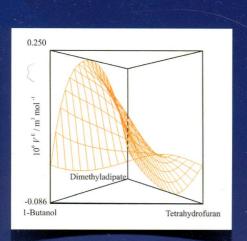
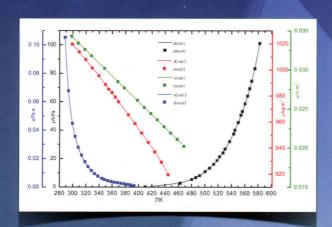
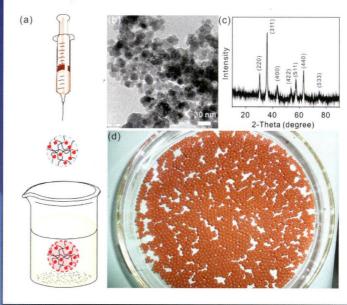
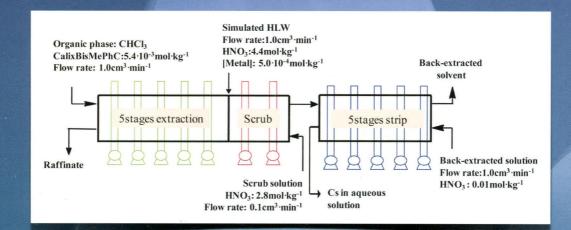
Journal of Chemical&engineering data













November 14, 2013 Volume 58, Issue 11 Pages 2887-3308 **Articles**

Densities, Viscosities, and Speeds of Sound of Binary Mixtures of Heptan-1-ol with 1,4-Dioxane at Temperatures from (298.15 to 323.15) K and Atmospheric Pressure

M. Habibullah, Ismail M. M. Rahman, M. Ashraf Uddin, Masuk Anowar, Mahbubul Alam, Koichi Iwakabe, and Hiroshi Hasegawa pp 2887–2897

Publication Date (Web): November 4, 2013 (Article)

DOI: 10.1021/je400512u

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Vapor Pressure, Density, Viscosity, and Surface Tension of Tetrapropylene Glycol

Elena M. Fendu and Florin Oprea

pp 2898-2903

Publication Date (Web): October 8, 2013 (Article)

DOI: 10.1021/je4004977

Section:

General Physical Chemistry

Heat Capacities of Natural Antlerite and Brochantite at Low Temperature

Mira R. Bissengaliyeva, Nuraly S. Bekturganov, Daniil B. Gogol, Shynar T. Taimassova, Temirgaly A. Koketai, and Michael A. Bespyatov pp 2904–2912

Publication Date (Web): October 30, 2013 (Article)

DOI: 10.1021/je400130b

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Solubilities of 4-Bromo-1,8-naphthalic Anhydride in Different Pure Solvents and Binary Solvent Mixtures with the Temperature Range from (278.15 to 333.15) K

Yonghong Hu, Zheng Cao, Jiaojiao Li, Wenge Yang, Yumei Kai, and Wenbiao Zhi pp 2913–2918

Publication Date (Web): October 21, 2013 (Article)

DOI: 10.1021/je400259a

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Binary Diffusion Coefficients of Platinum(II) Acetylacetonate in Supercritical Carbon Dioxide

Chang Yi Kong, Tomoya Siratori, Guosheng Wang, Takeshi Sako, and Toshitaka Funazukuri pp 2919–2924

Publication Date (Web): October 15, 2013 (Article)

DOI: 10.1021/je400313n

Section:

General Physical Chemistry

Experimental Densities and Speeds of Sound of Substituted Phenols and Their Modeling with the Prigogine—Flory—Patterson Model

Deivisson L. Cunha, João A. P. Coutinho, Jean Luc Daridon, Rodrigo A. Reis, and Márcio L. L. Paredes

pp 2925-2931

Publication Date (Web): October 25, 2013 (Article)

DOI: 10.1021/je4003256

Section:

Physical Organic Chemistry

Thermodynamic and Spectroscopic Study of the Ternary System Dimethyladipate + Tetrahydrofuran +1-Butanol at *T* = (288.15 to 323.15) K

Andjela B. Knežević-Stevanović, Slobodan P. Šerbanović, Ivona R. Radović, Bojan D. Djordjević, and Mirjana Lj. Kijevčanin pp 2932–2951

Publication Date (Web): September 26, 2013 (Article)

DOI: 10.1021/je4003916

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Phase Equilibrium of PEG 2000 + Triammonium Citrate + Water System Relating PEG Molecular Weight, Cation, Anion with Effective Excluded Volume, Gibbs Free Energy of Hydration, Size of Cation, and Type of Anion at (298.15, 308.15, and 318.15) K.

Rajendran Govindarajan and Muthiah Perumalsamy pp 2952–2958

Publication Date (Web): October 14, 2013 (Article)

DOI: 10.1021/je400355g

Section:

Physical Organic Chemistry

Vapor-Liquid Equilibrium of CO_2 in Aqueous Blends of (*N*-Ethyl-ethanolamine + *N*-Methyl-diethanolamine) and (*N*-Ethyl-ethanolamine + 2-Amino-2-methyl-1-propanol)

G. Kumar and M. Kundu

pp 2959–2965

Publication Date (Web): October 14, 2013 (Article)

DOI: 10.1021/je4004492

Section:

Physical Organic Chemistry

Ideal Gas Heat Capacity Derived from Speed of Sound Measurements in the Gaseous Phase for *trans*-1,3,3,3-Tetrafluoropropene

Yuya Kano, Yohei Kayukawa, and Kenichi Fujii , Haruki Sato

pp 2966-2969

Publication Date (Web): October 9, 2013 (Article)

DOI: 10.1021/je4004564

Section:

General Physical Chemistry

Densities and Viscosities of Erythritol, Xylitol, and Mannitol in l-ascorbic Acid Aqueous Solutions at T = (293.15 to 323.15) K

Xiaofeng Jiang, Chunying Zhu, and Youguang Ma

pp 2970-2978

Publication Date (Web): November 4, 2013 (Article)

DOI: 10.1021/je400395u

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Excess Heat Capacities for Lactam + Chlorotoluene Binary Mixtures

V. K. Sharma, A. Rohilla, J. S. Yadav, S. Solanki, and D. Sharma

pp 2979-2990

Publication Date (Web): October 29, 2013 (Article)

DOI: 10.1021/je400408w

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Excess Volume of Water in Hydrate Complexes of Some α-Amino Acids

F. R. Rima, M. Monirul Islam, and M. Nazrul Islam pp 2991–2997

Publication Date (Web): October 14, 2013 (Article)

DOI: 10.1021/je400415r

Section:

Physical Organic Chemistry

Effect of Ascorbic Acid on the Colloidal and Micellar Properties of Anionic, Cationic, and Nonionic Surfactants: Conductivity, Volumetric, Viscometric, and Fluorescence Study

Lusine R. Harutyunyan, Martina L. Lachinyan, and Romik S. Harutyunyan pp 2998–3008

Publication Date (Web): October 28, 2013 (Article)

DOI: 10.1021/je400667c

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Critical Evaluation of the Second Dissociation Constants for Aqueous Sulfuric Acid over a Wide Temperature Range

Hannu Sippola pp 3009–3032

Publication Date (Web): September 13, 2013 (Article)

DOI: 10.1021/je4004614

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Thermodynamic Properties and Detonation Characterization of 3,3-Dinitroazetidinium Hydrochloride

Biao Yan, Hongya Li, Ningning Zhao, Haixia Ma, Jirong Song, Fengqi Zhao, and Rongzu Hu pp 3033–3038

Publication Date (Web): October 3, 2013 (Article)

DOI: 10.1021/je400470q

Section:

Propellants and Explosives

Fructose Solubility in Mixed (Ethanol + Water) Solvent: Experimental Data and Comparison among Different Thermodynamic Models

Carlos E. Crestani, André Bernardo, Caliane B. B. Costa, and Marco Giulietti pp 3039–3045

Publication Date (Web): October 28, 2013 (Article)

DOI: 10.1021/je400471m

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Measurement and Prediction of Densities of Vegetable Oils at Pressures up to 45 MPa

Samuel V. D. Freitas, Francisca A. e Silva, María José Pastoriza-Gallego, Manuel M. Piñeiro, Álvaro S. Lima, and João A. P. Coutinho

pp 3046-3053

Publication Date (Web): October 14, 2013 (Article)

DOI: 10.1021/je400474w

Section:

Electrochemical, Radiational, and Thermal Energy Technology

Vapor-Liquid Equilibrium for Ternary and Binary Mixtures of Tetrahydrofuran, Cyclohexane, and 1,2-Propanediol at 101.3 kPa

Zhigang Zhang, Peng Jia, Donghao Huang, Ming Lv, Yan Du, and Wenxiu Li pp 3054–3060

Publication Date (Web): October 30, 2013 (Article)

DOI: 10.1021/je4004993

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Solubility of 3,4-Dichloronitrobenzene in Methanol, Ethanol, and Liquid Mixtures (Methanol + Water, Ethanol + Water): Experimental Measurement and Thermodynamic Modeling

Hongkun Zhao, Hui Xu, Zhipeng Yang, and Rongrong Li pp 3061–3068

Publication Date (Web): October 24, 2013 (Article)

DOI: 10.1021/je400507u

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Phase Equilibria of the Carbon Dioxide + 1-Decanol System at High Pressures

Simona Ioniță, Viorel Feroiu, and Dan Geană pp 3069–3077

Publication Date (Web): October 17, 2013 (Article)

DOI: 10.1021/je4005239

Section:

Physical Organic Chemistry

Excess Molar Volume along with Viscosity and Refractive Index for Binary Systems of Tricyclo[5.2.1.0^{2.6}]decane with Five Cycloalkanes

Guangqian Li, Hai Chi, Yongsheng Guo, Wenjun Fang, and Shenlin Hu pp 3078–3086

Publication Date (Web): October 8, 2013 (Article)

DOI: 10.1021/je400529k

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Heat Capacity and Standard Thermodynamic Functions of Triphenylantimony Bis(1-adamantanecarboxylate) over the Range from (0 to 520) K

Irina A. Letyanina, Alexey V. Markin, Natalia N. Smirnova, Semen S. Sologubov, and Vladimir V. Sharutin

pp 3087–3095

Publication Date (Web): October 2, 2013 (Article)

DOI: 10.1021/je400535t

Section:

Thermodynamics, Thermochemistry, and Thermal Properties

Hydrogen Adsorption on Zn-BDC, Cr-BDC, Ni-DABCO, and Mg-DOBDC Metal-Organic Frameworks

Debjyoti Sahu, Prashant Mishra, Satyannarayana Edubilli, Anil Verma, and Sasidhar Gumma pp 3096–3101

Publication Date (Web): October 25, 2013 (Article)

DOI: 10.1021/je400546d

Section:

Surface Chemistry and Colloids

Methods for Calculating the Critical Constants of Hydrocarbons (Using the *n*-Alkane Series as an Example)

Valeriy A. Bychinsky, Alexey A. Tupitsyn, Konstantin V. Chudnenko, and Anastasiya V. Mukhetdinova

pp 3102-3109

Publication Date (Web): October 14, 2013 (Article)

DOI: 10.1021/je400547n

Section:

General Physical Chemistry

Determination and Modeling of Isobaric Vapor-Liquid Equilibria for the Methylcarbamate + Methyl-N-phenyl Carbamate System at Different Pressures

Dehua Xu, Huiquan Li, and Zhibao Li

pp 3110-3117

Publication Date (Web): October 8, 2013 (Article)

DOI: 10.1021/je400551d

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Liquid-Liquid Equilibrium for Ethanolysis Systems of Fish Oil

S. L. Bucio, Á. G. Solaesa, M. T. Sanz, S. Beltrán, and R. Melgosa pp 3118–3124

Publication Date (Web): October 9, 2013 (Article)

DOI: 10.1021/je400573u

Section:

Food and Feed Chemistry

Phase Equilibrium in the CsCl + YbCl₃ + HCl (~11.3 %) + H₂O System at 298.2 K and Thermodynamic Properties of New Solid Phase Compounds

Zhan-Ping Qiao, Hai-quan Xie, Xin Chen, and Hui Wang

pp 3125-3129

Publication Date (Web): September 26, 2013 (Article)

DOI: 10.1021/je4005867

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Liquid-Liquid Equilibria for the Ternary Systems of Perfluamine + Hydrofluoroether + Benzene, Toluene, or Xylene at 298.15 K or 313.15 K

Tae Gyu Lee, Kwang Ho Song, and Jaehoon Choe

pp 3130-3136

Publication Date (Web): October 29, 2013 (Article)

DOI: 10.1021/je400592a

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Semiclathrate Hydrate Phase Equilibrium for CO₂/CH₄ Gas Mixtures in the Presence of Tetrabutylammonium Halide (Bromide, Chloride, or Fluoride)

Shuanshi Fan, Qi Li, Jianghua Nie, Xuemei Lang, Yonggang Wen, and Yanhong Wang pp 3137–3141

Publication Date (Web): October 8, 2013 (Article)

DOI: 10.1021/je4005933

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

γ-Fe₂O₃ Nanoparticles Encapsulated Millimeter-Sized Magnetic Chitosan Beads for Removal of Cr(VI) from Water: Thermodynamics, Kinetics, Regeneration, and Uptake Mechanisms

Yu-Jing Jiang, Xin-Yao Yu, Tao Luo, Yong Jia, Jin-Huai Liu, and Xing-Jiu Huang pp 3142–3149

Publication Date (Web): October 10, 2013 (Article)

DOI: 10.1021/je400603p

Section:

Water

Solubility of 2,2',6,6'-Tetrabromo-4,4'-isopropylidene Phenol in Aqueous Pollutant Solutions

Jinhua Li, Jing Bai, Baoxue Zhou, and Xiaofang Hu pp 3150–3154

Publication Date (Web): October 11, 2013 (Article)

DOI: 10.1021/je400602s

Section:

Physical Organic Chemistry

Heat Capacities of Four Promising Alternatives to Lithium Bromide Aqueous Solution in Absorption Refrigerators

Neng Gao, Guangming Chen, Yunyun Jiang, Lingyun Fang, and Yijian He pp 3155–3159

Publication Date (Web): October 8, 2013 (Article)

DOI: 10.1021/je400605x

Section:

Thermodynamics, Thermochemistry, and Thermal Properties

Equilibrium Solubility of Sodium 2,4-Diaminobenzenesulfonate in Binary NaCl + H_2O , Na₂SO₄ + H_2O , and $C_2H_5OH + H_2O$ Solvent Mixtures at Elevated Temperatures from 273.15 K to 323.15 K

Rongrong Li, Ming Jiang, Chenglin Wu, Yujing You, Stephen Louis Romano, and Hongkun Zhao

pp 3160-3164

Publication Date (Web): October 28, 2013 (Article)

DOI: 10.1021/je4006079

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Solubility and Metastable Zone Width of Sodium Chromate Tetrahydrate

Liping Wang, Jiaoyu Peng, Lili Li, Haitao Feng, Yaping Dong, Wu Li, Jian Liang, and Zhulin Zheng

pp 3165-3169

Publication Date (Web): October 18, 2013 (Article)

DOI: 10.1021/je4006272

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Comparing the Performance of Computational Estimation Methods for Physicochemical Properties of Dimethylsiloxanes and Selected Siloxanols

Andreas M. Buser, Sebastian Schenker, Martin Scheringer, and Konrad Hungerbühler

pp 3170-3178

Publication Date (Web): October 22, 2013 (Article)

DOI: 10.1021/je400633h

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Phase Equilibria of Clathrate Hydrates in (Methane + Cyclooctane + Water), (Methane + 3,3-Dimethyl-1-butene + Water), (Methane + 2-Pentanone + Water), or (Methane + 3-Pentanone + Water) Systems

Aidin Alipour, Jafar Javanmardi, Ali Eslamimanesh, and Amir H. Mohammadi pp 3179–3182

Publication Date (Web): October 24, 2013 (Article)

DOI: 10.1021/je4006344

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Measurement and Correlation of Solubility of 2-Chloro-4ethylamino-6-isopropylamino-1,3,5-triazine in Different Organic Solvents

Dongmei Jia, Yuejin Li, Yaping Li, and Changhai Li pp 3183–3189

Publication Date (Web): October 11, 2013 (Article)

DOI: 10.1021/je400639m

Section:

Physical Organic Chemistry

Volumetric and Ultrasonic Studies of Molecular Interactions in *n*-Alkoxypropanols + Alkyl Acetates Mixtures at Different Temperatures

Amalendu Pal, Harsh Kumar, Ritu Maan, and Harish Kumar Sharma pp 3190–3200

Publication Date (Web): October 24, 2013 (Article)

DOI: 10.1021/je400637y

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Thermodynamic Properties of Poly-1*H*,1*H*,5*H*-octafluoropentyl Acrylate

Alexey V. Markin, Sergey D. Zaitsev, Oksana S. Zotova, and Natalia N. Smirnova pp 3201–3206

Publication Date (Web): October 30, 2013 (Article)

DOI: 10.1021/je400645v

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Quaternary Pyridinium Ketoximes as Zinc Extractants from Chloride Solutions

Karolina Wieszczycka, Aleksandra Wojciechowska, Marta Krupa, and Roksana Kordala-Markiewicz

pp 3207-3215

Publication Date (Web): October 11, 2013 (Article)

DOI: 10.1021/je400646z

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Isobaric Vapor—Liquid Equilibrium of Binary and Ternary Systems with 2-Ethoxyethanol + Ethylbenzene + Dimethyl Sulfoxide

Li Yuan, Lei Wang, and Peng Bai

pp 3216-3221

Publication Date (Web): October 10, 2013 (Article)

DOI: 10.1021/je4006739

Section:

Physical Organic Chemistry

Liquid-Liquid Equilibria for the System Water + 1,3-Dichloro-2-propanol + Epichlorohydrin from (283.2 to 303.2) K

Rui Wang, Yangcheng Lu, Kai Wang, and Guangsheng Luo

pp 3222–3225

Publication Date (Web): October 28, 2013 (Article)

DOI: 10.1021/je400681a

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Isobaric Vapor—Liquid Equilibrium and Isothermal Interfacial Tensions for the System Ethanol + 2,5-Dimethylfuran

Andrés Mejía, Hugo Segura, and Marcela Cartes

pp 3226-3232

Publication Date (Web): October 8, 2013 (Article)

DOI: 10.1021/je400683g

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Solid-Liquid Equilibria for Six Binary Mixtures of Pentanedioic Acid, Octanedioic Acid, 3-Methylheptanedioic Acid, 2,2-Dimethylbutanedioic Acid, and 2,3-Dimethylbutanedioic Acid

Tzu-Chi Wang and Chia-Hao Chang

pp 3233-3239

Publication Date (Web): October 22, 2013 (Article)

DOI: 10.1021/je400686f

Section:

Physical Organic Chemistry

Reactive Extraction of Phenylacetic Acid with Tri-n-butyl Phosphate in Benzene, Hexanol, and Rice Bran Oil at 298 K

Kanti K. Athankar, Mahesh N. Varma, Diwakar Z. Shende, Chang Kyoo Yoo, and Kailas L.

Wasewar

pp 3240-3248

Publication Date (Web): October 10, 2013 (Article)

DOI: 10.1021/je400696d

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Phase Equilibrium and Dissociation Enthalpies for Hydrates of Various Water-Insoluble Organic Promoters with Methane

Qiu-Nan Lv, Xiao-Sen Li, Zhao-Yang Chen, and Jing-Chun Feng

pp 3249-3253

Publication Date (Web): October 14, 2013 (Article)

DOI: 10.1021/je4007025

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Isobaric Vapor—Liquid Equilibria of Binary Systems (Propyl Acetate + *n*-Pentanol), (Propyl Acetate + 1-Methyl-1-butanol), and (Propyl Acetate + 3-Methyl-1-butanol) at 101.3 kPa

Jinli Zhang, Yulong Liu, Nan Meng, Wei Li, and Minqing Zhang

pp 3254-3258

Publication Date (Web): October 3, 2013 (Article)

DOI: 10.1021/je4007184

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Dissociation Data and Thermodynamic Modeling of Clathrate Hydrates of Ethene, Ethyne, and Propene

Kaniki Tumba, Hamed Hashemi, Paramespri Naidoo, Amir H. Mohammadi, and Deresh Ramjugernath

pp 3259–3264

Publication Date (Web): October 25, 2013 (Article)

DOI: 10.1021/je400727q

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Liquid-Liquid Equilibria, Density, Refractive Index, and Solubility for Mixtures of Water + Methanol + Heptane + Methylbenzene or + Dimethyl Carbonate at T = 298.15 K

Chun-Peng Lin, Gaun-Hung Lai, and Chein-Hsiun Tupp 3265–3274

Publication Date (Web): October 3, 2013 (Article)

DOI: 10.1021/je400730n

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Solvent Extraction of Cesium with a New Compound Calix[4]arene-bis[(4-methyl-1,2-phenylene)-crown-6]

Anyun Zhang, Ying Dai, Lei Xu, and Zhifang Chai pp 3275–3281

Publication Date (Web): October 16, 2013 (Article)

DOI: 10.1021/je400735z

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Equilibrium Solubilities of 2-Cyanoguanidine in Water + (Ethane-1,2-diol or *N,N*-Dimethylformamide) Mixtures at Different Temperatures: An Experimental and Correlational Study

Yongsheng Ren and Xiaoxiao Duan pp 3282–3288

Publication Date (Web): October 31, 2013 (Article)

DOI: 10.1021/je400754e

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions

Measurement and Correlation of Isothermal Vapor—Liquid Equilibrium of Fluoroethane +N,N-Dimethylacetamide, Fluoroethane +N-Methyl-2-pyrrolidone, and 1,1,1,2-Tetrafluoroethane +N,N-Dimethylacetamide Systems

Xuye Jing, Rulei Deng, and Danxing Zheng pp 3289–3296

Publication Date (Web): October 22, 2013 (Article)

DOI: 10.1021/je4007822

Section:

Physical Organic Chemistry

Energy-Saving Recovery of Acetone, Butanol, and Ethanol from a Prefractionator by the Salting-Out Method

Shaoqu Xie, Conghua Yi, and Xueqing Qiu pp 3297–3303

Publication Date (Web): October 28, 2013 (Article)

DOI: 10.1021/je400740z

Section:

Unit Operations and Processes

Measurements of Bubble Point Pressures for the Binary Mixture of Pentafluoroethane with Chloropentafluoroethane

Wei Zhang, Zhi-qiang Yang, Wei Mao, and Jian Lupp 3304–3308

Publication Date (Web): November 4, 2013 (Article)

DOI: 10.1021/je400837p

Section:

Phase Equilibriums, Chemical Equilibriums, and Solutions