

Anise Grant

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Education

- Georgia Institute of Technology** Atlanta, Georgia
Doctor of Philosophy, Materials Science and Engineering Expected Graduation: Fall 2018
- Case Western Reserve University (CWRU)** Cleveland, Ohio
Bachelor of Science, Polymer Science and Engineering Spring 2014

Research Experience

- Graduate Research Assistant*, Georgia Institute of Technology August 2014 – Present
- Advisor: Vladimir Tsukruk, Ph.D.
 - Characterize graphene-silk composite interfacial interactions via fourier transform infrared spectroscopy, atomic force microscopy, and x-ray photoelectron spectroscopy
 - Elucidate the effect of graphene-oxide reduction in silk-graphene interactions
- Summer Intern*, Wright Patterson Air Force Base July 2015 – August 2015
- Advisor: Rajesh Naik, Ph.D.
 - Prepared sucker ring tooth (SRT) protein composites using graphene oxide and silk fibroin as a matrix
 - Characterized SRT protein folding and aggregation behavior via fourier transform infrared spectroscopy and atomic force microscopy
- Research Assistant*, Case Western Reserve University, Cleveland, OH January 2013 – May 2014
- Advisor: Ica Manas-Zloczower Ph.D.
 - Developed methods for dispersing cellulose nanowhiskers (CNWs) in epoxy as sustainable composite with properties comparable to carbon nanotube reinforced epoxy
 - Applied rheological methods to characterize dispersion of multi-walled carbon nanotubes in epoxy
- Research Assistant*, University of Massachusetts-Amherst, Amherst, MA May 2013 – August 2013
- Advisor: Kenneth Carter, Ph.D.
 - Collaborated with multiple research groups on project funded by the *Defense Threat Reduction Agency*
 - Synthesized hydrogel particles used to model acid-catalyzed cleavage in hydrogel films
- Research Assistant*, Case Western Reserve University, Cleveland, OH August 2011 – September 2013
- Advisor: Lei Zhu, Ph.D.
 - Developed mathematical model for actuation in multilayer dielectric actuator in series
 - Investigated ideal thermoplastic polyurethane composition by broadband dielectric spectroscopy for use in artificial muscle
 - Characterized mixed polymer brush morphology by transmission electron microscopy
- Products Formulation Intern*, Procter and Gamble, Cincinnati, OH May 2012 – August 2012
- Advisor: Charlie Neale, Ph.D.
 - Conducted performance and viability research for products under development
 - Collaborated with technologists across multiple disciplines
- Research Assistant*, Virginia Commonwealth University, Richmond, VA June 2011 – August 2011
- Advisor: Keith Shelton, Ph.D.
 - Conducted behavioral experiments on animal models and analysis by gel permeation chromatography

Peer-Reviewed Publications

- Y. Yin, K. Hu., **A. Grant**, Y. Zhang, and V. V. Tsukruk. *Biopolymeric Nanocomposites with Enhanced Interphases*. Langmuir, in print.

Presentations

Grant, A. *Exploration of Acid-Sensitive Gel Particles*, Oral Presentation at the National Organization of Professional Black Chemists and Chemical Engineers National Conference. Indianapolis, IN, October 2013.

Grant, A., Jimenez, N., Allaykhyarov, E., Mackey, M., Baer, E., & Zhu, L. *Multilayer polymer films as piezoelectric materials*, Poster Presentation at the American Chemical Society Fall National Conference, Indianapolis, IN, September 2013.

Grant, A., Meng, Q., & Manas-Zloczower, I. *Effect of Block Copolymer Dispersing Agents on Dispersion and Dispersion Stability of Multi-walled Carbon Nanotubes in Organic Solvents*, Poster Presentation at Case Western Reserve University Intersections: SOURCE Symposium, Cleveland, OH, April 2013.

Grant, A. & Shelton, K. *Quantifying abuse-related isoflurane blood concentrations in mice*. Oral and Poster Presentation at National Institutes of Health/National Institute of Diabetes and Digestive Kidney Disease Short-Term Research Experience for Underrepresented Persons Symposium, Bethesda, MD, August 2011.

Awards and Scholarships

Air Force Research Laboratory Scholarship	August 2014 – August 2015
Case Alumni Association Scholarship	August 2013 – May 2014
Case School of Engineering – Alcoa Campus Partnership Program Research Grant	January 2013 – May 2013
Saint-Gobain Competition Honorable Mention	April 2012
Provost Special Scholarship	August 2010 – May 2014

Leadership Experience

<i>Second-Year Representative</i> , Graduate Student Advisory Group	September 2014 – Present
<i>President</i> , CWRU National Society of Black Engineers Chapter	May 2013 – May 2014
<i>Co-Founder and Treasurer</i> , Undergraduate Macromolecular Science and Engineering	January 2013 – May 2014
<i>Undergraduate Student Government</i> , Engineering Caucus Representative	December 2012 – May 2013
<i>Secretary</i> , CWRU National Society of Black Engineers Chapter	May 2011 – April 2012
<i>Senator</i> , CWRU National Society of Black Engineers Chapter	September 2010 – April 2012

Professional Affiliations

American Chemical Society	March 2013 – Present
Society of Plastics Engineers	March 2012 – Present
National Society of Black Engineers	September 2010 – Present
Society of Women Engineers	August 2010 – Present

Community Outreach

<i>Tutor</i> , The Kroc Center Salvation Army Family Literacy Program	January 2015 – Present
<i>Program Co-Lead</i> , Georgia High School Outreach for Science and Technology	August 2014 – Present
<i>Tutor</i> , Cleveland Public Schools and Church of the Covenant	September 2010 – May 2014
<i>Volunteer</i> , The Cuyahoga Earned Income Tax Credit Coalition	November 2012 – May 2013
<i>Volunteer</i> , Kenya Service trip at Kithoka Amani Community Home	December 2012 – January 2013
<i>Volunteer</i> , Alternative Spring Break in New Orleans, LA	March 2012
<i>Refugee Family Mentor</i> , Catholic Charities Migration and Refugee Services	November 2011 – April 2012
<i>Social Intake Worker</i> , The Free Clinic of Greater Cleveland	September 2011 – May 2012