

Caitlyn Elizaga

Biomedical Engineering BS with a minor in Management, May 2025

Intern at Pfanstiehl, Inc., President of Biomedical Engineering Society, Undergraduate Teaching Assistant for Biomolecular & Cellular Systems Lab



Weldon School of
Biomedical Engineering

RESEARCH OPPORTUNITY

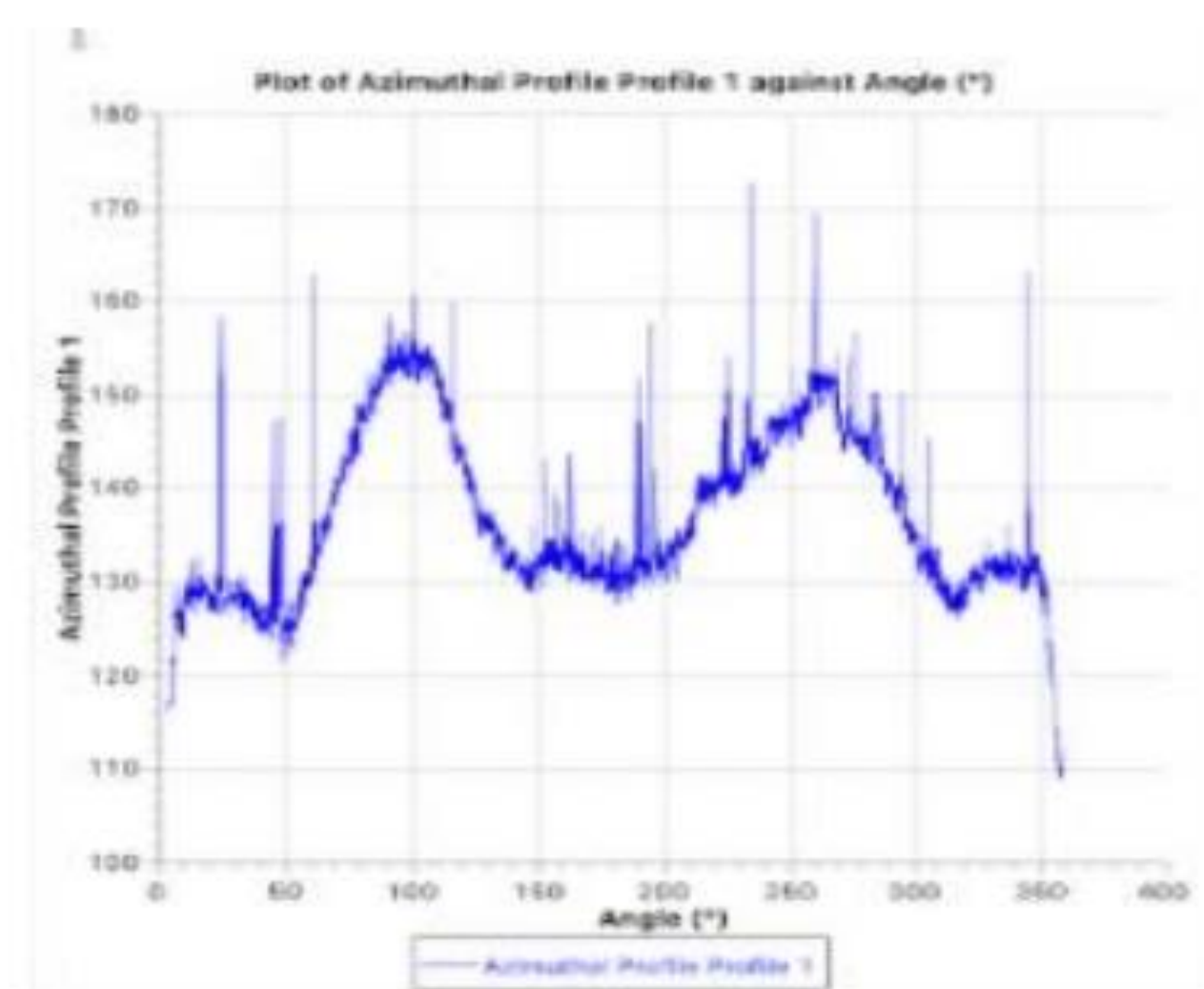
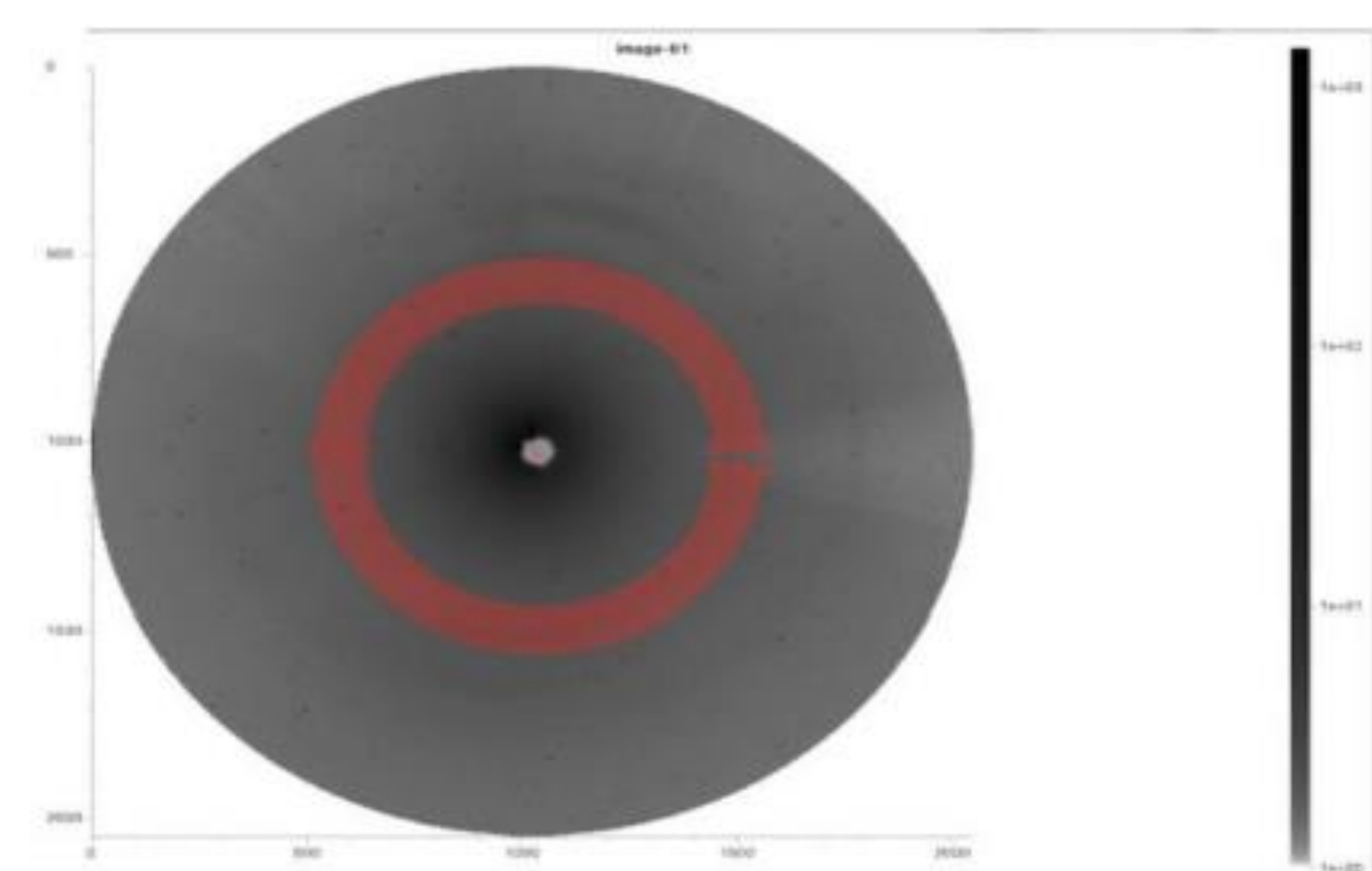
Exemplary Student Research Program:

X-Ray Diffraction & Recyclable Materials: Relationship Between Polymer Crystallinity and Supported Weight

- Investigated the structural properties of heated PETE plastic bottles, including X-ray diffraction analysis of crystalline structures, to explore recyclable plastics as potential building materials, and conducted mechanical testing on joints using a reconfigured car jack
- Explored the effects to plastic crystallinity due to structural changes in material and joint depression variants



Huber
Diffractometer



U.S. DEPARTMENT OF
ENERGY

Argonne National Laboratory is a
U.S. Department of Energy laboratory
managed by UChicago Argonne, LLC.

INTERNSHIP EXPERIENCE

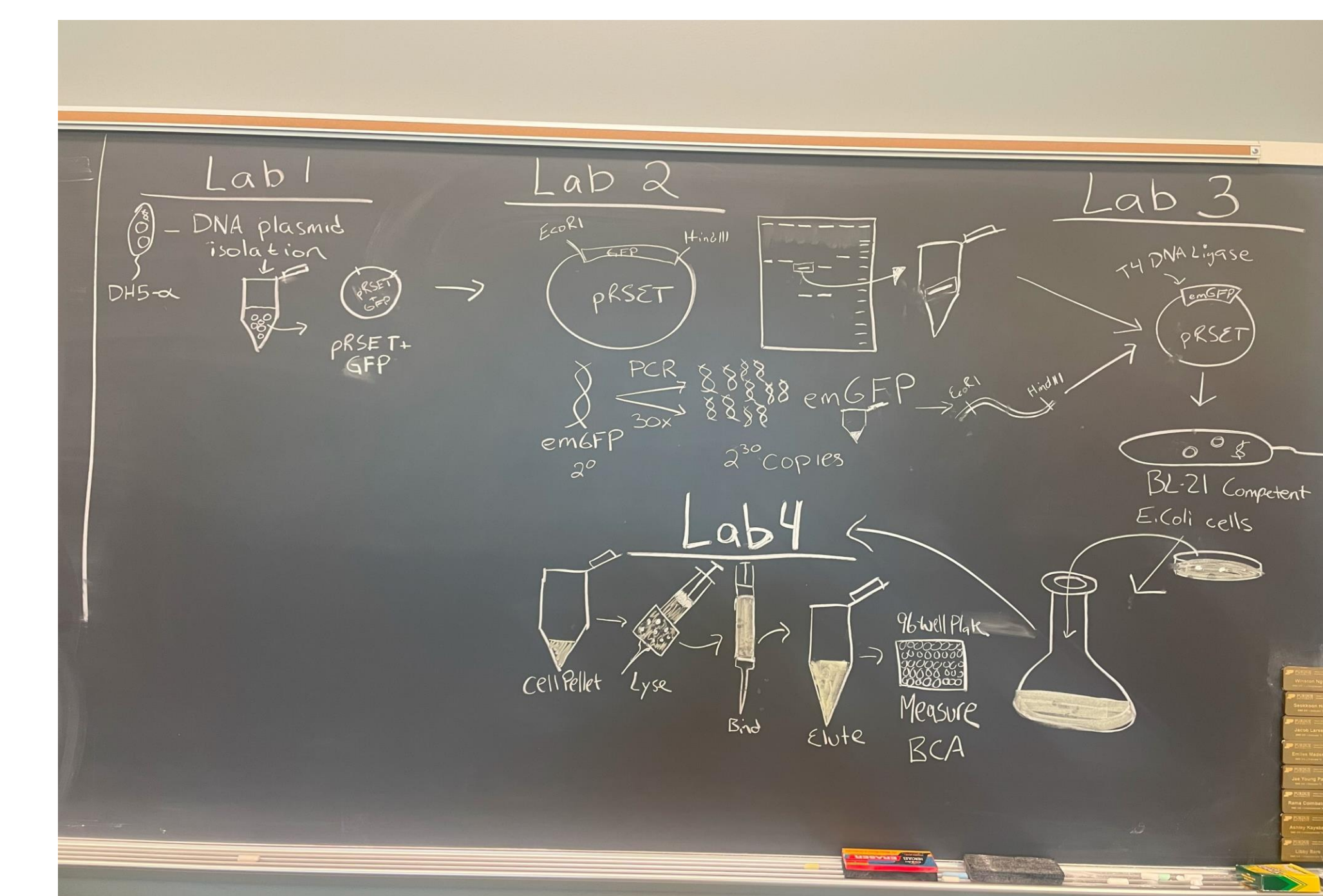
Exemplary Student Research Program:

Process Analytical Development Intern working with Quality Control (QC) and Product Development (PD)

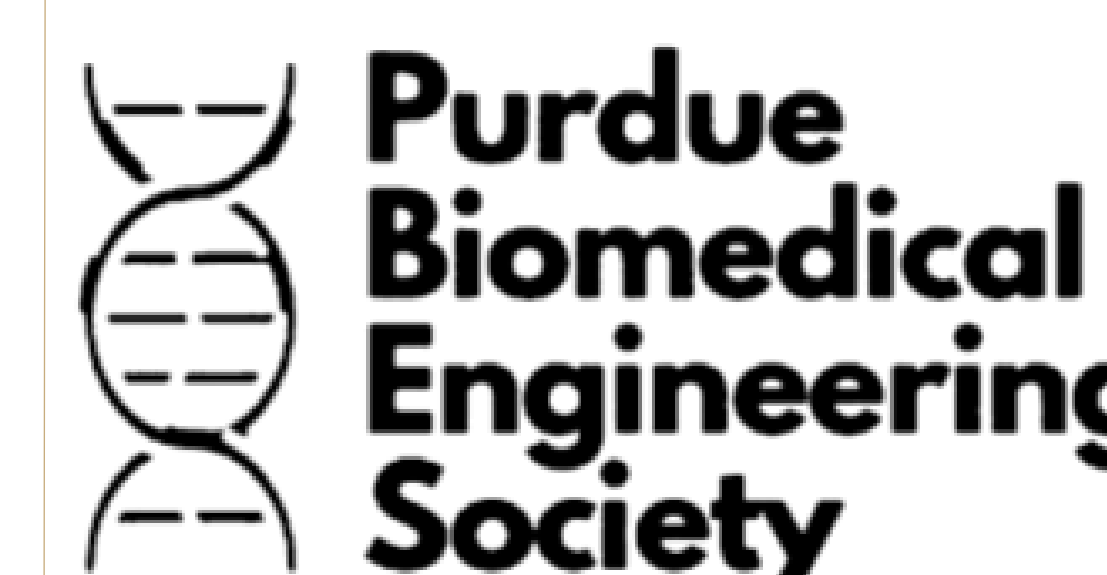


- Collaborated with cross-functional teams to analyze and improve procedures, by conducting various lab tests, contributing to the enhancement of product quality and efficiency of high purity excipients for COVID-19 vaccines and other medicines
- Extensively learned and implemented the use of Malvern NanoSight and Malvern Mastersizer for particle size distribution and analysis of nanoparticulates

CAMPUS INVOLVEMENTS



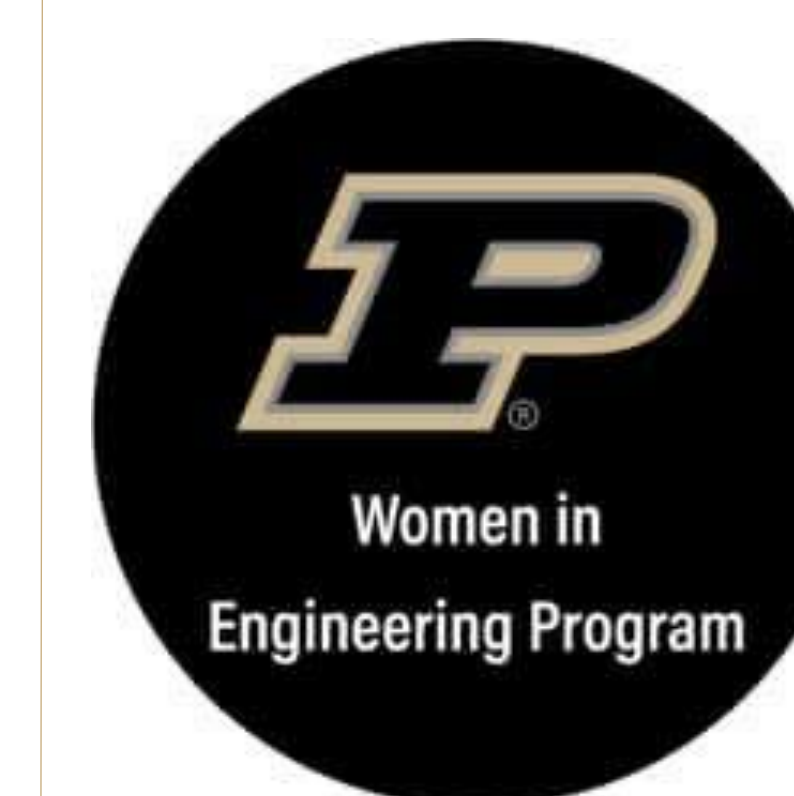
Undergraduate Teaching Assistant: BME
205 – Biomolecular & Cellular Systems



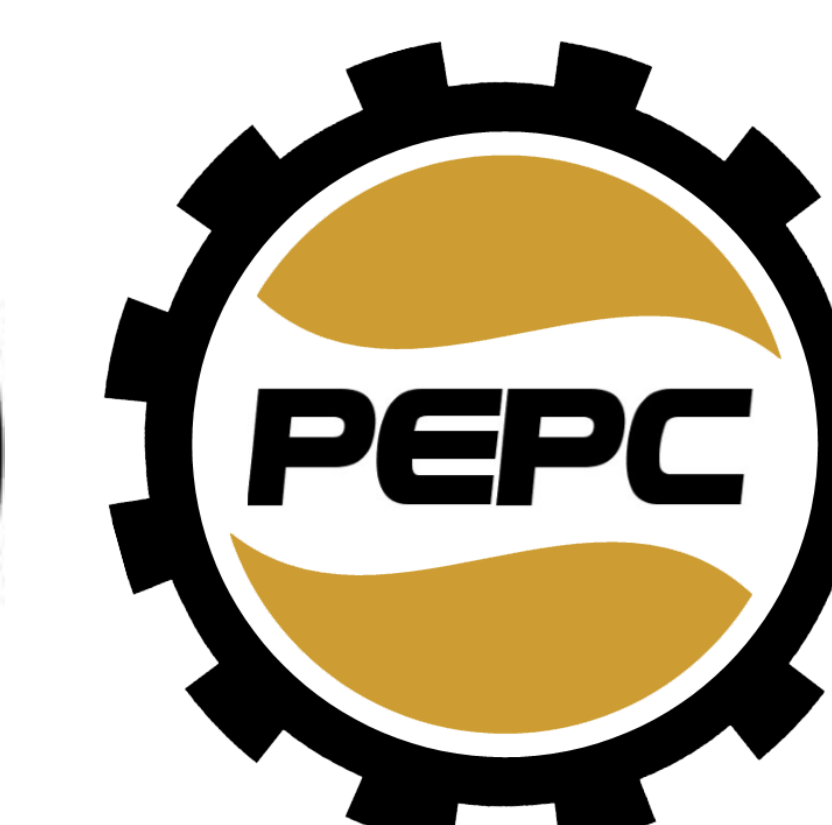
BMES
BIOMEDICAL ENGINEERING SOCIETY



President – May 2023 - Present
Social Programming Sophomore Rep –
November 2022 – May 2023



1:1 Mentor



Voting Member



Design
Committee

Feel free to reach out with any questions!
Email: celizaga@purdue.edu