Christopher Lawrence

PhD Candidate

Education

2018-Present **PhD Canditate: Atmospheric Science**, *University at Albany*, Albany, NY.
- Thesis: Aqueous Chemistry at Whiteface Mountain: A New Chemical Regime Under Changing Emissions
- Advisor: Dr. Sara Lance

2014-2018 **B.S.: Environmental Science**, *College of Environmental Science and Forestry*, Syracuse, NY.
- Minor: Chemistry
- Minor: Mathematics
- Magna Cum Laude

Research and Teaching Interests

Atmospheric Chemistry.
- Aqueous processing of organic carbon
- Aqueous chemistry impacts on secondary organic aerosol
- Organic/inorganic interactions in the condensed phase

Atmospheric biogeochemistry.
- Organic Carbon and nitrogen cycles

Wet deposition.
- Organic carbon and nitrogen deposition

Statistics.

Professional Experience

Summer 2018-Present **Graduate Research Assistant**, *University at Albany*, Albany, NY.

2020-2021 **Chair of Wage and Benfits Committee of the Graduate Student Association**, *University of Albany*, Albany, NY.

2020-2021 **Vice President of Registered Graduate Student Organization**, *University of Albany*, Albany, NY.

2017-2019 **Undergraduate Research Project**, *College of Environmental Science and Forestry*, Syracuse, NY.

Atmospheric Sciences Research Center (ASRC), University of Albany, Albany, NY
+1 518-605-8771 • `celawrence@albany.edu` • *ChrisLaw08*

Awards

November 2022 **National Atmospheric Deposition Program Best Student Presentation Award**, *Title: The Emerging Role of Organic Carbon in Atmospheric Chemistry at Whiteface Mountain.*

September 2021- August 2024 **National Aeronautics & Space Administration (NASA) Future Investigators in NASA Earth and Space Science and Technology (FINESST) Award**, *Title: Emergence of a New Chemical Regime: Organic Carbon and Base Cations in Whiteface Mountain Cloud Water, Award Number: 20-EARTH20-0298.*

Fall 2021 **National Center for Atmospheric Research Advanced Studies Program Graduate Vistor Program Award**, *Advisor: Dr. Mary Barth.*

March-April 2020 **National Center for Atmospheric Research Atmospheric Chemistry Observations and Modeling (ACOM) Visitor Program**, *Advisor: Dr. Mary Barth.*

Publications

1. Lawrence, C. E., Casson, P., Brandt, R., Schwab, J. J., Dukett, J. E., Snyder, P., Yerger, E., Kelting, D., VandenBoer, T. C., & Lance, S. (2023). Long-term monitoring of cloud water chemistry at Whiteface Mountain: The emergence of a new chemical regime. *Atmospheric Chemistry and Physics*, *23*(2), 1619–1639. `https://doi.org/10.5194/acp-23-1619-2023`
2. Lawrence, C., & Mao, H. (2019). Anthropogenic and Natural Factors Affecting Trends in Atmospheric Methane in Barrow, Alaska. *Atmosphere*, *10*(4), 187. `https://doi.org/10.3390/atmos10040187`

Presentations

2023 **Investigating the Contribution of Cloud Water Chemistry to Organic Acids at Whiteface Mountain**, *American Meteorological Society's Annual Meeting*, Denver, CO.
- Oral Presentation

2022 **The Emerging Role of Organic Carbon in Atmospheric Chemistry at Whiteface Mountain**, *National Atmospheric Depositions Program's Annual Meeting*, Knoxville, TN.
- Oral Presentation

2022 **Investigating the Chemistry of Water Soluble Organic Gases in Upstate New York Using WRF-Chem and Chemical Box Modeling**, *American Meteorological Society's Annual Meeting*, Virtual.
- Oral Presentation

2021 **Changes in Atmospheric Aqueous Chemistry at Whiteface Mountain: Shifting focus from Acid rain**, *National Atmospheric Deposition Program*, Virtual.
- Oral Presentation

2021 **Investigating Characteristic Air Masses Affecting Organic and Inorganic Cloud Water Composition at Whiteface Mountain Using HYSPLIT and Cluster Analysis**, *American Meteorological Society's Annual Meeting*, Virtual.
- Oral Presentation

2020 **Emergence of New Chemical Regime: Growing Abundance of Water Soluble Organic Carbon Associated with a Growing Ion Imbalance**, *American Meteorological Society's Annual Meeting*, Boston, MA.
- Oral Presenation

2019 **Emergence of a New Chemical Regime: Growing Abundance of Water Soluble Organics in Cloud Water Linked with a Growing Ion Imbalance**, *American Association for Aerosol Research*, Portland, OR.
- Poster

2019 **Monitoring Cloud Water Chemistry (including Organics) at Whiteface Mountain, NY**, *American Meteorological Society's Annual Meeting*, Phoenix, AZ.
- Poster

2018 **Monitoring Cloud Water Chemistry (including Organics) at Whiteface Mountain, NY**, *National Atmospheric Deposition Program's Annual Meeting*, Albany, NY.
- Poster