

Bridget Anger

EDUCATION

George Washington University May 2026
Doctorate of Philosophy in Environmental Engineering GPA 3.85

University of Maryland, Baltimore County (UMBC) May 2021
Bachelor's of Science in Chemical Engineering GPA: 3.5

HONORS: Meyerhoff Scholar, Center for Women in Technology Affiliate

RELEVANT EXPERIENCE

Academic Center for Student Athletes - UMBC

Baltimore, MD

Peer Tutor

October 2019 - Present

- Tutor student athletes in chemistry, thermodynamics, fluid dynamics, and environmental science

Blaney Laboratory - UMBC

Baltimore, MD

Undergraduate Research Assistant

January 2018 - Present

- Perform and assist with the design of experiments relating to the analysis of residual antimicrobial activity of photodegraded antibiotics (classes studied: macrolides, sulfonamides, and fluoroquinolones)
- Analyze and present data acquired through experimentation and literature review

University of Texas at Austin Environmental Science Institute

Austin, TX

Research Intern

June - August 2018

- Studied the effect of alloy composition in palladium silver alloy nanoparticles on the catalytic reduction of nitrite in solution, then created and presented a poster of the project

UMBC Chemistry Department

Baltimore, MD

Learning Assistant - Chemistry 101 (General Chemistry I)

August 2017 - May 2018

- Proctor reading quizzes and assist students with questions and discussions throughout lecture

Vanderbilt Institute of Nanoscale Science and Engineering

Nashville, TN

Research Intern

May - August 2017

- Worked on a personal research project focused on improving charge separation in biohybrid (PSI:PEDOT) photocathodes, created and presented poster on research
- Won "Best Poster" award for the program with a prize of a \$1000 stipend to pay for travel to present at the National Conference for Undergraduate Research (NCUR) 2018

UMBC Chemistry Department

Baltimore, MD

Volunteer

September 2016

- Supervised and demonstrated simple chemistry concepts to 12 children ages 5-12

PRESENTATIONS AND PAPERS

1. Hain, E; Adejumo, H; Anger, B; Orenstein, J; Blaney, L. Advances in antimicrobial activity analysis of fluoroquinolone, macrolide, sulfonamide, and tetracycline antibiotics for environmental applications through improved bacteria selection. *Journal of Hazardous Materials* 415, 125686.

2. Ibitoye, T.; Anger, B.; Hain, E.; Hopanna, M.; Blaney, L. Phototransformation of macrolide antibiotics in UV-254 systems and characterization of residual antimicrobial activity. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 24, 2019.

3. Ibitoye, T.; Anger, B.; Hopanna, M.; Hain, E.; Harris, L.; He, K.; Blaney, L. Phototransformation and residual antimicrobial activity of five macrolide antibiotics in UV-254 engineered systems. Spring 2019 ACS National Meeting (Orlando, FL), April 2, 2019.

4. Hain, E.R.; Ibitoye, T.; Hopanna, M.; Anger, B.; He, K.; Blaney, L. Characterization of the residual antimicrobial activity of antibiotics and their transformation products in UV-254 and UV-H2O2 processes. Chesapeake Section of the American Water Works Association spring meeting (Chevy Chase, MD), May 10, 2018.
5. Anger, B; Robinson, M; Cliffel, D.E.; Jennings, G.K. Efficient charge separation in composite Photosystem I/PEDOT photocathodes prepared by vapor phase polymerization. National Conference for Undergraduate Research (Oklahoma City, OK), April 5, 2018.
6. Anger, B; Robinson, M; Cliffel, D.E.; Jennings, G.K. Efficient charge separation in composite Photosystem I/PEDOT photocathodes prepared by vapor phase polymerization. VINSE REU Poster Competition (Nashville, TN) August 2018. Awards Best Poster Award (poster #6). VINSE REU August 2018. (Included \$1,000 travel stipend for attending an academic conference)

VOLUNTEER EXPERIENCE

Meyerhoff Peer Advising Program

October 2018 – May 2019

- Provide support and guidance for a freshman chemical engineering student in the Meyerhoff scholars program and continue to mentor them throughout their college career

EXTRACURRICULAR ACTIVITIES

Tau Beta Pi (Member)

May 2018 – Present

American Chemical Society (Member)

October 2016 - Present