

A driven and proven leader who sets high goals for personal and team projects. Recognized as an adaptive, ambitious, innovative, self-starter who seeks technically challenging opportunities to bring solutions to all assignments. A quick-learner that appreciates the need to learn from mentors and peers.

EDUCATION

University of Oregon

Master of Science in Chemistry, Emphasis in Polymer Science,

The University of Southern Mississippi

Bachelor of Science in Polymer Science and Engineering 2017, GPA: 3.51

Minors: Chemistry and Mathematics

Anticipated June 2018

EXPERIENCE

Undergraduate Research Assistant

Research Group of Dr. Jeffrey Wiggins

"Determination of epoxy-AEK structure-property relationships and the impact on mechanical properties."

- Synthesized, purified and subsequently confirmed the product of 10 aryletherketone (AEK) monomer derivatives via FTIR, NMR, GPC and/or TLC which allowed exploration of AEK impact on the mechanical properties of epoxy networks by varying AEK molecular weight, constitutional isomerism and stoichiometric amounts.
- Formulated a variety of epoxy-AEK composites for experiments through a multistep process followed by forging of samples to the proper dimensions for tension and compression testing of cured aerospace epoxies yielding up to a 20% increase in modulus compared to the neat epoxy network.
- Characterized thermal and mechanical properties of networks by DSC, DMA and MTS testing and generated data reports for doctoral candidate to determine next steps.
- Determined degradation temperatures of materials by thermogravimetric analysis (TGA) to unveil proper parameters for other thermal testing methods.
- Fostered twelve younger students interest in the polymer science field by demonstrating proper lab techniques, the purpose of polymer characterization methods, and objectives of the research group.

9/2013-5/2017

Hattiesburg, MS

Student Tutor

The University of Southern Mississippi

- Set goals for more than 10 students on assignments, test, and final grades and tutored them on key concepts, necessary models, and important formulas in general chemistry, organic chemistry, and mathematics.

5/2015-5/2017

Hattiesburg, MS

AFFILIATIONS

Delta Tau Delta Fraternity

President

- Supervised seven other executive officers and ten committee heads on the administrative council to ensure proper chapter operations.
- Facilitated weekly chapter and executive council meetings, as well as biannual chapter retreats to discuss and vote on chapter business, set goals, and solve problems.
- Represented the fraternity before all necessary bodies at The University of Southern Mississippi such as other organization presidents, university officials, and the local media.
- Appointed committee heads to the administrative council to run day to day chapter operations.

The University of Southern Mississippi

11/2015-11/2016

Vice President

- Organized and reviewed the chapter's annual accreditation report summarizing all aspects of chapter operations.
- Chaired the administrative council meetings which involved overseeing and planning chapter events such as socials, community service, and membership development programming.

11/2014-11/2015

- Recruitment chair** **4/2013-11/2014**
- Organized and planned recruitment events, while motivating chapter membership.
 - Managed the potential member names list, and interacted with potential new members to result in a 100% increase in the fraternity's size.

- Community service chair** **11/2012-5/2013**
- Planned and executed all fraternity related community service events.
 - Recorded and ensured attendance at all community service events.

- Society for the Advancement of Material and Process Engineering** **The University of Southern Mississippi**
Vice President **1/2014- 5/2015**
- Designed and built a carbon fiber bridge for the annual SAMPE bridge competition.
 - Ordered metal tooling to construct the designed bridge to the proper dimensions to be cured in the autoclave.
 - Organized all undergraduate involvement within the club.

- Student Government Association** **The University of Southern Mississippi**
Senator **1/2015-12/2015**
- Improved the campus road system by adding more raised crosswalks, making stop signs more visible, and repainting nonvisible road stripes by authoring and passing legislation through the student government.
 - Communicated with the student body to collect ideas, and hear concerns about the campus and the student experience.
 - Reported student feedback to the student government association.

VOLUNTEER EXPERIENCE

- The Big Event** **2013-2017**
Hattiesburg, MS
- Mentored at risk males ages 14-18 during a daylong seminar to interact about decision making and the importance of intellectual growth.
 - Helped a team make repairs to homes for underprivileged families in the area.
 - Assisted a crew with repainting over 20 classrooms at Oakgrove Elementary School.
 - Assured safety and proper traffic flow of a 5K race to raise money for the local Catholic church.

- Adopt-a-Highway** **2012-2017**
Hattiesburg, MS
- Engaged in monthly cleanups, and reported repairs needed for the roads infrastructure to the Mississippi Department of Transportation.

- Great Strides 5k Run 4 Breath** **2013-2017**
Hattiesburg, MS
- Planned the event in 2017 by organizing a letter campaign, collaborating with university officials, promoting the event, and working with the university police for road control resulting in \$35,000 being raised for the Cystic Fibrosis Foundation.

- Juvenile Diabetes Research Foundation** **2012-2017**
Hattiesburg, MS
- Initiated collaboration with the foundation by organizing, planning, and participating in fundraisers through the fraternity raising more the \$10,000 to date.

AWARDS

- 2015 and 2016 Sid and Jodi Gonsoulin Leadership Scholarship
- 2016 Brady Lee Vanhuss, Jr. Memorial Scholarship Endowment