

William E. Acree, Jr.

**BIOGRAPHICAL SKETCH**

**1. Mailing and Correspondence Information:**

Department of Chemistry  
University of North Texas  
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Denton, TX 76203  
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Telephone: (940) 565-3543

**2. 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)

**3. Non-academic Work Experience:**

Research Associate	Phillips Petroleum Co. Summer Employee	May-July 1980
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**4. 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 (tenured)	Kent State University	Sept. 1986- Aug. 1988
Assistant Professor	Kent State University	Sept. 1982- Aug. 1986
Faculty Associate	Kent State's Liquid Crystal Institute	March 1985- Aug. 1988

Instructor	University of Kansas	Aug. 1981- May 1982
Research Associate	University of Kansas	Jan. 1980- May 1981

Awards and Honors:

Sigma Xi (Full member)  
 UNT Scholar of the Month (March, 1991)  
 Society of Applied Spectroscopy Tour Speaker for 1994  
 Recipient of 2004 UNT McNair Postbaccalaureate Achievement Program – Outstanding Service Award  
 Recipient of 2006 UNT Upward Bound Math & Science Program – Outstanding Mentor Award  
 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, the award was transferred in 2012 to the best thermodynamics paper published in *ScienceJet* June 2012 issue of the *Journal of Spectroscopy and Dynamics* dedicated to Prof. William E. Acree, Jr.  
 UNT Libraries 2012 Outstanding Contributor to the University of North Texas Scholarly Works Award  
 Recipient of Professional Degree in Chemistry from Missouri University of Science and Technology (May 2013 graduation ceremony)  
 Fellow of The Royal Society of Chemistry, elected July of 2013  
 Fellow of the International Union of Pure and Applied Chemistry (IUPAC), December of 2013  
 Recipient of the Analytical Challenge (Ksp Solubility Product) Award, sponsored by Sprunger-Verlag, July of 2015  
 Recipient of the Analytical Challenge (Highest Melting Point) Award, sponsored by Sprunger-Verlag, September of 2015  
 Recipient of the 2016 Yale Educator Award

**5. Editorial Advisory Board Memberships:**

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* (Four volume series, by Gale Group of Thompson Learning, June 2001)  
 Editorial Advisory Board Member for the *Journal of Chemical and Engineering Data* (January 2004 - December 2006; January 2007 – December 2009; January 2010 – December 2012)  
 Editorial Advisory Board Member for the *Journal of Chemical Thermodynamics* (January 2007 – December 2011)  
 Co-Editor of the *Journal of Chemical Thermodynamics* (January 2012 – Present)  
 Top Reviewer Award for 2007 from the *Journal of Chromatography*  
 Editorial Advisory Board Member for the *Journal of Thermodynamics* (July 2008 – Present)  
 Editorial Advisory 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 – June 2012)  
 Editorial Advisory Board Member for the *RASAYAN JOURNAL* (May 2010 – Present)  
 Senior Advisor for the *Journal of Spectroscopy and Dynamics* (September 2010 – Present)  
 Senior Advisor for the journal *ScienceJet* (June 2012 – Present)  
 INTECH Scientific Board Member (2010 – 2011, 2011 – 2012, 2012-2013)  
 Editorial Advisory Board Member for *Journal of Basic and Applied Sciences* (May 2011 – Present)  
 Editorial Advisory Board Member for *Open Journal of Fluid Dynamics* (January 2012 – Present)  
 Editorial Advisory Board Member for *Journal of Applied Solution Chemistry and Modeling* (June 2012 – Present)  
 Editorial Advisory Board Member for *Mediterranean Journal of Chemistry* (July 2012 – Present)  
 Editorial Advisory Board Member for *European Chemical Bulletin* (September 2012 – Present)  
 Editorial Advisory Board Member for *Journal of Thermodynamics and Catalysis*

(September 2012 – Present)  
 Editorial Advisory Board Member for *Green and Sustainable Chemistry* (September 2012 – Present)  
 Editorial Advisory Board Member for *Conference Papers in Chemistry* (September 2012 – Present)  
 Editorial Advisory Board Member for *Modern Chemistry* (December 2012 – Present)  
 Editorial Advisory Board Member for *International Research Journal of Thermodynamics*  
 (February 2013 – Present)  
 Editorial Advisory Board Member for *Modern Chemistry and Applications* (February 2013 – Present)  
 Editorial Advisory Board Member for *Advances in Chemical Engineering* (July 2013 – Present)  
 Editorial Advisory Board Member for *International Journal of Quantitative Structure-Property Relationships* (May 2015 – Present)

**6. Memberships on Professional Society Subcommittees**

Membership on the IUPAC Subcommittee on Solubility and Equilibrium Data (January 2014 – Present)

**7. Academic Service Assignments:**

University-Wide Service Assignments:

Member of University-wide Subcommittee for SACS accreditation:  
 Graduate Programs (April 1993-April 1995)  
 Member of University-wide Subcommittee for SACS accreditation:  
 External Grants and Contracts and Related Corporate Entities  
 (April 1993-April 1995)  
 Member of University Developing Scholars Committee (June 1996-Sept 2000)  
 Chair of (1998-2000)  
 Member of the University Committee to Evaluate Administrators  
 (Sept. 1996-Sept 2002; appointed by Faculty Senate)  
 Member of the University Sunset Review Team for the Institute of Applied Sciences  
 Chair of (Spring 2002)  
 Member of the UNT Endorsement Committee for Simon Scholarship Award for Noble Purpose  
 (Fall 2004; Committee established by UNT Office for Nationally Competitive Scholarships)  
 Member of the Faculty Senate (elected Representative from Group VII, Nov. 2006-May 2007)  
 Chemistry Departmental Coordinator for UNT State Employee Charitable Campaign  
 (Aug. 2005-Sept. 2015)  
 Mentor for the UNT Emerald Eagle Scholars Program (Sept. 2007–Aug. 2008;  
 Sept. 2009-Aug. 2011)  
 Faculty Ambassador (October 2007 – Sept. 2009)  
 Member of University Scholar's Committee (Spring 2012 and 2013)  
 Member of University Chemical Hazards Committee (April 2013-Present, Chair of April 2013–  
 Present)  
 Member of University Environmental Oversight and Risk Review Committee (April 2013 – Sept. 2015)  
 Member of the University First Flight Task Force (January 2014 – Sept. 2015)  
 Member of Provost's Open Access Advisory Board (May 2016 – Present)

College Service Assignments:

Member of KSU's Honors College Policy Council (1985-1987)  
 Member of College of Arts & Sciences Graduate Curriculum Committee  
 (Aug. 1994-Aug. 1998, Sept. 2000-Aug. 2003; Sept. 2016-Present)  
 Member of College of Arts and Sciences Departmental Assessment Committee  
 (Aug. 1996 - March 1997; elected member)  
 Member of College of Arts & Sciences Council of Advisors (June 2005-July 2009)  
 Member of College of Arts & Sciences Undergraduate Curriculum Committee  
 (Oct. 2007–May 2009; elected member)

Departmental Service Assignments:

Departmental Awards Coordinator (1984-1988)  
 Member of Departmental Graduate Committee (1986-1988)  
 Chemistry Department Representative to KSU's local AAUP Chapter  
 Member of Departmental Graduate Recruiting Committee (1991-1993)  
 Departmental Recruiting Chair (1991-1993)  
 Departmental International Recruiting Chair (1993-1997)  
 Member of Departmental Personnel Affairs Committee (1990-1994; 1995-1998; 2003-2006, 2007-2009; 2015-Present); Chair of (1991-1994, 1997-1998)  
 Member of Departmental Graduate Affairs Committee (1992-1997, Jan. 2000 - Sept. 2000)  
 Member of Departmental Undergraduate Affairs Committee (1997-2007; Chair of Sept. 2000-May 2007; Acting Chair of Jan. 2009 – Aug. 2009; Chair of Sept 2016–Present)  
 Analytical Chemistry Division Chair (Jan. 1994-May 1994; Sept. 1995-June 2008)  
 Departmental Seminar Coordinator (Aug. 1994-Dec. 1995)  
 Adhoc Committee to revise Departmental Tenure Policy (Spring 1996); Chair of Departmental Representative to SRB Space Committee (June 1996-Sept 2001)  
 Member of Departmental Tenure and Promotion to Associate Professor Committee (Sept. 1991-Present)  
 Member of Departmental Promotion to Full Professor Committee (Sept. 1992-Present)  
 Adhoc Committee on Departmental Instrumentation (Sept. 1997-Present; Chair of Sept. 1997-Sept. 2000)  
 Interim Undergraduate Chemistry Advisor (Jan. 2001-March 2001)  
 Undergraduate Chemistry Advisor (June 2005–June 2009; Sept 2016–Present)  
 Member of Departmental New Science Building Committee (Sept. 2001–Dec. 2005; Chair of Sept. 2001- Dec. 2005)  
 Member of Chemistry Departmental REU Advisory Board (March 2003–Dec. 2005; May 2007 - Present)  
 Associate Chair of Chemistry (May 2007 – May 2009)

#### Service to Other Academic Programs:

TAMS Admission Interviewer (Spring, 1996, 1997 and 2001)  
 Mentor for summer UNT Upward Bound Math & Science Program (Summer 1992–Present)  
 Panel Member for McNair Program (Fall 1995, Summer 1997 and Summer 1998)  
 Mentor for the UNT McNair Postbaccalaureate Achievement Program (Spring 1997-Present)  
 Member of the UNT McNair Postbaccalaureate Achievement Program Advisory Board (Jan. 2000-Present)  
 Member of the FOCUS Scholarships Advisory Board (this is for a funded research grant on which Dr. Lee Hughes and Dr. Diana Mason are Co-PIs; Jan. 2009–Jan. 2013)  
 TAMS Scientific Review Committee, Board Member (May 2015 – Present)

#### Mentoring Activities for Texas Academy of Math & Science (TAMS) Students

Mentor to eight Regional Finalists and thirteen Semifinalists in the Siemens Competition  
**Regional Finalists:** Sai Achi (2009); Mariam Saifullah (2010); Shulin Ye (2010); Sumedha Mehta (2014); Akash Wadawadigi (2014); Nina Kuprasertkul (2014); Colleen Dai (2015); Shoshana Zhang (2015)  
**Semi-Finalists:** Sai Achi (2009); Mariam Saifullah (2010); Shulin Ye (2010); Vicky Chou (2011); Amanda Quay (2011); Sumedha Mehta (2014); Akash Wadawadigi (2014); Nina Kuprasertkul (2014); Colleen Dai (2015); Shoshana Zhang (2015); Sarah Cheeran (2016); Bihan Jiang (2016); Amber Lu (2016)  
 Mentor to two Semifinalists in the Intel Science Talent Search  
 Sai Achi (2009); Amanda Quay (2012)  
 Mentor to one Barry M. Goldwater Scholarship recipient  
 Amanda Quay (2012)  
 Mentor to 3 TAMS students (N. Kurasertkul, S. Mehta and A. Wadawadigi) who competed in the 2015

Fort Worth Regional Science Fair – Awards received by students include second place in Biochemistry (Senior Division), third place in the awards given by Lockheed Martin Aeronautics Company, and first place in the awards given by the Tarrant County Veterinary Medical Association

Mentor to 3 TAMS students (N. Kurasertkul, S. Mehta and A. Wadawadigi) who competed in the 2015 Exxon Mobil Science and Engineering Fair – Award received by the students was fifth place in Senior Division Life Sciences – Biochemistry

Mentor to 2 TAMS students (S. Zhang and C. Dai) who competed in the 2015 Exxon Mobile Science and Engineering Fair – Award received by the students was fourth place in Senior Division Physical Sciences – Mathematical Science

Mentor to 3 TAMS students (S. Cheeran, B. Jiang and A. Lu) who competed in the 2016 Fort Worth Regional Science Fair – Awards received by students included first place in Mathematics (Senior Division), first place in the award given by ASU Walton Sustainability Solutions Initiative, and first place in the award given by Mu Alpha Theta

#### Service to the Chemical Profession:

City of Kent Task Force for "Right-to-Know" Legislation (1985-1987)

Judge for the ACS Meeting-in-Miniature (Spring 1992, meeting at the University of North Texas; Spring 1993, meeting at East Texas State University, Spring 2000, meeting at the University of North Texas)

Program Advisory Committee for First Conference of the International Academy of Physical Science (held Feb. 1996 in Bilaspur, India)

Sigma Xi Officer (Vice-President of UNT Chapter, May 1997-May 1998)

Program Committee for Symposium on "Chemometrics, Imaging, and Pattern Recognition for the Monitoring of the Environment", (held Sept. 1999 in Boston, MA)

Contributor to the *World of Chemistry* Encyclopedia (Published by the Gale Group, 1999)

Consultant for Texas International Education Consortium – my portion of project involved design of introductory chemistry laboratory component for a new university in Saudi Arabia (arranged by Dean of Arts and Sciences), February 2005.

Judge for the 54<sup>th</sup> Annual Fort Worth Regional Science Fair (Chemistry section), Fair held at the University of North Texas, March, 2005

Judge for the 55<sup>th</sup> Annual Fort Worth Regional Science Fair (Environmental Science section), Fair held at the University of North Texas, March, 2006

Judge for the 56<sup>th</sup> Annual Fort Worth Regional Science Fair (Chemistry section), Fair held at the University of North Texas, March, 2007

Examination Reviewer/Consultant (Secondary and High School Examinations) for Harcourt Assessment, Inc.; March 2007 – March 2009

Judge for the 57<sup>th</sup> Annual Fort Worth Regional Science Fair (Best of Fair), Fair held at the University of North Texas, March, 2008

Member of ACS Southwest Regional Subcommittee to Select Winner of the 2016 Anne Nalley Award (July 2016 - October 2016)

Reviewer for the following chemical journals: *Journal of Chromatography*; *Applied Spectroscopy*; *Journal of Solution Chemistry*; *International Journal of Pharmaceutics*; *Journal of Chemical and Engineering Data*; *Journal of Pharmaceutical Sciences*; *Journal of Colloid and Interface Science*; *Journal of Chemical Society, Faraday Transactions*; *Journal of Molecular Liquids*; *Fluid Phase Equilibria*; *Canadian Journal of Chemistry*; *Mikrochimica Acta*; *Industrial and Engineering Chemistry Research*; *Thermochimica Acta*; *Journal of Chemical Society, Perkin Transactions 2*; *Journal of Physical Chemistry*; *Journal of Chemical Education*; *The Analyst*; *Analytica Chimica Acta*; *Journal of Chemical Thermodynamics*; *Journal of Physical and Chemical Reference Data*; *Journal of the American Chemical Society*; *Talanta*; *Macromolecules*; *Chemical Engineering Communication*; *Environmental Science and Technology*; *Spectrochimica Acta*; *Physical Chemistry Chemical Physics*; *Polycyclic Aromatic Compounds*; *Journal of Organic Chemistry*; *Journal of the Chemical Society, Chemical Communications*; *Green Chemistry*; *Structural Chemistry*; *Electrophoresis*; *Organic & Biomolecular Chemistry*; *Spectroscopy Letters*; *New Journal of Chemistry*;

*Journal of Separation Science; Journal of Environmental Monitoring; Pharmaceutical Research; Journal of Photochemistry and Photobiology A; South African Journal of Chemistry; Science of the Total Environment; Energy & Fuels; Organic Geochemistry; Physics and Chemistry of Liquids; Chemical Research in Toxicology; QSAR & Combinatorial Science; Die Pharmazie; Organic Letters; Journal of Chromatographic Science; Asian-Pacific Journal of Chemical Engineering; Journal of Physical Organic Chemistry; Analytical and Bioanalytical Chemistry; Environmental Chemistry Letters; Chemical Physics Letters; International Journal of Thermophysics; Bioconjugate Chemistry; Environmental Toxicology and Chemistry; Electrophoresis; Journal of Drug Targeting; Global Journal of Physical Chemistry; Luminescence: The Journal of Biological and Chemical Luminescence; International Journal of Chemical Engineering; Chemical Engineering Journal; International Journal of Analytical Chemistry; Korean Journal of Chemical Engineering; Journal of Petroleum Science and Engineering; Scientific Reports; European Journal of Pharmaceutical Sciences; Journal of Thermal Analysis and Calorimetry; International Journal of Environmental Analytical Chemistry; Characterization of Materials; Indian Journal of Chemistry, Section A; Arabian Journal of Chemistry; International Journal of Physical Sciences; Journal of Molecular Structure; Journal of Shanghai Jiao Tong University; Natural Product Communications; Recent Patents on Chemical Engineering; Mini-Reviews in Medicinal Chemistry; Current Pharmaceutical Analysis; Iranian Journal of Pharmaceutical Research; American Chemical Science Journal; International Journal of Energy Research; SAR and QSAR in Environmental Research; Green and Sustainable Chemistry; Advances in Chemical Engineering; Journal of Chemical Technology and Biotechnology; Journal of Industrial and Engineering Chemistry; Bulgarian Chemical Communications; Journal of Applied Solution Chemistry and Modeling; Journal of Computer Aided Molecular Design; Mediterranean Journal of Chemistry; Chemical Engineering Research and Design; Biomacromolecules; Pharmaceutical Sciences; Chemistry Central Journal; Journal of Luniescence; Colloids and Surfaces A; Journal of Environmental Chemical Engineering.*

Reviewer for CRC Press

Reviewer for the following funding agencies: National Science Foundation, ACS Petroleum Research Fund

## 8. 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, xlv + 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, Applications and Perspectives (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 (2013).

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 (2103).
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  $\gamma$ -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).
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