

Dr. William E. Acree, Jr.

BIOGRAPHICAL SKETCH

1. Educational Background:

Name	Location	Date Graduated
Oak Park High School	Kansas City, Missouri	May 1971
University of Missouri-Rolla	Rolla, Missouri	May 1975 B.S.
University of Missouri-Rolla	Rolla, Missouri	May 1977 M.S.
University of Missouri-Rolla	Rolla, Missouri	May 1981 Ph.D.

Awards and Honors:

Curators Scholarship (1971-75)
Chancellors Scholarship (1975)
Phi Eta Sigma Honor Society
Phi Kappa Phi Honor Society
Kappa Mu Epsilon Honorary Mathematics Society
Outstanding Freshman Chemistry Student (awarded by W. T. Schrenk Chemical Society)
Outstanding Graduating Senior in Chemical Sciences
(awarded by the local section of Alpha Chi Sigma at the University of Missouri-Rolla)

2. Academic Experience:

Chair of Chemistry	University of North Texas	July 2009 - Aug. 2015
Professor	University of North Texas	Sept. 1992 - Present
Associate Professor	University of North Texas	Sept. 1988 -Aug. 1992
Associate Professor	Kent State University	Sept. 1986-Aug. 1988
Assistant Professor	Kent State University	Sept. 1982-Aug. 1986
Instructor	University of Kansas	Aug. 1981-May 1982
Research Associate	University of Kansas	Jan. 1980-May 1981

Awards and Honors:

Sigma Xi (Full member)
Editorial Board of *IUPAC's Solubility Data Series* (Volume 56)
Editorial Board of John Wiley's *Solution Chemistry Series* (Oct. 1995-Dec. 2000)
Editorial Board of *Science of Everyday Things* (June 2001)
Editorial Advisory Board Member for the *Journal of Chemical and Engineering Data*
(January 2004 - December 2006; Reappointed for a second term January 2007 - Present)
Recipient of 2004 UNT McNair Post-Baccalaureate Achievement Program – Outstanding Service Award
Recipient of 2006 UNT Upward Bound Math & Science Program – Outstanding Mentor Award
Editorial Advisory Board Member for the *Journal of Chemical Thermodynamics*
(December 2006 – December 2011)
Editorial Board Member for the *Journal of Thermodynamics* (July 2008 – Present)
Editorial Board Member for the *International Journal of Liquid State Sciences*
(August 2008 – Present)
Editorial Advisory Board Member for the *Global Journal of Physical Chemistry*
(March 2010 – Present)
Editorial Advisory Board Member for the *RASAYAN JOURNAL* (May 2010 – Present)
Senior Advisor for the *Journal of Spectroscopy and Dynamics* (September 2010 – Present)
INTECH Editorial Board Member (2010 – 2012)
Editorial Advisory Board Member for *Journal of Basic and Applied Sciences* (May 2011 – Present)
Prof. William E. Acree, Jr. Award established in 2010 in my name by the Global Journal of Physical Chemistry for the best paper published each year in the journal in the area of thermodynamics

Co-Editor of *Journal of Chemical Thermodynamics* (January 2012 – Present)
Professional Degree in Chemistry from the Missouri University of Science & Technology
(awarded May 2013)
Fellow of The Royal Society of Chemistry, elected July of 2013
Fellow of International Union of Pure and Applied Chemistry (IUPAC), December of 2013
Recipient of the Analytical Challenge (Ksp Solubility Product) Award, sponsored by Springer-Verlag,
July of 2015
Recipient of the Analytical Challenge (Highest Melting Point) Award, sponsored by Springer-Verlag,
September of 2015

3. Publications:

Textbooks, Monographs, or Chapters

1. *Thermodynamic Properties of Nonelectrolyte Solutions*, **W. E. Acree, Jr.**, Academic Press, Inc., Orlando, FL, 1984, 306 pp.
2. "Nonelectrolyte Solutions: Thermodynamics," **W. E. Acree, Jr.**, *The Encyclopedia of Physical Science and Technology* (by Academic Press, Inc.), Vol. 9, 61-78 (1987).
3. "Nonelectrolyte Solutions: Thermodynamics," (Updated), **W. E. Acree, Jr.**, *The Encyclopedia of Physical Science and Technology* (by Academic Press, Inc.), Vol. 11, 1-22 (1992).
4. *Polycyclic Aromatic Hydrocarbons in Pure and Binary Solvent Mixtures*, **W. E. Acree, Jr.**, Ed., IUPAC Solubility Data Series, Vol. 54, Oxford University Press, London, 1994, xlv + 337 pp.
5. "Predictive Methods for Solute Solubility in Binary Solvent Mixtures," **W. E. Acree, Jr.**, book chapter in *Current Topics in Solution Chemistry*, Council of Scientific Research Integration, Trivandrum, India, Volume 1, pp 1-30 (1994).
6. *Polycyclic Aromatic Hydrocarbons: Binary Nonaqueous Systems, Part I: Solutes A-E*, **W. E. Acree, Jr.**, Ed., IUPAC Solubility Data Series, Vol. 58, Oxford University Press, 1995, xlvi + 338 pp.
7. *Polycyclic Aromatic Hydrocarbons: Binary Nonaqueous Systems, Part 2: Solutes F-Z*, **W. E. Acree, Jr.**, Ed., IUPAC Solubility Data Series, Vol. 59, Oxford University Press, 1995, xxx + 347 pp.
8. "Solvent-Modulated Fluorescence Behavior and Photophysical Properties of Polycyclic Aromatic Hydrocarbons Dissolved in Fluid Solution," **W. E. Acree, Jr.**, **S. A. Tucker** and **S. Pandey**, book chapter in *Current Topics in Solution Chemistry*, Research Trends, Trivandrum, India, Volume 2, pp. 1-27 (1997).
9. "Gay-Lussac's Law of Combining Volumes," **W. E. Acree, Jr.**, *The Encyclopedia of Chemistry* (by Macmillan Publishing USA), Vol. 2, 682-684 (1997).
10. "Thermodynamics of Mobile Order Theory," **W. E. Acree, Jr.**, **J. R. Powell**, **M. E. R. McHale**, **S. Pandey**, **T. L. Borders** and S. W. Campbell, book chapter in *Research Trends in Physical Chemistry*, Council of Scientific Research Integration, Trivandrum, India, Volume 6, pp 197-233 (1997).
11. "Estimating Phase Change Enthalpies and Entropies," J. S. Chickos, **W. E. Acree, Jr.** and J. F. Liebman, Chapter 4 in *Computational Thermochemistry: Prediction and Estimation of Molecular Thermodynamics*, Karl Irikura and David Frurip (Editors), ACS Symposium Series No. 677, American Chemistry Society, Washington DC, pp. 63-91 (1998).
12. "Absorption and Luminescent Probes," **W. E. Acree, Jr.**, *Encyclopedia of Analytical Chemistry: Instrumentation and Applications*, (by John Wiley and Sons), 10280-10305 (2000).
13. "Absorption and Luminescence Detectors," **W. E. Acree, Jr.**, *Encyclopedia of Analytical Chemistry: Instrumentation and Applications*, (by John Wiley and Sons), 10333-10351 (2000).

14. "Modern General Chemistry Laboratory: Incorporating Computer-Oriented Data Acquisition and Evaluation Approach into the Student Laboratory Experience", **W. E. Acree, Jr.**, Eagle Images, xii + 296 pp, 2005 [ISBN 0-9774658-0-2].
15. "Selection of Ionic Liquid Solvents for Chemical Separations Based on the Abraham Model," **W. E. Acree, Jr., L. M. Grubbs** and M. H. Abraham, in *Ionic Liquids, Theory and Applications (Book 2)*, INTECH Publishers, Chapter 13, 273-302 (2011).
16. "Prediction of Partition Coefficients and Permeability of Drug Molecules in Biological Systems with Abraham Model Solute Descriptors Derived from Measured Solubilities and Water-to-Organic Solvent Partition Coefficients," **W. E. Acree, Jr., L. M. Grubbs** and M. H. Abraham, in *Toxicity and Drug Testing*, INTECH Publishers, Chapter 5, pp. 91-128 (2012)..
17. "Prediction of Toxicity, Sensory Responses and Biological Responses with the Abraham Model," **W. E. Acree, Jr., L. M. Grubbs** and M. H. Abraham, in *Toxicity and Drug Testing*, INTECH Publishers, Chapter 12, 261-296 (2012).
18. *Toxicity and Drug Testing*, **W. E. Acree, Jr.** (Editor), INTECH Publishers, 528 pages (2012). [ISBN 978-953-51-0004-1]
19. "Analytical Applications of Ionic Liquids," **W. E. Acree, Jr.** and L. M. Grubbs, *Encyclopedia of Analytical Chemistry: Instrumentation and Applications*, (by John Wiley and Sons), article number a9153, DOI: 10.1002/9780470027318.a9153, pp. 1-40. **(by invitation)**
20. "IUPAC-NIST Solubility Data Series. Volume 98. Solubility of Polycyclic Aromatic Hydrocarbons in Pure and Organic Solvent Mixtures – Revised and Updated. Part 1. Binary Solvent Mixtures," **W. E. Acree, Jr.**, *J. Phys. Chem. Ref. Data*, 42, 013103-1 (2013). [**Parts 1, 2 and 3 comprise the entire book**].
21. "IUPAC-NIST Solubility Data Series. Volume 98. Solubility of Polycyclic Aromatic Hydrocarbons in Pure and Organic Solvent Mixtures – Revised and Updated. Part 2. Ternary Solvent Mixtures," **W. E. Acree, Jr.**, *J. Phys. Chem. Ref. Data*, 42, 013104-1 (2013).
22. "IUPAC-NIST Solubility Data Series. Volume 98. Solubility of Polycyclic Aromatic Hydrocarbons in Pure and Organic Solvent Mixtures – Revised and Updated. Part 3. Neat Organic Solvents," **W. E. Acree, Jr.**, *J. Phys. Chem. Ref. Data*, 42, 013105-1.
23. "IUPAC-NIST Solubility Data Series. Volume 99. Solubility of Benzoic Acid and Substituted Benzoic Acids in Both Neat Organic Solvents and Organic Solvent Mixtures," **W. E. Acree, Jr.**, *J. Phys. Chem. Ref. Data*, 42, 033103-1 (2013).
24. "IUPAC-NIST Solubility Data Series. Volume 102. Solubility of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) in both Neat Organic Solvents and Organic Solvent Mixtures," **W. E. Acree, Jr.**, *J. Phys. Chem. Ref. Data*, 43, 023102-1 (2014).

Research Articles

1. "Thermochemical Investigations of Nearly Ideal Binary Solvents. 3. Solubility in Systems of Nonspecific Interactions," **W. E. Acree, Jr.** and G. L. Bertrand, *J. Phys. Chem.*, 81, 1170 (1977).
2. "A Cholesterol-Isopropanol Gel," **W. E. Acree, Jr.** and G. L. Bertrand, *Nature*, 269, 450 (1977).
3. "Thermochemical Investigations of Nearly Ideal Binary Solvents. 4. Gas-Liquid Partition Coefficients in Complexing and Noncomplexing Systems," **W. E. Acree, Jr.** and G. L. Bertrand, *J. Phys. Chem.*, 83, 2355 (1979).
4. "Comment on the Prediction of Gas Chromatographic Retention Behavior with Mixed Liquid Phase," **W. E. Acree, Jr.** and J. H. Rytting, *Anal. Chem.*, 52, 1765 (1980).

5. "A Thermodynamic Model for Liquid-Liquid Chromatography with a Binary Mobile Phase," **W. E. Acree, Jr.** and J. H. Rytting, *J. Liq. Chromatogr.*, 4, 23 (1981).
6. "Comment on Solubility Parameters from Maxima in Solubility/ Solvent Plots," **W. E. Acree, Jr.**, J. H. Rytting and J. T. Carstensen, *Int. J. Pharm.* 8, 69 (1981).
7. "Thermochemical Investigations of Nearly Ideal Binary Solvents. 7. Monomer and Dimer Models for the Solubility of Benzoic Acid in Simple Binary and Ternary Solvents," **W. E. Acree, Jr.** and G. L. Bertrand, *J. Pharm. Sci.*, 70, 1033 (1981).
8. "Solubility in Binary Solvent Systems. 1. Specific vs. Nonspecific Interactions," **W. E. Acree, Jr.** and J. H. Rytting, *J. Pharm. Sci.*, 71, 201 (1982).
9. "Solubility in Binary Solvent Systems. 2. The Importance of Nonspecific Interactions," **W. E. Acree, Jr.** and J. H. Rytting, *Int. J. Pharm.*, 10, 231 (1982).
10. "Thermochemical Investigations of Gas-Liquid Chromatography. Partition Coefficients of Inert Solutes on Self-Associating Binary Solvent Mixtures," **W. E. Acree, Jr.**, *J. Phys. Chem.*, 86, 1461 (1982).
11. "Thermodynamic Excess Properties of Ternary Alcohol-Inert Hydrocarbon Systems. 1. Simplified Method for Predicting Enthalpies from Binary Data," **W. E. Acree, Jr.** and J. H. Rytting, *J. Solution Chem.*, 11, 137 (1982).
12. "Solubility in Binary Solvent Systems. 4. Prediction of Naphthalene Solubilities Using the UNIFAC Group Contribution Method," **W. E. Acree, Jr.** and J. H. Rytting, *Int. J. Pharm.*, 13, 197 (1983).
13. "Thermochemical Investigations of Gas-Liquid Chromatography. 2. Partition Coefficients of Alcohol Solutes on Binary Solvent Mixtures of Inert Hydrocarbons," **W. E. Acree, Jr.**, *J. Chromatogr.*, 257, 189 (1983).
14. "Solubility in Binary Solvent Systems. 3. Predictive Expressions Based on Molecular Surface Areas," **W. E. Acree, Jr.** and J. H. Rytting, *J. Pharm. Sci.*, 72, 292 (1983).
15. "Thermochemical Investigations of Nearly Ideal Binary Solvents. 6. Solubilities of Iodine and Benzil in Systems of Nonspecific Interactions," **W. E. Acree, Jr.** and G. L. Bertrand, *J. Solution Chem.*, 12, 101 (1983).
16. "Isentropic Compressibility of an Ideal Ternary Solution," **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 28, 215 (1983).
17. "Thermochemical Investigations of Associated Solutions. 2. Calculation of the Iodine-Benzene Association Constant from Solubility Measurements," **W. E. Acree, Jr.**, *Int. J. Pharm.*, 15, 159 (1983).
18. "Thermochemical Investigations of Associated Solutions: Calculation of Solute-Solvent Equilibrium Constants from Solubility Measurements," **W. E. Acree, Jr.**, D. R. McHan and J. H. Rytting, *J. Pharm. Sci.*, 72, 929 (1983).
19. "Thermochemical Excess Properties of Multicomponent Systems. Representation and Estimation from Binary Data," G. L. Bertrand, **W. E. Acree, Jr.** and T. E. Burchfield, *J. Solution Chem.*, 12, 327 (1983).
20. "Comments on the Generalized Corresponding-States Method for the Prediction of Surface Tension of Pure Liquids and Liquid Mixtures," **W. E. Acree, Jr.**, *J. Colloid Interface Sci.*, 95, 273 (1983).
21. "Viscosity, Refractive Index, and Surface Tension of Multicomponent Systems: Mathematical Representation and Estimation from Data for Binary Systems," **W. E. Acree, Jr.** and G. L. Bertrand, *J. Solution Chem.*, 12, 755 (1983).

22. "Solubility of Biphenyl in Binary Solvent Mixtures," **W. E. Acree, Jr.**, *Int. J. Pharm.*, 18, 47 (1984).
23. "Correlation and Estimation of Aqueous Solubilities of Polycyclic Aromatic Hydrocarbons," R. J. Baker, **W. E. Acree, Jr.** and C.-C. Tsai, *Quant. Struct.-Act. Relat. Pharmacol., Chem. Biol.*, 3, 10 (1984).
24. "Octanol/Water Partition Coefficients of 4-Substituted Benzylidene *t*-Butylamine N-Oxides," **W. E. Acree, Jr.**, W. E. Bacon and A. J. Leo, *Int. J. Pharm.*, 20, 209 (1984).
25. "Hydrolysis Reactions in Lamellar Liquid Crystalline Media and Octanol/Water Partition Coefficients," W. E. Bacon and **W. E. Acree, Jr.**, *Mol. Cryst. Liq. Cryst.*, 108, 177 (1984).
26. "Empirical Expression for Predicting Surface Tension of Liquid Mixtures," **W. E. Acree, Jr.**, *J. Colloid Interface Sci.*, 101, 575 (1984).
27. "Solubility of Phenylacetic Acid in Binary Solvent Mixtures," **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 30, 70 (1985).
28. "Excess Molar Volumes of Binary Mixtures of Cyclohexane and γ -Butyrolactone with Aromatic Hydrocarbons," **W. E. Acree, Jr.**, K. Gholami, D. R. McHan and J. H. Rytting, *J. Chem. Eng. Data*, 30, 182 (1985).
29. "Comments on Role of Interfacial Tension in Reverse Phase Liquid Chromatography," **W. E. Acree, Jr.**, *J. Liq. Chromatogr.*, 8, 1739 (1985).
30. "Octanol/Water Partition Coefficients of Substituted α ,N-Diphenylnitrones and Benzonitrile N-Oxides," J. J. Kirchner, **W. E. Acree, Jr.**, A. J. Leo and G. Gelli, *J. Pharm. Sci.*, 74, 1129 (1985).
31. "Solubility in Binary Solvent Systems. 5. Monomer and Dimer Models for the Solubility of *p*-Tolylacetic Acid in Systems of Nonspecific Interactions," **C. L. Judy** and **W. E. Acree, Jr.**, *Int. J. Pharm.*, 27, 39 (1985).
32. "Thermochemical Investigation of Gas-Liquid Chromatography. 3. Retention Behavior of Alkane Solutes on Binary Liquid Crystalline Solvent Mixtures," **C. A. Rouse** and **W. E. Acree, Jr.**, *J. Chromatogr.*, 357, 33 (1986).
33. "Enthalpies of Combustion of Four N-Phenylmethylene Benzenamine N-Oxide Derivatives, of N-Phenylmethylene Benzenamine, and of *trans*-Diphenyldiazene N-Oxide: The Dissociation Enthalpy of the (N-O) Bond," **J. J. Kirchner**, **W. E. Acree, Jr.**, G. Pilcher and L. Shaofeng, *J. Chem. Thermodyn.*, 18, 793 (1986).
34. "Solubility in Binary Solvent Systems. 6. Prediction of Naphthalene and Biphenyl Solubilities using the Wilson Model," **W. E. Acree, Jr.**, **N. M. Pontikos** and **C. L. Judy**, *Int. J. Pharm.*, 31, 225 (1986).
35. "Experimental Artifacts and Determination of Accurate *P_y* Values," K. W. Street, Jr. and **W. E. Acree, Jr.**, *Analyst*, 111, 1197 (1986).
36. "The *P_y* Solvent Polarity Scale: Binary Solvent Mixtures Used in Reversed-Phase Liquid Chromatography," K. W. Street, Jr. and **W. E. Acree, Jr.**, *J. Liq. Chromatogr.*, 9, 2799 (1986).
37. "Excess Insentropic Compressibilities of Binary Mixtures of N,N-Dimethylformamide with *n*-Alcohols at 303.15 K," **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 16, 113 (1986).
38. "Comment on Solubility and Enhanced Tension of Solute in Solution," G. L. Bertrand and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 16, 153 (1986).
39. "Solubility of Pyrene in Binary Solvent Mixtures Containing Cyclohexane," **C. L. Judy**, **N. M. Pontikos** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data.*, 32, 60 (1987).
40. "Solubility in Binary Solvent Systems. 7. Comparison of Predictive Expressions Derived from the NIBS

- Models," **C. L. Judy, N. M. Pontikos and W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 16, 179 (1987).
41. "Correlation and Estimation of Aqueous Solubilities of Halogenated Benzenes," R. J. Baker, **B. J. Donelan, L. J. Peterson, W. E. Acree, Jr.** and C.-C. Tsai, *Phys. Chem. Liq.*, 16, 279 (1987).
 42. "Solubility of Anthracene in Binary Solvent Mixtures Containing Dibutyl Ether," **M. V. Marthandan and W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 32, 301 (1987).
 43. "Thermochemical Investigations of Associated Solutions. 4. Calculation of Carbazole-Dibutyl Ether Association Constants from Measured Solubility in Binary Solvent Mixtures," **J. W. McCargar and W. E. Acree, Jr.**, *J. Pharm. Sci.*, 76, 572 (1987).
 44. "Thermochemical Investigations of Associated Solutions. 5. Calculation of Solute-Solvent Equilibrium Constants from Solubility in Mixtures Containing Two Complexing Solvents," **W. E. Acree, Jr. and J. W. McCargar**, *J. Pharm. Sci.*, 76, 575 (1987).
 45. "Thermochemical Investigations of Gas-Liquid Chromatography. 4. Partition Coefficients of Solutes on Binary Mixtures Containing Two Complexing Solvents," **W. E. Acree, Jr.**, *J. Chromatogr.*, 402, 41 (1987).
 46. "Solubility in Binary Solvent Systems. 8. Estimation of Binary Alkane + p-Dioxane Solvent Nonideality from Measured Anthracene Solubilities," **A. D. Procyk, M. Bissell**, K. W. Street, Jr. and **W. E. Acree, Jr.**, *J. Pharm. Sci.*, 76, 621 (1987).
 47. "Influence of Lamellar Liquid Crystalline and Micellar Solvents on the Hydrolysis of 4-Substituted Benzylidene t-Butylamine N-Oxides," W. E. Bacon, **W. E. Acree, Jr.**, M. E. Neubert and S. J. Laskos, Jr., *Mol. Cryst. Liq. Cryst.*, 4L, 173 (1987).
 48. "Comment on Thermochemical Investigations of Associated Solutions: Calculation of Solute-Solvent Equilibrium Constants from Solubility Measurements," **W. E. Acree, Jr.**, *J. Pharm. Sci.*, 76, 580 (1987).
 49. "Thermochemical Investigations of Associated Solutions. 3. Effect of the Inert Cosolvent on Solute-Solvent Association Constants Calculated from Solubility Measurements," **J. W. McCargar and W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 17, 123 (1987).
 50. "Comment on A New Expression for the Combinatorial Entropy of Mixing in Liquid Mixtures," **W. E. Acree, Jr. and J. W. McCargar**, *J. Mol. Liq.*, 37, 249 (1988).
 51. "Thermochemical Investigations of Associated Solutions. 7. Development of Solubility Expressions Based on the Huyskens and Haulait-Pirson Definition of Solution Ideality," **W. E. Acree, Jr. and J. W. McCargar**, *J. Mol. Liq.*, 37, 251 (1988).
 52. "Thermochemical Investigations of Associated Solutions. 6. Mole Fraction vs. Volume Fraction Based Equilibrium Constants," **J. W. McCargar and W. E. Acree, Jr.**, *J. Solution Chem.*, 17, 1081 (1988).
 53. "Solubility of Anthracene in Binary Solvent Mixtures Containing Tetrahydropyran," **M. Bissell, C. Chittick and W. E. Acree, Jr.**, *Fluid Phase Equilib.*, 41, 187 (1988).
 54. "Comment on Entropies of Diphenylglyoxal Solutions in Non-Polar Solvents," **W. E. Acree, Jr. and A. D. Procyk**, *Thermochim. Acta*, 130, 367 (1988).
 55. "The Influence of Nematic Solvents in the Thermal Rearrangement of α -Benzyloxystyrene," W. E. Bacon, **W. E. Acree, Jr.**, J. S. Hwang and G. H. Brown, *Mol. Cryst. Liq. Cryst.*, 5, 147 (1988).
 56. "Novel Gas-Liquid Chromatographic Stationary Phases. Nonaqueous CTAB + Formamide Lyotropic Liquid Crystalline Solvents," **J. M. Byrd and W. E. Acree, Jr.**, *Mol. Cryst. Liq. Cryst.*, 5, 163 (1988).
 57. "Solubility of p-Phenylazophenol in Low Molecular Weight Liquid Crystalline Precursors," N. M.

- Djordjevic, C. A. Rouse, R. A. Djerki and **W. E. Acree, Jr.**, *J. Solution Chem.*, 17, 967 (1988).
58. "Benzo(ghi)perylene Versus Pyrene as Solute Probes for Polarity Determination of Liquid Organic Salts Used in Chromatography," K. W. Street, Jr., **W. E. Acree, Jr.**, P.H. Shetty and C. F. Poole, *Analyst*, 113, 1869 (1988).
 59. "The Py and BPe Solvent Polarity Scales: Effect of Temperature on Pyrene and Benzo[ghi]perylene Fluorescence Spectra," R. Waris, **W. E. Acree, Jr.** and K. W. Street, Jr., *Analyst*, 113, 1465 (1988).
 60. "Estimation of the Effective Dielectric Constant of Cyclodextrin Cavities Based on the Fluorescence Properties of Pyrene-3-Carboxaldehyde," K. W. Street, Jr. and **W. E. Acree, Jr.**, *Appl. Spectrosc.*, 42, 1315 (1988).
 61. "Solubility of Anthracene in Binary Alkane + Toluene Solvent Mixtures," **S. A. Tucker, D. J. Murrall, B. M. Oswalt, J. L. Halmi** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 18, 279 (1988).
 62. "Polycyclic Aromatic Hydrocarbon Solute Probes: Effect of Solvent Polarity on the Ovalene and Benzo[ghi]perylene Fluorescence Emission Fine Structure," R. Waris, **M. A. Rembert, D. M. Sellers, W. E. Acree, Jr.**, K. W. Street, Jr., C. F. Poole, P. H. Shetty and J. C. Fetzer, *Appl. Spectrosc.*, 42, 1525 (1988).
 63. "Polycyclic Aromatic Hydrocarbon Solute Probes: 2. Effect of Solvent Polarity on the Fluorescence Emission Fine Structures of Coronene Derivatives," R. Waris, **M. A. Rembert, D. M. Sellers, W. E. Acree, Jr.**, K. W. Street, Jr. and J. C. Fetzer, *Analyst*, 114, 195 (1989).
 64. "Solubility of Pyrene in Binary Solvent Mixtures Containing Dibutyl Ether," **J. R. Wallach, S. A. Tucker, B. M. Oswalt, D. J. Murrall** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 34, 70 (1989).
 65. "Polycyclic Aromatic Hydrocarbon Solute Probes: 3. Fluorescence Emission Spectra of Pyrene, Ovalene, Benzo[ghi]perylene and Coronene Dissolved in Liquid Tetrabutylammonium Sulfonate Salts," **S. A. Tucker, W. E. Acree, Jr.**, K. W. Street, Jr. and J. C. Fetzer, *Appl. Spectrosc.*, 43, 162 (1989).
 66. "Thermochemical Investigations of Associated Solutions. 8. Development of Model for Systems Containing AC and AC₂ Molecular Complexes," **W. E. Acree, Jr.** and **S. A. Tucker**, *Phys. Chem. Liq.*, 19, 23 (1989).
 67. "Solubility of Carbazole in Binary Chloroalkane + Dibutyl Ether Solvent Mixtures," **J. W. McCargar** and **W. E. Acree, Jr.**, *J. Solution Chem.*, 18, 151 (1989).
 68. "Solubility of Anthracene in Binary Carbon Tetrachloride + Alkane Solvent Mixtures," **S. A. Tucker** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 19, 73 (1989).
 69. "Thermochemical Investigations of Associated Solutions. 9. Prediction of Excess Enthalpies of Ternary Acetone + Cyclohexane + Chloroform Mixtures from Binary Data," **W. E. Acree, Jr.**, **S. A. Tucker** and **L. E. Cretella**, *Thermochim. Acta*, 145, 245 (1989).
 70. "Solubility of Anthracene in Binary p-Xylene + Alkane and Benzene + Alkane Solvent Mixtures," **W. E. Acree, Jr.** and **S. A. Tucker**, *Phys. Chem. Liq.*, 20, 31 (1989).
 71. "Polycyclic Aromatic Hydrocarbon Solute Probes. 4. Effect of Solvent Polarity on the Fluorescence Emission Fine Structures of Select Pyrene and Pentaphene Derivatives," R. Waris, **W. E. Acree, Jr.**, K. W. Street, Jr. and J. C. Fetzer, *Appl. Spectrosc.*, 43, 845 (1989).
 72. "Enthalpies of Combustion of Three Benzylidene t-Butylamine N-Oxide Derivatives and of Nitrobenzylidene t-Butylamine: The Dissociation of the (N-O) Bond," **W. E. Acree, Jr.**, **J. J. Kirchner, S. A. Tucker, G. Pilcher** and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.*, 21, 443 (1989).
 73. "Comment on Ultrasonic Velocity and Viscosity of Binary Liquid Mixtures," **W. E. Acree, Jr.**, *Thermochim. Acta*, 149, 393 (1989).

74. "Thermochemical Investigations of Tautomeric Equilibria. Variation of the Calculated Equilibrium Constant on Binary Solvent Composition," **W. E. Acree, Jr.** and **S. A. Tucker**, *Phys. Chem. Liq.*, 20, 135 (1989).
75. "Polycyclic Aromatic Hydrocarbon Solute Probes. 5. Fluorescence Emission Spectra of Pyrene, Ovalene, Benzo(ghi)perylene and Coronene Dissolved in Liquid Tetraalkylammonium Thiocyanate Salts," K. W. Street, Jr., **W. E. Acree, Jr.**, J. C. Fetzer, P. H. Shetty and C. F. Poole, *Appl. Spectrosc.*, 43, 1149 (1989).
76. "Thermodynamic Properties of Ternary Nonelectrolyte Solutions. Prediction of Excess Volumes from Measured Binary Data," **J. W. McCargar** and **W. E. Acree, Jr.**, *Thermochim. Acta*, 149, 363 (1989).
77. "Polycyclic Aromatic Hydrocarbon Solute Probes. 6. Effect of Dissolved Oxygen and Halogenated Solvents on the Emission Spectra of Select Probe Molecules," **S. A. Tucker**, **L. E. Cretella**, R. Waris, K. W. Street, Jr., **W. E. Acree, Jr.** and J. C. Fetzer, *Appl. Spectrosc.*, 44, 269 (1990).
78. "Polycyclic Aromatic Sulfur Heterocycles. Solubility of Thianthrene in Binary Solvent Mixtures Containing Cyclohexane," **W. E. Acree, Jr.**, **S. A. Tucker** and **A. I. Zvaigzne**, *Phys. Chem. Liq.*, 21, 45 (1990).
79. "Thermodynamic Properties of Ternary Nonelectrolyte Solutions. 2. Prediction of Infinite Dilution Activity Coefficients and Solubilities Based on the Various NIBS and Microscopic Partition Models," **W. E. Acree, Jr.**, **S. A. Tucker** and **L. E. Cretella**, *Thermochim. Acta*, 158, 11 (1990).
80. "Polycyclic Aromatic Hydrocarbon Solute Probes. 7. Evaluation of Additional Coronene Derivatives as Possible Solvent Polarity Probe Molecules," **W. E. Acree, Jr.**, **S. A. Tucker**, **A. I. Zvaigzne**, K. W. Street, Jr., J. C. Fetzer and H. F. Grutzmacher, *Appl. Spectrosc.*, 44, 477 (1990).
81. "Comments on the Competitive Preferential Solvation Theory," **W. E. Acree, Jr.**, **A. I. Zvaigzne** and **S. A. Tucker**, *J. Chem. Soc., Faraday Trans.*, 86, 307 (1990).
82. "Comments on Thermochemical Investigations of Associated Solutions. 9. Prediction of Excess Enthalpies of Ternary Acetone + Cyclohexane + Chloroform Mixtures from Measured Binary Data," **W. E. Acree, Jr.**, **A. I. Zvaigzne** and **S. A. Tucker**, *Thermochim. Acta*, 161, 89 (1990).
83. "Comments on Thermochemical Investigations of Associated Solutions. 8. Development of Model for Systems Containing AC and AC₂ Molecular Complexes," **W. E. Acree, Jr.**, **A. I. Zvaigzne** and **S. A. Tucker**, *Phys. Chem. Liq.*, 21, 169 (1990).
84. "Thermochemical Investigations of Associated Solutions. 11. Calculation of Pyrene-Dichlorobutane Association Parameters from Measured Solubility Data," **W. E. Acree, Jr.**, **S. A. Tucker** and **A. I. Zvaigzne**, *J. Chem. Soc., Faraday Trans.*, 86, 2197 (1990).
85. "Thermochemical Investigations of Associated Solutions. 10. Excess Enthalpies and Excess Volumes of Ternary Acetone + Bromoform + n-Hexane Mixtures," P. P. Singh, R. Malik, S. Maken, **W. E. Acree, Jr.** and **S. A. Tucker**, *Thermochim. Acta*, 162, 291 (1990).
86. "Thermochemical Investigations of Associated Solutions. 12. Mole Fraction Versus Volume Fraction Based Association Constants for Predicting Excess Molar Enthalpies of Acetone + Bromoform + Alkane Mixtures," P. P. Singh, R. Malik, S. Maken, **W. E. Acree, Jr.** and **A. I. Zvaigzne**, *Thermochim. Acta*, 165, 113 (1990).
87. "Polycyclic Aromatic Hydrocarbons and Polycyclic Aromatic Sulfur Heterocycles: Examination of Molecular Structure-Fluorescence Probe Character Correlations," **W. E. Acree, Jr.**, **S. A. Tucker**, **L. E. Cretella**, **A. I. Zvaigzne**, K. W. Street, Jr., J. C. Fetzer, K. Nakasuji and I. Murata, *Appl. Spectrosc.*, 44, 951 (1990).
88. "Effect of Solvent Polarity on the Fluorescence Emission Spectra of Select Five- and Six-Ring Pyrene Derivatives," **W. E. Acree, Jr.**, **A. I. Zvaigzne** and J. C. Fetzer, *Appl. Spectrosc.*, 44, 1193 (1990).

89. "Thermodynamic Properties of Ternary Nonelectrolyte Solutions. 3. Excess Molar Volumes of 2-Propanone + Tribromomethane + Alkane Mixtures," P. P. Singh, R. Malik, S. Maken and **W. E. Acree, Jr.**, *J. Chem. Soc., Faraday Trans.*, 86, 2853 (1990).
90. "Thermochemical Investigations of Preferential Solvation in Nonelectrolyte Solutions. Estimation of Preferential Solvation from Measured Solute Solubilities in Binary Solvent Mixtures," **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 22, 107 (1990).
91. "Polycyclic Aromatic Nitrogen Heterocycles. Solubility of Carbazole in Binary Solvent Mixtures Containing Cyclohexane," **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 22, 157 (1990).
92. "Enthalpies of Combustion of Phenazine N-Oxide, Phenazine, Benzofuroxan and Benzofurazan: The Dissociation Enthalpies of the (N-O) Bonds," M. L. P. Leitaó, G. Pilcher, **W. E. Acree, Jr.**, **A. I. Zvaigzne**, **S. A. Tucker** and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.*, 22, 923 (1990).
93. Thermochemical Investigations of Associated Solutions. 13. Calculation of Anthracene-Chlorobutane Association Parameters from Measured Solubility Data," **W. E. Acree, Jr.**, *J. Solution Chem.*, 20, 307 (1991).
94. "Thermodynamic Properties of Nonelectrolyte Solutions. 4. Estimation and Mathematical Representation of Solute Activity Coefficients and Solubilities in Binary Solvents Using the NIBS and Modified Wilson Equations," **W. E. Acree, Jr.** and **A. I. Zvaigzne**, *Thermochim. Acta*, 178, 151 (1991).
95. "Mathematical Representation of Thermodynamic Properties. Carbazole Solubilities in Binary Alkane + Dibutyl Ether and Alkane + Tetrahydropyran Solvent Mixtures," **W. E. Acree, Jr.**, **J. W. McCargar**, **A. I. Zvaigzne** and **I.-L. Teng**, *Phys. Chem. Liq.*, 23, 27 (1991).
96. "Polycyclic Aromatic Nitrogen Heterocycles: Part 2. Effect of Solvent Polarity on the Fluorescence Emission Fine Structure of Three Azapyrene Compounds," **S. A. Tucker**, **W. E. Acree, Jr.** and M. J. Tanga, *Appl. Spectrosc.*, 45, 57 (1991).
97. "Polycyclic Aromatic Hydrocarbon Solute Probes. 8. Evaluation of Additional Naphthacene and Perylene Derivatives as Possible Solvent Polarity Probe Molecules," **S. A. Tucker**, **I.-L. Teng**, **W. E. Acree, Jr.** and J. C. Fetzer, *Appl. Spectrosc.*, 45, 186 (1991).
98. "Enthalpies of Combustion of 2,4,6-Trimethylbenzotrile, 2,4,6-Trimethylbenzotrile N-Oxide, 2,6-Dimethylbenzotrile, 2,4,6-Trimethoxybenzotrile, and 2,4,6-Trimethoxybenzotrile N-Oxide: The Dissociation Enthalpies of the (N-O) Bonds," **W. E. Acree, Jr.**, **S. A. Tucker**, **A. I. Zvaigzne**, Y. Meng-Yan, G. Pilcher and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.*, 23, 31 (1991).
99. "Thermochemical Investigations of Associated Solutions. 14. Calculation of Anthracene-Butyl Acetate Association Parameters from Measured Solubility Data," **W. E. Acree, Jr.**, *J. Chem. Soc., Faraday Trans.*, 87, 461 (1991).
100. "Polycyclic Aromatic Hydrocarbon Solute Probes. 9. Evaluation of Additional Pentaphene, Pentacene and Pyranthrene Compounds as Possible Solvent Polarity Probes," **S. A. Tucker**, **A. I. Zvaigzne**, **W. E. Acree, Jr.**, J. C. Fetzer and M. Zander, *Appl. Spectrosc.*, 45, 424 (1991).
101. "Thermochemical Investigations of Associated Solutions. 15. Comparison of PAH-Chlorobutane Versus PAH-Dichlorobutane Equilibrium Constants Calculated from Solubility Data," **W. E. Acree, Jr.** and **A. I. Zvaigzne**, *Phys. Chem. Liq.*, 23, 225 (1991).
102. "Polycyclic Aromatic Nitrogen Heterocycles. 3. Effect of Solvent Polarity and Solvent Acidity on the Fluorescence Emission Behavior of Select Azapyrenes and Phenathroisoquinolines," **S. A. Tucker**, **W. E. Acree, Jr.** and M. J. Tanga, *Appl. Spectrosc.*, 45, 911 (1991).
103. "Thermodynamic Properties of Organic Compounds. Enthalpy of Fusion and Melting Point Temperature

- Compilation," **W. E. Acree, Jr.**, *Thermochim. Acta*, 189, 37 (1991).
104. "Effect of Solvent Polarity and Acidity on Fluorescence Emission Fine Structures of Select Aza-Polynuclear Aromatics and Dibenzo[b,n]perylene Hetero-atom Derivatives," **S. A. Tucker**, **W. E. Acree, Jr.**, M. J. Tanga, M. Zander, J. C. Fetzer, S. Tokita, K. Hiruta, K. Kitahara and H. Nishi, *Appl. Spectrosc.*, 45, 1188 (1991).
 105. "Comments on Topological Investigation of Molecular Interactions in Ternary Mixtures of Non-electrolytes: Excess Gibbs Free Energy of Mixing," **W. E. Acree, Jr.**, *Indian J. Chem.*, 30A, 733 (1991).
 106. "Thermochemical Investigations of Molecular Complexation. Estimation of Anthracene-Ethyl Acetate and Anthracene-Diethyl Adipate Association Parameters from Measured Solubility Data," **A. I. Zvaigzne** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 24, 31 (1991).
 107. "Fluorescence Emission Properties of Polycyclic Aromatic Compounds in Review, **W. E. Acree, Jr.**, **S. A. Tucker** and J. C. Fetzer, *Polycyclic Aromat. Compds.*, 2, 75 (1991). (**invited article**).
 108. "Spectroscopic Properties of Polycyclic Aromatic Hydrocarbons: Effect of Solvent Polarity on the Fluorescence Emission Behavior of Select Fluoranthene, Fluorenochrysenes, Indenochrysenes and Indenopyrene Derivatives," **S. A. Tucker**, **W. E. Acree, Jr.**, B. P. Cho, R. G. Harvey and J. C. Fetzer, *Appl. Spectrosc.*, 45, 1699 (1991).
 109. "Enthalpies of Combustion of 1,4-Dicyanobenzene Di-N-oxide and 1,4-Dicyanobenzene: The Mean Dissociation Enthalpy of the (N-O) Bonds," **S. A. Tucker**, **W. E. Acree, Jr.** and G. Pilcher, *J. Chem. Thermodyn.*, 24, 213 (1992).
 110. "Spectroscopic Properties of Polycyclic Aromatic Compounds: Examination of Nitromethane as a Selective Fluorescence Quenching Agent for Alternant Polycyclic Aromatic Nitrogen Hetero-atom Derivatives," **S. A. Tucker**, **W. E. Acree, Jr.**, M. J. Tanga, S. Tokita, K. Hiruta and H. Langhals, *Appl. Spectrosc.*, 46, 229 (1992).
 111. "Mathematical Representation of Thermodynamic Properties: 2. Derivation of the Combined Nearly Ideal Binary Solvent (NIBS)/Redlich-Kister Mathematical Representation from a Two- and Three-Body Interactional Mixing Model," **W. E. Acree, Jr.**, *Thermochim. Acta*, 198, 71 (1992).
 112. "Thermodynamic Properties of Organic Compounds: 2. Combustion and Sublimation Enthalpies of 2,4,6-Trimethylbenzotrinitrile N-Oxide," **W. E. Acree, Jr.**, V. V. Simirski, A. A. Kozyro, A. P. Krasulin, G. J. Kabo and M. L. Frenkel, *J. Chem. Eng. Data*, 37, 131 (1992).
 113. "Quantitative Structure-Property Relationships for Aqueous Solubilities of Halogenated Aromatic Compounds," T. T. Blair, E. Gifford, **W. E. Acree, Jr.** and C.-C. Tsai, *Phys. Chem. Liq.*, 24, 137 (1992).
 114. "Thermodynamic Properties of Nonelectrolyte Solutions. Part 2. Excess Molar Volumes of Binary Mixtures Containing 1,1-Oxybisbutane," **I.-L. Teng** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 24, 249 (1992).
 115. "Spectroscopic Investigation of Fluorescence Quenching Agents: Effect of Nitromethane on the Fluorescence Emission Behavior of Select Cyclopenta-PAH, Aceanthrylene, and Fluorene Derivatives," **V. L. Amszi**, **Y. Cordero**, **B. Smith**, **S. A. Tucker**, **W. E. Acree, Jr.**, C. Yang, E. Abu-Shaqara, and R. G. Harvey, *Appl. Spectrosc.*, 46, 1156 (1992).
 116. "Spectroscopic Investigation of Fluorescence Quenching Agents. Part 2. Effect of Nitromethane on the Fluorescence Emission Behavior of 36 Alternant Benzenoid Polycyclic Aromatic Hydrocarbons," **S. A. Tucker**, **H. Darmodjo**, **W. E. Acree, Jr.**, J. C. Fetzer, and M. Zander, *Appl. Spectrosc.*, 46, 1260 (1992).
 117. "Excitation Versus Emission Spectra as a Means to Examine Selective Fluorescence Quenching Agents," **S. A. Tucker** and **W. E. Acree, Jr.**, *Appl. Spectrosc.*, 46, 1388 (1992).
 118. "Polycyclic Aromatic Nitrogen Heterocycles. Part IV. Effect of Solvent Polarity, Solvent Acidity,

- Nitromethane and 1,2,4-Trimethoxybenzene on the Fluorescence Emission Behavior of Select Monoaza- and Diazaarenes," **S. A. Tucker, H. Darmodjo, W. E. Acree, Jr.,** M. Zander, E. C. Meister, M. J. Tanga and S. Tokita, *Appl. Spectrosc.*, **46**, 1630 (1992).
119. "Thermodynamic Properties of Nonelectrolyte Solutions. Part 1. Excess Molar Volumes of Binary Mixtures Containing Chlorobenzene," **I.-L. Teng** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **25**, 1 (1992).
120. "Spectroscopic Properties of Polycyclic Aromatic Hydrocarbons: 2. Examination of Nitromethane as a Selective Fluorescence Quenching Agent for Alkylated Pyrene and Chrysene Derivatives," **S. A. Tucker, W. E. Acree, Jr.**, J. C. Fetzer and J. Jacob, *Polycyclic Aromat. Compds.*, **3**, 1 (1992).
121. "Solubility of Anthracene in Binary Alkane + Dimethyl Adipate and Alkane + Dibutyl Oxalate Solvent Mixtures," **A. I. Zvaigzne, B. Smith, Y. Cordero** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **25**, 51 (1992).
122. "Comments Concerning on the Isobaric Vapour-Liquid Equilibrium of the Cyclohexanol-Phenolmethanol Binary at 101.325 ± 0.067 kPa," **W. E. Acree, Jr.**, *Fluid Phase Equilibr.*, **81**, 343 (1992).
123. "Thermodynamic Properties of Ternary Nonelectrolyte Solutions. Part 5. Two- and Three-Body Models for Predicting Excess Molar Volumes of Chlorobenzene + Dibutyl Ether + Alkane Mixtures," **I.-L. Teng** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **25**, 101 (1993).
124. "Polycyclic Aromatic Nitrogen Heterocycles. Part V. Fluorescence Emission Behavior of Select Tetraaza- and Diazaarenes in Nonelectrolyte Solvents," **S. A. Tucker, W. E. Acree, Jr.** and C. Upton, *Appl. Spectrosc.*, **47**, 201 (1993).
125. "Spectroscopic Properties of Polycyclic Aromatic Compounds. Part III. Fluorescence Emission and Quenching Behavior of Periodic Table Group 16 Hetero-atom Derivatives," **S. A. Tucker, W. E. Acree, Jr.**, M. Zander, P. Demerseman and J.-P. Buisson, *Appl. Spectrosc.*, **47**, 317 (1993).
126. "Excess Volumes of Ternary Mixtures of 1,2-Dichlorobenzene, Methyl Ethyl Ketone as Common Components and 1-Alkanols at 303.15 K," J. R. Sekar, P. R. Naidu and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **38**, 167 (1993).
127. "Thermodynamic Properties of Organic Compounds. Part 3. Sublimation Enthalpy and Heat Capacities of 2,4,6-Trimethylbenzonitrile N-Oxide," **W. E. Acree, Jr.**, V. M. Sevruk, A. A. Kozyro, A. P. Krasulin, G. J. Kabo and M. L. Frenkel, *J. Chem. Eng. Data*, **38**, 101 (1993).
128. "Comments Concerning Solubility Effects on Chemical Processes. I. Solubility of Aromatic and Heterocyclic Compounds in Binary Aqueous-Organic Solvents," **W. E. Acree, Jr.**, *J. Pharm. Sci.*, **82**, 431 (1993).
129. "Comments Concerning Partitioning of Polycyclic Aromatic Hydrocarbons to Marine Porewater Organic Colloids", **W. E. Acree, Jr.**, *Environ. Sci. Technol.*, **27**, 757 (1993).
130. "Enthalpies of Combustion of *p*-Azoxyanisole and *p*-Azoxyphenetole: The Dissociation Enthalpy of the (N-O) Bonds. Enthalpies of Crystal-to-(Liquid Crystal) Transitions," **W. E. Acree, Jr., S. A. Tucker**, G. Pilcher, M. I. Paz Andrade and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.*, **25**, 653 (1993).
131. "Spectroscopic Properties of Polycyclic Aromatic Compounds. Part II. Fluorescence Emission Behavior of Select Acenaphthylene-Derivatives in Organic Nonelectrolyte Solvents," **S. A. Tucker, H. C. Bates, V. L. Amszi, W. E. Acree, Jr.**, H. Lee, P. Di Raddo, R. G. Harvey and G. Dyker, *Anal. Chim. Acta*, **278**, 269 (1993).
132. "Spectroscopic Investigation of Fluorescence Quenching Agents. Part III. Effect of Solvent Polarity on the Selectivity of Nitromethane for Discriminating Between Alternant Versus Non-alternant Polycyclic Aromatic Hydrocarbons," **S. A. Tucker, W. E. Acree, Jr.**, J. C. Fetzer, R. G. Harvey, Mary J. Tanga, P.-C. Cheng and L. T. Scott, *Appl. Spectrosc.*, **47**, 715 (1993).

133. "Solubility of Anthracene in Binary Alkane + 1-Propanol and Alkane + 1-Butanol Solvent Mixtures," **A. I. Zvaigzne, I.-L. Teng, E. Martinez, J. Trejo** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **38**, 389 (1993).
134. "Thermodynamic Properties of Organic Compounds. Part 4. First Update of Enthalpy of Fusion and Melting Point Temperature Compilation," **W. E. Acree, Jr.**, *Thermochim. Acta*, **219**, 97 (1993).
135. "Solubility of Pyrene in Binary Alkane + 1-Propanol and Alkane + 2-Propanol Solvent Mixtures," **A. I. Zvaigzne** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **38**, 393 (1993).
136. "Comments Concerning the Influence of Anhydrous Cupric Chloride on the Nature of the Interactions Between Bromoform and 1,4-Dioxane," **W. E. Acree, Jr.**, *Fluid Phase Equilibr.*, **87**, 379 (1993).
137. "Polycyclic Aromatic Hydrocarbon Solute Probes. Part X. Evaluation of Select Hydrogenated Pyrene, Benzo[ghi]perylene and Naphthacene Derivatives as Possible Solvent Polarity Probes," **S. A. Tucker, W. E. Acree, Jr.**, J. C. Fetzer and R. H. Mitchell, *Appl. Spectrosc.*, **47**, 1040 (1993).
138. "Spectrofluorometric Probe Method for Examining Preferential Solvation in Binary Solvent Mixtures," **W. E. Acree, Jr.**, **D. C. Wilkins** and **S. A. Tucker**, *Appl. Spectrosc.*, **47**, 1171 (1993).
139. "Enthalpies of Combustion of 2,2',4,4',6,6'-Hexamethylazobenzene N,N-Dioxide, 2,2',6,6'-Tetramethylazobenzene N,N-Dioxide, 2,4,6-Trimethylnitrobenzene, and 2,6-Dimethylnitrobenzene: The Dissociation Enthalpies of the (N=N) and (N-O) Bonds," **W. E. Acree, Jr.**, **S. A. Tucker**, G. Pilcher, A. Chowdhary, M. D. M. C. Ribeiro da Silva and M. J. S. Monte, *J. Chem. Thermodyn.*, **25**, 1253 (1993).
140. "Spectrochemical Investigations of Preferential Solvation. Fluorescence Emission Behavior of Select Polycyclic Aromatic Hydrocarbon Solute Probes Dissolved in Mixed Solvents," **W. E. Acree, Jr.**, **S. A. Tucker** and **D. C. Wilkins**, *J. Phys. Chem.*, **97**, 11199 (1993).
141. "Polycyclic Aromatic Nitrogen Heterocycles. Part VI. Fluorescence Emission and Quenching Behavior of Select Phenyl- and Alkyl-Derivatives Dissolved in Nonelectrolyte Solvents," **S. A. Tucker, W. E. Acree, Jr.** and C. Upton, *Polycyclic Aromat. Compds.*, **3**, 221 (1993).
142. "Spectroscopic Investigation of Fluorescence Quenching Agents. Part IV. Selectivity of Nitromethane for Discriminating Between Alternant Versus Nonalternant Polycyclic Aromatic Hydrocarbons in Solvents of Differing Polarities," **S. A. Tucker, H. C. Bates, W. E. Acree, Jr.** and J. C. Fetzer, *Appl. Spectrosc.*, **47**, 1775 (1993).
143. "Comments Concerning Fluorescence Probe Studies on the Microstructure of Polystyrene-Poly(vinylpyridine) Diblock Copolymer Film," **W. E. Acree, Jr.**, **S. A. Tucker** and **D. C. Wilkins**, *Macromolecules*, **25**, 6866 (1993).
144. "Comments Concerning the Effect of Temperature on the Fluorescence Quenching of Perylene by Tetrachloromethane in Mixtures with Cyclohexane and Benzene," **W. E. Acree, Jr.**, *Z. Naturforsch.*, **48A**, 1265 (1993).
145. "Excess Volumes of Ternary Mixtures Containing *p*-Chlorotoluene and Octane with 1-Alcohols at 303.15 K," K. S. Kumar, P. R. Naidu and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **39**, 2 (1994).
146. "Thermochemical Investigations of Hydrogen-Bonded Solutions: Development of a Predictive Equation for the Solubility of Anthracene in Binary Hydrocarbon + Alcohol Mixtures Based Upon Mobile Order Theory," **W. E. Acree, Jr.**, **A. I. Zvaigzne** and **S. A. Tucker**, *Fluid Phase Equilibr.*, **92**, 233 (1994).
147. "Enthalpies of Combustion of 4-Dimethylaminonitrosobenzene and 4-Dimethylaminonitrobenzene," **W. E. Acree, Jr.**, **S. A. Tucker**, G. Pilcher and G. Toole, *J. Chem. Thermodyn.*, **26**, 85 (1994).
148. "Thermochemical Investigations of Hydrogen-Bonded Solutions: Part 2. Comparison of Mobile Order Theory Versus Mecke-Kempton Association Model for Describing Anthracene Solubilities in Binary

- Hydrocarbon + Alcohol Mixtures," **W. E. Acree, Jr.**, **A. I. Zvaigzne** and **S. A. Tucker**, *Fluid Phase Equilibr.*, 92, 1 (1994). [Corrigendum, *Fluid Phase Equilibr.*, 101, 267 (1994).]
149. "Thermochemical Investigations of Hydrogen-Bonded Solutions: Part 3. Development of Expression for Predicting Excess Enthalpies of Ternary Alcohol + Two Inert Hydrocarbon Systems Based Upon Mobile Order Theory," **W. E. Acree, Jr.**, *Fluid Phase Equilibr.*, 92, 19 (1994).
150. "Solubility of Anthracene in Binary Alkane + 2-Butanol Solvent Mixtures," **A. I. Zvaigzne** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 39, 114 (1994).
151. "Solubility of Anthracene in Binary *tert*-Butylcyclohexane + Alcohol and *tert*-Butylcyclohexane + 2,2,4-Trimethylpentane Solvent Mixtures," **A. I. Zvaigzne** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 39, 117 (1994).
152. "Thermochemical Investigations of Associated Solutions. Part 16. Comparison of the Extended NIBS and Mobile Order Theory for Solubility in Systems Containing Solute-Solvent Complexation," **W. E. Acree, Jr.** and **S. A. Tucker**, *Int. J. Pharm.*, 101, 199 (1994).
153. "Spectrochemical Investigations of Preferential Solvation. Part 2. Compatibility of Thermodynamic Models Versus Spectrofluorometric Probe Methods for Tautomeric Solutes Dissolved in Binary Mixtures," **W. E. Acree, Jr.**, **D. C. Wilkins**, **S. A. Tucker**, **J. M. Griffin** and **J. R. Powell**, *J. Phys. Chem.*, 98, 2537 (1994).
154. "Solubility in Binary Solvent Systems. Part 9. Estimation of the Carbazole-Tetrahydropyran Association Constant Based Upon Mobile Order Theory," **W. E. Acree, Jr.** and **S. A. Tucker**, *Phys. Chem. Liq.*, 27, 1 (1994).
155. "Spectroscopic Properties of Polycyclic Aromatic Compounds. Part IV. Effect of Solvent Polarity and Nitromethane on the Fluorescence Emission Behavior of Select Bi-Polycyclic Aromatic Hydrocarbons," **S. A. Tucker**, **J. M. Griffin**, **W. E. Acree, Jr.**, **M. Zander** and **R. H. Mitchell**, *Appl. Spectrosc.*, 48, 458 (1994).
156. "A New Predictive Relation for Ternary Excess Volumes," **W. E. Acree, Jr.**, **A. I. Zvaigzne** and **P. R. Naidu**, *Phys. Chem. Liq.*, 27, 69 (1994).
157. "Thermochemical Investigations of Hydrogen-Bonded Solutions: Part 4. Prediction of Liquid-Vapor Equilibria for Binary 2,2,4-Trimethylpentane + 1-Alkanol Mixtures Using Mobile Order Theory," **W. E. Acree, Jr.** and **S. A. Tucker**, *Phys. Chem. Liq.*, 27, 137 (1994).
158. "Solubility of Anthracene in Binary Alkane + 2-Methyl-1-propanol Solvent Mixtures," **A. I. Zvaigzne**, **J. Wolfe** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 39, 541 (1994).
159. "Excess Molar Volumes of 1,2,4-Trichlorobenzene + Methyl Ethyl Ketone + 1-Alkanols at 303.15 K," **J. Sekar**, **P. R. Naidu** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 39, 496 (1994).
160. "Solubility of Anthracene in Binary Alkane + 3-Methyl-1-butanol Solvent Mixtures," **A. I. Zvaigzne** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 39, 708 (1994).
161. "Thermochemical Investigations of Hydrogen-Bonded Solutions: Part 5. Development of a Predictive Equation for the Solubility of Anthracene in Binary Alcohol + Alcohol Mixtures Based Upon Mobile Order Theory," **W. E. Acree, Jr.** and **A. I. Zvaigzne**, *Fluid Phase Equilibr.*, 99, 167 (1994).
162. "Selective Fluorescence Quenching to Discriminate Between Alternant and Nonalternant Polycyclic Aromatic Hydrocarbons: Acephenanthrylene Derivatives as Exceptions to the Nitromethane Quenching Rule," **S. A. Tucker**, **J. M. Griffin**, **W. E. Acree, Jr.**, **P. P. J. Mulder**, **J. Lugtenburg** and **J. Cornelisse**, *Analyst*, 119, 2129 (1994).
163. "Effect that Various Electron Donating Functional Groups have Regarding Nitromethane's Inability to Quench Fluorescence Emission of Nonalternant Fluoranthenoid Polycyclic Aromatic Hydrocarbons," **S. A.**

- Tucker, J. M. Griffin, W. E. Acree, Jr., M. J. Tanga, J. E. Bupp, T. K. Tochimoto, J. Lugtenburg, K. van Haeringen, J. Cornelisse, P.-C. Cheng and L. T. Scott, *Polycyclic Aromat. Compds.*, **4**, 161 (1994).
164. "Effect that Various Electron Donating and Electron Withdrawing Functional Groups have Regarding Nitromethane's Ability to Selectively Quench Fluorescence Emission of Alternant Polycyclic Aromatic Hydrocarbons," S. A. Tucker, J. M. Griffin, W. E. Acree, Jr., J. C. Fetzer, M. Zander, O. Reiser, A. de Meijere and I. Murata, *Polycyclic Aromat. Compds.*, **4**, 141 (1994).
165. "Thermochemical Investigations of Hydrogen-Bonded Solutions: Part 6. Comparison of Mobile Order Theory Versus Kretschmer-Wiebe Association Model for Describing Anthracene Solubilities in Binary Hydrocarbon + Alcohol Mixtures," W. E. Acree, Jr. and S. A. Tucker, *Fluid Phase Equilibr.*, **102**, 17 (1994).
166. "Solubility of Pyrene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based upon Mobile Order Theory," J. R. Powell, D. Voisinet, A. Salazar and W. E. Acree, Jr., *Phys. Chem. Liq.*, **28**, 269 (1994).
167. "Polycyclic Aromatic Hydrocarbon Solute Probes. Part XI. Unusual Solvent Modulated Fluorescence Emission Behavior of 1-Methylcoronene and Select Dimethylcoronenes in Nonelectrolyte Solvents," S. A. Tucker, W. E. Acree, Jr. and J. C. Fetzer, *Appl. Spectrosc.*, **49**, 8 (1995) (invited article).
168. "Comments Concerning Solvent Effects on Chemical Processes. Part 7. Quantitative Description of the Composition Dependence of the Solvent Polarity Measure $E_T(30)$ in Binary Aqueous-Organic Solvent Mixtures," W. E. Acree, Jr., J. R. Powell and S. A. Tucker, *J. Chem. Soc., Perkin Trans.*, 529 (1995).
169. "Enthalpies of Combustion of 4-Nitropyridine N-Oxide and Pyridine-3-carboxylic Acid N-Oxide: The Dissociation Enthalpies of the (N-O) Bonds in Pyridine N-Oxide Derivatives," W. E. Acree, Jr., S. A. Tucker, M. D. M. C. Ribeiro da Silva, M. A. R. Matos, J. M. Goncalves, M. A. V. Ribeiro da Silva and G. Pilcher, *J. Chem. Thermodyn.*, **27**, 391 (1995).
170. "Quantitative Structure-Property Relationships for Aqueous Solubilities of Halogenated Aromatic Compounds: Melting Point Temperatures of Polychloronaphthalenes and Polychlorophenanthrenes," W. E. Acree, Jr., J. R. Powell, D. Voisinet and A. Salazar, *Phys. Chem. Liq.*, **29**, 145 (1995).
171. "Solubility of Anthracene in Binary Alcohol + 2-Methyl-1-propanol and Alcohol + 3-Methyl-1-butanol Solvent Mixtures," A. I. Zvaigzne and W. E. Acree, Jr., *J. Chem. Eng. Data*, **40**, 917 (1995).
172. "Solubility of Anthracene in Binary Alcohol + Dibutyl Ether Solvent Mixtures," J. R. Powell and W. E. Acree, Jr., *J. Chem. Eng. Data*, **40**, 914 (1995).
173. "Acid-Base Indicators: Transition Colors and pH Ranges Determined in Select Aqueous-Organic Mixed Solvents," S. A. Tucker, H. C. Bates and W. E. Acree, Jr., *Analyst*, **120**, 2277 (1995).
174. "Solubility of Anthracene in Binary Alcohol + 1,4-Dioxane Solvent Mixtures," J. R. Powell, B. J. Miller and W. E. Acree, Jr., *J. Chem. Eng. Data*, **40**, 1124 (1995).
175. "Solubility of Pyrene in Binary Alkane + 1-Octanol Solvent Mixtures," A. I. Zvaigzne and W. E. Acree, Jr., *J. Chem. Eng. Data*, **40**, 1127 (1995).
176. "Solubility of Pyrene in Binary Alcohol + 1-Propanol and Alcohol + 2-Propanol Solvent Mixtures," A. I. Zvaigzne, B. J. Miller and W. E. Acree, Jr., *J. Chem. Eng. Data*, **40**, 1267 (1995).
177. "Solubility of Anthracene in Binary Alcohol + 2-Ethyl-1-hexanol Solvent Mixtures," J. R. Powell, M. E. R. McHale, A.-S. M. Kauppila, P. Otero, M. Jayasekera and W. E. Acree, Jr., *J. Chem. Eng. Data*, **40**, 1270 (1995).
178. "Solubility of Anthracene and Pyrene in Binary Alcohol + Alcohol Solvent Mixtures," A. I. Zvaigzne, M.

- E. R. McHale, J. R. Powell, A.-S. M. Kauppila and W. E. Acree, Jr., *J. Chem. Eng. Data*, 40, 1273 (1995).
179. "Spectrochemical Investigations of Preferential Solvation. Part 3. Extension of the Khossravi-Connors-Skwiercznski Two-Step Competitive Solvation Model to Fluorescence Emission Behavior of Polycyclic Aromatic Hydrocarbon Solvent Polarity Probes Dissolved in Binary Solvent Mixtures," W. E. Acree, Jr., S. A. Tucker, D. C. Wilkins and J. M. Griffin, *Phys. Chem. Liq.*, 30, 79 (1995).
180. "Spectrochemical Investigations of Preferential Solvation. Part 4. Determination of Local Composition from Observed Probe Absorption/Emission Wavelength Shifts in Binary Solvent Systems," W. E. Acree, Jr. and J. R. Powell, *Phys. Chem. Liq.*, 30, 63 (1995).
181. "Enthalpies of Combustion of 2,2',6,6'-Tetraethylazobenzene N,N-Dioxide, 2,4,6-Tri(1,1-dimethylethyl)nitrosobenzene and 2,4,6-Tri(1,1-dimethylethyl)nitrobenzene," W. E. Acree, Jr., S. G. Bott, S. A. Tucker, M. D. M. C. Ribeiro da Silva, M. A. R. Matos and G. Pilcher, *J. Chem. Thermodyn.*, 27, 1433 (1995).
182. "Solubility of Anthracene in Binary Alcohol + 2-Methoxyethanol Solvent Mixtures," M. E. R. McHale, J. R. Powell, A.-S. M. Kauppila and W. E. Acree, Jr., *J. Chem. Eng. Data*, 41, 105 (1996).
183. "Comments Concerning Model for Solubility Estimation in Mixed Solvent Systems," W. E. Acree, Jr., *Int. J. Pharm.*, 127, 27 (1996).
184. "Solubility of Anthracene in (Binary Alcohol + 2-Butoxyethanol) Solvent Mixtures," M. E. R. McHale, A.-S. M. Kauppila, J. R. Powell and W. E. Acree, Jr., *J. Chem. Thermodyn.*, 28, 209 (1996).
185. "Solubility of Benzil in Binary Alkane + Dibutyl Ether Solvent Mixtures. Comparison of Predictive Expressions Derived from the Nearly Ideal Binary Solvent (NIBS) Model," M. E. R. McHale, J. R. Powell, A.-S. M. Kauppila, P. Otero, M. Jayasekera and W. E. Acree, Jr., *J. Solution Chem.*, 25, 295 (1996).
186. "Solubility of Anthracene in Binary Alcohol + 2-Propoxyethanol Solvent Mixtures," M. E. R. McHale, J. R. Powell, A.-S. M. Kauppila and W. E. Acree, Jr., *J. Chem. Eng. Data*, 41, 272 (1996).
187. "Solubility of Benzil in Binary Alkane + Cyclooctane Solvent Mixtures. Comparison of Predictive Expressions Derived from the Nearly Ideal Binary Solvent (NIBS) Model," M. E. R. McHale, A.-S. M. Kauppila, J. R. Powell and W. E. Acree, Jr., *Phys. Chem. Liq.*, 31, 175 (1996).
188. "Thermochemical Investigations of Hydrogen-Bonded Solutions. Part 9. Comparison of Mobile Order Theory and the Kretschmer-Wiebe Association Model for Predicting Pyrene Solubilities in Binary Alcohol + Alcohol Solvent Mixtures," M. E. R. McHale, A. I. Zvaigzne, J. R. Powell, A.-S. M. Kauppila, W. E. Acree, Jr. and S. W. Campbell, *Phys. Chem. Liq.*, 32, 67 (1996).
189. "Spectrochemical Investigations in Molecularly Organized Solvent Media: Evaluation of Nitromethane as a Selective Fluorescence Quenching Agent for Alternant PAHs in Micellar Solvent Media," S. Pandey, W. E. Acree, Jr. and J. C. Fetzer, *Anal. Chim. Acta*, 324, 175 (1996).
190. "Solubility of Anthracene in (Binary 2-Alkoxyethanol + 2-Alkoxyethanol) Solvent Mixtures," M. E. R. McHale, A.-S. M. Kauppila, J. R. Powell and W. E. Acree, Jr., *J. Chem. Thermodyn.*, 28, 589 (1996).
191. "Solubility of Anthracene in Binary Alcohol + 2-Pentanol and Alcohol + 4-Methyl-2-pentanol Solvent Mixtures," J. R. Powell, M. E. R. McHale, A.-S. M. Kauppila and W. E. Acree, Jr., *J. Chem. Eng. Data*, 41, 728 (1996).
192. "Enthalpies of Combustion of 5-Methoxybenzofurazan, 5-Methoxybenzofurazan-1-oxide, 5-Methylbenzofurazan-1-oxide, 5-Chlorobenzofurazan-1-oxide, and 4-Nitrobenzofurazan-1-oxide: The Dissociation Enthalpies of the (N-O) Bonds," W. E. Acree, Jr., S. G. Bott, S. A. Tucker, M. D. M. C. Ribeiro da Silva, M. A. R. Matos and G. Pilcher, *J. Chem. Thermodyn.*, 28, 673 (1996).
193. "Thermochemical Investigations of Hydrogen-Bonded Solutions. Part 8. Comparison of Mobile Order

- Theory and the Kretschmer-Wiebe Association Model for Predicting Anthracene Solubilities in Binary Alcohol + Alcohol Solvent Mixtures," **A. I. Zvaigzne, J. R. Powell, W. E. Acree, Jr.** and S. W. Campbell, *Fluid Phase Equilib.*, 121, 1 (1996).
194. "Polycyclic Aromatic Hydrocarbon Solute Probes. Part XII. Dissimilar Fluorescence Excitation/Emission Behavior Between Alkylpyrene and Alkylcoronene Derivatives and the Parent PAH Molecule," **J. R. Powell, S. Pandey, B. J. Miller, W. E. Acree, Jr.**, P. E. Hansen and J. C. Fetzer, *J. Luminesc.*, 69, 27 (1996).
195. "Solubility of Benzil in Binary Alkane + Methyl *tert*-Butyl Ether Solvent Mixtures," **M. E. R. McHale, J. R. Powell, A.-S. M. Kauppila** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 41, 1184 (1996).
196. "Solubility of Anthracene in Binary Alkane + Methyl *tert*-Butyl Ether Solvent Mixtures at 298.15 K," **M. E. R. McHale, A.-S. M. Kauppila** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 41, 1203 (1996).
197. "Thermochemical Investigations of Hydrogen-Bonded Solutions: Part 10. Development of Expressions for Predicting Excess Enthalpies of Ternary Two Alcohol + Inert Hydrocarbon Systems Based Upon Mobile Order Theory," **S. Pandey, J. R. Powell, M. E. R. McHale, A.-S. M. Kauppila** and **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, 123, 29 (1996).
198. "Solubility of Anthracene in Binary Alcohol + 1-Pentanol Solvent Mixtures. Comparison of Expressions Derived from Mobile Order Theory and Kretschmer-Wiebe Association Model," **J. R. Powell, M. E. R. McHale, A.-S. M. Kauppila, W. E. Acree, Jr.** and S. W. Campbell, *J. Solution Chem.*, 25, 1001 (1996).
199. "Thermochemical Investigations of Hydrogen-Bonded Solutions. Part 11. Expressions for Predicting Anthracene Solubilities in Binary Alcohol + Alkoxyalcohol Mixtures Based on Mobile Order Theory," **M. E. R. McHale, J. R. Powell, A.-S. M. Kauppila, W. E. Acree, Jr.** and P. L. Huyskens, *J. Solution Chem.*, 25, 1089 (1996).
200. "Solubility of Pyrene in Binary Alcohol + Cyclohexanol and Alcohol + 1-Pentanol Solvent Mixtures at 299.2 K," **M. E. R. McHale, A.-S. M. Horton, S. A. Padrilla, A. L. Trufant, N. U. De La Sancha, E. Vela** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 41, 1522 (1996).
201. "Solubility of Anthracene in (Binary Alcohol + Methyl *t*-Butyl Ether) Solvent Mixtures," **J. R. Powell, M. E. R. McHale, A.-S. M. Kauppila** and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 28, 1215 (1996).
202. "Thermochemical Investigations of Hydrogen-Bonded Solutions: Part 12. Development of Expression for Predicting Solute Solubility in Binary Alcohol + Water Solvent Mixtures Based Upon Mobile Order Theory," **M. E. R. McHale, S. Pandey** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 33, 93 (1996).
203. "Solubility of Benzil in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based upon Mobile Order Theory," **K. A. Fletcher, S. Pandey, M. E. R. McHale** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 33, 181 (1996).
204. "Solubility of Anthracene in Binary Alcohol + 3-Methoxy-1-butanol Solvent Mixtures," **M. E. R. McHale, A.-S. M. Horton, S. A. Padrilla, A. L. Trufant, N. U. De La Sancha, E. Vela, J. R. Powell** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 42, 54 (1997).
205. "Solubility of Anthracene in Binary Alcohol + 2-Methoxyethyl Ether Solvent Mixtures," **J. R. Powell, K. S. Coym** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 42, 395 (1997).
206. "Spectrochemical Investigations of Fluorescence Quenching Agents. Part 5. Effect of Surfactants on the Ability of Nitromethane to Selectively Quench Fluorescence Emission of Alternant PAHs," **S. Pandey, K. A. Fletcher, J. R. Powell, M. E. R. McHale, A.-S. M. Kauppila, W. E. Acree, Jr.**, J. C. Fetzer, W. Dai and R. G. Harvey, *Spectrochim. Acta*, 53, 165 (1997).
207. "Spectroscopic Properties of Polycyclic Aromatic Compounds. Part 5. The Nitromethane Selective Quenching Rule Revisited in Aqueous Micellar Solvent Media," **S. Pandey, J. R. Powell, W. E. Acree, Jr.**,

- B. P. Cho, J. Kum, C. Yang and R. G. Harvey, *Polycyclic Aromat. Compds.*, 12, 1 (1997).
208. "Spectroscopic Properties of Polycyclic Aromatic Compounds. Part 6. The Nitromethane Selective Quenching Rule Visited in Aqueous Micellar Zwitterionic Surfactant Solvent Media," **S. Pandey, W. E. Acree, Jr.**, B. P. Cho and J. C. Fetzer, *Talanta*, 44, 413 (1997).
209. "Spectroscopic Investigations in Molecularly Organized Solvent Media. Part 2. Examination of the Nitromethane Selective Quenching Rule at Different "Effective" Micellar Surface Charge Densities," **S. Pandey, W. E. Acree, Jr.** and J. C. Fetzer, *J. Luminesc.*, 71, 189 (1997).
210. "Solubility of *trans*-Stilbene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based upon Mobile Order Theory," **K. A. Fletcher, M. E. R. McHale, K. S. Coym** and **W. E. Acree, Jr.**, *Can. J. Chem.*, 75, 258 (1997).
211. "Comments Concerning Derivation of the Wilson Equation for G^E from Association Models," **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, 129, 307 (1997).
212. "Solubility of Thianthrene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based upon Mobile Order Theory," **K. A. Fletcher, M. E. R. McHale, J. R. Powell, K. S. Coym** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 34, 41 (1997).
213. "Comments Concerning Effects of Photophysical Reactions of Pyrene in Alcohol and Aqueous Systems on Spectroscopic Analysis," **S. Pandey** and **W. E. Acree, Jr.**, *Anal. Chim. Acta*, 343, 155 (1997).
214. "Thermochemical Investigations of Hydrogen-Bonded Solutions. Part 13. Prediction of Pyrene Solubilities in Binary Alcohol + Alcohol Solvent Mixtures Using Alcohol-Specific Mobile Order Theory Stability Constants," **M. E. R. McHale, K. A. Fletcher, K. S. Coym, W. E. Acree, Jr.**, V. G. Varanasi and S. W. Campbell, *Phys. Chem. Liq.*, 34, 103 (1997).
215. "Solubility of Benzil in Binary Alcohol + 1-Octanol Solvent Mixtures," **K. A. Fletcher, S. Pandey, M. E. R. McHale** and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 29, 475 (1997).
216. "Solubility of Pyrene in Binary Alcohol + 2-Methyl-2-butanol Solvent Mixtures at 299.2 K," **M. E. R. McHale, K. S. Coym, K. A. Fletcher** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 42, 511 (1997).
217. "Comments Concerning Retention of Ionizable Compounds on HPLC. pH Scale in Methanol - Water and the pK and pH Values of Buffers," **W. E. Acree, Jr.**, *Anal. Chem.*, 69, 1970 (1997).
218. "Thermochemical and Theoretical Studies of Some Quinoxaline-1,4-dioxides and Pyrazine-1,4-dioxide," **W. E. Acree, Jr.**, **J. R. Powell, S. A. Tucker**, M. D. M. C. Ribeiro da Silva, M. A. R. Matos, J. M. Goncalves, L. M. N. B. F. Santos, V. M. F. Morais and G. Pilcher, *J. Org. Chem.*, 62, 3722 (1997).
219. "Prediction of Anthracene Solubility in Alcohol + Alkane Solvent Mixtures Using Binary Alcohol + Alkane VLE Data: Comparison of the Kretschmer-Wiebe and Mobile Order Theory Models," **J. R. Powell, M. E. R. McHale, A.-S. M. Kauppila, W. E. Acree, Jr.**, P. H. Flanders, V. G. Varanasi and S. W. Campbell, *Fluid Phase Equilib.*, 134, 185 (1997).
220. "Solubility of Anthracene in Binary Alkane + Chlorocyclohexane and Alkane + 1-Chlorooctane Solvent Mixtures," **C. E. Hernández, K. S. Coym, L. E. Roy, J. R. Powell, M. E. R. McHale** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 42, 954 (1997).
221. "Prediction of Anthracene Solubilities in Binary Alcohol + Alcohol Solvent Mixtures Using Alcohol-Specific Mobile Order Theory Stability Constants," **J. R. Powell, K. A. Fletcher, K. S. Coym, W. E. Acree, Jr.**, V. G. Varanasi and S. W. Campbell, *Int. J. Thermophys.*, 18, 1495 (1997).
222. "Spectrofluorometric Analysis of Polycyclic Aromatic Hydrocarbons: Review of the Applicability of Nitromethane as a Selective Quenching Agent for Identification of Alternant vs. Nonalternant Polycyclic

- Aromatic Hydrocarbons," **W. E. Acree, Jr.**, **S. Pandey**, **S. A. Tucker** and J. C. Fetzer, *Polycyclic Aromat. Compds.*, 12, 71 (1997).
223. "Solubility of Anthracene in Binary Alkane + 2-Methoxyethyl Ether Solvent Mixtures," **K. S. Coym**, **L. E. Roy**, **C. E. Hernández** and **W. E. Acree, Jr.**, *Chem. Eng. Commun.*, 162, 215 (1997).
224. "Solubility of Anthracene in Binary Alkane + 2-Butoxyethanol Solvent Mixtures," **C. E. Hernández**, **L. E. Roy**, **G. D. Reddy**, **G. L. Martinez**, **A. Parker**, **A. Jackson**, **G. Brown** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 42, 1249 (1997).
225. "Solubility of Anthracene in Binary Alcohol + Alkoxyalcohol Solvent Mixtures. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **M. E. R. McHale**, **K. S. Coym**, **L. E. Roy**, **C. E. Hernández** and **W. E. Acree, Jr.**, *Can. J. Chem.*, 75, 1403 (1997).
226. "Cetylpyridinium Chloride Micelles as a Selective Fluorescence Quenching Solvent Media for Discriminating Between Alternant Versus Nonalternant Polycyclic Aromatic Hydrocarbons," **S. Pandey**, **W. E. Acree, Jr.** and J. C. Fetzer, *Talanta*, 45, 39 (1997).
227. "Examination of the Nitromethane Selective Quenching Rule in Micellar Anionic Sodium Dodecylbenzenesulfonate and Micellar Cationic Dodecylethyldimethylammonium Bromide Solvent Media," **S. Pandey**, **W. E. Acree, Jr.** and J. C. Fetzer, *Mikrochim. Acta*, 129, 41 (1998).
228. "Solubility of Thioxanthen-9-one in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **K. A. Fletcher**, **K. S. Coym**, **L. E. Roy**, **C. E. Hernández**, **M. E. R. McHale** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 35, 243 (1998).
229. "Solubility of Pyrene in (Binary Alkane + 2-Butanol) Solvent Mixtures," **C. E. Hernández**, **K. S. Coym**, **L. E. Roy**, **J. R. Powell** and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 30, 37 (1998).
230. "Spectroscopic Investigations in Molecularly Organized Solvent Media. Part 3. Examination of the Nitromethane Selective Quenching Rule in Aqueous Anionic + Cationic and Anionic + Nonionic Mixed Surfactant Solutions," **S. Pandey**, **K. A. Fletcher**, **W. E. Acree, Jr.** and J. C. Fetzer, *Fresenius Z. Anal. Chem.*, 360, 669 (1998).
231. "Solubility of Anthracene in Binary Alkane + 2-Isopropoxyethanol Solvent Mixtures," **C. E. Hernández**, **L. E. Roy**, **G. D. Reddy**, **G. L. Martinez**, **A. Jackson**, **G. Brown**, **T. L. Borders**, **J. T. Sanders** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 36, 257 (1998).
232. "Enthalpy of Formation of 4-Diethylaminonitrosobenzene," **M. D. M. C. Ribeiro da Silva**, **M. A. R. Matos**, **G. Pilcher** and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 30, 271 (1998).
233. "Solubility Correlation of Structurally Related Drugs in Binary Solvent Mixtures," **A. Jouyban-Gharamaleki**, **M. Barzegar-Jalali** and **W. E. Acree, Jr.**, *Int. J. Pharm.*, 166, 205 (1998).
234. "Solubility of Anthracene in Binary Alkane + 2-Ethyl-1-hexanol and Alkane + 1-Pentanol Solvent Mixtures at 298.2 K," **L. E. Roy**, **C. E. Hernández**, **G. D. Reddy**, **J. T. Sanders**, **T. Deng**, **M. B. Tuggle** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 43, 493 (1998).
235. "Thermodynamics of Mobile Order Theory: Comparison of Experimental and Predicted Anthracene and Pyrene Solubilities in Binary Alkane + Alcohol Solvent Mixtures," **T. L. Borders**, **M. E. R. McHale**, **J. R. Powell**, **K. S. Coym**, **C. E. Hernández**, **L. E. Roy**, **W. E. Acree, Jr.**, **D. C. Williams** and **S. W. Campbell**, *Fluid Phase Equilib.*, 146, 207 (1998).
236. "Comparison of Models for Describing Multiple Peaks in Solubility Profiles," **A. Jouyban-Gharamaleki** and **W. E. Acree, Jr.**, *Int. J. Pharm.*, 167, 177 (1998).
237. "Enthalpies of Combustion of the Pyridine N-Oxide Derivatives: 4-Methyl, 3-Cyano, 4-Cyano, 3-Hydroxy-,

- 2-Carboxy-, 4-Carboxy-, 3-Methyl-4-Nitro-, and of the Pyridine Derivatives: 2-Carboxy-, 4-Carboxy-. The Dissociation Enthalpies of the N-O Bonds," M. D. M. C. Ribeiro da Silva, M. A. R. Matos, M. C. Vaz, L. M. B. F. Santos, G. Pilcher, **W. E. Acree, Jr.** and **J. R. Powell**, *J. Chem. Thermodyn.*, **30**, 869 (1998).
238. "Vapor-Liquid Equilibrium for Systems that Contain More than One Alcohol: Comparison of Kretschmer-Wiebe and Mobile Order Models," **W. E. Acree, Jr.** and S. W. Campbell, *Fluid Phase Equilibr.*, **150**, 207 (1998).
239. "Spectroscopic Investigations in Molecularly Organized Solvent Media. Part 5. Fluorescence Behavior of Polycyclic Aromatic Hydrocarbons Dissolved in Cetylpyridinium Chloride + Zwitterionic and Cetyltrimethyl-ammonium Chloride + Zwitterionic Mixed Surfactant Systems," **S. Pandey**, **W. E. Acree, Jr.** and J. C. Fetzer, *Talanta*, **47**, 769 (1998).
240. "Solubility of Anthracene in Ternary Propanol + Butanol + Cyclohexane Solvent Mixtures," **T. Deng** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **43**, 1062 (1998).
241. "Solubility of Anthracene in Ternary Propanol + 2,2,4-Trimethylpentane + Cyclohexane and Butanol + 2,2,4-Trimethylpentane + Cyclohexane Solvent Mixtures," **T. Deng** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **43**, 1059 (1998).
242. "Descriptors for Solutes from the Solubility of Solids: *trans*-Stilbene as an Example," M. H. Abraham, C. Green, **W. E. Acree, Jr.**, **C. E. Hernández** and **L. E. Roy**, *J. Chem. Soc., Perkin Trans. 2*, 2677 (1998).
243. "Solubility of Anthracene in Ternary Propanol + Butanol + 2,2,4-Trimethylpentane Solvent Mixtures," **T. Deng**, **S. D. Childress**, **K. M. De Fina** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **43**, 1065 (1998).
244. "Solubility of Fluoranthene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **C. E. Hernández** and **W. E. Acree, Jr.**, *Can. J. Chem.*, **76**, 1312 (1998). [Erratum, **76**, 1931 (1998)]
245. "Solubility of Anthracene in Binary Alkane + 2-Propoxyethanol Solvent Mixtures," **C. E. Hernández**, **L. E. Roy**, **G. D. Reddy**, **G. L. Martinez**, **A. Jackson**, **G. Brown** and **W. E. Acree, Jr.**, *Chem. Eng. Commun.*, **169**, 137 (1998).
246. "Solubility of Anthracene in Binary Alkane + 3-Methoxy-1-butanol Solvent Mixtures at 298.2 K," **C. E. Hernández**, **L. E. Roy**, **G. D. Reddy**, **T. L. Borders**, **J. T. Sanders** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **37**, 31 (1998).
247. "Comparison of Various Cosolvency Models for Calculating Solute Solubility in Water-Cosolvent Mixtures," A. Jouyban-Gharamaleki, L. Valaee, M. Barzegar-Jalali, B. J. Clark and **W. E. Acree, Jr.**, *Int. J. Pharm.*, **177**, 93 (1999).
248. "Comments Concerning: Solubility Prediction of Caffeine in Aqueous N,N-Dimethylformamide Mixtures Using the Extended Hildebrand Solubility Approach," A. Jouyban-Gharamaleki and **W. E. Acree, Jr.**, *Int. J. Pharm.*, **177**, 127 (1999).
249. "Solubility of Anthracene in Ternary 2-Butoxyethanol + Alkane + Propanol Solvent Mixtures," **T. Deng**, **S. Horiuchi**, **L. E. Roy** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **44**, 258 (1999).
250. "Solubility of Anthracene in Ternary 2-Alkoxyethanol + Cyclohexane + Heptane and 2-Alkoxyethanol + Cyclohexane + 2,2,4-Trimethylpentane Solvent Mixtures," **T. Deng**, **S. D. Childress**, **K. M. De Fina**, **C. E. Hernández**, **L. E. Roy**, **T. L. Sharp** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **44**, 357 (1999).
251. "Solubility of Anthracene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **L. E. Roy**, **C. E. Hernández** and **W. E. Acree, Jr.**, *Polycyclic Aromat. Compds.*, **13**, 105 (1999).

252. "Classification of Select Aceanthrylenes, Acephenanthrylenes and Dicyclopentapyrenes as Alternant Versus Nonalternant Polycyclic Aromatic Hydrocarbons on the Basis of Their Fluorescence Quenching Behavior in the Presence of the Nitromethane and the Cetylpyridinium Cation Selective Quenching Agents," **S. Pandey**, **W. E. Acree, Jr.**, L. T. Scott, A. Necula, J. C. Fetzer, P. P. J. Mulder, J. Lugtenburg and J. Cornelisse, *Polycyclic Aromat. Compds.*, **13**, 79 (1999).
253. "Solubility of Anthracene in Ternary (Propanol + Heptane + Cyclohexane) and (Butanol + Heptane + Cyclohexane) Solvent Mixtures," **T. Deng**, **C. E. Hernández**, **L. E. Roy** and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **31**, 205 (1999).
254. "Examination of Dodecylpyridinium Chloride as a Potentially Selective Fluorescence Quenching Agent for Discriminating Between Alternant Versus Nonalternant Polycyclic Aromatic Hydrocarbons," **S. Pandey**, **L. E. Roy**, **W. E. Acree, Jr.** and J. C. Fetzer, *Talanta*, **48**, 1103 (1999).
255. "Thermochemical Investigations of Hydrogen-Bonded Solutions. Part 7. Extension of Mobile Order Theory to Inert Solutes Dissolved in Binary Alcohol + Interactive Cosolvent Mixtures," P. L. Huyskens, **J. R. Powell**, and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **37**, 251 (1999).
256. "Solubility of Anthracene in Ternary Propanol + Butanol + Heptane Solvent Mixtures," **T. Deng**, **S. D. Childress**, **K. M. De Fina** and **W. E. Acree, Jr.**, *Chem. Eng. Commun.*, **172**, 217 (1999).
257. "Solubility of Anthracene in Ternary 2-Butoxyethanol + Propanol + Butanol Solvent Mixtures," **T. Deng** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **44**, 544 (1999).
258. "Comments Concerning Margules Equations Applied to PAH Solubilities in Alcohol-Water Mixtures," A. Jouyban-Gharamaleki, **W. E. Acree, Jr.** and B. J. Clark, *Environ. Sci. Technol.*, **33**, 1953 (1999).
259. "Solubility of Anthracene in Multicomponent Solvent Mixtures Containing Propanol, Butanol and Alkanes," **T. Deng**, **S. Horiuchi**, **K. M. De Fina**, **C. E. Hernández** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **44**, 798 (1999).
260. "Thermodynamics of Mobile Order Theory. Part 3. Comparison of Experimental and Predicted Solubilities for Fluoranthene and Pyrene," **L. E. Roy**, **C. E. Hernández** and **W. E. Acree, Jr.**, *Polycyclic Aromat. Compds.*, **13**, 205 (1999).
261. "Solubility of Diphenyl Sulfone in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon the General Solvation Model," **K. A. Fletcher**, **C. E. Hernández**, **L. E. Roy**, **K. S. Coym** and **W. E. Acree, Jr.**, *Can. J. Chem.*, **77**, 1214 (1999).
262. "Solubility of Anthracene in Ternary Dibutyl Ether + Alcohol + Cyclohexane Solvent Mixtures," **K. J. Pribyla** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **44**, 1020 (1999).
263. "Solubility of Phenanthrene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **C. E. Hernández**, **K. M. De Fina**, **L. E. Roy**, **T. L. Sharp** and **W. E. Acree, Jr.**, *Can. J. Chem.*, **77**, 1465 (1999).
264. "Solubility of Acenaphthene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **K. M. De Fina**, **T. L. Sharp** and **W. E. Acree, Jr.**, *Can. J. Chem.*, **77**, 1537 (1999).
265. "Solubility of Biphenyl in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **K. M. De Fina**, **T. L. Sharp** and **W. E. Acree, Jr.**, *Can. J. Chem.*, **77**, 1589 (1999).
266. "Thermodynamics of Mobile Order Theory. Part 2. Extension of the Basic Model to Prediction of Anthracene Solubilities in Binary Alkane + Alkoxyalcohol Solvent Mixtures," **C. E. Hernández**, **L. E. Roy** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **37**, 505 (1999).

267. "Spectroscopic Investigations in Molecularly Organized Solvent Media. Part 4. Effect of Co-surfactant on the Ability of the Cetylpyridinium Cation to Selectively Quench Fluorescence Emission Alternant vs. Nonalternant Polycyclic Aromatic Hydrocarbons," **S. Pandey**, **W. E. Acree, Jr.** and J. C. Fetzer, *Phys. Chem. Liq.*, **37**, 565 (1999).
268. "The Solubility of Gases and Vapours in Propan-1-ol at 298 K," M. H. Abraham, J. Le, **W. E. Acree, Jr.** and P. W. Carr, *J. Phys. Org. Chem.*, **12**, 675 (1999).
269. "Solubility of Anthracene in Ternary Dibutyl Ether + Alcohol + Heptane Solvent Mixtures," **K. J. Pribyla** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **44**, 1259 (1999).
270. "Solubility of 2-Hydroxybenzoic Acid in Select Organic Solvents at 298.15 K," **K. M. De Fina**, **T. L. Sharp**, **L. E. Roy** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **44**, 1262 (1999).
271. "Solubility of Anthracene in Ternary Dibutyl Ether + Alcohol + 2,2,4-Trimethylpentane Solvent Mixtures," **K. J. Pribyla**, **M. A. Spurgin**, **I. Chuca** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **44**, 1265 (1999).
272. "The Solvation Properties of the Aliphatic Alcohols," M. H. Abraham, J. Le and **W. E. Acree, Jr.**, *Coll. Czech. Chem. Comm.*, **64**, 1748 (1999).
273. "Enthalpies of Combustion of 2-Iodosobenzoic Acid and 4-Nitrosophenol: The Dissociation Enthalpy of the (I-O) Bond," M. D. M. C. Ribeiro da Silva, M. A. R. Matos, M. L. C. C. H. Ferrao, L. M. P. F. Amaral, M. S. Miranda, **W. E. Acree, Jr.** and G. Pilcher, *J. Chem. Thermodyn.*, **31**, 1551 (1999).
274. "Solubility of Anthracene in Binary Alkane + 2-Ethoxyethanol Solvent Mixtures at 298.2 K," **C. E. Hernández**, **L. E. Roy**, **T. Deng**, **M. B. Tuggle** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **37**, 677 (1999).
275. "Solubility of *trans*-Stilbene in Binary Alkane + 2-Butanol Solvent Mixtures at 298.2 K," **T. Deng**, **S. D. Childress**, **K. M. De Fina**, **C. E. Hernández**, **L. E. Roy**, **T. L. Sharp**, **B. McKethan**, **A. Rubio**, **M. Sanchez**, **D. Wright** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **37**, 735 (1999).
276. "Solubility of *trans*-Stilbene in Binary Alkane + 1-Propanol Solvent Mixtures at 298.2 K," **C. E. Hernández**, **L. E. Roy**, **T. L. Sharp**, **S. D. Childress**, **K. M. De Fina**, **T. Deng** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **37**, 757 (1999).
277. "Estimating Solid-Liquid Phase Change Enthalpies and Entropies," J. S. Chickos, **W. E. Acree, Jr.** and J. F. Liebman, *J. Phys. Chem. Ref. Data*, **28**, 1535 (1999).
278. "Correlation and Prediction of the Solubility of Buckminsterfullerene in Organic Solvents: Estimation of Some Physicochemical Properties," M. H. Abraham, C. E. Green and **W. E. Acree, Jr.**, *J. Chem. Soc., Perkin Trans. 2*, 281 (2000).
279. "Solubility of *trans*-Stilbene in Binary Alkane + 2-Propanol Solvent Mixtures at 298.2 K," **K. M. De Fina**, **C. E. Hernández**, **T. L. Sharp** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **38**, 89 (2000).
280. "Solubility of the Pesticide Diuron in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **K. M. De Fina**, **T. L. Sharp**, **M. A. Spurgin**, **I. Chuca**, **W. E. Acree, Jr.**, C. E. Green and M. H. Abraham, *Can. J. Chem.*, **78**, 184 (2000).
281. "Prediction of Drug Solubility in Ternary Solvent Mixture," A. Jouyban-Gharamaleki, B. J. Clark and **W. E. Acree, Jr.**, *Drug Develop. Ind. Pharm.*, **26**, 971 (2000).
282. "Solubility of *trans*-Stilbene in Binary Alkane + 1-Butanol Solvent Mixtures at 298.2 K," **K. M. De Fina**, **C. E. Hernández** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **38**, 211 (2000).
283. "Solubility of *trans*-Stilbene in Binary Alcohol + 1-Propanol Solvent Mixtures at 298.2 K," **K. M. De Fina**,

- C. E. Hernández and W. E. Acree, Jr., *Phys. Chem. Liq.*, **38**, 203 (2000).
284. "Solubility of Diphenyl Sulfone in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," K. M. De Fina, T. T. Van, K. A. Fletcher and W. E. Acree, Jr., *Can. J. Chem.*, **78**, 449 (2000).
285. "Solubility of Hexachlorobenzene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Model," K. M. De Fina, T. T. Van and W. E. Acree, Jr., *Can. J. Chem.*, **78**, 459 (2000).
286. "Thermodynamics of Mobile Order Theory. Part 4. Comparison of Experimental and Predicted Solubilities for *trans*-Stilbene," L. E. Roy, C. E. Hernández, K. M. De Fina and W. E. Acree, Jr., *Phys. Chem. Liq.*, **38**, 333 (2000).
287. "Standard Molar Enthalpy of Sublimation of Crystalline 3-Pyridinecarboxylic Acid," M. D. M. C. Ribeiro da Silva, J. M. Goncalves and W. E. Acree, Jr., *J. Chem. Thermodyn.*, **32**, 1071 (2000).
288. "Solubility of Anthracene in Ternary Methyl *tert*-Butyl Ether + Alcohol + Heptane Solvent Mixtures," K. J. Pribyla, I. Chuca, T. T. Van and W. E. Acree, Jr., *J. Chem. Eng. Data*, **45**, 533 (2000).
289. "Solubility of Anthracene in Ternary Methyl *tert*-Butyl Ether + Alcohol + Cyclohexane Solvent Mixtures," K. J. Pribyla, M. A. Spurgin, I. Chuca and W. E. Acree, Jr., *J. Chem. Eng. Data*, **45**, 530 (2000).
290. "Comments Concerning Solubility of Buckminsterfullerene in Tetrahydrofuran, Thiophene, Tetrahydrothiophene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene and *n*-Butylamine," W. E. Acree, Jr., *S. Afr. J. Chem.*, **53**, 96 (2000).
291. "Solubility of Anthracene in Ternary Methyl *tert*-Butyl Ether + Alcohol + 2,2,4-Trimethylpentane Solvent Mixtures at 298.15 K," K. J. Pribyla, C. Ezell, T. T. Van and W. E. Acree, Jr., *J. Chem. Eng. Data*, **45**, 974 (2000).
292. "Solvation Descriptors for Ferrocene, and the Estimation of Some Physicochemical and Biochemical Properties," M. H. Abraham, N. Benjelloun-Kakhama, J. M. R. Gola, W. E. Acree, Jr., W. S. Cain and J. E. Cometto-Muniz, *New J. Chem.*, **24**, 825 (2000).
293. "Solubility of Anthracene in Ternary 1,4-Dioxane + Alcohol + 2,2,4-Trimethylpentane Solvent Mixtures at 298.15 K," K. J. Pribyla, T. T. Van, C. Ezell and W. E. Acree, Jr., *J. Chem. Eng. Data*, **45**, 968 (2000).
294. "Solubility of Anthracene in Ternary 1,4-Dioxane + Alcohol + Cyclohexane Solvent Mixtures at 298.15 K," K. J. Pribyla, M. A. Spurgin, I. Chuca and W. E. Acree, Jr., *J. Chem. Eng. Data*, **45**, 971 (2000).
295. "Solubility of Anthracene in Ternary 1,4-Dioxane + Alcohol + Heptane Solvent Mixtures at 298.15 K," K. J. Pribyla, M. A. Spurgin, I. Chuca and W. E. Acree, Jr., *J. Chem. Eng. Data*, **45**, 965 (2000).
296. "Comments on the Paper Entitled: Determination of the Equilibrium Constant for Complex Formation in a Binary Mixture of Chloroform and Triethylamine From Viscosity Data on the Basis of the Ideal Associated Solution Model," W. E. Acree, Jr., *Indian J. Chem.*, **39A**, 475 (2000).
297. "Models to Predict Solubility in Ternary Solvents Based on Sub-binary Experimental Data," A. Jouyban-Gharamaleki, B.J. Clark and W. E. Acree, Jr., *Chem. Pharm. Bull.*, **48**, 1866 (2000).
298. "Solvation Descriptors for Pesticides from the Solubility of Solids: Diuron as an Example," C. E. Green, M. H. Abraham, W. E. Acree, Jr., K. M. De Fina and T. L. Sharp, *Pesticide Management Science*, **56**, 1043 (2000).
299. "Solubilities of Anthracene, Fluoranthene and Pyrene in Organic Solvents. Comparison of Calculated Values Using UNIFAC and Modified UNIFAC (Dortmund) with Experimental Values and Using Mobile Order

- Theory," H. K. Hansen, C. Riverol and **W. E. Acree, Jr.**, *Can. J. Chem. Eng.*, 78, 1168 (2000).
300. "Solubility of Anthracene in Binary Alkane + 2-Methyl-2-propanol Solvent Mixtures at 298.2 K," **K. M. De Fina**, **T. T. Van**, **A. Ibarra**, **E. Hamilton**, **J. Martinez**, **A. Valdez** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 39, 249 (2001).
301. "Solubility of Anthracene in Binary Alcohol + Methyl Acetate Solvent Mixtures at 298.2 K," **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 46, 885 (2001).
302. "Solubility of Pyrene in Ternary Propanol + Butanol + Cyclohexane Solvent Mixtures at 299.15 K," **E. M. Debase** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 46, 991 (2001).
303. "Solubility of Pyrene in Ternary Alcohol + Cyclohexane + Heptane Solvent Mixtures at 299.15 K," **E. M. Debase** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 46, 1297 (2001).
304. "Solubility of Anthracene in Binary Alcohol + 1-Chlorobutane Solvent Mixtures at 298 K," **K. M. De Fina**, **T. Chee**, **A. Delacruz**, **A. Frizzelle**, **K. Theeuwes** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 39, 499 (2001).
305. "Partition of Solutes from the Gas Phase and from Water to Wet and Dry Di-n-butyl Ether: A Linear Free Energy Relationship Analysis," M. H. Abraham, Z. M. Zissimos and **W. E. Acree, Jr.**, *Phys. Chem. Chem. Phys.*, 3, 3732 (2001).
306. "Solubility of Pyrene in Ternary Propanol + Butanol + 2,2,4-Trimethylpentane Solvent Mixtures at 299.15 K," **E. M. Debase** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 46, 1464 (2001).
307. "Solubility Predictions for Crystalline Nonelectrolyte Solutes Dissolved in Organic Solvents Based on the Abraham General Solvation Model," **W. E. Acree, Jr.** and M. H. Abraham, *Can. J. Chem.*, 79, 1466 (2001).
308. "The Solubility of Gases and Vapors in Octan-1-ol at 298 K," M. H. Abraham, J. Le, **W. E. Acree, Jr.**, P. W. Carr and A. J. Dallas, *Chemosphere*, 44, 855 (2001).
309. "Solubility of Ferrocene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Model," **K. M. De Fina**, **C. Ezell** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 39, 699 (2001).
310. "Thermodynamics of Mobile Order Theory. Part 5. Extension of the Basic Model to Prediction of Anthracene Solubilities in Ternary Alkane + Alcohol Solvent Mixtures," **K. J. Pribyla** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 39, 683 (2001).
311. "Solubility of Anthracene in Binary Alcohol + Butyl Acetate Solvent Mixtures at 298.2 K," **A. Toro** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 39, 773 (2001).
312. "Experimental Thermochemical Study of the Enthalpies of Formation and Sublimation of Isonicotinamide, Picolinamide, Nicotinamide, Isonicotinamide N-Oxide and Nicotinamide N-Oxide: The Dissociation Enthalpies of the N-O Bonds," M. D. M. C. Ribeiro da Silva, J. M. Goncalves, S. C. C. Ferreira, L. C. M. da Silva, M. J. Sottomayor, G. Pilcher and **W. E. Acree, Jr.** and **L. E. Roy**, *J. Chem. Thermodyn.*, 33, 1263 (2001).
313. "Experimental Standard Molar Enthalpies of Formation of Crystalline 3,5-Dimethylpyrazole, 3,5-Dimethyl-4-nitrosopyrazole, 1,3,5-Trimethyl-4-nitrosopyrazole and 3,5-Dimethyl-1-phenyl-4-nitrosopyrazole," M. D. M. C. Ribeiro da Silva, S. C. C. Ferreira, I. A. P. Rodrigues, L. C. M. da Silva, **W. E. Acree, Jr.**, **S. Pandey** and **L. E. Roy**, *J. Chem. Thermodyn.*, 33, 1227 (2001).
314. "Solubility of Pyrene in Ternary Propanol + Butanol + Heptane Solvent Mixtures at 299.15 K," **S. Fishback**, **S. Duenas**, **N. Kuehn**, **J. Pacheco** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 47, 62 (2002).
315. "Solubility Prediction of Anthracene in Mixed Solvents Using a Minimum Number of Experimental Data,"

- A. Jouyban, M. Khoubnasabjafari, H.-K. Chan, B. J. Clark and **W. E. Acree, Jr.**, *Chem. Pharm. Bull.*, 50, 21 (2002).
316. "Solubility of the Pesticide Monuron in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **K. M. De Fina**, **T. L. Sharp**, **I. Chuca**, **M. A. Spurgin**, **W. E. Acree, Jr.**, C. E. Green and M. H. Abraham, *Phys. Chem. Liq.*, 40, 255 (2002).
317. "Solubility of Anthracene in Binary Alcohol + Ethyl Acetate Solvent Mixtures," **A. Toro** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 40, 327 (2002).
318. "Enthalpies of Sublimation of Organic and Organometallic Compounds, 1910-2001," J. S. Chickos and **W. E. Acree, Jr.**, *J. Phys. Chem. Ref. Data*, 31, 537 (2002).
319. "A Model to Represent Solvent Effects on the Chemical Stability of Solutes in Mixed Solvent Systems," A. Jouyban, H. K. Chan, M. Barzegar-Jalali and **W. E. Acree, Jr.**, *Int. J. Pharm.*, 243, 167 (2002).
320. "Solubility of Crystalline Nonelectrolyte Solutes in Organic Solvents: Mathematical Correlation of Benzil Solubilities With the Abraham General Solvation Model," **W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, 31, 293 (2002).
321. "Solubility Predictions for Crystalline Polycyclic Aromatic Hydrocarbons (PAHs) Dissolved in Organic Solvents Based on the Abraham General Solvation Model," **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilib.*, 201, 245 (2002).
322. "Prediction and Mathematical Correlation of the Solubility of Fluorene in Alcohol Solvents Based Upon the Abraham General Solvation Model," **C. I. Monárrez**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 40, 581 (2002).
323. "Mathematical Representation of Apparent Dissociation Constants in Aqueous-Organic Solvent Mixtures," A. Jouyban, H.-K. Chan, B. J. Clark and **W. E. Acree, Jr.**, *Int. J. Pharm.*, 246, 135 (2002).
324. "Solubilities of the Pesticides Diuron and Monuron in Organic Nonelectrolyte Solvents. Comparison of Calculated Values Using UNIFAC and Modified UNIFAC (Dortmund) Models with Experimental Data and Values Using the Mobile Order Theory," C. Riverol, H. K. Hansen and **W. Acree, Jr.**, *Can. J. Chem. Eng.*, 80, 530 (2002).
325. "Solubility of Xanthene in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **C. I. Monárrez**, **D. M. Stovall**, **J. H. Woo**, **P. Taylor** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 40, 703 (2002).
326. "Total Phase Change Entropies and Enthalpies. An Update on Their Estimation and Applications to the Estimations of Amphiphilic Fluorocarbon-Hydrocarbon Molecules," J. S. Chickos and **W. E. Acree, Jr.**, *Thermochim. Acta*, 395, 59 (2003).
327. "Solubility of 9-Fluorenone in Organic Nonelectrolyte Solvents. Comparison of Observed Versus Predicted Values Based Upon Mobile Order Theory," **C. I. Monárrez**, **D. M. Stovall**, **J. H. Woo**, **P. Taylor** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 41, 73 (2003).
328. "Enthalpies of Vaporization of Organic and Organo-metallic Compounds, 1880-2002," J. S. Chickos and **W. E. Acree, Jr.**, *J. Phys. Chem. Ref. Data*, 32, 519 (2003).
329. "Solubility of Anthracene in Binary Alcohol + Acetonitrile Solvent Mixtures at 298.2 K," **K. M. De Fina**, **S. Abernathy**, **K. Alexander**, **C. Olugbuyi**, **A. Vance** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 48, 402 (2003).
330. "Some Novel Liquid Partitioning Systems: Water-Ionic Liquids and Aqueous Biphasic Systems," M. H. Abraham, A. M. Zissimos, J. G. Huddleston, H. D. Willauer, R. D. Rogers and **W. E. Acree, Jr.**, *Ind. Eng. Chem. Res.*, 42, 413 (2003).

331. "Solubility in Binary Solvent Mixtures: Pyrene Dissolved in Alcohol + Acetonitrile at 299.2 K," **C. I. Monárrez, J. H. Woo, P. G. Taylor, A. M. Tran** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **48**, 736 (2003).
332. "Solubility in Binary Solvent Mixtures: Anthracene Dissolved in Alcohol + Acetonitrile at 298.2 K," **C. I. Monárrez, J. H. Woo, P. G. Taylor, A. M. Tran** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **48**, 720 (2003).
333. "Comments Concerning Solubility of Anthracene in Two Binary Solvents Containing Toluene," A. Jouyban and **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, **209**, 155 (2003).
334. "Energetics of 6-Methoxyquinoline and 6-Methoxyquinoline N-Oxide: The Dissociation Enthalpy of the N-O Bond," M. D. M. C. Ribeiro da Silva, L. M. B. F. Santos, A. L. R. Silva, O. Fernandes and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **35**, 1093 (2003).
335. "Partition of Solutes into Wet and Dry Ethers: An LFER Analysis," M. H. Abraham, A. M. Zissimos and **W. E. Acree, Jr.**, *New J. Chem.*, **27**, 1041 (2003).
336. "Solubility in Binary Solvent Systems: Anthracene Dissolved in Alcohol + 2-Methyl-1-butanol Mixtures at 298.2 K," **C. I. Monárrez, P. G. Taylor, A. M. Tran** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **48**, 1341 (2003).
337. "A General Treatment of Solubility. Part I. The QSPR Correlation of Solvation Free Energies of Single Solutes in Series of Solvents," A. R. Katritzky, A. A. Oliferenko, P. V. Oliferenko, R. Petrkhin, D. B. Tatham, U. Maran, A. Lomaka and **W. E. Acree, Jr.**, *J. Chem. Inf. Comput. Sci.*, **43**, 1794 (2003).
338. "A General Treatment of Solubility. Part II. QSPR Prediction of Free Energies of Solvation of Specified Solutes in Ranges of Solvents," A. R. Katritzky, A. A. Oliferenko, P. V. Oliferenko, R. Petrkhin, D. B. Tatham, U. Maran, A. Lomaka and **W. E. Acree, Jr.**, *J. Chem. Inf. Comput. Sci.*, **43**, 1806 (2003).
339. "Solubility in Binary Solvent Mixtures: Anthracene Dissolved in Alcohol + Carbon Tetrachloride Mixtures at 298.2 K," **P. G. Taylor, A. M. Tran, A. K. Charlton, C. R. Daniels** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **48**, 1603 (2003).
340. "Solubility of Benzoic Acid in Select Organic Solvents at 298.15 K," **C. R. Daniels, A. K. Charlton, R. M. Wold, E. Pustejovsky, A. N. Furman, A. C. Bilbrey, J. N. Love, J. A. Garza** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **41**, 599 (2003).
341. "Thermochemical Behavior of Dissolved Carboxylic Acid Solutes: Solubilities of 3-Methylbenzoic Acid and 4-Chlorobenzoic Acid in Organic Solvents," **C. R. Daniels, A. K. Charlton, R. M. Wold, W. E. Acree, Jr.** and M. H. Abraham, *Can. J. Chem.*, **81**, 1492 (2003).
342. "Solubility of Crystalline Nonelectrolyte Solutes in Organic Solvents: Mathematical Correlation of Acetylsalicylic Acid Solubilities with the Abraham General Solvation Model," **A. K. Charlton, C. R. Daniels, W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, **32**, 1087 (2003).
343. "Experimental and Theoretical Study of the Dissociation Enthalpy of the N-O Bond on 2-Hydroxypyridine N-Oxide. Theoretical Analysis of the Energetics of the N-O Bond for Hydroxypyridine Isomers," M. D. M. C. Ribeiro da Silva, M. A. R. Matos, M. S. Miranda, V. M. F. Morais and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **36**, 107 (2004).
344. "Thermochemical Behavior of Dissolved Carboxylic Acid Solutes: Part 2. Mathematical Correlation of Ketoprofen Solubilities with the Abraham General Solvation Model," **C. R. Daniels, A. K. Charlton, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **42**, 305 (2004).
345. "Thermochemical Behavior of Dissolved Carboxylic Acid Solutes: Part 3. Mathematical Correlation of 2-Methylbenzoic Acid Solubilities With the Abraham Solvation Parameter Model," **R. Coaxum, K. R. Hoover, E. Pustejovsky, D. M. Stovall, W. E. Acree, Jr.** and M. H. Abraham *Phys. Chem. Liq.*, **42**, 313 (2004).

346. "Thermochemical Behavior of Dissolved Carboxylic Acid Solutes: Part 4. Mathematical Correlation of 4-Nitrobenzoic Acid Solubilities With the Abraham Solvation Parameter Model," **K. R. Hoover**, **R. Coaxum**, **E. Pustejovsky**, **D. M. Stovall**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **42**, 339 (2004).
347. "Thermodynamic Properties of Quinoxaline-1,4-Dioxide Derivatives: A Combined Experimental and Computational Study," M. D. M. C. Ribeiro da Silva, J. R. B. Gomes, J. M. Goncalves, E. A. Sousa, **S. Pandey** and **W. E. Acree, Jr.**, *J. Org. Chem.*, **69**, 2765 (2004).
348. "QSPR Treatment of Rat Blood/Air, Saline/Air and Olive Oil/Air Partition Coefficients Using Theoretical Descriptors," A. R. Katritzky, M. Kuanar, D. C. Fana, M. Karelson and **W. E. Acree, Jr.**, *Bioorg. Med. Chem.*, **12**, 4735 (2004).
349. "Thermochemistry of 3-Amino-2-quinoxalinecarbonitrile-1,4-Di-N-oxide. Evaluation of the Mean Dissociation Enthalpy of the (N-O) Bond," M. D. M. C. Ribeiro da Silva, J. R. B. Gomes, J. M. Goncalves, E. A. Sousa, **S. Pandey** and **W. E. Acree, Jr.**, *Org. Biomol. Chem.*, **2**, 2507 (2004).
350. "Surface Tension Calculation of Mixed Solvents with Respect to Solvent Composition and Temperature by Using the Jouyban-Acree Model," A. Jouyban, A. Fathi-Azarbayjani and **W. E. Acree, Jr.**, *Chem. Pharm. Bull.*, **52**, 1219 (2004).
351. "Thermochemical Behavior of Dissolved Carboxylic Acid Solutes: Part 5. Mathematical Correlation of 3,5-Dinitrobenzoic Acid Solubilities With the Abraham Solvation Parameter Model," **K. R. Hoover**, **R. Coaxum**, **E. Pustejovsky**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **42**, 457 (2004).
352. "Mathematical Correlation of Naproxen Solubilities in Organic Solvents with the Abraham Solvation Parameter Model," **C. R. Daniels**, **A. K. Charlton**, **R. M. Wold**, **E. Pustejovsky**, **A. N. Furman**, **A. C. Bilbrey**, **J. N. Love**, **J. A. Garza**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **42**, 481 (2004).
353. "Correlation and Prediction of Partition Coefficient Between the Gas Phase and Water, and the Solvents Dodecane and Undecane," M. H. Abraham and **W. E. Acree, Jr.**, *New J. Chem.*, **28**, 1538 (2004).
354. "Solubility of Crystalline Nonelectrolyte Solutes in Organic Solvents: Mathematical Correlation of 2-Methoxybenzoic Acid and 4-Methoxybenzoic Acid Solubilities with the Abraham Solvation Parameter Model," **K. R. Hoover**, **D. M. Stovall**, **E. Pustejovsky**, **R. Coaxum**, **K. Pop**, **W. E. Acree, Jr.** and M. H. Abraham, *Can. J. Chem.*, **82**, 1353 (2004).
355. "Mathematical Correlation of 4-Aminobenzoic Acid Solubilities in Organic Solvents with the Abraham Solvation Parameter Model," **C. R. Daniels**, **A. K. Charlton**, **R. M. Wold**, **R. J. Moreno**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **42**, 633 (2004).
356. "Correlation of Surface Tension of Mixed Solvents with Solvent Composition," A. Jouyban, A. F. Azarbayjani, M. Barzegar-Jalali and **W. E. Acree, Jr.**, *Pharmazie*, **59**, 937 (2004).
357. "Solubility of Crystalline Nonelectrolyte Solutes in Organic Solvents: Mathematical Correlation of 3-Nitrobenzoic Acids Solubilities with the Abraham General Solvation Model," **A. K. Charlton**, **C. R. Daniels**, **R. M. Wold**, **E. Pustejovsky**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Mol. Liq.*, **116**, 19 (2005).
358. "Experimental Thermochemical Study of Three Monosubstituted Pyrazines," M. D. M. C. Ribeiro da Silva, M. S. Miranda, C. M. V. Vaz, M. A. R. Matos and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **37**, 49 (2005).
359. "Comments Concerning (Liquid + Liquid) Phase Behavior for Systems Containing (Aromatic + TBA + Methylcyclohexane)," **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **37**, 389 (2005).
360. "Characterisation of the Water-Isopropyl Myristate System," M. H. Abraham and **W. E. Acree, Jr.**, *Int. J. Pharm.*, **294**, 121 (2005).

361. "Solubility of Crystalline Nonelectrolyte Solutes in Organic Solvents: Mathematical Correlation of 3-Chlorobenzoic Acid Solubilities with the Abraham Solvation Parameter Model," **K. R. Hoover**, **K. Pop**, **W. E. Acree, Jr.** and M. H. Abraham, *S. African J. Chem.*, **58**, 25-29 (2005).
362. "Modeling Acid Dissociation Constant of Analytes in Binary Solvents at Various Temperatures Using the Jouyban-Acree Model," A. Jouyban, S. Soltani, H.-K. Chan and **W. E. Acree, Jr.**, *Thermochim. Acta*, **428**, 119 (2005).
363. "Calculation of the Viscosity of Binary Liquids at Various Temperatures using the Jouyban-Acree Model," A. Jouyban, M. Khoubnasabjafari, Z. Vaez-Gharamaleki, Z. Fekari and **W. E. Acree, Jr.**, *Chem. Pharm. Bull.*, **53**, 519 (2005).
364. "Solubility of Crystalline Nonelectrolyte Solutes in Organic Solvents: Mathematical Correlation of Ibuprofen Solubilities with the Abraham Solvation Parameter Model," **D. M. Stovall**, **C. Givens**, **S. Keown**, **K. R. Hoover**, E. Rodriguez, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **43**, 261 (2005).
365. "Solubility of 9-Fluorenone, Thianthrene and Xanthene in Organic Solvents," **D. M. Stovall**, **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilib.*, **232**, 113 (2005).
366. "The Dissociation Enthalpies of Terminal (N-O) Bonds in Organic Compounds," **W. E. Acree, Jr.**, G. Pilcher and M. D. M. C. Ribeiro da Silva, *J. Phys. Chem. Ref. Data*, **34**, 553 (2005). [Erratum, **34**, 1555 (2005)]
367. "Air-to-Blood Distribution of Volatile Organic Compounds: A Linear Free Energy Analysis," M. H. Abraham, A. Ibrahim and **W. E. Acree, Jr.**, *Chem. Res. Toxicol.*, **18**, 904 (2005). [Listed as the 12th "Most Cited" article published in *Chem. Res. Toxicol.* in 2005.]
368. "A Unified Cosolvency Model for Calculating Solute Solubility in Mixed Solvents," A. Jouyban, N. Y. K. Chew, H.-K. Chan, M. Sabour and W. E. Acree, Jr., *Chem. Pharm. Bull.*, **53**, 634 (2005).
369. "The Correlation and Prediction of Butane/Water and Gas/Butane Partition Coefficients," M. H. Abraham and **W. E. Acree, Jr.**, *Can. J. Chem. Eng.*, **83**, 362 (2005).
370. "General Treatment of Solubility. Part III. Principal Component Analysis (PCA) of Solubilities of Diverse Solutes in Diverse Solvents," A. R. Katritzky, I. Tulp, D. C. Fara, A. Lauria, I. Tulp, U. Maran and **W. E. Acree, Jr.**, *J. Chem. Inform. Model.*, **45**, 913 (2005).
371. "Thermochemical and Theoretical Studies of Dimethylpyridine-2,6-dicarboxylate, 2,3-, 2,5- and 2,6-Pyridinedicarboxylic Acids," M. A. R. Matos, V. M. F. Morais, M. D. M. C. Ribeiro da Silva, M. C. F. Marques, E. A. Sousa, J. P. Castifiñeiras, C. P. Santos and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **50**, 1184 (2005).
372. "Mathematical Representation of Solute Solubility in Binary Mixture of Supercritical Fluids Using Jouyban-Acree Model," A. Jouyban, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *Pharmazie*, **60**, 527 (2005).
373. "Energetics of the N-O Bonds in 2-Hydroxyphenazine-di-N-oxide," J. R. B. Gomes, E. A. Sousa, J. M. Gonçalves, M. J. S. Monte, P. Gomes, **S. Pandey**, **W. E. Acree, Jr.** and M. D. M. C. Ribeiro da Silva, *J. Phys. Chem. B*, **109**, 16188 (2005).
374. "Correlation of the Solubility Behavior of Crystalline 1-Nitronaphthalene in Organic Solvents with the Abraham Solvation Parameter Model," **K. R. Hoover**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, **34**, 1121 (2005).
375. "Solubility of Crystalline Nonelectrolyte Solutes in Organic Solvents: Mathematical Correlation of 4-Chloro-3-nitrobenzoic Acid and 2-Chloro-5-nitrobenzoic Acid Solubilities with the Abraham Solvation Parameter Model," **D. M. Stovall**, **C. Givens**, **S. Keown**, **K. R. Hoover**, **R. Barnes**, **C. Harris**, **J. Lozano**, **M. Nguyen**, E. Rodriguez, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **43**, 351 (2005).

376. "Solubility of Behavior of Crystalline Polycyclic Aromatic Hydrocarbons (PAHs): Prediction of Fluorene Solubilities in Organic Solvents with the Abraham Solvation Parameter Model," **D. M. Stovall, K. R. Hoover, W. E. Acree, Jr.** and M. H. Abraham, *Polycyclic Aromat. Compds.*, **23**, 313 (2005).
377. "Mathematical Representation of the Density of Liquid Mixtures at Various Temperatures using Jouyban-Acree Model," A. Jouyban, A. Farthi-Azarbayjan, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *Indian J. Chem.*, **44A**, 1553 (2005).
378. "Chemical Toxicity Correlations for Several Fish Species Based on the Abraham Solvation Parameter Model," **K. R. Hoover, W. E. Acree, Jr.** and M. H. Abraham, *Chem. Res. Toxicol.*, **18**, 1497 (2005).
379. "QSAR Modeling of Tissue:Air and Blood:Air Partition Coefficients Using Theoretical Descriptors," A. R. Katritzky, M. Kuanar, D. C. Fara, M. Karelson, **W. E. Acree, Jr.**, V. P. Solov'ev and A. Varnek, *Bioorg. Med. Chem.*, **13**, 6450 (2005).
380. "Comments Regarding 'Predicting the Equilibrium Partitioning of Organic Compounds Using Just One Linear Solvation Energy Relationship (LSER)'" **K. B. Flanagan, W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilib.*, **237**, 224 (2005).
381. "Mathematical Representation of Solubility of Electrolytes in Binary Solvent Mixtures Using the Jouyban-Acree Model, M. Khoubnasabjafari, A. Jouyban and **W. E. Acree, Jr.**, *Chem. Pharm. Bull.*, **53**, 1591 (2005).
382. "Modelling Retention Factors of Analytes in Chromatography with Ternary Solvent Mobile Phases," A. Jouyban, Z. Vaez-Gharamaleki, A. A. Matin, Dj. Djozan and **W. E. Acree, Jr.**, *Chem. Anal.*, **50**, 981 (2005).
383. "Modeling the Solvatochromic Parameter (E_T^N) of Mixed Solvents with Respect to Solvent Composition and Temperature using the Jouyban-Acree Model," A. Jouyban, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *DARU*, **14**, 22 (2006).
384. "Solubility Prediction of Salicylic Acid in Water-Ethanol-Propylene Glycol Mixtures Using Jouyban-Acree Model," A. Jouyban, N. Y. K. Chew, H. K. Chan, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *Pharmazie*, **16**, 318 (2006).
385. "Air to Brain, Blood to Brain and Plasma to Brain Distribution of Volatile Organic Compounds: Linear Free Energy Analyses," M. H. Abraham, A. Ibrahim and **W. E. Acree, Jr.**, *Eur. J. Med. Chem.*, **41**, 494 (2006).
386. "Mathematical Correlation of 1,2,4,5-Tetramethylbenzene Solubilities in Organic Solvents with the Abraham Solvation Parameter Model," **K. B. Flanagan, K. R. Hoover, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **44**, 173 (2006).
387. "Refractive Index Correlation of Solvent Mixtures at Various Temperatures," A. Jouyban, S. Soltani, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *Asian J. Chem.*, **18**, 2037 (2006).
388. "Correlation of Capacity Factor of Analytes in Quaternary Solvent Mobile Phases using Jouyban-Acree Model, J. Hanaee, A. Jouyban, M. R. Rashidi, S. Esnaashari and **W. E. Acree, Jr.**, *Pharmazie*, **61**, 417 (2006).
389. "Solubility Prediction of Paracetamol in Binary and Ternary Solvent Mixtures Using Jouyban-Acree Model," A. Jouyban, H. K. Chan, N. Y. K. Chew, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *Pharm. Chem. Bull.*, **54**, 428 (2006).
390. "Comment on 'Prediction of Vapor Pressures of Solid Organic Compounds with a Group-Contribution Method,'" **W. E. Acree, Jr.** and J. S. Chickos, *Fluid Phase Equilib.*, **243**, 198 (2006).
391. "Mathematical Representation of Solubility of Amino Acids in Binary Aqueous-Organic Mixures at Various Temperatures Using the Jouyban-Acree Model," A. Jouyban, M. Khoubnasabjafari, H. K. Chan and **W. E.**

- Acree, Jr.**, *Pharmazie*, 61, 789 (2006).
392. "Correlation of Blood:Brain Barrier Permeation Using Structural Descriptors," A. R. Katritzky, M. Kuanar, S. Slavov, D. A. Dobchev, D. C. Fara, M. Karelson, **W. E. Acree, Jr.**, A. Varnek and V. P. Solov'ev, *Bioorg. Med. Chem.*, 14, 4888 (2006).
393. "The Analysis of Solvation in Ionic Liquids and Organic Solvents Using the Abraham Linear Free Energy Relationship," **W. E. Acree, Jr.** and M. H. Abraham, *J. Chem. Technol. Biotechnol.*, 81, 1441 (2006) [Erratum, *81*, 1722 (2006)].
394. "Correlation of Minimum Inhibitory Concentrations Towards Oral Bacterial Growth Based on the Abraham Model," **C. Mintz, W. E. Acree, Jr.** and M. H. Abraham, *QSAR Comb. Sci.*, 25, 912 (2006).
395. "A Data Base for Partition of VOCs and Drugs from Blood/Plasma/Serum to Brain, and an LFER Analysis of the Data," M. H. Abraham, A. Ibrahim, Y. Zhao and **W. E. Acree, Jr.**, *J. Pharm. Sci.*, 95, 2091 (2006).
396. "Air to Muscle, and Blood/Plasma to Muscle, Distribution of Volatile Organic Compounds and Drugs: Linear Free Energy Analyses," M. H. Abraham, A. Ibrahim and **W. E. Acree, Jr.**, *Chem. Res. Toxicol.*, 18, 801 (2006).
397. "Predicting Solubility of Anthracene in Non-aqueous Solvent Mixtures Using a Combination of the Jouyban-Acree and Abraham Models," A. Jouyban, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *Chem. Pharm. Bull.*, 54, 1124 (2006).
398. "Phase Change Enthalpies and Entropies of Liquid Crystals," **W. E. Acree, Jr.** and J. S. Chickos, *J. Phys. Chem. Ref. Data*, 35, 1051-1330 (2006).
399. "Solubility Prediction of Anthracene in Nonaqueous Solvent Mixtures Using a Combination of Jouyban-Acree and Abraham Models," A. Jouyban, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *Can. J. Chem.*, 84, 874 (2006).
400. "Correlating Chemical Toxicities to Select Protozoa Using the Abraham Model," **K. R. Bowen, K. B. Flanagan, W. E. Acree, Jr.** and M. H. Abraham, *Sci. Total Environ.*, 369, 109 (2006).
401. "Mathematical Correlation of 1-Chloroanthraquinone Solubilities in Organic Solvents with the Abraham Solvation Parameter Model," **K. B. Flanagan, K. R. Hoover, O. Garza, A. Hizon, T. Soto, N. Vellegas, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 44, 377 (2006).
402. "Mathematical Correlation of Phenothiazine Solubilities in Organic Solvents with the Abraham Solvation Parameter Model," **K. R. Hoover, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 44, 367 (2006).
403. "Comparative Analysis of Solvation and Selectivity in Room Temperature Ionic Liquids (RTILs) Using the Abraham Linear Free Energy Relationship," M. H. Abraham and **W. E. Acree, Jr.**, *Green Chem.*, 8, 906 (2006).
404. "Experimental Thermochemical Study of Two Polymethylpyrazine N,N-Dioxide Derivatives," M. D. M. C. Ribeiro da Silva, M. A. A. Viera, **C. Givens, S. Keown** and **W. E. Acree, Jr.**, *Thermochim. Acta*, 450, 67 (2006).
405. "In Silico Prediction of Drug Solubility in Ethanol-Water Mixtures Using the Jouyban-Acree Model," A. Jouyban and **W. E. Acree, Jr.**, *J. Pharm. Pharmaceut. Sci.*, 9, 262 (2006).
406. "Solubility Prediction in Non-aqueous Binary Solvents Using a Combination of the Jouyban-Acree and Abraham Models," A. Jouyban and **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, 249, 24 (2006).
407. "Correlation of the Toxicity of Organic Compounds to Tadpoles Using the Abraham Model," **K. R. Bowen, K. B. Flanagan, W. E. Acree, Jr.**, M. H. Abraham and C. Rafols, *Sci. Total Environ.*, 271, 99 (2006).

408. "Comments on Solvation Parameters. 2. A Simplified Molecular Topology to Generate Easily Optimized Values," **C. Mintz**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Chem. Inf. Model.*, **46**, 1879 (2006).
409. "Solubility Prediction of Anthracene in Non-Aqueous Solvent Mixtures Using Jouyban-Acree Model," A. Jouyban, H. Jalilzadeh, M. Khoubnasabhafari and **W. E. Acree, Jr.**, *Iranian J. Pharm. Sci.*, **2**, 73 (2006).
410. "Comments on DTA Studies on the Liquidus Temperatures of Cr Complex with the Addition of an Anhydrous Ni Complex," **W. E. Acree, Jr.**, *Mat. Lett.*, **61**, 680 (2007).
411. "Solubility Prediction of Pyrene in Non-aqueous Solvent Mixtures Using Jouyban-Acree Model," A. Jouyban, M. Khoubnasabjafari and **W. E. Acree, Jr.**, *Asian J. Chem.*, **19**, 1853 (2007).
412. "Chemical Toxicity to Aquatic Organisms: 2. Development of Correlations for Several Protozoas, Bacteria and Water Fleas Based on the Abraham Solvation Parameter Model," **K. R. Hoover**, **K. B. Flanagan**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Environ. Eng. Sci.*, **6**, 165 (2007).
413. "Solubility of Anthracene in Binary Diisopropyl Ether + Alkane Solvent Mixtures at 298.15 K," **M. Carrillo**, **M. Corella**, **K. Wolcott**, **K. R. Bowen** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **52**, 270 (2007).
414. "Partition of Compounds from Gas to Water and from Gas to Physiological Saline at 310 K: A Linear Free Energy Relationships," M. H. Abraham, A. Ibrahim and **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, **251**, 93 (2007).
415. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Water and in 1-Octanol Based on the Abraham Model," **C. Mintz**, M. Clark, **W. E. Acree, Jr.** and M. H. Abraham, *J. Chem. Inf. Model.*, **47**, 115 (2007).
416. "Air to Liver Partition Coefficients for Volatile Organic Compounds and Blood to Liver Partition Coefficients for Volatile Organic Compounds and Drugs," M. H. Abraham, A. Ibrahim and **W. E. Acree, Jr.**, *Eur. J. Med. Chem.*, **42**, 743 (2007).
417. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Benzene and in Alkane Solvents Based on the Abraham Model," **C. Mintz**, M. Clark, **K. Burton**, **W. E. Acree, Jr.** and M. H. Abraham, *QSAR & Comb. Sci.*, **26**, 881 (2007).
418. "Prediction of Drug Solubility in Ethanol-Ethyl Acetate Mixtures at Various Temperatures Using the Jouyban-Acree Model," A. Jouyban and **W. E. Acree, Jr.**, *J. Drug Deliv. Sci. Technol.*, **17**, 159 (2007).
419. "Comments on An Improved Characteristic Molecular Volume Parameter for Linear Solvation Energy Relationships for Acyclic Alkanes," **C. Mintz** and **W. E. Acree, Jr.**, *J. Phys. Org. Chem.*, **20**, 365 (2007).
420. "Thermodynamic Properties of Three Pyridine Carboxylic Acid Methyl Ester Isomers," M. D. M. C. Ribeiro da Silva, V. L. S. Freitas, L. M. N. B. F. Santos, M. Fulem, M. J. Sottomayor, M. J. S. Monte and W. E. Acree, Jr., *J. Chem. Eng. Data*, **52**, 580 (2007).
421. "Thermochemical Studies on 3-Methylquinoxaline-2-carboxamide 1,4-Dioxide Derivatives: Enthalpies of Formation and of (N-O) Bond Dissociation," J. R. B. Gomes, E. A. Sousa, P. Gomes, N. Vale, J. M. Gonçalves, S. Pandey, **W. E. Acree, Jr.** and M. D. M. C. Ribeiro da Silva, *J. Phys. Chem B.*, **111**, 2075 (2007).
422. "Solubility of Anthracene in Binary Diisopropyl Ether + Alcohol Solvent Mixtures at 298.15 K," **M. Corella**, **K. Wolcott**, **M. Carrillo** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **52**, 929 (2007).
423. "Partition Coefficient Correlations for Transfer of Solutes from Gas Phase and from Water to Room Temperature Ionic Liquids," **C. Mintz** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **45**, 241 (2007).

424. "Mathematical Correlation of Salicylamide Solubilities in Organic Solvents with the Abraham Solvation Parameter Model," **B. H. Blake-Taylor**, **V. H. Deleon**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **45**, 389 (2007).
425. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Toluene and Carbon Tetrachloride Based on the Abraham Model," **C. Mintz**, M. Clark, **K. Burton**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, **36**, 947 (2007).
426. "Characterization of Room Temperature Ionic Liquids by the Abraham Model with Cation-Specific and Anion-Specific Equation Coefficients," **L. Sprunger**, M. Clark, W. E. Acree, Jr. and M. H. Abraham, *J. Chem. Inf. Model.*, **47**, 1123 (2007).
427. "Energetic and Structural Characterization of 2-R-3-Methylquinoxaline-1,4-dioxides (R = Benzoyl or *tert*-Butoxycarbonyl): Experimental and Computational Studies," J. R. B. Gomes, E. A. Sousa, J. M. Goncalves, L. Gales, A. M. Damas, P. Gomes, S. Pandey, **W. E. Acree, Jr.** and M. D. M. C. Ribeiro da Silva, *J. Phys. Org. Chem.*, **20**, 491 (2007).
428. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Dimethyl Sulfoxide and Propylene Carbonate Based on the Abraham Model," **C. Mintz**, **K. Burton**, **W. E. Acree, Jr.** and M. H. Abraham, *Thermochim. Acta*, **459**, 17 (2007).
429. "Prediction of Gas to Water Partition Coefficients from 273 to 373 K Using Predicted Enthalpies and Heat Capacities of Hydration," M. H. Abraham and **W. E. Acree, Jr.**, *Fluid Phase Equilibr.*, **262**, 97 (2007).
430. "Solubility Prediction of Drugs in Water-Cosolvent Mixtures using Abraham Solvation Parameters," A. Jouyban, Sh. Soltanpour, S. Soltani, K. K. Chan and **W. E. Acree, Jr.**, *J. Pharm. Pharmaceut. Sci.*, **10**, 294 (2007).
431. "Experimental Thermochemical Study of 6-Chloro-2,3-dimethylquinoxaline 1,4-Dioxide: and DFT Evaluation of the N-O Bond Enthalpies in Related Haloquinoxalines," J. R. B. Gomes, M. A. A. Vieira, **D. M. Stovall**, **W. E. Acree, Jr.** and M. D. M. C. Ribeiro da Silva, *Bull. Chem. Soc. Jpn.*, **80**, 1770 (2007).
432. "Characterization of the Retention Behavior of Organic and Pharmaceutical Drug Molecules on an Immobilized Artificial Membrane Column with the Abraham Model," **L. Sprunger**, **B. H. Blake-Taylor**, **A. Wairegi**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Chromatogr. A*, **1160**, 235 (2007).
433. "A Linear Free Energy Relationship Correlation of the Distribution of Solutes Between Water and Sodium Dodecyl Sulfate(SDS) Micelles and Between Gas and SDS Micelles," **L. Sprunger**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Chem. Inf. Model.*, **47**, 1808 (2007).
434. "Characterization of the Sorption of Gaseous and Organic Solutes onto Polydimethylsiloxane Solid-Phase Microextraction Surfaces Using the Abraham Model," **L. Sprunger**, **A. Proctor**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Chromatogr. A*, **1175**, 162 (2007).
435. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Chloroform and 1,2-Dichloroethane Based on the Abraham Model," **C. Mintz**, **K. Burton**, **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilibr.*, **258**, 191 (2007).
436. "Comment on Systematic Investigation of the Sorption Properties of Polyurethane Foams for Organic Vapors", **L. Sprunger**, **W. E. Acree, Jr.** and M. H. Abraham, *Anal. Chem.*, **79**, 6891 (2007).
437. "Modelling the Deviations of Solubilities in Water-Dioxane Mixtures from Predicted Solubilities by the Jouyban-Acree Model," A. Jouyban, M. A. A. Fakhree, M. Hamzeh-Mivehroud and **W. E. Acree, Jr.**, *J. Drug. Del. Sci. Tech.*, **17**, 359 (2007).
438. "Deviations of Drug Solubility in Water-Cosolvent Mixtures from the Jouyban-Acree Model – Effect of Solute Structure," A. Jouyban, A. A. Fakhree, T. Ghafourian, A. A. Sael and W. E. Acree, Jr., *Pharmazie*,

- 63, 113 (2008).
439. "Air to Lung Partition Coefficients for Volatile Organic Compounds and Blood to Lung Partition Coefficients for Volatile Organic Compounds and Drugs," M. H. Abraham, A. Ibrahim and **W. E. Acree, Jr.**, *Eur. J. Med. Chem.*, 43, 478 (2008).
 440. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Linear Alkanes (C₅ – C₁₆) Based on the Abraham Model," **C. Mintz**, **K. Burton**, **W. E. Acree, Jr.** and M. H. Abraham, *QSAR Comb. Sci.*, 27, 179 (2008).
 441. "Characterization of the Partitioning of Gaseous Solutes into Humic Acid with the Abraham Model and Temperature-Independent Equation Coefficients," **C. Mintz**, **T. Ladlie**, **K. Burton**, M. Clark, **W. E. Acree, Jr.** and M. H. Abraham, *QSAR Comb. Sci.*, 27, 483 (2008).
 442. "Solubility of Anthracene in Binary Propyl Acetate + Alcohol Solvent Mixtures at 298.15 K," **L. Alcazar**, **A. Blanco**, **R. Cano**, **L. Fisher**, **M. Nau**, **L. Sidransky** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 53, 201 (2008).
 443. "Solubility Prediction of Solutes in Non-aqueous Binary Solvent Mixtures," A. Jouyban, M. Khoubnasabhafari, S. Soltani, S. Soltanpour, E. Tamizi and **W. E. Acree, Jr.**, *J. Brazilian Chem. Soc.*, 19, 604 (2008).
 444. "Effect of Anesthetic Structure on Inhalation Anesthesia: Implications for the Mechanism," M. H. Abraham, **W. E. Acree, Jr.**, **C. Mintz** and **S. Payne**, *J. Pharm. Sci.*, 97, 2373 (2008).
 445. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Alcohol Solvents Based on the Abraham Model," **C. Mintz**, **T. Ladlie**, **K. Burton**, M. Clark, **W. E. Acree, Jr.** and M. H. Abraham, *QSAR Comb. Sci.*, 27, 627 (2008).
 446. "Solubility of Sodium Diclofenac in Binary Water-Alcohol Solvent Mixtures at 25 °C," A. A. Saei, F. Jabbaribar, M. A. A. Fakhree, **W. E. Acree, Jr.** and A. Jouyban, *J. Drug Deliv. Sci. Technol.*, 18, 149 (2008).
 447. "Naphthalene Solubility in Binary Solvent Mixtures of 2,2,4-Trimethylpentane + Alcohols at 298.15 K," A. Shayanfar, S. Soltani, F. Jabbaribar, A. A. Hamidi, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 53, 574 (2008).
 448. "Solubility of Anthracene in Ternary Cyclohexane + Propanol + 1-Pentanol and Cyclohexane + Butanol + 1-Pentanol Mixtures," **B. Martine**, **B. H. Brooke-Taylor** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 53, 556 (2008).
 449. "LFER Correlations for Room Temperature Ionic Liquids : Separation of Equation Coefficients into Individual Cation-Specific and Anion-Specific Contributions," **L. M. Sprunger**, **A. Proctor**, **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilibr.*, 265, 104 (2008).
 450. "Solubility of Anthracene in Ternary 2,2,4-Trimethylpentane + Propanol + 1-Pentanol and 2,2,4-Trimethylpentane + Butanol + 1-Pentanol Mixtures," **B. H. Brooke-Taylor**, **B. Martine** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 53, 970 (2008).
 451. "Solubility Prediction of Paracetamol in Water-Ethanol-Propylene Glycol Mixtures at 25 and 30 C Using Practical Approaches," A. Jouyban, O. Azarmir, Sh. Mirzei, D. Hassanzadeh, T. Ghafourian, **W. E. Acree, Jr.** and A. Nokhodchi, *Chem. Pharm. Bull.*, 56, 602 (2008).
 452. "Solvation Parameters for Mercury and Mercury(II) Compounds: Calculation of Properties of Environmental Interest," M. H. Abraham, J. Gil-Lostes, **W. E. Acree, Jr.**, J. E. Cometto-Muniz and W. S. Cain, *J. Environ. Monit.*, 10, 435 (2008).
 453. "Solubility of Anthracene in Ternary Solvent Mixtures of 2,2,4-Trimethylpentane + 2-Propanone + Alcohols at 298.15 K," A. Shayanfar, S. Soltani, F. Jabbaribar, E. Tamizi, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem.*

- Eng. Data*, 53, 890 (2008).
454. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Dibutyl Ether and Ethyl Acetate," C. Mintz, K. Burton, T. Ladlie, M. Clark, W. E. Acree, Jr. and M. H. Abraham, *Thermochim. Acta*, 470, 67 (2008).
455. "ab initio Solubility Prediction of Nonelectrolytes in Ternary Solvents Using a Combination of Jouyban-Acree and Abraham Models," A. Jouyban, M. Khoubnasabjafari, A. A. Hamidi and W. E. Acree, Jr., *Asian J. Chem.*, 20, 3413 (2008).
456. "Computation Methodology for Determining Abraham Solute Descriptors from Limited Experimental Data by Combining Abraham Model and Goss Modified Abraham Model Correlations," L. M. Sprunger, A. Proctor, W. E. Acree, Jr. and M. H. Abraham, *Phys. Chem. Liq.*, 46, 574 (2008).
457. "Mathematical Correlations for Gas-to-Olive Oil, Gas-to-Saline Solution and Saline Solution-to-Olive Oil Partition Coefficients Based on the Goss Modified Abraham Model," L. M. Sprunger, W. E. Acree, Jr. and M. H. Abraham, *QSAR Comb. Sci.*, 27, 890-900 (2008).
458. "Correlation and Prediction of Partition Coefficients from the Gas Phase and from Water to Alkan-1-ols," M. H. Abraham, A. Nasezadeh and W. E. Acree, Jr., *Ind. Eng. Chem. Res.*, 47, 3990 (2008).
459. "Comparison of Solubility of Gases and Vapors in Wet and Dry Alcohols, Especially Octan-1-ol," M. H. Abraham and W. E. Acree, Jr., *J. Phys. Org. Chem.*, 21, 823 (2008).
460. "QSPR Studies on Ostwald Solubility and Partition Coefficients of Organic Solutes in Ionic Liquids," A. R. Katritzky, M. Kuanar, I. B. Stoyanova-Slavova, S. H. Slavov, D. A. Dobchev, M. Karelson and W. E. Acree, Jr., *J. Chem. Eng. Data*, 53, 1085 (2008).
461. "Correlation and Prediction of Partition Coefficients for Solute Transfer to 1,2-Dichloroethane from Both Water and From the Gas Phase," L. M. Sprunger, J. Gibbs, W. E. Acree, Jr. and M. H. Abraham, *Fluid Phase Equilibr.*, 273, 78 (2008).
462. "Thermochemical Study of Three Hindered Pyridine Derivatives," V. L. S. Freitas, W. E. Acree, Jr. and M. D. M. C. Ribeiro da Silva, *J. Chem. Eng. Data*, 53, 1820 (2008).
463. "Comments Concerning 'Characterizations for Vinylimidazolium Based Ionic Liquid Polymer Stationary Phases for Capillary Gas Chromatography,'" J. Gibbs, L. M. Sprunger, W. E. Acree, Jr. and M. H. Abraham, *Chromatographia*, 68, 1075 (2008).
464. "Thermochemical Study of Three Dimethylpyrazine Derivatives," M. D. M. C. Ribeiro da Silva, J. I. T. A. Cabral, C. Givens, S. Keown and W. E. Acree, Jr., *J. Therm. Anal. Calorim.*, 92, 73 (2008).
465. "Comments on Thermophysical Properties of para-Anisaldehyde (1) + Chlorobenzene (2) at Temperatures of (303.15, 313.15 and 323.15) K and a Pressure of 0.1 MPa", A. Jouyban and W. E. Acree, Jr., *J. Chem. Eng. Data*, 53, 1999 (2008).
466. "Correlation and Prediction of Partition Coefficient Between the Gas Phase and Water, and the Solvents Dry Methyl Acetate, Dry and Wet Ethyl Acetate, and Dry and Wet Butyl Acetate," L. M. Sprunger, A. Proctor, W. E. Acree, Jr., M. H. Abraham and N. Benjelloun-Dakhama, *Fluid Phase Equilibr.*, 270, 30 (2008).
467. "Comments Concerning Study of Solute-Solvent and Solvent-Solvent Interactions in Pure and Mixed Solvents," A. Jouyban and W. E. Acree, Jr., *J. Mol. Liq.*, 142, 158 (2008).
468. "Solubility of Anthracene in Ternary Heptane + Propanol + 1-Pentanol and Heptane + Butanol + 1-Pentanol Mixtures," A. Proctor, B. A. Martine and W. E. Acree, Jr., *J. Chem. Eng. Data*, 53, 2197 (2008).

469. "Solubility of Anthracene in Quaternary Solvent Mixtures of 2,2,4-Trimethylpentane + 2-Propanone + Methanol + Alcohols at 298.15 K," A. Shayanfar, S. Soltanpour, F. Jabbaribar, A. Hamidi, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 53, 2250 (2008).
470. "Correlation of Human and Animal Air-to-Blood Partition Coefficients with a Single Linear Free Energy Relationship Model," **L. M. Sprunger, J. Gibbs, W. E. Acree, Jr.** and M. H. Abraham, *QSAR & Comb. Sci.*, 27, 1130 (2008).
471. "Solubility of Anthracene in Ternary Cyclohexane + Propanol + Methyl-1-propanol and Cyclohexane + Butanol + 2-Methyl-1-propanol Mixtures," **A. Proctor, B. H. Blake-Taylor** and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 53, 2910 (2008).
472. "LFER Correlations for the Solubilizing Characterization of Room Temperature Ionic Liquids Containing Trifluoromethanesulfonate and Trifluoroacetate Anions," **A. Proctor, L. M. Sprunger, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 46, 631 (2008).
473. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in N, N-Dimethylformamide and *tert*-Butanol," **C. Mintz, K. Burton, T. Ladlie**, M. Clark, **W. E. Acree, Jr.** and M. H. Abraham, *J. Mol. Liq.*, 144, 23 (2009).
474. "Prediction of Convulsant Activity of Gases and Vapors," M. H. Abraham and **W. E. Acree, Jr.**, *Eur. J. Med. Chem.*, 44, 885 (2009).
475. "Linear Free Energy Relationship Correlation for the Distribution of Solutes Between Water and Cetyltrimethylammonium Bromide (CTAB) Micelles", **L. M. Sprunger, J. Gibbs, W. E. Acree, Jr.** and M. H. Abraham, *QSAR & Comb. Sci.*, 28, 72 (2009).
476. "Partition of Compounds from Water and from Air into Wet and Dry Ketones," M. H. Abraham, **W. E. Acree, Jr.**, A. J. Leo and D. Hoekman, *New J. Chem.*, 33, 568 (2009).
477. "Characterization of Room Temperature Ionic Liquid (RTIL) Chromatographic Stationary Phases by Combining Experimental Retention Factor and Partition Coefficient Data into a Single Model," **L. M. Sprunger, J. Gibbs**, Quinner Q. Baltazar, **W. E. Acree, Jr.**, M. H. Abraham and J. L. Anderson, *Phys. Chem. Liq.*, 47, 74 (2009).
478. "Enthalpy of Solvation Correlations for Gaseous Solutes Dissolved in Acetonitrile and Acetone," **C. Mintz, J. Gibbs, W. E. Acree, Jr.** and M. H. Abraham, *Thermochem. Acta*, 484, 65 (2009).
479. "Solubility of Lamotrigine, Diazepam and Clonazepam in Ethanol + Water Mixtures at 298.15 K," A. Shayanfar, M. A. A. Fakhree, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 54, 1107 (2009).
480. "Activity Coefficients at Infinite Dilution Organic Compounds in Trihexy(tetradecyl)phosphonium Bis(trifluoromethylsulfonyl)imide Using Inverse Gas Chromatography," A.-L. Revelli, **L. M. Sprunger, J. Gibbs, W. E. Acree, Jr.**, G. A. Baker, and F. Mutelet, *J. Chem. Eng. Data*, 54, 977 (2009).
481. "Solubility of Lamotrigine, Diazepam, Clonazepam and Phenobarbital in Propylene Glycol + Water Mixtures at 298.15 K," A. Shayanfar, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 54, 1153 (2009).
482. "Comments on Solubiity of Ethyl Maltol in Aqueous Ethanol Mixtures," A. Jouygan and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 54, 1168 (2009).
483. "Prediction of Drug Solubility in Mixed Solvents Using Computed Abraham Parameters," A. Jouyban, Sh. Soltanpour, S. Soltani, E. Tamizi, M. A. Abolghassemi Fakhree and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 146, 82 (2009).
484. "LFER Correlations for Room Temperature Ionic Liquids: Revised Cation-Specific and Anion-Specific Equation Ceofficients for Predictive Applications Covering a Much Larger Area of Chemical Space," **L. M.**

- Sprunger, J. Gibbs, A. Proctor, W. E. Acree, Jr.**, M. H. Abraham, Y. Meng, C. Yao and J. L. Anderson, *Ind. Eng. Chem. Res.*, **48**, 4145 (2009).
485. "Solubility of Phenanthrene in Binary Mixtures of C₁ – C₄ Alcohols + 2-Propanol and Ethanol + Methanol at 298.15 K," M. A. A. Fakhree, A. Shayanfar, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, **54**, 1405 (2009).
486. "Solubility of Chlordiazepoxide, Diazepam, and Lorazepam in Ethanol + Water Mixtures at 303.2," A. Jouyban, J. Shokri, M. Barzegar-Jalali, D. Hassanzadeh, **W. E. Acree, Jr.**, T. Ghafourian and A. Nokhodchi, *J. Chem. Eng. Data*, **54**, 2142 (2009).
487. "Partition of Compounds from Water and from Air into the Wet and Dry Monhalobenzenes," M. H. Abraham, **W. E. Acree, Jr.**, A. J. Leo and D. Hoekman, *New J. Chem.*, **33**, 1685 (2009).
488. "Correlation and Prediction of Solute Transfer to Chloroalkanes from Both Water and the Gas Phase," **L. M. Sprunger, S. S. Achi, W. E. Acree, Jr.**, M. H. Abraham, A. J. Leo and D. Hoekman, *Fluid Phase Equilibr.*, **281**, 144 (2009).
489. "Comments Concerning Equilibrium Phase Diagram of the Ternary 2-Nitrobenzoic Acid + 3-Nitrobenzoic Acid + Acetone System at 283.15 and 313.15 K," **W. E. Acree, Jr.**, *J. Phase Equilibr. Diff.*, **30**, 306 (2009).
490. "Partition of Compounds from Water and from Air into Amides," M. H. Abraham, **W. E. Acree, Jr.** and J. E. Cometto-Muñiz, *New J. Chem.*, **33**, 2034 (2009).
491. "Total Phase Change Entropies and Enthalpies: An Update on Fusion Enthalpies and Their Estimation," J. S. Chickos and **W. E. Acree, Jr.**, *Thermochim. Acta*, **495**, 5 (2009).
492. "Solubility of Clonazepam, Diazepam, Lamotrigine, and Phenobarbital in N-Methyl-2-pyrrolidone + Water Mixtures at 298.2 K," A. Shayanfar, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, **54**, 2964 (2009).
493. "Comments Concerning Solid-Liquid Phase Equilibrium and Phase Diagram of the Ternary *o*-Nitrobenzoic Acid + *m*-Nitrobenzoic Acid + Ethanol System at 283.15 and 313.15 K," **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **54**, 2146 (2009).
494. "Solubility of Pioglitazone Hydrochloride in Aqueous Solutions of Ethanol, Propylene Glycol and N-Methyl-2-pyrrolidone at 298.2 K," S. Soltanpour, **W. E. Acree, Jr.** and A. Jouyban, *AAPS Pharm. Sci. Tech.* **10**, 1153 (2009).
495. "Linear Free Energy Relationship Correlations for Enthalpies of Solvation of Organic Solutes into Room Temperature Ionic Liquids (RTILs) Based on the Abraham Model with Ion-Specific Equation Coefficients," **L. M. Sprunger, S. S. Achi, W. E. Acree, Jr.** and M. H. Abraham, *Ind. Eng. Chem. Res.*, **48**, 8704 (2009).
496. "Modeling the Effects of Different Mobile Phase Compositions and Temperatures on the Retention of Various Analytes in HPLC," A. Jouyban, S. Soltanpour, **W. E. Acree Jr.**, D. Thomas, P. Agrafiotou and A. Pappa-Louisi, *J. Sep. Sci.*, **32**, 3898 (2009).
497. "Development of Abraham Model Correlations for Solvation Characteristics of Linear Alcohols," **L. M. Sprunger, S. S. Achi, R. Pointer, B. H. Blake-Taylor, W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilibr.*, **286**, 170 (2009).
498. "Solubility of 7-Chloro-2-methylamino-5-phenyl-5*H*-1,4-benzodiazepin-4-oxide, 7-Chloro-1,3-dihydro-1-methyl-5-phenyl-2*H*-1,4-benzodiazepin-2-one, and 9-Chloro-6-(2-chlorophenyl)-4-hydroxy-5-diazabicyclo[5.4.0]undeca-5,8,10,12-tetraen-3-one in (Propane-1,2-diol + Water) at a Temperature of 303.2 K," A. Jouyban, J. Shokri, M. Barzegar-Jalali, D. Hassanzadeh, **W. E. Acree, Jr.**, T. Ghafourian and A. Nokhodchi, *J. Chem. Eng. Data*, **55**, 539 (2010).
499. "Solubility of Drugs and other Compounds in Organic Solvents," M. H. Abraham, R. E. Smith, R. Luchtefeld,

- A. J. Boorem, R. Luo and **W. E. Acree, Jr.**, *J. Pharm. Sci.*, 99, 1500 (2010).
500. "Partition Coefficients of Organic Compounds in New Imidazolium and Tetraalkylammonium Based Ionic Liquids Using Inverse Gas Chromatography," F. Mutelet, A.-L. Revelli, J.-L. Jaubert, **L. M. Sprunger**, **W. E. Acree, Jr.** and G. A. Baker, *J. Chem. Eng. Data*, 55, 234 (2010).
501. "Effect of Different Concentrations of Poly(vinylpyrrolidone) on the Solubility of Lamotrigine and Diazepam in Ethanol + Water Mixtures," S. Soltanpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 55, 570 (2010).
502. "Solubility of Budesonide, Hydrocortisone, and Prednisolone in Ethanol + Water Mixtures at 298.2 K," H. S. M. Ali, P. York, N. Blagden, S. Soltanpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 55, 578 (2010).
503. "Linear Free Energy Relationship (LFER) Correlations for the Solubilizing Characterization of Room Temperature Ionic Liquids Containing Triethylsulphonium and 1-Butyl-1-methylpyrrolidinium Cations," **L. M. Sprunger**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 48, 385 (2010).
504. "Water-Solvent Partition Coefficients and $\Delta \log P$ Values as Predictors for Blood-Brain Distribution," M. H. Abraham, **W. E. Acree, Jr.**, A. J. Leo, D. Hoekman and J. Cavanaugh, *J. Pharm. Sci.*, 99, 2492 (2010).
505. "Solubility of 5-(2-Chlorophenyl)-7-nitro-1,3-dihydro-1,4-benzodiazepin-2-one, 6-Chloro-1-methyl-5-phenyl-3H-1,4-benzodiazepin-2-one, and 6-(2,3-Dichlorophenyl)-1,2,4-triazine-3,5-diamine in the Mixtures of Poly(ethylene glycol) 600, Ethanol, and Water at a Temperature of 298.2 K," S. Soltanpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, *J. Chem. Eng. Data*, 55, 1727 (2010).
506. "Development of Abraham Model Correlations for Solvation Characteristics of Secondary and Branched Alcohols," **L. M. Sprunger**, **S. S. Achi**, **R. Pointer**, **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilib.*, 288, 121 (2010).
507. "Development of Correlations for Describing Solute Transfer into Acyclic Alcohols Based on the Abraham Model and Fragment-Specific Equation Coefficients," **L. M. Sprunger**, **S. S. Achi**, **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilib.*, 288, 139 (2010).
508. "The Biological and Toxicological Activity of Gases and Vapors," M. H. Abraham, R. Sánchez-Moreno, J. Gil-Lostes, **W. E. Acree, Jr.**, J. E. Cometto-Muñiz and W. S. Cain, *Toxicol. in Vitro*, 24, 357 (2010).
509. "Solubility of Benzodiazepines in Polyethylene Glycol 200 + Water Mixtures at 303.2 K," A. Jouyban, J. Shokri, M. Barzegar-Jalali, D. Hassanzadeh, **W. E. Acree, Jr.**, T. Ghafourian and A. Nokhodchi, *J. Chem. Eng. Data*, 55, 519 (2010).
510. "Solubility of Phenanthrene in Binary Mixtures of C1-C4 at 298.2 K," M. Fakhree, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 55, 531 (2010).
511. "Molecular Energetics of Alkyl Substituted Pyridien N-Oxides: An Experimental Study," J. I. T. A. Cabral, R. A. R. Monteiro, M. A. A. Rocha, L. M. N. B. F. Santos, **W. E. Acree, Jr.**, and M. D. M. C. Ribeiro da Silva, *J. Therm. Anal. Calorim.*, 100, 431 (2010).
512. "Linear Free Energy Relationship (LFER) Correlations for the Solubilizing Characterization of Room Temperature Ionic Liquids Containing 1-Hexyloxymethyl-3-methylimidazolium and 1,3-Dihexyloxymethylimidazolium Cations," **L. M. Sprunger**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 48, 394 (2010).
513. "Study of Ether, Alcohol or Cyano Functionalized Ionic Liquids Using Inverse Gas Chromatography," A.-L. Revelli, F. Mutelet, J.-N. Jaubert, M. Garcia-Martinez, **L. M. Sprunger**, **W. E. Acree, Jr.** and G. A. Baker, *J. Chem. Eng. Data*, 55, 2434 (2010).

514. "Phase Transition Enthalpy Measurements of Organic and Organic Compounds. Sublimation, Vaporization and Fusion Enthalpies from 1880 to 2009," W. E. Acree, Jr and J. S. Chickos, *J. Phys. Chem. Ref. Data*, **39**, 043101-1 to 043101-942 (2010).
515. "Equations for the Transfer of Neutral Molecules and Ionic Species from Water to Organic Solvents," M. H. Abraham and **W. E. Acree, Jr.**, *J. Org. Chem.*, **75**, 1006 (2010). (**featured article**)
516. "Solubility Prediction of Polycyclic Aromatic Hydrocarbons in Non-aqueous Solvents," A. Jouyban, A. Shayanfar and W. E. Acree, Jr., *Fluid Phase Equilib.*, **293**, 47 (2010).
517. "Reply to Comments of Endo and Goss Concerning Development of Correlations for Describing Solute Transfer into Acyclic Alcohols Based on the Abraham Model and Fragment-Specific Equation Coefficients," **L. M. Grubbs**, **S. S. Achi**, **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilib.*, **295**, 148 (2010).
518. "Cation-specific and Anion-specific Abraham Model Correlations for Solute Transfer into Ionic Liquids," **L. M. Grubbs**, **M. Saifullah**, **N. E. De La Rosa**, **W. E. Acree, Jr.**, M. H. Abraham, Qichao Zhao and J. L. Anderson, *Glob. J. Phys. Chem.*, **1**, 1 (2010). (**featured author in Journal's inaugural issue**)
519. "Solute Descriptors for Phenoxide Anions and Their Use to Establish Correlations of Rates of Reactions of Anions with Iodomethane," M. H. Abraham and **W. E. Acree, Jr.**, *J. Org. Chem.*, **75**, 3021 (2010).
520. "Solubility Prediction of Clonazepam in Aqueous Mixtures of Ethanol, Polyethylene Glycol 200 and Propylene Glycol at 30 °C," A. Jouyban, J. Shokri, M. Barzegar-Jalali, D. Hassanzadeh, W. E. Acree, Jr., T. Ghafourian and A. Nokhadchi, *Drug. Del. Sci. Technol.*, **20**, 149 (2010).
521. "Solubility of Anthracene in Binary and Ternary Mixtures of Cyclohexanone, Ethyl Acetate and Methanol at 298.2 K," A. Jouyban, J. L. Manzoori, V. Panahi-Azar, J. Soleymani, M. A. A. Fakhree and W. E. Acree, Jr., *J. Chem. Eng. Data*, **55**, 2607 (2010).
522. "Solubility of Phenanthrene in Ternary Mixtures of C₁-C₄ Alcohols at 298 K," M. A. A. Fakhree, W. E. Acree, Jr. and A. Jouyban, *Ind. Eng. Chem. Res.*, **49**, 6338 (2010).
523. "The Transfer of Neutral Molecules, Ions and Ionic Species from Water to Ethylene Glycol and to Propylene Carbonate; Descriptors for Pyridinium Cations," M. H. Abraham and **W. E. Acree, Jr.**, *New J. Chem.*, **34**, 2298 (2010).
524. "Mathematical Correlations for Describing Enthalpies of Solvation of Organic Vapors and Gases into Ionic Liquid Solvents," **L. M. Grubbs**, **W. E. Acree, Jr.** and M. H. Abraham, *Thermochim. Acta*, **509**, 87 (2010).
525. "A General Treatment of Solubility 4. Description and Analysis of a PCA Model for Ostwald Solubility Coefficients," I. Tulp, D. Dobchev, A. Katritzky, **W. E. Acree, Jr.** and U. Maran, *J. Chem. Inf. Model.*, **50**, 1275 (2010).
526. "Modeling the Retention Behavior of Analytes in RP-HPLC with Mixed Solvent Mobile Phases using Jouyban-Acree and Abraham Models," A. Jouyban, S. Soltani, A. Fathi-Azarbaijani and **W. E. Acree, Jr.**, *Anal. Methods*, **2**, 1286 (2010).
527. "Mathematical Correlations for Describing Solute Transfer into Functionalized Alkane Solvents Containing Hydroxyl, Ether, Ester or Ketone Solvent," **L. M. Grubbs**, **M. Saifullah**, **N. E. De La Rosa**, **S. Ye**, **S. S. Achi**, **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilib.*, **298**, 48 (2010).
528. "Correlation of Enthalpies of Solvation of Organic Vapors and Gases in Ionic Liquid Solvents Using a Group Contribution Version of the Abraham Solvation Parameter Model," **L. M. Grubbs**, **W. E. Acree, Jr.** and M. H. Abraham, *Thermochim. Acta*, **511**, 96 (2010).
529. "The Transfer of Neutral Molecules, Ions and Ionic Species from Water to Wet Octanol," M. H. Abraham and **W. E. Acree, Jr.**, *Phys. Chem. Chem. Phys.*, **12**, 13182 (2010).

530. "Solubility of Anthracene in C₁-C₃ Alcohols at 298.2 to 333.2 K and Their Mixtures with 2-Propanone at 298.2 K," A. Jouyban, J. Manzoor, J. Soleymani, V. Panahi-Azar, M. Fakhree, S. Ahmadian, A. Shayanfar and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 55, 5319 (2010).
531. "Hydrogen Bonding Between Solutes in Solvent Octan-1-ol and Solvent Water," M. H. Abraham, J. M. R. Gola, J. E. Cometto-Muñiz and **W. E. Acree, Jr.**, *J. Org. Chem.*, 75, 7651 (2010).
532. "Solubility of Acetaminophen and Ibuprofen in the Mixtures of Polyethylene Glycol 200 or 400 with Ethanol, and Water, and Density of Solute-Free Mixed Solvents at 298.2 K," A. Jouyban, S. Soltanpour and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 55, 5252 (2010).
533. "Improved Prediction of Drug Solubilities in Ethanol + Water Mixtures at Various Temperatures," A. Jouyban, S. Soltanpour and **W. E. Acree, Jr.**, *Biomedicine International*, 1, 19-24 (2010). (**Published in Journal's inaugural issue**)
534. "Determination of the Abraham Solute Descriptors for 2-Ethylanthraquinone Based on Measured Solubility Ratios," **K. Holley, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 49, 355 (2011).
535. "Solubility of Anthracene in Binary Alkane + Ethanol Solvent Mixtures at 298.15 K," **L. M. Grubbs, K. Holley, S. S. Achi, R. Pointer, D. Casares, R. Hall, J. Ruiz** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 49, 379 (2011).
536. "Determination of the Abraham Model Solute Descriptors for 3,5-Dinitro-2-methylbenzoic Acid from Measured Solubility in Organic Solvents," **S. Ye, M. Saifullah, L. M. Grubbs, M. C. McMillan-Wiggins, P. Acosta, D. Mejorado, I. Flores, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 49, 821 (2011).
537. "Correlations for Describing Gas-to-Ionic Liquid Partitioning at 323 K Based on Ion-Specific Equation Coefficient and Group Contribution Versions of the Abraham Model," **L. M. Grubbs, S. Ye, M. Saifullah, M. C. McMillan-Wiggins, W. E. Acree, Jr.**, M. H. Abraham, P. Twu and J. L. Anderson, *Fluid Phase Equilibr.*, 301, 257 (2011).
538. "The Lipophilicity and Hydrogen Bond Strength of Pyridine-N-oxides and Protonated Pyridine-N-oxides," M. H. Abraham, L. Honcharova, S. A. Rocco, **W. E. Acree, Jr.** and **K. M. De Fina**, *New J. Chem.*, 35, 930 (2011).
539. "Partition Coefficients and Solubilities of Drugs and Other Compounds in the Water-Ethanol Solvent System," M. H. Abraham and **W. E. Acree, Jr.**, *J. Solution Chem.*, 40, 1279 (2011).
540. "Solubility of Anthracene and Phenanthrene in Ethanol + 2,2,4-Trimethylpentane Mixtures at Different Temperatures," A. Shayanfar, S. H. Eghrary, F. Sardari, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 56, 2290 (2011).
541. "Thermochemistry of 2,2'-Dipyridil and 2,2'-Dipyridil N,N'-Dioxide. The Dissociation Enthalpies of the N-O Bonds," A. F. L. O. M. Santos, A. R. Monteiro, J. M. Goncalves, **W. E. Acree, Jr.** and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.*, 43, 1044 (2011).
542. "Activity Coefficients at Infinite Dilution Measurements for Organic Solutes and Water in the Ionic Liquid 1-Ethyl-3-methylimidazolium Tetracyanoborate," U. Domanska, M. Krolikowska, **W. E. Acree, Jr.** and G. A. Baker, *J. Chem. Thermodyn.*, 43, 1050 (2011).
543. "Enthalpy of Solvation Correlations for Organic Solutes and Gases Dissolved in 1-Propanol and Tetrahydrofuran," **T. W. Stephens, V. Chou, A. N. Quay, W. E. Acree, Jr.** and M. H. Abraham, *Thermochim. Acta*, 519, 103 (2011).
544. "Solubility Prediction of Drugs in Mixed Solvents Using Partial Solubility Parameters," A. Jouyban, A. Shayanfar, V. Panahi-Azar, J. Soleymani, B. H. Yousefi, **W. E. Acree, Jr.** and P. York, *J. Pharm. Sci.*, 100,

- 4368 (2011).
545. "Correlation of the Solubilizing Abilities of Hexyl(trimethyl)ammonium bis((Trifluoromethyl)sulfonyl)imide, 1-Propyl-1-methylpiperidinium bis((Trifluoromethyl)sulfonyl)imide and 1-Butyl-1-methylpyrrolidinium thiocyanate," L. M. Grubbs, S. Ye, M. Saifullah, W. E. Acree, Jr., P. Twu, J. L. Anderson, G. A. Baker and M. H. Abraham, *J. Solution Chem.*, 40, 2000 (2011).
546. "Abraham Model Correlations for Transfer of Neutral Molecules to Tetrahydrofuran and to 1,4-Dioxane, and for Transfer of Ions to Tetrahydrofuran," M. Saifullah, S. Ye, L. M. Grubbs, N. E. De La Rosa, W. E. Acree, Jr. and M. H. Abraham, *J. Solution Chem.*, 40, 2082 (2011).
547. "Activity Coefficients at Infinite Dilution of Organic Compounds in Four New Imidazolium-Based Ionic Liquids," J.-C. Moise, F. Mutelet, J.-N. Jaubert, L. M. Grubbs, W. E. Acree, Jr. and G. A. Baker, *J. Chem. Eng. Data*, 56, 3106 (2011).
548. "Solubility of Phenothiazine in Water, Ethanol, and Propylene Glycol at 298.2 to 338.2 K and Their Binary and Ternary Mixtures at 298.2 K," S. Ahmadian, V. Panahi-Azar, M. A. A. Fakhree, W. E. Acree, Jr. and A. Jouyban, *J. Chem. Eng. Data*, 56, 4352 (2011) (published in Kenneth N. Marsh Festschrift special issue).
549. "Evaluating the Solvation Properties of Functionalized Ionic Liquids with Varied Cation/Anion Composition using the Solvation Parameter Model," P. Twu, Q. Zhao, W. R. Pitner, W. E. Acree Jr., G. A. Baker and J. L. Anderson, *J. Chromatogr. A*, 1218, 5311 (2011).
550. "Enthalpy of Solvation Correlations for Organic Solutes and Gases Dissolved in 2-Propanol, 2-Butanol, 2-Methyl-1-Propanol and Ethanol," T. W. Stephens, N. E. De La Rosa, M. Saifullah, S. Ye, V. Chou, A. N. Quay, W. E. Acree, Jr. and M. H. Abraham, *Thermochim. Acta*, 523, 214 (2011).
551. "Hydrogen Bond Descriptors and Other Properties of Ion Pairs," M. H. Abraham and W. E. Acree, Jr., *New J. Chem.*, 35, 1740 (2011).
552. "Abraham Model Correlations for Solute Partitioning into *o*-Xylene, *m*-Xylene and *p*-Xylene from Both Water and the Gas Phase," T. W. Stephens, N. E. De La Rosa, M. Saifullah, S. Ye, V. Chou, A. N. Quay, W. E. Acree, Jr. and M. H. Abraham, *Fluid Phase Equilibr.*, 308, 64 (2011).
553. "Thermodynamic Studies of Fluphenazine Decanoate Solubility in Propylene Glycol + Water Mixtures and Correlations with the Jouyban-Acree Model," V. Panahi-Azar, A. Shayanfar, F. Martinez, W. E. Acree, Jr., and A. Jouyban, *Fluid Phase Equilibr.*, 308, 72 (2011).
554. "Thermodynamics and Activity Coefficients at Infinite Dilution Measurements for Organic Solutes and Water in the Ionic Liquid 1-Butyl-1-methylpyrrolidinium Tetracyanoborate," U. Domańska, M. Królikowski and W. E. Acree, Jr., *J. Chem. Thermodyn.*, 43, 1810 (2011).
555. "Abraham Model Correlations for Transfer of Neutral Molecules and Ions to Sulfolane," T. W. Stephens, N. E. De La Rosa, M. Saifullah, S. Ye, V. Chou, A. N. Quay, W. E. Acree, Jr. and M. H. Abraham, *Fluid Phase Equilibr.*, 309, 30 (2011).
556. "Prediction of Partition Coefficients of Organic Compounds in Ionic Liquids Using Temperature-Dependent Linear Solvation Energy Relationship with Parameters Calculated Through Group Contribution Method," F. Mutelet, V. Ortega-Villa, J.-C. Moise, J. N. Jaubert and W. E. Acree, Jr., *J. Chem. Eng. Data*, 56, 3598 (2011).
557. "Partition Coefficients of Organic Compounds in Four New Tetraalkylammonium bis(Trifluoromethyl-sulfonyl)imide Ionic Liquids Using Inverse Gas Chromatography," W. E. Acree, Jr., G. A. Baker, F. Mutelet and J.-C. Moise, *J. Chem. Eng. Data*, 56, 3688 (2011).
558. "The Transfer of Neutral Molecules, Ions and Ionic Species from Water to Benzonitrile; Comparison with

- Nitrobenzene,” M. H. Abraham and **W. E. Acree, Jr.**, *Thermochim. Acta*, 526, 22 (2011).
559. “Mathematical Representation of Fluorescence Intensity of Probes in Aqueous Binary Solvent Mixtures,” A. Jouyban, M. Shaghaghi, E. Zoghi, N. Karami, B. J. Clark and **W. E. Acree, Jr.**, *J. Fluoresc.*, 21, 2111 (2011).
560. “Correlation of Solute Transfer into Alkane Solvents from Water and from the Gas Phase with Updated Abraham Model Equations,” **T. W. Stephens**, **A. N. Quay**, **V. Chou**, **M. Loera**, **C. Shen**, **A. Wilson**, **W. E. Acree, Jr.** and M. H. Abraham, *Glob. J. Phys. Chem.*, 3, 1/1 (2012).
561. “Correlation of Solute Transfer into Alkane Solvents from Water and from the Gas Phase with Updated Abraham Model Equations,” **T. W. Stephens**, **A. N. Quay**, **V. Chou**, **M. Loera**, **C. Shen**, **A. Wilson**, **W. E. Acree, Jr.** and M. H. Abraham, *Glob. J. Phys. Chem.*, 3, 1/1 (2012).
562. “Equations for the Partition of Neutral Molecules, Ions and Ionic Species from Water to Water-Ethanol Mixtures,” M. H. Abraham and **W. E. Acree, Jr.**, *J. Solution Chem.*, 41, 730 (2012).
563. “Correlation of the Solubilizing Abilities of 1-Butyl-1-methylpiperidinium bis(Trifluoromethylsulfonyl)-imide and 1-Butyl-1-methylpyrrolidinium Tetracyanoborate,” **T. W. Stephens**, **W. E. Acree, Jr.**, P. Twu, J. L. Anderson, G. A. Baker and M. H. Abraham, *J. Solution Chem.*, 41, 1165 (2012).
564. “Determination of Abraham Model Solute Descriptors for Benzoin Based on Measured Solubility Ratios,” **T. W. Stephens**, **M. Loera**, **M. Calderas**, **R. Diaz**, **N. Montney**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 50, 254 (2012).
565. “Gas-Solvent and Water-Solvent Partition Coefficients of the Tetraphenyl Compounds of Group (IV),” M. H. Abraham and **W. E. Acree, Jr.**, *New J. Chem.*, 36, 626 (2012).
566. “Correlation of Solute Transfer into Isooctane from Water and from the Gas Phase Based on Updated Abraham Equations,” **T. W. Stephens**, **A. Wilson**, **N. Dabadge**, **A. Tian**, **H. J. Hensley**, **M. Zimmerman**, **W. E. Acree, Jr.** and M. H. Abraham, *Glob. J. Phys. Chem.*, 3, 9/1 (2012).
567. “Development of the Surface-SFED Models for Polar Solvents,” S. Lee, K.-H. Cho, **W. E. Acree, Jr.** and K. T. No, *J. Chem. Inf. Model.*, 52, 440 (2012).
568. “Energetic and Structural Properties of 4-Nitro-2,1,3-benzothiadiazole,” M. D. M. C. Ribeiro da Silva, V. L. S. Freitas, M. A. A. Vierira, M. J. Sottomayor and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 49, 146 (2012).
569. “Quantitative Structure-Property Relationship Studies for Predicting Gas to Carbon Tetrachloride Solvation Enthalpy Based on Partial Least Squares, Artificial Neural Network and Support Vector Machine,” Z. Dashtbozorgi, H. Golmohammadi and **W. E. Acree, Jr.**, *Glob. J. Phys. Chem.*, 3, 13/1 (2012).
570. “Solubility of Naproxen in Ethyl Acetate + Ethanol at Several Temperatures and Correlation with the Jouyban-Acree Model,” G. A. Rodriguez, D. R. Delgado, F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, 320, 49 (2012).
571. “Comments on Measurement and Correlation of Solubilities of (Z)-2-(2-Aminothiazol-4-yl)-2-methoxyiminoacetic Acid in Different Pure Solvents and Binary Mixtures of Water + (Ethanol, Methanol, or Glycol),” A. Jouyban, M. A. A. Fakhree and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 57, 1344 (2012).
572. “Experimental and Predicted Solubilities of 3,4-Dichlorobenzoic Acid in Select Organic Solvents and in Binary Aqueous-Ethanol Mixtures,” **A. Wilson**, **A. Tian**, **V. Chou**, **A. N. Quay**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 50, 324 (2012).
573. “Prediction of Gas to Water Solvation Enthalpy of Organic Compounds Using Support Vector Machine,” H. Golmohammadi, Z. Dashtbozorgi and **W. E. Acree, Jr.**, *Thermochim. Acta.*, 539, 7 (2012).

574. "The Hydrogen Bond Properties of Water from 273 K to 573 K: Equations for the Prediction of Gas-Water Partition Coefficients," M. H. Abraham and **W. E. Acree, Jr.**, *Phys. Chem. Chem. Phys.*, **14**, 7433 (2012).
575. "A Novel QSPR Model for Prediction for Gas to Dimethyl Sulfoxide Solvation Enthalpy of Organic Compounds Based on Support Vector Machine," H. Golmohammadi, Z. Dashtbozorgi and **W. E. Acree, Jr.**, *Mol. Inform.*, **31**, 385 (2012).
576. "Solubility of Salbutamol and Salbutamol Sulphate in Ethanol + Water Mixtures at 25 °C," H. S. M. Ali, N. Blagden, M. Khoubnasabjafari, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, **173**, 62 (2012).
577. "Thermodynamic Studies of Fluphenazine Decanoate Solubility in PEG 200 + Water Mixtures," V. Panahi-Azar, S. Ahmadian, F. Martinez, **W. E. Acree, Jr.** and A. Jouyban, *Fluid Phase Equilibr.*, **330**, 36 (2012).
578. "Linear Free Energy Relationships for Water/Hexadec-1-ene and Water/Deca-1,9-diene Partitions, and for Permeation through Lipid Bilayers; Comparison of Permeation Systems," M. H. Abraham and **W. E. Acree, Jr.**, *New J. Chem.*, **36**, 1798 (2012).
579. "Quantitative Structure-Activity Relationship for Prediction of Blood-to-Brain Partitioning Behavior Using Support Vector Machines," H. Golmohammadi, Z. Dashtbozorgi and **W. E. Acree, Jr.**, *Eur. J. Pharm. Sci.*, **47**, 421 (2012).
580. "QSPR Studies for Predicting Gas to Acetone and Gas to Acetonitrile Solvation Enthalpies Using Support Vector Machine," A. Toubaei, Z. Dashtbozorgi, H. Golmohammadi and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **175**, 24 (2012).
581. "Solubility of Anthracene in Binary Toluene + Alcohol Solvent Mixtures at 298.15 K," **N. Dabadge, A. Tian, A. Wilson, M. Barrera, M. Payne, E. Sanchez, T. Sanchez** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **50**, 812 (2012).
582. "Comments Concerning Determination of Specific Heat Capacity Enthalpy and Standard Molar Combustion Enthalpy of Taurine by DSC," **W. E. Acree, Jr.**, *J. Thermal Anal. Calorim.*, **110**, 1555 (2012).
583. "Determination of Partition Coefficients of Refrigerants by GLC Headspace Analysis," M. H. Abraham, J. Gil-Lostes, S. Corr and **W. E. Acree, Jr.**, *J. Chromatogr. A*, **1265**, 144 (2012).
584. "Determination of the Solubilizing Character of 1-Methoxyethyl-1-methylpiperidinium *tris*(Pentafluoroethyl)trifluorophosphate Based on the Abraham Solvation Parameter Model," P. Twu, J. L. Anderson, **T. W. Stephens, W. E. Acree, Jr.** and M. H. Abraham, *Eur. Chem. Bull.*, **1**, 212 (2012).
585. "Solubility of 2-Hydroxybenzoic Acid in Water, 1-Propanol, 2-Propanol and 2-Propanone at 298.2 K to 338.2 K and their Aqueous Binary Mixtures at 298.2 K," M. A. A. Fakhree, S. Ahmadian, V. Panahi-Azar, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, **57**, 3303 (2012).
586. "Activity Coefficients at Infinite Dilution for Organic Compounds Dissolved in 1-Alkyl-1-Methylpyrrolidinium *bis*(Trifluoromethylsulfonyl)imide Ionic Liquids Having Six-, Eight- and Ten-Carbon Atom Chains," **W. E. Acree, Jr.**, G. A. Baker, A.-L. Revelli, J.-C. Moise and F. Mutelet, *J. Chem. Eng. Data*, **57**, 3510 (2012).
587. "Prediction of Bovine Serum Albumin-Water Partition Coefficients of a Wide Variety of Neutral Organic Compounds by Means of Support Vector Machine," H. Golmohammadi, Z. Dashtbozorgi and **W. E. Acree, Jr.**, *Mol. Inform.*, **31**, 867 (2012).
588. "Physicochemical Properties and Activity Coefficients at Infinite Dilution for Organic Solutes and Water in a Novel Bicyclic Guanidinium Superbase-Derived Protic Ionic Liquid," U. Domańska, M. Królikowski,

- W. E. Acree, Jr.** and G. A. Baker, *J. Chem. Thermodyn.*, 58, 62 (2013).
589. "Prediction of Heat Capacities of Hydration of Various Organic Compounds Using Partial Least Squares and Artificial Neural Network," H. Golmohammadi, Z. Dashtbozorgi and **W. E. Acree, Jr.**, *J. Solution Chem.*, 42, 336 (2013).
590. "Application of QSPR for Prediction of Gas to 1-Octanol Solvation Enthalpy Using Support Vector Regression," H. Golmohammadi, Z. Dashtbozorgi and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 51, 182 (2013).
591. "Correlation of the Solubilizing Abilities of 1-Butyl-1-methylpyrrolidinium *tris*(Pentafluoroethyl)-trifluorophosphate, 1-Butyl-1-methylpyrrolidinium Triflate and 1-Methoxyethyl-1-methylmorpholinium *tris*(Pentafluoroethyl)trifluorophosphate," P. Twu, J. L. Anderson, **T. W. Stephens**, **A. Wilson**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, 42, 772 (2013).
592. "Descriptors for the Prediction of Partition Coefficients and Solubilities of Organophosphorus Compounds," M. H. Abraham and **W. E. Acree, Jr.**, *J. Sep. Sci. Technol.*, 48, 884 (2013).
593. "On the Solubility of Nicotinic Acid and Isonicotinic Acid in Water and Organic Solvents," M. H. Abraham and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 61, 74 (2013).
594. "Activity Coefficients at Infinite Dilution for Organic Solutes Dissolved in Three 1-Alkyl-1-methylpyrrolidinium *bis*(Trifluoromethylsulfonyl)imide Ionic Liquids Bearing Short Linear Alkyl Side Chains of Three to Five Carbons," F. Mutelet, E.-S. R. E. Hassan, **T. W. Stephens**, **W. E. Acree, Jr.**, and G. A. Baker, *J. Chem. Eng. Data*, 58, 2210 (2013).
595. "Descriptors for Artemisinin and its Derivatives; Estimation of Physicochemical and Biochemical Data," M. H. Abraham and **W. E. Acree, Jr.**, *Eur. Chem. Bull.*, 2, 1027 (2013).
596. "Response to a Critique of Abraham and Acree's Correlation for Deca-1,9-diene/Water Partition Coefficients," M. H. Abraham and **W. E. Acree, Jr.**, *New J. Chem.*, 37, 882 (2013).
597. "Comments Regarding Density, Speed of Sound, Refractive Index and Derivatives Properties of the Binary Mixture n-Hexane + n-Heptane (or n-Octane or n-Nonane) at T = 288.15 – 313.15 K," **W. E. Acree, Jr.** and **T. W. Stephens**, *Phys. Chem. Liq.*, 51, 429 (2013).
598. "Determination of Solvation Descriptors for Terpene Hydrocarbons from Chromatographic Measurements," M. H. Abraham, J. R. M. Gola, J. Gil-Lostes, **W. E. Acree, Jr.**, and J. E. Cometto-Muniz, *J. Chromatogr. A*, 1293, 133 (2013).
599. "A Group Contribution Model for Determining the Sublimation Enthalpy of Organic Compounds at the Standard Reference Temperature of 298 K," F. Gharagheizi, P. Ilani-Kashkouli, **W. E. Acree, Jr.**, A. H. Mohammadi and D. Ramjugernath, *Fluid Phase Equilibr.*, 354, 265 (2013).
600. "Determination of the Solubilizing Character of 1-(2-Hydroxyethyl)-3-methylimidazolium *tris*(Pentafluoroethyl)trifluorophosphate Based on the Abraham Solvation Parameter Model," P. Twu, J. L. Anderson, **T. W. Stephens**, **H. Lu**, **K. Satish**, **D. Shan**, **W. E. Acree, Jr.** and M. H. Abraham, *Eur. Chem. Bull.*, 2, 954 (2013).
601. "Solubility of Anthracene in Binary Ethylbenzene + Alcohol Solvent Mixtures at 298.15 K," **N. Dabadge**, **A. Tian**, **B. Willis**, **A. Wilson**, and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 51, 715 (2013).
602. "Experimental and Predicted Solubilities of 3,4-Dimethoxybenzoic Acid in Select Organic Solvents of Varying Polarity and Hydrogen-Bonding Character," **K. R. Bowen**, **T. W. Stephens**, **H. Lu**, **D. Shan**, **K. Satish**, **W. E. Acree, Jr.** and M. H. Abraham, *Eur. Chem. Bull.*, 2, 577 (2013).
603. "Mathematical Representation of Viscosity of Ionic Liquid + Molecular Solvent Mixtures at Various Temperatures Using Jouyban-Acree Model," A. Jouyban, J. Soleymani, F. Jafari, M. Khoubnasabjafari and

- W. E. Acree Jr., *J. Chem. Eng. Data*, **58**, 1523 (2013).
604. "Analysis of Immobilized Artificial Membrane Retention Factors for Both Neutral and Ionic Species," M. H. Abraham, W. E. Acree, Jr., A. Fahr and X. Liu, *J. Chromatogr. A*, **1298**, 44 (2013).
605. "Abraham Model Correlations for Predicting Gas-to-Liquid Partition Coefficients and Activity Coefficients of Organic Solutes Dissolved in 1-(2-Methoxyethyl)-1-methylpyrrolidinium tris(Pentafluoroethyl)trifluorophosphate," R. Jiang, J. L. Anderson, T. W. Stephens, W. E. Acree, Jr. and M. H. Abraham, *Eur. Chem. Bull.*, **2**, 741 (2013).
606. "Comments Regarding Study of Molecular Interactions in Binary Mixtures of Formamide with 2-Methoxyethanol and 2-Ethoxyethanol at Varying Temperatures, W. E. Acree, Jr., *Phys. Chem. Liq.*, **51**, 764 (2013).
607. "Correlations of Solute Partitioning and Enthalpies of Solvation for Organic Solutes in Ionic Liquids using a Temperature Independent Free Energy Relationship," T. W. Stephens, B. Willis, N. Dabadge, A. Tian, W. E. Acree, Jr. and M. H. Abraham, *Eur. Chem. Bull.*, **2**, 887 (2013).
608. "Improvement of Quality in Publication of Experimental Thermophysical Property Data: Challenges, Assessment Tools, Global Implementation, and Online Support," R. D. Chirico, M. Frenkel, J. W. Magee, V. Diky, C. D. Muzny, A. F. Kazakov, K. Kroenlein, I. Abdulagatov, W. E. Acree, Jr., J. F. Brenneke, P. L. Brown, P. T. Cummings, T. W. de Loos, D. G. Friend, A. R. H. Goodwin, L. D. Hansen, W. M. Haynes, N. Koga, A. Mandelis, K. N. Marsh, P. M. Mathias, C. McCabe, J. P. O'Connell, A. Pádua, V. Rives, C. Schick, J. P. Martin Trusler, S. Vyazovkin, R. D. Weir, and J. Wu, *J. Chem. Eng. Data*, **58**, 2699 (2013). **(Featured on front cover of journal)**
609. "A Group Contribution Model for Determining the Vaporization Enthalpy of Organic Compounds at the Standard Reference Temperature of 298 K," F. Gharagheizi, P. Ilani-Kashkouli, W. E. Acree, Jr., A. H. Mohammadi, and D. Ramjugernath, *Fluid Phase Equilib.*, **360**, 279 (2013).
610. "Enthalpy of Solvation Correlations for Organic Solutes and Gases in Dichloromethane and 1,4-Dioxane," A. Wilson, A. Tian, N. Dabadge, W. E. Acree, Jr., M. A. Varfolomeev, I. T. Rakipov, S. M. Arkipova and M. H. Abraham, *Struct. Chem.*, **24**, 1841 (2013) **(by invitation, special issue devoted to Professor Maria Victoria Roux)**.
611. "QSPR Models for Prediction of Gas to Heptane and Gas to Hexadecane Solvation Enthalpies of Organic Compounds from Theoretical Molecular Descriptors," H. Golmohammadi, Z. Dashtbozorgi and W. E. Acree, Jr., *Struct. Chem.*, **24**, 1799 (2013) **(special issue devoted to Professor Maria Victoria Roux)**.
612. "Solubility of Carvedilol in Ethanol + Propylene Glycol Mixtures at Various Temperatures," S. Vahdati, A. Shayanfar, J. Hanaee, F. Martinez, W. E. Acree, Jr. and A. Jouyban, *Ind. Eng. Chem. Res.*, **52**, 16630 (2013).
613. "Thermochemical Properties of 4-N,N-Dialkylamino-7-nitrobenzofurazan Derivatives (Alkyl = Methyl, Ethyl)," A. F. L. O. M. Santos, A. L. R. Silva, O. D. F. Santiago, J. M. Goncalves, S. Pandey, W. E. Acree, Jr. and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.*, **73**, 62 (2014) **(by invitation, special memorial issue devoted to Professor Manuel Ribeiro da Silva)**.
614. "The Prediction of Blood-Tissue Partitions, Water-Skin Partitions and Skin Permeation for Agrochemicals," M. H. Abraham, J. M. R. Gola, A. Ibrahim, W. E. Acree, Jr. and X. Liu, *Pest Manage. Sci.*, **70**, 1130 (2014).
615. "Comments on Prediction of Drug Solubility in Lipid Mixtures from the Individual Ingredients," A. Jouyban and W. E. Acree, Jr., *AAPS Pharm. Sci. Tech.* **15**, 83 (2014).
616. "The Solubility of Liquid and Solid Compounds in Dry Octan-1-ol," M. H. Abraham and W. E. Acree, Jr., *Chemosphere*, **103**, 26 (2014).

617. "Comments Concerning Study of Molecular Interactions in Binary Liquid Mixtures of Ethyl Acetoacetate with Chloroform and Dimethylsulphoxide Using Excess Acoustic Parameters and Spectroscopic Methods," **W. E. Acree, Jr.** and **T. W. Stephens**, *Phys. Chem. Liq.* 52, 452 (2014).
618. "Thermochemical Investigations of Solute Transfer into Ionic Liquid Solvents: Updated Abraham Model Equation Coefficients for Solute Activity Coefficient and Partition Coefficient Predictions," **T. W. Stephens**, **V. Chou**, **A. N. Quay**, **C. Shen**, **N. Dabadge**, **A. Tian**, **M. Loera**, **B. Willis**, **A. Wilson**, **W. E. Acree, Jr.**, P. Twu, J. L. Anderson and M. H. Abraham, *Phys. Chem. Liq.* 52, 488 (2014).
619. "Comments on Role of Anions (Tetrafluoroborate, Perchlorate) of Tetrabutylammonium Salts in Determining Solvation Effects Prevailing in Industrially Essential Solvents Probed by Conductance and FT-IR Spectra," **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 59, 1372 (2014).
620. "Solubility Prediction of Pharmaceutical in Dioxane + Water Mixtures at Various Temperatures: Effects of Different Descriptors and Feature Selection Methods," A. Jouyban, A. Shayanfar, T. Ghafourian and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 195, 125 (2014).
621. "QSPR Prediction of Gas-to-Ionic Liquid Partition Coefficient of Organic Solutes Dissolved in 1-(2-Hydroxyethyl)-1-methylimidazolium tris(Pentafluoroethyl)trifluorophosphate Using the Replacement Method and Support Vector Regression," H. Golmohammadi, Z. Dashtbozorgi and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 196, 43 (2014).
622. "Commentary on Study of Assorted Interactions of an Ionic Liquid in Significant Solvent Systems Using Compensated Equation of Fuoss Conductance and Vibrational Model," **W. E. Acree, Jr.**, *Ionics*, 20, 747 (2014).
623. "Solubility of Sodium Acetate in Ternary Mixtures of Methanol, 1-Propanol, Acetonitrile and Water at 298.2 K," J. Soleymani, E. Kenndler, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 59, 2670 (2014).
624. "Infinite Dilution Activity Coefficients of Solutes Dissolved in Two Trihexyl(tetradecyl)phosphonium Ionic Liquids," F. Mutelet, D. Alonso, **T. W. Stephens**, **W. E. Acree, Jr.** and G. A. Baker, *J. Chem. Eng. Data*, 59, 1877 (2014).
625. "Commentary Regarding Comment on Concepts Against Mathematics Self-inconsistency in Thermodynamic Evaluations," **W. E. Acree, Jr.**, *J. Therm. Anal. Calorim.*, 117, 1009 (2014).
626. "Descriptors for the Prediction of Partition Coefficients of 8-Hydroxyquinoline and its Derivatives," M. H. Abraham and **W. E. Acree, Jr.**, *J. Sep. Sci. Technol.*, 49, 2135 (2014).
627. "On the Solubility of Quercetin," M. H. Abraham and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 197, 157 (2014).
628. "Solubility Determination of Tris(hydroxymethyl)aminomethane in Water + Methanol Mixtures at Various Temperatures Using a Laser Monitoring Technique," V. Jouyban-Gharamaleki, K. Jouyban-Gharamaleki, J. Soleymeni, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Eng. Data*, 59, 2305 (2014).
629. "Examination of Hydrogen-Bond Interactions Between Dissolved Solutes and Alkylbenzene Solvents Based on Abraham Model Correlations Derived from Measured Enthalpies of Solvation," M. A. Varfolomeev, I. T. Rakipov, **W. E. Acree, Jr.**, **M. Brumfield** and M. H. Abraham, *Thermochim. Acta*, 594, 68 (2014).
630. "Abraham Model Correlations for Describing Solute Transfer into Ionic Liquid Solvents: Calculation of Ion-Specific Equation Coefficients for the 4,5-Dicyano-2-(trifluoromethyl)imidazolide Anion," **T. W. Stephens**, **E. Hart**, **N. Kupraserthul**, **S. Mehta**, **A. Wadawadigi**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 52, 777 (2014).
631. "Abraham Model Correlations Describing the Solubilizing Ability of Peanut Oil," **D. M. Stovall**, **E. Hart**,

- N. Kurasertkul, S. Mehta, A. Wadawadigi, W. E. Acree, Jr. and M. H. Abraham, *Phys. Chem. Liq.*, 52, 792 (2014).
632. "Solubility of *Tris*(hydroxymethyl)aminomethane in Water + 1-Propanol Mixtures at Various Temperatures," V. Jouyban-Gharamaleki, K. Jouyban-Gharamaleki, J. Soleymani, W. E. Acree, Jr. and A. Jouyban, *J. Chem. Eng. Data*, 59, 3723 (2014).
633. "An NMR Method for the Quantitative Assessment of Intramolecular Hydrogen Bonding; Connection to Physicochemical, Environmental and Biochemical Properties," M. H. Abraham, R. J. Abraham, W. E. Acree, Jr., A. E. Aliev, A. J. Leo and W. L. Whaley, *J. Org. Chem.*, 79, 11075 (2014).
634. "Solubility of *Tris*(hydroxymethyl)aminomethane in Methanol + 1-Propanol Mixtures at Various Temperatures," V. Jouyban-Gharamaleki, K. Jouyban-Gharamaleki, J. Soleymani, E. Kenndler, W. E. Acree, Jr. and A. Jouyban, *J. Chem. Eng. Data*, 59, 4227 (2014).
635. "QSPR Prediction of Gas-to-Methanol Solvation Enthalpy of Organic Compounds Using Replacement Method and Support Vector Machine," H. Golmohammadi, Z. Dashtbozorgi, M. G. Samani and W. E. Acree, Jr., *Phys. Chem. Liq.*, 53, 46 (2015).
636. "A Simple Method for Estimating *in vitro* Air-Tissue and *in vivo* Blood-Tissue Partition Coefficients," M. H. Abraham, J. M. R. Gola, A. Ibrahim, W. E. Acree, Jr. and X. Liu, *Chemosphere*, 120, 188 (2015).
637. "Abraham Model Correlations for Solute Transfer into Tributyl Phosphate from Both Water and the Gas Phase," M. Brumfield, A. Wadawadigi, N. Kuprasertkul, S. Mehta, W. E. Acree, Jr. and M. H. Abraham, *Phys. Chem. Liq.*, 53, 10 (2015).
638. "Physicochemical and Biochemical Properties for the Dialkyl Phthalates," M. H. Abraham and W. E. Acree, Jr., *Chemosphere*, 119, 871 (2015).
639. "Comments Concerning a Possible Simplification of the Goss-Modified Abraham Solvation Equation," W. E. Acree, Jr., M. Brumfield and M. H. Abraham, *Chemosphere*, 138, 1058 (2015).
640. "Determination of Abraham Model Solute Descriptors for Three Dichloronitrobenzenes from Measured Solubilities in Organic Solvents," M. Brumfield, A. Wadawadigi, N. Kuprasertkul, S. Mehta, T. W. Stephens, M. Barrera, J. De La Rosa, L. Kennemer, J. Meza, W. E. Acree, Jr. and M. H. Abraham, *Phys. Chem. Liq.*, 53, 163 (2015).
641. "Abraham Model Correlations for Describing Solute Transfer into Diisopropyl Ether," M. Brumfield, W. E. Acree, Jr. and M. H. Abraham, *Phys. Chem. Liq.*, 53, 25 (2015).
642. "Reply to the Comment on "A Simple Method for Estimating *in vitro* Air-Tissue and *in vivo* Blood-Tissue Partition Coefficients,"" M. H. Abraham and W. E. Acree, Jr., *Chemosphere*, 120, 797 (2015).
643. "Analysis of the Solubility of Betaine: Calculation of Descriptors and Physicochemical Properties," M. H. Abraham and W. E. Acree, Jr., *Fluid Phase Equilib.*, 387, 1 (2015).
644. "Prediction of Gas-to-Liquid Partition Coefficient of Organic Solutes Dissolved in 1-(2-Methoxyethyl)-1-methylpyrrolidinium *tris*(Pentafluoroethyl)trifluorophosphate using QSPR Approaches," Z. Dashtbozorgi, H. Golmohammadi and W. E. Acree, Jr., *J. Mol. Liq.*, 201, 21 (2015).
645. "Determination of Abraham Model Solute Descriptors for the Monomeric and Dimeric Forms of *trans*-Cinnamic Acid Using Measured Solubilities from the Open Notebook Science Challenge," J.-C. Bradley, M. H. Abraham, W. E. Acree, Jr., A. S. I. D. Lang, S. N. Beck, D. A. Bulger, E. A. Clark, L. N. Condrón, S. T. Costa, E. M. Curtin, S. B. Kurtu, M. I. Mangir, and M. J. McBride, *Chem. Central J.*, 9, 11/1 (2015).
[by invitation for special J.-C. Bradley memorial issue]
646. "Comment on Structural Determinants of Drug Partitioning in Surrogates of Phosphatidylcholine Bilary

- Strata,” **W. E. Acree, Jr.**, **M. Brumfield** and M. H. Abraham, *Mol. Pharm.*, 12, 1328 (2015).
647. “Commentary Regarding on Study of Accoustic Parameters in Binary Mixture at Variable Frequencies,” **W. E. Acree, Jr.**, *Int. J. Thermophys.*, 36, 804 (2015).
648. “Abraham Model Enthalpy of Solvation Correlations for Solutes Dissolved in 1-Alkanol Solvents (C₄-C₆),” **E. Hart**, **H. Zettl**, **D. Grover**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 53, 638 (2015)..
649. “Predicting Abraham Model Solvent Coefficients,” J.-C. Bradley, M. H. Abraham, **W. E. Acree, Jr.** and Andrew S. Lang, *Chem. Central J.*, 9, 12/1 (2015). [by invitation for special **J.-C. Bradley memorial issue**]
650. “Abraham Model Correlations for Solute Transfer into 2-Ethoxyethanol from Water and from the Gas Phase,” I. A. Sedov, M. A. Stolov, **E. Hart**, **D. Grover**, **H. Zettl**, **V. Koshevarova**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Mol. Liq.*, 208, 63 (2015).
651. “Studies on the Hydrogen Bond Acidity, and Other Descriptors and Properties for Hydroxyflavones and Hydroxyisoflavones,” M. H. Abraham, **W. E. Acree, Jr.**, C. E. Earp, A. Vladimirova, and W. L. Whaley, *J. Mol. Liq.*, 208, 363 (2015).
652. “Abraham Model Correlations for Solute Transfer into 2-Methoxyethanol from Water and from the Gas Phase,” **E. Hart**, **D. Grover**, **H. Zettl**, **V. Koshevarova**, **S. Zhang**, **C. Dai**, **W. E. Acree, Jr.**, I. A. Sedov, M. A. Stolov and M. H. Abraham, *J. Mol. Liq.*, 209, 738 (2015).
653. “Abraham Model Correlations for Solute Transfer into 2-Butoxyethanol from Water and from the Gas Phase at 298 K,” I. A. Sedov, M. A. Stolov, **E. Hart**, **D. Grover**, **H. Zettl**, **V. Koshevarova**, **C. Dai**, **S. Zhang**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Mol. Liq.*, 209, 196 (2015).
654. “Solubility of Tris(hydroxymethyl)aminomethane in Water + Methanol + 1-Propanol Mixtures at Various Temperatures,” V. Jouyban-Gharamaleki, K. Jouyban-Gharamaleki, J. Soleymani, **W. E. Acree, Jr.**, E. Kenndler and A. Jouyban, *J. Chem. Eng. Data*, 60, 2515 (2015).
655. “Abraham Model Enthalpy of Solvation Correlations for Solutes Dissolved in Dimethyl Carbonate and Diethyl Carbonate,” **E. Hart**, **D. Grover**, **H. Zettl**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 53, 732 (2015).
656. “Comparison of Lipid Membrane-Water Partitioning with Various Organic Solvent-Water Partitions of Neutral Species and Ionic Species; Uniqueness of Cerasome as a Model for the Stratum Corneum in Partition Processes,” K. Zhang, A. Fahr, M. H. Abraham, **W. E. Acree, Jr.**, D. J. Tobin and X. Liu, *Int. J. Pharm.*, 493, 1 (2015).
657. “Effect of Halogen Substitution on the Enthalpies of Solvation and Hydrogen Bonding of Organic Solutes in Chlorobenzene and 1,2-Dichlorobenzene Derived Using Multi-parameter Correlations,” M. A. Varfolomeev, I. T. Rakipov, A. A. Khachatryan, **W. E. Acree, Jr.**, **M. Brumfield** and M. H. Abraham, *Thermochim. Acta*, 617, 8 (2015).
658. “Abraham Model Correlations for Estimating Solute Transfer of Neutral Molecules into Anhydrous Acetic Acid from Water and from the Gas Phase,” **D. M. Stovall**, **A. Schmidt**, **C. Dai**, **S. Zhang**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Mol. Liq.*, 212, 16 (2015).
659. “Comments Concerning a Possible Simplification of the Goss-Modified Abraham Solvation Equation,” **W. E. Acree, Jr.**, **M. Brumfield** and M. H. Abraham, *Chemosphere*, 138, 1058 (2015).
660. “Prediction of Analytes’ Electrophoretic Mobility in Mixed Solvent Buffers Using Abraham Solvation Parameters,” A. Jouyban, R. Fazell-Bakhtiyari, A. Shayanfar and **W. E. Acree, Jr.**, *Anal. Methods*, 7, 8123 (2015).

661. "The Transfer of Neutral Molecules from Water and from the Gas Phase to Acetophenone and to Aniline," M. H. Abraham, **M. Zad** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 212, 301 (2015).
662. "Using Water-Solvent Systems to Estimate in vivo Blood-Tissue Partition Coefficients," C. E. Berricott, E. A. Knight, **W. E. Acree, Jr.** and A. S. Lang, *Chem. Central J.*, 9, 58/1 (2015). [by invitation for special **J.-C. Bradley memorial issue**]
663. "Development of Abraham Model Correlations for Solute Transfer into Both 2-Propoxyethanol and 2-Isopropoxyethanol at 298.15 K," I. A. Sedov, D. Khailbrakhmanova, **E. Hart**, **D. Grover**, **H. Zettl**, **V. Koshevarova**, **C. Dai**, **S. Zhang**, **A. Schmidt**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Mol. Liq.*, 212, 833 (2015).
664. "A Linear Free Energy Analysis of PAMPA Models for Biological Systems," J. He, M. H. Abraham, **W. E. Acree, Jr.** and Y. Zhao, *Int. J. Pharm.*, 496, 717 (2015).
675. "Some Numerical Analyses on the Solubility of Vanillin in Carbitol + Water Solvent Mixtures," F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *Rev. Colomb. Quim.*, 44, 34 (2015).
666. "Abraham Model Correlation for Describing Solute Transfer into Anhydrous 1,2-Propylene Glycol of Neutral and Ionic Species," **D. M. Stovall**, **C. Dai**, **S. Zhang**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 54, 1 (2016).
667. "Determination of the Solubilizing Character of 2-Methoxyethyl(dimethyl)ethylammonium tris(Pentafluoro-ethyl)trifluorophosphate Based on the Abraham Solvation Parameter Model," P. Twu, J. L. Anderson, **D. M. Stovall**, **S. Zhang**, **C. Dai**, **A. Schmidt**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 54, 110 (2016).
668. "Descriptors for Ions and Ion-pairs for Use in Linear Free Energy Relationships," M. H. Abraham and **W. E. Acree, Jr.**, *J. Chromatogr. A*, 1430, 2 (2016). [by invitation as an Editor's choice review article]
669. "Development of Abraham Model Expressions for Predicting Enthalpies of Solvation of Solutes Dissolved in Acetic Acid," **E. Hart**, **D. Grover**, **H. Zettl**, **V. Koshevarova**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 54, 141 (2016).
670. "Comments on Solubility and Thermodynamic Behavior of Vanillin in Propane-1,2-diol + Water Cosolvent Mixtures at Different Temperatures," A. Jouyban and **W. E. Acree, Jr.**, *Food Chem.*, 192, 1049 (2016).
671. "Development of Abraham Model Correlations for Predicting Enthalpies of Solvation of Nonionic Solutes Dissolved in Formamide," **A. Schmidt**, **M. Zad**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 54, 323 (2016).
672. "Further Comments on Solubility and Thermodynamic Behavior of Vanillin in Propane-1,2-diol + Water Cosolvent Mixtures at Different Temperatures," F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *Food Chem.*, 196, 757 (2016).
673. "Comments on Solubility and Thermodynamic Function of a New Anticancer Drug Ibrutinib in 2-(2-Ethoxyethoxy)ethanol + Water Mixtures at Different Temperatures," F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 95, 180 (2016).
674. "Comments Concerning Experimental Determination and Correlation of the Solubility of 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (DMHF) in Binary (Ethanol + Water) Solvent Mixtures," A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 213, 273 (2016).
676. "Comments Concerning the Density, the Refractive Index and the Adjustment of the Excess Thermodynamic Properties by Means of the Multiple Linear Regression Method for the Ternary System Ethylbenzene-Octane-Propylbenzene," **W. E. Acree, Jr.**, *Thermochim. Acta*, 625, 1 (2016).

677. "Calculation on Solubility of N-Ethylcarbazole in Ethanol + Petroleum Ether Mixtures at Various Temperatures," A. Jouyban and **W. E. Acree, Jr.**, *Korean J. Chem. Eng.*, **33**, 1698 (2016).
678. "Further Numerical Analysis on the Solubility of Ibrutinib in Ethanol + Water Mixtures at Different Temperatures," F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **218**, 35 (2016).
679. "Determination of Abraham Model Solute Descriptors for Isophthalic Acid from Experimental Solubility Data in Organic Solvents at 298 K," **A. Schmidt, D. Grover, H. Zettl, V. Koshevarova, C. Dai, S. Zhang, E. Hart, M. Brumfield, J. De La Rosa, V. Portillo, A. Pugh, A. Sanchez, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **64**, 747 (2016).
680. "Solution Thermodynamics and Preferential Solvation of Sulfamethazine in Methanol + Water Mixtures," D. R. Delgado, O. A. Almanza, F. Martinez, M. A. Pena, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **97**, 264 (2016).
681. "Development of Abraham Model Correlations for Enthalpies of Solvation of Organic Solutes Dissolved in 1,3-Dioxolane," **E. Higgins, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **54**, 786 (2016).
682. "Further Calculations on Solubility of 3-Amino-1-adamantanol in Ethanol + Water Binary Solvent Mixtures at Various Temperatures," A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **219**, 211 (2016).
683. "Generally Trained Models to Predict Solubility of Drugs in Carbitol + Water Mixtures at Various Temperatures," M. Khoubnasabjafari, A. Shaynfar, F. Martinez, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, **219**, 435 (2016).
684. "Equations for Water-Triolein Partition Coefficients for Neutral Species; Comparison with Other Water-Solvent Partitions, and Environmental and Toxicological Processes," M. H. Abraham and **W. E. Acree, Jr.**, *Chemosphere*, **154**, 48 (2016).
685. "The Factors that Influence Solubility in Perfluoroalkanes," M. H. Abraham, **W. E. Acree, Jr.** and E. Matteoli, *Fluid Phase Equilib.*, **241**, 59 (2016).
686. "Comments on Solubility and Solution Thermodynamics of 2,3,4,5-Tetrabromothiophene in (Ethanol + Trichloromethane) Binary Solvent Mixtures," A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, **241**, 88 (2016).
687. "Abraham Model Linear Free Energy Relationships as a Means of Extending Solubility Studies to Include the Estimation of Solute Solubilities in Additional Organic Solvents," **W. E. Acree, Jr., M. Y. Horton, E. Higgins** and M. H. Abraham, *J. Chem. Thermodyn.*, **102**, 392 (2016).
688. "Phase Transition Enthalpy Measurements of Organic and Organometallic Compounds. Sublimation, Vaporization and Fusion Enthalpies from 1880 to 2015, Part 1: C₁ - C₁₀," **W. E. Acree, Jr.** and J. S. Chickos, *J. Phys. Chem. Ref. Data*, **45**, 033101/1-033101/565 (2016).
689. "Further Numerical Analyses on the Solubility of Sulfapyridine in Ethanol + Water Mixtures," D. R. Delgado, M. A. Pena, F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *Pharm. Sci.*, **22**, 143 (2016).
690. "Solubility and Apparent Specific Volume at Saturation of Some Pharmaceutical Salts in Methanol + Water Mixtures at 298.15 K," M. M. Munoz, M. A. Pena, O. A. Almanza, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **220**, 842 (2016).
691. "Equations for the Partition of Neutral Molecules, Ions and Ionic Species from Water to Water-Methanol Mixtures," M. H. Abraham and **W. E. Acree, Jr.**, *J. Solution Chem.*, **45**, 861 (2016).
692. "Activity Coefficients at Infinite Dilution for Organic Solutes Dissolved in Two 1,2,3-Tris(diethylamino)-cyclopentylum Based Room Temperature Ionic Liquids," A. Chikh Baelhadj, F. Mutelet, **B. Jiang** and **W.**

- E. Acree, Jr.**, *J. Mol. Liq.*, 223, 89 (2016).
693. “Solubility of Trisodium Citrate in Water + Methanol Mixtures at Various Temperatures,” J. Soleymani, V. Jouyban-Gharamaleki, K. Jouyban-Gharamaleki, **W. E. Acree, Jr.**, E. Kenndler and A. Jouyban, *J. Mol. Liq.*, 221, 166 (2016).
694. “Solubility and Preferential Solvation of Sulfanilamide, Sulfamethizole and Sulfapyridine in Methanol + Water Mixtures at 298.15 K,” Z. J. Cardenas, D. M. Jimenez, O. A. Almanza, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *J. Solution Chem.*, 45, 1479 (2016).
695. “Infinite Dilution Activity Coefficients of Solutes Dissolved in Anhydrous Alkyl(dimethyl)isopropylammonium bis(Trifluoromethylsulfonyl)imide Ionic Liquids Containing Functionalized- and Nonfunctionalized-Alkyl Chains,” F. Mutelet, D. Alonso, S. Ravula, Gary A. Baker, **B. Jiang**, and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 222, 295 (2016).
696. “Modelling the Solubility and Preferential Solvation of Gallic Acid in Cosolvent + Water Mixtures,” A. Jouyban, **W. E. Acree, Jr.** and F. Martinez, *J. Mol. Liq.*, 224, 502 (2016).
697. “Modelling the Solubility and Preferential Solvation of Bergenin in DMSO + Water Mixtures,” F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *Latin Amer. J. Pharm.*, 35, 2185 (2016).
698. “Commentary on Measurement and Correlation of the Solubility of Telmisartan (Form A) in Nine Different Solvents from 277.85 to 338.35 K,” **W. E. Acree, Jr.**, **M. Y. Horton**, **E. Higgins** and M. H. Abraham, *J. Solution Chem.*, 45, 1902 (2016).
699. Solvation Descriptors for Porphyrins (Porphines),” M. H. Abraham and **W. E. Acree, Jr.**, *New J. Chem.*, 40, 9945 (2016).
700. “Correct Derivation of a Combined Version of the Jouyban-Acree and van’t Hoff Model and Some Comments on Determination and Correlation of the Solubility of Myricetin in Ethanol and Water Mixtures from 288.15 to 323.15 K,” A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 55, 131 (2017).
701. “Ion-Specific Equation Coefficient Version of the Abraham Model for Ionic Liquid Solvents: Determination of Coefficients for Tributylethylphosphonium, 1-Butyl-1-methylmorpholinium, 1-Allyl-3-methylimidazolium and Octyltriethylammonium Cations, **B. Jiang**, **M. Y. Horton**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 55, 358 (2017)..
702. “Abraham Model Expressions for Describing Water-to-Organic Solvent and Gas-to-Organic Solvent Partition Coefficients for Solute Transfer into Anhydrous Poly(Ethylene Glycol) Dialkyl Ether Solvents at 298.15 K,” **E. Hart**, **S. Cheeran**, **G. E. Little**, **H. Singleton**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 55, 347 (2017).
703. “Solubility of Phenobarbital in Aqueous Cosolvent Mixtures Revisited: IKBI Preferential Solvation Analysis,” F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 55, 432 (2017).
704. “Abraham Model Correlations for Ionic Liquid Solvents: Computation Methodology for Updating Existing Equation Coefficients,” **W. E. Acree, Jr.** and **B. Jiang**, *Phys. Chem. Liq.*, 55, 457 (2017).
705. “Abraham Model Ion-Specific Equation Coefficients for the 1-Butyl-2,3-dimethylimidazolium and 4-Cyano-1-butylpyridinium Cations Calculated from Measured Gas-to-Liquid Partition Coefficient Data,” **A. Lu**, **B. Jiang**, **S. Cheeran**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 55, 218 (2017).
706. “Computation of Abraham Model Solute Descriptors for 3-Methyl-4-nitrobenzoic Acid from Measured Solubility Data,” **W. E. Acree, Jr.**, **K. R. Bowen**, **M. Y. Horton** and M. H. Abraham, *Phys. Chem. Liq.*, 55, 482 (2017).

707. "Solubility and Preferential Solvation of Caffeine and Theophylline in Methanol + Water Mixtures at 298.15 K," Z. J. Cardenas, D. M. Jimenez, O. A. Almanza, A. Jouyban, F. Martinez, and **W. E. Acree, Jr.**, *J. Solution Chem.*, accepted for publication.
708. "The Objective Minimization Function for the Mathematical Representation of Solubility Data for Solutes Dissolved in Binary Solvent Mixtures," **W. E. Acree, Jr.** and **M. Y. Horton**, *J. Chem. Thermodyn.*, 104, 61 (2017).
709. "Abraham Model Linear Free Energy Relationships for Describing the Partitioning and Solubility Behavior of Nonelectrolyte Solutes Dissolved in Pyridine at 298.15 K," I. A. Sedov, T. Salikov, **E. Hart**, **E. Higgins**, **W. E. Acree, Jr.** and M. H. Abraham, *Fluid Phase Equilibr.*, 431, 68 (2017).
710. "Determination of Abraham Model Solution Descriptors and Preferential Solvation from Measured Solubilities for 4-Nitropyrazole Dissolved in Binary Aqueous-Organic Solvent Mixtures," **W. E. Acree, Jr.**, **A. M. Ramirez**, **S. Cheeran** and F. Martinez, *Phys. Chem. Liq.*, 55, 605 (2017).
711. "Preferential Solvation of Etoricoxib in Some Aqueous Binary Cosolvent Mixtures at 298.15 K," F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 55, 291 (2017).
712. "Solubility of Sorbic Acid in Organic Mono-solvents: Calculation of Abraham Model Solute Descriptors from Measured Solubility Data," **M. Barrera**, **E. Hart**, **M. Y. Horton**, **E. Higgins**, **S. Cheeran**, G. E. Little, H. Singleton, D. Calhoun, K. Gillispie, F. Khalil, R. Williams, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 55, 650 (2017).
713. Comment on Measurement and Correlation of the Solubility of *p*-Coumaric Acid in Nine Pure and Water + Ethanol Mixed Solvents at Temperatures from 293.15 to 333.15 K," **W. E. Acree, Jr.**, **M. Barrera** and M. H. Abraham, *J. Chem. Eng. Data*, 62, 578 (2017).
714. "Correct Derivation of Cosolvency Models and Some Comments on Solubility of Fenofibrate in Different Binary Solvents: Experimental Data and Results of Thermodynamic Modeling," A. Jouyban, F. Martinez and W. E. Acree, Jr., *J. Chem. Eng. Data*, 62, 1153 (2017).
715. "Development of Abraham Model Correlations for Solute Transfer into Diethylene Glycol from Both Water and the Gas Phase at 298.15," I. A. Sedov, T. I. Magsumov, **E. Hart**, **E. Higgins**, **D. Grover**, **H. Zettl**, **M. Zad**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, 46, 331 (2017).
716. "Phase Transition Enthalpy Measurements of Organic and Organometallic Compounds and Ionic Liquids. Sublimation, Vaporization and Fusion Enthalpies from 1880 to 2015, Part 2: C₁₁ - C₁₉₂," **W. E. Acree, Jr.** and J. S. Chickos, *J. Phys. Chem. Ref. Data*, 46, 013104/1 to 013104/532 (2017).
717. "Enthalpies of Solution and Enthalpies of Solvation of Organic Solutes in Ethylene Glycol at 298.15 K: Prediction and Analysis of Intermolecular Interaction Contributions," M. A. Stolov, K. V. Zaitseva, M. A. Varfolomeev and **W. E. Acree, Jr.**, *Thermochim. Acta*, 648, 91 (2017).
718. "Comments on Thermodynamic Models for Correlation of Solubility of Hexaquocobalt(II) Bis(*p*-toluenesulfonate) in Liquid Mixtures of Water and Ethanol from 288.15 to 333.15 K," **W. E. Acree, Jr.**, A. Jouyban and F. Martinez, *J. Solution Chem.*, 46, 734 (2017).
719. "Solubility and Preferential Solvation of Some *n*-Alkyl-parabens in Methanol + Water Mixtures at 298.15 K," Z. J. Cardenas, D. M. Jimenez, D. R. Delgado, O. A. Almanza, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 108, 26 (2017).
720. "Further Calculations on Solubility of 2-Chloro-3-(trifluoromethyl)pyridine in Ethanol + 1-Propanol Solvent Mixtures at Various Temperatures," A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 240, 678 (2017).
721. "Comments Concerning Molar Volumes and Viscosities of N-[(4-Bromo-3,5-difluorine)]maleimide

- (BDPM)-DMF-Toluene and BDPM-DMF-Ethanol Mixtures in a Range 298 K to 318 K”, **W. E. Acree, Jr.**, *J. Mol. Liq.*, 231, 25 (2017).
722. “Commentary on Solubility and Solution Thermodynamics of Cetilistat in Water and (Acetone, Isopropyl Alcohol, Acetonitrile) Binary Solvnet Mixtures,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 230, 518 (2017).
723. “Comment on Solubility of Trimethoprim in Selected Pure Solvents and (Water + Ethanol/2-Propanol) Mixed-Solvent Systems,” **W. E. Acree, Jr.**, A. Jouyban and F. Martinez, *J. Chem. Eng. Data*, 62, 1157 (2017).
724. “Commentary on Thermodynamic Equilibrium of Hydroxyacetic Acid in Pure and Binary Solvent Systems,” **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 108, 199 (2017).
725. “Commentary on Effect of β -Alanine and the Solvent Composition on the Solubility of Solvate of Calcium D-Pantothenate Containing Four Molecules of Methanol and One Molecule of Water (D-PC·4MeOH·H₂O),” **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 110, 1 (2017).
726. “Descriptors for Ferrocene and Some Substituted Ferrocenes,” M. H. Abraham and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 232, 325 (2017).
727. “Commentary on Measurement and Correlation of Solubility of 1,3,5-Trioxane in Binary Solvents from (288.15 to 328.15) K,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 238, 430 (2017).
728. “Determination of Abraham Model Solute Descriptors for 2-Methyl-3-nitrobenzoic Acid from Measured Solubility Data in Alcohol, Alkyl Ether, Alkyl Acetate and 2-Alkoxyethanol Mono-solvents,” **E. Hart, A. M. Ramirez, S. Cheeran, M. Barrera, M. Y. Horton, A. Wadawadigi, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 55, 796 (2017).
729. “The Correlation and Prediction of Infinite Dilution Activity Coefficients of Solutes in Water at 298.15 K,” M. H. Abraham, **W. E. Acree, Jr.** and A. M. Zissimos, *Fluid Phase Equilib.*, 449, 117 (2017).
730. “Solubility and Preferential Solvation of Caffeine and Theophylline in Methanol + Water Mixtures at 298.15 K,” Z. J. Cardenas, D. M. Jimenez, O. A. Almanza, A. Jouyban, F. Martinez, and **W. E. Acree, Jr.**, *J. Solution Chem.*, 46, 1605 (2017).
731. “Comment on Measurement and Correlation of the Solubility of Maltitol in Different Pure Solvents, Methanol-Water Mixtures, and Ethanol-Water Mixtures,” A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 62, 1919 (2017).
732. “Gas-Solvent and Water-Solvent Partition of *trans*-Stilbene,” M. H. Abraham and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 238, 58 (2017).
733. “Commentary on Correlation of Solubility of Hexamethylene-1,6-bisthiosulphate Disodium Salt Dihydrate Versus Dielectric Constants of Water + Ethanol Mixture,” **W. E. Acree, Jr.** and C. Yang, *Fluid Phase Equilib.*, 447, 27 (2017).
734. “Study of Benzyl- or Cyclohexyl-Functionalized Ionic Liquids Using Inverse Gas Chromatography,” F. Mutelet, H. Djebouri, G. A. Baker, S. Ravula, **B. Jiang, X. Tong, D. Woods** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 242, 550 (2017).
735. “Descriptors for Pentane-2,4-dione and its Derivatives,” M. H. Abraham and **W. E. Acree, Jr.**, *J. Solution Chem.*, 46, 1625 (2017).
736. “Commentary on Experimental Measurements and Equilibrium Study of Functional D-Sorbitol in Good and Anti-Solvent Binary Mixtures,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 241, 731 (2017).
737. “Commentary on Studies on Molar Volume, Dielectric Properties and Refractive Indices of Cyanex 923 +

- Benzene/Xylene at 300 K,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 241, 792 (2017).
738. “Comments on Temperature-Dependent Solubility of β -Alanine in Different Binary Solvents from 288.15 K to 323.15 K: Measurement and Thermodynamic Modeling,” A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 243, 245 (2017).
739. “Commentary on Uncover the Effect of Solvent and Temperature on Solid-Liquid Equilibrium Behavior of L-Norvaline,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 246, 91 (2017).
740. “Commentary on Extended Hildebrand Approach: An Empirical Model for Solubility Prediction of Etodolac in 1,4-Dioxane and Water Mixtures,” **W. E. Acree, Jr.**, *J. Solution Chem.*, 46, 2130 (2017).
741. “Determination of Molar Refractions and Abraham Descriptors for tris(Acetylacetonato)chromium(III), tris(Acetylacetonato)iron(III) and tris(Acetylacetonato)cobalt(III),” M. H. Abraham, **W. E. Acree, Jr.**, A. F. Fucaloro and A. W. Zanella, *New J. Chem.*, 41, 14259 (2017).
742. “Abraham Model Correlations for Triethylene Glycol Solvent Derived from Infinite Dilution Activity Coefficient, Partition Coefficient and Solubility Data Measured at 298.15 K,” I. A. Sedov, T. I. Magsumov, **E. Hart**, **A. M. Ramirez**, **S. Cheeran**, **M. Barrera**, **M. Y. Horton**, **A. Wadawadigi**, **O. Zha**, **X. Y. Tong**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, 46, 2249 (2017).
743. “Preferential Solvation of Fenofibrate in (Ethanol or Acetone) + Water Mixtures at 298.15 K,” A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Iranian J. Chem. Chem. Eng.*, 36, 123 (2017).
744. “Application of a General Computer Algorithm Based on the Group-Additivity Method for the Calculation of Two Molecular Descriptors at Both Ends of Dilution: Liquid Viscosity and Activity Coefficient in Water at Infinite Dilution,” R. Naef and **W. E. Acree, Jr.**, *Molecules*, 23, 5/1 (2018).
745. “Volumetric Properties of {PEG 200 (or 300) (1) + Water (2)} Mixtures at Several Temperatures and Correlation with the Jouyban-Acree Model,” M. M. Munoz, D. A. Tinjaca, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 56, 100 (2018).
746. “Solubility and Preferential Solvation of Phenacetin in Methanol + Water Mixtures at 298.15 K,” Z. J. Cardenas, O. A. Almanza, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 56, 16 (2018).
747. “Commentary on Investigation on Molecular Interaction Studies of Binary Mixture of DEHPA and Petrofin at 298.15 K,” **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 56, 279 (2018).
748. “Comments on Solubility and Dissolution Thermodynamic Data of Cefpiramide in Pure Solvents and Binary Solvents,” **W. E. Acree, Jr.**, *J. Solution Chem.*, 47, 198 (2018).
749. “Comments on Thermodynamic Modeling Studies of Aqueous Solubility of Caffeine, Gallic Acid and their Cocrystal in the Temperature Range of 303 K - 363 K,” **W. E. Acree, Jr.**, *Fluid Phase Equilibr.*, 463, 32 (2018).
750. “The Correlation and Prediction of the Temperature Variation of Infinite Dilution Activity Coefficients of Compounds in Water,” M. H. Abraham and **W. E. Acree, Jr.**, *Fluid Phase Equilibr.*, 455, 1 (2018).
751. “Comments Concerning Solubility and Dissolution Thermodynamic Properties of 1,6-bis[3-(3,5-di-*tert*-Butyl-4-hydroxyphenyl)propionamide]hexane in Pure Solvent and Binary Solvent Mixtures,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 256, 380-381 (2018).
752. “Partition of Neutral Molecules and Ions from Water to o-Nitrophenyl Octyl Ether and of Neutral Molecules from the Gas Phase to o-Nitrophenyl Octyl Ether,” M. H. Abraham, **W. E. Acree, Jr.** and X. Liu, *J. Solution Chem.*, 47, 293 (2018).
753. “Infinite Dilution Activity Coefficients and Gas-Liquid-Liquid Partition Coefficients of Organic Solutes

- Dissolved in 1-Benzylpyridinium bis(Trifluoromethylsulfonyl)imide and 1-Cyclohexylmethyl-1-pyrrolidinium bis(Trifluoromethylsulfonyl)imide,” F. Mutelet, S. Ravula, G. A. Baker, **D. Woods**, **X. Tong** and **W. E. Acree, Jr.**, *J. Solution Chem.*, **47**, 308 (2018).
754. “Comment on Solubility and Thermodynamic Analysis of 1,6-Hexanediamine in Mono-solvents and 1-Butanol + Cyclohexane Mixed Solvents at Different Temperatures,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **259**, 16 (2018).
755. “Comments on Solid-Liquid Phase Equilibrium and Thermodynamic Properties of Olaparib in Selected Organic Solvents and (Tetrahydrofuran + MTBE, Acetonitrile + Isopropyl Alcohol) Binary Solvent Mixtures,” **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **63**, 853 (2018).
756. “Comments on Determination and Thermodynamic Modeling of Solid-Liquid Phase Equilibrium for Esomeprazole Sodium in Monosolvents and in the (Ethanol + Ethyl Acetate) Binary Solvent Mixtures,” **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **63**, 855 (2018).
757. “Mathematical Derivation of the Jouyban-Acree Model to Represent Solute Solubility Data in Mixed Solvents at Various Temperatures,” A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **256**, 541 (2018).
758. “Analysis of Solute-Pyridine Intermolecular Interactions Based on Experimental Enthalpies of Solution and Enthalpies of Solvation of Solutes Dissolved in Pyridine,” M. A. Varfolomeev, M. A. Stolov, R. N. Nagrimonov, I. T. Rakipov, **W. E. Acree, Jr.** and M. H. Abraham, *Thermochim. Acta*, **660**, 11 (2018).
759. “Comments Concerning Measurement of the Solubility of the Salt 2-Mercaptobenzothiazole with Cyclohexylamine and tert-Butylamine in Various Solvents at Low Temperatures: Models and Thermodynamic Parameters,” **W. E. Acree, Jr.**, *Fluid Phase Equilibr.*, **465**, 48 (2018).
760. “Comments on the Determination and Correlation of the Solubility and Thermodynamic Parameters of 2,3,5,4'-Tetrahydroxystilbene-2-O- β -D-glucoside in Pure Organic Solvents,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **259**, 359 (2018).
761. “Descriptors for α,ω -Dicarboxylic Acids from Oxalic Acid to Sebacic Acid,” M. H. Abraham and **W. E. Acree, Jr.**, *Fluid Phase Equilibr.*, **467**, 17 (2018).
762. “Determination of Abraham Model Correlations for Solute Transfer into Propyl Acetate Based on Experimental Activity Coefficient and Solubility Data,” I. A. Sedov, T. M. Salikov, D. R. Khaibrakhmanova, **A. Wadawadigi**, **O. Zha**, **E. Qian**, **E. Hart**, **M. Barrera**, **W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, **47**, 634 (2018).
763. “Incorporation of Hydrogen Bond Angle Dependency into G-SFED Model and Its Application,” S. Ma, S. Hwang, S. Lee, **W. Acree, Jr.** and K. T. No, *J. Chem. Inform. Model.*, **58**, 761 (2018).
764. “Abraham Model Solute Descriptors Reveal Strong Intramolecular Hydrogen Bonding in 1,4-Dihydroxy-anthraquinone and 1,8-Dihydroxyanthraquinone,” **W. E. Acree, Jr.**, **K. Smart** and M. H. Abraham, *Phys. Chem. Liq.*, **56**, 416 (2018).
765. “Illustration of the Calculation of Solute Descriptors for Maltol from Published Solubility Data,” **W. E. Acree, Jr.**, **M. Jodray** and M. H. Abraham, *Phys. Chem. Liq.*, **56**, 403 (2018).
766. “Study of Some Volumetric and Refractive Properties of {PEG 300 (1) + Ethanol (2)} Mixtures at Several Temperatures,” M. M. Munoz, D. A. Tinjaca, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **56**, 391 (2018).
767. “Determination Of Abraham Model Solute Descriptors for Monomeric 3,4,5-Trimethoxybenzoic Acid from Experimental Solubility Data in Organic Solvents Measured at 298.2 K,” **E. Hart**, **A. Klein**, **O. Zha**, **A. Wadawadigi**, **E. Qian**, **S. Dunn**, **J. Herron**, **K. Kankolongo**, **S. Ryan**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **56**, 381 (2018).

768. "Comments on Solution Thermodynamics of Benzotriazole in Different Pure Solvents," **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **63**, 1844 (2018).
769. "Solution Thermodynamics and Preferential Solvation of Atenolol in {Ethanol (1) + Water (2)} Cosolvent Mixtures," A. Jouyban, **W. E. Acree, Jr.** and F. Martinez, *J. Appl. Solution Chem. Model.*, **7**, 1 (2018).
770. "Comment on Determination and Correlation of Dipyrindamole *p*-Toluene Sulfonate Solubility in Seven Alcohol Solvents and Three Binary Solvents," **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **63**, 2322 (2018).
771. "Comments on Solubility and Thermodynamic Properties of Maltol in Different Pure Solvents," **W. E. Acree, Jr.**, *J. Mol. Liq.*, **263**, 247 (2018).
772. "Abraham Model Correlations for Describing the Thermodynamic Properties of Solute Transfer into Pentyl Acetate Based on Headspace Chromatographic and Solubility Measurements," I. A. Sedov, T. M. Salikov, **A. Wadawadigi, O. Zha, E. Qian, W. E. Acree, Jr.** and M. H. Abraham, *J. Chem. Thermodyn.*, **124**, 133 (by invitation, published in VSI: Solubility special issue).
773. "Calculation of the Surface Tension of Ordinary Organic and Ionic Liquids by Means of a Generally Applicable Computer Algorithm Based on the Group-Additivity Method," R. Naef and **W. E. Acree**, *Molecules*, **23**, 1224/1 (2018).
774. "Descriptors for Cyclooctasulfur - Estimation of Water-Solvent Partition Coefficients, Solubilities in Solvents, and Physicochemical Properties," M. H. Abraham and **W. E. Acree, Jr.**, *ACS Omega*, **3**, 5516 (2018).
775. "Solubility and Preferential Solvation of Benzocaine in {Methanol (1) + Water (2)} Mixtures at 298.15," Z. J. Cardenas, D. M. Jimenez, O. A. Almanza, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **56**, 465 (2018).
776. "Comment on Measurement and Correlation of the Solubility of 2,6-Dihydroxybenzoic Acid in Alcohols and Binary Solvents," E. Rahimpour, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **63**, 2329 (2018).
777. "Comment on Measurement and Correlation of Solubility of Two Isomers of Cyanopyridine in Eight Pure Solvents from 268.15 to 318.15 K," **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **63**, 2314 (2018).
778. "Solubility and Apparent Specific Volume of Sucrose in Some Aqueous Polyethylene Glycol Mixtures at 298.2 K," D. A. Tinjaca, M. M. Munoz, E. Rahimpour, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Pharm. Sci.*, **24**, 163 (2018).
779. "Comment on Measurement, Correlation, and Thermodynamic Properties for Solubilities of Bioactive Compound (-)-Epicatechin in Different Pure Solvents at 298.15 K to 338.15 K," **W. E. Acree, Jr.** and F. Martinez, *J. Mol. Liq.*, **266**, 441 (2018).
780. "Calculation of the Abraham Model Solute Descriptors for the Pharmaceutical Compound Acipimox Based on Experimental Solubility Data," **W. E. Acree, Jr.**, **M. Che, G. Lee** and M. H. Abraham, *Phys. Chem. Liq.*, accepted for publication.
781. "Further Calculations on the Solubility of Dipyrone in Some Binary Solvent Mixtures at Various Temperatures," A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, accepted for publication.
782. "Development of Abraham Model Correlations for Describing Solute Transfer of Molecular Solutions into Propanenitrile and Butanenitrile from Water and from the Gas Phase," **E. Hart, A. Klein, M. Barrera, M. Jodray, K. Rodriguez, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, accepted for publication.
783. "Equilibrium Solubility, Preferential Solvation and Apparent Specific Volume of Sucrose in Some

- {Cosolvent (1) + Water (2)} Mixtures at 298.2 K,” D. A. Tinjaca, M. M. Munoz, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, accepted for publication.
784. “Updated Abraham Model Correlations for Correlating Solute Transfer into Dry Butanone and Dry Cyclohexanone Solvents,” **X. Tong, D. Woods, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, accepted for publication.
785. “Preferential Solvation of Some Antiepileptic Drugs in {Cosolvent (1) + Water (2)} Mixtures at 298.15 K,” D. A. Tinjaca, A. Shayanfar, A. Jouyban, F. Martinez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, submitted for publication.
786. “Abraham Model Correlations for Describing the Solubilizing Character of 3-Methoxy-1-butanol and 1-*tert*-Butoxy-2-propanol Solvents,” **E. Hart, M. Jodray, K. Rodriguez, M. Barrera, E. Qian, O. Zha, X. Y. Tong, D. Woods, Y. Liu, G. Lee, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, accepted for publication.
787. “Updated Abraham Model Correlations for Enthalpies of Solvation of Organic Solutes Dissolved in Benzene and Acetonitrile,” **J. Z. Lu, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, accepted for publication.
788. “Determination of Abraham Model Solution Descriptors for 4-*tert*-Butylbenzoic Acid from Experimental Solubility Data in Organic Mono-solvents,” **E. Hart, G. Lee, E. Qian, M. Jodray, M. Barrera, R. Fischer, M. Che, Y. Liu, O. Zha, D. Woods, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, manuscript accepted for publication.
789. “Infinite Dilution Activity Coefficients and Gas-to-Liquid Partition Coefficients of Organic Solutes Dissolved in 1-*sec*-Butyl-3-methylimidazolium bis(Trifluoromethylsulfonyl)imide and in 1-*tert*-Butyl-3-methylimidazolium bis(Trifluoromethylsulfonyl)imide,” F. Mutelet, G. A. Baker, S. Ravula, **E. Qian, L. Wang** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, accepted for publication.
790. “Determination of Abraham Model Solute Descriptors for *o*-Acetoacetanilide Based on Experimental Solubility Data in Organic Mono-Solvents,” **Grace Lee, Melanie Che, Ellen Qian, Lainey Wang, Avi Gupta, Reese Neal, David Yue, Samantha Downs, Tiffany Mayes, Olivia Rose, William E. Acree, Jr.** and Michael H. Abraham, *Phys. Chem. Liq.*, accepted for publication.

Educational Publications

1. "Comment on Free Energy and Equilibrium: The Basis of $\Delta G^\circ = -RT \ln K$ for Reactions in Solution," **W. E. Acree, Jr.**, *J. Chem. Educ.*, 63, 150 (1986).
2. "Primary and Secondary Inner-Filtering: Effect of $K_2Cr_2O_7$ on Fluorescence Emission Intensities of Quinine Sulfate," **S. A. Tucker, V. L. Amszi** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 69, A8 (1992). (**featured laboratory experiment**).
3. "Studying Acid-Base Equilibria in Two-Phase Solvent Media: Analyzing Results Using Aqueous Surfactant Solutions with Organic Solvents in the Titration of Analytes with Low Solubilities and Low Dissociation Constants," **S. A. Tucker, V. L. Amszi** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 70, 80 (1993); **reprinted in part in** *Quantitative Chemical Analysis*, 4th Edition, authored by D. C. Harris; W. H. Freeman, New York, NY, 1995, pp. 302-303.
4. "Student Design of an Analytical Laboratory Method: Titrations and Indicator Ranges in Mixed Aqueous-Organic Solvents," **S. A. Tucker** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 71, 71 (1994).
5. "Modern Laboratory Experiment for Instrumental Analysis: Analytical Method for Simultaneous Determination of Chloride and Bromide Ions Based Upon Fluorescence Quenching Methods," **S. A. Tucker** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 72, A31 (1995). (**featured laboratory experiment**).

6. "A Student Designed Potentiometric Titration: Quantitative Determination of Iron (II) by Caro's Acid Titration," **J. R. Powell, S. A. Tucker, W. E. Acree, Jr.**, J. A. Sees and L. H. Hall, *J. Chem. Educ.*, 73, 984 (1996).
7. "Quantitative Determination of Cr (III) and Co(II) Using a Spectroscopic H-Point Standard Addition Method," **S. Pandey, J. R. Powell, M. E. R. McHale** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 74, 848 (1997).
8. "Kinetic-Based Indirect Spectrophotometric Method for Simultaneous Determination of MnO_4^- and $\text{Cr}_2\text{O}_7^{2-}$: Modern Instrumental Analysis Laboratory Experiment" **S. Pandey, M. E. R. McHale, A.-S. M. Horton, S. A. Padrilla, A. L. Trufant, N. U. De La Sancha, E. Vela** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 75, 450 (1998).
9. "Quantitative Analysis Laboratory Experiment: Bilinear Regression Analysis as a Means to Reduce Matrix Effects in Simultaneous Spectrophotometric Determination of Cr(III) and Co(II)," **S. Pandey, M. E. R. McHale, K. S. Coym** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 75, 878 (1998).
10. "Comparison of Analytical Methods: Direct Emission Versus First-Derivative Fluorometric Methods for Quinine Determination in Tonic Waters," **S. Pandey, T. L. Borders, C. E. Hernández, L. E. Roy, G. D. Reddy, G. L. Martinez, A. Jackson, G. Brown** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 76, 85 (1999).
11. "Selection of an Analysis Wavelength: An Interesting Example Involving Solvatochromism and the Zwitterionic Dimroth-Reichardt's ET-30 Dye," **T. Deng** and **W. E. Acree, Jr.**, *J. Chem. Educ.*, 76, 1555 (1999).

Electronic Publications

1. "Enthalpy of Fusion Database," J. S. Chickos, **W. E. Acree, Jr.** and J. F. Liebmann, database is contained in NIST Chemistry Webbook, accessible at <http://webbook.nist.gov> (Entered in database in July 2001 - Present).

Invited Book Reviews

1. *Inorganic Chromatographic Analysis* (Book Review), *J. Amer. Chem. Soc.*, 108, 4687 (1986).
2. *Ions in Solution: Basic Principles of Chemical Interactions* (Book Review), *J. Amer. Chem. Soc.*, 111, 5981 (1989).
3. *Chemistry of Nonaqueous Solutions: Current Progress* (Book Review), *J. Amer. Chem. Soc.*, 117, 1672 (1995).
4. *High-Speed Countercurrent Chromatography* (Book Review), *J. Amer. Chem. Soc.*, 119, 1498 (1997).
5. *Introduction to Analytical Gas Chromatography: Second Edition, Revised and Expanded* (Book Review), *J. Am. Chem. Soc.*, 120, 6849 (1998).
6. *Basic Gas Chromatography* (Book Review), *J. Chem. Educ.*, 75, 1094 (1998).
7. *Liquid Interfaces in Chemistry and Biology* (Book Review), *J. Chem. Educ.*, 75, 1391 (1998).
8. *Basic Principles of Inorganic Chemistry* (Book Review), *J. Chem. Educ.*, 76, 1341 (1999).
9. *Characterization of Compounds in Solution: Theory and Practice* (Book Review), *J. Amer. Chem. Soc.*, 124, 3186 (2002).

Editorials

1. "Editorial," **W. E. Acree, Jr.**, R. D. Weir and A. A. H. Padua, *J. Chem. Thermodyn.*, 105, A1 (2017).

2. "Editorial: Pharmaceuticals Solubility is Still Nowadays Widely Studied Everywhere," F. Martinez, A. Jouyban and **W. E. Acree, Jr.**, *Pharm. Sci.* 23, 1 (2017) (**by invitation**).