Eric J. Mei

678-848-1407 • emei@uw.edu

EDUCATION

PhD, University of Washington *2023 – Present*
Atmospheric Sciences, Advisors: Alex J. Turner, Gregory J. Hakim

MS, Georgia Institute of Technology *2022 – 2023*
Environmental Engineering, Advisor: Armistead (Ted) G. Russell GPA: 4.00

BS, Georgia Institute of Technology *2018 – 2022*
Environmental Engineering GPA: 4.00
Minor: Earth and Atmospheric Sciences (Environmental Chemistry)

RESEARCH

Department of Atmospheric Sciences, University of Washington *2023 – Present*
Graduate Research Assistant (PI: Alex Turner and Gregory Hakim)
- Developing computationally efficient surrogate models for chemistry climate system
- Investigating drivers of methane variability with deep learning emulators for chemistry climate models

School of Civil and Environmental Engineering, Georgia Institute of Technology *2022 – 2023*
Graduate Research Assistant (PI: Armistead (Ted) Russell)
- Performed thesis research separating impact of natural gas price trends from regulations on air quality
- Sampled ambient mercury at near-road site in joint project with the University of Nevada Reno
- Modeled source contributions to $PM_{2.5}$ composition during Jan-Feb 2022 in Fairbanks, AK

School of Civil and Environmental Engineering, Georgia Institute of Technology *2022*
Research Assistant (PI: Jennifer Kaiser)
- Evaluated existing and novel ethylene oxide (EtO) measurement techniques for Georgia Environmental Protection Division
- Communicated scientific analysis to stakeholders with less technical background in a detailed report

School of Civil and Environmental Engineering, Georgia Institute of Technology *2021 – 2022*
Undergraduate Research Assistant (PI: Xing Xie)
- Identified ability of superabsorbent polymer (PSAP) beads to isolate analytical targets from wastewater
- Helped develop VirusTrack, a commercial method for the use of PSAP beads in COVID-19 surveillance
- Competed in the CEE Entrepreneurial Impact Competition and presented VirusTrack to industry panel

School of Earth and Atmospheric Sciences, Georgia Institute of Technology *2020*
Undergraduate Research Assistant (PI: Yuanzhi Tang)
- Analyzed transformation of contaminants in sewage sludge post-anaerobic digestion
- Obtained N and P concentrations of wastewater samples through spectrophotometry

PUBLICATIONS

4. **Mei, E. J.**, Z. Gao, P. K. Hopke, S. Ebelt, D. Q. Rich, A. G. Russell (2024). Impacts of fuel prices and regulations on electricity generation emissions and urban air quality. *ACS ES&T Air.* https://doi.org/10.1021/acsestair.3c00034

3. **Mei, E. J.**, A. C. Moore, and J. Kaiser (2023). Suitability of new and existing ambient ethylene oxide measurement techniques for cancer inhalation risk assessment. *Environmental Pollution.* doi.org/10.1016/j.envpol.2023.122481

2. Gustin, M. S., S. M. Dunham-Cheatham, N. Allen, N. Choma, W. Johnson, S. Lopez, A. G. Russell, **E. J. Mei**, O. Magand, A. Dommergue, T. Elgiar (2023). Observations of the chemistry and concentrations of reactive Hg at locations with different ambient air chemistry. *Science of The Total Environment.* doi.org/10.1016/j.scitotenv.2023.166184

1. Chen, W., **E. J. Mei**, and X. Xie (2022). Virus stabilization with enhanced porous superabsorbent polymer (PSAP) beads for diagnostics and surveillance. *ACS ES&T Water.* doi.org/10.1021/acsest water.2c00239

TALKS

2023   AQ ATL23 Symposium, "Impacts of Fuel Prices and Regulations on Electricity Generation Emissions and Urban Air Quality." **Best talk.**

POSTERS

2024   CS4Env Symposium, "Development of a linear inverse model to emulate chemistry-climate dynamics."

SCHOLARSHIPS, FELLOWSHIPS, and AWARDS

ARCS Foundation Scholar at University of Washington	*2023*
Georgia Power Fellowship at Georgia Institute of Technology	*2022*
Environmental Engineering and Science Foundation Master's Degree Scholarship	*2022*
Brown & Caldwell LGBTQIA+ Scholarship	*2022*
Georgia Engineering Foundation ACEC Scholarship	*2022*
ADP Henry Taub National Merit Scholarship	*2018 – 2022*
Zell Miller Scholarship	*2018 – 2022*

TEACHING EXPERIENCE

Tutoring and Academic Support, Georgia Institute of Technology   *2019 – 2020*
Peer-Led Undergraduate Study Session Leader – Physics 1
- Coordinated with the professor to lead study sessions for over 400 students twice a week
- Trained in guiding and facilitating learning for students via CRLA Level II certification

College of Sciences, Georgia Institute of Technology   *2019*
Undergraduate Teaching Assistant – Physics 1
- Managed and taught the weekly 3-hour lab activities and exercises of three laboratory sections
- Graded weekly laboratory quizzes and reviewed concepts in succinct sessions

PROFESSIONAL MEMBERSHIPS

American Geophysical Union