

William E. Acree, Jr.

BIOGRAPHICAL SKETCH

1. Mailing and Correspondence Information:

Department of Chemistry
University of North Texas
1155 Union Circle Drive #305070
Denton, TX 76203
E-mail: acree@unt.edu
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
--------------------	---	---------------

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, Honors and Recognitions:

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* and discontinued in 2015
 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 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
 Recipient of the 2016 Yale Educator Award
 Recipient of a 2018 College of Science Faculty Award for Service
 Recipient of the UNT 2020 Ulys & Vera Knight Faculty Mentor Award
 Recipient of the UNT 2021 TAMS and Honors College Excellence in Undergraduate Mentoring Award
 Recognized as the Alumnus of the Month for June 2022 by the Department of Chemistry at the University of Missouri University of Science and Technology (MS&T)
 Finalist for the 2023 CUR-Goldwater Outstanding Faculty Mentor Award
 Finalist for the 2024 CUR-Goldwater Outstanding Faculty Mentor Award
 Recipient of the UNT 2024 President's Council Service Award
 Recognized by *Liquids* by having a special journal issue titled "Recent Advances in the Behavior of Liquids in Honor of Prof. Dr. William Acree, Jr."
 Finalist for the 2025 CUR-Goldwater Outstanding Faculty Mentor 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, August 2023 – Present)
 Co-Editor of the *Journal of Chemical Thermodynamics* (January 2012 – June 2023)
 Top Reviewer Award for 2007 from the *Journal of Chromatography*
 Editorial Board Member for the *Journal of Thermodynamics* (July 2008 – May 2017)
 Editorial Board Member for the *International Journal of Liquid State Sciences*
 (August 2008 – December 2012)
 Editorial Advisory Board Member for the *Global Journal of Physical Chemistry* (March 2010 – June 2012)
 Editorial Advisory Board Member for the *RASAYAN Journal of Chemistry* (May 2010 – December 2014)
 Senior Advisor for the *Journal of Spectroscopy and Dynamics* (September 2010 – September 2013)
 Senior Advisor for the journal *ScienceJet* (June 2012 – December 2014)
 INTECH Science Board Member (2010 – 2011, 2011 – 2012, 2012 - 2013)
 Editorial Advisory Board Member for *Journal of Basic and Applied Sciences* (May 2011 – December 2012)
 Editorial Advisory Board Member for *Open Journal of Fluid Dynamics* (January 2012 – December 2013)
 Editorial Advisory Board Member for *Conference Papers in Chemistry* (September 2012 – December 2014)
 Editorial Advisory Board Member for *Modern Chemistry* (December 2012 – December 2014)
 Editorial Advisory Board Member for *Green and Sustainable Chemistry* (September 2012 – December 2020)
 Editorial Advisory Board Member for *European Chemical Bulletin* (September 2012 – December 2022)
 Editorial Advisory Board Member for *International Research Journal of Thermodynamics*
 (February 2013 – December 2020)
 Editorial Advisory Board Member for *The Open Chemical Engineering Journal* (July 2013 – December 2020)
 Editorial Advisory Board Member for *Liquids* (October 2020 – February 2023)
 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 *Journal of Thermodynamics and Catalysis* (September 2012 – Present)
 Editorial Advisory Board Member for *Modern Chemistry and Applications* (February 2013 – Present)
 Editorial Advisory Board Member for *International Journal of Quantitative Structure-Property Relationships* (May 2015 – Present)
 Editorial Advisory Board Member for *Journal of Chemistry and Applied Chemical Engineering* (July 2017 – Present)
 Editorial Advisory Board Member for *Pharmaceutical Sciences* (August 2019 – Present)
 Editorial Advisory Board Member for the Physical Chemistry Section of *Molecules* (September 2019 – Present)
 Editorial Advisory Board Member for the Thermal Management Section of *Energies* (December 2019 – Present)
 Editorial Advisory Board Member for *Revista Colombiana de Ciencias Químico Farmacéuticas* (May 2020 – Present)
 Editorial Advisory Board Member for *Thermo* (July 2020 – Present)
 Section Editor-in-Chief of “Molecular Liquids” for the journal *Liquids* (February 2023 – Present)
 Editorial Advisory Board Member for *ImmunoAnalysis* (March 2024 – Present)
 Editorial Board Member for the *Journal of Solution Chemistry* (Jan. 2025 – 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; elected Representative from Group VII, Sept. 2024-Present)

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 (Oct. 2007 – Sept. 2009)

Member of University Scholar's Committee (Spring 2012 and 2013)

Member of University Chemical Hazards Committee (April 2013-May 2015, Chair of April 2013–
May 2015)

Member of University Environmental Oversight and Risk Review Committee (April 2013 – Sept. 2015)

Member of the University First Flight Task Force (Jan. 2014 – Sept. 2014)

Member of the Provost's Open Access Advisory Board (May 2016 – June 2019; Chair of Oct. 2017 – June 2019)

Member of the University Writing Committee (Nov, 2017 – Aug. 2020)

Member of the COVID-19 Graduate Student Grade Appeal Committee (May 2020 – Aug. 2020)

Member of the Academic Affairs Committee (Sept. 2020 – Aug. 2023)

Member of University Mentoring Program Grants Selection Committee (Oct. 2020 – Dec. 2020)

Member of Administrator Evaluation Committee (AEC) for Reappointment of Dean Quintanilla (Jan. 2025 – 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 – May 2017)

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; Sept. 2016 –
May 2017)

Member of College of Arts & Sciences Undergraduate Curriculum Committee
(Oct. 2007 – May 2009; elected member)

Member of College of Sciences Council of Advisors (May 2017 – Sept. 2021)

Member of College of Science Ad-hoc Space Committee (June 2018 – Dec. 2019)

Member of Health Professions Advisory Committee (April 2019 – May 2021)

Member of ad Hoc Faculty Grievance Committee (April 2019 - July 2019)

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 – 2018; 2022 – Present); Chair of (1991 – 1994, 1997 – 1998; 2017 – 2018)
 Member of Departmental Graduate Affairs Committee (1992 – 1997, Jan. 2000 – Sept. 2000)
 Member of Departmental Undergraduate Affairs Committee (1997 – 2007; 2016 – 2021; Chair of Sept. 2000 – May 2007; Acting Chair of Jan. 2009 – Aug. 2009; Co-Chair of Sept. 2016 – Sept. 2021)
 Analytical Chemistry Division Chair (Jan. 1994 – May 1994; Sept. 1995 – June 2008; June 2023 – Present)
 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; Chair of Sept. 2017 – Sept. 2018)
 Member of Departmental Promotion to Full Professor Committee (Sept. 1992 – Present; Chair of Sept. 2017 – Sept. 2018)
 Adhoc Committee on Departmental Instrumentation (Sept. 1997 – Sept. 2002; Chair of Sept. 1997 – Sept. 2000)
 Interim Undergraduate Chemistry Advisor (Jan. 2001 – March 2001)
 Undergraduate Chemistry Advisor (June 2005 – June 2009; Sept. 2016 – Sept. 2021)
 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 – May 2011)
 Associate Chair of Chemistry (May 2007 – May 2009; Sept. 2018 – May 2021; July 2024 – Present)
 Co-Advisor UNT ACS Student Affiliate Chapter (Nov. 2016 – Present) **Student chapter received Certificates of Achievement in both 2017 and 2017, as well as 2018-2019 and 2023-2034**
Honorable Mention Awards from the ACS
 Member of Departmental Grade Appeal Committee (Sept. 2015 – June 2020)
 Chair of Departmental Grade and Academic Integrity Appeals Committee (Sept. 2021 – Aug. 2024)
 Chair of Departmental Faculty Awards Committee (Sept. 2021 – Aug. 2024)
 Faculty Advisor to the Beta Eta Chapter of Alpha Chi Sigma (Jan. 2022 – May 2022, chapter went dormant because of lack of new members)
 Member of Departmental Alumni Relations Committee (Jan. 2023 – Present)
 Chair of Departmental Graduate Affairs Committee (July 2024 – Present)
 Departmental Graduate Student Advisor (July 2024 – Present)

Service to Other Academic Programs:

TAMS Admission Interviewer (Spring, 1996, 1997 and 2001)
 Research mentor for summer UNT Upward Bound Math & Science Program (Summer 1992 – 2017)
 Panel Member for McNair Program (Fall 1995, Summer 1997 and Summer 1998)
 Mentor for the UNT McNair Postbaccalaureate Achievement Program (Spring 1997 – 2017)
 Member of the UNT McNair Postbaccalaureate Achievement Program Advisory Board (Jan. 2000 – May 2017)
 Member of the FOCUS Scholarships Advisory Board (this is for a funded research grant that Dr. Lee Hughes and Dr. Diana Mason are Co-PIs on; Jan. 2009 – Jan. 2013)
 TAMS Scientific Review Committee, Board Member (May 2015 – Present)
 Mock Lecturer for TAMS Preview and Early Start Days (Sept. 2017 - Present)

Member of Teach North Texas (TNT) Promotion Committee (Sept. 2018 – Dec. 2019; Chair of Sept. 2018 – Dec. 2019)

Member of TAMS Distinguished Alumnus Award Committee (Nov. 2018 – Aug. 2019)

Mentoring Activities for Texas Academy of Math and Science Students:

Mentor to eight Regional Finalists and sixteen 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); Helen Lu (2013); Kalpana Satish (2013); Danyang Shan (2013); 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 Search

Sai Achi (2009); Amanda Quay (2012)

Mentor to nine Barry M. Goldwater Scholarship recipients

Amanda Quay (2012); Amber Lu (2017); Ellen Qian (2019); Jonathan Lu (2019); David Yue (2019); Shrika Eddula (2021); Neel Shanmugam (2022); Ramya Motati (2024); Saikiran Motati (2025)

Mentor to one Truman Scholarship Finalist

David Yue (2019)

Two students working in the Acree laboratory were selected to participate in the Research Science Institute, sponsored by the Center for Excellence in Education (CEE)

Jonathan Lu (Summer 2019); Saikiran Motati (Summer 2024)

One student working in the Acree laboratory was named among the top 300 Scholars in the Regeneron Science Talent Search Competition (Saikiran Motati, 2025)

One student who had worked in the Acree laboratory was the recipient of ACS Scholarship for Undergraduates in Chemistry (Saikiran Motati, 2025)

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

Mentor to 1 TAMS student (B. Jiang) who competed in the 2017 Fort Worth Regional Science Fair - Award received by the student was first place in Senior Division - Energy and Transportation

Mentor to 1 TAMS student (E. Qian) who competed in the 2018 Fort Worth Regional Science Fair - Award received by the student was first place in Senior Division - Chemistry

Mentor to 1 TAMS student (E. Qian) who competed in the 2018 Texas State Science and Engineering Fair - Award received by the student was third place in Senior Division - Chemistry

Mentor to 2 TAMS students (S. Wang and K. Liu) who competed in the 2019 Fort Worth Region Science Fair - Award received by the students was first place in the award given by the North Texas Section of the American Industrial Hygiene Association

Mentor to 2 TAMS students (S. Eddula and J. Huang) who competed in the 2020 Fort Worth Regional Science Fair – Award received by the students was first place in Senior Division – Environmental

Management and Sciences

- Mentor to 2 TAMS students (S. Eddula and J. Huang) who were UNT's two student representatives at the Capitol's 2021 Texas Undergraduate Research Day
- Mentor to 2 TAMS students (S. Eddula and J. Huang) who competed in the 2021 Fort Worth Regional Science Fair – Award received by the students was first place in Senior Division - Environmental Management & Sciences, students also received six place overall award in the Senior Division
- Mentor to 2 TAMS students (S. Cai and A. Xu) who competed in the 2021 Fort Worth Regional Science Fair – Award received by the students was second place in Senior Division – Animal Sciences
- Mentor to 2 TAMS students (K. Kim and P. Garlapati) who competed in the 2021 Fort Worth Regional Science Fair – Award received by the students was second place in Senior Division – Chemistry
- Mentor to 1 TAMS student (E. Huang) who competed in the 2021 Fort Worth Regional Science Fair – Award received by the student was second place in Senior Division – Earth & Planetary Sciences
- Mentor to 1 TAMS student (A. Xu) who competed in the 2021 Texas Junior Academy of Science (TJAS) competition – Award received by student was second place in Botany/Zoology category
- Mentor to 1 TAMS student (K. Kim) who competed in the 2021 Texas Junior Academy of Science (TJAS) competition – Award received by student was second place in the Environmental Science category.
- Mentor to 2 TAMS students (S. Sinha and A. Varadharajan) who competed in the 2022 Fort Worth Regional Science Fair – award received by students was second place in Senior Division – Chemistry
- Mentor to 1 TAMS student (S. Cai) who competed in the 2022 Fort Worth Regional Science Fair – award received by student was first place in Senior Division – Environmental Management & Sciences; as well as two special awards: first place – U.S. Agency for International Development, and first place – Ricoh Sustainable Development Award.
- Mentor to 1 TAMS student (A. Xu) who competed in the 2022 Fort Worth Regional Science Fair – award received by student was third place in Senior Division – Plant Sciences
- Mentor to 2 TAMS students (S. Sinha and N. Shanmugam) who competed in the 2023 Fort Worth Regional Science Fair – award received by students was a special award: third place – NASA Earth System Science Award
- Mentor to 1 TAMS student (R. Motati) who competed in the 2023 Texas State Stockholm Junior Water Prize from the Water Environment Association of Texas – award received by student was third place
- Mentor to 3 TAMS students (R. Motati, T. Kandi and S. Motati) who competed in the 2024 Fort Worth Regional Science Fair – award received by students was first place in Senior Division – Chemistry
- Mentor to 2 TAMS students (D. Kumarandurai and B. Lin) who competed in the 2025 Fort Worth Regional Science Fair – award received by students was first place in Senior Division – Plant Sciences

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 54th Annual Fort Worth Regional Science Fair (Chemistry section), Fair held at the University of North Texas, March, 2005
 Judge for the 55th Annual Fort Worth Regional Science Fair (Environmental Science section), Fair held at the University of North Texas, March, 2006
 Judge for the 56th 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 57th Annual Fort Worth Regional Science Fair (Best of Fair), Fair held at the University of North Texas, March, 2008
 Member of IUPAC Project Group on Solubility DATA Series - Celebrating 100 Volumes of Plenitude of the IUPAC-NIST Series (Jan. 2014 - Aug. 2014)
 Member of ACS Southwest Regional Subcommittee to Select Winner of the 2016 E. Ann Nalley Award (July 2016 - October 2016)
 Member of IUPAC Task Force on Recommended Reference Materials for Phase Equilibrium Studies (June 2017 - Present)
 External Evaluator of the Chemistry Program at Tarleton State University (July 16, 2018)
 Member of IUPAC Task Force on Henry's Law Constants (Aug. 2019 – Dec. 2021)
 Member of IUPAC Task Force on Gold Book Update of Terms from the Glossary of Terms Related to Solubility (April 2021 - Present)
 Honorary Guest Editor for 2022 September Special Issue of the *Journal of Solution Chemistry* dedicated to Professor Michael Abraham (**Special issue contained 10 papers**)
 Guest Editor for the Special Issue in *Liquids* on Modeling of Liquids Behavior: Experiments, Theory and Simulations (**Special issue contained 14 papers**)
 Guest Editor for the Honorary Issue in *Liquids* dedicated to Professor Christian Reichardt (**Special issue contained 15 papers**)
 Guest Editor for the Special Issue in *Thermo* in the Editorial Board Members' Collection Series: Molecular Simulation and Thermodynamics
 Guest Editor for the Special Issue in *Liquids* on Recent Advances in the Behavior of Liquids in Honor of Prof. Dr. William Acree, Jr. (**Special issue contained 19 papers**)
 Guest Editor for the Special Issue in *Liquids* on Thermodynamics of Molecular Complexation and Hydrogen Bonding in Solution Chemistry – A Themed Issue Honoring Professor Dr. Boris N. Solomonov (**Special issue contained 6 papers**)

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*; *Analytical Letters*; *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 Luminescence; Colloids and Surfaces A; Journal of Environmental Chemical Engineering; Molecular Physics; Environmental Sciences: Processes and Impacts; Chemical Product and Process Monitoring; Critical Reviews in Analytical Chemistry; Industrial Crops and Products; Monatshefte für Chemie; Journal of CO₂ Utilization, Separation and Purification Technology; Fermentation; ChemEngineering; Canadian Journal of Chemical Engineering; Chinese Journal of Chemical Engineering; Processes; Mendeleev Communications; French-Ukrainian Journal of Chemistry; Symmetry; Journal of Pharmacy and Pharmacology; Pharmaceutics; Food Hydrocolloids; Photochemical and Photobiological Sciences; Journal of AOAC International; Pure and Applied Chemistry; Chemical Data Collections; Revista Colombiana de Ciencias Químico – Farmacéuticas; Energies; Journal of the Taiwan Institute of Chemical Engineers; International Journal of Biological Macromolecules; Data; Journal of the Mexican Chemical Society; Iranian Journal of Pharmaceutical Sciences; Journal of Food Engineering; Materials; Chemistry; Biochemical and Biophysical Research Communications; Separations; Annales Pharmaceutiques Françaises; BMC Chemistry; ImmunoAnalysis; Physchem; International Journal of Molecular Sciences; Applied Sciences; Nanomaterials.

Reviewer for CRC Press

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

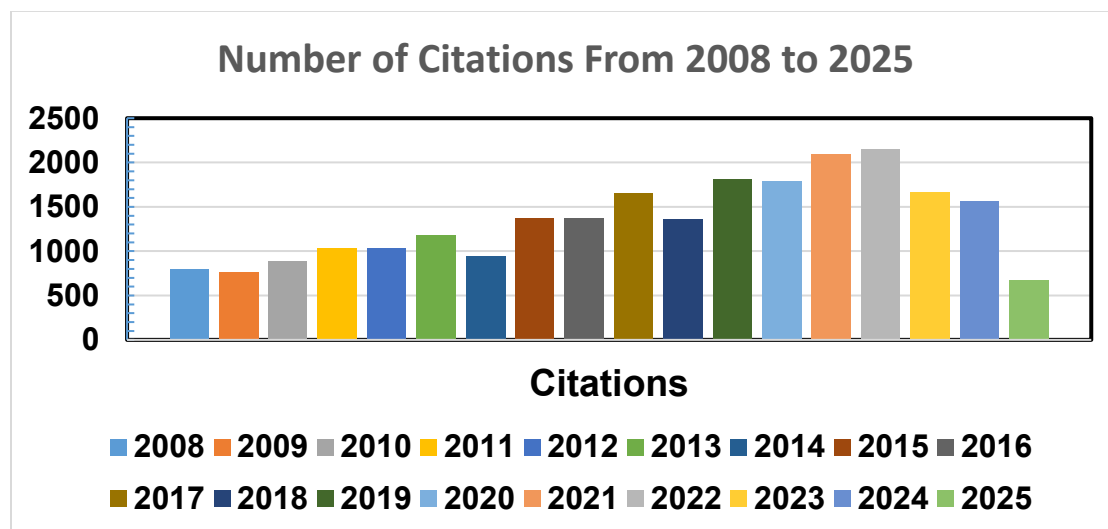
8. Publications:

Source: Google Scholar

Sum of Times Cited is 30,436

Average Citations per Article is 26.04

h-Index is 78



Dr. Acree has published 509 peer-refereed research papers with graduate and undergraduate student co-authors. In the list of authors on the following publications the **names of the graduate student are in green font**, **the names of the undergraduate chemistry and biology majors are in red font**, **the names of the undergraduate McNair scholars are in blue font**, **the names of the undergraduate TAMS scholars are in purple font**, **the names of the undergraduate NSF-REU participants are in aqua font**, and **the names of the summer Upward Bound Math and Science high school students are in orange font**. 1065 of Dr. Acree's publications list UNT as his University affiliation. 314 of Dr. Acree's publications are co-authored by graduate students and 352 papers are co-authored by undergraduate and high school students. Graduate and undergraduate students are first authors on 224 and 148 of Dr. Acree's publications, respectively.

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. Pandey** and **S. A. Tucker**, 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.**, *Macmillan Encyclopedia of Chemistry* (J. J. Lagowski, Ed.), Simon & Shuster 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 *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: Applications, Theory and Instrumentation*, (by John Wiley and Sons), 10280-10305 (2000).
 13. "Absorption and Luminescence Detectors," **W. E. Acree, Jr.**, *Encyclopedia of Analytical Chemistry: Applications, Theory and Instrumentation*, (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: Applications, Theory and Instrumentation*, (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 (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).
25. "Modern General Chemistry Laboratory: Incorporating Computer-Oriented Data Acquisition and Evaluation Approach into the Student Laboratory Experience. Second Edition - Wireless Probes and New Software," J. Calderon, **W. E. Acree, Jr.** and A. Petros, EaglePrint, 346 pp, 2017 [ISBN: 978-1-941363-72-4].
26. "IUPAC-NIST Solubility Data Series. 105. Solubility of Solid Alkanoic Acids, Alkenoic Acids, Alkanedioic Acids and Alkenedioic Acids Dissolved in Neat Organic Solvents, Organic Solvent Mixtures, and Aqueous-organic Solvent Mixtures. I. Alkanoic Acids," **W. E. Acree, Jr.** and W. E. Waghorne, *J. Phys. Chem. Ref. Data*, 50, 043103-1 (2021). **[Parts 1, 2 and 3 will comprise the entire book]**
27. "IUPAC-NIST Solubility Data Series. 105. Solubility of Solid Alkanoic Acids, Alkenoic Acids, Alkanedioic Acids and Alkenedioic Acids Dissolved in Neat Organic Solvents, Organic Solvent Mixtures, and Aqueous-Organic Solvent Mixtures. II. Alkenoic and Alkynoic Acids," **W. E. Acree, Jr.** and W. E. Waghorne, *J. Phys. Chem. Ref. Data*, 50, 043105-1 (2021).
28. "Special Issue e-Book Reprint: Modeling of Liquids Behavior: Experiments, Theory and Simulations," **W. E. Acree, Jr.** and J. O. Saavedra (co-Editors), MDPI, Basel, Switzerland. ISBN 978-3-0365-8009-8 (Note: MDPI republishes papers that appear in a special issue of *Liquids* in e-book format, provided that the special issue contains at least 10 papers.)
29. "IUPAC-NIST Solubility Data Series. 105. Solubility of Solid Alkanoic Acids, Alkenoic Acids, Alkanedioic Acids and Alkenedioic Acids Dissolved in Neat Organic Solvents, Organic Solvent Mixtures, and Aqueous-Organic Solvent Mixtures. III. Alkanedioic Acids and Alkenedioic Acids," **W. E. Acree, Jr.** and W. E. Waghorne, *J. Phys. Chem. Ref. Data*, 52, 033102-1 (2023).
30. "Special Issue e-Book Reprint: Solvatochromic Probes and Their Applications in Molecular Interaction Students – A Themed Issue to Honor Professor Dr. Christian Reichardt," **W. E. Acree, Jr.** and F. Cataldo (co-Editor), MDPI, Basel, Switzerland. ISBN 978-3-7258-1037-6 (Note: MDPI republishes papers that appear in a special issue of *Liquids* in e-book format, provided that the special issue contains at least 10 papers.)
31. "Special Issue e-Book Reprint: Recent Advances in the Behavior of Liquids in Honor of Prof. Dr. William Acree, Jr.," **W. E. Acree, Jr.** and J. O. Saavedra (co-Editor), MDPI, Basel, Switzerland. ISBN 978-3-7258-4191-2 (Note: MDPI republishes papers that appear in a special issue of *Liquids* in e-book format, provided that the special issue contains at least 10 papers.)
- **** "Special Issue e-Book Reprint: Thermodynamics of Molecular Complexation and Hydrogen Bonding in Solution Chemistry – A Themed Issue Honoring Professor Dr. Boris N. Solomonov," **W. E. Acree, Jr.** and M. I. Yagofarov (co-Editor), MDPI, Basel, Switzerland. (Note: MDPI republishes papers that appear in a special issue of *Liquids* in e-book format, provided that the special issue contains at least 10 papers. Six papers have already been published in Special Issue.)
- **** "IUPAC-NIST Solubility Data Series. XXX. Solubility of Benzoic Acid and Substituted Benzoic Acids in Both Neat Organic Solvents and Organic Solvent Mixtures (Supplement to Solubility Data Series Volume 99)," **W. E. Acree, Jr.**, W. E. Waghorne and S. Chalk, project proposal for preparing the volume for inclusion in the *IUPAC Solubility Data Series* has been approved by IUPAC – project number #2021-023-

1-500.

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 Benzyldene *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 Py Values," K. W. Street, Jr. and **W. E. Acree, Jr.**, *Analyst*, **111**, 1197 (1986).
 36. "The Py 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.*, **41**, 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. 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 Benzyldene *t*-Butylamine *N*-Oxide Derivatives and of Nitrobenzyldene *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-Trimethylbenzonitrile, 2,4,6-Trimethylbenzonitrile *N*-Oxide, 2,6-Dimethylbenzonitrile, 2,4,6-Trimethoxybenzonitrile, and 2,4,6-Trimethoxybenzonitrile *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, Fluorenochrysene, Indenochrysene 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-Trimethylbenzonitrile *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 Equilib.*, **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. Sevruck, 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 on 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 Equilib.*, 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. Compd.*, 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, 7366 (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 Equilib.*, 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 Equilib.*, 92, 1 (1994). [Corrigendum, *Fluid Phase Equilib.*, 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 Equilib.*, 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. R. 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 Equilib.*, 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 Equilib.*, **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. Voisinnet**, **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. Voisinnet** 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. Padilla, 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. Padilla, 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 Combustion 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 Equilib.*, **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 Cetyltrimethylammonium 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**, **T. L. Sharp** 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 on 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., *Collect. Czech. Chem. Commun.*, 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, A. 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. "Calculation of Solubilities of the Pesticides Diuron and Monuron in Organic Nonelectrolyte Solvents. Comparison of Calculated Values Using UNIFAC and Modified UNIFAC (Dortmund) Models," 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**, 2785 (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. 3. 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. Castifilheiras, 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. Fathi-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 Retention 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.**, *Chem. Pharm. 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 Mixtures 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.**, V. P. Solov'ev and A. Varnek, *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 Toxicities of Organic Compounds 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. Khoubnasabjafari 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. Gonçalves, 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 Equilib.*, **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**, 263 (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 Equilib.*, **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. Saei 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. A. 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 Equilib.*, 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. A. 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. "Quantitative Structure-Property Relationship 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 Equilib.*, **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 Equilib.*, **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 of Organic Compounds in Trihexyl(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 Solubility of Ethyl Maltol in Aqueous Ethanol Mixtures," A. Jouyban 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 Coefficients 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 $C_1 - C_4$ 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 K," 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 Monohalobenzenes," 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 Equilib.*, **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 Equilib. 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 Equilib.*, **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. Gharfourian and A. Nokhodchi, *J. Chem. Eng. Data*, **55**, 539 (2010).
499. "Prediction of 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-3*H*-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 Alcohols 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 Pyridine *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-Dihexyloxymethyl-imidazolium 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 Organometallic Compounds. Sublimation, Vaporization and Fusion Enthalpies from 1880 to 2010," 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 Phases," 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 Equilib.*, 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. Domańska, M. Królikowska, **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 Equilib.*, **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. Martínez, **W. E. Acree, Jr.**, and A. Jouyban, *Fluid Phase Equilib.*, **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 Equilib.*, **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 Toluene and Ethylbenzene from Water and from the Gas Phase Based on the Abraham Model," **T. W. Stephens**, **M. Loera**, **A. N. Quay**, **V. Chou**, **C. Shen**, **A. Wilson**, **W. E. Acree, Jr.** and M. H. Abraham, *Open Thermodyn. J.*, **5**, 104 (2011).
 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. Martínez, 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. Martínez, **W. E. Acree, Jr.** and A. Jouyban, *Fluid Phase Equilib.*, **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 Equilib.*, 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). [Erratum, 61, 3386 (2016)]
 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 on 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 for inclusion in 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) **(by invitation for inclusion in 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. Martínez, 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 for inclusion in 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," S. Khooshechin, Z. Dashtbozorgi, H. Golmohammadi 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)imidazolidine Anion,” **T. W. Stephens**, **E. Hart**, **N. Kuprasertkul**, **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. Soleymeni, **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. Soleymeni, 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. “Deduction of Physicochemical Properties from Solubilities: 2,4-Dihydroxybenzophenone, Biotin and Caprolactam as Examples,” M. H. Abraham, **W. E. Acree, Jr.**, **M. Brumfield**, **E. Hart**, **L. Pipersbugh**, **K. Mateja**, **C. Dai**, **D. Grover** and **S. Zhang**, *J. Chem. Eng. Data*, 60, 1440 (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-Ionic 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. Lang, S. N. Beck, D. A. Bulger, E. A. Clark, L. N. Condon, 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 inclusion in special J.-C. Bradley memorial issue]**
646. “Comment on Structural Determinants of Drug Partitioning in Surrogates of Phosphatidylcholine Biliary Strata,” **W. E. Acree, Jr.**, **M. Brumfield** and M. H. Abraham, *Mol. Pharm.*, 12, 1328 (2015).
647. “Commentary Regarding on Study of Acoustic 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 inclusion in 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). [Erratum 232, 506 (2017)]
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 inclusion in 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). [Erratum: **241**, 730 (2017)]
 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. Martínez, 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(Pentafluoroethyl)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. Martínez, 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. Martínez, 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).
675. "Activity Coefficients at Infinite Dilution for Organic Solutes Dissolved in Two 1-Alkylquinuclidinium bis(Trifluoromethylsulfonyl)imides Bearing Alkyl Side Chains of Six and Eight Carbons, A. Ayad, F. Mutelet, A. Negadi, W. E. Acree, Jr., B. Jiang, A. Lu, D. V. Wagle and G. A. Baker, *J. Mol. Liq.*, 215, 176 (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. Martínez, 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. Martínez, M. A. Peña, 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. Martínez 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. Shaynafar, F. Martínez, 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. Martínez 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 to 033101-565 (2016).
689. "Further Numerical Analyses on the Solubility of Sulfapyridine in Ethanol + Water Mixtures," D. R. Delgado, M. A. Peña, F. Martínez, 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. Peña, O. A. Almanza, A. Jouyban, F. Martínez 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 Infinte 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. Martínez and **W. E. Acree, Jr.**, *J. Solution Chem.*, **45**, 1479 (2016).
695. "Infinite Dilution Activity Coefficients of Solutes Dissolved in Anhydrous Alkyl(dimethyl)isopropyl-ammonium 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. Martínez, *J. Mol. Liq.*, **224**, 502 (2016).
697. "Modelling the Solubility and Preferential Solvation of Bergenin in DMSO + Water Mixtures," F. Martínez, 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. Martínez 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. Martínez, 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. "Calculation of Five Thermodynamic Molecular Descriptors by Means of a General Computer Algorithm Based on the Group-Additivity Method: Standard Enthalpies of Vaporization, Sublimation and Solvation, and Entropy of Fusion of ordinary Organic Molecules and Total Phase-Change Entropy of Liquid Crystals," R. Naef and **W. E. Acree, Jr.**, *Molecules*, 22, 1059-1 (2017).
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 Organic 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 Equilib.*, 431, 66 (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. Martínez, *Phys. Chem. Liq.*, 55, 605 (2017).
711. "Preferential Solvation of Etoricoxib in Some Aqueous Binary Cosolvent Mixtures at 298.15 K," F. Martínez, 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. Calhoon**, **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. Martínez and W. E. Acree, Jr., *J. Chem. Eng. Data*, **62**, 1153 (2017).
715. “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. Martínez, *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. Martínez 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. Martínez 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 Solvent 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. Martínez, *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. Martínez, 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. Martínez 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. Martínez 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. Martínez 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. Martínez 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. Martínez 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 Equilib.*, 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 Equilib.*, 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. "Comments 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 Equilib.*, **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 Equilib.*, **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. Martínez 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. Martínez, *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 for inclusion 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 K," Z. J. Cardenas, D. M. Jimenez, O. A. Almanza, A. Jouyban, F. Martínez 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. Martínez 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. Martínez, *J. Mol. Liq.*, 266, 441 (2018).
780. "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.*, 56, 571 (2018).
781. "Preferential Solvation of Some Antiepileptic Drugs in {Cosolvent (1) + Water (2)} Mixtures at 298.15 K," D. A. Tinjaca, A. Shayanfar, A. Jouyban, F. Martínez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 56, 646 (2018).
782. "Comment on Solubility Measurement and Thermodynamic Modeling of *N*-(4-Methylphenyl)-*Z*-3-chloro-2-(phenylthio)propanamide in 12 Pure Solvents at Temperatures Ranging from 278.15 to 318.15 K," **W. E. Acree, Jr.**, **B. Churchill** and M. H. Abraham, *J. Chem. Eng. Data*, 63, 3163 (2018).
783. "A Global Version of Modified Wilson Model for Solubility Prediction of Drugs in Methanol + Water Mixtures," M. Barzegar-Jalali, E. Rahimpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 269, 609 (2018).
784. "Comment on Volumetric and Compressibility Behavior of L-Valine in Aqueous Polyethylene Glycol Solutions at T = (298.15, 308.15 and 318.15) K," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 269, 607 (2018).
785. "Further Calculations on the Solubility of Dipyrone in Some Binary Solvent Mixtures at Various Temperatures," A. Jouyban, F. Martínez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 56, 816 (2018).
786. "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.*, 56, 821 (2018).
787. "Comments on Role of Solubility and Solvation Thermodynamics on the Stability of L-Phenylalanine in

- Aqueous Methanol and Ethanol Solutions,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 271, 209 (2018).
788. “Comment on Density, Dynamic Viscosity, Excess Property and Intermolecular Interplay Studies for 1,4-Butanediol + Dimethyl Sulfoxide Binary Mixture,” **W. E. Acree, Jr.** and F. Martínez, *J. Mol. Liq.*, 272, 237 (2018).
 789. “Comments on Investigation of Molecular Interactions in Binary Liquid Mixture: Measurement and Correlation through Thermo Physical Study, **W. E. Acree, Jr.** and F. Martínez, *J. Mol. Liq.*, 272 689 (2018).
 790. “Comment on ‘Measurement and Modeling of Solubility of para-*tert*-Butylbenzoic Acid in Pure and Mixed Organic Solvents at Different Temperatures’ and ‘Determination of Solubility and Thermodynamic Properties of Benzophenone in Different Pure Solvents,” **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 63, 4807 (2018).
 791. “Apparent Specific Volumes of Sucrose in Different Aqueous Cosolvent Mixtures at 298.2 K,” D. A. Tinjacá, M. M. Muñoz, F. Martínez, A. Jouyban and **W. E. Acree, Jr.**, *Pharm. Sci.*, 24, 324 (2018).
 792. “Solubility Prediction of Drugs in Binary Solvent Mixtures at Various Temperatures Using a Minimum Number of Experimental Data Points,” S. Dadmand, F. Kamari, **W. E. Acree, Jr.** and A. Jouyban, *AAPS PharmSciTech*, 20 (1) 10-1 (2019).
 793. “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.*, 57, 84 (2019).
 794. “Generalized Molecular Solvation in Non-Aqueous Solutions by a Single Parameter Implicit Solvation Scheme,” C. Hille, S. Ringe, M. Deimel, C. Kunkel, **W. E. Acree, Jr.**, K. Reuter and H. Oberhofer, *J. Chem. Phys.*, 150, 041710-1 (2019). **[published in special issue on Interfacial Electrochemistry and Photo(Electro)-Catalysis]**
 795. “Comments on “Measurement and Relationships of Density and Viscosity of 1,2 Propylene Glycol + Dimethyl Sulfoxide Mixtures and Spectral Insight,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 276, 57 (2019).
 796. “Comments on Solubility and Thermodynamic Properties of 5-Nitrofurazone Form γ in Mono-solvents and Binary Solvent Mixtures,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 277, 78 (2019).
 797. “Abraham Model Correlations for Describing Solute Transfer into 4-Methyl-2-pentanol from Both Water and the Gas Phase,” **E. Qian, A. Gupta, R. Neal, G. Lee, M. Che, L. Wang, D. Yue, S. Wang, K. Liu, A. Zhang, W. E. Acree, Jr.** and M. H. Abraham, *J. Mol. Liq.*, 278, 335 (2019).
 798. “Descriptors for Hydrogen Halides, Their Solution Properties and Hydrogen Bonding Acidity and Basicity; Comparison of the Latter with Gas Phase Data,” M. H. Abraham and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 275, 667 (2019).
 799. “Comment on Solubility Determinations and Correlation of Cyromazine in Sixteen Pure Solvents and Mixing Properties of Solutions,” **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, 479, 33 (2019).
 800. “Comments on Density, Dynamic Viscosity, Excess Properties and Intermolecular Interaction of Triethylene Glycol + *N,N*-Dimethylformamide Binary Mixture,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 275, 441 (2019).
 801. “Solvation Descriptors for Zwitterionic α -Aminoacids; Estimation of Water-Solvent Partition Coefficients, Solubilities and Hydrogen-bond Acidity and Hydrogen-bond Basicity,” M. H. Abraham and **W. E. Acree, Jr.**, *ACS Omega*, 4, 2883 (2019).

802. "Prediction of Paracetamol Solubility in Cosolvency Systems at Different Temperatures," A. Hatefi, A. Jouyban, E. Mohammadian, **W. E. Acree, Jr.** and E. Rahimpour, *J. Mol. Liq.*, 273, 282 (2019).
803. "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.*, 57, 163 (2019).
804. "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. Martínez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 57, 259 (2019).
805. "Smart Systems for Determination of Drug's Solubility," V. Jouyban-Gharamaliki, A. Jouyban, **W. E. Acree, Jr.** and E. Rahimpour, *Drug Dev. Ind. Pharm.*, 45, 177 (2019).
806. "Comment on Thermodynamic Modelling for Solubility of 3-Methyl-2-nitrobenzoic Acid in Nine Organic Solvents from T (283.15 K - 318.15 K) and Dissolution Properties," **W. E. Acree, Jr.** and M. H. Abraham, *J. Solution Chem.*, 48, 163 (2019).
807. "Comments on Measurement and Correlation Studies of Phase Equilibria and Thermophysical Properties of 4-*tert*-Butylbenzaldehyde," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 281, 563 (2019).
808. "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.*, 57, 382 (2019).
809. "Comments on the Density, Dynamic Viscosity and Kinematic Viscosity of Protic and Aprotic Polar Solvents (Pure and Mixed) Systems: An Experimental and Theoretical Insight of Thermophysical Properties," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 283, 299 (2019).
810. "Comments on Investigation of Diverse Interactions of Amino Acids (Asp and Glu) in Aqueous Dopamine Hydrochloride with the Manifestation of the Catecholamine Molecule Recognition Tool in Solution Phase," **W. E. Acree, Jr.** and F. Martínez, *J. Mol. Liq.*, 283, 573 (2019).
811. "Comment on Studies on Molecular Interactions in Aqueous and Aqueous Urea Systems of Paracetamol (*N*-(4-Hydroxyphenyl)ethanamide)," **W. E. Acree, Jr.** and F. Martínez, *J. Mol. Liq.*, 283, 548 (2019).
812. "Characterization of the Solubilizing Ability of Tetraalkylammonium Ionic Liquids Containing a Pendant Alkyl Chain Bearing a Basic *N,N*-Dimethylamino or *N,N*-Dimethylaminoethoxy Functionality," F. Rabhi, F. Mutelet, H. Sifaoui, D. V. Wagle, G. A. Baker, **B. Churchill** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 283, 380 (2019).
813. "Effects of *N*-Methylpyrrolidone and Temperature on Phenytoin Solubility," S. Khajir, A. Shayanfar, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 285, 58 (2019).
814. "Using Machine Learning to Predict Enthalpy of Solvation," B. J. Jaquis, A. Li, N. D. Monnier, R. G. Sisk, **W. E. Acree, Jr.** and A. S. I. D. Lang, *J. Solution Chem.*, 48, 564 (2019).
815. "Comments on Study of Thermodynamic Properties of Binary Mixtures of Propionitrile with Dimethylsulfoxide (or Diethylsulfoxide) at Temperatures from (298.15 to 323.15) K," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 285, 740 (2019).
816. "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.*, 57, 445 (2019).

817. "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.*, 57, 453 (2019).
818. "Determination of Abraham Model Solute Descriptors for o-Acetoacetanilide Based on Experimental Solubility Data in Organic Mono-Solvents," **G. Lee, M. Che, E. Qian, L. Wang, A. Gupta, R. Neal, D. Yue, S. Downs, T. Mayes, O. Rose, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 57, 528 (2019).
819. "Limiting Diffusion Coefficients for Ions and Nonelectrolytes in Solvents Water, Methanol, Ethanol, Propan-1-ol, Butan-1-ol, Octan-1-ol, Propanone and Acetonitrile at 298 K, Analyzed Using Abraham Descriptors," M. H. Abraham and **W. E. Acree, Jr.**, *J. Solution Chem.*, 48, 748 (2019).
820. "Solubilization of Naproxen: Experimental Data and Computational Tools," E. Mohammadian, A. Jouyban, M. Barzegar-Jalali, **W. E. Acree, Jr.** and E. Rahimpour, *J. Mol. Liq.*, 288, 110985-1 (2019).
821. "Note on Acoustic and Volumetric of Renewable Oxygenated Fuel Additives at (298.15-323.15) K: Isomeric Butanediols with Ethyl Butyrate," *J. Chem. Thermodyn.*, 138, 104 (2019).
822. "Further Analysis on Solubility Measurement and Thermodynamic Modeling of Benzoic Acid in Monosolvents and Binary Mixtures," A. Jouyban, E. Rahimpour and **W. E. Acree, Jr.**, *Pharm. Sci.*, 25, 165 (2019).
823. "Solubility of Sulfacetamide in (Ethanol + Water) Mixtures: Measurement, Correlation, Thermodynamics, Preferential Solvation and Volumetric Contribution at Saturation," A. Romdhani, F. Martínez, O. A. Almanza, M. A. Peña, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 290, 111219-1 (2019).
824. "Comments on Elucidation of Molecular Interactions Between Ionic Liquid [Emim][Triflate] with 2-Methoxyethanol & *N*-Methylpyrrolidone: Experimental and COSMO-RS Studies," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 291, 111258-1 (2019).
825. "Equilibrium Solubility and Apparent Specific Volume of Lidocaine · HCl · H₂O in Some {Cosolvent (1) + Water (2)} Mixtures at 298.2 K," L. C. Echeverry, M. M. Muñoz, D. A. Tinjacá, F. Martínez, M. A. Peña, E. Rahimpour, A. Jouyban and **William E. Acree, Jr.**, *Phys. Chem. Liq.*, 57, 679 (2019).
826. "A New Computation Method for Drug Solubility Prediction in Methanol + Water Mixtures," S. Dadmand, F. Kamari, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 492, 111369-1 (2019).
827. "Comparison of Models for Correlation of Drug Solubility in Ethanol + Water Binary Mixtures," S. N. Mirheydari, M. Barzegar-Jalali, **W. E. Acree, Jr.**, H. Shekkari, A. Shayanfar, and A. Jouyban, *J. Solution Chem.*, 48, 1079 (2019). (**Published in Special Issue: International Symposium on Solubility Phenomena 2018**)
828. "Abraham Model Correlations for Solute Transfer into 2-Methyl-2-butanol Based on Measured Activity Coefficient and Solubility Data at 298.15 K," I. A. Sedov, T. M. Salikov, **E. Qian, A. Wadawadigi, O. Zha, W. E. Acree, Jr.** and M. H. Abraham, *J. Mol. Liq.*, 293, 111454-1 (2019).
829. "Development of Abraham Model IL-Specific Correlations for *N*-Triethyl(octyl)ammonium bis(Fluoro-sulfonyl)imide and 1-Butyl-3-methylpyrrolidinium bis(Fluorosulfonyl)imide," **D. Yue, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 57, 733 (2019).
830. "Determination of the Hydrogen-Bond Acidity and Basicity for Un-dissociated Hydrazoic Acid, Isocyanic Acid and Isothiocyanic Acid, M. H. Abraham and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 294, 111666-1 (2019).

831. "A New Method for the Determination of Henry's Law Constants (Air-Water-Partition Coefficients) at 298.15 K," M. H. Abraham, **W. E. Acree, Jr.**, D. Hoekman, A. J. Leo and M. L. Medlin, *Fluid Phase Equilib.*, 502, 112300-1 (2019).
832. "Development of Abraham Model Expressions for Predicting the Standard Molar Enthalpies of Vaporization of Organic Compounds at 298.15 K," **B. Churchill**, **W. E. Acree, Jr.** and M. H. Abraham, *Thermochim. Acta*, 681, 178372-1 (2019).
833. "Comments on "Experimental Measurements, Equilibrium Study and Model Correlation of Methyl Paraben in Ethanol and Methanol Aqueous Solutions from = (293.15 to 323.15) K," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 296, 111807-1 (2019).
834. "Comments on What if Cocrystallization Fails for Neutral Molecules? Screening Offered Eutectics as Alternative Pharmaceutical Materials: Leflunomide - A Case Study," **W. E. Acree, Jr.** and A. Jouyban, *Pharm. Sci.*, 25, 369 (2019).
835. "Surface Tension of Multicomponent Organic Mixtures: Measurement and Correlation," G. R. Vakili-Nezhaad, M. Al-Wadhahi, S. Al-Haddabi, A. Valilinejad and **W. E. Acree**, *J. Mol. Liq.*, 296, 112008-1 (2019).
836. "Comments on Assorted Interactions of Amino Acids Prevailing in Aqueous Vitamin C Solutions Probed by Physicochemical and *ab-initio* Contrivances," **W. E. Acree, Jr.** and F. Martínez, *Chem. Phys. Lett.*, 738, 136871-1 (2020).
837. "Abraham Model Correlations for Solute Transfer into Benzyl Alcohol from Both Water and the Gas Phase," **R. Fischer**, **M. Jodray**, **E. Qian**, **L. Wang**, **G. Lee**, **D. Yue**, **M. Che**, **Y. Liu**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 58, 116 (2020).
838. "Abraham Model Correlations for Enthalpies of Solvation of Organic Solutes Dissolved in Methyl Acetate and Octane," **J. Z. Lu**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 58, 18 (2020).
839. "Study of Some Volumetric Properties of {Ethanol (1) + Propylene Glycol (2) + Water (3)} Mixtures at Several Temperatures," M. M. Munoz, A. Romdhani, F. Martínez, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 58, 105 (2020).
840. "Descriptors for Terpene Esters from Chromatographic and Partition Measurements; Estimation of Human Odor Detection Thresholds," M. H. Abraham, **W. E. Acree, Jr.** and J. E. Cometto-Muniz, *J. Chromatogr. A*, 1609, 460428-1 (2020).
841. "Comments on Volumetric and Compressibility Properties for Aqueous Solutions of Choline Chloride Based Deep Eutectic Solvents and Prigogine-Flory-Patterson Theory to Correlate Excess Molar Volumes at T = (293.15 to 308.15) K," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 298, 112181-1 (2020).
842. "Solubility of Sulfacetamide in Aqueous Propylene Glycol Mixtures: Measurement, Correlation, Dissolution Thermodynamics, Preferential Solvation and Solute Volumetric Contribution at Saturation," I. P. Osorio, F. Martínez, D. R. Delgado, A. Jouyban, and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 297, 111889-1 (2020).
843. "Comments on Molecular Interactions in the Binary Mixtures of Some Monoalkanolamines with Acetonitrile between 303.15 and 323.15 K," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 298, 112180-1 (2020).
844. "Computational Tools for Solubility Prediction of Celecoxib in the Binary Solvent Systems," E. Rahimpour, E. Mohammadian, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 299, 112129-1 (2020).
845. "Comments on Dynamic Viscosity, Density and Surface Tension of 1,3-Propanediol (1) + 1,2-

- Propanediamine (2) Binary System at T = (293.15 to 318.15) K and Atmospheric Pressure,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **301**, 112503-1 (2020).
846. “Comments on Estimation of the Solubility with Cosolvent Composition by Combined of the Williams-Amidon Model with Quasi Virial Coefficient,” **W. E. Acree, Jr.**, *Asia-Pacific J. Chem. Eng.*, **15**, 2387-1 (2020).
847. “Comments on Probing Molecular Interactions Between Choline Acetate Ionic Liquid and Alcohols: A Comparable Thermophysical Study of Choline Acetate Ionic Liquid with Change in Solvent,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **302**, 112612-1 (2020).
848. “Development of Abraham Model Correlations for Solute Transfer into 2-Ethyl-1-hexanol from Both Water and the Gas Phase Based on Measured Solubility Ratios,” **K. Liu, S. Wang, E. Hart, A. Klein, T. W. Stephens, B. Bates, J. Calzada, M. Garcia, J. Abbah-Manesah, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **58**, 202 (2020).
849. “Determination of Abraham Model Solute Descriptors for Xanthone Based on Experimental Solubility Measurements at 298.2 K,” **E. Qian, G. Lee, M. Che, L. Wang, D. Yue, R. Fischer, M. Jodray, A. Gupta, R. Neal, Y. Liu, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **58**, 214 (2020).
850. “PMFF: Development of a Physics-based Molecular Force Field for Protein Simulation and Ligand Docking,” **S. B. Hwang, C. J. Lee, S. Lee, S. Ma, Y.-M. Kang, K. H. Cho, S.-Y. Kim, O. Y. Kwon, C. N. Yoon, Y. K. Kang, J. H. Yoon, K.-Y. Nam, S.-G. Kim, Y. In, H. H. Chai, W. E. Acree, Jr., J. A. Grant, K. D. Gibson, M. S. Jhon, H. A. Scheraga and K. T. No**, *J. Phys. Chem. B*, **124**, 974 (2020).
851. “Comments on Density, Viscosity, Surface Tension and Excess Properties of 1,3-Propanediamine and Tetraethylene Glycol at T = 293.15 K – 318.15 K,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **304**, 112732-1 (2020).
852. “Comment on Solubility Measurement and Correlation of 2-Phenyl-1H-indole in fourteen mono organic solvents from 289.05 K to 338.55 K,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **304**, 112800-1 (2020).
853. “Comments on Physicochemical Properties and Spectral Studies for Binary Systems of 2-Ethoxyethanol (1) + Water (2) and + Dimethyl Sulfoxide (2),” **W. E. Acree, Jr.**, *J. Solution Chem.*, **49**, 254 (2020).
854. “Comments on Volumetric, Ultrasonic, Viscometric and Refractive Index Studies of Molecular Interactions in Binary Mixtures of 1-Butyl-3-methylimidazolium Tetrafluoroborate with Methyl Acrylate at Temperatures from 293.15 to 318.15 K,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **305**, 112814-1 (2020).
855. “Further Comments on Experimental Measurements, Equilibrium Study and Model Correlation of Methyl Paraben in Ethanol and Methanol Aqueous Solutions from = (293.15 to 323.15) K,” **A. Jouyban, F. Martínez and W. E. Acree, Jr.**, *J. Mol. Liq.*, **305**, 112806-1 (2020).
856. “Characterization of the Solubilizing Ability of Short-Chained Glycol-Grafted Ammonium and Phosphonium Ionic Liquids,” **F. Mutelet, C. Hussard, G. A. Baker, H. Zhao, B. Churchill and W. E. Acree, Jr.**, *J. Mol. Liq.*, **304**, 112786-1 (2020).
857. “Comments on Thermophysical Properties Analysis of Poly (Ethylene Glycol) 600 + Methanol, Ethanol, 1-Propanol, and 2-Propanol Binary Liquid Mixtures,” **M. Khoubnasabjafari, A. Jouyban, F. Martínez and W. E. Acree, Jr.**, *Int. J. Thermophys.*, **41**, 64-1 (2020).
858. “Estimation of Enthalpies of Sublimation of Organic, Organometallic and Inorganic Compounds,” **M. H. Abraham and W. E. Acree, Jr.**, *Fluid Phase Equilib.*, **515**, 112575-1 (2020).
859. “Comments on Density, Viscosity, Surface Tension and Intermolecular Interaction of Triethylene Glycol and 1,2-Diaminopropane Binary Solution & Its Potential Downstream Usage for Bioplastic Production,”

- W. E. Acree, Jr.**, *J. Mol. Liq.*, 310, 113173-1 (2020).
860. "Critical Comments on Assessment of the Thermodynamic Properties of DL-p-Metha-1,8-diene, 4-Isopropyl-1-methylcyclohexene (DL-limonene) by Inverse Gas Chromatography (IGC)," **W. E. Acree, Jr.**, *J. Chromatog. Sci.*, 58, 401 (2020).
 861. "Comments on Classification of Biphasic Solvent Systems According to Abraham Descriptors for Countercurrent Chromatography," **W. E. Acree, Jr.**, **B. Churchill** and M. H. Abraham, *J. Chromatog. A*, 1618, 460889-1 (2020).
 862. "Application of Abraham Solvation Parameter Model: Estimation of the Lethal Molar Concentration of the Antiepileptic Drug Levetiracetam towards Aquatic Organisms from Measured Solubility Data," **D. Yue**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 58, 302 (2020).
 863. "Further Computation and Some Comments on Stearic Acid Solubility in Mixed Solvents of (Water + Ethanol) and (Ethanol + Ethyl Acetate): Experimental Data and Comparison Among Different Thermodynamic Models," A. Jouyban, E. M. H. Agha, E. Rahimpour and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 310, 113228-1 (2020).
 864. "Comprehensive Models for Density Prediction of Ionic Liquid + Molecular Solvent Mixtures at Different Temperatures," A. Jouyban, S. N. Mirheydari, M. Barzegar-Jalali, H. Shekaarie, **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 58, 309 (2020).
 865. "Solubility of Sulphadiazine in (Acetonitrile + Water) Mixtures: Measurement, Correlation, Thermodynamics and Preferential Solvation," D. R. Delgado, D. I. Caviedes-Rubio, C. P. Ortiz, Y. L. Parra-Pava, M. A. Peña, A. Jouyban, S. N. Mirheydari, F. Martínez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 58, 381 (2020).
 866. "Preferential Solvation of Some Corticosteroids in {Ethanol (1) + Water (2)} Mixtures at 298.2 K," A. Jouyban, **W. E. Acree, Jr.** and F. Martínez, *J. Mol. Liq.*, 312, 113249-1 (2020).
 867. "Estimation of Vapor Pressures of Liquid and Solid Organic and Organometallic Compounds at 298.15 K," M. H. Abraham and **W. E. Acree, Jr.**, *Fluid Phase Equilib.*, 519, 112595-1 (2020).
 868. "Abraham Solvation Parameter Model: Prediction of Enthalpies of Vaporization and Sublimation of Monomethyl Branched Alkanes Using Measured Gas Chromatographic Data," **G. Liu**, **S. Eddula**, **C. Jiang**, **J. Huang**, **P. Tirumala**, **A. Xu**, **W. E. Acree, Jr.** and M. H. Abraham, *Eur. Chem. Bull.*, 9, 273 (2020).
 869. "Dissolution Thermodynamics and Preferential Solvation of Ketoconazole in Some {Ethanol (1) + Water (2)} Mixtures," A. Jouyban, **W. E. Acree, Jr.** and F. Martínez, *J. Mol. Liq.*, 313, 113579-1 (2020).
 870. "Further Computation on the Solubility of 2-Methyl-1,3-benzothiazol-5-amine in Ethanol + Water Mixtures at Several Temperatures," G. Dikmen, M. Barzegar-Jalali, S. N. Mirheydari, **W. E. Acree, Jr.** and A. Jouyban, *Phys. Chem. Liq.*, 58, 421 (2020).
 871. "Equilibrium Solubility and Apparent Specific Volume at Saturation of Sodium Diclofenac in {Formamide (1) / N-Methylformamide (1) / or N,N-Dimethylformamide (1) + Water (2)} Mixtures at 298.2 K," M. M. Munoz, A. Romdhani, D. A. Tinjaca, F. Martínez, L. C. Echeverry, M. A. Peña, E. Rahimpour, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 58, 446 (2020).
 872. "Comment on Solubility Modeling and Solvent Effect on the Solid-Liquid Equilibrium of 2,2-bis(Hydroxymethyl)butyric Acid at Different Temperatures," **W. E. Acree, Jr.**, **P. Tirumala** and **J. Huang**, *J. Mol. Liq.*, 314, 113668-1 (2020).
 873. "Comments on Experimental Investigation of Density, Viscosity and Intermolecular Interaction of Binary

- System 1,3-Butanediol + 1,2-Ethanediamine for CO₂ Capture,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **315**, 113728 (2020).
874. “Comment on Volumetric and Acoustic Approach for Investigating Molecular Interactions of Choline Acetate Ionic Liquid in α,ω -Alkanediols at Different Temperatures,” **W. E. Acree, Jr.**, **S. Eddula** and **Grace Liu**, *J. Mol. Liq.*, **315**, 113749-1 (2020).
875. “Calculation of Abraham Model L-Descriptor and Standard Molar Enthalpies of Vaporization and Sublimation for C9 – C26 Mono-Alkyl and Polymethyl Alkanes,” **P. Tirumala**, **J. Huang**, **S. Eddula**, **C. Jiang**, **A. Xu**, **G. Liu**, **W. E. Acree, Jr.** and M. H. Abraham, *Eur. Chem. Bull.*, **9**, 317 (2020).
876. “Solubility of Codeine Phosphate in *N*-Methyl-2-pyrrolidone + 2-Propanol Mixtures at Different Temperatures, H. Rezaei, A. Jouyban, **W. E. Acree, Jr.**, M. Barzegar-Jalali and E. Rahimpour, *J. Mol. Liq.*, **316**, 113859-1 (2020).
877. “Comments on “Thermophysical Characterization of Aqueous Deep Eutectic Solvent (Choline Chloride/Urea) Solutions in Full Ranges of Concentration at T = (293.15-323.15) K,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **316**, 113922-1 (2020).
878. “Abraham Model Correlations for Enthalpies of Solvation of Organic Solutes Dissolved in *N,N*-Dimethylacetamide, 2-Butanone and Tetrahydrofuran (Updated),” **J. Z. Lu**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **58**, 675 (2020).
879. “Development of Abraham Model Correlations for Describing Solute Transfer into 2-Methyl-1-butanol from Both Water and the Gas Phase from Experimental Solubility Data for Crystalline Organic Compounds,” **E. Qian**, **A. Gupta**, **R. Neal**, **G. Lee**, **M. Che**, **L. Wang**, **D. Yue**, **R. Fischer**, **M. Jodray**, **E. Connolly**, **S. Wang**, **K. Liu**, **A. Zhang**, **J. Dai**, **S. Zhu**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **58**, 623 (2020).
880. “Comments on Spectroscopic and Volumetric Study of Binary Liquid Mixtures Containing Ethyl 4-Hydroxybenzoate and Alkanols,” **W. E. Acree, Jr.**, *Chem. Data Collect.*, **29**, 100489-1 (2020).
881. “Preferential Solvation of Apremilast in Some (Transcutol® + Water) Mixtures,” A. Jouyban, **W. E. Acree, Jr.** and F. Martínez, *J. Mol. Liq.*, **316**, 113905-1 (2020).
882. “Development of Abraham Model Correlations for Short-Chain Glycol-Grafted Imidazolium and Pyridinium Ionic Liquids from Inverse Gas-Chromatographic Measurements,” F. Mutelet, G. A. Baker, H. Zhao, **B. Churchill** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **317**, 113983-1 (2020).
883. “Estimation of Heat Capacities of Gases, Liquids and Solids, and Heat Capacities of Vaporization and of Sublimation of Organic Chemicals at 298.15 K,” M. H. Abraham and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **317**, 113969-1 (2020).
884. “Solubility of Acetaminophen in (Ethanol + Propylene Glycol + Water) Mixtures: Measurement, Correlation, Thermodynamics, and Volumetric Contribution at Saturation,” A. Romdhani, F. Martínez, O. A. Almanza, A. Jouyban, and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **318**, 114065-1 (2020).
885. “Comments Regarding Solid-liquid Equilibrium Solubility, Thermodynamic Properties and Solvent Effect of 3,4-Dinitro-1*H*-pyrazole in Different Pure Solvents,” **W. E. Acree, Jr.** and **J. Huang**, *J. Mol. Liq.*, **318**, 114323-1 (2020).
886. “Comments Regarding Acoustical and Physico-chemical Study of Binary Azeotropes (Aniline),” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **320A**, 114428-1 (2020).
887. “Solubility of 4-Methyl-3-nitrobenzoic Acid in Organic Mono-solvents: Calculation of Abraham Model

- Solute Descriptors,” **S. Wang, K. Liu, A. Zhang, J. Dai, A. Gupta, S. Zhu, S. Eddula, C. Jiang, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **58**, 782 (2020).
888. “Determination of Abraham Model Correlations for Describing Solute Transfer into the Methyl Butyrate Mono-solvent at 298 K,” **E. Qian, A. Wadawadigi, O. Zha, K. Liu, J. Dai, S. Eddula, C. Jiang, A. Zhang, S. Zhu, E. Garcia, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **58**, 792 (2020).
889. “Abraham Model Correlation for Direct Water-to-2,2,5,5-Tetramethyloxolane Solute Transfer Partitioning Process Revisited,” **B. Churchill, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **58**, 833 (2020).
890. “Evaluating Classical Force Fields Against Experimental Cross-Solvation Free Energies,” **S. Kashefolgheta, M. P. Oliveira, S. R. Rieder, B. A. C. Horta, W. E. Acree, Jr.** and P. H. Hunenberger, *J. Chem. Theory Comput.*, **16**, 7556 (2020).
891. “Surface Tension of Binary Organic Mixtures Based on a New Dimensionless Number,” **G. R. Vakili-Nezhaad, M. Al-Wadhahi, S. Al-Haddabi, A. Vakilinejad and W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **152**, 106292-1 (2021).
892. “Comments Concerning “Volumetric Properties, Viscosity Coefficients and Aggregation Behaviour of DBU-Acetate Protic Ionic Liquid in Molecular Solvents,” **W. E. Acree, Jr.** and **S. Eddula**, *J. Mol. Liq.*, **321**, 114786-1 (2021).
893. “Comments on Interpretation of Hydrogen Bonding Formation Through Thermodynamic, Spectroscopic and DFT Studies Between Isoamyl Alcohol and Benzyl Alcohol at T = (293.15 to 318.15) K,” **W. E. Acree, Jr.** and **B. Churchill**, *J. Mol. Liq.*, **321**, 114543-1 (2021).
894. “Solubility of Sulfadiazine in (Acetonitrile + Methanol) Mixtures: Determination, Correlation, Dissolution Thermodynamics and Preferential Solvation,” **D. R. Delgado, O. Bohamon-Hernandez, N. E. Cerquera, C. P. Ortiz, F. Martínez, E. Rahimpour, A. Jouyban and W. E. Acree, Jr.**, *J. Mol. Liq.*, **322**, 114979-1 (2021).
895. “Comments on Stearic Acid Solubility in Mixed Solvents of (Water + Ethanol) and (Ethanol + Ethyl Acetate): Experimental Data and Comparison Among Different Thermodynamic Models,” **W. E. Acree, Jr., E. R. Huang and K. Kim**, *J. Mol. Liq.*, **322**, 114962-1 (2021).
896. “A Single Model to Represent Physico-chemical Properties of Liquid Mixtures at Various Temperatures,” **A. Jouyban and W. E. Acree, Jr.**, *J. Mol. Liq.*, **323**, 115054-1 (2021).
897. “Solubility of Sulfadiazine in (Ethylene Glycol + Water) Mixtures: Measurement, Correlation, Thermodynamics and Preferential Solvation,” **A. M. Cruz-González, M. S. Vargas-Santana, C. P. Ortiz, N. E. Cerquera, D. R. Delgado, F. Martínez, A. Jouyban and W. E. Acree, Jr.**, *J. Mol. Liq.*, **323**, 115058-1 (2021).
898. “Solubility of Meloxicam in Aqueous Binary Mixtures of Formamide, N-Methylformamide and N,N-Dimethylformamide: Determination, Correlation, Thermodynamics and Preferential Solvation,” **D. A. Tinjacá, F. Martínez, O. A. Almanza, A. Jouyban and W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **154**, 106332-1 (2021).
899. “Comments on Reply to Comments on Study of Density, Dynamic Viscosity, Excess Property and Intermolecular Interplay Studies for 1,4-Butanediol + Dimethyl Sulfoxide Binary Mixture,” **W. E. Acree, Jr.** and **F. Martínez**, *J. Mol. Liq.*, **321**, 112089-1 (2021).
900. “Abraham Model Correlations for Describing Solute Transfer Processes into Diethyl Carbonate,” **J. Dai, S. Eddula, C. Jiang, A. Zhang, K. Liu, S. Zhu, S. Wang, A. Gupta, B. Churchill, E. Garcia, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **59**, 26 (2021).

901. "Descriptors for Adamantane and Some of its Derivatives," M. H. Abraham, **W. E. Acree, Jr.** and X. Liu, *J. Mol. Liq.*, 325, 114894-1 (2021).
902. "Equilibrium Solubility and Apparent Specific Volume at Saturation of Sodium Sulfadiazine in Some Aqueous Cosolvent Mixtures at 298.2 K," M. M. Munoz, F. Martínez, D. R. Delgado, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 59, 40 (2021).
903. "Thermodynamic Analysis of the Solubility of Triclocarban in Ethylene Glycol + Water Mixtures," A. M. Cruz-González, M. S. Santana-Tovar, S. De Jesus Polania-Orozco, C. P. Ortiz, N. E. Cerquera, F. Martínez, D. R. Delgado, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 325, 115222-1 (2021).
904. "Calculation of Abraham Model L-Descriptor and Standard Molar Enthalpies of Vaporization for Linear C₇-C₁₄ Alkynes from Gas Chromatographic Retention Index Data," **N. Shanmugam**, **S. Eddula** and **W. E. Acree, Jr.**, *Eur. Chem. Bull.*, 10, 46 (2021).
905. Development of Abraham Model Correlations for Enthalpies of Solvation of Solutes Dissolved in *N*-Methylformamide, 2-Pyrrolidone and *N*-Methylpyrrolidone," T. I. Magsumov, I. A. Sedov and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 323, 114609-1 (2021).
906. "Comments on Intermolecular Interactions between Methanol and Some Sulphonamide Drugs in Aqueous Medium using Thermodynamics Approach," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 322, 112244-1 (2021).
907. "Equilibrium Solubility, Dissolution Thermodynamics, Transfer Property and Preferential Solvation of Zonisamide in Aqueous Binary Mixtures of Ethanol, Acetonitrile, Isopropanol and *N,N*-Dimethylformamide," C. Zhang, A. Jouyban, H. Zhao, A. Farajtabar and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 326, 115219-1 (2021).
908. Prediction of Drug Solubility in Ethylene Glycol + Water Mixtures Using Generally Trained Mathematical Models," P. Jafari, E. Rahimpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 328, 115325-1 (2021).
909. "Comments on Measurement and Correlation of Solubility Data for Atorvastatin Calcium in Pure and Binary Solvent Systems from 293.15 K to 328.15 K," **W. E. Acree, Jr.**, **A. Xu** and **S. Cai**, *J. Mol. Liq.*, 328, 115445-1 (2021).
910. Solubility of Meloxicam in (Carbitol® + Water) Mixtures: Determination, Correlation, Dissolution Thermodynamics and Preferential Solvation," D. A. Tinjacá, F. Martínez, O. A. Almanza, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 324, 114671-1 (2021).
911. "Descriptors for High-Energy Nitro Compounds; Estimation of Thermodynamic, Physiochemical and Environmental Properties," M. H. Abraham, **W. E. Acree, Jr.** and X. Liu, *Propel. Explos. Pyrotech.*, 46, 267 (2021). [Published in Special Issue: Progress in Energetic Materials]
912. "Evodiamine in Several Binary Aqueous -Cosolvents: Solubility Measurement and Modeling, Hansen Solubility Parameter, Preferential Solvation and Apparent Dissolution and Transfer Properties," C. Zhang, A. Farajtabar, A. Jouyban, **W. E. Acree, Jr.** and H. Zhao, *J. Mol. Liq.*, 330, 115658-1 (2021).
913. "Further Calculations on the Solubility of *trans*-Resveratrol in (Transcutol® + Water) Mixtures," A. Romdhani, I. P. Osorio, F. Martínez, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 330, 115645-1 (2021).
914. "Calculation of the Vapour Pressure of Organic Molecules by Means of a Group-Additivity Method and their Resultant Free Energy and Entropy of Vaporization at 298.15K," R. Naef and **W. E. Acree, Jr.**, *Molecules*, 26, 1045-1 (2021).
915. "Descriptors for Vitamin K3 (Menadione); Calculation of Biological and Physicochemical Properties," X. Liu, M. H. Abraham and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 330, 115707-1 (2021).

916. "Solubility, Dissolution Thermodynamics and Preferential Solvation of Sulfadiazine in (*N*-Methyl-2-Pyrrolidone + Water) Mixtures," I. P. Osorio, F. Martínez, M. A. Peña, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **330**, 115693-1 (2021).
917. "Abraham Model Correlations for Describing Dissolution of Organic Solutes and Inorganic Gases in Dimethyl Carbonate," **S. Strickland**, **L. Ocon**, **A. Zhang**, **S. Wang**, **S. Eddula**, **G. Liu**, **P. Tirumala**, **J. Huang**, **J. Dai**, **C. Jiang**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **59**, 181 (2021).
918. "Descriptors for Edaravone; Studies on its Structure, and Prediction of Properties," X. Liu, M. H. Abraham, R. J. Abraham, **W. E. Acree, Jr.**, A. Aghamohammadi and K. Afarinkia, *J. Mol. Liq.*, **332**, 115821-1 (2021).
919. "Comments on Assessment of Solubility and Hansen Solubility Parameters of Rifampicin in Various Permeation Enhancers: Experimental and Computational Approach," **W. E. Acree, Jr.**, **N. Shanmugam** and **P. Garlapati**, *J. Mol. Liq.*, **333**, 115971-1 (2021).
920. "Equations for the Correlation and Prediction of Partition Coefficients of Neutral Molecules and Ionic Species in the Water-Isopropanol Solvent System," M. H. Abraham, **W. E. Acree, Jr.**, C. Rafols and M. Roses, *J. Solution Chem.*, **50**, 458 (2021).
921. "Comments Regarding Volumetric, UV-Vis and FT IR Studies of Isoniazid in Diethylsulfoxide Solutions," **W. E. Acree, Jr.**, *J. Solution Chem.*, **50**, 610 (2021).
922. The Partition of Organic Compounds from Water into the Methyl Isobutyl Ketone Extraction Solvent with Updated Abraham Model Equation," **K. Smart**, **E. Garcia**, **B. Oloyede**, **R. Fischer**, T. D. Golden, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **59**, 431 (2021).
923. "Updated Abraham Model Correlations to Describe Enthalpies of Solvation of Solutes Dissolved in Heptane, Cyclohexane and *N,N*-Dimethylformamide," **J. Huang**, **S. Eddula**, **P. Tirumala**, **T. Casillas**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **59**, 442 (2021).
924. "Preferential Solvation of 4-(4-Ethoxyphenyl)-5-(3,4,5-trimethoxybenzoyl)-3,4-dihydropyrimidin-2-(1*H*)-one in {PEG 400 (1) + Water (2)} Mixtures," A. Jouyban, F. Shakeel, **W. E. Acree, Jr.** and F. Martínez, *Phys. Chem. Liq.*, **59**, 423 (2021).
925. "Predicting the Solubility, Thermodynamic Properties and Preferential Solvation of Sulfamethazine in {Acetonitrile + Water} Mixtures Using a Minimum Number of Experimental Data Points," M. Khoubnasabjafari, D. R. Delgado, F. Martínez, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **59**, 400 (2021).
926. "*o*-Nitroacetanilide Equilibrium Solubility in Fifteen Mono-Solvents: Experimental Determination, Mathematical Correlation and Solvent Effect Examination," H. Zhao, Y. Bao, A. Farajtabar, A. Jouyban, **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, **66**, 2124 (2021).
927. "Solubility, Three-Dimensional Hansen Solubility Parameters and Solution Thermodynamics of 3,3'-Diamino Diphenyl Sulfone in Fourteen Neat Solvents from 283.15 K to 328.15 K," J. Chen, A. Farajtabar, A. Jouyban, **W. E. Acree, Jr.** and, H. Zhao, *J. Chem. Eng. Data*, **66**, 2167 (2021).
928. "Solubility, Hansen Solubility Parameter, Solvent Effect and Preferential Solvation of Benorilate in Binary Aqueous Mixtures of Isopropanol, *N,N*-Dimethylformamide, Ethanol and *N*-Methyl-2-Pyrrolidinone," Q. Gao, P. Zhu, H. Zhao, A. Farajtabar, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **161**, 106517-1 (2021).
929. "Solubility, Dissolution Thermodynamics and Preferential Solvation of Meloxicam in (Methanol + Water)

- Mixtures,” D. A. Tinjaca, F. Martínez, O. A. Almanza, A. Jouyban and **W. E. Acree, Jr.**, *J. Solution Chem.*, 50, 667 (2021).
930. “Prediction of Hypothetical Solubility of Drugs in Phase Separated Miscible Binary Solvent Mixtures Using in Interpolation Technique,” E. Rahimpour, J. Soleymani, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 335, 116518-1 (2021).
931. “Dissolution Thermodynamics and Preferential Solvation of Gliclazide in (Transcutol® + Water) Mixtures,” A. Jouyban, **W. E. Acree, Jr.** and F. Martínez, *Phys. Chem. Liq.*, 59, 607 (2021).
932. “Abraham Solvation Parameter Model: Calculation of Ion-Specific Equation Coefficients for the *N*-Ethyl-*N*-methylmorpholinium and *N*-Octyl-*N*-methylmorpholinium Cations,” **B. Churchill**, **T. Casillas**, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 59, 575 (2021).
933. “Further Numerical Analyses of the Solubility of Diazepam in Aqueous tert-Butanol Mixtures,” A. Jouyban, **W. E. Acree, Jr.** and F. Martínez, *Phys. Chem. Liq.*, 59, 512 (2021).
934. “Solubility of Sulfamerazine in (Ethylene Glycol + Water) Mixtures: Measurement, Correlation, Thermodynamics and Preferential Solvation,” M. S. Vargas-Santana, A. M. Cruz-Gonzalez, C. P. Ortiz, D. R. Delgado, F. Martínez, M. A. Peña, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 337, 116330-1 (2021).
935. “Solubility and Thermodynamic Aspects of Etonogestrel in Several Aqueous Cosolvent Solutions,” W. Li, J. Yuan, X. Wang, W. Shi, H. Zhao, R. Xing, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 338, 116624-1 (2021).
936. “Bifonazole Dissolved in Numerous Aqueous Alcohol Mixtures: Solvent Effect, Enthalpy–Entropy Compensation, Extended Hildebrand Solubility Parameter Approach and Preferential Solvation,” W. Li, J. Yuan, X. Wang, W. Shi, H. Zhao, R. Xing, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 338, 116671-1 (2021).
937. “Evaluation of Nine Condensed-Phase Force Fields of the GROMOS, CHARMM, OPLS, AMBER, and OpenFF Families Against Experimental Cross-Solvation Free Energies,” S. Kashefolgheta, S. Wang, **W. E. Acree, Jr.** and P. H. Hünenberger, *Phys. Chem. Chem. Phys.*, 23, 13055 (2021).
938. “Comments on “Study of Intermolecular Interactions in the Binary Mixtures Containing Cyclic Ethers and Benzyl Amine at Different Temperatures” **W. E. Acree, Jr.**, **A. Xu** and **E. Huang**, *Chem. Data Collect.*, 34, 100737-1 (2021).
939. “Solubility of Coumarin nn (Ethanol + Water) Mixtures: Determination, Correlation, Thermodynamics and Preferential Solvation,” S. Akay, B. Kayan, A. Jouyban, F. Martínez and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 339, 116761 (2021).
940. “Non-Electrostatic Energies as a Metric for Prediction of Deferasirox Solubility in Binary Solvent Mixtures: Novel Polarized Continuum Model Tactic, P. Rajabzadeh, P. Ghanbarpour, N. Aliasgharlou, E. Rahimpour, **W. E. Acree, Jr.**, A. Jouyban and A. F. Azarbayjan, *J. Mol. Liq.*, 339, 115791-1 (2021).
941. “JPCRD: 50 Years of Providing the Scientific Community with Critically Evaluated Thermodynamic Data, Predictive Methods and Large Thermodynamic Data Compilations,” **W. E. Acree, Jr.** and J. S. Chickos, *J. Phys. Chem. Ref. Data*, 50, 033101-1 (2021). **(by invitation for inclusion in the journal’s 50th year anniversary).**
942. “Prediction of Sulfonamides’ Solubilities in the Mixed Solvents Using Solvation Parameters,” E. Rahimpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 339, 116269-1 (2021).

943. "Reference Materials for Phase Equilibrium Studies. 1. Liquid-Liquid Equilibria (IUPAC Technical Report)," A. Bazyleva, **W. E. Acree, Jr.**, R. D. Chirico, V. Diky, G. T. Hefter, J. Jacquemin, J. W. Magee, J. P. O'Connell, J. D. Olson, I. Polishuk, K. A. G. Schmidt, J. M. Shaw, J. P. Martin Trusler and R. D. Weir, *Pure Appl. Chem.*, **93**, 811 (2021).
944. "Additional Computations on Volumetric, Acoustic, Transport and FTIR Studies of Binary Dibutylamine + Isomeric Butanol Mixtures as Potential CO₂ Absorbents," P. Jafaria, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, **338**, 116776 (2021).
945. "Solubility Modeling and Solvation Behavior of 3,3'-Diamino Diphenylsulfone in Binary Aqueous Mixtures of Isopropanol, Methanol, Ethanol and *N,N*-Dimethylformamide," J. Chen, P. Zhu, A. Jouyban, A. Farajtabar, **W. E. Acree, Jr.** and H. Zhao, *J. Chem. Thermodyn.*, **163**, 106612-1 (2021).
946. "Solubility, Solvation Thermodynamics and Solvent Effect of Thiabendazole in Several Cosolvent Blends," X. Zhang, R. Lv, R. Xing, W. Shi, H. Zhao, W. Lia, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **163**, 106616-1 (2021).
947. "Abraham Solvation Parameter Model: Updated Correlations for Describing Solute Partitioning into Plant Cuticles from Water and from Air," **S. Eddula, A. Xu, C. Jiang, J. Huang, P. Tirumala, G. Liu, W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, **59**, 716 (2021).
948. "Dissolution Thermodynamics and Preferential Solvation of Meloxicam in (Acetonitrile + Water) Mixtures," D. A. Tinjaca, F. Martínez, O. A. Almanza, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **59**, 733 (2021).
949. "Solubility Measurement, Preferential Solvations and Solvent Effect of 3,5-Dinitrosalicylic Acid in Several Binary Aqueous Blends," J. Chen, A. Farajtabar, A. Jouyban, **W. E. Acree, Jr.**, P. Zhu and H. Zhao, *J. Chem. Eng. Data*, **66**, 3531 (2021).
950. "Comments Regarding Solubility Determination and Crystallization Thermodynamics of an Intermediate in Different Organic Solvents," **N. Shanmugam, A. Varadharajan** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **342**, 117408-1 (2021).
951. "Equilibrium Solubility of Vanillin in Some (Ethanol + Water) Mixtures: Determination, Correlation, Thermodynamics and Preferential Solvation," S. Akay, B. Kayan, A. Jouyban, F. Martínez and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **342**, 117529-1 (2021).
952. "The Quantitative Structure-Property Relationships for the Gas-Ionic Liquid Partition Coefficient of Large Variety of Organic Compounds in Three Ionic Liquids," K. M. Toots, S. Sild, J. Leis, **W. E. Acree** and U. Maran, *J. Mol. Liq.*, **343**, 117573-1 (2021).
953. "Descriptors for Fluorotelomere Alcohols. Calculation of Physicochemical Properties," M. H. Abraham and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **59**, 932 (2021).
954. "Solubilization of Dexamethasone: Experimental Data Co-solvency and Polarized Continuum Modelling," A. Maheri, P. Ghanbarpour, E. Rahimpour, **W. E. Acree, Jr.**, A. Jouyban, A. F. Azarbayjani and M. Kouhkan, *Phys. Chem. Liq.*, **59**, 817 (2021).
955. "Solubility of Sulphadiazine in Some {Carbitol® + Water (2)} Mixtures: Determination, Correlation, and Preferential Solvation," I. P. Osorio, F. Martínez, M. Á. Peña, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **59**, 890 (2021).
956. "Comments on Molecular Interaction Studies of Antidepressant Drug with Aqueous Caffeine Using Volumetric and Acoustic Methods," **A. Varadharajan, N. Shanmugam** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **344**, 117706-1 (2021).

957. "Revision and Extension of a Generally Applicable Group-Additivity Method for the Calculation of the Standard Heat of Combustion and Formation of Organic Molecules," R. Naef and **W. E. Acree, Jr.**, *Molecules*, 26, 6101-1 (2021). **(by invitation for inclusion in special issue for Exclusive Papers of the Editorial Board Members (EBMs) of the Physical Chemistry Section of Molecules)**
958. "Commentary on Structure Breaking/Making Property of Acefylline Piperazine in Aqueous, Aqueous Methanol, and Aqueous Ethylene Glycol Systems," **W. E. Acree, Jr.**, *J. Struct. Chem.*, 62, 1604 (2021). **(also published in the Russian edition of the journal which is Zhurnal Strukturnoi Khimii.)**
959. "Comments on Solubility and thermodynamic properties of an energetic intermediate in four binary solvents (water + n-butanol, n-pentanol, isobutanol and isoamyl alcohol)," A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 344, 117805-1 (2021).
960. "Solubility, Solvent Effect and Solvation Performance of MBQ-167 in Aqueous Co-solvent Solutions," Q. Gao, P. Zhu, H. Zhao, A. Farajtabar, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Eng. Data*, 66, 4725 (2021).
961. "Solubility, Solvent Effect, Enthalpy–Entropy Compensation and Solvation Thermodynamics of 4-(Bromomethyl)-2(1*H*)-Quinolinone in Several Aqueous Blends," X. Gao, P. Zhu, A. Jouyban, **W. E. Acree, Jr.**, and H. Zhao, *J. Chem. Thermodyn.*, 166, 106670-1 (2022).
962. "Comments on Effect of Alkyl Chain Length of 1-Alkanols on Solution Behavior of Bactericidal Antibiotic in Terms of Thermo-Acoustic Parameters," **W. E. Acree, Jr.**, *J. Mol. Liq.*, 346, 117922-1 (2021).
963. "Comprehensive Understanding on Solubility and Solvation Performance of Curcumin (Form I) in Aqueous Co-solvent Blends," R. Lv, X. Zhang, R. Xing, W. Shi, H. Zhao, W. Li, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 167, 106718-1 (2022).
964. "Henry's Law Constants (IUPAC Recommendations 2021)," R. Sander, **W. E. Acree, Jr.**, A. De Visscher, S. E. Schwartz and T. J. Wallington, *Pure Appl. Chem.*, 94, 71 (2022).
965. "Preferential Solvation Study of Synthesized Aldose Reductase Inhibitor (SE415) in {PEG400 (1) + Water (2)} Cosolvent Mixture and Gastroplus Based Predictions," A. Hussain, M. A. Altamimi, O. Afzal, A. S. A. Altamimi, A. Ali, A. Ali, F. Martínez, M. U. M. Siddique, **W. E. Acree, Jr.** and A. Jouyban, *ACS Omega*, 7, 1197 (2022).
966. "Preferential Solvation Study of (*Z*)-*N*-Benzyl-2-{5-(4-hydroxybenzylidene)-2,4-dioxothiazolidin-3-yl}acetamide (3) in {NMP (1) + Water (2)} Co-solvent Mixture and Gastroplus Software Based *in Vitro* Simulation," A. Hussain, O. Afzal, A. S.A. Altamimi, A. Ali, A. Ali, F. Martínez, M. U. M. Siddique, **W. E. Acree, Jr.** and N. Ali, *J. Mol. Liq.*, 349, 118491-1 (2022).
967. "Contribution from Non-ideality and Preferential Solvation to Non-linear Solvatochromism in Binary Mixtures," X. Yao, R. Fang, H. Zhao, A. Farajtabar, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 349, 118515-1 (2022).
968. "Solubility, Solvation Analysis and Enthalpy-Entropy Compensation of Musk Ketone in Some Cosolvent Solutions," X. Yao, G. Wang, H. Zhao, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 168, 106727-1 (2022).
969. "Abraham Model Correlations for Describing the Partition of Organic Compounds from Water into the Methyl Ethyl Ketone Extraction Solvent," **K. Smart**, **E. Connolly**, **L. Ocon**, T. D. Golden, **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 60, 47 (2022).
970. "Thermodynamic Study and Preferential Solvation of Sulfamerazine in Acetonitrile + Methanol Cosolvent

- Mixtures at Different Temperatures,” R. E. Cárdenas-Torres, C. P. Ortiz, **W. E. Acree, Jr.**, A. Jouyban, F. Martínez, and D. R. Delgado, *J. Mol. Liq.*, 349, 118172-1 (2022).
971. “Relation Between Solubility and Microextraction Recovery Data of Lamogrigine for Prediction of Partitioning Properties,” E. Rahimpour, M. R. A. Mogaddam, M. Barzegar-Jalali, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 349, 118114-1 (2022).
 972. “Solubility, Dissolution Thermodynamics and Preferential Solvation of Meloxicam in Aqueous Mixtures of 2-Propanol,” D. A. Tinjaca, F. Martínez, O. A. Almanza, A. Jouyban and **W. E. Acree, Jr.**, *Pharm. Sci.*, 28, 130 (2022).
 973. “Abraham Model Description of the Solubilizing Properties of the Isopropyl Acetate Organic Mono-solvent,” **A. Xu, A. Varadharajan, N. Shanmugam, K. Kim, E. Huang, S. K. Cai** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 60, 312 (2022).
 974. “Solubility of *trans*-Resveratrol in {Ethanol (1) + Water (2)} Mixtures Revisited: Correlation, Dissolution Thermodynamics and Preferential Solvation,” A. Romdhani, F. Martínez, A. Pena, E. Rahimpour, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 60, 203 (2022).
 975. “Development of Abraham Model Correlations for Solute Transfer into Cyclopentanol from Both Water and the Gas Phase Based on Measured Solubility Ratios,” **S. K. Cai, E. Huang, K. Kim, N. Shanmugam, A. Varadharajan, A. Xu** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 60, 287 (2022).
 976. “Extended Hildebrand Solubility Approach Applied to Sulphadiazine in Aqueous Binary Mixtures of Carbitol® and *N*-Methyl-Pyrrolidone at 313.15 K,” I. P. Osorio, F. Martínez, M. Á. Peña, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 60, 165 (2022).
 977. “Further Computations in Physico-Chemical Properties of Binary Mixtures of *p*-Cymene with α -Pinene, Limonene and Citral,” A. Nazemich, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, 350, 118211-1 (2022).
 978. “Comments on “Volumetric, Acoustic and IR Spectroscopic Properties of Binary Mixtures (1,2-Diaminopropane + Methyl-, Ethyl-, *n*-Propyl- and *n*-Butyl Acetates: A Combined Experimental and First-Principles Investigation,” **K. Smart** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 351, 118651-1 (2022).
 979. “Descriptors for Some Compounds with Pharmacological Activity; Calculation of Properties,” X. Liu, **W. E. Acree, Jr.** and M. H. Abraham, *Int. J. Pharm.*, 617, 121597-1 (2022).
 980. “Comments Concerning Solid-Liquid Phase Equilibrium, Hansen Solubility Parameters and Thermodynamic Behavior of Arbidol Hydrochloride Monohydrate in Eleven Mono-Solvents,” A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 354, 118836-1 (2022).
 981. “Drug’s Solubility Correlation Using the Jouyban-Acree Model: Effects of Concentration Units and Error Criteria,” E. Rahimpour, S. Alvani-Alamdari, **W. E. Acree, Jr.** and A. Jouyban, *Molecules*, 27, 1998-1 (2022). **(by invitation for inclusion in Special Issue: New Insights into Thermodynamics of Solutes in Neat and Complex Solvents)**
 982. “Comments on Density Modeling and Apparent Molar Volume of Ionic Liquid 1-Butyl-3-methylimidazolium Bromide in Water,” **W. E. Acree, Jr.**, *J. Braz. Soc. Mech. Sci.*, 44, 149-1 (2022).
 983. “Equilibrium Solubility of Amrinone in Aqueous Co-Solvent Solutions Reconsidered: Quantitative Molecular Surface, Inter/Intra-molecular Interactions and Solvation Thermodynamics Analysis,” J. Chen, H. Zhao, A. Farajtabar, P. Zhu, A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 355, 118995-1 (2022).
 984. “Electrostatic Potential Surface Analysis of Paclobutrazol Molecule and Comprehensive Insight into Its Solubility in Aqueous Co-solvent Solutions,” F. Liu, H. Zhao, A. Farajtabar, P. Zhu, A. Jouyban and **W. E.**

- Acree, Jr.**, *J. Chem. Thermodyn.*, **170**, 106787-1 (2022).
985. Comments on Study of Solvation Behavior Thermodynamics and FT-IR Spectroscopic Analysis of *N*-Butylethanolammonium Based Ionic Liquids with Polar Solvents,” **W. E. Acree, Jr.**, *J. Mol. Struct.*, **1262**, 132999-1 (2022).
 986. “Abraham Model Correlations for Describing Solute Transfer into Anisole Based on Measured Activity Coefficients and Molar Solubilities,” **K. Kim, N. Shanmugam, A. Xu, A. Varadharajan, S. K. Cai, E. Huang** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **60**, 452 (2022).
 987. “Determination of Abraham Model Solute Descriptors for Hippuric Acid from Measured Molar Solubilities in Several Organic Mono-solvents of Varying Polarity and Hydrogen-Bonding Ability,” **S. Sinha, A. Varadharajan, A. Xu, E. Wu** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **60**, 563 (2022).
 988. “Application of Polarizable Continuum Modelling to Assess Minoxidil Solubility in Mixed Solvents,” M. Kouhkan, P. Abbasi, P. Ghanbarpour, E. Rahimpour, **W. E. Acree, Jr.**, A. Jouyban and A. F. Azarbayjani, *Phys. Chem. Liq.*, **60**, 572 (2022).
 989. “Equilibrium Solubility of *trans*-Resveratrol in {Acetone (1) + Water (2)} Mixtures: Correlation, Dissolution Thermodynamics and Preferential Solvation,” F. Martínez, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **60**, 598 (2022).
 990. “Hirshfeld Surface and Electrostatic Potential Surface Analysis of Crystalline Clozapine and Its Solubility and Molecular Interactions in Aqueous Blends,” X. Yao, Z. Wang, Y. Geng, H. Zhao, E. Rahimpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Mol. Liq.*, **360**, 119328-1 (2022).
 991. “Acetamidiprid in Several Binary Aqueous Solutions: Solubility, Intermolecular Interactions and Solvation Behavior,” Y. Liu, H. Zhao, A. Farajtabar, P. Zhu, E. Rahimpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Thermodyn.*, **172**, 106828-1 (2022).
 992. “Comments on Elucidating the Important Thermo Physical Characterization Properties of Amine Activated Hybrid Novel Solvents for Designing Post-Combustion CO₂ Capture Unit,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, **360**, 119395-1 (2022).
 993. “Comments on Excess Molar Volumes Reported in Study of Short Range and Long Range Molecular Interactions in Binary Liquid Mixtures of *N,N*-Dimethylformamide (DMF) and 1-Propanol,” **W. E. Acree**, *J. Mol. Liq.*, **360**, 119451-1 (2022).
 994. “Comments on “Experimental and Theoretical Investigation of Molecular Interaction and Molecular Polarity of Organic Solvent with Ionic Liquids and Deep Eutectic Solvents at T (298.15–343.15) K and 1 atm,” **W. E. Acree, Jr.**, *Asia-Pacific J. Chem. Eng.*, **17**, e2772-1 (2022).
 995. “Comments on Experimental Measurement of Physical, Transport, and Optical Properties of Binary Mixtures of *N*-Hexyl Pyridinium Nitrate [Hpy][NO₃] Ionic Liquid with Water, Ethanol, and Acetonitrile At 298.15 K and 101 kPa,” **K. Kim, N. Shanmugam**, and **W. E. Acree, Jr.**, *J. Solution Chem.*, **51**, 785 (2022).
 996. “Abraham Solvation Parameter Model: Calculation of L Solute Descriptors for Large C₁₁ to C₄₂ Methylated Alkanes from Measured Gas-Liquid Chromatographic Retention Data,” **E. Wu, S. Sinha, C. Yang, M. Zhang** and **W. E. Acree, Jr.**, *Liquids*, **2**, 85 (2022). (published in Topic Collection: **Feature Papers in Solutions and Liquid Mixtures Research**)
 997. “Comments on Evaluation of Thermodynamic Behavior of Bisphenol A in Water with Deep Eutectic Solvents,” **W. E. Acree, Jr.**, *S. Afr. J. Chem. Eng.*, **41**, 233 (2022).
 998. “Machine Learning Quantitative Structure-Property Relationships as a Function of Ionic Liquid Cations for

- the Gas-Ionic Liquid Partition Coefficient of Hydrocarbons,” K. M. Toots, S. Sild, J. Leis, **W. E. Acree** and U. Maran, *Int. J. Mol. Sci.*, 23, 7534-1 (2022). **(by invitation for inclusion in Special Issue: Structure, Energy, and Dynamics of Molecular Interactions)**
999. “Comments Regarding Thermodynamic Parameters of Solvation and Volumes of Nano Cu(NO₃)₂·2.5H₂O in Different Concentrations of DMF – Water Mixed Solvents,” **W. E. Acree, Jr.**, *J. Mol. Liq.*, 363, 119780-1 (2022).
1000. “Investigations of Potential Ionic Liquid Phases for Chromatographic Processes Using Spectroscopic and Thermal Techniques,” **K. Smart**, T. D. Golden and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 363, 119820-1 (2022).
1001. “Abraham Solvation Parameter Model: Examination of Possible Intramolecular Hydrogen-Bonding Using Calculated Solute Descriptors,” **S. Sinha**, **C. Yang**, **E. Wu** and **W. E. Acree, Jr.**, *Liquids*, 2, 131 (2022).
1002. “Quantitative Surface and HS Analysis of 3-Nitrophthalonitrile and Its Solubility and Solvation Thermodynamics in Aqueous Solutions,” Y. Liu, H. Zhao, A. Farajtabar, P. Zhu, E. Rahimpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Chem. Thermodyn.*, 174, 106873-1 (2022).
1003. “Expanding the Equilibrium Solubility and Dissolution Thermodynamics of Benzoic Acid in Aqueous Alcoholic Mixtures,” S. Akay, B. Kayan, Á. Peña, A. Jouyban, F. Martínez and **W. E. Acree, Jr.**, *Reactions*, 3, 393 (2022).
1004. “Increasing the Equilibrium Solubility of Meloxicam in Aqueous Media by Using Dimethyl Sulfoxide as Cosolvent: Correlation, Dissolution Thermodynamics and Preferential Solvation,” D. A. Tinjacá, F. Martínez, O. A. Almanza, M. A. Peña, A. Jouyban, **W. E. Acree, Jr.**, *Liquids*, 2, 161 (2022). **(by invitation for inclusion in special issue on Modeling of Liquids Behavior: Experiments, Theory and Simulations)**
1005. “Development of Predictive Expressions for Infinite Dilution Activity Coefficients, Molar Solubilities and Partition Coefficients for Solutes Dissolved in 2-Pyrrolidone Based on the Abraham Solvation Parameter Model,” T. I. Magsumov, I. A. Sedov and **W. E. Acree, Jr.**, *J. Solution Chem.*, 51, 975 (2022). **(by invitation for inclusion in special issue dedicated to Michael H. Abraham)**
1006. “Descriptors for Melatonin; Prediction of Properties,” X. Liu, M. H. Abraham and **W. E. Acree, Jr.**, *J. Solution Chem.*, 51, 992 (2022). **(by invitation for inclusion in special issue dedicated to Michael H. Abraham)**
1007. “Employing Abraham and Hansen Parameters for Solubility Prediction of Ketoconazole in Binary Solvents at Various Temperatures,” Z. Karimzadeh, E. Rahimpour, **W. E. Acree, Jr.** and A. Jouyban, *J. Solution Chem.*, 51, 1000 (2022). **(by invitation for inclusion in special issue dedicated to Michael H. Abraham)**
1008. “Solubility of Tadalafil in Aqueous Mixtures of Transcutol® and PEG 400 Revisited: Correlation, Thermodynamics and Preferential Solvation,” F. Shakeel, S. Alshehri, M. M. Ghoneim, F. Martínez, M. Á. Peña, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 60, 750 (2022).
1009. “Equilibrium Solubility of 6-Methylcoumarin in Some (Ethanol + Water) Mixtures: Determination, Correlation, Thermodynamics and Preferential Solvation,” S. Akay, B. Kayan, A. Jouyban, F. Martínez and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 60, 707 (2022).
1010. “Simulation of Dielectric Constants of Solvents at Various Temperatures Using Catalan Parameters,” A. Jouyban, V. Jouyban-Gharamaleki, M. Khoubnasabjafari, S. Soltanpour and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 60, 910 (2022).
1011. “Abraham Model Correlations for Solute Transfer into Cyclopentanone,” **A. Daniel**, **K. Kim**, **N.**

- Shanmugam, S. Sinha, A. Varadharajan and W. E. Acree, Jr., *Phys. Chem. Liq.*, **60**, 964 (2022).
1012. "Development of Abraham Model Correlations for Solute Transfer into the *tert*-Butyl Acetate Mono-solvent and Updated Equations for Both Ethyl Acetate and Butyl Acetate," L. Longacre, E. Wu, C. Yang, M. Zhang, S. Sinha, A. Varadharajan and W. E. Acree, Jr., *Liquids*, **2**, 258 (2022). **(by invitation for inclusion in special issue on Modeling of Liquids Behavior: Experiments, Theory and Simulations)**
 1013. "Prediction of Equivalent Alkane Carbon Number Using Abraham Solute Parameters," W. E. Acree, Jr., W.-K. Chong, A. S. I. D. Lang and H. Mozafari, *Liquids*, **2**, 318 (2022). **(by invitation for inclusion in special issue on Modeling of Liquids Behavior: Experiments, Theory and Simulations)**
 1014. "Comments on Investigation of the Inter-Ionic Interactions of an Imidazolium-Based Ionic Liquid with the Aqueous Solutions of Tripotassium Citrate and Trisodium Citrate Through Volumetric, Acoustic and FTIR Routes," W. E. Acree, Jr., *J. Mol. Liq.*, **367**, 118912-1 (2022).
 1015. "Revision and Extension of a Generally Applicable Group-Additivity Method for the Calculation of the Refractivity and Polarizability of Organic Molecules at 298.15 K," R. Naef and W. E. Acree, Jr., *Liquids*, **2**, 327 (2022). **(by invitation for inclusion in special issue on Modeling of Liquids Behavior: Experiments, Theory and Simulations)**
 1016. "Phase Transition Enthalpy Measurements of Organic Compounds. An Update of Sublimation, Vaporization and Fusion Enthalpies From 2016 to 2021," W. E. Acree, Jr. and J. S. Chickos, *J. Phys. Chem. Ref. Data*, **51**, 043101-1 (2022).
 1017. "Effect of *N*-Methyl-pyrrolidone (NMP) on the Equilibrium Solubility of Meloxicam in Aqueous Media: Correlation, Dissolution Thermodynamics and Preferential Solvation," D. A. Tinjacá, F. Martínez, O. A. Almanza, A. Jouyban and W. E. Acree, Jr., *ACS Omega*, **7**, 37988 (2022).
 1018. "Simulation of Surface Tension of Mono-solvents at Various Temperatures," N. Kabudi, A. Shayanfar, W. E. Acree, Jr. and A. Jouyban, *Liquids*, **2**, 378 (2022). **(by invitation for inclusion in special issue on Modeling of Liquids Behavior: Experiments, Theory and Simulations)**
 1019. "Ionic Liquids as Stationary Phases for the Gas Chromatographic Separation of Fentanyl Analogues," K. Smart, K. Reyes, K. Wilder, W. E. Acree, Jr., G. F. Verbeck and T. D. Golden, *Forensic Chem.*, **31**, 100452-1 (2022).
 1020. "Simulation of Clozapine Solubility in Mono- and Mixed Solvents at Different Temperatures," E. Rahimpour, R. Xu, H. Zhao, W. E. Acree, Jr. and A. Jouyban, *J. Solution Chem.*, **51**, 1540 (2022).
 1021. "Reference Materials for Phase Equilibrium Studies. 2. Solid-Liquid Equilibria (IUPAC Technical Report)," A. Bazyleva, W. E. Acree, Jr., V. Diky, G. T. Hefter, J. Jacquemin, M. C. F. Magalhães, J. W. Magee, D. K. Nordstrom, J. P. O'Connell, J. D. Olson, I. Polishuk, K. A. G. Schmidt, J. M. Shaw, J. P. M. Trusler and R. D. Weir, *Pure Appl. Chem.*, **94**, 1225 (2022).
 1022. "Comprehending of Florfenicol (Form A) Dissolution Behavior in Aqueous Low Alcohol Blends: Solubility, Solvation Thermodynamics as Well as Inter-molecular Interactions," Y. Liu, H. Zhao, P. Zhu, A. Farajtabar, A. Jouyban and W. E. Acree, Jr., *J. Chem. Thermodyn.*, **176**, 106925-01 (2023).
 1023. "Development of Abraham Model Correlations for Describing Solute Transfer into Transcutol Based on Molar Solubility Ratios for Pharmaceutical and Other Organic Compounds," A. Varadharajan, S. Sinha, A. Xu, A. Daniel, K. Kim, N. Shanmugam, E. Wu, C. Yang, M. Zhang and W. E. Acree, Jr., *J. Solution Chem.*, **52**, 70 (2023).
 1024. "Determination of Abraham Model Solute Descriptors for 62 Additional C₁₀ Through C₁₃ Methyl- and Ethyl-branched Alkanes," R. Motati and W. E. Acree, Jr., *Liquids*, **3**, 118 (2023).

1025. "Comments Regarding Volumetric, Acoustic, Viscometric Properties, and Solute–Solvent Interactions of Metformin Hydrochloride in Aqueous Solution of Polyethylene Glycol (PEG 4000) at Different Temperatures ($T = 288.15\text{--}318.15\text{ K}$)," [A. Varadharajan](#) and **W. E. Acree, Jr.**, *J. Solution Chem.*, 52, 364 (2023).
1026. "QSPR-Based Model Extrapolation Prediction of Enthalpy of Solvation," X. Yu and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 376, 121455-01 (2023).
1027. "Abraham Solvation Parameter Model: Revised Predictive Expressions for Solute Transfer into Polydimethylsiloxane Based on Much Larger and Chemical Diverse Datasets," [A. Zhou](#), [L. Longacre](#), [R. Motati](#) and **W. E. Acree, Jr.**, *Compounds*, 3, 205 (2023). **(by invitation for inclusion in special issue of Featured Papers 2022 - 2023)**
1028. "Preferential Solvation Study of Rosuvastatin in {PEG400 (1) + Water (2)} Cosolvent Mixture and Gastroplus Software Based in vivo Predictions," A. Hussain, O. Afzal, H. Sabina, N. Haider, A. S. A. Altamimi, F. Martínez, **W. E. Acree, Jr.** and M. Ramzan, *ACS Omega*, 8, 12761 (2023).
1029. "Abraham Model Solute Descriptors: Effect of Structural Features on the Calculated Numerical Descriptor Values for Vanillin and Select Derivatives," [A. Xu](#), **W. E. Acree, Jr.** and M. H. Abraham, *Phys. Chem. Liq.*, 61, 1 (2023).
1030. "Comments on Analysis of the Dissolution Behavior and Solubility of Rotigotine Form II in Different Mono-solvents," [N. Shanmugam](#), [S. Wu](#), [E. Yao](#) and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 383, 122105-1 (2023).
1031. Comments on "Solubility Measurement, Thermodynamic Modeling and Solubility Parameters of Clarithromycin (Form II) in Aqueous Ethanolic Solution," [R. Motati](#), [T. Kandi](#) and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 61, 226 (2023).
1032. "Calculation of Abraham Model Solute Descriptors for 2-Naphthoxyacetic Acid," [D. Benavides](#), [L. Longacre](#), [A. Varadharajan](#) and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 61, 264 (2023).
1033. "Determination of Abraham Model Solute Descriptors for *N*-Hydroxyphthalimide: An Organic Compound Having a *N*-Hydroxy (N-OH) Functional Group," [E. Yao](#), [A. Zhou](#), [S. Wu](#), [N. Shanmugam](#), [A. Varadharajan](#), [S. Sinha](#), [E. Wu](#) and **W. E. Acree, Jr.**, *J. Solution Chem.*, 52, 895 (2023).
1034. "Development of Abraham Model Correlations for Dimethyl Adipate from Measured Solubility Data of Nonelectrolyte Organic Compounds," [N. Shanmugam](#), [A. Zhou](#), [R. Motati](#), [E. Yao](#), [T. Kandi](#), [L. Longacre](#), [D. Benavides](#), [S. Motati](#) and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 61, 328 (2023).
1035. "Reichardt's Dye-Based Solvent Polarity and Abraham Solvent Parameters: Examining Correlations and Predictive Modeling," **W. E. Acree, Jr.** and A. S. I. D. Lang, *Liquids*, 3, 303 (2023). **(by invitation for inclusion in special issue on Solvatochromic Probes and Their Applications in Molecular Interaction Studies – A Themed Issue to Honor Professor Dr. Christian Reichardt)**
1036. "Equilibrium Solubility, Solvation and Dissolution Thermodynamics, and Density Functional Theory Study of Albendazole in Solutions of Acetone/Ethanol/Isopropanol + Water," F. Mao, W. Shi, H. Zhao, W. Li, A. Jouyban, **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, 186, 107138-01 (2023).
1037. "Comments on Solid-Liquid Equilibrium Solubility Prediction of Sulfanilamide in Four Binary Solvent Mixtures by Using Pure Solvents Solubility Data from 278.15 to 318.15 K with the Abraham Solvation Parameter Model, Yalkowsky Log-Linear and Extended Log-Linear Solubility Thermodynamic Models," A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, 388, 122745-01 (2023).
1038. "Abraham Model Solute Descriptors for Favipiravir: Case of Tautomeric Equilibrium and Intramolecular

- Hydrogen-Bond Formation,” **E. Yao** and **W. E. Acree, Jr.**, *Thermo*, **3**, 443 (2023). **(by invitation for inclusion in Editorial Board Members’ Collection Series: Molecular Simulation and Thermodynamics)**
1039. “QSPR Model for Solvation Enthalpy Based on Quantum Chemical Descriptors,” X. Yu, H. Wang and **W. E. Acree, Jr.** and J. Deng, *J. Mol. Liq.*, **389**, 122884-01 (2023).
 1040. “COSMO-RS and LSER Models of Solution Thermodynamics: Towards a COSMO-LSER Equation of State Model of Fluids,” C. Panayiotou, **W. E. Acree, Jr.** and I. Zuburtikudis, *J. Mol. Liq.*, **390**, 122992-01 (2023).
 1041. “Comments on An Overview of Molecular Interaction Studies of Binary/Ternary Liquid Mixtures with R₄NI Salts Using Ultrasonic Velocity, Transport, Apparent Molar Volume, and Dielectric Constant Properties,” **W. E. Acree, Jr.**, *J. Solution Chem.*, **52**, 1153 (2023).
 1042. “Solubility of Glimepiride in Mono- and Mixed-Solvents at Various Temperatures: Proposing Practical Strategy for Industrial Applications,” A. Jouyban and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **390**, 123135 (2023).
 1043. “Abraham Model Descriptors for Vitamin K4: Prediction of Solution, Biological and Thermodynamic Properties,” **S. Motati, R. Motati, T. Kandi** and **W. E. Acree, Jr.**, *Liquids*, **3**, 402 (2023). **(by invitation for inclusion in special issue on Solubility and Solubilization of Drugs: Modeling and Thermodynamic Analysis)**
 1044. “Comments on Study on 2-Amino-4-chloro-6-methoxypyrimidine in Four Binary Solvent Mixtures: Solubility Measurement, Calculation, Preferential Solvation and Extended Hildebrand Solubility Parameter Approach Analysis,” **S. Motati, R. Motati** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **391**, 123239-01 (2023).
 1045. “A New Set of Solute Descriptors to Calculate the Solubility of Drugs in Mono-solvents,” A. Jouyban, S. Khezri, P. Jafari, A. Zarghampour and **W. E. Acree, Jr.**, *Ann. Pharm. Fr.*, **81**, 1109 (2023).
 1046. “Updated Abraham Model Correlations for Describing Solute Transfer into Both 2-Pentanol and 3-Methyl-1-butanol Based on Much Larger Data Sets,” **T. Kandi, R. Motati, S. Motati, N. Shanmugam, A. Zhou, E. Yao, C. Webber** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **61**, 405 (2023).
 1047. “Abraham Model Solute Descriptors for Two Additional α -Amino Acids: D-Tryptophan and L-Tyrosine,” **R. Motati** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **61**, 433 (2023).
 1048. “Interactions Between Components of Choline Chloride/Propylene Glycol or Ethylene Glycol Deep Eutectic Solvents in the Presence of Water by Determination of Amlodipine Besylate Solubility Profile,” M. Moradi, P. Jafari, E. Rahimpour, A. Shayanfar, **W. E. Acree, Jr.** and A. Jouyban, *J. Drug Deliv. Sci. Technol.*, **90**, 105143-01 (2023).
 1049. “Revisiting the Total Hildebrand and Partial Hansen Solubility Parameters of Analgesic Drug Meloxicam,” D. A. Tinjacá, F. Martinez, M. A. Peña, A. Jouyban and **W. E. Acree, Jr.**, *Liquids*, **3**, 469 (2023). **(by invitation for inclusion in special issue on Solubility and Solubilization of Drugs: Modeling and Thermodynamic Analysis)**
 1050. “Comprehensive Solubility Study and Inter-Molecular Interactions on Fenbendazole Dissolved in Some Aqueous Aprotic and Protic Co-solvent Solutions,” F. Mao, W. Shi, H. Zhao, W. Li, A. Jouyban and **W. E. Acree, Jr.**, *J. Chem. Thermodyn.*, **191**, 107231-01 (2024).
 1051. “Abraham General Solvation Parameter Model: Intramolecular Hydrogen Bond Formation and its Effect on the A- and B- Descriptor Values of Select Tetracycline Derivatives,” **E. Yao** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **62**, 25 (2024).

1052. "Comments Regarding Volumetric and Spectroscopic Properties of Binary Liquid Mixtures of 1,2-Ethylenediamine with 1,4-Butanediol at Varying Temperature, **S. Motati** and **W. E. Acree, Jr.**, *Chem. Data Collect.*, **49**, 101095-01 (2024).
1053. "Calculation of the Three Partition Coefficients Log P_{ow} , Log K_{oa} and Log K_{aw} of Organic Molecules at Standard Conditions at Once by means of a Generally Applicable Group-Additivity Method," R. Naef and **W. E. Acree, Jr.**, *Liquids*, **4**, 231 (2024). **(by invitation for inclusion in a special issue on Recent Advances in the Behavior of Liquids in Honor of Prof. Dr. William Acree, Jr.)**
1054. "Abraham Solvation Parameter Model: Determination of Experiment-Based Solute Descriptor Values for 3,5-Dimethoxybenzoic Acid Based on Measured Solubility Data," **N. Shanmugam**, **A. Zhou**, **C. Webber**, **E. Yao** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **62**, 89 (2024).
1055. "Comments on Fundamental Properties and Intermolecular Interaction of Triethylene Glycol + Ethylenediamine Aqueous Solution for CO₂ Capture," **S. Motati** and **W. E. Acree, Jr.**, *J. Mol. Liq.*, **406**, 125012-01 (2024).
1056. "Experiment-Based Abraham Model Solute Descriptors for 2,3-Dimethoxybenzoic Acid from Measured Solubility Data," **J. Francis**, **R. Motati**, **T. Kandi**, **E. Yao**, **J. Chen**, **S. Motati**, **A. Chen** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **62**, 343 (2024).
1057. "Comments Regarding Solubility Determination and Thermodynamic Model Analysis of L- α -Glyceryl Phosphorylcholine in Different Organic Solvents of 278.15 K to 323.15 K," **A. Chen**, **J. Chen** and **W. E. Acree, Jr.**, *J. Pharm. Biomed. Anal.*, **247**, 116217-01 (2024).
1058. "Comments on Volumetric Properties of Binary Mixtures of (Ethylene Glycol or Glycerol + Benzene or Cyclohexane or Hexane) at Varying Temperatures," **W. E. Acree, Jr.**, *Chem. Data Collect.*, **51**, 101130-01 (2024).
1059. "Abraham General Solvation Parameter Model: Predictive Expressions for Solute Transfer into Isobutyl Acetate," **R. Motati**, **T. Kandi**, **J. Francis**, **J. Chen**, **E. Yao**, **S. Motati**, **A. Chen**, **D. Kumarandurai**, **N. Shanmugam** and **W. E. Acree, Jr.**, *Liquids*, **4**, 470 (2024). **(by invitation for inclusion in a special issue on Recent Advances in the Behavior of Liquids in Honor of Prof. Dr. William Acree, Jr.)**
1060. "Solubility of Atenolol in Aqueous Propylene Glycol Mixtures Revisited: IKBI Preferential Solvation Analysis," O. E. García-Serna, F. Martínez, Á. Peña, A. Jouyban and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, **62**, 527 (2024).
1061. "Effect of Intramolecular Hydrogen Bond Formation on the Abraham Model Solute Descriptors for Oxybenzone," **J. Chen**, **A. Chen**, **Y. Yang** and **W. E. Acree, Jr.**, *Liquids*, **4**, 647 (2024). **(by invitation for inclusion in a special issue on Recent Advances in the Behavior of Liquids in Honor of Prof. Dr. William Acree, Jr.)**
1062. "Comments Regarding Measurement and Modeling of Excess Molar Volume and Excess Enthalpy of n-Tridecane or n-Tetradecane with Decalin by Application of PFP Theory," **W. E. Acree, Jr.**, *J. Solution Chem.*, **53**, 1651 (2024).
1063. "Exploring the Influence of Ionic Liquid Anion Structure on Gas-Ionic Liquid Partition Coefficients of Organic Solutes Using Machine Learning," K. M. Toots, S. Sild, J. Leis, **W. E. Acree** and U. Maran, *Langmuir*, **40**, 23714 (2024).
1064. "Prediction of Hydrogen-Bonding Interaction Energies with New COSMO-based Molecular Descriptors," I. Zuburtikudis, **W. E. Acree, Jr.** and C. Panayiotou, *J. Mol. Liq.*, **422**, 126907-01 (2025).
1065. "Solubility and Thermodynamic Analysis of Amlodipine Besylate in Mixtures of Propylene Glycol and 1-

- Propanol from 293.2 to 323.2 K,” H. Rezaei, F. Martinez, **W. E. Acree, Jr.** and A. Jouyban, *Chem. Thermo. Therm. Anal.*, 18, 100171-01 (2025).
1066. “Abraham Solvation Parameter Model: Experiment-Based Solute Descriptors for (2-Nitrophenyl)acetic Acid,” **D. Kumarandurai**, **B. Lin**, **G. Perez**, **A. Witterstaetter** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 63, 236 (2025).
1067. “Comments on Solubility Determination, Correlation, Solvent Effect and Thermodynamic Properties of Tolnaftate in Ten Mono-Solvents and Binary Solvent Systems from 283.15 K to 328.15 K,” **A. Kabin**, **D. Kumarandurai**, **B. Lin** and **W. E. Acree Jr.**, *J. Chem. Thermodyn.*, 207, 107484-01 (2025).
1068. “Effect of Ethanol on the Solubility and Apparent Specific Volume of Sodium Sulfadiazine in Aqueous Mixtures,” D. R. Delgado, F. Martinez, M. A. Peña, A. Jouyban and **W. E. Acree Jr.**, *J. Pharm. BioTech Ind.*, 2, 5 (2025). **(by invitation for inclusion in a special issue on Feature Papers to Celebrate the Inaugural Issue of Journal of Pharmaceutical and BioTech Industry)**
1069. “Solubility of Sodium Acetate Trihydrate in Binary Solvent Mixtures of Methanol, Ethanol, 1-Propanol, Acetonitrile and Water at 298.2 K,” J. Soleymani, E. Rahimpour, **W. E. Acree Jr.** and A. Jouyban, *J. Solution Chem.*, 54, 498 (2025).
1070. “Comments Regarding Solubility Determination, Model Evaluation, Molecular Simulation and Thermodynamic Analysis of Sulfentrazone (Form I) in Single and Binary Solvents,” **B. Lin**, **S. Motati** and **W. E. Acree Jr.**, *J. Chem. Thermodyn.*, 207, 107490-01 (2025).
1071. “Prediction of Hydrogen-Bonding Interaction Free-Energies with Two New Molecular Descriptors,” **W. E. Acree, Jr.** and C. Panayiotou, *Liquids*, 5, 12 (2025). **(by invitation for inclusion in a special issue on Thermodynamics of Molecular Complexation and Hydrogen Bonding in Solution Chemistry—A Themed Issue Honoring Professor Dr. Boris N. Solomonov)**
1072. “Development of Abraham Model Correlations for Predicting the Solubility of Crystalline Organic Compounds and Inorganic Gases in Ethyl Formate,” **C. Wilson**, **A. Kabin**, **C. Prewitt** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 63, 380 (2025).
1073. “Experiment-Based Abraham Model Solute Descriptors for 2-[4-(Dibutylamino)-2-hydroxybenzoyl]-benzoic Acid,” **A. Chen**, **J. Chen**, **S. Kowtha**, **N. Bhupathi Raju** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 63, 449 (2025).
1074. “Comments on Calculation of Solute Partition Coefficient Using the A-P Scheme,” **C. Wilson**, **B. Lin** and **W. E. Acree, Jr.**, *J. Solution Chem.*, 54, 531 (2025).
1075. “Quaternary System of Terephthalic Acid + 4-Carboxybenzaldehyde + *p*-Toluic Acid + *N*-Methylpyrrolidone: Mutual Solubility Determination and Correlation Together with Quantum Chemistry Research,” M. Zheng, A. Farajtabar, A. Jouyban, **W. E. Acree Jr.** and H. Zhao, *J. Chem. Thermodyn.*, 209, 107533-01 (2025).
1076. “Abraham Model Expressions for Correlating and Predicting Solubilities and Molar Solubility Ratios of Crystalline Nonelectrolyte Organic Compounds in Dibutyl Adipate,” **G. Perez**, **A. Witterstaetter**, **B. Lin**, **D. Kumarandurai**, **A. Chen**, **J. Chen**, **S. Kowtha**, **N. Bhupathi Raju**, **A. Kabin** and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, 63, 630 (2025).
1077. “A Multicomponent QSPR Approach to Describe and Predict Gas-Ionic Liquid Distribution of Organic Solutes Using Machine Learning,” K. M. Toots, S. Sild, J. Leis, **W. E. Acree** and U. Maran, *J. Mol. Liq.*, 436, 128184-01 (2025).
1078. “Comments Regarding Volumetric, Acoustic, and Conductometric Studies of Ionic Surfactants in Aqueous

- Ammonium Acetate-Ethylene Glycol Deep Eutectic Solvent”, C. Turner, D. Mohanraj, A. Sun, A. Kabin, S. Kowtha, B. Lin and W. E. Acree, Jr., *J. Mol. Liq.*, **436**, 128194-01 (2025).
1079. “On Dispersion and Polar Interactions and Solvation and Cohesion Energies. A First Round”, W. E. Acree, Jr. and C. Panayiotou, *Fluid Phase Equilib.*, **160**, 114573-01 (2025).
 1080. “Comments on Experimental and Simulation Study on the Solubility of 1-Naphthylamine in Twelve Neat Solvents”, D. Mohanraj, B. Lin, A. Kabin, C. Turner, A. Sun, S. Kowtha, and W. E. Acree, Jr., *J. Mol. Liq.*, **437**, 128518-01 (2025).
 1081. “Dispersion, Polar and Hydrogen-Bonding Contributions to Solvation Free Energies,” W. E. Acree, Jr. and C. Panayiotou, *Liquids*, **5**, 24 (2025). **(by invitation for inclusion in a special issue on Energy Transfer in Liquids)**
 1082. “Solvent-Specific Abraham Model Expressions for Describing the Solubility Behavior of Crystalline Nonelectrolyte Organic Compounds in Methoxycyclopentane,” B. Lin, D. Kumarandurai, J. Chen, A. Witterstaetter, G. Perez, S. Motati, A. Chen, A. Kabin, S. Kowtha, N. Bhupathi Raju, J. Francis, M. Xia and W. E. Acree, Jr., *Phys. Chem. Liq.*, **63**, 808 (2025).
 1083. “Critically Assessing Published Volumetric Thermodynamic Data for Common Errors”, S. Kowtha, B. Lin, A. Kabin, A. Sun, C. Turner and W. E. Acree, Jr., *Phys. Chem. Liq.*, **63**, 901 (2025).
 1084. “Determination of Experiment-Based Abraham Model Solute Descriptors for Compounds Exhibiting Potential Medicinal or Agricultural Properties”, A. Sun, C. Turner, B. Lin, A. Kabin, S. Kowtha, D. Mohanraj and W. E. Acree, Jr., *Phys. Chem. Liq.*, **63**, 851 (2025).
 1085. “Critical Analysis of the Paper Titled Experimental and Theoretical Studies of Molecular Interactions Prevailing in *N,N*-Dimethylacetamide + Alkyl Acrylate Binary Mixtures Using Acoustic and Viscometric Properties at Different Temperatures,” W. E. Acree, Jr., *J. Solution Chem.*, **54**, 1667 (2025).
 1086. “Some Comments on Solubility of Rivaroxaban and its Numerical Analysis Methods Using Various Algorithms”, A. Jouyban, D. M. Makarov and W. E. Acree Jr., *Phys. Chem. Liq.*, **63**, 874 (2025).
 1087. “Common Errors Made in the Mathematical Representation of Experimental Data Using the van’t Hoff and Modified Apelblat Equations and Their Effect on Calculated Thermodynamic Quantities,” D. Mohanraj, A. Jamdagneya, A. Varadharajan and W. E. Acree, Jr., *Phys. Chem. Liq.*, accepted for publication.
<https://doi.org/10.1080/00319104.2025.2582200>
 1088. “Comments Regarding Solid–Liquid Equilibrium Solubility and Thermodynamic Properties of 2,4,6-Trinitro-3-Bromoanisole in Different Pure Solvents,” D. Mohanraj, N. Damera and W. E. Acree Jr., *J. Solution Chem.*, accepted for publication.
 1089. “Solubility and Apparent Specific Volume of Sodium Sulfamerazine in Aqueous Alcoholic Mixtures,” D. R. Delgado, F. Martinez, M. A. Pena, A. Jouyban and W. E. Acree, Jr., *J. Solution Chem.*, accepted for publication.
 1090. “Development of Updated Abraham Model Correlations for Predicting Solute Transfer into 1,4-Dioxane and Methyl Acetate from both Water and the Gas Phase,” B. Lin, C. Turner, A. Kabin, D. Mohanraj, S. Kowtha, A. Sun, and W. E. Acree, Jr., *Phys. Chem. Liq.*, accepted for publication.
 1091. “Comments on “Solubility Measurement, Modelling, and Thermodynamic Analysis of Carprofen in Ten Mono-Solvents and Two Binary Mixed Solvents from 288.15 to 328.15K,” A. Kabin, A. Varadharajan, A. Jamdagneya and W. E. Acree, Jr., *J. Mol. Liq.*, submitted for publication.
<https://doi.org/10.1016/j.molliq.2025.129146>

- **** "From Solvation Thermodynamics to Polarity Scales and Universalities," C. Tsiptsias, **W. Acree, Jr.** and C. Panayiotou, *J. Mol. Liq.*, submitted for publication.
- **** "Characterization of the Solubilizing Ability of *bis*(Dialkylimidazolium) Tetrathiocyanocobaltate Ionic Liquids," G. Dumet, **W. E. Acree, Jr.** and F. Mutelet, *J. Chem. Thermodyn.*, revised manuscript submitted for publication.
- **** "Using the Abraham Model to Predict Chemical Separations by Temperature Programmed Gas Chromatography," **K. Smart**, S. S. Akhter, T. D. Golden and **W. E. Acree, Jr.**, *Phys. Chem. Liq.*, submitted for publication.
- **** "Solubility of Isoniazid in Aqueous Alcohol Solutions Revisited: Molecular Simulation, Solvent Effect and Solvation Behavior," W. Shi, R. Lv, X. Zhang, R. Xing, H. Zhao, W. Li, A. Jouyban and **W. E. Acree, Jr.**, manuscript in preparation.

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 $Cr_2O_7^{2-}$: Modern Instrumental Analysis Laboratory Experiment" **S. Pandey**, **M. E. R. McHale**, **A.-S. M. Horton**, **S. A. Padilla**, **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).

Conference Proceedings:

1. "Using Spectroscopy Experiments in Laboratory to Facilitate Learning in Chemistry Lecture," A. Wilson, T. W. Stephens and W. E. Acree, Jr., *La Chimica nella Scuola*, XXXIV, 409 (2012). [22nd International Conference of Chemistry Education and 11th European Conference on Research in Chemical Education]

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 – remained in database until December 2018).

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. Amer. 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. Martínez, A. Jouyban and W. E. Acree, Jr., *Pharm. Sci.*, 23, 1 (2017) (by invitation).
3. "Michael H. Abraham and his Developed Parameters: Various Applications in Medicine, Chemistry and Biology," A. Jouyban and W. E. Acree, Jr., *Pharm. Sci.*, 28, 170 (2022) (by invitation).
4. "Introduction to the Michael Abraham Special Issue," W. E. Acree, Jr., *J. Solution Chem.*, 51, 971 (2022)

(Guest Editor for Special Issue).

5. "The Impact of Automation on Immunoanalysis Testing," **W. E. Acree, Jr.**, *ImmunoAnalysis*, 3, 12-01 (2023).

Data Table Publications:

1. "Heat of Fusion of Some Organic Compounds," **W. E. Acree, Jr.**, *Handbook of Chemistry and Physics* (65th Ed.), CRC Press, Inc. pp. C689-693.
2. "Heat Capacity (C_p) of Organic Liquids and Vapors at 25 °C," **W. E. Acree, Jr.**, *Handbook of Chemistry and Physics* (66th Ed.) CRC Press, Inc., pp. D174-175.
3. "Excess Volume. Oxolan-2-one + Benzene," **W. E. Acree, Jr.**, K. Gholami, D. R. McHan and J. H. Rytting, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 17, 102 (1989).
4. "Excess Volume. Oxolan-2-one + Toluene," **W. E. Acree, Jr.**, K. Gholami, D. R. McHan and J. H. Rytting, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 17, 103 (1989).
5. "Excess Volume. Oxolan-2-one + 1,3-Dimethylbenzene," **W. E. Acree, Jr.**, K. Gholami, D. R. McHan and J. H. Rytting, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 17, 104 (1989).
6. "Heats of Fusion of Some Organic Compounds," **W. E. Acree, Jr.**, *Handbook of Chemistry and Physics* (1st Student Ed.), CRC Press, Inc., pp. C666-670.
7. "Enthalpy of Fusion of Some Organic Compounds," (Updated), **W. E. Acree, Jr.**, *Handbook of Chemistry and Physics* (71th Ed.), CRC Press, Inc., pp. 5:84-91.
8. "Excess Volume. Chlorobenzene + n-Heptane," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 45 (1992).
9. "Excess Volume. Chlorobenzene + n-Octane," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 46 (1992).
10. "Excess Volume. Chlorobenzene + 2,2,4-Trimethylpentane," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 47 (1992).
11. "Excess Volume. Chlorobenzene + Cyclohexane," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 48 (1992).
12. "Excess Volume. Chlorobenzene + Dibutyl Ether," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 49 (1992).
13. "Excess Volume. Dibutyl Ether + n-Heptane," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 50 (1992).
14. "Excess Volume. Dibutyl Ether + n-Octane," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 51 (1992).
15. "Excess Volume. Dibutyl Ether + 2,2,4-Trimethylpentane," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 52 (1992).
16. "Excess Volume. Dibutyl Ether + Cyclohexane," **W. E. Acree, Jr.** and **I.-L. Teng**, *Int. DATA Ser., Sel. Data Mixtures, Ser. A*, 20, 53 (1992).

Miscellaneous:

1. "New Aspects of Liquid Crystals and Foams in Decontamination," Principal Investigators were **W. E. Acree, Jr.** and G. H. Brown, Technical Report for U. S. Army Contract DAAA15-85-C-0019, 1987.
2. "Correlation and Estimation of Aqueous Solubilities of Substituted Benzenes, Polychlorinated Biphenyls and Polycyclic Aromatic Hydrocarbons," C.-C. Tsai, **W. E. Acree, Jr.**, T. Blair, E. Gifford, L. J. Peterson and S.-T. Liao, QSAR in Environmental Toxicology-III, 207-210 (1988).

9. Papers Presented:

1. "Thermochemical Investigations of Solubility in Binary Solvent Systems," **W. E. Acree, Jr.**, presented at Missouri Academy of Science, Rolla, Missouri, April, 1976.
2. "Solubility in Binary Solvent Systems. Specific vs. Nonspecific Interactions" **W. E. Acree, Jr.**, and J. H. Rytting, presented at Midwest Regional ACS Meeting, Columbia, Missouri, November, 1981.
3. "Thermodynamic Models for Solubility in Binary Solvent Systems," **W. E. Acree, Jr.**, Academy of Pharmaceutical Sciences, San Antonio, Texas, February, 1985 (**invited symposium speaker**).
4. "Synthesis and Characterization of Nitrones," **J. J. Kirchner** and **W. E. Acree, Jr.**, presented at Central Regional SAACS Meeting, Kent, Ohio, April, 1986.
5. "Solubility of Pyrene in Binary Solvent Mixtures," **C. L. Judy** and **W. E. Acree, Jr.**, presented at Central Regional SAACS Meeting, Kent, Ohio, April, 1986.
6. "Solubility in Binary Solvents: The NIBS vs. Wilson Model," **N. M. Pontikos** and **W. E. Acree, Jr.**, presented at Central Regional SAACS Meeting, Kent, Ohio, April, 1986.
7. "Experimental Artifacts and Determination of Accurate Py Values," K. W. Street, Jr., and **W. E. Acree, Jr.**, presented at Central Regional ACS Meeting, Bowling Green, Ohio, June, 1986.
8. "Correlation and Estimation of Aqueous Solubilities of Polycyclic Aromatic Hydrocarbons, Halogenated Benzenes, and Polychlorinated Biphenyls," C.-C. Tsai, **W. E. Acree, Jr.**, R. J. Baker, F. S. Fojas, and L. J. Peterson, presented at 2nd International Workshop on QSAR in Environmental Toxicology, June, 1986.
9. "The Py Solvent Polarity Scale: Solvent Mixtures Used in Reversed-Phase Liquid Chromatography," K. W. Street, Jr. and **W. E. Acree, Jr.**, presented at National ACS Meeting, New Orleans, LA, September, 1987.
10. "Solvent Polarity Scales Used in Chromatography," K. W. Street, Jr., **W. E. Acree, Jr.** and C. F. Poole, presented at Pittsburgh Conference & Exposition, New Orleans, LA, February, 1988.
11. "Correlation and Estimation of Aqueous Solubilities of Substituted Benzenes, Polychlorinated Biphenyls, and Polycyclic Aromatic Hydrocarbons," C.-C. Tsai, **W. E. Acree, Jr.**, T. Blair, E. Gifford, and L. J. Peterson, presented at 3rd International Workshop on QSAR in Environmental Toxicology, May, 1988.
12. "Application of Polycyclic Aromatic Hydrocarbon (PAH) Solute Probes in Analytical Chemistry," K. W. Street, Jr., **W. E. Acree, Jr.**, R. Waris, **S. A. Tucker** and J. C. Fetzer, presented at Pittsburgh Conference & Exposition, Atlanta, GA, March, 1989.

13. "PAH Solvent Polarity Probes: General Considerations and Applications," **S. A. Tucker**, R. Waris, K. W. Street, Jr., **W. E. Acree, Jr.**, C. F. Poole, and J. C. Fetzer, presented at National ACS Meeting, Dallas, Texas, April, 1989.
14. "PAH Solvent Polarity Probes: General Considerations and Applications," **S. A. Tucker**, **W. E. Acree, Jr.** and K. W. Street, Jr., presented at ACS Central Regional Meeting, May, 1989.
15. "Fluorescence Properties-Molecular Structure Correlations for Polycyclic Aromatic Hydrocarbon (PAH) Solute Probes Used in Analytical Chemistry," **S. A. Tucker**, **W. E. Acree, Jr.**, **A. I. Zvaigzne**, K. W. Street, Jr. and J. C. Fetzer, presented at Pittsburgh Conference & Exposition, New York, New York, March, 1990.
16. "Fluorescence Properties-Molecular Structure Correlations for Polycyclic Aromatic Hydrocarbon (PAH) Solute Probes Used in Analytical Chemistry," **W. E. Acree, Jr.**, presented at Texas Chemistry Forum, Austin, Texas, May, 1990 (**invited symposium speaker**).
17. "Fluorescence Behavior of Polycyclic Aromatic Hydrocarbon (PAH) Solute Probes," **W. E. Acree, Jr.**, **S. A. Tucker**, **A. I. Zvaigzne** and K. W. Street, Jr., poster presented at Texas Chemistry Forum, Austin, Texas, May, 1990.
18. "Predicting the Thermochemical Properties of Weakly Associated Multicomponent Solutions," **A. I. Zvaigzne** and **W. E. Acree, Jr.**, presented at ACS Regional Meeting-in-Miniature, Dallas, Texas, April, 1991.
19. "Thermochemical Investigations of Ternary Nonelectrolyte Associated Solutions," **W. E. Acree, Jr.**, **A. I. Zvaigzne** and **I.-L. Teng**, presented at the 1991 Midwest Thermodynamics Symposium, Osage Beach, Missouri, May, 1991.
20. "Examination of Selective Quenching Agents and Discriminating Solvents for Identification of Polycyclic Aromatic Compounds," **S. A. Tucker**, **V. L. Amszi**, **W. E. Acree, Jr.** and J. C. Fetzer, presented at Pittsburgh Conference & Exposition, New Orleans, Louisiana, March, 1992.
21. "Quantitative Structure-Property Relationships for Aqueous Solubilities," T. T. Blair, **W. E. Acree, Jr.**, E. M. Gifford and C.-C. Tsai, presented at 5th International Workshop on QSAR in Environmental Toxicology, July, 1992.
22. "Selective Quenching of Polycyclic Aromatic Nitrogen Hetero-atom's Fluorescence Emission," **W. E. Acree, Jr.**, **S. A. Tucker** and **V. L. Amszi**, presented at 48th Southwest Regional ACS Meeting, Lubbock, Texas, October, 1992.
23. "Polycyclic Aromatic Compounds: A Comprehensive Review," **S. A. Tucker**, **V. L. Amszi** and **W. E. Acree, Jr.**, presented at 48th Southwest Regional ACS Meeting, Lubbock, Texas, October, 1992.
24. "Polycyclic Aromatic Hydrocarbons: Examination of Solvent Polarity Behavior and Selective Quenching Phenomena via Steady-State Fluorescence," **S. A. Tucker** and **W. E. Acree, Jr.**, Detroit, Michigan, presented at FACSS National Meeting, October, 1993.
25. "Effect of Solvent Polarity on the Selectivity of Nitromethane for Discriminating Between Alternant Versus Nonalternant Polycyclic Aromatic Hydrocarbons," **S. A. Tucker** and **W. E. Acree, Jr.**, presented at FACSS National Meeting, Detroit, Michigan, October, 1993.
26. "Effect of Electron Withdrawing and Electron Donating Substituents on the Photophysical Properties of Polycyclic Aromatic Compounds," **S. A. Tucker**, **J. M. Griffin**, **D. C. Wilkins** and **W. E. Acree, Jr.**, presented at Pittsburgh Conference and Exposition, Chicago, Illinois, March, 1994.

27. "Unusual Solvent Modulated Fluorescence Emission Behavior of 1-Methylcoronene and 1,2-Dimethylcoronene in Nonelectrolyte Solvents of Varying Polarity," **S. A. Tucker**, **W. E. Acree, Jr.** and J. C. Fetzer, presented at Pittsburgh Conference and Exposition, Chicago, Illinois, March, 1994 (S.A. Tucker invited participant in Graduate Student Poster session).
28. "Application of Polycyclic Aromatic Hydrocarbon Solute Probes for Examining Preferential Solvation in Binary Solvent Mixtures," **S. A. Tucker** and **W. E. Acree, Jr.**, presented at ACS Regional Meeting-in-Miniature, Fort Worth, Texas, April, 1994.
29. "The Dissociation Enthalpies of the (N-O) Bonds on Some 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, poster presented at Thermodynamic Workshop, Warsaw, Poland, August, 1994.
30. "Polycyclic Aromatic Hydrocarbons as Standards for Spectrofluorometric Wavelength Calibration," **W. E. Acree, Jr.**, **S. A. Tucker**, **J. R. Powell** and J. C. Fetzer, presented at Eastern Analytical Symposium, New Jersey, November, 1994 (**invited symposium speaker**).
31. "Characterization of and Spectral Behavior of Dual-Fluorescent Solvatochromic Probe Molecules in Micellar Solutions," **J. R. Powell**, **W. E. Acree, Jr.** and **S. A. Tucker**, presented at Pittsburgh Conference and Exposition, New Orleans, Louisiana, March, 1995.
32. "Comparison of Spectrofluorometric Probe Methods for Determining Preferential Solvation," **S. A. Tucker** and **W. E. Acree, Jr.**, presented at Pittsburgh Conference and Exposition, New Orleans, Louisiana, March, 1995.
33. "Thermochemical Investigations of Hydrogen-Bonded Solutions," **A. I. Zvaigzne** and **W. E. Acree, Jr.**, presented at National AIChE meeting, Houston, Texas, March, 1995.
34. "Thermochemical Studies Involving Aromatic C-Nitroso and C-Nitro Compounds," M. D. M. C. Ribeiro da Silva, M. A. R. Matos, **W. E. Acree, Jr.**, **S. A. Tucker**, and G. Pilcher, presented at the International Conference on Thermodynamics, Reading, United Kingdom, April, 1995.
35. "Thermochemical Studies of Some Quinoxaline Derivatives," M. D. M. C. Ribeiro da Silva, M. A. R. Matos, J. M. Goncalves, **W. E. Acree, Jr.**, **S. A. Tucker** and G. Pilcher, presented at Calorimetry Conference, Gaithersburg, Maryland, July 23-28, 1995.
36. "Comparison of Spectroscopic Probe Methods for Determining Preferential Solvation Around a Dissolved Fluorophore," **W. E. Acree, Jr.** and **J. R. Powell**, presented at FACSS National Meeting, Cincinnati, Ohio, October, 1995 (**invited symposium speaker**).
37. "Anionic Micellar Solvents as Exceptions to the Nitromethane Selective Quenching Rule," **S. Pandey**, K. A. Fletcher and **W. E. Acree, Jr.**, presented at ACS Regional Meeting-in-Miniature, Denton, Texas, April, 1996.
38. "Evaluation of Caro's Acid as a Titrant for Iron (II) Determinations," **J. R. Powell** and **W. E. Acree, Jr.**, presented at ACS Regional Meeting-in-Miniature, Denton, Texas, April, 1996.
39. "Application of Mobile Order Theory to Alcohol + 2-Alkoxyethanol Solvent Mixtures," **M. E. R. McHale**, **A.-S. M. Kauppila** and **W. E. Acree, Jr.**, presented at ACS Regional Meeting-in-Miniature, Denton, Texas, April, 1996.
40. "Energetica da Ligacao N-O em Derivados da Piridina-*N*-Oxide," M. D. M. C. Ribiero da Silva, M. A. R. Matos, M. C. Vaz, **W. E. Acree, Jr.** and **J. R. Powell**, presented at National meeting of the Portuguese Chemical Society, Porto, Portugal, May, 1996.

41. "Energetic Studies of Benzofurazan *N*-Oxide Derivatives: 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, presented at IUPAC Thermodynamics Conference, Japan, August 1996.
42. "Advances in the Estimation of Fusion Entropies and Enthalpies by Group Additivity," J. S. Chickos and **W. E. Acree, Jr.**, presented at National ACS Meeting, Orlando, FL, September, 1996.
43. "Anionic Micellar Solvents as Exceptions to the Nitromethane Selective Quenching Rule," **S. Pandey**, K. A. Fletcher and **W. E. Acree, Jr.**, present at FACSS, Kansas City, Missouri, October, 1996.
44. "Thermochemical Studies of Two Quinoxaline-di-*N*-oxide Derivatives," M. D. M. C. Ribeiro da Silva, M. A. R. Matos, L. M. N. B. F. Santos, **W. E. Acree, Jr.** and G. Pilcher, presented at Fifteenth Experimental Thermodynamics Conference, Surrey, United Kingdom, April, 1997.
45. "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, presented at 13th Symposium on Thermophysical Properties, Boulder, Colorado, June 22-27th, 1997.
46. "The Dissociation Enthalpies of the N-O Bonds in Pyridine-Carboxylic Acid *N*-Oxide Isomers," M. D. M. C. Ribeiro da Silva, M. A. R. Matos, L. M. B. F. Santos, J. C. M. Ribeiro and **W. E. Acree, Jr.**, presented at Jornades Mediterranees de Calorimetria i Anàlisi Termica, Plana de Mallorca, Spain, June 24-28, 1997.
47. "Thermodynamics of Mobile Order Theory," **W. E. Acree, Jr.**, **J. R. Powell**, **M. E. R. McHale**, **A. I. Zvaigzne** and S. W. Campbell, presented at 53rd Southwest Regional ACS Meeting, Tulsa, Oklahoma, October, 1997.
48. "Selective Fluorescence Quenching Agents for Polycyclic Aromatic Hydrocarbon (PAH) Analysis," **S. Pandey** and **W. E. Acree, Jr.**, presented at 53rd Southwest Regional ACS Meeting, Tulsa, Oklahoma, October, 1997.
49. "D(N-O) Bond Dissociation Enthalpies in Substituted Quinoxaline 1,4-Dioxide, Pyridine *N*-Oxide and Benzofurazan *N*-Oxide Derivatives," **W. E. Acree, Jr.**, M. D. M. C. Ribeiro da Silva and G. Pilcher, presented at 53rd Southwest Regional ACS Meeting, Tulsa, Oklahoma, October, 1997.
50. "Mobile Order Theory and the Thermodynamics of Hydrogen Bonding," **C. E. Hernández**, **L. E. Roy** and **W. E. Acree, Jr.**, presented at the 215th National ACS Meeting, Dallas, Texas, April, 1998.
51. "Analytical Method Selection: Comparison of Two Fluorescence Methods for Quinine Determination in Tonic Waters," **L. E. Roy**, **C. E. Hernández**, **S. Pandey** and **W. E. Acree, Jr.**, presented at the 215th National ACS Meeting, Dallas, Texas, April, 1998.
52. "Selective Fluorescence Quenching of Alternant Polycyclic Aromatic Hydrocarbons in Molecularly Organized Solvent Media," **S. Pandey** and **W. E. Acree, Jr.**, presented at the 215th National ACS Meeting, Dallas, Texas, April, 1998.
53. "Mobile Order Theory and the Thermodynamics of Hydrogen Bonding," **C. E. Hernández**, **L. E. Roy** and **W. E. Acree, Jr.**, presented at ACS Regional Meeting-in-Miniature, Dallas, Texas, April, 1998.
54. "Alkylpyridinium Cations as Selective Fluorescence Quenching Agents for Alternant Versus Nonalternant Polycyclic Aromatic Hydrocarbons," **L. E. Roy**, **S. Pandey** and **W. E. Acree, Jr.**, presented at ACS Regional Meeting-in-Miniature, Dallas, Texas, April, 1998.
55. "The Dissociation Enthalpies of the N-O Bonds on Pyridine *N*-Oxide Derivatives," M. D. M. C. Ribeiro da

- Silva, M. A. R. Matos, M. C. Vaz, L. M. N. B. F. Santos, G. Pilcher, **W. E. Acree, Jr.** and **J. R. Powell**, presented at International Symposium on Calorimetry and Chemical Thermodynamics, Campinas, Brazil, April 5-9, 1998.
56. "Dissociation Enthalpy of the (N-O) Bond in 6-Methoxyquinoline *N*-Oxide," M. D. M. C. Ribeiro da Silva, L. M. N. B. F. Santos, O. O. P. Fernandes and **W. E. Acree, Jr.**, presented at International Conference on Chemical Thermodynamics, Porto, Portugal, July, 1998.
 57. "Development of Spectroscopic Methods for the Determination of Chemicals in Pain Medications," **T. L. Sharp**, **C. E. Hernández**, **L. E. Roy**, **K. M. De Fina** and **W. E. Acree, Jr.**, presented at ACS Southeastern Regional Meeting, Research Triangle, North Carolina, November 6, 1998.
 58. "Enthalpies of Combustion of 2-Iodosobenzoic Acid and of 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, presented at the Sixteenth Thermodynamics Conference, London, United Kingdom, April, 1999.
 59. "Estudo Termoquímico e Teórico de Cianopirazinas," M. S. Miranda, M. A. R. Matos, M. D. M. C. Ribeiro da Silva, V. M. F. Morais, and **W. E. Acree, Jr.**, presented at National meeting of the Portuguese Chemical Society, Coimbra, Portugal, October, 1999.
 60. "Estudo Termoquímico de Derivados da 4-Nitrosopirazola," M. D. M. C. Ribeiro da Silva, S. C. C. Ferreira, I. A. P. Rodrigues, L. C. M. da Silva and **W. E. Acree, Jr.**, presented at National meeting of the Portuguese Chemical Society, Coimbra, Portugal, October, 1999.
 61. "Solubilities of Anthracene, Fluoranthene and Pyrene in Organic Solvents. Comparison of Calculated Values Using UNIFAC and Modified UNIFAC (Dortmund) with Experimental Data and Values Using Mobile Order Theory," H. K. Hansen, C. Riverol and **W. E. Acree, Jr.**, presented at 2nd International Conference on Petroleum and Gas Phase Behavior and Fouling, Copenhagen, Denmark, August, 2000.
 62. "Thermochemical and Theoretical Studies of 2,6-Pyridinedicarboxylic Acid and Dimethylpyridine-2,6-dicarboxylate," M. A. R. Matos, M. D. M. C. Ribeiro da Silva, M. C. F. Marques, V. M. F. Morais and **W. E. Acree, Jr.**, presented at 5th Encontro Nacional de Química-Física, Faro, Portugal, September, 2001.
 63. "The Dissociation Enthalpy of the (N-O) Bond in 2-Hydroxypyridine *N*-Oxide: The Influence of the Hydrogen Bond," M. S. Miranda, M. D. M. C. Ribeiro da Silva, M. A. R. Matos, V. M. F. Morais and **W. E. Acree, Jr.**, presented at 5th Mediterranean Conference on Calorimetry and Thermal Analysis, MEDICTA 2001, A Coruna-Galicia, Spain, September, 2001.
 64. "Contribution to the Energetics of the (N-O) Bonds on Benzofurazan-*N*-Oxide Derivatives," M. D. M. C. Ribeiro da Silva, J. C. M. Ribeiro, A. L. R. Silva, M. A. R. Matos and **W. E. Acree, Jr.**, presented at The International Society for Biological Calorimetry, ISBCXII, A Coruna-Galicia, Spain, September, 2001.
 65. "Prediction of Total Phase Change Entropies and Enthalpies of Liquid Crystals by Group Additivity," J. S. Chickos and **W. E. Acree, Jr.**, presented at North American Thermal Analysis Conference, St. Louis, Missouri, October, 2001.
 66. "Contribution to the Thermochemical Study of Nitrobenzofurazan Derivatives," M. D. M. C. Ribeiro da Silva, J. M. Goncalves, O. D. F. Santiago and **W. E. Acree, Jr.**, presented at 6th Mediterranean Conference on Calorimetry and Thermal Analysis, MEDICTA 2003, Porto, Portugal, July, 2003.
 67. "The Mean Dissociation Enthalpy of the (N-O) Bonds in 2,3-Dimethylquinoxaline 1,4-Dioxide," M. D. M. C. Ribeiro da Silva, J. M. Goncalves, E. A. Sousa, J. R. B. Gomes and **W. E. Acree, Jr.**, presented at 6th Mediterranean Conference on Calorimetry and Thermal Analysis, MEDICTA 2003, Porto, Portugal, July,

- 2003.
68. “Contribucao Para o Estudo Termoquimico de 4-Nitro-2,1,3-benzotiadiazole,” M. D. M. C. Ribeiro da Silva, M. J. Sottomayor, M. A. A. Vieira and **W. E. Acree, Jr.**, presented at National Meeting of Portuguese Chemical Society, Portugal, April 22-24, 2004.
 69. “Estudo Calorimetrico de Derivados Alquilados da 4-Nitropiridina *N*-Oxido,” E. A. Sousa, **W. E. Acree, Jr.** and M. D. M. C. Ribeiro da Silva, presented at National Meeting of Portuguese Chemical Society, Portugal, April 22-24, 2004.
 70. “Modeling the Surface Tension of Mixed Solvents at Various Temperatures,” A. Jouyban, A. Fathi Azarbayjani and **W. E. Acree, Jr.**, presented at Iranian Analytical Chemistry meeting, Mashhad, Iran, May 18-20, 2004.
 71. “Modeling Acid Dissociation Constant of Analytes in Binary Solvents at Various Temperatures,” A. Jouyban, S. Soltani, A. A. Matin and **W. E. Acree, Jr.**, presented at Iranian Analytical Chemistry meeting, Mashhad, Iran, May 18-20, 2004.
 72. “Modeling the Density of Binary Solvents at Various Temperatures,” A. Jouyban, A. Fathi-Azarbaijani, S. Soltani, S. Varez and **W. E. Acree, Jr.**, presented at 9th Iranian Seminar of Pharmaceutical Sciences, Tabriz, Iran, 2004.
 73. “Modeling the Viscosity of Binary Solvents at Various Temperatures,” A. Jouyban, Z. Fekari, A. A. Matin, Z. Vaez and **W. E. Acree, Jr.**, presented at 9th Iranian Seminar of Pharmaceutical Sciences, Tabriz, Iran, 2004.
 74. “Estudo Calorimétrico da 4-Fenilpyridina *N*-Óxido,” E. A. Sousa, **W. E. Acree, Jr.** and M. D. M. C. Ribeiro da Silva, presented at Livro de Resumos do 7^o Encontro Nacional de Quimica – Fisica S.P.Q., Comunicação P11, Porto, Portugal, July 2005.
 75. “Correlation of Retention Factor of Analytes in Quaternary Solvet Mobile Phases Using Jouyban-Acree Model, A. Jouyban, H. Hanaee, M. R. Rashidi, S. Esnaashari and **W. E. Acree, Jr.**, presented at Malaysian Pharmaceutical Conference 2005, Kuala Laumpur, Malaysia 2005.
 76. “Predicting Biologically Important Properties Using Solubilities and the Abraham General Solvation Model,” [C. Givens](#), [S. Keown](#), [D. M. Stovall](#), [K. R. Hoover](#), W. E. Acree, Jr. and M. H. Abraham, presented at 231st ACS National Meeting, Atlanta, Georgia, March 26-30, 2006.
 77. “Experimental Thermochemical Study of Two Pyrazine *N,N'*-Dioxide Derivatives,” M. D. M. C. Ribeiro da Silva, M. A. A. Vieira and **W. E. Acree, Jr.**, presented at International Symposium on Calorimetry and Chemical Thermodynamics, Campinas, Brazil, April, 2006.
 78. “Predictive Methods: Are Experimental Measurements Still Necessary,” **W. E. Acree, Jr.**, presented at the IUPAC conference, Boulder, Colorado, July 27-August 4, 2006. (**invited symposium speaker**)
 79. The Mean Dissociation Enthalpy of the N-O Bond for 2,2'-Bipyridine *N,N'*-Dioxide,” M. D. M. C. Ribeiro da Silva, A. R. Monteiro, J. M. Gonçalves and **W. E. Acree, Jr.**, presented at the IUPAC conference, Boulder, Colorado, July 27-August 4, 2006.
 80. “Energetics of the Pyrdinecarboxylic Acid Methyl Ester Isomers,” M. D. M. C. Ribeiro da Silva, V. L. S. Freitas and **W. E. Acree, Jr.**, presented at the European Symposium on Thermal Analysis and Calorimetry, Krakow, Poland, August 27-31, 2006.
 81. “Prediction of Pyrene Solubility in Non-Aqueous Solvent Mixtures Using Jouyban-Acree Model,” A.

- Jouyban, E. Tamizi and **W. E. Acree, Jr.**, presented at Iranian Pharmaceutical Conference, Tehran, Iran, August, 2006.
82. "Solubility Prediction of Solutes in Non-aqueous Binary Solvents Using a Combination of Jouyban-Acree and Abraham Models," A. Jouyban, S. Soltani and W. E. Acree, Jr., presented at Iranian Pharmaceutical Conference, Tehran, Iran, August, 2006.
 83. "Thermochemical Study of Two Dimethylpyrazine-*N,N*-Dioxide Derivatives," M. D. M. C. Ribeiro da Silva, J. I. T. A. Cabral and **W. E. Acree, Jr.**, presented at MEDICTA 2007, Palermo, Italy, September, 2007.
 84. "Modeling of the Simultaneous Effects of Mobile Phase Composition and Temperature on the Capacity Factor of Analytes in HPLC Using Jouyban-Acree Model, S. Soltanpour, **W. E. Acree, Jr.** and A. Jouyban, presented at 11th Iranian Pharmaceutical Sciences Conference, Kerman, Iran 2008.
 85. "Prediction of Drug Solubility in Water-Cosolvent Mixtures by a Combination of the Jouyban-Acree Model and Catalan Parameters," M. A. A. Fakhree, **W. E. Acree, Jr.** and A. Jouyban, presented at 11th Iranian Pharmaceutical Sciences Conference, Kerman, Iran 2008.
 86. "New Generation Ionic Liquids Characterization by Linear Solvation Energy Models," **L. Sprunger** and **W. E. Acree, Jr.**, presented at ACS Meeting-in-Miniature, Denton, TX, May 2009.
 87. "Characterization of New Generation Ionic Liquid Chromatographic Stationary Phases," **L. Sprunger**, **W. E. Acree, Jr.** and M. H. Abraham, presented at 238th ACS National Meeting, Washington, DC, Aug. 2009.
 88. "Prediction of Diffusion Coefficients for Binary Liquid Systems," A. Jouyban, S. Soltani, M. Mohammadzadeh, S. Tatardar and **W. E. Acree, Jr.**, presented at 16th Iranian Seminar of Analytical Chemistry, Harnadan, Iran, 2009.
 89. "Modeling of Retention Behavior of Analytes RP-HPLC with Mixed Mobile Phases Using a Combination of Jouyban-Acree and Abraham Parameters," A. Jouyban, S. Soltani, A. Chabra, Z. Bagherzadeh and **W. E. Acree, Jr.**, presented at 16th Iranian Seminar of Analytical Chemistry, Harnadan, Iran, 2009.
 90. "Thermodynamic Properties of New Generation Ionic liquids," **L. Sprunger**, **W. E. Acree, Jr.** and M. H. Abraham, presented at 239th ACS National Meeting, San Francisco, CA, March 2010 (oral presentation in special symposium devoted to ionic liquids).
 91. "Modeling of Retention Behavior of Analytes RP-HPLC with Mixed Mobile Phases Using a Combination of Jouyban-Acree and Abraham Parameters," S. Soltani, Z. Baghernezad, A. Chabra, A. Shayanfar, **W. E. Acree, Jr.** and A. Jouyban, presented at 12th Iranian Pharmaceutical Sciences Congress, Zanjan, Iran, 2010.
 92. "Using Spectroscopy Laboratory Experiments to Facilitate Learning in Chemistry Lecture," **A. Wilson**, **T. W. Stephens** and **W. E. Acree, Jr.**, presented at 22nd International Conference of Chemistry Education and 11th European Conference on Research in Chemical Education, Rome, Italy, July 2012.
 93. "NIST-Journal Cooperation to Improve the Quality of Published Experimental Data: New On-line Tools and IUPAC Recommendations," R. D. Chirico, M. Frenkel, J. W. Magee, V. V. Diky, K. Kroenlein, C. D. Muzny, A. F. Kazakov, I. M. Abdulgatatov, G. R. Hardin, T. W. de Loos, J. P. O'Connell, C. M. McCabe, J. F. Brennecke, P. M. Mathias, A. R. H. Goodwin, J. Wu, K. N. Marsh, R. D. Weir, **W. E. Acree, Jr.**, A. Padua, W. M. Haynes, D. G. Friend, A. Mandelis, V. Rives, C. Schick, S. Vyazovkin and E. Chen, presented at 2012 ICCT, Brazil, August 2012.
 94. "Leveraging Open Notebook Science for Solubility and Melting Point Predictions for Optimizing Reactions and Recrystallizations," M. J. McBride, J.-C. Bradley, **W. E. Acree, Jr.**, A. Lang and A.

- Williams, presented at 244th ACS National Meeting & Exposition, Philadelphia, PA, August 19-23, 2012.
95. “Correlations of Solute Partitioning and Enthalpies of Solvation for Organic Solutes in the Ionic Liquids 1-Hexyl-3-methylimidazolium Tetracyanoborate, 1-(2-Methoxyethyl)-1-methylpiperidinium *bis*(Trifluoromethylsulfonyl)imide and 1-(2-Methoxyethyl)-1-methylpyrrolidinium *bis*(Trifluoromethylsulfonyl)imide Using a Temperature Independent Free Energy Relationships,” **T. W. Stephens**, **B. Willis**, **N. Dabadge**, **A. Tian**, **W. E. Acree, Jr.** and **M. H. Abraham**, presented at ACS Southwest Regional Meeting, New Orleans, LA, November 2012.
 96. “NIST-Journal Cooperation to Improve the Quality of Published Experimental Data: New On-line Tools and IUPAC Recommendations,” **R. D. Chirico**, **M. Frenkel**, **J. W. Magee**, **V. V. Diky**, **K. Kroenlein**, **C. D. Muzny**, **A. F. Kazakov**, **I. M. Abdulgatov**, **G. R. Hardin**, **T. W. de Loos**, **J. P. O’Connell**, **C. M. McCabe**, **J. F. Brennecke**, **P. M. Mathias**, **A. R. H. Goodwin**, **J. Wu**, **K. N. Marsh**, **R. D. Weir**, **W. E. Acree, Jr.**, **A. Padua**, **W. M. Haynes**, **D. G. Friend**, **A. Mandelis**, **V. Rives**, **C. Schick**, **S. Vyazovkin** and **E. Chen**, presented at 245th ACS National Meeting & Exposition, New Orleans, LA, April 7-12, 2013.
 97. “Correlations of Solute Partitioning and Enthalpies of Solvation for Organic Solutes in Two Morpholinium Ionic Liquids Using a Temperature Independent Free Energy Relationship,” **T. W. Stephens**, **W. E. Acree, Jr.** and **M. H. Abraham**, presented at 245th ACS National Meeting & Exposition, New Orleans, LA, April 7-12, 2013.
 98. “Temperature Independent Cation-Specific and Anion-Specific Abraham Model Coefficients for Predicting the Gas-to-Ionic Liquid Partition Coefficient,” **T. W. Stephens**, **W. E. Acree, Jr.** and **M. H. Abraham**, presented at 245th ACS National Meeting & Exposition, New Orleans, LA, April 7-12, 2013.
 99. “Temperature Independent Free Energy Relationships for Three Ionic Liquids Based on the Trifluorotris-(perfluoroethyl)phosphate Anion,” **T. W. Stephens**, **W. E. Acree, Jr.**, and **M. H. Abraham**, presented at 44th ACS Western Regional Meeting, Santa Clara, CA, October 3-6, 2013.
 100. “Determination and Correlation of Molar Entropies of Solvation for Three Piperidinium Based Ionic Liquids with the Abraham Model,” **T. W. Stephens** and **W. E. Acree, Jr.**, presented at ACS Southwest Regional Meeting, Waco, TX, November 16-19, 2013.
 101. “Correlations of Solute Partitioning for Organic Solutes in Two Ionic Liquids Based on the 1-(2-Methoxyethyl)-1-methylpiperidinium Cation Using a Temperature Independent Free Energy Relationship Based on the Abraham Solvation Model,” **T. W. Stephens**, **W. E. Acree, Jr.** and **M. H. Abraham**, presented at 247th ACS National Meeting & Exposition, Dallas, TX, March 16-20, 2014.
 102. “Determination of Gas-to-Ionic Liquid Partition Coefficients for Ionic Liquids Using Two Temperature Independent Group Contribution Methods,” **T. W. Stephens**, **W. E. Acree, Jr.** and **M. H. Abraham**, presented at 247th ACS National Meeting & Exposition, Dallas, TX, March 16-20, 2014.
 103. “Shaken not Stirred. Y’All: A Comparison of Select Texas Vodkas,” **T. W. Stephens**, **D. Mason**, **R. L. Ford**, **A. George** and **W. E. Acree, Jr.**, presented at 247th ACS National Meeting & Exposition, Dallas, TX, March 16-20, 2014.
 104. “Analyzing Solubility Descriptors Using the Abraham Solvation Parameter Model,” **J. A. Reyes** and **W. E. Acree, Jr.**, presented at 247th ACS National Meeting & Exposition, Dallas, TX, March 16-20, 2014.
 105. “NIST-Journal Cooperation: Pre-Acceptance Evaluation and On-line Tools to Improve the Quality of Published Experimental Data,” **R. D. Chirico**, **M. Frenkel**, **J. W. Magee**, **V. V. Diky**, **K. Kroenlein**, **C. D. Muzny**, **A. F. Kazakov**, **I. M. Abdulagatov**, **G. R. Hardin**, **T. W. De Loos**, **J. P. O’Connell**, **C. McCabe**, **J. F. Brennecke**, **P. M. Mathias**, **A. R. H. Goodwin**, **J. Wu**, **K. N. Marsh**, **R. D. Weir**, **W. E. Acree, Jr.**, **A. Pádua**, **W. M. Haynes**, **D. G. Friend**, **A. Mandelis**, **V. Rives**, **C. Schick**, **S. Vyazovkin** and **E. Chen**,

- presented at the International Conference on Chemical Thermodynamics, Durban, South Africa, July 27-Aug. 1, 2014.
106. “Models to Evaluate Experimental Solubility Data for Crystalline Nonelectrolyte Solutes in Organic Mono-solvents and Solvent Mixtures,” **W. E. Acree, Jr.**, presented at 248th ACS National Meeting & Exposition, San Francisco, CA, August 10-14, 2014 (invited symposium speaker).
 107. “Thermodynamic Properties of Organic Solutes Dissolved in 1,2,3-*tris*(Dimethylamino)cyclopropenylum and Alkylquinuclidinium Based Ionic Liquids,” L. Cesari, F. Mutelet and **W. E. Acree, Jr.**, presented at APCIL Congress, HanZhou, China, October 2016.
 108. “Solubility of Sorbic Acid in Organic Mono-solvents: Calculation of Abraham Model Solute Descriptors from Measured Solubility Data,” **M. Barrera** and **W. E. Acree, Jr.**, presented at ACS Regional Meeting-in-Miniature, Dallas, Texas, April, 2017.
 109. “Solubility of Sorbic Acid in Organic Mono-solvents: Calculation of Abraham Model Solute Descriptors from Measured Solubility Data,” **M. Barrera** and **W. E. Acree, Jr.**, presented at McNair Conference at the University of California, Berkley, California, July, 2017.
 110. “Predicting Drug Separations for Ionic Liquid Phases Using an Intelligent Decision Tree & the Abraham Model,” **K. Smart**, **W. E. Acree, Jr.** and T. D. Golden, presented at Southwestern Association of Toxicologists (SA) Fall Meeting, Dallas, Texas, November 2018.
 111. “Fostering Outstanding Cohorts in Undergraduate Science: A Ten-Year Retrospective,” L. E. Hughes, **W. Acree**, S. Gao, D. Mason, P. Padilla and U. Philipose, to be presented at Gordon Research Conference on Undergraduate Biology Education Research, Lewiston, Maine, June 23-28, 2019.
 112. “Modelling Nonelectrostatic Solute-Solvent Interactions in Continuum Embedding,” C. Hille, S. Ringe, J. Filser, M. Deimel, C. Kunkel, **W. E. Acree**, K. U. Reuter and H. Oberhofer, presented at 258th ACS National Meeting & Exposition, San Diego, California, August 25-29, 2019.
 113. “Development of Abraham Model Correlations for an Analytically Important Extraction Solvent MIBK,” **W. E. Acree, Jr.**, **E. Garcia** and **K. Smart**, accepted for presentation at 259th ACS National Meeting & Exposition, Philadelphia, Pennsylvania, March 22-26, 2020. (ACS meeting cancelled due to COVID 19).
 114. “Development of Abraham Model Expressions for Predicting the Standard Molar Enthalpies of Vaporization of Organic Compounds at 298.15 K,” **B. N. Churchill** and **W. E. Acree, Jr.**, presented at 260th ACS National Meeting & Exposition, virtual, Aug. 17-30, 2020.
 115. “Estimation of Chemical Toxicity due to Fentanyl Compounds,” **K. Smart**, T. D. Golden and **W. E. Acree**, presented at 73rd AAFS Meeting, Virtual, February 2021.
 116. “Novel GLC-based Methods for Isomeric Fentanyl Analogs,” **K. Smart**, D. Golden, G. Verbeck and **W. E. Acree, Jr.**, presented at Pittsburgh Conference & Exposition, virtual meeting, March 8, 2021.
 117. “Separation of Fentanyl Analogues Using GLC-based Methods with Ionic Liquids,” **K. Smart**, **K. Reyes**, **W. E. Acree, Jr.**, G. F. Verbeck, IV and T. D. Golden, presented at Pittsburgh Conference & Exposition, March 9, 2022.
 118. “Gas Chromatographic Separation of Fentanyl Analogues with an Ionic Phase,” **K. Smart**, **K. Reyes**, **W. Acree, Jr.**, G. F. Verbeck and T. D. Golden, presented at 54th ACS Regional Meeting-in-Miniature, Dallas, Texas, April, 2022.
 119. “Determination of Abraham Model Solute Descriptors for Hippuric Acid from Measured Molar Solubilities

in Several Organic Mono-Solvents of Varying Polarity and Hydrogen-Bonding Ability," **S. Sinha, A. Varadharajan** and **W. E. Acree, Jr.**, presented at 264th ACS National Meeting & Exposition, Chicago, Illinois, August, 2022.

120. "Updated Abraham Model Correlations for Describing Solute Transfer into Both 2-Pentanol and 3-Methyl-1-butanol Based on Much Larger Data Sets," **C. Webber** and **W. E. Acree, Jr.**, presented at 267th ACS National Meeting & Exposition, New Orleans, Louisiana, March 18, 2024.
121. "Determination of Thermodynamic Parameters of Fentanyl-Like Compounds Using Chromatography: A Preliminary Study," **A. Silva, K. Smart**, **W. E. Acree, Jr.** and **T. D. Golden**, presented at SACNAS NDiSTEM Conference, Phoenix, Arizona, October 2024. (poster).
122. "Development of Abraham Model Correlations for Predicting the Solubility of Crystalline Organic Compounds and Inorganic Gases in Ethyl Formate," **C. Wilson, A. Kabin, C. Prewitt** and **W. E. Acree**, presented at ACS Regional Meeting-in-Miniature, Commerce, Texas, April, 2025.

10. Seminars Presented:

1. "Thermochemical Investigations of Gas-Liquid Chromatography," seminar presented at Louisiana State University, April, 1984.
2. "Thermodynamic Aspects of Gas-Liquid Chromatography," presented at Clarkson College of Technology, October, 1984.
3. "Thermodynamic Aspects of Gas-Liquid Chromatography," presented at Memphis State University, March, 1985.
4. "Thermochemical Aspects of Gas-Liquid Chromatography," presented at University of Texas at San Antonio, March, 1985.
5. "Solubilization Predictions and Coatings Applications," 3-hour seminar in Surface Coatings II at Kent State University, November, 1986.
6. "Applications of Liquid Crystals in Chemistry," presented at Ashland College, February, 1987.
7. "Applications of Liquid Crystals in Chemistry," presented at Thiel College, December, 1987.
8. "Thermochemical Investigations of Associated Solutions," presented at University of Missouri-St.Louis, January, 1988.
9. "Thermochemical Investigations of Gas-Liquid Chromatography," presented at North Texas State University, March, 1988.
10. "Thermochemical Investigations of Associated Solutions," presented at University of Toledo, March, 1988.
11. "Thermochemical Investigations of Associated Solutions," presented at University of Missouri-Rolla, April, 1990.
12. "Thermochemical Investigations of Associated Solutions," presented at Texas Women's University, October, 1990.
13. "Physicochemical Solution Model for Describing Thermodynamic Properties of Associated Solutions," presented at East Texas State University, April, 1993.

14. "Spectrofluorometric Probe Methods for Studying Molecular Interactions in Fluid Solution," presented at the Toledo Section of the Society for Applied Spectroscopy meeting, March, 1994.
15. "Spectrofluorometric Probe Methods for Studying Molecular Interactions in Fluid Solution," presented at the Cincinnati Section of the Society for Applied Spectroscopy meeting, March, 1994.
16. "Photophysical Properties of Polycyclic Aromatic Hydrocarbons," presented at Wichita State University, April, 1994.
17. "Thermodynamic Models for Hydrogen-Bonding Systems," presented at Texas Women's University, February, 1995.
18. "Spectrofluorometric Probe Methods for Studying Molecular Interactions in Fluid Solution," presented at Oklahoma State University, April, 1995.
19. "Thermodynamics of Mobile Order Theory," presented at University of South Florida, April, 1997.
20. "Thermodynamic Modeling of Hydrogen-Bonded Solutions: Comparison of Various Models," presented at University of Missouri-St. Louis, March, 1999.
21. "Linear Free Energy Relationships for Chemical, Physical and Biological Processes," presented at New Mexico Tech University, October, 2003.
22. "Applications Involving and Predictions of Phase Transition Enthalpies," presented at St. Louis Sectional ACS Award Symposium Honoring James S. Chickos, April, 2006.
23. "Linear Free Energy Relationships for Chemical, Physical and Biological Processes," presented at Oklahoma State University, April, 2006.
24. "Linear Free Energy Relationships for Chemical, Physical and Biological Processes," presented at Texas Women's University, October, 2014.
25. "Linear Free Energy Relationships for Chemical, Physical and Biological Processes," presented at Texas A & M University at Kingsville, June, 2016.
26. "Linear Free Energy Relationships for Chemical, Physical and Biological Processes," presented at Texas A & M University at San Antonio, July, 2016.
27. "Spectroscopic and Thermodynamic Studies of Organic Compounds and Solutions," presented at Missouri University of Science and Technology, March, 2017.

11. B.S. Honors and Masters Thesis, and Doctoral Dissertations Directed:

1. "Solubility of Pyrene in Binary Solvent Mixtures," C. L. Judy, B.S. Honors Thesis, 1986.
2. "Thermochemical Investigations of Gas-Liquid Chromatography: Retention Behavior of Solutes on Binary Liquid-Crystalline Solvent Mixtures," C. A. Rouse, Ph.D. Dissertation, 1986.
3. "Thermodynamic and Empirical Methods for Predicting Solubility in Binary Solvents," A. D. Procyk, B.S. Honors Thesis, 1987.
4. "Thermochemical Investigations of Associated Solutions," J. W. McCargar, Ph.D. Dissertation, 1988. Jim

- received Kent State University's local Sigma Xi section's award for the outstanding doctoral dissertation in 1988.
5. "Polycyclic Aromatic Hydrocarbons and Polycyclic Aromatic Sulfur Heterocycles: Solubility and Spectroscopic Studies," S. A. Tucker, B.S. Honors Thesis, 1990.
 6. "Thermochemical Investigation of Ternary Nonelectrolyte Solutions," I.-Lih Teng, M.S. Thesis, 1992.
 7. "Spectroscopic Properties of Polycyclic Aromatic Compounds," S. A. Tucker, Ph.D. Dissertation, 1994. (Sheryl received the UNT Chemistry Departmental 1994 James and Ruth Spurlock award for outstanding graduate student research work.)
 8. "Spectrofluorometric Probe for Examining Preferential Solvation in Binary Mixtures," D. C. Wilkins, M.S. Thesis, 1994.
 9. "Spectrofluorometric and Solubility Studies of Polycyclic Aromatic Hydrocarbons in Hydrogen Bonded Binary Solvent Mixtures," J. R. Powell, Ph.D. Dissertation, 1997.
 10. "Chemical Equilibria in Binary Solvent Mixtures," M. E. R. McHale, Ph.D. Dissertation, 1997.
 11. "Mobile Order Theory as Applied to Polycyclic Aromatic Heterocycles," K. A. Fletcher, M.S. Thesis, 1997.
 12. "A Quenchofluorometric Study of Polycyclic Aromatic Hydrocarbons in Molecularly Organized Media," S. Pandey, Ph.D. Dissertation, 1998. (Sid received the UNT Chemistry Departmental 1997 James and Ruth Spurlock award for outstanding graduate student research work.)
 13. "Polycyclic Aromatic Hydrocarbons: Spectrofluorometric Quenching and Solubility Behavior," L. E. Roy, B.S. Honors Thesis, 1999.
 14. "Thermodynamic Properties of Nonelectrolyte Solutes in Ternary Solvent Mixtures," T. Deng, Ph.D. Dissertation, 1999.
 15. "Thermochemical Study of Crystalline Solutes Dissolved in Ternary Hydrogen-Bonding Solvent Mixtures," K. J. Pribyla, Ph.D. Dissertation, 2001.
 16. "Thermodynamics of Mobile Order Theory: Solubility and Partition Aspects," K. M. De Fina, M. S. Thesis, 2004.
 17. "Thermodynamics of the Abraham General Solvation Model: Solubility and Partition Aspects," D. M. Stovall, M. S. Thesis, 2006.
 18. "Predicting Aquatic Toxicities Using the Abraham General Solvation Model," K. R. Bowen, B.S. Biology Honors Thesis, 2006.
 19. "Thermochemical Investigations of Crystalline Solutes in Non-electrolyte Solutions: Mathematical Representation of Solubility Data and the Development of Predictive Solubility Equations in Systems with Specific and Non-specific Interactions," A. I. Zvaigzne, Ph.D. Dissertation, 2008.
 20. "Predicting Chemical and Biochemical Properties Using the Abraham General Solvation Model," C. Mintz, Ph.D. Dissertation, 2009.
 21. "Salicylamide: Toxicity Correlations and Solubility Studies," B. Blake, B. S. Honors Thesis, 2010.

22. "Characterization of Novel Solvents and Absorbents for Chemical Separations," L. M. Grubbs, Ph.D. Dissertation, 2011.
23. "Characterization of Ionic Liquid Solvents using a Temperature Independent, Ion Specific Abraham Parameter Model," T. W. Stephens, Ph.D. Dissertation, 2014.
24. "Characterization of Aprotic Solutes and Solvents Using Abraham Model Correlations," M. Brumfield, M.S. Thesis, 2016.
25. "Using the Abraham Solvation Parameter Model to Predict Solute Transfer into Various Mono- and Multi-Functional Organic Solvents, E. F. Hart, Ph.D. Dissertation, 2018.
26. "Teaching First-Semester General Chemistry Using 3D Video Games Following an Atoms First Approach to Chemistry," D. Jenkins, Ph.D. Dissertation, (co-directed with Dr. D. Mason) 2018.
27. "Allowing Students to Have VOICES (Voluntary Options in Chemistry Education Schedules) in General Chemistry I," R. Ford, Ph.D. Dissertation (co-directed with Dr. D. Mason), 2018.
28. "The Abraham Solvation Model Used for Prediction of Solvent-Solute Interactions and New Methods for Updating Parameters," B. N. Churchill, Ph.D. Dissertation, 2021.
29. "Investigation of Ionic Liquids for Chromatographic Separation of Fentanyl Analogues," K. Smart, Ph.D. dissertation, (co-directed with Drs. T. Golden and G. Verbeck) 2022.

Non-Thesis Masters Students Directed:

1. Vicki L. Amszi (Fall, 1992; co-author of 4 publications, left school with a non-thesis masters degree after her mobile home was destroyed by fire).
2. Anastasia Wilson (Summer 2015; co-author of 10 publications; graduated with a Masters of Science in Industrial Chemistry).

12. Student Co-Authors and Student Mentees:

27 Graduate Students:

Joyce Powell	40 papers	Mary McHale	35 papers
Siddarth Pandey	32 papers	Tammy Borders	5 papers
Sheryl Tucker	53 papers*	Laura Grubbs (Sprunger)	41 papers
Christine Rouse	2 papers	James McCargar	9 papers
Janet Byrd	1 paper	Anita Zvaigzne	33 papers
I.-Lih Teng	6 papers	Denise Wilkins	5 papers
Taihe Deng	14 papers	Karen Pribyla	10 papers
Karina De Fina	21 papers	Michelle Stovall	12 papers
Christina Mintz	16 papers	Kathleen Holley	2 papers
Kristin Fletcher	12 papers	Timothy Stephens	24 papers
Anastasia Wilson	10 papers	Erin Hart	21 papers
Michela Brumfield	9 papers	Vicki Amszi	4 papers
Katherine Smart	6 papers	David Jenkins	Co-advisor
Robyn Ford	Co-advisor	Brittani Churchill	10 papers
Chelsi Wilson	2 papers		

*Students whose names appear in a colored font worked in Dr. Acree's laboratory as both a graduate and an undergraduate student, or as both an undergraduate student and UBMS highschool student. The number of publications given for the student indicate the co-authored publications that the student obtained under the given academic classification heading. For example, Sheryl Tucker co-authored 53 papers as a graduate student and an additional 21 papers as an undergraduate chemistry major.

70 Undergraduate Chemistry and Biology Majors:

Cheryl Judy	4 papers	Nicholas Pontikos	3 papers
James Kirchner	3 papers	Brian Donelan	1 paper
Lisa Peterson	1 paper	Mary Marthandan	1 paper
Margaret Bissell	2 papers	Charles Chittick	1 paper
Alexander Procyk	2 papers	Bridget Oswalt	2 papers
Michael Rembert	2 papers	David Sellers	2 papers
Debra Murrall	2 papers	Jordana Wallach	1 paper
Lisa Cretalla	4 papers	Julie Halmi	1 paper
Hardjanti Darmodjo	2 papers	Heather Bates	3 papers
Brian Miller	3 papers	Ann-Sofi Kaupila	19 papers
Lindsay Roy	29 papers	Stacy Payne	1 paper
Jessica Sanders	3 papers	Michael Tuggle	2 papers
Satoru Horiuchi	2 papers	Sabrina Childress	5 papers
Karina De Fina	3 papers	Sheryl Tucker	21 papers
Tiffany Van	6 papers	Christopher Ezell	3 papers
Angel Toro	2 papers	Ebun Debase	3 papers
Michelle Stovall	2 papers	Casandra Monarrez	6 papers
Jee Woo	4 papers	Rodrick Coaxum	4 papers
Eric Pustejovsky	7 papers	Krisztina Pop	2 papers
Rebekah Moreno	1 paper	Brooke Blake-Taylor	6 papers
Rhiannon Wold	5 papers	Vallerie DeLeon	1 paper
Beth Martine	3 papers	Noehli De La Rosa	6 papers
Hali Hensley	1 paper	Malcolm Zimmerman	1 paper
Angeline Wairegi	1 paper	Erin Hart	2 papers
Lila Pipersburgh	1 paper	Katherine Mateja	1 paper
Grace Little	2 papers	Hunter Singleton	2 papers
Ashley Ramirez	3 papers	Alex Klein	3 papers
Megan Jodray	7 papers	Karen Rodriguez	2 papers
Rachel Fischer	5 papers	Erin Connolly	2 papers
Sara Strickland	1 paper	Libby Ocon	2 papers
Blessing Oloyede	1 paper	Theresa Casillas	2 papers
Alyssa Daniel	2 papers	Kylie Wilder	1 paper
Laine Longacre	4 papers	Darla Benavides	2 papers
Francis Jilawan	3 papers	Adam Witterstaetter	3 papers
Gabriel Perez	3 papers	Carrie Prewitt	1 paper

90 Undergraduate TAMS Students:

Jason Griffin	6 papers	Gaddum Reddy	6 papers
---------------	----------	--------------	----------

Michael Spurgin	6 papers	Karen Coym	14 papers
Priscilla Taylor	6 papers	Ahn Tran	4 papers
Katherine Burton	9 papers	Amy Proctor	8 papers
Sai Achi	8 papers	Shulin Ye	8 papers
Mariam Saifullah	9 papers	Amanda Quay	8 papers
Vicky Chou	8 papers	Nishu Dabadge	6 papers
Connie Shen	3 papers	Amy Tian	7 papers
Helen Lu	2 papers	Kalpana Satish	2 papers
Danyang Shan	2 papers	Napasorn Kuprasertkul	4 papers
Sumedha Mehta	4 papers	Akash Wadawadigi	4 papers
Damini Grover	10 papers	Heidi Zettl	9 papers
Shoshana Zhang	8 papers	Colleen Dai	8 papers
Victoria Koshevarova	6 papers	Minaz Zad	3 papers
Bihan Jiang	7 papers	Amber Lu	2 papers
Elizabeth Higgins	6 papers	Sarah Cheeran	6 papers
Melissa Horton	8 papers	Anisha Wadawadigi	7 papers
Olivia Zha	8 paper	Xin Tong	5 papers
Delani Woods	5 papers	Ellen Qian	13 papers
Jonathan Lu	3 papers	Yuqing Liu	4 papers
Grace Lee	8 papers	Melanie Che	7 papers
Lainey Wang	6 papers	David Yue	7 papers
Avi Gupta	6 papers	Reese Neal	4 papers
Shang Wang	6 papers	Kelly Liu	6 papers
Alex Zhang	6 papers	Siqi Zhu	4 papers
Jingyi Dai	5 papers	Shrika Eddula	11 papers
Carina Jiang	7 papers	Grace Liu	5 papers
Priya Tirumala	6 papers	Jennifer Huang	7 papers
Angelina Xu	11 papers	Kelly Kim	7 papers
Evonne Huang	5 papers	Sophia Cai	4 papers
Neel Shanmugam	10 papers	Pravani Garlapati	1 paper
Advika Varadharajan	12 papers	Sneha Sinha	7 papers
Emily Wu	6 papers	Miles Zhang	3 papers
Chelsea Yang	4 papers	Emily Yao	9 papers
Nikita Shanmugam	6 papers	Shuhan Wu	2 papers
Amy Zhou	5 papers	Ramya Motati	10 papers
Saikiran Motati	10 papers	Trisha Kandi	6 papers
Jocelyn Chen	7 papers	Audrey Chen	7 papers
Dhishithaa Kumarandurai	5 papers	Yixuan Yang	1 paper
Bradley Lin	11 papers	Allison Kabin	10 papers
Sri Kowtha	8 papers	Nitya Bhupathi Raju	3 papers
Mingue (Kathy) Xie	1 paper	Divya Mohanraj	6 papers
Angelina Sun	5 papers	Ananya Jamdagneya	2 papers
Anika Varadharajan	2 papers	Nitya Damera	1 paper
Yuuki Uemura	1 Submitted	Brooklyn Julson	1 Submitted

92 Upward Bound Math and Science (Summer High School Student Program):

Bradley Smith	2 papers	Brad McKethan	1 paper
Robin Barnes	1 paper	Yvonne Cordero	2 papers
Abigail Rubio	1 paper	Cheridan Harris	1 paper
Erika Martinez	1 paper	Michelle Sanchez	1 paper
Jose Lozano	1 paper	Jennifer Trejo	1 paper
Dusty Wright	1 paper	Minh Nguyen	1 paper
Joshua Wolfe	1 paper	Andres Ibarra	1 paper
Oscar Garza	1 paper	Diana Voisinnet	2 papers
Eboney Hamilton	1 paper	Akiko Hizon	1 paper
Andres Salazar	2 papers	Josh Martinez	1 paper
Tishna Soto	1 paper	Pablo Otero	2 papers
Alison Valdez	1 paper	Nicole Vellegas	1 paper
Melani Jayasekera	2 papers	Tatina Chee	1 paper
Miranda Carrillo	2 papers	Sandra Padilla	3 papers
Alena Delacruz	1 paper	Monica Corella	2 papers
Ashante Trufant	3 papers	Kim Theeuwes	1 paper
Anna Blanco	1 paper	Noe De La Sancha	3 papers
Stephanie Fishback	1 paper	Ruth Cano	1 paper
Ernesto Vela	3 papers	Sarah Duenas	1 paper
Lisset Alcarzar	1 paper	Geo Martinez	4 papers
Nancy Kuehn	1 paper	Leigh Fisher	1 paper
Amy Parker	1 paper	Jessica Pacheco	1 paper
Mason Nau	1 paper	Autumn Jackson	4 papers
Sarah Abernathy	1 paper	Lizette Sidransky	1 paper
Guenevere Brown	4 papers	Karen Alexander	1 paper
Priscilla Acosta	1 paper	Ashley Furman	2 papers
Comfort Olugbuyi	1 paper	Izamar Flores	1 paper
Adam Bilbrey	2 papers	Araina Vance	1 paper
David Mejorado	1 paper	Jermica Love	2 papers
Derek Casares	1 paper	Monica Calderas	1 paper
Jacob Garza	2 papers	Ramie Hall	1 paper
Ricardo Diaz	1 paper	Jose Ruiz	1 paper
Nicholas Montney	1 paper	Amber Frizzelle	1 paper
Kimberle Wolcott	2 papers	Megan Payne	1 paper
Maribel Barrera	2 papers	Erika Sanchez	1 paper
Troy Sanchez	1 paper	Michael Garcia	1 paper
Jackie Calzada	1 paper	Bailey Bates	1 paper
Justice Abban-Manesah	1 paper	Jennifer De La Rosa	2 papers
Logan Kennemer	1 paper	Jocelin Meza	1 paper
Sarah Dunn	1 paper	Janna Herron	1 paper
Ketsia Kankolongo	1 paper	Shy'an Ryan	1 paper
Alfredo Sanchez	1 paper	Ashley Pugh	1 paper
Valeria Portillo	1 paper	Donavyn Calhoon	1 paper
Kyle Gillispie	1 paper	Febronia Khalil	1 paper
Randall Williams	1 paper	Tiffany Mayes	1 paper
Samantha Downs	1 paper	Olivia Rose	1 paper

5 Undergraduate McNair Scholars:

Carmen Hernandez	29 papers	Tina Sharp	12 papers
Ivette Chuca	7 papers	Kaci Hoover (later Kaci Bowen)	19 papers
Maribel Barrera	8 papers		

16 Summer REU Students:

Amanda Charlton	8 papers	Charlisa Daniels	8 papers
Chelsea Givens	4 papers	Stephanie Keown	4 papers
Kelli Flanagan	6 papers	Tara Ladlie	4 papers
Jennifer Gibbs	8 papers	McCoy McMillan-Wiggins	2 papers
Racheal Pointer	3 papers	Matthew Loera	4 papers
Bria Willis	3 papers	Jesus Reyes	ACS Presentation
Amber Schmidt	5 papers	Estefania Garcia	3 papers
Catherine Webber	2 papers	Courtney Turner	5 papers

13. Notable Student Awards and Recognitions

1. Amanda Quay (2012); Amber Lu (2017); Ellen Qian (2019); Jonathan Lu (2019); David Yue (2019); Shrika Eddula (2021); Neel Shanmugam (2022); Ramya Motati (2024); and Saikiran Motati (2025) were recipients of the highly competitive Barry Goldwater Scholarship Award
2. David Yue was named Finalist in the Truman Scholarship competition.
3. Dr. Sheryl Tucker, who worked in my research laboratory both as an undergraduate student and as a graduate student was the recipient of both the NSF Doctoral Fellowship and an American Chemical Society Analytical Division Doctoral Fellowship. Dr. Tucker is currently Provost at Southern Illinois University – Carbondale.
4. Dr. Joyce Powell (married last name Heuman) was a recipient of a dissertation fellowship from the American Association of University Women (AAUW). After graduation she was employed at Texas Instruments for several years and is currently the President of Integrated Micro Materials.
5. Dr. Siddharth Pandey is a Full Professor of Chemistry at the Indian Institute of Technology New Delhi. Dr. Pandey is a Fellow of The Royal Society of Chemistry and has published more than 220 peer-refereed chemistry articles in international science journals.
6. Dr. Katherine Smart was a recipient of a highly competitive National Institute of Justice Graduate Research Fellowship in Science, Technology, Engineering and Mathematics.
7. Dr. Mary McHale, Dr. Anita Zvaigzne, Dr. Sheryl Tucker and Dr. Laura Sprunger each received an Eli Lilly Travel Award to present their research at the American Institute of Chemical Engineers national meeting, and at the American Chemical Society national meeting.
8. More than 62 undergraduate students have received either highly competitive TAMS Summer Research Scholarship awards or UNT Undergraduate Research Fellowships to perform research in Dr. Acree's chemistry laboratory.

14. Grantsmanship:

Funded research proposals and grant applications:

1. "New Aspects of Liquid Crystals and Foams in Decontamination," (with G. H. Brown), to US Army, 6/1/85, \$55,954.
 2. "Novel Solubility Method for Determining Thermodynamic Properties of Nonelectrolyte Solid Solutions," to Petroleum Research Fund (ACS), 9/1/85, \$15,000.
 3. "Aqueous Solubilities of Organic Pollutants and Related Compounds," (with C.-C. Tsai), to EPA, 9/18/86, \$184,200.
 4. "Remote Sensing and Decontamination of Chemical Agents," (with K. W. Street), to DoD, 2/15/87, \$60,000.
 5. "Novel Solubility Method for Determining Thermodynamic Properties of Nonelectrolyte Solid Solutions," to Petroleum Research Fund (ACS, Type SRF), 5/1/87, \$2,000.
 6. "Polycyclic Aromatic Hydrocarbon Solute Probes," to Chevron Research Co., 1/1/87 - present, \$30,000 (market value of donated PAH solute probes).
 7. "Polycyclic Aromatic Nitrogen Heterocycle Solute Probes," to SRI International, 1/1/90 - present, \$6,000 (market value of donated PANH solute probes).
 8. "Thermodynamic Properties of Ternary Nonelectrolyte Solutions," to NSF, 9/89, \$164,617.
 9. "Stability Testing of Caro's Acid," to Texas Instruments, 4/1/94 – 4/1/97, \$8,000.
 10. "Novel GLC-based Method for Identification of Positional Isomeric Fentanyl," (Research Assistantship for K. Smart; P.I. is Teresa Golden; co-P.I.'s are W. E. Acree, Jr. and G. F. Verbeck), to NIH, 1/1/20 - 12/31/20, \$49,997.
- ** In addition to the afore mentioned funded research grants, one of my graduate students (Ms. Sheryl Tucker) was supported by a NSF Doctoral Research Fellowship, an UNT Doctoral Research Fellowship and ACS Analytical Division Graduate Fellowship, and one scientific visitor to my research laboratory (Dr. P.R. Naidu) was partially supported under the Fulbright Program. Four of my graduate students (Mary McHale, Anita Zvaigzne, Sheryl Tucker and Laura Sprunger) received a Eli Lilly Travel Awards to present their research at the American Institute of Chemical Engineers national meeting, and at the American Chemical Society national meeting.

Funded Departmental research proposals that I contributed to:

1. "Research Experiences for Undergraduates in Chemistry at the University of North Texas," (P.I.s were A. K. Wilson and T. Cundari), to NSF, 3/2003 – 3/2006, \$161,061. (I was one of several Senior Investigators on this Departmental research proposal.)
2. "Research Experiences for Undergraduates in Chemistry at the University of North Texas," (P.I.s were A. K. Wilson and T. Cundari), to NSF, 3/2007 – 3/2010, \$172,000. (I was one of several Senior Investigators on this Departmental research proposal.)
3. "Research Experiences for Undergraduates in Chemistry at the University of North Texas," (P.I.s were A. K. Wilson and R. Petros), to NSF, 3/2010 – 3/2013, \$212,000. (I was one of several Senior Investigators on this Departmental research proposal.)
4. "REU Site: Undergraduate Research Opportunities at the Interface of Computational and Experimental

Chemistry at the University of North Texas,” (P.I.s were A. K. Wilson and L. Slaughter), to NSF, 3/2015 - 3/2018, \$243,742. (I was one of several Senior Investigators on this Departmental research proposal.)

5. “UNT Chemistry REU,” (P.I.s are L. Slaughter and H. Wong), to NSF, 9/1/18 - 8/31/21, \$279,576. (I was one of several Senior Investigators on this proposal.)
6. “REU Site: Chemistry Research Experiences for Early-Stage Undergraduates through Collaborative HSI Partnerships,” (P.I.s are L. Slaughter and M. Atkinson), to NSF, 5/25/25 - 5/14/28, \$464,721. (I was one of several Senior Investigators on this proposal.)

Pending Research Proposal:

Representative Unfunded Research Proposals and Grant Applications:

(Complete listing will be provided upon request)

1. "Thermochemical Investigations of Associated Solutions Containing Organo-Sulfur Compounds," to DOE (Basic Energy Research), 12/89, \$164,600.
2. "Photochemical Reactions of Polycyclic Aromatic Hydrocarbons," to Welch Foundation, 1/90, \$75,000.
3. "Workshop for Faculty at Community and Junior Colleges," (joint, P.S. Braterman is P.I.), to National Science Foundation, 4/91, \$229,065.
4. "Purchase and Development of a Comprehensive Undergraduate Computing System," (with S.G. Bott and P. Marshall), to National Science Foundation, 11/90, \$29,686.
5. "Cooperative Research Program: University of North Texas and Universite de Paris VII -C.N.R.S," **W. E. Acree, Jr.**, to NSF, 4/90, \$16,350.
6. "Thermodynamic Properties of Hydrogen-Bonded Systems," to Welch Foundation, 1/15/92, \$90,000.
7. "Spectroscopic Properties of Polycyclic Aromatic Compounds," to National Science Foundation, 8/21/93, \$247,960.
8. "Thermodynamic Properties of Ternary Nonelectrolyte Solutions," to National Science Foundation, 9/1/93, \$221,960.
9. “Understanding Green Science Processes,” P.I. was D. Mason (W. E. Acree, Jr. was one of several investigators), to National Science Foundation, Spring 2003, \$1,803,665.
10. “Meeting the Challenges of Modeling Good Laboratory Practice in Chemistry Education,” D. Mason (P.I.), W. E. Acree, Jr. (Co-P.I.) and T. Golden (Co-P.I.), to NSF, 6/04, \$99,998.
11. “Making STEM Connections and Applications Accessible to Secondary School Students Project, W. E. Acree, Jr. (P.I.) and D. Mason (Co-P.I.), to NSF, 6/04, \$1,936,750.
12. “REU Site: Opportunities in Chemistry at the University of North Texas,” (P.I.s were A. K. Wilson and T. Cundari), to NSF, submitted on September 7, 2005, requested amount was \$220,242. (I was one of several Senior Investigators on this Departmental research proposal.)
13. “Facilitating Low-Income First-Generation College Students’ Academic Sociocultural Learning” (submitted to Dept. of Educ., PI is Dr. Sharon Jenkins of the Department of Psychology), \$1,022,000. (I was one of five Investigators on this Departmental research proposal.)

14. "The Culture of Science: Low-Income First-Generation Undergraduates' Academic Acculturation Process" (submitted to DOE – PI is Dr. Sharon Jenkins of the Department of Psychology), \$1,163,000. If funded I would have been paid between 10 to 15 % of my monthly salary for each of the three summer months for four years.
15. "Promoting Low-Income First-Generation College Women's Pursuit of STEM Careers" (submitted to NIH, PI is Dr. Sharon Jenkins of the Department of Psychology), \$1,006,000. If funded I would have been paid 15 % of my monthly salary for each of the three summer months for three years.
16. "Mentoring McNair Scholars: Mentor and Staff Practices and Experiences" (Submitted to NIH, PI is Dr. Sharon Jenkins of the Department of Psychology), \$962,000. If funded I would have been paid at 30 % for the 3 months of summer.
17. "UNT Facilitating Achievement in Science Tracks (UNT-FAST)," (P.I. is L. Hughes; Co-P.I.s are W. E. Acree, S. Champlin, Y. Lin and S. Widner), to Howard Hughes Medical Institute, 2017 Inclusive Excellence Competition, 6/2017 - 6/2022, \$958,000.
18. "UNT Fostering Outstanding Cohorts in Undergraduate Sciences 2017," (P.I. is L. Hughes, Co-P.I.s are W. E. Acree, D. Chen, D. J. Liu and U. Philpose), to NSF, 9/2017-8/2022, \$999,848.
19. "UNT Inclusive Excellence Program," (P.I. is L. Hughes; Co-P.I.s are W. E. Acree, S. Champlin, Y. Lin and S. Widner), to Howard Hughes Medical Institute, 2018 Inclusive Excellence Competition, 6/2018 - 6/2023, \$929,377.
20. "Fostering Outstanding Cohorts in Undergraduate Science 2019: University of North Texas," (P.I. is L. Hughes, Co-P.I.s are W. E. Acree, P. D. Chen, J. Liu, U. Philpose, and J. Quintanilla), to NSF, 6/2019 - 5/2024, \$999,253.
21. "Fostering Outstanding Cohorts in Undergraduate Science 2020," (P.I. is L. Hughes, Co-P.I.s are W. E. Acree, P. D. Chen, J. Liu, U. Philpose, and C. Heidbrink), to NSF, 6/2020 - 5/2025, \$971,564.
22. "Collaborative Research ECR DBER: Investigating Dormant Essential Automaticity (IDEAS) in STEM" (Lead P.I. is M. Atkinson, co-P.I. is W. E. Acree, Jr.), to NSF DBER grant program, 7/1/21 – 6/31/24, \$415,834.
23. "Permeability Calculations, Database, and Scoring Metrics for Potential Drug Analogs Using Artificial Membrane Assays and Receptor Affinity Data," (P.I. Teresa Golden; co-P.I. is W. E. Acree, Jr.) to NIJ, 1/1/24 - 12/31/26, \$150,370.
24. "Permeability Calculations and Experiments for Drug Isomers and Analogs Using Artificial Membrane Assays and Abraham Solvation Model," (P.I. Teresa Golden; co-P.I. is W. E. Acree, Jr.) to NIJ, 1/1/25 - 12/31/27, \$162,536.

WILLIAM ACREE

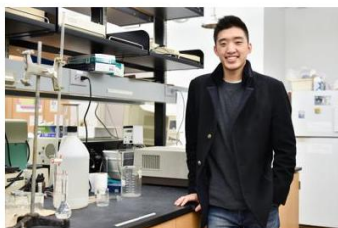
MENTORING OF UNDERGRADUATE STUDENTS IN RESEARCH

Research Mentor to three 2019 Goldwater Scholars



Scholars were Ellen Qian (2nd from left), Jonathan Lu (3rd from left) and David Yue (2nd from right)

Research Mentor to
2019 Truman Finalist



David Yue

Research Mentor to
2017 Goldwater Scholar



Amber Lu

Research Mentor to
2012 Goldwater Scholar



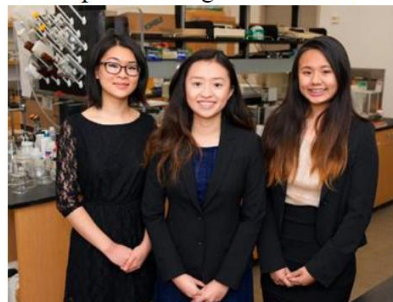
Amanda Quay (right)

Research Mentor to Three
2014 Siemens Competition Regional Finalists



Sumedha Mehta (3rd from left), Akash Wadawadigi (center) and Nina Kuprasertkul (2nd from right)

Research Mentor to Two 2015 Siemens
Competition Regional Finalists



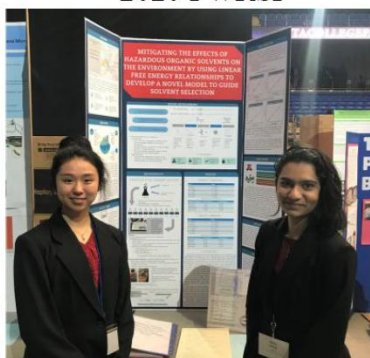
Colleen Dai (left) and Shoshana Zhang (center)

Research Mentor to
2010 Siemens Competition
Regional Finalist



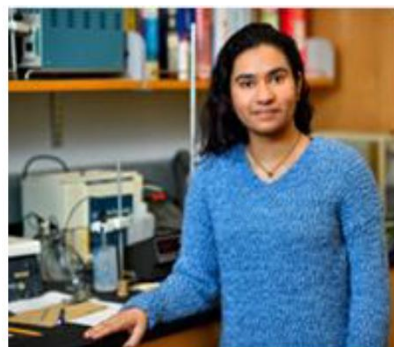
Shulin Ye

First place in Environment
Management and Science
2020 FWRSE



Jennifer Huang and
Shrika Eddula

Research Mentor to
2021 Goldwater Scholar



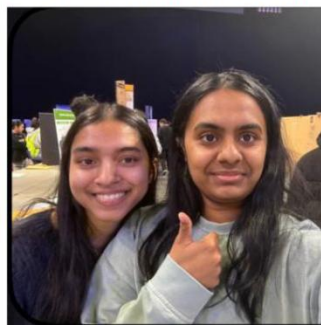
Shrika Eddula

Research Mentor to
2022 Goldwater Scholar



Neel Shanmugam

Research Mentor to
2024 Goldwater Scholar



Ramya Motati (right side)

Research Mentor to
2025 Goldwater Scholar



Saikiran Motati

Recognitions Received from Other US Universities

2017 Stanford University Teacher Tribute



Nominated by Bihan Jiang

2015 Stanford University Teacher Tribute



Nominated by Akash Wadwadigi

2016 Yale Educator Award



Nominated by
Shoshana Zhang