

## Professional Summary

- Accomplished researcher with 7 years of experience in the fields of polymer chemistry, materials science, and engineering highlighted by 4 academic fellowships totaling \$325,000
- Excellent communication skills demonstrated by 7 publications in top peer-reviewed journals and 19 oral/poster presentations at a mix of regional/international conferences
- Selected to serve as 1 of 55 young researchers to represent the U.S. at the 65<sup>th</sup> Lindau Nobel Laureate Meeting

## Education

**Ph.D. Chemistry**, GPA: 3.5, (Oct. 2017 [*defense scheduled*])

Duke University, Durham, NC

Dissertation: Examining the mechanical reactivity of substituted cyclobutene mechanophores

Certificate in College Teaching from The Graduate School, Duke University

**B.S. Chemistry**, GPA: 3.92, (May 2012)

University of Georgia, Athens, GA

- Graduated Summa Cum Laude

## Work Experience

**Graduate Research Assistant, Duke University** (Jan. 2013 – present)

- Skilled in small molecule and polymer synthesis including various filled-silicone elastomers, polyacrylates, polymethacrylates, and polyesters
- Experience determining structure-activity relationships of polymers scaling from single-molecule measurements to bulk polymer mechanical tests
- Authored 3 publications in top peer-reviewed journals (2 first-author) and presented my research at 4 international and 10 regional conferences
- Received 4 academic fellowships totaling \$325,000 and helped secure over \$500,000 in research funding
- Mentored, supervised, and trained 5 graduate and 4 undergraduate students
- Developed an interactive polymer and materials science outreach demonstration, which has been published in the *Journal of Chemical Education* and used at a number of outreach events across the nation by various 3<sup>rd</sup> parties

**Instructor, Duke University** (May 2016 – May 2017)

- Experience working as part of a team through the creation and design of a freshman seminar course centered around the chemistry of crime
- Proficiency in explaining complex scientific concepts to non-scientists as evidenced by co-teaching the freshman seminar course using a team-based, active learning approach geared specifically towards non-science majors
- Developed course materials, documents, and laboratory experiments covering topics such as chemical equilibria, thermodynamics, canine odor detection, chromatography and separations
- Skilled in leading group discussions, including topics that may evoke strong opinions

**Undergraduate Research Assistant, University of Georgia** (May 2010 – May 2012)

- Authored 4 publications in top peer-reviewed materials and nanoscience journals
- Designed and synthesized copper and silicon-based nanorods by oblique angle co-deposition
- Characterized nanodevices by UV-Vis, cyclic voltammetry, and TEM

**REU, University of Oregon** (May 2011 – Aug. 2011)

- Expressed and purified proteins from *E. Coli* cells
- Determined Michaelis-Menten kinetics of guanylate kinase proteins
- Presented and discussed my research at 2 international conferences

## Affiliations and Leadership

- **Member, The American Chemical Society (2010 – present)**
- **Lab Manager, Craig Lab (2016 – present)**
  - Co-directed an effort to write the lab's procedural documents
  - Digitized and actively maintain inventory of 7000+ chemicals
  - Organize group meetings and serve as first point of contact for incoming students
  - Foster a lab culture of safety and collaboration
- **Public Relations Chair, PRATTically Speaking Toastmasters Club (2016 – present)**
  - Manage the club's social media pages (Twitter, Facebook)
  - Organize outreach events geared towards the recruitment of new club members
- **Co-Chair, Douglas G. Hill Memorial Lecture, Duke University (2013-2015)**
  - Organized a department-wide election process to nominate invited speakers
  - Planned the invited speakers schedule and coordinated after-lecture receptions
- **President, Student Affiliates of the American Chemical Society, University of Georgia (2011 – 2012)**
  - Managed club operations, including inviting guest speakers and planning club meetings
  - Coordinated and volunteered with "Kid's N' Chemistry" program, our club's science outreach program where we demonstrated engaging chemistry demonstrations to students at local elementary schools
- **Treasurer, Undergraduate Neuroscience Organization, University of Georgia (2011-2012)**
  - Maintained club bank account, collected membership dues, and organized the club budget
  - Co-founded the club's annual "Pancakes for Parkinson's" fundraiser event, with all proceeds going towards Parkinson's research

## Technical Experience

Organic Synthesis	Polymer Synthesis	NMR
UV-Vis Spectroscopy	Ring-Opening Metathesis Polymerization	Microsoft Office
Column Chromatography	Gel-Permeation Chromatography	Rheology
Grant Writing	Controlled Radical Polymerization	Fluorescence Spectroscopy
Polycondensation	IR Spectroscopy	3D Printing
MATLAB	Small Angle X-Ray Scattering	Illustrator/Inventor

## Selected Awards, Honors, and Fellowships

- 65<sup>th</sup> Lindau Nobel Laureate Meeting – Young Researcher, US Delegation (2015)
- Research Triangle Materials Science and Engineering Center (MRSEC) Fellow (2013 – present)
- National Science Foundation Graduate Research Fellowship (2013 – 2017)
- Dean's Graduate Fellowship – Duke University (2012 – 2016)
- Altria Group (Cohort 4) Award – Hispanic Scholarship Fund (2010-2012)
- ACS Scholars Award (2010-2012)