Christopher R. Turlington
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Education
Ph.D. Inorganic Chemistry, University of North Carolina at Chapel Hill, 2015
Joseph L. Templeton and Maurice Brookhart, joint thesis advisers
B.S. Chemistry, Furman University, Summa Cum Laude, 2010

Experience
Assistant Professor of Chemistry, Hope College, 2017-present
Postdoctoral Scholar, Stanford University, Robert M. Waymouth (adviser), 2015-2017
Tomato Farmer, 1996-2005

Awards
Towsley Scholar Semi-Finalist, Hope College, 2020
NIH Ruth L. Kirschstein National Research Service Award Individual Postdoctoral Fellowship, 2015
NSF Graduate Research Fellowship, 2010
Phi Beta Kappa, 2010
Goldwater Scholar, 2009
ACS Undergraduate Award in Inorganic Chemistry, 2009
Camille and Henry Dreyfus Foundation Chemistry Scholarship, 2008
Freshman Chemistry Award, Furman University, 2007
Duke Scholar, Furman University, 2006 – 2010

Current Research Funding
2017 ACS PRF Undergraduate New Investigator, $55,000, "Exploration of Nitrile Oxidation Reactions: Towards Synthesis of Metal-Nitrene Complexes and Nitrene Transfer to Substrates." May 2018 – August 31, 2021.
2020 Michigan Space Grant Consortium (NASA) Undergraduate Research Fellowship, $3,000, "Recyclable Polymers for Oxidation Reactions." May 2020 – April 2021.

Independent Career Publications (Hope Undergraduate Co-Author, Corresponding Author*)
11) James E. Bird, Cole A. Hammond, Kjersti G. Oberle, Erin E. Ramey, Yutong Zou, Ryan C. Lash, and Christopher R. Turlington*. "Nitrile Oxidation at a Ruthenium Complex leading to Intermolecular Imido Group Transfer." *Organometallics* **2020**, *39*, 3775–3779. pubs.acs.org/doi/10.1021/acs.organomet.0c00589
10) Anna M. Bauer, Erin E. Ramey, Kjersti G. Oberle, Gretchen A. Fata, Chloe D. Hutchison, and Christopher R. Turlington*. "Cross-linked poly(4-vinylpyridine-*N*-oxide) as a polymer-supported oxygen atom transfer reagent." *Tetrahedron Letters* **2019**, *60*, 151193. doi.org/10.1016/j.tetlet.2019.151193

Postdoctoral Publications

9) Timothy R. Blake, Wilson C. Ho, Christopher R. Turlington, Xiaoyu Zang, Melanie A. Huttner, Paul A. Wender, and Robert M. Waymouth. "Synthesis and Mechanistic Investigations of pH-Responsive Cationic Poly(aminoester)s." *Chemical Science* **2020**, *11*, 2951-2966. doi.org/10.1039/C9SC05267D

8) Nancy L. Benner, Rebecca L. McClellan, Christopher R. Turlington, Ole A. W. Haabeth, Robert M. Waymouth, and Paul A. Wender. "Oligo(serine ester) Charge-Altering Releasable Transporters: Organocatalytic Ring-Opening Polymerization and their Use for *in Vitro* and *in Vivo* mRNA Delivery." *Journal of the American Chemical Society* **2019**, *141*, 8416-8421. pubs.acs.org/doi/10.1021/jacs.9b03154

Graduate School Publications

7) Christopher R. Turlington, Peter S. White, Maurice Brookhart, and Joseph L. Templeton. "Sequential Nitrene Transfers to an Organometallic Half-Sandwich Iridium Complex." *Organometallics* **2015**, *34*, 4810-4812. pubs.acs.org/doi/10.1021/acs.organomet.5b00717

6) Christopher R. Turlington, Peter S. White, Maurice Brookhart, and Joseph L. Templeton. "Half-Sandwich Rh(Cp*) and Ir(Cp*) Complexes with Oxygen Atom Transfer Reagents as Ligands." *Journal of Organometallic Chemistry* **2015**, *792*, 81-87. doi.org/10.1016/j.jorganchem.2015.02.007

5) Christopher R. Turlington, James Morris, Peter S. White, William W. Brennessel, William D. Jones, Maurice Brookhart, and Joseph L. Templeton. "Exploring Oxidation of Half-Sandwich Rhodium Complexes: Oxygen Atom Insertion into the Rhodium-Carbon Bond of κ^2-Coordinated 2-Phenylpyridine." *Organometallics* **2014**, *33*, 4442-4448. pubs.acs.org/doi/10.1021/om500660n

4) Christopher R. Turlington, Peter S. White, Maurice Brookhart, and Joseph L. Templeton. "Oxygen Atom Transfer to a Half-Sandwich Iridium Complex: Clean Oxidation Yielding a Molecular Product." *Journal of the American Chemical Society* **2014**, *136*, 3981-3994. pubs.acs.org/doi/10.1021/ja413023f

3) Christopher R. Turlington, Daniel P. Harrison, Peter S. White, Maurice Brookhart, and Joseph L. Templeton. "Probing the Oxidation Chemistry of Half-Sandwich Iridium Complexes with Oxygen Atom Transfer Reagents." *Inorganic Chemistry* **2013**, *52*, 11351-11360. pubs.acs.org/doi/abs/10.1021/ic4016405

Undergraduate Publications (Undergraduate Co-Author)

2) Chivin Sun, Christopher R. Turlington, W. Walsh Thomas, James H. Wade, Wade M. Stout, David L. Grisenti, William P. Forest, Donald G. VanDerveer, and Paul S. Wagenknecht. "Synthesis of *cis* and *trans* Bis-alkynyl Complexes of Cr(III) and Rh(III) Supported by a Tetradentate Macrocyclic Amine: A Spectroscopic Investigation of the M(III)–Alkynyl Interaction." *Inorganic Chemistry* **2011**, *50*, 9354-9364. pubs.acs.org/doi/10.1021/ic2009336

1) David L. Grisenti, W. Walsh Thomas, Christopher R. Turlington, Matthew D. Newsom, Christopher J. Priedemann, Donald G. VanDerveer, and Paul S. Wagenknecht. "Emissive Chromium(III) Complexes with Substituted Arylethynyl Ligands." *Inorganic Chemistry* **2008**, *47*, 11452-11454. pubs.acs.org/doi/10.1021/ic801376p

Selected Presentations (Hope Undergraduate Author, Corresponding Author*)

6) James E. Bird, Cole A. Hammond, and Christopher R. Turlington*. "Synthesis of Ruthenium(II) Polypyridyl Complexes and their Oxidation Behavior in Reactive Solvents." *260th Meeting of the American Chemical Society*. San Francisco, California, August 16 – 20 (**2020**). Poster presentation. Conference held virtually due to COVID-19 pandemic.

5) Kjersti G. Oberle, Erin E. Ramey, Yutong Zou, Katherine A. Webster, and Christopher R. Turlington*. "Synthesis of a 4-Iodostyrene Monomer and its Behavior in Polymerization Reactions." *260th Meeting of the American Chemical Society*. San Francisco, California, August 16 – 20 (**2020**). Poster presentation. Conference held virtually due to COVID-19 pandemic.

4) Christopher R. Turlington*. "Cross-linked Poly(4-vinylpyridine-N-oxide) as a Polymer-Supported Oxygen Atom Transfer Reagent." *260th Meeting of the American Chemical Society*. San Francisco, California, August 16 – 20 (**2020**). Oral presentation. Conference held virtually due to COVID-19 pandemic.
3) Kjersti G. Oberle, Jared C. Lowe, and Christopher R. Turlington*. "Novel Chiral Organic Catalysts for Methacrylate Polymerizations." *257th Meeting of the American Chemical Society*. Orlando, Florida, March 31 – April 4 (**2019**). Poster presentation.
2) Gretchen A. Fata, Chloe D. Hutchison, and Christopher R. Turlington*. "Poly(4-vinylpyridine-*N*-oxide) as an Oxygen Atom Transfer Reagent." *257th Meeting of the American Chemical Society*. Orlando, Florida, March 31 – April 4 (**2019**). Poster presentation.
1) Ryan C. Lash and Christopher R. Turlington*. "Synthesis and Characterization of Ruthenium Complexes bearing Tris(pyrazolyl)methane or Terpyridine as a Tridentate Ligand." *257th Meeting of the American Chemical Society*. Orlando, Florida, March 31 – April 4 (**2019**). Poster presentation.

Snapshot of Student Involvement in Research Activities (Beginning Fall 2017)
Total Undergraduate Student Researchers: 17
Total Undergraduate Co-Authors on Peer-Reviewed Publications: 11
Total Undergraduate Students at National Conferences: 11 (combining to give 5 poster presentations)

Courses Taught

CHEM 125 – General Chemistry 1:	211 students over 5 sections (F17, F18, F19)
CHEM 126 – General Chemistry 2:	195 students over 4 sections (S18, S19, S20)
CHEM 127 – General Chemistry 1 Lab:	58 students over 3 sections (F17, F18, F19)
CHEM 128 – General Chemistry 2 Lab:	45 students over 3 sections (S18, S19)
CHEM 322 – Inorganic Chemistry	17 students in 1 section (S21)
CHEM 324 – Inorganic Chemistry Lab:	14 students in 3 sections (S20, S21)
CHEM 490/490R – Research in Chemistry:	42 students (S18, F18, S19, F19, S20, F20, S21)

Internal Service Activities
Faculty Adviser to ACS Chemistry Club, 2019-present**.** The student-run Chemistry Club does science outreach in the community and plans social events for chemistry students, including demonstrations during National Chemistry Week and picnics for student researchers during the summer.
General Chemistry Coordinator, 2019-2020, 2021-2022. Responsibilities include standardizing the general chemistry experience across all course sections. I organized weekly instructor meetings to promote active learning techniques, discuss best teaching practices, and kept the faculty teaching the course on the same page.
Member on division-wide "Teaching Science in Prison" committee, 2019. We were tasked with developing a general education science course to be taught at a local correctional facility as part of a broader general education curriculum. The program culminates in a bachelor's degree from Hope College.

External Service Activities
Tetrahedron Letters Reviewer, 2019-present
ACS PRF Reviewer, 2018-present
ACS Member, 2017-present

Research Collaborations
Dan Harrison, Virginia Military Institute. Electrocatalytic polymerization of cyclic carbonates.
Hemamala Karunadasa, Stanford University. Instrument Collaborator (X-ray Photoelectron Spectroscopy).

Gellert Mezei, Western Michigan University. Instrument Collaborator (Crystallography and Single Crystal X-ray Diffractometer).

Dan Jones, Michigan State University. Instrument Collaborator (Matrix Assisted Laser-Desorption Ionization Mass Spectrometry).