

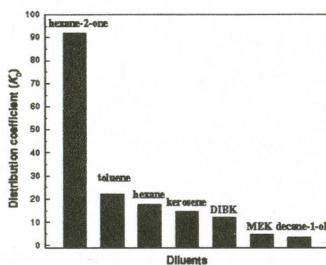
**Solubility of Tetranitrodimerglycoluril (TNDGU) in Different Solvents at Temperatures between 293.15 K and 313.15 K**

Kejian Cui, Yumei Yang, Zihui Meng,* Guangrui Xu, Zhibin Xu,* and Min Xue



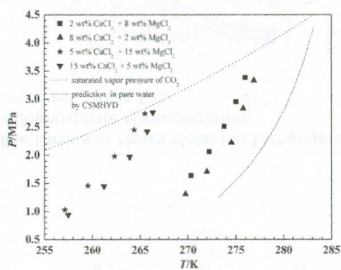
Reactive Extraction of Oxoethanoic Acid (Glyoxylic Acid) Using Amberlite-LA2 in Different Diluents

Hasan Uslu,* Dipaloy Datta, and Sushil Kumar



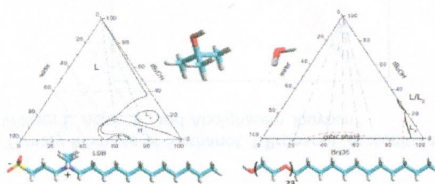
Phase Equilibria of CO₂ Hydrate in CaCl₂-MgCl₂ Aqueous Solutions

Zhen Long, Li Zha, Deqing Liang,* and Dongliang Li



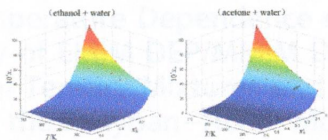
Effect of Branched Alcohols on Phase Behavior and Rheology of Nonionic Surfactant Systems

Cristina García-Iriepa and Mercedes Valiente*



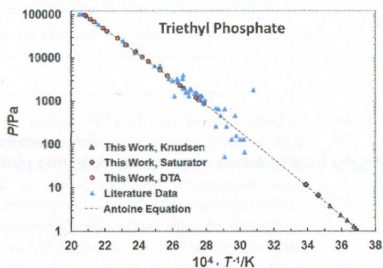
Measurement and Correlation of Solubility of Calcium-L-lactate Pentahydrate in Ethanol + Water and Acetone + Water Systems

Qinghua Luan, Yongli Wang, Guan Wang, Jingxiang Yang, and Hongxun Hao*



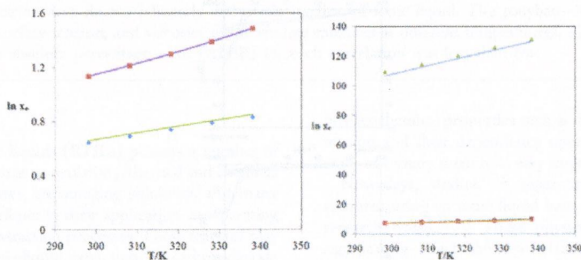
Vapor Pressure of Triethyl and Tri-*n*-Propyl Phosphates and Diethyl Malonate

Ann Brozena,* James H. Buchanan, Ronald W. Miles Jr, Barry R. Williams, and Melissa S. Hulet



Solubility of *N*-(4-Chlorophenyl)-2-(pyridin-4-ylcarbonyl)hydrazinecarbothioamide (Isoniazid Analogue) in Five Pure Solvents at (298.15 to 338.15) K

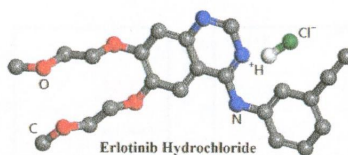
Faiyaz Shakeel,* Mashooq A. Bhat, and Nazrul Haq



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dx.doi.org/10.1021/je500482k

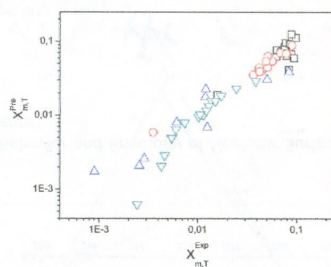
Solubility of Two Polymorphs of Erlotinib Hydrochloride in Isopropanol and Acetone from (273.15 to 303.15) K
 Jie Lu,* Xiaolan Zhan, Lianwei Chen, Lijuan Zhang, and Shimin Mao



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dx.doi.org/10.1021/je500497q

Solubility of Sodium Acetate in Ternary Mixtures of Methanol, 1-Propanol, Acetonitrile, and Water at 298.2 K
 Jafar Soleymani, Ernst Kenneder, William E. Acree Jr., and Abolghasem Jouyban*

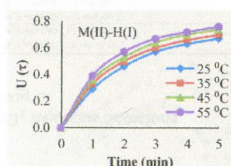


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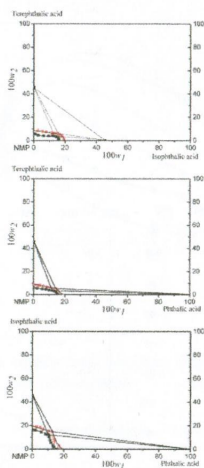
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dx.doi.org/10.1021/je500523n

Kinetics and Thermodynamics of Alkaline Earth and Heavy Metal Ion Exchange under Particle Diffusion Controlled Phenomenon Using Polyaniline-Sn(IV)iodophosphate Nanocomposite
 Md. Dilwar Alam Khan,* Arshia Akhtar, and Syed Ashfaq Nabi



Phase Equilibrium and Phase Diagram for the System of Benzene Dicarboxylic Acid + *N*-Methyl-2-pyrrolidone
 Gan-Bing Yao,* Ya-Ping Sun, Ling Wang, Jian-Kang Yi, Long Meng, and Xu Zhang



Comments and Replies

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dx.doi.org/10.1021/je500210z

Comments on "Liquid-Liquid Equilibria for the Quaternary System H_3PO_4 -NaCl- H_2O -TBP at 298.15 K"
 A. Marcilla* and F. Ruiz-Beviá

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dx.doi.org/10.1021/je500401p

Reply to "Comments on 'Liquid-Liquid Equilibria for the Quaternary System H_3PO_4 -NaCl- H_2O -TBP at 298.15 K"
 Chengqi Liu, Yongsheng Ren,* and Ya'nan Wang

Retractions

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dx.doi.org/10.1021/je400279d

Ionic Liquids as Promising Solvents for Biomass Derived Mannitol and Xylitol
 Ana Rita C. Morais, Lucinda J. A. Conceição, Rafał Bogel-Lukasik,* and Ewa Bogel-Lukasik