



**ON THE COVER:** The images shown on the cover were taken from papers in this issue: (top left) Liquid-liquid equilibria of the ternary system water + ethylbenzene + 1-phenylethanol at 318.2 K (see DOI: 10.1021/je500726x). (top right) Predicted phase diagram of the  $\text{Ca}(\text{NO}_3)_2$ – $\text{Mg}(\text{NO}_3)_2$ – $\text{H}_2\text{O}$  system compared with the results in the literature (see DOI: 10.1021/je500629s). (bottom left) Ternary phase diagram for the system of glutaric acid + urea + water at 303.15 K (see DOI: 10.1021/je50072se). (bottom right) Schematic representation of possible interactions in the mixtures of [EMIM][NTf<sub>2</sub>] and TX (see DOI: 10.1021/je500502a).

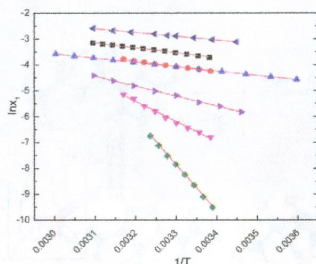
## Articles

3947

DOI: 10.1021/je500286x

4-Amino-3,6-dichloropyridazine Solubility Measurement and Correlation in Seven Pure Organic Solvents from (278.15 to 333.15) K

Jin-Qiang Liu,\* Yao-Yao Li, Ai-Yan Wang, Dong-Feng Hong, Li-Yue Zhang, Sha Wu, Qiao-Yun Bai, and Si-Yu Chen



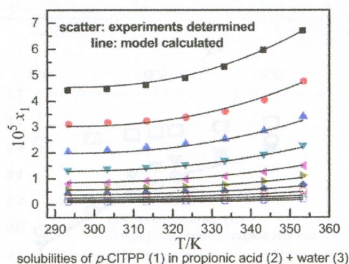
3953



DOI: 10.1021/je500291x

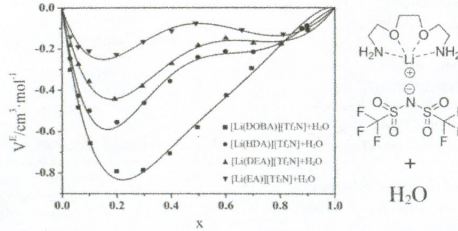
Solubilities of 5,10,15,20-Tetrakis(*p*-chlorophenyl)porphyrin in Binary Propionic Acid + Water Solvent Mixtures at (293.2 to 353.2) K

Chunlin Li, Qinbo Wang,\* Binwei Shen, Zhenhua Xiong, and Chuxiong Chen



### Effect of the Temperature and Coordination Atom on the Physicochemical Properties of Chelate-Based Ionic Liquids and Their Binary Mixtures with Water

Minming Shen, Siying Che, Yuyang Zhang, Jia Yao, and Haoran Li\*

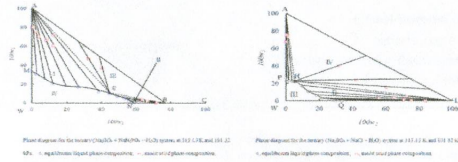


3969

DOI: 10.1021/je500854m

### Solid–Liquid Equilibrium for the Ternary Systems ( $\text{Na}_2\text{SO}_4 + \text{NaH}_2\text{PO}_4 + \text{H}_2\text{O}$ ) and ( $\text{Na}_2\text{SO}_4 + \text{NaCl} + \text{H}_2\text{O}$ ) at 313.15 K and Atmospheric Pressure

Xiaorui Zhang, Yongsheng Ren,\* Ping Li, Huijuan Ma, Wenjuan Ma, Chengqi Liu, Ya'nan Wang, Lingxin Kong, and Wei Shen

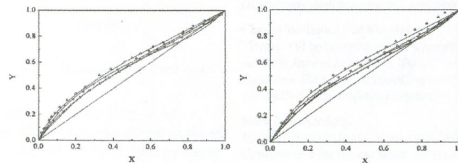


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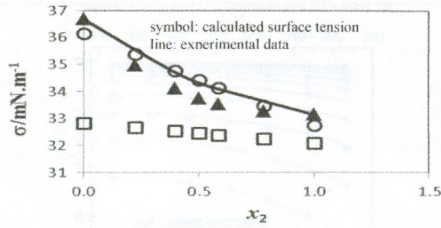
DOI: 10.1021/je500418f

### Phase Equilibrium Study of Binary and Ternary Mixtures of Ionic Liquids + Acetone + Methanol

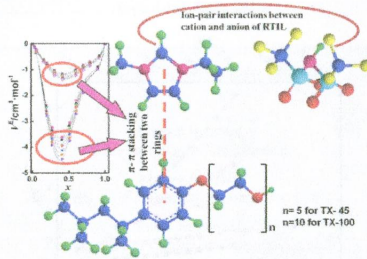
Wenxiu Li, Dezhang Sun, Tao Zhang, Yanhong Huang, Lin Zhang, and Zhigang Zhang\*



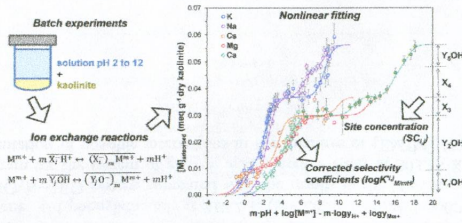
**Surface Tension Prediction of Ionic Liquid Binary Solutions**  
 Ensieh Ghasemian Lemraski\* and Zohre Pouyanfar



**Physicochemical Properties of New Formulations of 1-Ethyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide with Tritons**  
 Shafila Bansal, Navjot Kaur, Ganga Ram Chaudhary,\* S. K. Mehta, and A. S. Ahluwalia

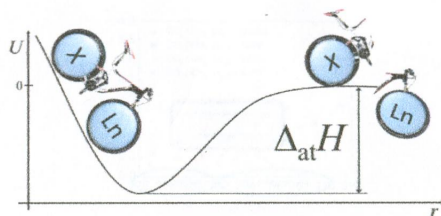


**Study of Major Ions Sorption Equilibria To Characterize the Ion Exchange Properties of Kaolinite**  
 Estela Reinoso-Maset\* and Jacques Ly

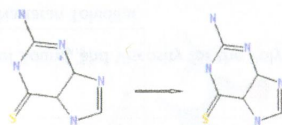


## Atomization Energies of LnX Molecules (Ln = Sm, Eu, and Yb; X = Cl, Br, and I)

Dmitry N. Sergeev, Vladimir B. Motalov,\* Mikhail F. Butman, Artem E. Kiselev, Lev S. Kudin, and Karl W. Krämer

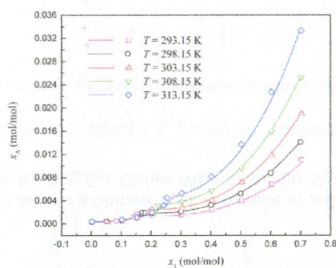
Solvent Effects on  $pK_a$  Values of Some Anticancer Agents in Acetonitrile–Water Binary Mixtures

Senem Sanli,\* Yuksel Altun, and Gulsen Guven



## Solubility of Trehalose in Water + Methanol Solvent System from (293.15 to 313.15) K

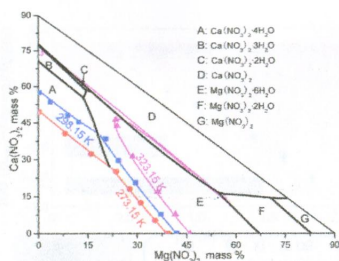
Linjie Jiang, Suye Li, Jinxia Jiang, Yangang Liang, and Peng Wang\*





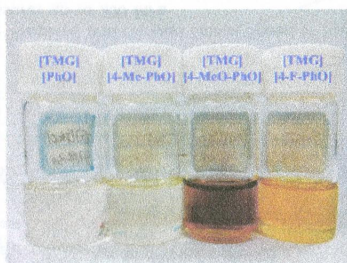
Solubility Phase Diagram of the  $\text{Ca}(\text{NO}_3)_2$ – $\text{Mg}(\text{NO}_3)_2$ – $\text{H}_2\text{O}$  System

Xia Yin, Dongdong Li, Yuqi Tan, Xiaoya Wu, Xiuli Yu, and Dewen Zeng\*

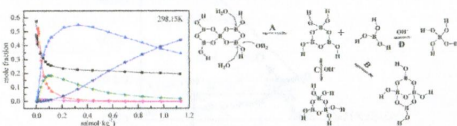


## Low-Viscosity Tetramethylguanidium-Based Ionic Liquids with Different Phenolate Anions: Synthesis, Characterization, and Physical Properties

Duan-Jian Tao,\* Wen-Jing Hu, Feng-Feng Chen, Xiang-Shu Chen,\* Xiao-Liang Zhang, and Yan Zhou

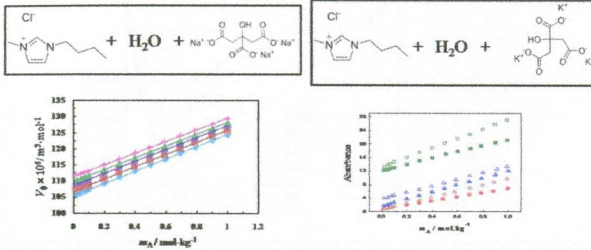
Density, Electrical Conductivity, pH, and Polyborate Distribution of  $\text{LiB}(\text{OH})_4$ ,  $\text{Li}_2\text{B}_2\text{O}_5(\text{OH})_4$ , and  $\text{LiB}_5\text{O}_6(\text{OH})_4$  Solutions

Haiwen Ge, Yan Fang,\* Chunhui Fang,\* Yongquan Zhou, Fayan Zhu, Hongyan Liu, Zixiang Yang, and Yuling Tang



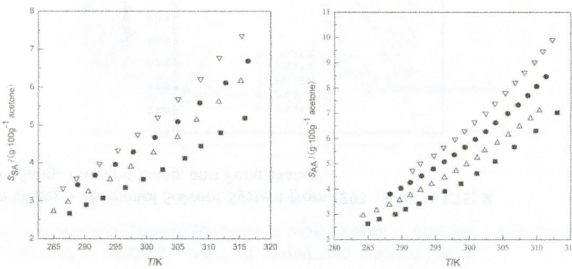
### Densities, Sound Speed, and UV Absorption Studies of Trisodium Citrate and Tripotassium Citrate in Aqueous Solutions of 1-Hexyl-3-methylimidazolium Chloride [C<sub>6</sub>mim][Cl]

Harsh Kumar\* and Chanda Chadha



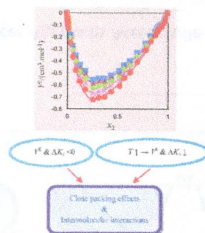
### Solubilities of Adipic Acid and Succinic Acid in a Glutaric Acid + Acetone or *n*-Butanol Mixture

Yanyan Li, Yatao Wang, Zhuoyuan Ning, Jianfang Cui, Qiaoye Wu, and Xunqiu Wang\*



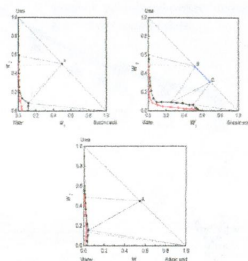
### Vapor–Liquid Equilibria, Density, Speed of Sound, and Viscosity for the Poly(ethylene glycol) 400 + 1-Propanol and 1-Butanol Systems

Mohammed Taghi Zafarani-Moattar\* and Nastaran Tohidifar



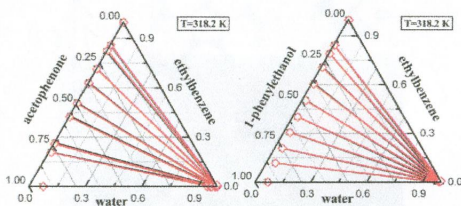
**Ternary Phase Diagram for Systems of Succinic Acid + Urea + Water, Glutaric Acid + Urea + Water, and Adipic Acid + Urea + Water at (288.15 and 303.15) K**

Gan-Bing Yao,\* Ling Wang, Ya-Ping Sun, Jian-Kang Yi, Long Meng, and Hong-Kun Zhao



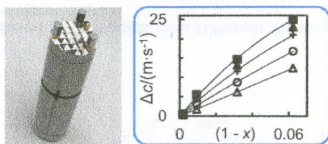
**Liquid–Liquid Equilibrium for the Ternary System Water + Ethylbenzene + Acetophenone and Water + Ethylbenzene + 1-Phenylethanol**

Lijuan Peng, Qinbo Wang,\* Binwei Shen, Chuxiong Chen, and Zhenhua Xiong



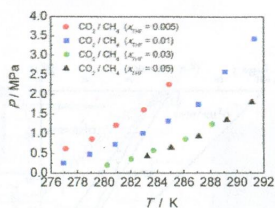
**Speed of Sound in (Carbon Dioxide + Propane) and Derived Sound Speed of Pure Carbon Dioxide at Temperatures between (248 and 373) K and at Pressures up to 200 MPa**

C.-W. Lin and J. P. M. Trusler\*



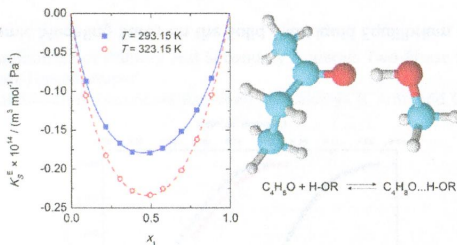


Phase Equilibrium Data of Gas Hydrates Formed from a  $\text{CO}_2 + \text{CH}_4$  Gas Mixture in the Presence of Tetrahydrofuran  
Dong-Liang Zhong, Zheng Li, Yi-Yu Lu,\* and Dong-Jun Sun



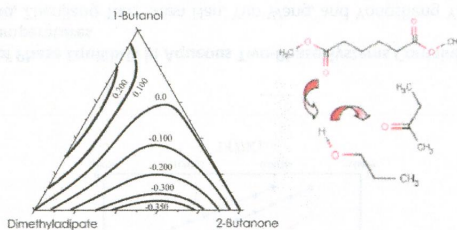
Speed of Sound, Density, and Related Thermodynamic Excess Properties of Binary Mixtures of Butan-2-one with C1–C4 *n*-Alkanols and Chloroform

Mikhail A. Varfolomeev, Ksenia V. Zaitseva, Ilnaz T. Rakipov, Boris N. Solomonov, and Wojciech Marczak\*



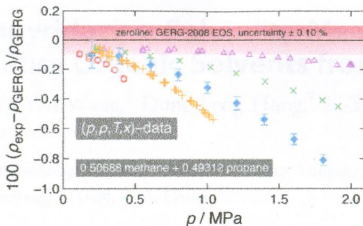
Densities, Viscosities, and Refractive Indices of the Ternary Mixture Dimethyladipate + 2-Butanone + 1-Butanol at  $T = (288.15 \text{ to } 323.15) \text{ K}$

Andjela B. Knežević-Stevanović, Ivona R. Radović, Slobodan P. Šerbanović, and Mirjana Lj. Kijevčanin\*



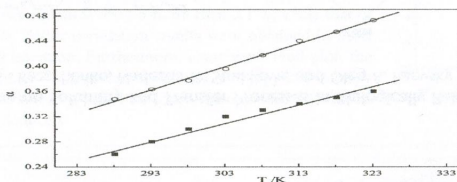
### Vapor-Phase ( $p, \rho, T, x$ ) Behavior and Virial Coefficients for the (Methane + Propane) System

Markus Richter and Mark O. McLinden\*



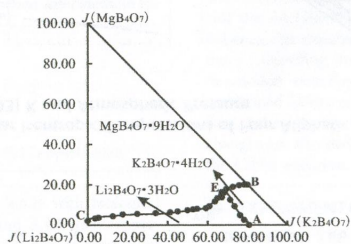
### Thermodynamics of Micelle Formation of Gemini Surfactants Hexylene-1,6-bis(dimethyloctylammonium bromide) and Dodecylene-1,12-bis(dimethyloctylammonium bromide) by Electric Conductance Measurements

K. Łudzik,\* K. Kustrzapa,\* and H. Piekarski



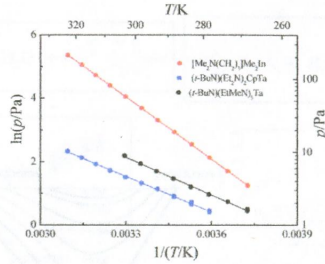
### Stable Phase Equilibrium of Aqueous Quaternary System $\text{Li}^+$ , $\text{K}^+$ , $\text{Mg}^{2+}$ //Borate- $\text{H}_2\text{O}$ at 348 K

Qi Tan, Ying Zeng,\* Pengtao Mu, Xudong Yu, and Yujuan Zhang



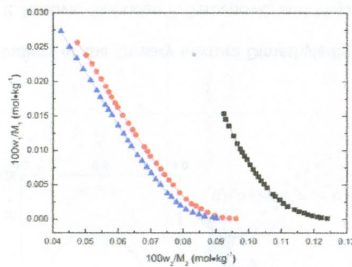
Vapor Pressures of (3-(Dimethylamino)propyl)dimethylindium, (*tert*-Butylimino)bis(diethylamino)cyclopentadienyntantalum, and (*tert*-Butylimino)tris(ethylmethylamino)tantalum

Pavel Morávek, Jiří Pangrác, Michal Fulem,\* Eduard Hulicius, and Květoslav Růžička



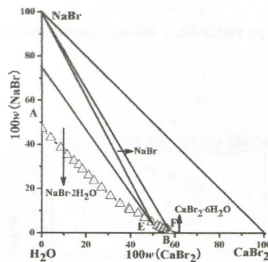
Measurement and Correlation of Phase Equilibria in Aqueous Two-Phase Systems Containing Polyoxyethylene Lauryl Ether and Sulfate Salt at Different Temperatures

Lihua Cao, Yang Lu, Tongfan Hao, Zhenjiang Tan,\* Juan Han, Yun Wang, and Yongsheng Yan



Measurement and Thermodynamic Modeling Study on the Solid and Liquid Equilibrium of Ternary System NaBr–CaBr<sub>2</sub>–H<sub>2</sub>O at 288.15 K

Lingzong Meng,\* Dan Li, Tianlong Deng, Yafei Guo, Cunyun Ma, and Youcai Zhu



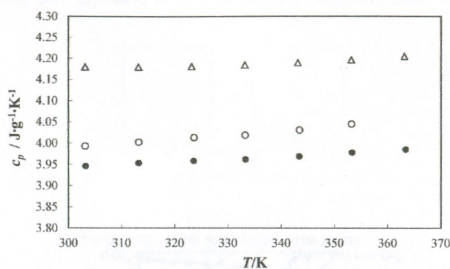


4200

DOI: 10.1021/je500897b

**Isobaric Heat Capacity of Boric Acid Solution**

Maogang He,\* Chao Su, Xiangyang Liu, and Xuetao Qi

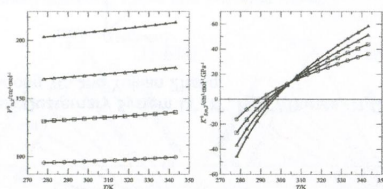


4205

DOI: 10.1021/je500914a

**Partial Molar Volumes and Partial Molar Isentropic Compressions of Four Aliphatic Linear Polyethers at Infinite Dilution in Water at Temperatures  $T = (278 \text{ to } 343) \text{ K}$  and Atmospheric Pressure**

Artur Purchala and Ivan Cibulka\*

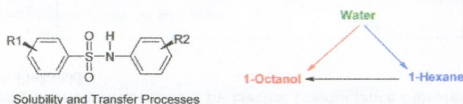


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DOI: 10.1021/je500918t

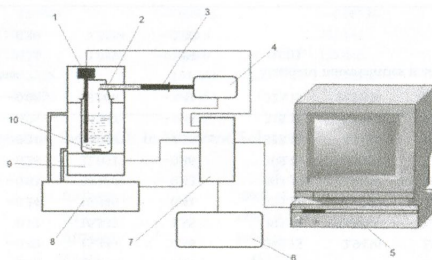
**Impact of Sulfonamide Structure on Solubility and Transfer Processes in Biologically Relevant Solvents**

German L. Perlovich,\* Vladimir P. Kazachenko, Nadezda N. Strakhova, and Oleg A. Raevsky



**Solubility of Tris(hydroxymethyl)aminomethane in Methanol + 1-Propanol Mixtures at Various Temperatures**

Vahid Jouyban-Gharamaleki, Karim Jouyban-Gharamaleki, Jafar Soleymani, Ernst Kenndler, William E. Acree Jr., and Abolghasem Jouyban\*

**Additions and Corrections****Correction to "Liquid-Liquid Equilibrium of Primary and Secondary Aqueous Two-Phase Systems Composed of Sucrose + Triton X-114 + Water at Different Temperatures"**

Subbarayalu Ramalakshmi, Ramakrishnan Nagasundara Ramanan,\* Arbakariya B. Ariff, and Chien Wei Ooi\*