

EDUCATION

- Ph.D Emory University, Chemistry** Fall 2023 - Present
Atlanta, GA
- BS Temple University, Chemistry** January 2020 - December 2022
Philadelphia, PA
Related coursework: Advanced Inorganic Chemistry, Crystallography and Diffraction, and Inorganic Synthesis
- Montgomery County Community College, Health Science** August 2017 - May 2019
Blue Bell, PA

MILITARY EXPERIENCE

- United States Army, Fort Leonard Wood MO** May 2019 – November 2019
Private First Class, Echo Company 2-10th Infantry *Honorably Discharged Due to Injury*
- Led a platoon as a leader to complete orders under very stressful situations daily
 - Completed mentally and physically challenging task while maintain high discipline

RESEARCH EXPERIENCE

- Undergraduate Research Program, Temple University, Philadelphia, PA** February 2022 - Present
Principal Investigator: Eric Borguet
- Perform first fundamental investigation on defects and binding sites within new metal-organic frameworks (MOFs) using acetonitrile and acetone
 - Analyze new MOFs ability to adsorb and desorb industrial toxic gases using temperature programmed infrared spectroscopy (TP-IR) and temperature programmed desorption mass spectroscopy (TPD-MS) under ultra-high vacuum (UHV) for various gas storage applications
- Sigmapharm Laboratory, Bensalem PA** May 2022 – July 2022
R&D Lab Intern, Lab Advisor: Athan-Jeed Bandy
- Studied generic drug development from the small scale of pre-formulation early stages to the larger batches in manufacturing development process
 - Prepared daily solutions such as buffers, media, and mobile phases independently
 - Performed and analyzed dissolution, HPLC, and UV-Vis data in compliance with SOPs, FDA, and OSHA regulations
- ITW Performance Polymers, Montgomeryville PA** May 2021 – August 2021
R&D Lab Intern, Lab Advisor: John Kenneweg
- Saved the company \$14 million by leading and assisting seven projects
 - Projects: Epoxy offset resins evaluation, high thermal conductivity silicones developing, raw material consolidation, crystalline silica replacement for health safety

- Developed new coating products and qualified raw materials for use in adhesive formulations by analytical testing
- Drove organic growth of more than two product lines through mechanical and electrical testing of high-profile clients' products
- Qualified finished goods and raw materials to reach key performance indicators (KPIs) goals through quality control
- Interacted with cross-functional teams outside the R&D lab such as engineers, QC, technical service to develop ideas
- Solved customers' issues by working closely and proficiency with distributors and technical engineers

TEACHING EXPERIENCE

Temple University Chemistry Department, Philadelphia PA January 2023 – June 2023
General Chemistry Laboratory Adjunct Instructor, Coordinator: Dr. John Michel

- Instructed up to a hundred student divided into four sections using practical experiments and in-depth lectures
- Composed engaging lesson plans allowing students to further their understandings of materials resulting in 20% "A" students with majority of "B+"
- Documented students' learning and materials mastery to make alternations on each student's basis to meet one's goal

WORK EXPERIENCE

Temple University General Education, Philadelphia PA February 2020 – December 2022
Philadelphia Experience (PEX) Content Manager, Coordinator: Donnell Powell

- Collaborate with PEX, Philadelphia Experience, partners up to four events such as art exhibitions, poetry, and music performance per semester for students
- Work with PEX ambassadors to spread out general information about opportunities to more than a hundred student per semester
- Organize and create contents for PEX IG which helped grow the number of followers by 200% in a month

Thomas Jefferson Hospital, Abington PA February 2021 – September 2021
Radiologist Assistant, Manager: Janell Godwin

- Monitored system, EPIC, for critical reports and facilitated cross-departmental collaboration
- Provided patients with radiology images when requested acquiring all necessary consents and form completion
- Fulfilled radiology requests from healthcare providers for patient reports conforming to PHI and HIPAA policies and procedures

PRESENTATIONS

Temple University, Philadelphia PA November 2022
Poster Presentation, Temple University Open House
Title: "Determination How Thermal Activation Affects Binding Distributions of Acetonitrile Probe in a Metal-Organic Framework (MOF) Under an Ultra High Vacuum (UHV) Condition"

Philadelphia Inorganic Colloquium, Philadelphia PA October 2022
Poster Presentation, Inorganic Research Colloquium
Title: “Fundamental Study of the New Metal-Organic Frameworks’ (MOFs) Defects Using Temperature-Programmed Desorption Mass Spectrometry (TPD-MS) and Infrared Spectroscopy (IR)”

Temple University, Philadelphia PA September 2022
Poster Presentation, Undergraduate Research Symposium
Title: “Investigating Defects and Binding Sites in Microporous Metal-Organic Frameworks (MOFs) Using Acetonitrile”

College of Science and Technology, Temple University, Philadelphia PA April 2022
Oral Presentation, First Generation in Science Panel
Title: “Personal Adversity and Perseverance as a First-Generation Student”

PROFESSIONAL AFFILIATIONS

Temple University Chemistry Society, Philadelphia PA May 2021 – May 2022
Secretary

- Coordinated weekly club meeting agendas and events such as career fairs, professional advising, and lab meetings for more than twenty students
- Created monthly newsletters using Mailchimp for club members to keep everyone updated about club information

Green Chemistry Committee, Temple University, Philadelphia PA May 2021 – May 2022
Member

- Hosted and helped with green chemistry seminars to educate and provide environmental research which were related to clean energy, sustainable materials, and other to students
- Collaborated with the Office of Sustainability at Temple University to help spread awareness about reuse, reduce, and recycle lifestyles to students on campus
- Connected with Philadelphia EHRS in order to reduce waste, trash, and energy problems in the chemistry building such as lighting reduction, fume hood use, and gloves waste

PROFESSIONAL SERVICE

Temple University General Education, Philadelphia PA September 2022 – Present
Undergraduate Research Ambassador

- Create effective methods to courage and engage undergraduate students with research opportunities
- Mentor three undergraduate students per semester who want to get involved in research by helping them exploring their interests, research fields, and career path
- Connect mentees to research faculty and guide them to apply for grants, choose advantageous classes, and plan research goals

PROFESSIONAL ACTIVITIES

Member of American Chemical Society August 2020 – Present
Member of Young Chemistry Committee, Philadelphia PA August 2021 – Present
Member of The Society of Flavor Chemists, Inc January 2021 – Present

COMMUNITY SERVICE

Saint Maria Goretti Parish, Hatfield PA

August 2018 – April 2019

Catechist

- Designed lesson plans and taught about religion to multiple age groups (Kindergarten, Elementary and Middle school) in accordance with parish and church programs and agreements

Vietnamese Teacher

- Taught Vietnamese language and culture to Vietnamese children and people who were born in the United States to help them engaging with the community and family

Volunteer

- Inspired girls in middle school who were underrepresented into STEM by using Kerbal Space Program and doing science technology activities such as colors mixing, small rockets shooting, and coding

TECHNICAL SKILLS

- Viscosity Measurement
- Solid Compression
- Hardness Testing
- Solvent Extraction
- Drugs Dissolution
- Thin-Layer Chromatography (TLC)
- Gas Chromatography
- High-Performance Liquid Chromatography (HPLC)
- Fourier-Transform Infrared Spectroscopy (FT-IR)
- Temperature-Programmed Desorption Mass Spectroscopy (TPD-MS)
- Ultraviolet Visible Spectroscopy (UV-Vis)
- X-ray Diffraction Machine (XDR)

COMPUTER SKILLS

Programming: Igor, Igor Macro, Origin, Apex 3, Olex, Gaussian, Mercury, and Python

Applications: Spartan, Jmol, ChemDraw, and MathLab

Platforms: Canva, Wix, Wordpress, and Mailchimp

HONORS AND AWARDS

Women in Natural Science Fellowship

2023 - Present

Awarded from *Laney Graduate School - Emory University* for outstanding academic achievement in graduate education where women have been historically underrepresented

Quayle New Graduate Student Award

2023

Awarded from *College of Arts and Science – Emory University* for exceptional research promise based on past experiment and excellent preparation for graduate school

Florence R. Berg Endowed Scholarship

2022

Awarded from *College of Science and Technology - Temple University* for conducting fulltime summer research

Charlotte W. Newcombe Scholarship Awarded from <i>Disability Resources and Services - Temple University</i>	2021 - 2022
Outstanding Member Awarded from <i>Temple University Chemical Society</i>	2020 - 2021
Leading Women Scholarship Awarded from <i>Montgomery County Community College</i> for outstanding academic achievement in science majors	2018 - 2019