

Department of Chemistry & Biochemistry
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 Dahlonega, Georgia 30597

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PROFESSIONAL APPOINTMENTS

Professor	Department of Chemistry & Biochemistry University of North Georgia Research areas: Computational studies on organic electronics	2017-present Dahlonega, GA
Associate Professor	Department of Chemistry & Biochemistry University of North Georgia	2013-2016 Dahlonega, GA
Assistant Professor	Department of Chemistry North Georgia College & State University	2007-2012 Dahlonega, GA
Consultant	Plextronics, Inc. Provided computations on OPVs and OLEDs	2007 - 2013 Pittsburgh, PA
Visiting Professor	Department of Chemistry New College of Florida	2002 - 2005 Sarasota, FL
Visiting Professor	Department of Chemistry Eckerd College	2002 - 2005 Saint Petersburg, FL

EDUCATION

Ph.D	<i>Theoretical/Computational Chemistry</i> Carnegie Mellon University (with Prof. D.J. Yaron) <u>Dissertation:</u> "Modeling the Photophysics of Biological Dye Assemblies."	2004 Pittsburgh, PA
B.S.	ACS-certified Chemistry Purdue University	1998 Indianapolis, IN
B.S.	Mathematics Purdue University	1998 Indianapolis, IN

AWARDS, HONORS AND FELLOWSHIPS

- **2020 CUR Outstanding Mentorship Award** **2020**
Chosen by the Chemistry Division for the Council for Undergraduate Research to be honored due to my undergraduate research program
- **2016 SPIE 2017 Women in Optics Calendar** **2016**
Chosen to be highlighted as a leader in the field by the International Society for Optics and Photonics for their 2017 calendar/planner
- **2015 Inspiring Women in Stem Award** **2015**
Awarded as a tribute to the candidate's inspiring work as a women in the STEM field.
- **Speak Easy in the Big Easy** **2013**
My student was given in the award at the 245th ACS National Meeting for being able to explain her research in layman's terms.
- **ACS Poster Award** **2012**
Awarded to outstanding student posters.
- **North Georgia's Faculty-Undergraduate Summer Engagement Award** **2012**
Awarded to student-faculty to support research during the summer.
- **Herty Medalist Undergraduate Research Symposium Poster Award** **2011**

- Awarded to outstanding student posters, my student received an honorable mention.*
- **North Georgia's Stinson Award** **2011**
Competitive award which is given to student to support their research projects – my students won this award every year it was granted.
 - **Physical Chemistry Poster Session Award** **2003**
Cash prize awarded to six participants who presented at the 225th ACS National Conference
 - **Graduate Student Chemistry Department Teaching Award** **2002**
Awarded grant to students entering the Mellon College of Science who demonstrated outstanding outstanding scholarship as an undergraduate student.
 - **Carnegie Scholar** **1998-2002**
Awarded to entering students to Carnegie Mellon University with superior undergraduate academic records.
 - **School of Science Dean's Scholarship** **1995-1997**
Awarded to School of Science majors attending IUPUI who excel academically and show promise of success in their future.
 - **Who's Who Among Students in American Universities and Colleges** **1995 & 1996**

CONSORTIUMS AND ADVISORY BOARDS

- Molecular Education and Research Consortium in Undergraduate computational chemistry (MERCURY) member **2011-**
- Review Board for NSF XSEDE project **2013-2016**
- Review Board for NSF Blue Waters project **2014-**

PROFESSIONAL MEMBERSHIPS

- American Chemical Society 1997-
- Division of Physical Chemistry, ACS 2002-

PUBLICATIONS

18. Nhon, L. Wilkins, R., Reynolds, J.R., **Tomlinson A.L.**, "Guiding Synthetic Targets of Anodically Coloring Electrochromes Through DFT", an Invited manuscript for special issue honoring women in chemical physics and physical chemistry to *JCP*, in preparation.
17. Collier, G., Wilkins, R., **Tomlinson, A.L.**, Reynolds, J.R. "Exploring Isomeric Effects on Optical and Electrochemical Properties," in preparation.
16. **Tomlinson A.L.**, "The Importance of Apps During COVID-19" *SPUR*, Fall20. DOI: [10.18833/spur/4/1/15](https://doi.org/10.18833/spur/4/1/15).
15. Burney-Allen, A., Rainwater, L., Shaw, J., Wheeler, D.L., Duzhko, V., **Tomlinson, A.L.**, Jeffries-EL, M. "Benzobisoxazole cruciforms: Benzobisoxazole cruciforms: A cross-conjugated platform for designing tunable donor/acceptor materials" accepted by the *Asian J. of Org. Chem*, DOI: [10.1002/ajoc.202000502](https://doi.org/10.1002/ajoc.202000502).
14. Wheeler, D., Diodiati, A., **Tomlinson, A.L.**, Jeffries-EL, M. "Evaluating the Role of Molecular Heredity in the Optical and Electronic Properties of Cross-Conjugated Benzo[1,2-d:4,5-d']bisoxazoles" *ACS Omega*, 5, 12374-12384, DOI: [10.1021/acs.omega.0c01126](https://doi.org/10.1021/acs.omega.0c01126).
13. Christiansen, D., Ohtani, S., Chujo, **Tomlinson, A.L.**, Reynolds, J.R. "All Donor Electrochromic Polymers Spanning the Visible Spectrum Through Random Copolymerization" *Chem. Mater.*, 31(17), 6841-6849, **Invited manuscript for a special issue honoring Jean-Luc Brédas**, DOI: [10.1021/acs.chemmater.9b01293](https://doi.org/10.1021/acs.chemmater.9b01293).
12. Christiansen, D., **Tomlinson, A.L.**, Reynolds, J.R. "A New Design Paradigm for Color Control in Conjugated Organic Anodically Coloring Electrochromic Molecules" *J. Am. Chem. Soc.*, 141(9), 3859-3862, DOI: [10.1021/jacs.9b01507](https://doi.org/10.1021/jacs.9b01507).

11. Chavez, R., Diodati, L., Wheeler, D.L., Shaw, J., **Tomlinson, A.L.**, Jeffries-EL, M. "Evaluating the Impact of Fluorination on the Electro-Optical Properties of Cross-Conjugated Benzobisoxazole," *J. Phys. Chem. A*, **2019**, 123(7), 1343-1352 *Invited manuscript for special issue honoring William M. Jackson Festschrift*, DOI: [10.1021/acs.jpca.8b07778](https://doi.org/10.1021/acs.jpca.8b07778).
10. Christiansen, D., Wheeler, D., Tomlinson, A., Reynolds, J. "Electrochromism of alkylene-linked discrete chromophore polymers with broad radical cation light absorption", *Polymer Chemistry*, **2018**, **9**, 3055-3066, DOI: [10.1039/c8py00385h](https://doi.org/10.1039/c8py00385h).
9. Wheeler, D., Rainwater, L., Green, A., Tomlinson, A., "Modeling electrochromic poly-dioxythiophene-containing materials through TDDFT", *Phys. Chem. Chem. Phys.*, **2017**, **19**, 20251-20258. doi.org/10.1039/c7cp04130f.
8. Hale, B., Elshobaki, M., Gebhardt, R., Wheeler, D., Stoffer, J., Tomlinson, A., Chaudhary, S., Jeffries-EL, M. "Evaluating the influence of heteroatoms on the electronic properties of ary[3,4-c]pyrroledione based copolymers", *Polymer*, **2017**, **100**, 85-92. doi.org/10.1016/j.polymer.2016.12.013
7. Chavez, R., Cai, M., Tlach, B.C., Wheeler, D.L., Kaudal, R., **Tomlinson, A.L.**, Shinar, R., Shinar, J. Jeffries-EL, M. "Benzobisoxazole cruciform: A tunable, cross-conjugated platform for the generation of blue OLED materials", *J. Materials Chemistry C*141(9), **2016**, **4**, 3765-3773. [DOI:10.1039/C5TC03622D](https://doi.org/10.1039/C5TC03622D)
6. Tlach, B.C., **Tomlinson, A.L.**, Morgan, K.D., Collins, C.R., and Jeffries-EL, M.* "Evaluation of the Impact of Extended Conjugation on the Optoelectronic Properties Benzo[1,2-*d*:4,5-*d'*]bisoxazole Polymers". *Aust J. Chem.* **2014**, **67**, 711-721. [DOI:10.1071/CH1352-8](https://doi.org/10.1071/CH1352-8) *Invited manuscript for a special issue on physical organic chemistry*.
5. Tlach, B.C., **Tomlinson, A.L.**, Ryno, A., Knoble, D. and Jeffries-EL, M* "Influence of Conjugation Axis on the Optical and Electronic Properties of Aryl-Substituted Benzobisoxazoles." *J. Org. Chem.* **2013**, **78** (13), 6570–6581. [DOI: 10.1021/jo4007927](https://doi.org/10.1021/jo4007927).
4. Kobilka, B. M.; Dubrovskiy, A. V.; Ewan, M. D.; **Tomlinson, A. L.**; Larock, R. C.; Chaudhary, S.; Jeffries-EL, M.*: "Synthesis of 3,7-diiodo-2,6-di(thiophen-2-yl)benzo[1,2-*b*:4,5-*b'*]difurans: functional building blocks for the design of new conjugated polymers." *Chem. Commun.* **2012**, **48**, 8919-8921. [10.1039/C2CC34070D](https://doi.org/10.1039/C2CC34070D).- *Invited manuscript for a special issue on aromaticity*.
3. Klimavicz, J.S.; Mike, J.F.; Bhuwarka, A; **Tomlinson, A.L.**; Jeffries-EL, M.* "Synthesis of Benzobisoxazole Based D- π -A- π -D Organic Chromophores with Variable Optical and Electronic Properties." *Pure Appl. Chem.*, **2012**, **84**, (4), 991-1004. [DOI:10.1351/PAC-CON-11-10-23](https://doi.org/10.1351/PAC-CON-11-10-23). *Invited manuscript for a special issue for the 14th International Symposium on Novel Aromatic Compounds (ISNA-14), Eugene, USA, 24–29 July 2011*.
2. Tlach, B.C.; **Tomlinson, A.L.**; Bhuwarka, A.; Jeffries-EL, M.* "Tuning the Optical and Electronic Properties of 4,8-Disubstituted Benzobisoxazoles via Alkynyl Substitution." *J. Org. Chem*, **2011**, **76** (21), 8670–8681. [DOI: 10.1021/jo201078w](https://doi.org/10.1021/jo201078w).
1. Mike, J F.; Nalwa, K.; Makowski, A. J.; Putnam, D.; **Tomlinson A.**; Chaudhary, S. and Jeffries-EL, M.* "Synthesis, Characterization and Photovoltaic Properties of Poly(thiophenevinylene) Benzobisoxazoles." *Phys. Chem. Chem. Phys.* **2011**, **13**, 1338 – 1344. [DOI:10.1039/C0CP00353K](https://doi.org/10.1039/C0CP00353K)

PUBLICATIONS IN SUBMISSION OR PREPARATION

1. Burney-Allen, A., Rainwater, L., Shaw, J., Wheeler, D.L., Duzhko, V., **Tomlinson, A.L.**, Jeffries-EL, M. *Benzobisoxazole cruciforms: Benzobisoxazole cruciforms: A cross-conjugated platform for designing tunable donor/acceptor materials* submitted on 4/1/20 to the *Asian J. of Org. Chem*.
3. Nhon, L, and Tomlinson A. L. ACE project 2 in progress.
4. Collier, G., Tomlinson A. L. and Reynolds, J.R., Stereochemistry project in progress.

FEATURED IN SCIENTIFIC AND NONSCIENTIFIC MEDIA

- Announcement on Cur.org website for 2020 Outstanding Mentorship Award
https://www.cur.org/ChemCUR2020_outstanding_mentorship_awardees/
- Article highlighting my 2020 CUR Outstanding Mentorship Award, UNG homepage, April 29, 2020.
- Article highlighting the SDSC news story on the JACS paper, UNG homepage, July 10, 2019.
- Article highlighting the involvement of Comet Cluster for JACS paper, SDSC homepage, June 3, 2019.
- Article about my JACS and JPCA papers featured on UNG website for Noteworthy, March 4, 2019.
- Article featuring “How I lead” in the UNG biannual magazine as well as on the website Spring/Summer 2018.
- Chair Comment for CTA featured in C&EN News Magazine, April 29, 2018.
- Article about my second AFOSR award on the UNG homepage, October 4, 2017.
- Article about my POLYMER publication on the UNG homepage, March 8, 2017.
- Article about my NSF MERCURY MRI grant on the UNG homepage, January 4, 2017.
- Article about AFOSR grant on the UNG homepage, 2016.
- Article about NCTA winner featured in C&EN News Magazine, February 8, 2016.
- Article about the AFOSR award on UNG homepage, 2015.
- Article about NSF Award on the UNG homepage, 2014.
- Article about JOC paper featured on NGCSU homepage, 2013.
- Feature Article for Pittsburgh Supercomputer Magazine, 2012.
- Feature Article for North Georgia News (online), 2011 which led to international exposure:
 - <http://www.isgtw.org/feature/students-research-solar-cells-hpc>
 - <http://www.computing.co.uk/ctg/news/2108069/supercomputers-research-solar-energy>
 - <http://www.ready-sourcing.com/tag/using-the-xsede>
 - http://www.hpcwire.com/hpcwire/2011-09-08/ember_sheds_light_on_solar_cell_research.html
 - <http://www.noodls.com/viewNoodl/11118707/north-georgia-college-state-university/chemistry-students-professor-using-supercomputers-to-research>
 - http://www.solarmore.info/a/best_solar_cell/20110909/16.html

FUNDING

Monetary:

- A Computational Study of Oligomers for Use in High Contrast Black Electrochromic Polymers.
PI: Aimée Tomlinson
Agency: Air Force Office of Scientific Research (15RT0592)
Dates: 8/1/15 – 1/31/17
Funding: \$29,507
- Computational Design of Oligomers for use in High Contrast Black Electrochromic Polymers.
Agency: Air Force Office of Scientific Research (17RT0234)
Date: 10/15/17 –10/31/19
Funding: \$46,375
- Collaborative Research: Modular design of Cross-Conjugated Organic Semiconductors
PI: Aimée Tomlinson
Agency: National Science Foundation (CHEM-1808414)
Type & Dates: CHE 8/1/18 – 7/31/21
Funding: \$105,000
- Collaborative Research: Tuneable Cross-Conjugated Organic Semiconductors
PI: Aimée Tomlinson
Agency: National Science Foundation (CHEM-1413207)
Type & Dates: CHE 8/1/14 – 7/31/18

Funding: \$86,468

Supercomputer Cluster Time:

- Computational Design of Materials for Use in Organic Electronics
PI: Aimée Tomlinson
Agency: NSF
Type & Dates: XSEDE 7/1/19 – 6/30/20
Funding: 394400 SUs + 100000 SU supplement
- Computational Design of Materials for Use in Organic Electronics
PI: Aimée Tomlinson
Agency: NSF
Type & Dates: XSEDE 7/1/18 – 6/30/19
Funding: 403565 SUs
- Computational Design of Materials for Use in Organic Electronics
PI: Aimée Tomlinson
Agency: NSF
Type & Dates: XSEDE 12/31/16 – 3/31/18
Funding: 266036 SUs
- Oligomers for use in Electrochromics
PI: Aimée Tomlinson
Agency: NSF
Type & Dates: XSEDE 3/7/16 – 3/6/17
Funding: 100,000 SUs
- Materials for use in Organic Photovoltaics
PI: Aimée Tomlinson, co-PI: Malika Jeffries-EL
Agency: NSF
Type & Dates: XSEDE 8/20/14 – 8/19/15
Funding: 200,000 SUs
- Benchmarking DFT to experimental data on a thien[3,4-c]pyrrole-4,6-dione-based organic conjugated polymer.
PI: Aimée Tomlinson, co-PI: Bryson Dye
Agency: NSF
Type & Dates: XSEDE 3/1/12 – 2/28/13
Funding: 200,000 SUs
- A Structural Study of Benzobiazoles using Time Dependent Density Functional Theory
PI: Aimée Tomlinson,
Agency: NSF
Type & Dates: XSEDE 3/1/12 – 8/31/13
Funding: 435,000 SUs
- Donor-Acceptor Co-polymers using Electron Deficient Moieties.
PI: Aimée Tomlinson,
Agency: NSF
Type & Dates: Teragrid 9/1/11 – 8/31/12
Funding: 200,000 SUs
- Benzobisaxazole Compounds for Use in Photovoltaics.
PI: Aimée Tomlinson
Agency: National Science Foundation
Type & Dates: Teragrid 9/1/10 – 8/31/11
Funding: 200,000 SUs

PRESENTATIONS

1. Tomlinson, A., Davis, J. and Young, B. "A TDDFT Investigation of Novel Benzobisazoles for Use in Photovoltaic Technology," 2008 Southeastern Regional Meeting of American Chemical Society, Nashville, TN, November 2008 (poster presented by Brian Young).

2. Tomlinson, A. "A TDDFT Investigation of Novel Benzobisazoles for Use in Photovoltaic Technology," 237th ACS National Meeting, Salt Lake City, UT, March 2009 (oral presentation by me).
3. Tomlinson, A. and Confer, R. "In Search of ... New Acceptor Materials for Organic Solar Cells," Herty Medalist Undergraduate Research Symposium, Atlanta, GA, September 2009 (poster presented by Rae Confer).
4. Tomlinson, A. and Confer, R. "In Search of ... New Acceptor Materials for use in Organic Photovoltaics," 237th ACS National Meeting, San Francisco, CA, March 2010 (poster presented by Rae Confer).
5. Tomlinson, A. "Benzobisazoles as Acceptor Materials for use in Organic Solar Cells," The 9th International Symposium on Functional pi-Electron Systems, Atlanta, GA, May 2010 (poster presented by me).
6. Tomlinson, A. "Benzobisazoles as Acceptor Materials for use in Organic Solar Cells," The 9th MERCURY conference on Computational Chemistry, Clinton, NY, August 2010 (poster presented by Rae Confer).
7. Tomlinson, A. and Leman, D. "An Electrochemical Study of Benzobisazole Cruciforms," 45th Midwest Regional Meeting, Wichita, KS, October 2010 (poster presented by Deborah Leman).
8. Tomlinson, A. "Benzobisazoles and photovoltaics from a TDDFT perspective," 242th ACS National Meeting, Anaheim, CA, March 2011 (oral presented by me).
9. Tomlinson, A. and Leman, D. "Benzobisazole Cruciforms – 2D pi-delocalized systems," 242th ACS National Meeting, Anaheim, CA, March 2011 (poster presented by Deborah Leman).
10. Tomlinson, A. and Ryno, A. "DFT Benchmarking for Benzobisazoles" Herty Medalist Undergraduate Research Symposium, Atlanta, GA, September 2011 (poster presented by Alden Ryno – he was singled out with an honorable mention).
11. Tomlinson, A. and Ryno, A. "An Exploration of Donor-Acceptor Oligomers using Benzobisazoles" 243rd ACS National Meeting, San Diego, CA, March 2012 (poster presented by Alden Ryno).
12. Tomlinson, A. and Morgan, K. "The Impact of the Conjugation Pathway in Benzobisaxazole-Containing Polymers from Theory & Experiment" presented both at Molecular Education and Research Consortium in Undergraduate Computational Chemistry, Lewisburg, PA, July 2012 and at Herty Medalist Undergraduate Research Symposium, Atlanta, GA, September 2012 (poster both times by Kiley Morgan).
13. Tomlinson, A. and Franklin, N. "The Impact of the Conjugation Pathway in Benzobisaxazole-Containing Polymers from Theory & Experiment" presented both at Molecular Education and Research Consortium in Undergraduate Computational Chemistry, Lewisburg, PA, July 2012 and at Herty Medalist Undergraduate Research Symposium, Atlanta, GA, September 2012 (poster both times by Nicole Franklin).
14. Tomlinson, A. and Collins, C. "The Impact of Conjugation Length on Benzobisazole Cruciforms" 2012 Southeastern Regional Meeting of American Chemical Society, Raleigh, NC, November 2012 (poster presented by Chris Collins – he won the poster award).
15. Tomlinson, A. and Morgan, K. "Impact of Length on the Electronic Properties of Benzobisazole Cruciforms" 245th ACS National Meeting, New Orleans, LA, April 2013 (poster presented by Kiley Morgan – she won the Speak in the Big Easy prize).

16. Tomlinson, A. "A Teaching Module: How Organic Solar Cells work," an invited talk to be presented at 245th ACS National Meeting, New Orleans, LA, April 2013.
17. Tomlinson, A. and Morgan, K. "The Impact of Push/Pull Ring Locations in Benzobisoxazole Possessing Cruciforms" presented at Molecular Education and Research Consortium in Undergraduate Computational Chemistry, Lewisburg, PA, July 2013 (poster presented by Kiley Morgan)
18. Tomlinson, A. and Ellett, J. "The Impact of Tetrazine Location in Benzobisoxazole Possessing Cruciforms" presented at the 249th ACS National Meeting, Denver, CO, March 2015 (poster presented by Jessica Ellett).
19. Tomlinson, A. "Theoretical design of novel, tunable cross-conjugated materials for use in organic electronic applications" presented at the 2015 Physical Organic Chemistry Gordon Research Conference, Holderness, NH, June 2015 (poster presented by me).
20. Tomlinson, A. "The Computational Design of Benzobisoxazole Materials for use in Organic Electronics" presented at the 2015 Pacificchem Conference, Honolulu, HI, December 2015 (poster presented by me).
21. Tomlinson, A. and Wheeler, D. "A DFT study of Cruciform Benzobisoxazole Derivatives for use in OPVs" presented at the 251st ACS National Meeting, San Diego, CA, March 2016 (poster presented by David Wheeler).
22. Tomlinson, A. and Green, A. "Elucidation of Electrochromic Materials Utilizing TDDFT" presented at the 253rd ACS National Meeting, San Francisco, CA, April 2017 (poster presented by Alexa Green).
23. Tomlinson, A. and Green, A. "Substitution Effects Study on an Anodically Coloring Yellow Electrochromic Material" The 16th MERCURY conference on Computational Chemistry, Greenville, SC., July 2017 (poster presented by Alexa Green).
24. Tomlinson, A. and Mullin, M. "Application of DFT to Benzobisoxazole Cruciforms Possessing Pentafluorobenzene" 2017 SERMACS conference Charlotte, NC., November 2017 (poster presented by Melody Mullin).
25. Tomlinson, A., Jeffries-EL, M., Rainwater, L., and Burney-Allen, A. "Benzobisoxazoles Cruciforms: A tunable, Cross-conjugated Platform for the Generation of Donor Materials for Organic Solar Cells" 2018 ACS National Meeting, New Orleans, LA, March 2018 (poster presented by Lily Rainwater).
26. Tomlinson, A. and Diodati, A. "Generating a TDDFT Model for Electrochromic Materials" 2019 ACS National Meeting, Orlando, FL, April 2019 (poster presented by Alex Diodati).
27. Tomlinson, A. and Diodati, A. "A DFT Examination of Benzobisoxazole Cruciforms for use in OLEDs" 2019 MERCURY Consortium, Greenville, SC, July 2019 (poster presented by Alex Diodati).
28. Tomlinson, A. "Adventures in DFT Designing of Organic Electronic Materials" 2019 SERMACS, Savannah, GA, October 2019 (invited talk to the Computational Chemistry Applied to Interesting Problems symposium – oral presented by me).

TEACHING

<u>Course Number - Title</u>	<u>Description</u>
Chem 1151 – Survey of Chemistry I	First course in a two-semester sequence covering elementary principles of general, organic and biochemistry designed for allied health majors. Topics to be covered include elements and compounds, chemical equations, nomenclature, and molecular structure. Corequisite: CHEM 1151L
Chem 1151L – Survey of Chemistry I Lab	Laboratory exercises supplement the lecture material of CHEM 1151.
Chem 1212 – Principles of Chemistry II	Continuation of Principles of Chemistry I. Second course of a two-semester sequence covering the fundamental principles and applications of chemistry for science majors. Topics to be covered include solutions, equilibrium, kinetics, spontaneity and electrochemistry. Prerequisite: CHEM 1211 with a grade of C or higher; Corequisite: CHEM 1212L
Chem 1212L – Principles of Chemistry II Lab	Laboratory exercises supplement the lecture material of CHEM 1212. Prerequisite: CHEM 1211L; Corequisite: CHEM 1212
Chem 3541 – Physical Chemistry I	This course is the first semester of a two-semester physical chemistry sequence. It is intended for students majoring in chemistry. An examination of modern quantum mechanics which includes the following topics: atomic and molecular structure theory, bonding, and spectroscopy. Prerequisites: CHEM 1212, MATH 2460 and PHYS 2212; Completion of CHEM 2734 is highly recommended. Corequisite: CHEM 3541L
Chem 3541L – Physical Chemistry I Lab	Laboratory course to supplement CHEM 3541 will provide students with the necessary mathematical techniques needed in the lecture course. Prerequisites: CHEM 1212L, PHYS 2212L and MATH 2460; Corequisite: CHEM 3541
Chem 3542 – Physical Chemistry II	This course is the second semester of a two-semester physical chemistry sequence. It is intended for students majoring in chemistry. Topics will include: statistical mechanics, thermodynamics, and kinetics. Prerequisite: CHEM 3541; Corequisite: CHEM 3542L
Chem 3542L – Physical Chemistry II Lab	Laboratory course to supplement CHEM 3542. The experiments are intended to enhance

	understanding of lecture material for both semesters. There will be an emphasis on data analysis, physical measurements, and applications using modern instruments. Prerequisite: CHEM 3541L; Corequisite: CHEM 3542
Chem 3911 – Junior Seminar	Chemistry majors will be required to prepare and present a seminar in their Junior year. Written and oral communication skills, literature search skills, and technology enhanced presentation skills will be emphasized. Prerequisite: CHEM 3442
Chem 4912 – Senior Seminar	Chemistry majors will be required to prepare and present a seminar in their Senior year. Written and oral communication skills, literature search skills, and technology enhanced presentation skills will be emphasized. Prerequisite: CHEM 3911

SUPERVISION OF UNDERGRADUATE RESEARCHERS

(Those in bold were co-authors on peer-reviewed journals and those in italics presented a poster at a national or regional meeting)

<u>Name (graduation year)</u>	<u>Dates</u>	<u>Next Step</u>
1. Jeremy Caldwell (2008)	Spring 2008	
2. <i>Jason Davis</i> (2010)	Summer 2008 – Spring 2009	Augusta U/PostDoc Duke
3. <i>Bryan Young</i> (2012)	Summer 2008 – Spring 2009	Ph.D. Texas A&M
4. <i>Rae Confer</i> (2012)	Spring 2009 – Summer 2010	
5. Andrew Pfeiffer (2012)	Summer 2009	
6. James Bradley (2008)	Fall 2009	MAT program
7. Rebecca Neff (2008)	Fall 2009	MAT program
8. Sean Ryno (2010)	Spring 2010	Ph.D. GaTech 2015
9. <i>Deborah Leman</i> (2013)	Spring 2010 – Spring 2011	Masters UGA
10. Katie Vance	Fall 2010 – Spring 2011	transferred to GaTech
11. Kevin Gmernicki (2012)	Spring 2011	Ph.D. U. Tenn.
12. Steven Thrasher (2013)	Spring 2010 – Spring 2011	
13. Alden Ryno (2012)	Spring 2011 – Spring 2012	Ph.D. GaTech
14. <i>Nicole Franklin</i> (2012)	Fall 2010 – Spring 2012	
15. Anna Davis (2013)	Spring 2013	Ph.D. Vanderbilt
16. Josh Moncada (2013)	Spring 2012 – Fall 2013	Ph.D. U. Tenn.
17. Kiley Morgan (2014)	Fall 2011 – Spring 2014	Edward Via med school
18. Chris Collins (2014)	Summer 2012 – Spring 2014	Ph.D. Carnegie Mellon
19. B.Philip Akins (2016)	Fall 2013	grad school bound
20. <i>Jessica Ellett</i> (2015)	Spring 2014 – Summer 2015	Ph.D. U. Tenn.
21. David Wheeler (2016)	Fall 2013 – July 2016	Boston University
22. Amber Bowman (2015)	Fall 2014 – Spring 2015	University of Kentucky
23. Nathan Medina (2017)	Fall 2014	commissioned army
24. Matthew Kerul (2015)	Spring 2015	
25. Miranda Whitfield (2016)	Summer 2015	FBI
26. Lily Diodati (Rainwater) (2018)	Fall 2015 – July 2018	grad school UF
27. Rebecca Bearden (2018)	Fall 2015	grad school bound
28. Alexa Green (2017)	Spring 2016 – July 2017	Grad School UNH

29. <i>Melody Mullen</i> (2018)	Fall 2016 – July 2018	GBI
30. Nicolas Diodati (2017)	Spring 2017	grad school UF
31. Michael Testarossa (2020)	Summer 2017	grad school UF
32. Ethan Ardnall (2021)	Fall 2017 – Spring 2018	plans to commission
33. Grant Gay	Summer 2018 – Fall 2018	transfer to GaTech Eng
34. <i>Alex Diodati</i> (2019)	Summer 2018 – Spring 2019	grad school UF
35. Thomas Quimby (2020)	Fall 2018 – Fall 2018	
36. Aaron Morrenzin (2019)	Fall 2018 – Spring 2019	grad school MSU
37. Emily Shrewsbury (2021)	Fall 2018 – Spring 2019	grad school bound
38. Riley Wilkens (2023)	Spring 2019 – present	transfer'g to GaTech Eng
39. Samuel Klingenberg (2020)	Spring 2019 – Fall 2019	grad school bound
40. Mason Butts	Summer 2019 present	medical school bound
41. Cursten Howard(2023)	Summer 2019 – Fall 2019	grad school bound
42. Gina Diodati (2023)	Summer 2019 – present	grad school bound
43. Evan Smith (2023)	Spring 2020 – present	grad school bound

UNIVERSITY SERVICE

Department of Chemistry

1. 2007 – 2008 Biochemist Search Committee.
2. 2009 – 2010 Chair of Department Head Governance Committee.
3. 2010 – present Technology training for TAs and colleagues.
4. 2011 Analytical Chemist Search Committee.
5. 2012 Inorganic Chemistry Search Committee.
6. 2009 – present Academic Advisement to Undergraduate Chemistry Majors.
7. 2008 – present Open House Recruitment Representative.
8. 2013 – present Departmental P& T Committee (chaired 2013-2014).
9. 2016 – present Upper Division Classes Committee
10. 2016 Physical Chemist Search Committee
11. 2017 Chair of Materials Chemist Search Committee
12. 2017 – present Chair of the Physical Chemistry Curriculum Committee
13. 2018 2018 Chair of Organic Candidate Search Committee for Dahlenega
14. 2019 2019 Chair of Organic Candidate Search Committee for Dahlenega

University Wide

1. 2008 – 2011 Discipline Committee.
2. 2008 – 2016 Technology Committee.
3. 2010 – 2012 Academic Activities Committee.
4. 2011 – 2012 Coordinator for the Discipline, Honor, and Equity Board
5. 2011 – 2012 Academic Integrity Committee
6. 2011 – 2012 Reviewer for CURCA Excellence in Research Award
7. 2013 – present Grade Appeals Committee.
8. 2014 – 2015 Student Course Evaluation Committee.

9. 2014 Academic Planning Committee.

Community

1. 2008 & 2011 Science Olympiad.
2. 2011 Northwest Georgia Regional Science Fair Judge.

PROFESSIONAL SERVICE

Professional Societies

- a. 2012 – present Member of the Molecular Education and Research Consortium in Undergraduate computational Chemistry (MERCURY)
- b. 2014 – 2017 Committee on Technician Affairs as a member and subcommittee chair (ACS).
- c. 2014 – 2018 Associate member (2014), Subcommittee Chair of Awards and Recognition (2015-2017) and Chair of Committee on Technician Affairs (2018)

Manuscript Review

- a. American Chemical Society articles
- b. Royal Society of Chemists articles
- c. Wiley Articles

Proposal Review

- a. National Science Foundation-DMR, CHEM, MRI
- b. NSF XSEDE
- c. NSF Blue Waters
- d. AAAS Marion Milligan Mason Award for Women in the Chemical Sciences
- e. ACS Petroleum Research Fund (PRF)

Review Panels

- a. National Science Foundation-XSEDE
- b. National Science Foundation-Blue Waters
- c. National Science Foundation-MRI