

ABIGAIL AHN

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SUMMARY

Structured and detail-oriented materials science engineer with experience in polymer materials research with a desire to leverage and grow my experimental design strategies, laboratory techniques and leadership skills to deliver consumer-focused solutions in a team-based environment.

EDUCATION

University of Michigan - Ann Arbor, MI

December 2024

Bachelor of Science in Engineering in Materials Science Engineering

GPA: 3.925 / 4.000

Coursework: Biomaterials, Composite Materials, Physics of Materials, Intro to Solid Mechanics

WORK EXPERIENCE

General Mills Incorporated

Minneapolis, MN

Research & Development Scientist / Packaging / Engineer Intern

Anticipated Start Date: May 2023

- Will innovate packaging to contribute to company-wide goal of sustainability for all packaging and products.
- Will collaborate with internal and external partners and customers.

University of Michigan Biointerfaces Institute

Ann Arbor, MI

Summer Undergraduate Research Intern / Jinsang Kim Research Group

May 2022- July 2022

- Researched hair structure and hair dye mechanisms through literature review and summarized findings to define impact.
- Synthesized polyphenol dye formulations to yield an eighteenfold hair color change increase in a five-minute period.
- Operated UV/Vis spectrophotometer and scanning electron microscope (SEM) to examine coating morphology on hair.
- Studied crosslinking mechanism in polyphenol coatings to improve robustness; co-author of manuscript in progress.

Michigan State University St. Andrews

Midland, MI

Summer Research Fellow Team Leader

July 2020 - August 2020

- Proposed a new catalyst mechanism with team of 20 to produce TCP-ene, an automotive refrigerant precursor, which decreased the unit operations by 75% and eliminates waste disposal.
- Facilitated discussions in sustainability subteam of five and combined individual research efforts to demonstrate the green chemistry emphasis of the synthesis mechanism.

PROJECT EXPERIENCE

Michigan Health Engineered for All Lives (M-HEAL)

Ann Arbor, MI

Project MESA Engineering Subteam Member

January 2022 - Present

- Collaborate with a team of 15 engineering students to design a portable gynecological examination table to increase accessibility to cancer screening for females in rural Latin American communities.
- Pursued new backpack fabrication workstream by selecting materials, designing and manufacturing a luggage strap inspired prototype to provide a high strength table transportation device at low cost.
- Leveraging materials science and Solidworks CAD skills to implement table cost reduction concepts.

LEADERSHIP EXPERIENCE

Society of Women Engineers (SWE)

Ann Arbor, MI

Elementary School Outreach Officer

May 2022 - Present

- Organize bi-annual educational event, EEE Day, that draws 100 elementary students and parents from local school districts to explore and boost interest in engineering through STEM activities and brief lectures.
- Facilitate committee meetings by creating meeting plans and delegating/accomplishing tasks like preparing lectures, activities, food arrangements and communicating with attendees for EEE Day.

SELECT HONORS & AWARDS

- Alfred H. White Memorial Scholarship | 2022
- College of Engineering Dean's List | Fall 2021, Winter 2022, Fall 2022
- William J. Branstrom Freshman Prize (Top 5%) | Fall 2021
- Regents Merit Scholarship | 2021