

# Christy Wheeler West

150 Student Services Drive  
Shelby Hall 4130  
Mobile, Alabama 36688  
251.460.7463  
cwwest@southalabama.edu

## Education

### **University of Minnesota, Minneapolis**

- Post-doctoral research associate, 2001-2003
- Department of Chemical Engineering and Materials Science
- Advisor: Lanny D. Schmidt

### **Georgia Institute of Technology, Atlanta**

- Ph.D. Chemical Engineering, 2001
- Dissertation: "Phase-Transfer Catalysis in Supercritical Fluid Solvents"
- Advisors: Charles A. Eckert and Charles L. Liotta
- Minor: Organic Chemistry

### **University of Alabama, Tuscaloosa**

- B.S. Chemical Engineering, *summa cum laude*, 1996

## Appointments

2018 - present	<b>University of South Alabama, Mobile, Alabama</b> Director, Office of Undergraduate Research
2017-present	<b>University of South Alabama, Mobile, Alabama</b> Associate professor, Department of Chemical and Biomolecular Engineering
2011-2017	<b>University of South Alabama, Mobile, Alabama</b> Assistant professor, Department of Chemical and Biomolecular Engineering
2009-2011	<b>University of South Alabama, Mobile, Alabama</b> Adjunct professor, Department of Chemical and Biomolecular Engineering Adjunct professor, Department of Chemistry
2004-2008	<b>College of St. Catherine, St. Paul, Minnesota</b> Instructor, Department of Chemistry
2003-2005	<b>University of St. Thomas, St. Paul, Minnesota</b> Adjunct professor, Department of Chemistry Adjunct professor, Department of Mathematics

### **Honors and awards**

- 2023 Corcoran Award (Chemical Engineering Division of ASEE)
- 2022 Gary Leach Recognition Award (American Institute of Chemical Engineers)
- Mortar Board Honor Society “Top Prof”, 2013, 2014, 2016, 2022
- 2020 Andy and Carol Denny National Alumni Association Excellence in Teaching Award
- Poster Award, ASEE Chemical Engineering Summer School, 2017
- College of Engineering Excellence in Teaching Award, 2014
- Gulf Coast Advance Spotlight Scientist, March 2014
- Georgia Tech School of Chemical Engineering Teamwork Award, 2000
- Georgia Institute of Technology President’s Fellow, 1996-2000
- Tau Beta Pi, The Engineering Honor Society, 1994
- Omega Chi Epsilon Chemical Engineering Honor Society, 1994
- Alpha Chi Epsilon Chemistry Honor Society, 1994
- Pi Mu Epsilon Mathematics Honor Society, 1994

### **Active professional memberships and service**

- American Institute of Chemical Engineers
  - Education Division Chair
- American Society of Engineering Education
  - 2027 ASEE/AIChE Summer School for Engineering Faculty, Chair
- ABET
  - Chemical Engineering program evaluator
- Tau Beta Pi Engineering Honor Society
  - Faculty advisor
- Omega Chi Epsilon Chemical Engineering Honor Society
  - Faculty advisor
- Council on Undergraduate Research

### **Current research topics**

#### **Transfer student success initiatives**

Developing interventions for both students and community college faculty and staff to promote success and shorten time to degree

### **Persistence in STEM for students placing in pre-calculus courses**

Creating pathways and support to calculus-intensive degrees for students who are at risk because their pre-college preparation does not prepare them to begin in calculus

### **Faculty perspectives on undergraduate research**

Understanding motivating and detracting factors for faculty to engage in the high-impact practice of including undergraduate students in their research programs

## **Peer-Reviewed Publications**

Undergraduate Research in Chemical Engineering: Benefits and Best Practices. C.W. West and J.H. Holles, *Chemical Engineering Education* (accepted September 2023).

How we teach: Capstone Design. L.P. Ford, J. Brennan, J. Cole, K.D. Rahm, M.V. Jamieson, L. Landherr, D.L. Silverstein, C.W. West, S.W. Thiel. *Proceedings of the 2023 ASEE Conference and Exposition*. 2023.

Engaging Transfer Students in a College of Engineering. C.W. West, E.J. Steward, J.D. Richardson, T.G. Thomas, N.T. Carr. *Proceedings of the 2023 ASEE Conference and Exposition*. 2023.

How we teach: material and energy balances. L.P. Ford, J. Brennan, J. Cole, K.D. Rahm, M.V. Jamieson, L. Landherr, D.L. Silverstein, C.W. West, S.W. Thiel. *Proceedings of the 2022 ASEE Conference and Exposition*. 2022.

AIChE Virtual Communities of Practice – Supporting Faculty During the COVID-19 Pandemic, M.W. Liberatore, D. Lepek, L. Ford, T. Carter, J. Pascal, M. Lamm, C.P. Luks, D.L. Silverstein, A.N. Ford Versypt, S.B. Velegol, T. Vogel, N. Raikar, M. Kipper, C.W. West. *Chemical Engineering Education*, Winter 2022.

Streamlining the Path from Community College to Engineering Degree Completion, C.W. West, E.J. Steward, J.R. Richardson. *Proceedings of the 2021 ASEE Conference and Exposition*. 2021.

How we teach: kinetics and reactor design. L.P. Ford, J. Brennan, D.L. Silverstein, C.W. West, S.W. Thiel, K.D. Rahm, J. Cole, M.V. Jamieson. *Proceedings of the 2021 ASEE Conference and Exposition*. 2021.

The Role of Urea in the Solubility of Cellulose in Aqueous Quaternary Ammonium Hydroxide, M. Walters, A. Mando, W.M. Reichert, C.W. West, K.N. West, B. Rabideau, *RSC Advances*, 2020, 10 (10), 5919-5929.

Superhydrophobic Functionalization of Cotton Fabric via Reactive Dye Chemistry and a Thiol-ene Click Reaction, A. Brown, M. Bozman, T. Hickman, M.I. Hossain, T. G. Glover, K.N. West, C.W. West, *Ind. Eng. Chem. Res.*, 2019, 58 (50) 22534-22540.

How We Teach: Thermodynamics. M.A. Vigeant, J. Cole, K.D. Dahm, L.P. Ford, L.J. Landherr, D.L. Silverstein, C.W. West. *Proceedings of the 2019 ASEE Conference and Exposition*. 2019.

Impacts of calcination on surface-clean supported nanoparticle catalysts. K. Bryant, C.W. West, and S.R. Saunders. *Applied Catalysis A: General*, 2019. 579, 58-64.

Synthesis and Characterization of UiO-66-NH<sub>2</sub> Metal-Organic Framework Cotton Composite Textiles, M. Bunge, K.N. West, C.W. West, T.G. Glover, *Ind. Eng. Chem. Res.*, 2018. 57 (28), 9151-9161.

A service learning project on aluminum recycling: developing professional skills in a material and energy balances course. C.W. West. *Chemical Engineering Education*, Winter 2017.

Alumina-supported Pt-CeO<sub>x</sub> water-gas shift catalysts prepared by supercritical fluid deposition, J.W. Deal, P.T. Le, C.B. Corey; K. More; C.W. West. *J. Supercritical Fluids*, 2017, 119, 113-121.

Fusion and thermal degradation behavior of symmetric sulfur-containing quaternary ammonium bromides. T.L.Y. Huynh, K. Poiroux, R.A. O'Brien, K.N. West, J.H. Davis, Jr., and C.W. West, *J. Phys. Chem. B*, 2016, 120 (7), 1330–1335.

Guess my birthday: Demonstrating the significance of significant figures. C.W. West. *Chemical Engineering Education*. Fall 2015.

Impact of Sulfur Heteroatoms on the Activity of Quaternary Ammonium Salts as Phase-Transfer Catalysts for Nucleophilic Displacement Reactions. C.W. West, R.A. O'Brien, E.A. Salter, B.E. Hollingsworth, T.L. Huynh, R.E. Sweat, N.J. Griffin, A. Wierzbicki, J.H. Davis, Jr. *J. Molecular Catalysis A: Chemical*, 2015, 282-288.

A simple and rapid route to novel tetra(4-thiaalkyl)ammonium bromides. R.A. O'Brien, C. Wheeler West, B.E. Hollingsworth, A.C. Stenson, C.B. Henderson, A. Mirjafari, N. Mobarrez, K.N. West, K.M. Mattson, E.A. Salter, A. Wierzbicki, J.H. Davis, Jr. *RSC Adv.*, 2013, 3 (46), 24612-24617.

The water gas-shift reaction at short contact times, C. Wheeler, A. Jhalani, E. J. Klein, S. Tummala and L. D. Schmidt, *Journal of Catalysis* 2004, 223, 191-199.

Phase-Transfer-Catalyzed Intramolecular Cycloalkylation of Phenylacetonitrile with  $\alpha,\omega$ -Dibromoalkanes in Supercritical Ethane, J.P. Jayachandran, C. Wheeler, B.C. Eason, C.L. Liotta, and C.A. Eckert, *J. Supercritical Fluids* 2003, 27, 179-186.

Phase-Transfer-Catalyzed Alkylation of Phenylacetonitrile in Supercritical Ethane, C. Wheeler, D.R. Lamb, J.P. Jayachandran, J.P. Hallett, C.L. Liotta, and C.A. Eckert, *Ind. Eng. Chem. Res.* 2002, 37, 1763-1767.

Ionic liquids as catalytic green solvents for nucleophilic displacement reactions, C. Wheeler, K.N. West, C.L. Liotta, C.A. Eckert, *Chem. Commun.* 2001, 887-888.

*In Situ* Formation of Alkylcarbonic Acids with CO<sub>2</sub>, K.N. West, C. Wheeler, J.P. McCarney, K.N. Griffith, D.M. Bush, C.L. Liotta, C.A. Eckert. *J. Phys. Chem. A* 2001, 105, 3947-3948.

Phase-Transfer Catalysis in Supercritical Carbon Dioxide: Kinetic and Mechanistic Investigations of Cyanide Displacement on Benzyl Chloride, K. Chandler, C.W. Culp (Wheeler), D.R. Lamb, C.L. Liotta, C.A. Eckert, *Ind. Eng. Chem. Res.* 1998, 37, 3252-3259.

### **Book Chapters**

Catalysis Using Supercritical or Subcritical Inert Gases under Split-Phase Conditions, P.G. Jessop, C.A. Eckert, C.L. Liotta, J. Bonilla, J.S. Brown, R. Brown, C. Thomas, C. Wheeler, and D. Wynne, *Clean Solvents*, ACS Symp. Ser. 819, L. Moens and M.A. Abraham (Eds.), American Chemical Society, Washington, D.C. 2002.

Phase-transfer and ammonium salt catalyzed reactions, C.A. Eckert, C.L. Liotta, C.W. Culp (Wheeler), D.R. Lamb, *Chemical Synthesis using Supercritical Fluids*, P.G. Jessop and W. Leitner (Eds.), VCH/Wiley, Weinheim, 1999.

### **Workshop**

Undergraduate Research: Benefits and Best Practices. C.W. West and J. Holles. ASEE/AIChE Summer School for Engineering Faculty, Golden, CO, 2022.

### **Conference Presentations**

Recalibrating Student Learning Goals using Bloom's Taxonomy, C.W. West. AIChE Annual Meeting, Phoenix, 2022.

Nucleophilic Aromatic Substitution in High-Temperature Ionic Liquids, A. Eftekhari, E. Anderson, J.H. Davis Jr., K.N. West, B.D. Rabideau, and C.W. West, AIChE Annual Meeting, Boston, November 2021.

Creating an Immersive, Interactive 3D Virtual Exhibit Space for Student Interaction, J. Shelley-Tremblay, K. Jahnke, D. Woolverton, and C.W. West, Conference on Teaching and Learning, Mobile, 2021.

Switchable Surfactants for the Preparation of Monodisperse, Supported Nanoparticle Catalysts and the Effects of Calcination. K. Bryant, S.R. Saunders, C.W. West and G. Ibrahim, AIChE Annual Meeting (Virtual), November 2020.

Ionic Liquids as Solvents for Nucleophilic Aromatic Substitution Reactions. E. Anderson, C.W. West, K.N. West and J.H. Davis Jr, AIChE Annual Meeting (Virtual), November 2020.

Laying a Foundation with Outcome Assessment in Material and Energy Balances, C.W. West, AIChE Annual Meeting Orlando, FL, 2019.

Integrating VBA-Excel into the Curriculum across Seven Junior-Year Courses, K.N. West, C.W. West, B.D. Rabideau, AIChE Annual Meeting, Orlando, 2019.

Starting Early and Small with Technical Communications: Sophomores, Plots, and Captions. C.W. West, AIChE Annual Meeting, Pittsburgh, 2018.

Functionalization of Cellulose Surfaces using Dye Anchors and Click Chemistry, C.W. West, A. Brown, C. Moran, M. Bozman, T.G. Glover and K.N. West. AIChE Annual Meeting, Pittsburgh, 2018.

Versatile Surface Modifications for Functionalization of Fibers, C.W. West, K.N. West, T.G. Glover, M. Bozman, C. Moran, AIChE Annual Meeting, Minneapolis, 2017.

Improving Student Writing Using Word Clouds, C.W. West, ASEE Chemical Engineering Summer School, Raleigh, 2017.

Developing Professional Skills through a Service Learning Project on Aluminum Recycling, C.W. West, AIChE Annual Meeting, San Francisco, 2016.

Highly Dispersed Metals on Metal Oxide Supports Via Reactive Deposition from Supercritical CO<sub>2</sub>, J.W. Deal, K.N. West, C.W. West, AIChE Annual Meeting, Atlanta, 2016.

Integrating Technical Content and Soft Skills Development in an Engineering Course through a Project Promoting Aluminum Recycling, C.W. West, Conference on Teaching and Learning, Mobile, 2016.

Impact of Sulfur Heteroatoms on the Activity of Quaternary Ammonium Salts as Phase Transfer Catalysts, C.W. West, R.A. O'Brien, E.A. Salter, T. Huynh, A. Wierzbicki, and J.H. Davis, Jr., AIChE Annual Meeting, Salt Lake City, 2015.

Water-Gas Shift Reaction on Catalysts Prepared using Supercritical Fluid Deposition, C.W. West, J.W. Deal, C.B. Corey, and P. Le, AIChE Annual Meeting, Atlanta, 2014.

Catalyst Preparation by Addition of Metal Ions During the Synthesis of Silica Aerogels, J. Youngpeter and C.W. West, AIChE Annual Meeting, Atlanta, 2014.

Dispersed Pt/Ceria Catalysts for Water-Gas Shift Prepared Using Supercritical Fluid Deposition, J.W. Deal, P.T. Le, C.B. Corey, and C.W. West, AIChE Annual Meeting, Atlanta, 2014.

Separations Using Supercritical CO<sub>2</sub> Deposited Adsorbents, S. Woodard, K.N. West, J.W. Deal, C.W. West, and, AIChE Annual Meeting, Atlanta, 2014.

Supercritical Fluid Deposition of Dispersed Platinum on Supported Ceria, C.W. West, J. W. Deal, C.B. Corey, AIChE Annual Meeting, San Francisco, 2013.

Novel Quaternary Ammonium Salts as Phase-Transfer Catalysts, B.E. Hollingsworth, C.W. West, ACS Spring Meeting, New Orleans, 2013.

Kinetic Evaluation of Novel Sulfur-Containing Quaternary Ammonium Salts as Phase Transfer Catalysts, C.W. West, R.A. O'Brien, A. Mirjafari, J.H. Davis, Jr., AIChE Annual Meeting, Pittsburgh, 2012.

Catalysts for Water-Gas Shift in Millisecond Reactors, C. Wheeler, E.J. Klein, L.D. Schmidt, AIChE Annual Meeting, Indianapolis 2002.

Environmentally Benign Solvent Systems for Chemical Reactions and Processes, C.L. Liotta, J.S. Brown, K.N. West, J.P. Hallett, J.P. McCarney, S.A. Nolen, C.W. Culp (Wheeler), K.N. Griffith, C.A. Eckert, R. Gläser, ACS Joint Southeast-Southwest Regional Meeting, New Orleans 2000.

Novel Single-Phase Fluorous-Organic Systems for Environmentally Benign Processing, K.N. West, J.P. Hallett, J.S. Brown, C.W. Culp (Wheeler), D.M. Bush, C.L. Liotta, C.A. Eckert, AIChE Annual Meeting, Los Angeles 2000.

CO<sub>2</sub>-Alcohol Systems for Novel in situ Acid Generation, C.W. Culp (Wheeler), K.N. West, J.P. McCarney, K.N. Griffith, C.L. Liotta, C.A. Eckert, AIChE Annual Meeting, Los Angeles 2000.

CO<sub>2</sub>-Soluble Phase-Transfer Catalysts for Reactions in Supercritical Fluids, C.W. Culp (Wheeler), K.N. Griffith, C.L. Liotta, C.A. Eckert, 4th Annual Green Chemistry and Engineering Conference, Washington, D.C. 2000.

Phase-Transfer Catalysis in Supercritical Fluid Systems, C.W. Culp (Wheeler), C.L. Liotta, C.A. Eckert, United Engineering Foundation Conference on Supercritical Fluids in Materials Processing and Synthesis, Davos, Switzerland, 1999.

Phase-Transfer-Catalyzed Reactions in Supercritical Fluid Systems, C.W. Culp (Wheeler), K.N. Griffith, C.L. Liotta, C.A. Eckert, ACS Annual Meeting, New Orleans, 1999.

Phase-Transfer Catalysis in Supercritical Fluids, C.W. Culp (Wheeler), D.R. Lamb, K. Chandler, C.L. Liotta, C.A. Eckert, AIChE Annual Meeting, Miami Beach, 1998.

### **Current Funding**

Linking Community College Students to Engineering, C.W. West (PI), E.J. Steward, J.D. Richardson, T.G. Thomas, N.T. Carr, NSF S-STEM, \$1,000,000. 2019 – 2024.

Development of Next Generation CO<sub>2</sub> Capture Processes for Naval Applications, Office of Naval Research, K.N. West (PI), W.M. Reichert, J.H. Davis, B.D. Rabideau, C.W. West (co-PI), \$4,766,507, 2022-2024.

### **Past Funding**

BASF Teens' Lab 2022, C.W. West (PI), A. Stenson, BASF Corporation, \$14,767. 2022.

24th Annual Summer Undergraduate Research Fellowship Program, C.W. West, Alabama Space Grant Consortium (NASA), \$20,000. 2022.

Understanding the Molecular-Level Interactions Between Ionic Liquids and Molecular Species to Design and Develop Novel Solvent Systems for Energy Efficient Processes, K.N. West, W.M. Reichert, J.H. Davis, C.W. West (co-PI), B.D. Rabideau, Department of Energy, \$2,828,833. 2019 – 2021. Renewal, \$999,948. 2021-2022.

BASF Teens' Lab 2021, C.W. West (PI), A. Stenson, BASF Corporation, \$15,000. 2021.

23rd Annual Summer Undergraduate Research Fellowship Program, C.W. West, Alabama Space Grant Consortium (NASA), \$20,000. 2021.

BASF Teens' Lab 2020, C.W. West (PI), A. Stenson, BASF Corporation, \$15,000. 2020.

22<sup>nd</sup> Annual Summer Undergraduate Research Fellowship Program, C.W. West, Alabama Space Grant Consortium (NASA), \$20,000. 2020.

BASF Teens' Lab 2019, C.W. West (PI), J.W. Coym, J.W. Steadman, BASF Corporation, \$14,236. 2019.

21st Annual Summer Undergraduate Research Fellowship Program, C.W. West, Alabama Space Grant Consortium (NASA), \$20,000. 2019.

BASF Teens' Lab 2018, C.W. West (PI), J.W. Coym, J.W. Steadman, BASF Corporation, \$13,259. 2018.

BASF Teens' Lab 2017, C.W. West (PI), J.W. Coym, J.W. Steadman, BASF Corporation, \$20,948. 2017.

Solar Water Splitting on Metal-Decorated Titania, C.W. West, University of South Alabama Office of Research and Economic Development, \$25,000.00. 2016 – 2017.

BASF Teens' Lab 2020, C.W. West (PI), A. Stenson, BASF Corporation, \$15,000. 2020.

Investigation of a Novel Hybrid Absorbent for Oil Spill Remediation, C.W. West (PI), K.N. West, T.G. Glover, Center for Environmental Resiliency, \$20,000. 2015 – 2017.

Travel Grant – Catalyst Characterization at Oak Ridge National Laboratory, C.W. West, Gulf Coast NSF - ADVANCE, \$4,000. 2015 – 2016.

Nanoscale Modification of Fibers via Reactive Dye Chemistry, K.N. West, T.G. Glover, West, C. W. (Co-PI), Army Research Office, \$50,000. 2013 – 2014.

Synthesis and Characterization of Catalytic Noble Metal Decorated Ceria Aerogels, C.W. West, University of South Alabama Faculty Development Council, \$5,500. 2012 – 2013.

### **Courses taught**

ChE 203 – Elementary Principles of Chemical Processes

ChE 342 – Chemical Engineering Communications

ChE 372 – Chemical Reactor Design

ChE 501 – Chemical Engineering Research Seminar

ChE 525 – Chemical Reactor Analysis

EG 101 – Introduction to Engineering and Design

EG 270 – Engineering Thermodynamics



EG390H – Energy and Sustainability  
 EG 501 – Research Integrity Seminar  
 HON 301 – Introduction to Senior Honors Project

**Student Research Direction**

<u>Thesis committee chair</u>		<u>Thesis committee member</u>	
Doctoral students	1	Master’s degree students	11
Master’s degree students	4	University honors students	9
University honors students	8		
Departmental honors students	11		

**Service**

Professional Service

ASEE/AIChE Summer School for Chemical Engineering Faculty, Chair of 2027 Summer School	2023-present
AIChE Education Division	
• Division Chair	2022-present
• Division 1 <sup>st</sup> Vice Chair	2021-2023
• Division 2 <sup>nd</sup> Vice Chair	2019-2021
• Annual Meeting Education Division programming chair	2019-2023
• Awards committee	2020-2022
• Survey/Curriculum committee	2018-2023
• Reactor design/Process Control/Computing Virtual Community of Practice leader	2021
• Material and Energy Balances/Thermodynamics Virtual Community of Practice leader	2020
• Annual Meeting session chair	2017, 2018, 2019, 2020, 2021, 2023
• Annual Meeting student poster competition judge	2014, 2015, 2017, 2018
• Annual Meeting student paper competition judge	2013

## ABET

- Program evaluator for AIChE member society 2021-present

## Proposal review activities

- NSF – DUE IUUSE and S-STEM 2019
- NSF – GRFP, Chemical Engineering 2016
- NSF – CBET Catalysis and Biocatalysis 2012-2016
- DoE EPSCoR 2014

## Journal reviews

*Applied Catalysis B: Environmental, New Journal of Chemistry, Journal of Molecular Liquids, Industrial and Engineering Chemistry Research, Chemical Engineering Education, Computer Applications in Engineering Education, Fuel, Composite Interfaces, Korean Journal of Chemical Engineering*

## University Service

- General Education Committee 2023-present
- College Research Council 2023-present
- University Committee on Undergraduate Research, Chair 2018-present
- Honors College Faculty Advisory Council 2017-present
- Process Improvement Committee 2017-2021
- University Scholarship and Financial Aid Committee 2015-present
- Honors College Dean search committee 2022
- Code of Ethics Ad Hoc Committee 2019
- CISSTEM Director search committee 2019, 2021
- Student Success Summit panelist 2017, 2018
- Facilities Needs Ad Hoc Committee 2017-2018
- Academic Misconduct Policy Review Ad Hoc Committee 2015-2017
- University Committee on Electronic Learning 2015-2018
- Learning Communities Coordinating Committee 2015

## College Service

- College-level committees
  - Faculty Affairs Committee 2023-present
  - Diversity, Equity, and Inclusion Committee 2020-present
  - USA-LINK Scholarship Committee 2014-present
  - Undergraduate Affairs committee 2017-2021

- Promotion and Tenure committee 2017-2018
- Excellence in Teaching Award committee 2015-2019
- Academic Standards committee, Chair 2014-2018
- Scholarship committee 2012-2020
- Search committees
  - Chemical Engineering department chair 2023
  - College of Engineering assistant/associate professor of instruction 2023
  - Chemical engineering instructor, committee chair 2021
  - Professor of practice, committee chair 2021
  - College of Engineering dean 2019
  - College of Engineering instructor/assistant professor 2016
  - Chemical Engineering department chair 2016
  - Chemical Engineering visiting assistant professor 2016
  - Chemical Engineering assistant professor 2011, 2016
  - Systems Engineering program chair 2015
  - College of Engineering laboratory instructor 2015
  - Systems Engineering assistant/associate professor 2013, 2014
  - Electrical and Computer Engineering assistant/associate professors 2015, 2018

#### Departmental Service

- Undergraduate Program Chair 2016-present
- Promotion and Tenure Committee, Chair 2022
- Acting Department Chair (summers) 2015, 2016
- Summer advising – first years and transfers 2013-2016
- AIChE student chapter faculty adviser 2011-2017
- Omega Chi Epsilon faculty adviser 2014-present

#### Community Service and Outreach

- BASF Teens' Lab 2017, 2018, 2019, 2021, 2022
- Scouts BSA Merit Badge Jubilee coordinating committee 2019-2020
- Alabama Academy of Sciences Gorgas Scholarship reader/judge 2016, 2019, 2020, 2022
- Mobile County Elementary School Student Leadership Conference presenter 2019
- Girls Enjoying Math and Science (GEMS) planning committee 2015-2017
- GEMS workshop presenter 2014, 2015, 2016

- Mobile County Public School System Science Fair judge 2014, 2015, 2017, 2018
- USA Wesley Foundation Board (Vice-Chair) 2012-2015