Elisabeth Andrews

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Education

University of Illinois, Department of Civil Engineering — Urbana, IL

- PhD Environmental Engineering 1996
- MS Environmental Engineering 1991

California Institute of Technology — Pasadena, CA

- BS Chemical Engineering 1989

Experience

1999–present NOAA/GML and University of Colorado — Boulder, CO

CIRES Research Scientist

- Data analysis of aerosol optical data related to climate change, trends, extreme events and for global model evaluation
- Presentation of results in peer-reviewed journals and scientific conferences
- Supervision/mentoring of students and colleagues doing aerosol research
- Laboratory and field maintenance of aerosol monitoring instruments
- Computer programming for data analysis and web-based documentation

1999-2000 CIRES Outreach — Boulder, CO

CIRES Research Scientist

- Studied involvement and retention of scientists in outreach programs
- Supervised graduate students doing outreach research
- Participated in CIRES Earthworks for K-12 teacher's course

1998-1999 University of Northern Colorado — Greeley, CO

NSF PFSMETE Post-doc

- Studied factors influencing high school student interest in science
- Taught ‘Introduction to environmental science’ undergraduate elective
- Taught ‘Air pollution and statistics’ course to Upward Bound students.

1997-1998 Electric Power Research Institute — Palo Alto, CA

Consultant

- Analyzed aerosol chemical, optical and gravimetric data from SEAVS field program

1996-1997 Colorado State University — Fort Collins, CO

CIRA Post-doc

- Intercomparison of cloud droplet monitoring techniques
- Studied cloud-aerosol interactions

Awards

2009 Haagen-Smit Award for outstanding paper
2014 CIRES Silver Medal Award for establishment of NOAA Federated Aerosol Network
2016 CIRES Technology Transfer Award for CLAP development

Publications

Submitted/In Review

Hallar, A.G., "Storm Peak Laboratory: A Research and Training Facility for the Atmospheric Sciences," submitted to *BAMS*, June 2024.

Mayol-Bracero, O. L., et al., "African dust and air quality in the Greater Caribbean region: The extreme impact of the "Godzilla" dust event of June 2020," in revision for *BAMS*, August 2024.

Park, D.-H., et al., "Decadal decrease in nucleated particles across a range of environments" in revision for *Nature Geoscience*, July 2024.

Rejano, F., et al., "CCN estimations at a high-altitude remote site: role of organic aerosol variability and hygroscopicity," revisions submitted to *Atmos. Chem. Phys.*, October 2024.

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Malm, W.C., Schichtel, B.A., Prenni, A., Day, D., Andrews, E., Perkins, R., Sullivan, A., Tigges, M., "Revisiting integrating nephelometer measurements," *Atmos. Environ.*, 319, 120237, https://doi.org/10.1016/j.atmosenv.2023.120237, 2023.

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Ohata, S. Mori, T., Kondo, Y., Sharma, S., Hyvärinen, A., Andrews, E., Tunved, P., Asmi, E., Backman, J., Servomaa, H., Veber, D., Eleftheriadis, K., Vratolis, S., Krejci, R., Zieger, P., Koike, M., Kanaya, Y., Yoshida, A., Moteki, N., Zhao, Y. Tobo Y., Matsushita, J., Oshima, N., "Estimates of mass absorption cross sections of black carbon for filter-based absorption photometers in the Arctic," *Atmos Meas. Tech.*, https://doi.org/10.5194/amt-14-6723-2021, 2021.

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model aerosol trends with ground-based observations over the last two decades - an AeroCom and CMIP6 analysis," *Atmos. Chem. Phys.*, 20, 13355–13378, https://doi.org/10.5194/acp-20-13355-2020, 2020.

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