

# Madeline A. Murphy

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## Education

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University of Minnesota—Twin Cities

Minneapolis, MN

B.S. Chemical Engineering with Honors, GPA 4.00/4.00

2020-2024

Advisor: Paul Dauenhauer

Thesis: in progress

## Scholarships & Fellowships

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2023 Charles A. Mann Scholarship | University of Minnesota

2020-2024 National Scholarship | University of Minnesota

## Awards & Honors

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2020-2023 College of Science and Engineering Dean's List | University of Minnesota

## Publications

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1. **Murphy M**, Gathmann SR, Bartel CJ, Abdelrahman OA, Dauenhauer P. Catalytic Resonance Theory: Circumfluence of Programmable Catalytic Loops. ChemRxiv. Cambridge: Cambridge Open Engage; 2023; This content is a preprint and has not been peer-reviewed.

## Presentations

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## Teaching Experience

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University of Minnesota—Twin Cities

Minneapolis, MN

Undergraduate Grader

Aug. 2022 – Dec. 2022

- Introduction to the Science and Engineering of Materials (MATS 2001)

Undergraduate Tutor

- College of Science and Engineering Tutor, Taylor Tutoring Center
- Organic Chemistry Tutor, OChem Connections

Jan. 2022 – May 2022

Jan. 2021 – Dec. 2021

## Leadership Experience

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University of Minnesota—Twin Cities

Minneapolis, MN

Ski and Snowboard Club at the University of Minnesota, President

Aug. 2023 – May 2024

- Led a club of over 400 member and an executive team of 15 officers, delegating responsibilities, planning events, and communicating with club sponsors.
- Coordinated an international club trip to Banff, AB in Canada for over 80 members.
- Held a position as an officer for 2 years prior to Presidential appointment.

**American Institute of Chemical Engineers, Secretary**

*Aug. 2023 – May 2024*

- Crafted weekly emails to inform members of upcoming events, department notices, and potential scholarship, research, and job opportunities.