

Elizabeth Henstrom

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SUMMARY

Prospective graduate student with a background in biochemistry and practical experience gained through research and work opportunities. Demonstrates outstanding teamwork, problem-solving, and time-management skills. Ready to pursue a graduate degree in Biological Chemistry and make substantial contributions driven by commitment and determination.

EDUCATION

Utah Valley University – Orem, UT

September 2021 – Present

- GPA: 3.58/4.0
- Awarded Dean's List – Spring 2022 (3.75 GPA)

University of Utah – Salt Lake City, UT

September 2020 – December 2020

- GPA: 3.72/4.0
 - Awarded Trustee's Scholarship – Fall 2020 (3.72 GPA)
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RESEARCH PROJECTS

Research Experience

Independent Research

September 2023 – Present

- Designed a cost-effective DIY HVPE (high-voltage paper electrophoresis) to separate small, charged compounds
- Set goals to utilize DIY HVPE to determine the charge of xanthommatin in monarch butterflies to determine chemical structure from tandem mass spectrometry results
- Created DIY HVPE for use with minimal funding, small independent research projects, and for possible use in high schools

Team Project

Procedure Development

November 2023 – December 2023

- Developed a new technique to extract formaldehyde from commonly used heat protectants based on methods found in multiple research papers
 - Presented research results to peers to explain the dangers of formaldehyde concentrations in everyday products
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PROFESSIONAL EXPERIENCE

IBC Advanced Technologies, Inc. – American Fork, UT
Research and Development

June 2024 – Present

- Separated metals from slurries provided by global customers, meeting customer needs
- Improved production efficiency by identifying opportunities for process optimization and implementing necessary changes
- Conducted thorough data analysis, ensuring accurate results and helping to guide future research efforts
- Aided in designing experiments to test hypotheses, systematically gathering data to make informed decisions about project direction
- Managed multiple projects simultaneously, meeting tight deadlines while maintaining high-quality work output

SKILLS

Instrumentation – (Interpretation and Handling of Results)

- ICP-OES
- AAS
- Chromatography (gas and liquid)
- Fluorescent spectrophotometry
- UV-vis spectrophotometry
- Mass spectrometry

Analytical

- Dilution techniques
- Creation of standards for instrument use
- Proper cleaning techniques
- Proper use and preparation of PPE
- Microsoft Excel
- Python
- ORCA Computational Modeling

Soft Skills

- Critical thinker
- Inquisitive
- Willing to learn
- Hard Worker
- Attention to detail
- Creative thinker

HOBBIES

- Women in the Physical Sciences Club (2023 - Present)
- Black Student Union (2022 - 2023)
- Native American Club (2022 - 2023)
- Food Bank Service (2023 - 2024)
- Volleyball (2014 - Present)
- Clarinetist (2010 - Present)