

# CAROLINE ANGERER

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## EDUCATION

**UNIVERSITY OF PENNSYLVANIA, SCHOOL OF ENGINEERING AND APPLIED SCIENCES Philadelphia, PA**  
*Master of Science in Engineering, Materials Science and Engineering* **Expected December 2024**

**UNIVERSITY OF PITTSBURGH, FREDERICK HONORS COLLEGE Pittsburgh, PA**  
*Bachelor of Science, Major in Chemistry with a Bioscience Concentration, Minor in Physics* **May 2023**  
Cumulative GPA: 3.88/4.00

- Honors: Summa Cum Laude, Chemistry Departmental Honors, Dean's List (all semesters)

## WORK EXPERIENCE

**R&D ENGINEERING INTERN May 2021-August 2021**  
*Coherent Corp. (formerly II-VI Inc.)* **Saxonburg, PA**

- Collaborated with a team of 15 scientists and engineers to develop novel electrolytic technology for use in patented high-energy rechargeable lithium batteries.
- Characterized electrolyte structure, properties, and performance through collection and analysis of >50 different spectral, thermal, and electrochemical data sets.

**TEACHING ASSISTANT August 2020-May 2021**  
*Honors General Chemistry Program, University of Pittsburgh* **Pittsburgh, PA**

- Co-led weekly recitation, laboratory class, and office hours for the Honors General Chemistry I & II courses.
- Graded the exams, quizzes, and homework of 40 students.

## PROJECTS & EXTRACURRICULAR ACTIVITIES

**ENTREPRENEURSHIP FELLOWS PROGRAM November 2023-Present**  
*Engineering Entrepreneurship, University of Pennsylvania* **Philadelphia, PA**

- One of 12 Penn students selected for a 12-month work study program for entrepreneurial leadership in high-growth technology ventures.

**BUSINESS ANALYST, UI/UX DESIGN September 2023-Present**  
*Penn Graduate Consulting Club, University of Pennsylvania* **Philadelphia, PA**

- Research the competitive landscape and redesign an interactive search, mapping, and education app for teenagers with the ultimate goal of increasing accessibility and improving the user interface.

**UNDERGRADUATE RESEARCH August 2021-May 2023**  
*Department of Chemistry, University of Pittsburgh* **Pittsburgh, PA**

- Constructed an experimental design using the Design of Experiments (DoE) statistical modeling method for the investigation of chemical reaction conditions of organic oxidations.
- Executed the synthesis, purification, and analysis of 18 unique chemical reactions, then compiled the data and optimized the yield of an oxidation of interest (improved yield by 90%).
- Presented at the 2023 American Chemical Society National Conference. (<https://doi.org/10.1021/scimeetings.3c00131>)

**BARISTA, SAXBYS August 2021-May 2023**

- Served an average of >200 customers per 4-hour shift.
- Worked 10-20 hours/week while studying as a full-time student.

## SKILLS & INTERESTS

**COMPUTER SKILLS:** Python, Matlab, Microsoft Office, Minitab (Statistical Software)

**LABORATORY SKILLS:** Organic Synthesis, Data Analysis, Spectroscopy, Chromatography, Organization and Documentation

**AWARDS:** National Undergraduate Award in Organic Chemistry (2023), Organic Chemistry Summer Research Fellowship (University of Pittsburgh, 2022), Academic Merit Scholarship (University of Pittsburgh, 2019-2023), Valedictorian (Neshaminy High School, 2019)

**INTERESTS:** Running (half-marathoner), Backpacking (visited 13 National Parks), Reading, Skiing