

Natalie Wilkinson

Email: nwilkinson7@gatech.edu **Website:** nwilkinson.me **Phone:** 678-218-8624

EDUCATION

Georgia Institute of Technology

Aug. 2016 - Dec. 2019

B.S. Chemistry

GPA: 3.70

Honors Program • Dean's List • Faculty Honors

EMPLOYMENT

Amgen Scholars Program, UC Berkeley College of Chemistry

Research Assistant under John Hartwig, Berkeley, CA

May 2018 - Aug. 2018

- Investigated an enantioselective iridium-catalyzed allylic substitution reaction of fluorinated electrophiles that yield synthetically-versatile chiral fluorinated building blocks.

Georgia Tech Department of Chemistry and Biochemistry

Undergraduate Research Assistant under Jake Soper, Atlanta, GA

May 2016 - Dec. 2018

- Investigating direct fluorination reactions of organozirconocene reagents to produce vinyl fluorides.
- Investigating the optimal conditions for the reactions of silyl enol ethers with a radical CF₃ source in the presence of a Co(II) catalyst to produce α -trifluoromethylated ketones.

Emory University

Department of Chemistry, Atlanta, GA

May 2015 - Aug. 2015

- Investigating the synthesis of a hydrogen peroxide complex of zinc under Chris Scarborough.

Department of Biology, Atlanta, GA

May 2014 - Aug. 2014

- Investigation of motor deficits in 6-hydroxydopamine-lesioned mice in a lever-pressing task under Dieter Jaeger.

PRESENTATIONS

UC Berkeley Amgen Scholars Research Symposium and Poster Session

July 2018

Research presentation on the enantioselective iridium-catalyzed allylic substitution reaction of fluorinated electrophiles.

Amgen Scholars Symposium at UCLA

June 2018

Informal presentation of research on the enantioselective iridium-catalyzed allylic substitution reaction of fluorinated electrophiles to general audience.

Georgia Tech REU Research Symposium and Poster Session

July 2016

Research presentation on the Direct Fluorination Reactions of Organozirconocene Reagents to Produce Vinyl Fluorides.

Institute on Neuroscience Research Symposium

July 2014

Research presentation on the Investigation of Motor Deficits in 6-Hydroxydopamine-Lesioned Mice in a Lever-Pressing Task.

ACTIVITIES

Georgia Tech Chemistry Department, Lab and Recitation Teaching Assistant

Aug. 2017 - Dec. 2018

Freshman Chemistry Program CHEM 1310 TA • Chemistry and Biochemistry CHEM 2214 TA

- Guided weekly lab and recitation classes and led collaborative environments for recitation classes and office hours

Georgia Tech Undergraduate Research Ambassador, Vice President of Internal Affairs

Aug. 2018 - Present

- Manage club budget, volunteering opportunities, and organization of events for undergraduate research opportunities

SKILLS

RESEARCH TECHNIQUES: NMR (1H, 19F, 31P) , IR (KBr pellets, Nujol, ATR) , UV-Vis, Chromatography (Gas, Liquid, Column, GC-Mass Spectrometry, Thin Layer, Prep TLC), Inert Atmosphere Chemistry (Schlenk line, glove box) , Fluorescence, Electron Paramagnetic Resonance , Powder X-Ray Diffraction , Flow Injection Analysis , Small Animal Research

SOFTWARE: Python, Bruker, Varian, MestreNova , TopSpin, Mathematica , ChemDraw , Chem3D , Excel, Java

RELEVANT COURSES: Advanced Spectroscopy , Organometallic Chem, Analytical Chem and Instrumental Analysis , Organic Chem, Inorganic Chem, Thermodynamics, Quantum Mechanics, Physical Chem Lab, Biochemistry