

Linda Lee Dalquest Schultz

Personal:

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Education:

Public Schools, Wichita Falls, TX.

B.A. Chemistry, Southern Methodist University (1967)

M.S. Chemistry, Southern Methodist University (1971)

Thesis: "Effect of pH and Ionic Strength on the Ion Exchange and Chelating Properties of a Chelating Ion Exchange Resin with Manganese", under direction of Professor C.T. Kenner

A.S.C.P. Registry (Chemistry) 1971

Ph.D. Chemistry, North Texas State University (1975)

Dissertation: "Kinetics and Mechanism of Substitution Reactions of Tungsten Carbonyl Complexes Containing Bidentate Sulfur Ligands", under direction of Professor G. R. Dobson

M.B.A. Tarleton State University (1993) - Accounting Emphasis

Professional Experience:

Department Head, Department of Chemistry, Geosciences, and Environmental Science, Tarleton State University, Stephenville, TX, 1994-2004.

Professor of Chemistry, Tarleton State University, Stephenville, TX, 1993-current.

Associate Professor of Chemistry, Tarleton State University, Stephenville, TX, 1986-1993.

Assistant Professor of Chemistry, Tarleton State University, Stephenville, TX, 1978-1986.

Postdoctoral Fellow, Texas Christian University, Raman Spectroscopy of Liquid Ammonia Solutions, under direction of Dr. W.H. Koehler, 1976-1978.

Research Associate, Howard Payne University, Brownwood, TX, 1975-1976.

Graduate Teaching Assistant, North Texas State University, Denton, TX, 1971-1973.

Medical Technologist, Special Chemistry Laboratory, Parkland Memorial Hospital, Dallas, TX (1969-1971), under direction of Dr. A.B.C. Dowdey.

Research Technician, Biochemistry Department, Univ. of Texas Southwestern Medical School at Dallas (1967-1969), under direction of Dr. J.M. Johnston.

Affiliations:

American Chemical Society – member since 1973; elected Councilor or Alternate Councilor of the Dallas-Fort Worth Local Section (3-year terms) 1984-1987, 1997 – current.

Alpha Chi Sigma - Professional Chemistry Fraternity, member since 1969.

Sigma Xi - Scientific Research Society – member since 2005; current Secretary-Treasurer for TSU Chapter.

Listing: American Men and Women of Science

Recent Honors:

2014 Regents Professor Award, Texas A&M University System, Spring, 2015.

2013 Piper Professor, Minnie Stephens Piper Foundation, San Antonio, TX.

Tarleton State University Faculty Excellence in Scholarship Award – 2013.

Texas A&M System Award for Teaching Excellence for Tarleton State University, Spring 2012.

Faculty Development Leave approved by TAMU Board of Regents, May 27, 2010. 50% release time for 2010-2011 academic year to publish research results.

Grants (Funded):

Co-investigator on Robert A. Welch Foundation Chemistry Departmental Research Grants, 1992 – 1998, \$25, 000 per year; 1998 – 2011, \$35, 000 per year; 2011- current, \$30,000 per year.

Co-principal investigator on National Science Foundation Major Research Instrumentation Grant to purchase Inductively Coupled Plasma Spectrophotometer, total amount \$107,701 (2003 – 2006).

Co-principal investigator on National Science Foundation Young Scholars Program, Summer, 1994.

National Science Foundation ROW Career Development Grant in the amount of \$50,000 (9/1/90 - 12/31/91); \$8,500 supplement (1991).

numerous TSU Organized Research Grants and Faculty Development Grants.

Scientific Publications:

Current

Peter T. Bell, W. Lance Whaley, Alyssa D. Tochterman, Karl S. Mueller, and Linda D. Schultz, "qHNMR Analysis of Purity of Common Organic Solvents – An Under-graduate Quantitative Analysis Laboratory Experiment" *J. Chem. Educ.*, 94 (2017), 1964.

Dietrich A. Volmer, Luana Curbani, Timothy A. Parker, Jennifer Garcia, Linda D. Schultz, and Endler Marcel Borges, "Determination of Titratable Acidity in Wine using Potentiometric, Conductometric, and Photometric Methods" *J. Chem. Educ.*, 94 (2017) 1296.

Jennifer Garcia and Linda D. Schultz, "Determination of Sulfate by Conductometric Titration: An Undergraduate Laboratory Experiment" *J. Chem. Educ.*, 93 (2016) 920.

Previous 5 years

Eric T. Davis, Linda D. Schultz, and J.D. Lewis, "Determination of Te-Te Force Constant in Potassium Tritelluride by Raman Spectroscopy in Liquid Ammonia and N,N-Dimethylformamide Solutions" *Spectro. Lett.*, 46 (2013) 191.

Eric F. Poindexter and Linda D. Schultz, "Ultraviolet-Visible Spectroscopic Investigation of Reaction of Rubidium and Tellurium in Liquid Ammonia Solution", *Spectro. Lett.*, 46 (2013) 264.

Jason L. McAfee, Jeremy R. Andreatta, Richard S. Sevcik, and Linda D. Schultz, "Equilibrium among Potassium Polytellurides in N,N-Dimethylformamide Solution", *J. Mol. Struct.*, 1022 (2012) 68.

Cody M. Anderson, Eric F. Poindexter, S. Whitney Sultemeier, Linda D. Schultz, and Tracy Pippins, "Element Cycles: An Environmental Chemistry Board Game" *J. Chem. Educ.*, 88 (2011) 1112.

Older

Peter T. Bell, Alyssa D. Adkins, Rex J. Gamble, and Linda D. Schultz, "Enthalpy Costs of Making and Breaking Bonds: A Game of Generating Molecules with Proper Lewis Structures". *J. Chem. Educ.*, 86 (2009) 450.

Richard S. Sevcik, Rex Gamble, Elizabet Martinez, Susan V. Alexander, and Linda D. Schultz, "Ionic Blocks", *J. Chem. Educ.*, 85 (2008) 1631.

Richard S. Sevcik, O'dell Hicks, Susan V. Alexander, and Linda D. Schultz, "Elements -A Card Game of Chemical Names and Symbols", *J. Chem. Educ.*, 85 (2008) 514.

Richard S. Sevcik, Ragan L. McGinty, Susan V. Alexander, and Linda D. Schultz, "Periodic Table Target: A Game That Introduces the Biological Significance of Chemical Element Periodicity", *J. Chem. Educ.*, 85 (2008) 516.

A.K. Charlton, R.S. Sevcik, D.A. Tucker, and L.D. Schultz, "A Colorimetric Analysis Experiment Not Requiring a Spectrophotometer: Quantitative Determination of Albumin in Powdered Egg White," *J. Chem. Educ.*, 84 (2007) 826.

L.D. Schultz, "Synthesis and Characterization of Potassium Polytellurides in Liquid Ammonia Solution," *Inorg. Chim. Acta.*, 176 (1990) 271.

L.D. Schultz and W.H. Koehler, "Synthesis and Characterization of Sodium Polytellurides in Liquid Ammonia Solution," *Inorg. Chem.*, 26 (1987) 1989.

W.H. Koehler, J.W. Lundeen, A. MoradiAraghi, B. deBettignies, L.D. Schultz, and M. Schwartz, "Solvent and Phase Dependence of Fermi Resonance in Ammonia," *J. Phys. Chem.*, 83 (1979) 3264.

G.R. Dobson, L.D. Schultz, B.E. Jones, and M. Schwartz, "Mechanism of the Reaction of tri(n-butyl)phosphine with 2,2,7,7 tetramethyl 3,6 dithia octane-tetracarbonyltungsten(0)," *J. Inorg. Nucl. Chem.*, 41 (1979) 119.

G.R. Dobson and L.D. Schultz, "A Reinvestigation of the Kinetics and Mechanism of Ligand Exchange in (2,2,8,8 tetramethyl 3,7dithianonane)tetracarbonyl tungsten(0)," *J. Organometal. Chem.*, 131 (1977) 285.

L.D. Schultz and G.R. Dobson, "A Reinvestigation of the Kinetics and Mechanism of the Ligand Exchange Reactions of (2,2,7,7 tetramethyl 3,6 dithiaoctane)tetracarbonyl-tungsten(0)," *J. Organometal. Chem.*, 124 (1977) 19.

L.D. Schultz and G.R. Dobson, "Direct Evidence for the RingOpening Mechanism; Substitution Reactions of 2,2,8,8 tetramethyl 3,7 dithianonane-tetracarbonyltungsten(0)," *J. Coord. Chem.*, 5 (1976) 163.

J.M. Johnston, F. Paltauf, C.M. Schiller, and L.D. Schultz, "The Utilization of the α -glycerophosphate and Monoglyceride Pathways for Phosphatidyl Choline Biosynthesis in the Intestine," *Biochim. Biophys. Acta*, 218 (1970) 124.

Other Publications:

O'dell Hicks, Elizabet Martinez, Ragan McGinty, Adrian Dunson, and Linda Schultz, "Searching for a Greener Plywood: Tarleton State University's Chemvention 2006 Experiment," *inChemistry* (The Magazine for ACS Student Affiliates), April/May, 2008, 14.