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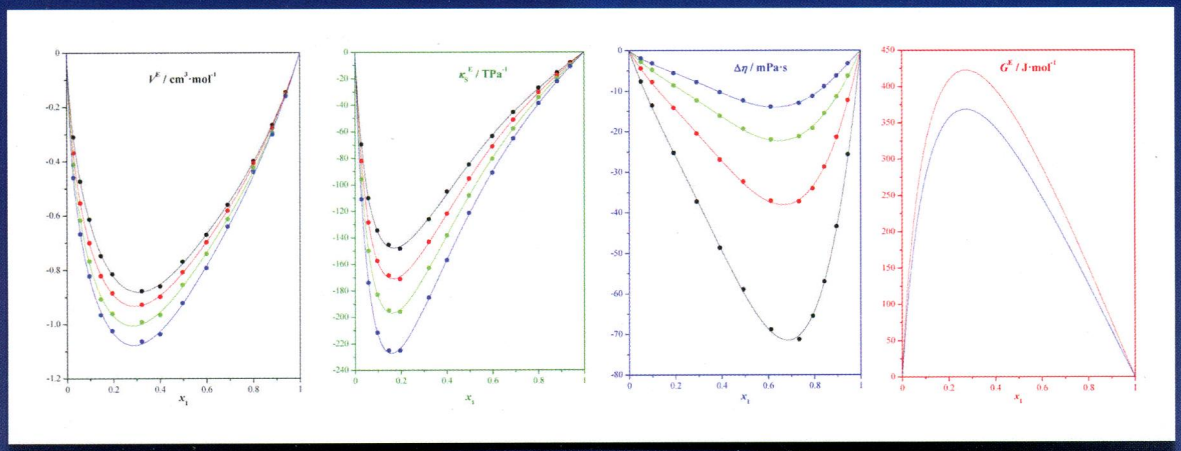

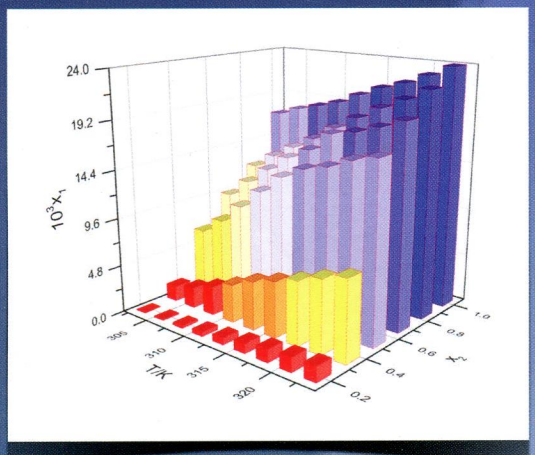

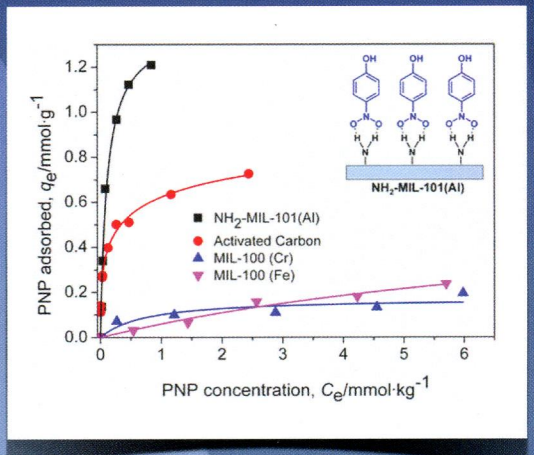

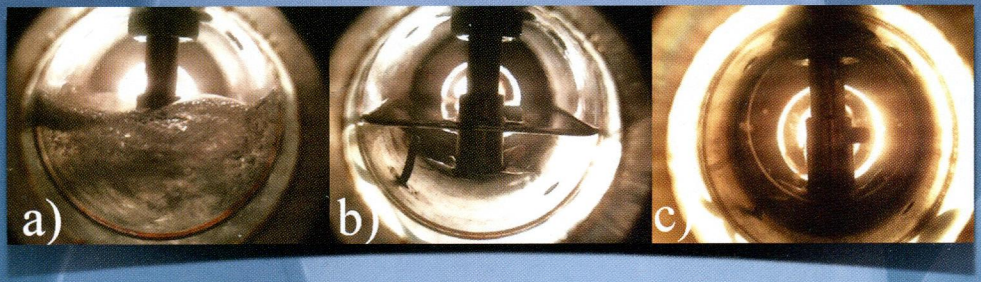

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Journal of chemical & engineering data

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VOLUME 59 ISSUE 5
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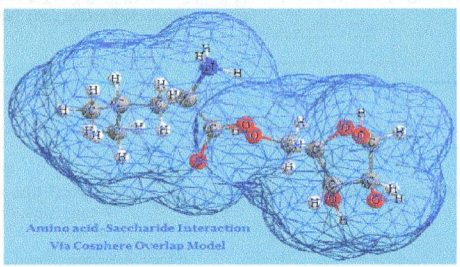
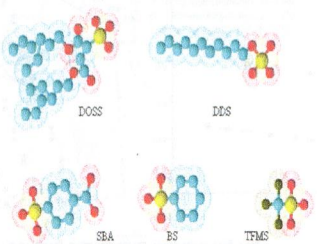
ON THE COVER: The images shown on the cover were taken from papers in this issue: (top) Graphs representing the thermophysical characterization of the binary mixture 1-propylpyridinium tetrafluoroborate with methanol (see DOI: 10.1021/je401120a). (middle left) Solubilities of ADCP in an ethanol + water mixture determined from (303.15 to 323.15) K by the synthetic method with a laser monitoring observation technique (see DOI: 10.1021/je401053y). Adsorption equilibria for phenol and PNP from water of three metal-organic frameworks. The graph shows the exceptional adsorption capacity of NH2-MIL-101(Al) for PNP (middle right) (see DOI: 10.1021/je4010239). Optical high-pressure stainless steel equilibrium cell used for the determination of vapor-liquid equilibria for the binary mixture of ester diethyl fumarate with CO_2. (bottom) (see DOI: 10.1021/je4010849).

Articles

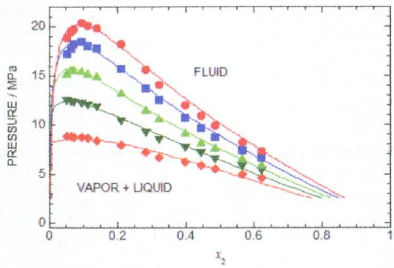




1391 dx.doi.org/10.1021/je400896u

Cloud-Point and Bubble-Point Measurement for the Poly(2-butoxyethyl acrylate) + Cosolvent Mixture and 2-Butoxyethyl Acrylate in Supercritical Fluid Solvents

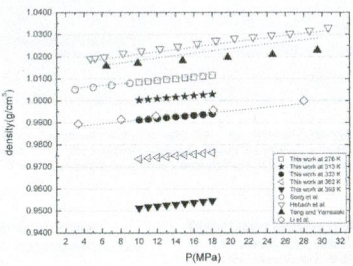
Yoon-Seok Jang and Hun-Soo Byun*



1400 dx.doi.org/10.1021/je500062a

Density Measurement and PC-SAFT/tPC-PSAFT Modeling of the CO_2 + H_2O System over a Wide Temperature Range

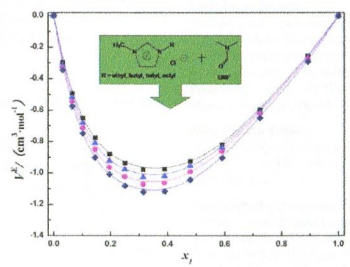
Yongchen Song, Weiwei Jian, Yi Zhang,* Mingjun Yang, Jiafei Zhao, Weiguo Liu, Yu Liu, and Yong Shen



1411 S dx.doi.org/10.1021/je4009238

Physicochemical Properties for the Binary Systems of Ionic Liquids [$C_n$mim]Cl + *N*,*N*-Dimethylformamide

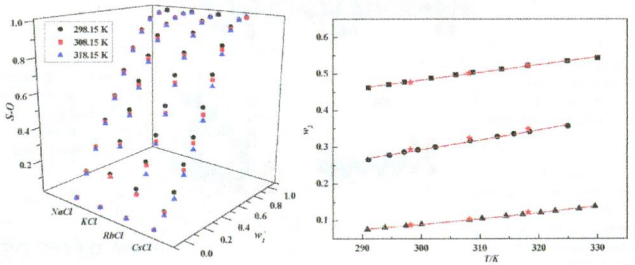
Xiao-Jing Yan, Shu-Ni Li,* Quan-Guo Zhai, Yu-Cheng Jiang, and Man-Cheng Hu*



1423 (S) dx.doi.org/10.1021/je400959n

Solid–Liquid Equilibrium (SLE) of the *N,N*-Dimethylacetamide (DMA) + MCl (M = Na, K, Rb, and Cs) + Water Ternary Systems at Multiple Temperatures

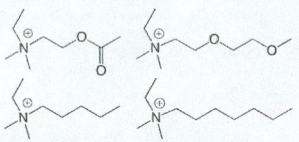
Dandan Zhao, Shu'ni Li,* Quanguo Zhai, Yucheng Jiang, and Mancheng Hu*



1435 dx.doi.org/10.1021/je400971q

CO_2 Solubilities in Ammonium Bis(trifluoromethanesulfonyl)amide Ionic Liquids: Effects of Ester and Ether Groups

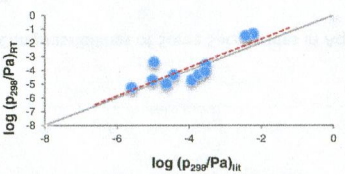
Takashi Makino,* Mitsuhiro Kanakubo,* and Tatsuya Umecky



1441 (S) dx.doi.org/10.1021/je401026a

Determination of Vapor Pressures for Organophosphate Esters

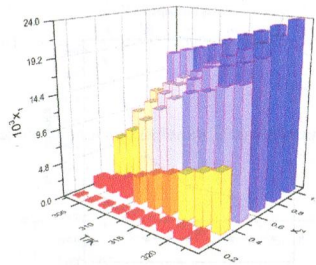
Sandra Brommer, Liisa M. Jantunen,* Terry F. Bidleman, Stuart Harrad, and Miriam L. Diamond



1448 dx.doi.org/10.1021/je401053y

Measurement and Correlation of Solubilities of 4-Amino-3,6-dichloropyridazine in Ethanol + Water Mixtures from (303.15 to 323.15) K

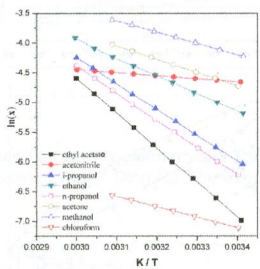
Jin-Qiang Liu,* Qiao-Yun Bai, Xin-Xiang Cao,* Dong-Feng Hong, Yao-Yao Li, Sha Wu, and Li-Yue Zhang



1454 S dx.doi.org/10.1021/je4009816

Solubilities of 4-(Hydroxymethyl)-1-oxido-2,6,7-trioxa-1-phosphabicyclo[2.2.2]octane in Organic Solvents

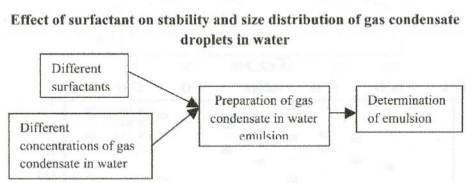
Guo-Min Yu, Li-Sheng Wang,* and Chao-Jun Du



1461 S dx.doi.org/10.1021/je4009574

Effect of Surfactant on Stability and Size Distribution of Gas Condensate Droplets in Water

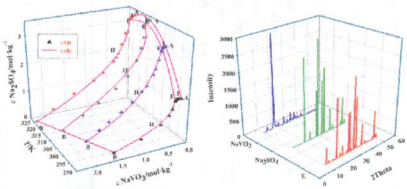
Hossein Esmaeili, Feridun Esmaeilzadeh,* and Dariush Mowla



1468 dx.doi.org/10.1021/je4009969

Investigations on the Solubility, Density, and Viscosity in the $NaVO_3$ + Na_2SO_4 + H_2O System from 293.15 K to 323.15 K

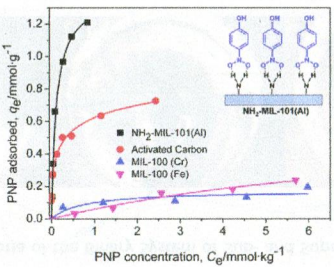
Krzysztof Mazurek* and Sebastian Drużyński



1476 dx.doi.org/10.1021/je4010239

Adsorption of Phenol and *p*-Nitrophenol from Aqueous Solutions on Metal–Organic Frameworks: Effect of Hydrogen Bonding

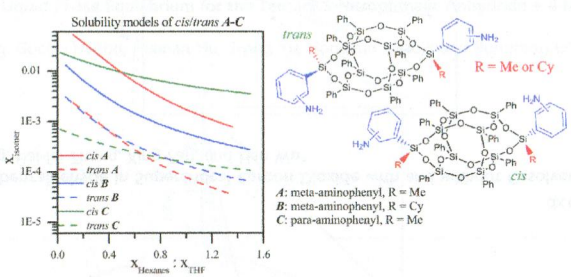
Baojian Liu,* Fan Yang, Yuanxing Zou, and Yong Peng

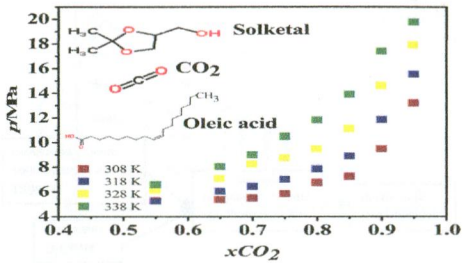


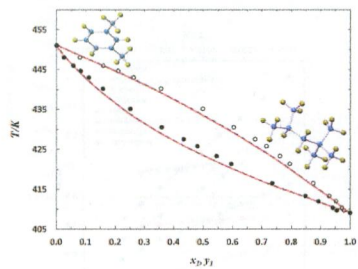
1483 dx.doi.org/10.1021/je4010245

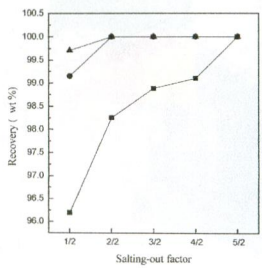
Separation and Solubility of Cis and Trans Isomers in Nanostructured Double-Decker Silsequioxanes

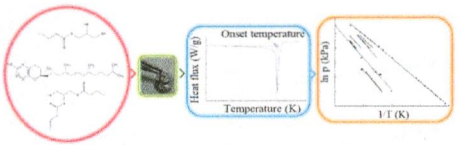
Beth W. Schoen, Carl T. Lira, and Andre Lee*

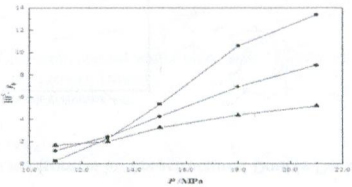


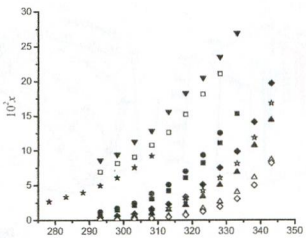












1540 dx.doi.org/10.1021/je401110x

Reactive Extraction of Pyridine-2-carboxylic Acid (Picolinic Acid) Using Nontoxic Extractant and Diluent Systems

Dipaloy Datta and Sushil Kumar*

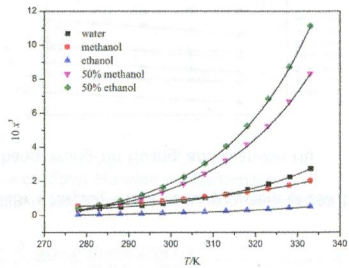
$$\text{Langmuir Isotherm: } q_e = \frac{Q_0 K_L C_e}{1 + K_L C_e}$$

$$\text{Freundlich Isotherm: } q_e = K_F C_e^{\frac{1}{n}} \qquad \text{Temkin Isotherm: } q_e = B_T \log K_T C_e$$

1549 dx.doi.org/10.1021/je500259m

Solubility of Aspartame in Water, Methanol, Ethanol and Different Binary Mixtures in the Temperature Range of (278.15 to 333.15) K

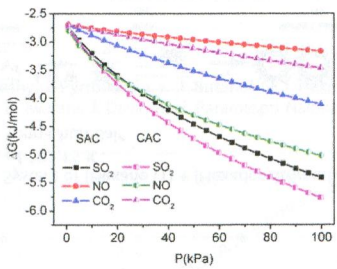
Yixin Leng* and Huichen Qi



1556 dx.doi.org/10.1021/je4011135

Adsorption of SO_2, NO, and CO_2 on Activated Carbons: Equilibrium and Thermodynamics

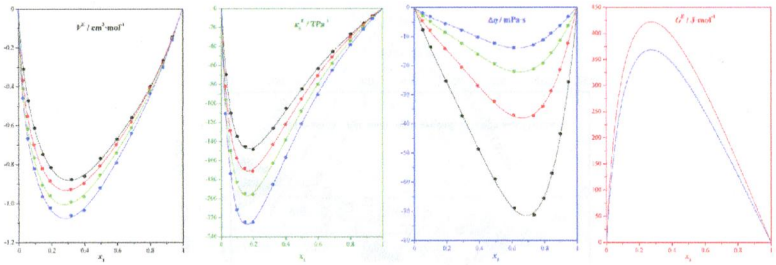
Honghong Yi, Zhixiang Wang, Haiyan Liu, Xiaolong Tang,* Ding Ma, Shunzheng Zhao, Bowen Zhang, Fengyu Gao, and Yanran Zuo



1564 dx.doi.org/10.1021/je401120a

Thermophysical Properties of the Binary Mixture 1-Propylpyridinium Tetrafluoroborate with Methanol

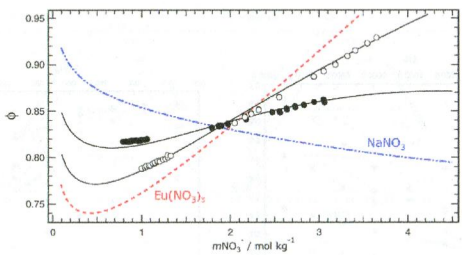
Mónica García-Mardones, Santiago Martín, Ignacio Gascón, and Carlos Lafuente*



1574 dx.doi.org/10.1021/je500016d

Isopiestic Determination of the Osmotic Coefficients of $NaNO_3$ + $Eu(NO_3)_3$ + H_2O at 298.15 K and Representation with an Extended Ion-Interaction (Pitzer) Model

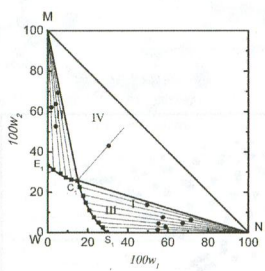
Peter R. Zalupski,* Rocklan McDowell, and Simon L. Clegg*



1583 dx.doi.org/10.1021/je500171d

Measurement of Solid−Liquid Phase Equilibrium for the Ternary 3-Nitrophthalic Anhydride + 4-Nitrophthalic Anhydride + 1,4-Dioxane System

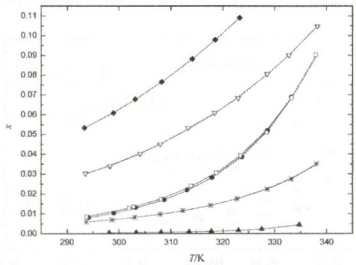
Fangli Qiu, Jianguo Yang, Guobo Huang, Huanan Hu, Siying Yu, Hongkun Zhao,* and Rongrong Li*



1588 dx.doi.org/10.1021/je500038u

Experimental Measurements and Modeling of the Solubility of Aceclofenac in Six Pure Solvents from (293.35 to 338.25) K

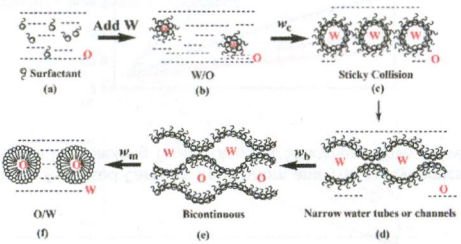
Jin-Qiang Liu,* Ye Wang, Hui Tang, Sha Wu, Yao-Yao Li, Li-Yue Zhang, Qiao-Yun Bai, and Xun Liu



1593 dx.doi.org/10.1021/je500040r

Phase Diagrams for the Pseudoternary System of {Hexane (1) + [Hexadecyltrimethylammonium Bromide (21) + Butan-1-ol (22)] (2) + Water (3)} at a Temperature of 303.15 K

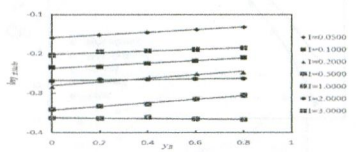
Xing-Bo Chen, Na Wang, Yahui Ma, and Tong-Chun Bai*



1603 dx.doi.org/10.1021/je500046e

Mean Activity Coefficients of NaBr in NaBr + Na_2SO_4 + H_2O Ternary System at 298.15 K Determined by Potential Difference Measurements

Si-Yao Zhong, Shi-Hua Sang,* Jun-Jie Zhang, Wang-Yin Huang, and Juan-Xin Hu

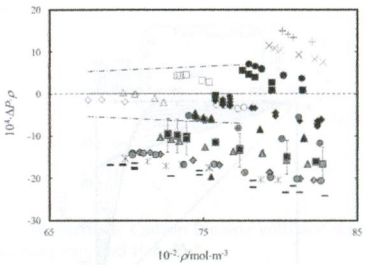


$\ln\gamma_{\pm,NaBr}$ changes with y_2 at different ionic strengths of the $NaBr-Na_2SO_4-H_2O$ ternary system at 298.15 K.

1609 dx.doi.org/10.1021/je5000692

Determination of the Relative Permittivity, ε_r, of Octane at Temperatures between (303 and 393) K and Pressures below 25 MPa with a Concentric Cylinder Capacitor at a Frequency of 1 kHz

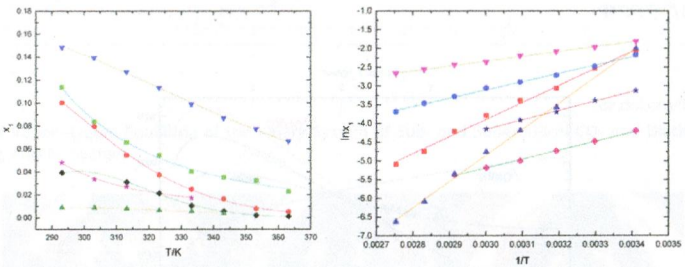
Laurent Pirolli, Anthony R. H. Goodwin,* Kenneth N. Marsh, and Eric F. May



1614 dx.doi.org/10.1021/je500068b

Determination and Correlation of Solubilities of Lithium Bis(oxalate)borate in Six Different Solvents from (293.15 to 363.15) K

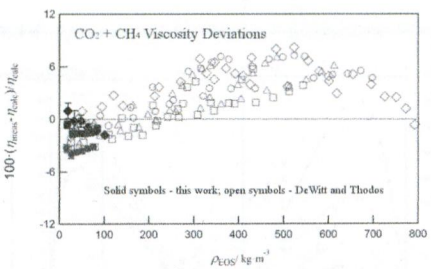
Fuchun Chen, Jinhuo Hu, Zhengyu Chen, Zhenyu Yang,* and Ningyu Gu*



1619 dx.doi.org/10.1021/je500083n

Improved Methods for Gas Mixture Viscometry Using a Vibrating Wire Clamped at Both Ends

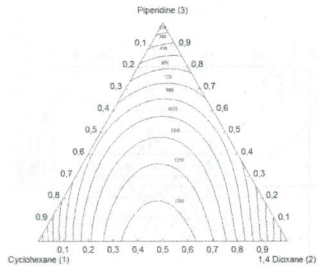
Clayton R. Locke, Paul L. Stanwix, Thomas J. Hughes, Austin Kisselev, Anthony R. H. Goodwin, Kenneth N. Marsh, and Eric F. May*



1629 dx.doi.org/10.1021/je500088z

Experimental Measurements and Correlations of Excess Molar Enthalpies for the Binary and Ternary Mixtures of (Cyclohexane, 1,4-Dioxane and Piperidine) or (Cyclohexane, Morpholine and Piperidine) at 308.15 K and Atmospheric Pressure

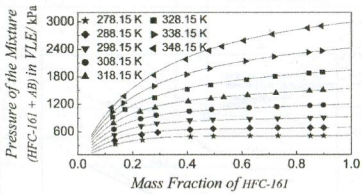
Farid Brahim Belaribi,* Ghénima Boukais-Belaribi, Atika Dahmoun, Aomar Dahmani, Amir H. Mohammadi, and Dominique Richon



1636 dx.doi.org/10.1021/je500075h

Solubility and Miscibility for the Mixture of (Ethyl Fluoride + Alkylbenzene Oil)

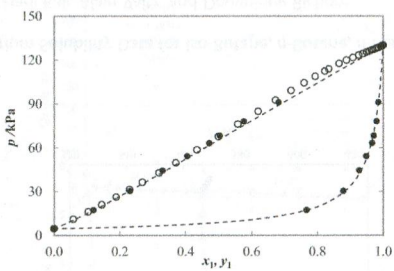
Lingyun Fang, Zanjun Gao, Xiaoyu Wang, Jun Lei, Xiaohong Han,* and Guangming Chen



1643 dx.doi.org/10.1021/je500092v

Vapor–Liquid Equilibrium Data for 1-Methyl-2-Pyrrolidone + (1-Butanol or 1-Hexene or Water) Binary Mixtures

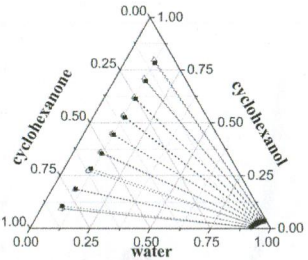
Ranjeetha Hirawan, Sumit Sinha, Samuel A. Iwarere, J. David Raal, Paramespri Naidoo, and Deresh Ramjugernath*



1651 dx.doi.org/10.1021/je500099u

Measurements and Correlation of Liquid–Liquid Equilibria for the Ternary System Water + Cyclohexanol + Cyclohexanone

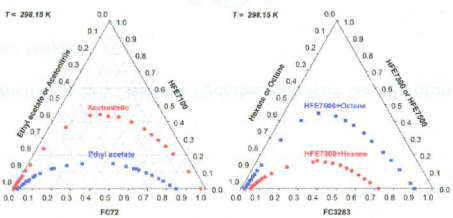
Xing Gong, Qinbo Wang,* Fuqiong Lei, and Binwei Shen



1656 S dx.doi.org/10.1021/je500107y

Liquid–Liquid Equilibria for the Ternary Systems of FC3283 + HFE7300 + Hexane, FC3283 + HFE7500 + Octane, and FC72 + HFE7100 + (Acetonitrile or Ethyl Acetate) at 273.15 K, 298.15 K, and 313.15 K

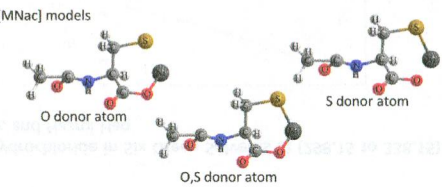
Sang Young Lim, Tae Gyu Lee, Kwang Ho Song,* and Jaehoon Choe



1661 dx.doi.org/10.1021/je500112y

Equilibrium Studies of Complexes between *N*-Acetylcysteine and Divalent Metal Ions in Aqueous Solutions

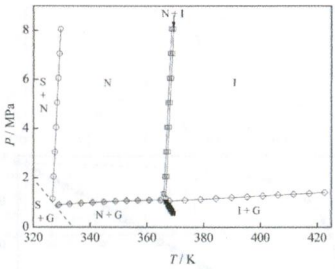
Shella Permatasari Santoso, Ivon Kusmijo Chandra, Felycia Edi Soetaredjo, Artik Elisa Angkawijaya, and Yi-Hsu Ju*



1667 dx.doi.org/10.1021/je500124r

Phase Behavior of Liquid Crystal + CO_2 Mixtures

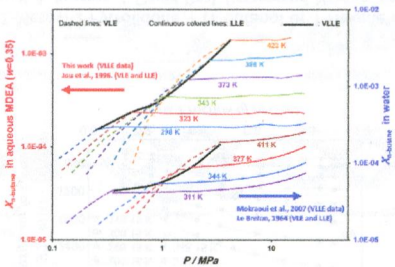
Mariëtte de Groen, Bo C. Ramaker, Thijs J. H. Vlugt, and Theo W. de Loos*



1673 dx.doi.org/10.1021/je500130j

New Vapor–Liquid–Liquid Equilibrium Solubility Data for iso-Butane, *n*-Butane, *n*-Pentane, and *n*-Hexane in Alkanolamine Aqueous Solutions

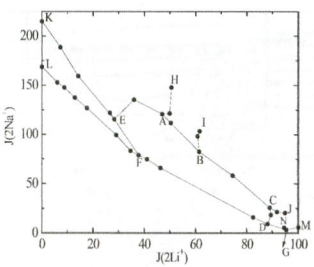
Salim Mokraoui,* Mohamed Kamel Hadj-Kali, Alain Valtz, and Dominique Richon

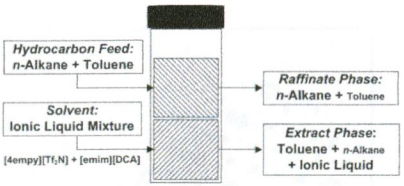


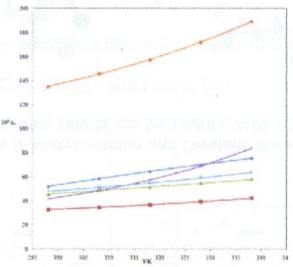
1685 dx.doi.org/10.1021/je500140e

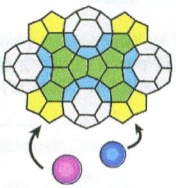
Solid–Liquid Metastable Phase Equilibria in the Five-Component System (Li + Na + K + Cl + SO_4 + H_2O) at 308.15 K

Yuanhui Liu, Yafei Guo, Xiaoping Yu, Shiqiang Wang, and Tianlong Deng*





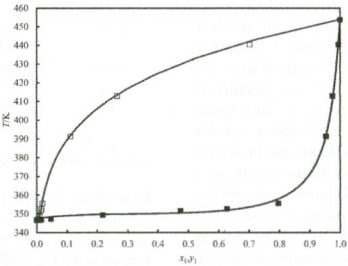




1710 dx.doi.org/10.1021/je500237g

Vapor–Liquid Equilibrium Data for Binary Systems of *n*-Dodecane + {Propan-1-ol, Butan-1-ol, 2-Methylpropan-1-ol} at 40 kPa

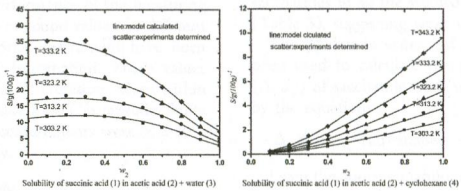
Zoubir Tebbal, Peterson Thokozani Ngema, Caleb Narasigadu, Latifa Negadi,* and Deresh Ramjugernath



1714 dx.doi.org/10.1021/je500231c

Solubilities of Succinic Acid in Acetic Acid + Water Mixtures and Acetic Acid + Cyclohexane Mixtures

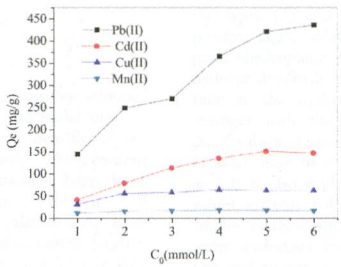
Fuqiong Lei, Qinbo Wang,* Xing Gong, Binwei Shen, Wenming Zhang, and Qing Han



1719 S dx.doi.org/10.1021/je500219e

Preparation of Graphene-Oxide/Polyamidoamine Dendrimers and Their Adsorption Properties toward Some Heavy Metal Ions

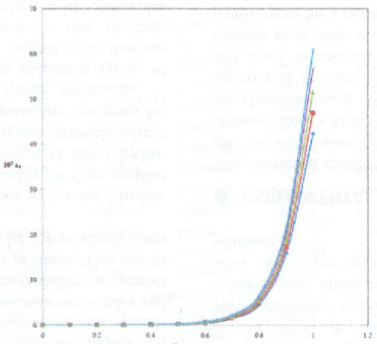
Fan Zhang,* Bo Wang, Shengfu He, and Ruilin Man



dx.doi.org/10.1021/je5002522

Solubility of *N*-(4-Chlorophenyl)-2-(pyridin-4-ylcarbonyl)hydrazinecarbothioamide (Isoniazid Analogue) in Transcutol + Water Cosolvent Mixtures at (298.15 to 338.15) K

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



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