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EDUCATION

B.A.	1999	Physics	Truman State University
M.S.	2001	Atmospheric and Oceanic Sciences	University of Colorado at Boulder
Ph.D.	2003	Atmospheric and Oceanic Sciences	University of Colorado at Boulder

Title of dissertation: *"Use of Tunable Diode Laser Closed Path Hygrometer for the Measurement of Total Water in Tropopause Cirrus"*

PROFESSIONAL EXPERIENCE

2016 – Present	Associate Professor, Department of Atmospheric Sciences, University of Utah, Salt Lake City, UT.
2006 – Present	Director, Storm Peak Laboratory, Steamboat Springs, CO.
2016 – Present	Affiliate Research Professor, Division of Atmospheric Sciences, Desert Research Institute, Reno, NV.
2014 – 2016	Research Professor, Division of Atmospheric Sciences, Desert Research Institute, Reno, NV.
2012 – 2014	Program Director, Physical and Dynamic Meteorology (PDM), Div. of Atmospheric & Geospace Sciences (AGS), National Science Foundation, Arlington, VA.
2012 – 2014	Associate Research Professor, Division of Atmospheric Sciences, Desert Research Institute Reno, NV.
2006 – 2012	Assistant Research Professor, Division of Atmospheric Sciences, Desert Research Institute Reno, NV.
2006 – 2016	Adjunct Faculty, Atmospheric Science Program, Department of Physics, University of Nevada, Reno.
2004 – 2006	National Research Council Fellow, Postdoctoral Research Associate, NASA Ames Research Center, Moffett Field, CA.; Advisor: Dr. Anthony Strawa.
2006 –2006	Adjunct Professor, Environmental Studies, Santa Clara University, CA.
1999 –2003	Graduate Research Assistant, Laboratory for Atmospheric and Space Physics; University of Colorado at Boulder, CO.; Advisor: Dr. Linnea Avallone.
2003	Graduate Teaching Assistant, Program in Atmospheric and Oceanic Studies, University of Colorado at Boulder, CO.
1996 – 1999	Undergraduate Teacher's Assistant, Multidisciplinary course titled "Physics for Poets", Department of Physics, Truman State University, Kirksville, MO. Advisor: Dr. Ken Hahn.

1999	Undergraduate Research Assistant Truman State, University Physics Department, Kirksville, MO; Advisor: Dr. David Chyba.
1998	Student Volunteer for National Weather Service, Weather Forecasting Office in Pleasant Hill, MO.

AWARDS/HONORS RECEIVED

- Awardee, 2012 Regents' Rising Research Award from the Nevada System of Higher Education Board of Regents.
- Awardee, Peter B. Wagner 2011 Medal of Excellence for DRI Scholars in the Early Stages of Career Development.
- National Academy of Sciences Postdoctoral Research Fellowship; February 2004 – July 2006
- University of Colorado at Boulder, Program in Atmospheric and Oceanic Science, Graduate Student Research Fellowship – August 1999 to December 2003
- University of Colorado at Boulder, Program in Atmospheric and Oceanic Science, Graduate Student Travel Grant for European Geophysical Society Meeting -2003
- National Aeronautics and Space Administration, Group Achievement Award – CRYSTAL-FACE – 2003
- Truman State University, President's Combined Ability Scholarship – 1995 to 1999
- Truman State University, Eugene Smith Physics Scholarship – 1997

FUNDED PROJECTS as Principal Investigator (PI):

Title: Aerosol-Cloud-Precipitation Interactions during StormVEX
Sponsor: Department of Energy Atmospheric Science Research
Funding: $361,252 Duration: 7/15 – 6/18

Title: Major Research Instrumentation: Acquisition of New Generation of Aerosol, Trace Gas, and Water Isotope Instruments for Storm Peak Laboratory
Sponsor: National Science Foundation
Funding: $217,880 Duration: 4/11 - 3/13

Title: Collaboration between DRI and NASA GISS - Bioaerosols in Cloud Processing
Sponsor: Nevada NASA EPSCoR program
Funding: $62,416 Duration: 8/11 – 8/12

Title: Collaborative Research: Colorado Airborne Multi-Phase Cloud Study (CAMPS)
Sponsor: National Science Foundation
Funding: $117,180 Duration: 01/10 – 12/12

Title: Collaborative Research: Hygroscopic Properties of Aerosol Organics
Sponsor: National Science Foundation
Funding: $347,253 Duration: 11/09 – 10/12

Title: Track 1 – Geoscience Research at Storm Peak Lab (GRASP)

Sponsor: National Science Foundation
Funding: $198,216 Duration: 07/09 – 06/12

Title: Upgrades to Storm Peak Laboratory, a High Elevation Atmospheric Research and Education Station
Sponsor: National Science Foundation
Funding: $601,245 Duration: 03/10 – 02/12

Title: Collaborative Research: ADVANCE Atmospheric Science Collaborations and Enriching Networks (ASCENT)
Sponsor: National Science Foundation
Funding: $278,850 Duration: 01/09 – 12/11

Title: The Storm Peak Lab Cloud Property Validation Experiment (StormVEx)
Sponsor: Department of Energy
Funding: $137,841 Duration: 11/09 – 10/11

Title: NASA JPL Airborne Cloud Radar Trailer at Storm Peak Lab Cloud Properties Validation
Sponsor: UCCSN Nevada - EPSCoR
Funding: $36,520 Duration: 07/09 – 06/10

Title: Collaborative Research: RAPID--Investigating Potential Secondary Organic Aerosol (SOA) Increases Due to Beetle Infestation across the Western United States
Sponsor: National Science Foundation
Funding: $55,581 Duration: 05/09 – 5/10

Title: Geoscience Research at Storm Peak with Diversity (GRASP)
Sponsor: National Science Foundation
Funding: $71,913 Duration: 03/07 – 04/08

Title: Climatic Studies of Thin Cirrus
Sponsor: NASA-Ames Research Center
Funding: $93,028 Duration: 01/07 – 12/07

FUNDED PROJECTS as Co-Principal Investigator (Co-PI):

Title: Collaborative Research: NO_3 Induced Nighttime Air Chemistry
Investigator: W. Goliff
Sponsor: National Science Foundation
Funding: $310,008 Duration: 07/07 – 06/11

Title: Local Host and Logistical Support for DOE-ARM AMF2 Deployment to StormVEx
Investigator: I. McCubbin
Sponsor: DOE - ANL
Funding: $464,635 Duration: 07/10 – 08/11

Title: MRI: Development of a Cavity Ring-Down Sensor for Real-Time Measurement of Atmospheric Mercury Concentrations and Fluxes
Investigator: D. Obrist
Sponsor: National Science Foundation
Funding: $653,473 Duration: 09/09 – 08/12

FIELD STUDIES

Utah Winter Fine Particulate Aircraft Study: University of Utah
January – February 2017
Increase scientific understanding of the complex atmospheric chemistry that drives the formation of unhealthy levels of particulate matter.

Isotopic Fractionation in Snow (IFRACS) – Storm Peak Laboratory:
December 2013 – February 2014
Study to improve understanding of precipitation processes in mixed phase orographic clouds and the variation in the isotopic signature of snowfall associated with aerosol effects on cloud microphysics.

Aerosol Lifecycle Intensive Operating Period – Brookhaven National Laboratory:
June-September 2011
Deployment of the Department of Energy Atmospheric Radiation Measurement Mobile Facility for ground based aerosol field campaign.

Colorado Airborne Multiphase Cloud Study (CAMPS) – Laramie, Wyoming:
December 2010- February 2011
Research aircraft flights using the University of Wyoming King Air over the StormVEx field sites.

Storm Peak Cloud Properties Validation Experiment (StormVEx):
October 2010 - May 2011
Deployment of the Department of Energy Atmospheric Radiation Measurement Mobile Facility.

Hygroscopic Growth of Organic Aerosols - Storm Peak Laboratory:
June - August 2010
In situ aerosol measurements to study relationship between aerosol chemistry and cloud droplet formation.

Inhibition of Snowfall by Pollution Aerosols II (ISPA II) - Storm Peak Laboratory:
January -February 2010
Investigates the relationships among pollution aerosols, snow growth by riming, and snowfall amounts on the ground.

Storm Peak Aerosol and Cloud Characterization (SPACC) – Storm Peak Laboratory:
March-April 2007
Multiple disciplinary investigations of organic aerosols in the free troposphere.

Inhibition of Snowfall by Pollution Aerosols I (ISPA I) - Storm Peak Laboratory:
January -February 2007
Investigates the relationships among pollution aerosols, snow growth by riming, and snowfall amounts on the ground.

MArine Stratus Radiation Aerosol and Drizzle (MASRAD) – Point Reyes, CA:
July-August 2005
In situ measurements to study relationship between aerosol particles and cloud droplet properties.

Atmospheric Brown Cloud - Post Monsoon EXperiment (APMEX) – Maldives, Indian Ocean:
Oct-Nov 2004
Ground site in situ measurements of aerosol optical properties to study pollution transport.

Caldecott Tunnel – Black Carbon Investigation: Oakland, CA: June 2004
In situ measurements of the aerosol optical properties of vehicle emission inside traffic tunnel.

Extended – MODIS – λ Validation Experiment, Marina, CA: April – May 2004
In situ measurement of aerosol extinction and scattering aboard CIRPAS Twin Otter.

Winter Fly-in (Winfly) 2002, McMurdo, Antarctica: August-November 2002
Ground-based in situ measurements of ClO, BrO, NO, NO_2, and O_3 to study boundary layer ozone depletion.

Cirrus Regional Study of Tropical Anvils and Layers Experiment (CRYSTAL-FACE), Key West, Fl: July 2002
In situ measurements of cirrus cloud total water from NASA WB-57 aircraft.

Instrumentation Development and Education in Airborne Science (IDEAS), Broomfield, CO: April 2002
In situ measurements of H_2O - Counter Flow Virtual Impactor from NCAR C-130 aircraft mentored by Dr. Cynthia Twohy.

SYNERGISTIC ACTIVITES

- Member of the Department of Energy's Atmospheric Radiation Measurements (ARM) Aerosols Measurements and Science Group (2016 – 2019).
- Member of the Department of Energy Atmospheric Radiation Measurements (ARM) Science Board (2015 – 2018).
- Elected to the Department of Energy Atmospheric Radiation Measurements (ARM) User Executive Committee in 2014, an independent body charged with providing objective, timely advice and recommendations to the leadership of the ARM Climate Research Facility.
- Member (2014-2018) of President's Advisory Committee on University Relations (PACUR), which builds and reinforces relationships between UCAR management and its membership.
- Member (2015-present) of the Department of Energy Aerosol Measurements and Science Group, which reports to ARM and interacts closely with Atmospheric System Research to address aerosol measurements needs.
- Guest editor for Special issue in Aerosol and Air Quality Research on Atmospheric Chemistry and Physics at Mountain Sites (2014-2015).
- Hosted the13th AeroCom workshop in Steamboat Springs, CO, September 29 to October 2, 2014.
- Hosted the 2nd AeroSat workshop in Steamboat Springs, CO, September 27-28, 2014.
- Hosted 2014 Symposium on Atmospheric Chemistry and Physics at Mountain Sites in Steamboat Springs, CO, August 11-15, 2014.
- Session Convener at AGU 2013 Meeting for "Chemical, Physical, and Morphological Properties of Remote Aerosols".
- Session Convener at AAAR 2013 Meeting for "Bioaerosols: Characterization and Environmental Impact".
- Session Convener at AGU 2012 and 2013 Meeting for "Aerosol Observations at High Elevation".
- Chair, NSF's Observing Facilities Assessment Panel (OFAP) provided technical and operational assessment of requests associated with the use of NSF's Lower Atmospheric Observing Facilities in the field (2010 to 2012).
- Panelist, NSF's OFAP provided technical and operational assessment of requests associated with the use of NSF's Lower Atmospheric Observing Facilities in the field (2009-2012).
- Chair, the AMS Mountain Meteorology Meeting, Steamboat Springs, CO, August 2012.
- Representative, University Cooperative for Atmospheric Research, Nevada System of Higher Education (2008 to present).
- Served on External Panel to review NASA Langley Science Directorate, focusing on the atmospheric airborne capabilities (2011).
- Chair, Peter B. Wagner Memorial Award for Women in Atmospheric Sciences (2011–2012).
- Chair, Platform Session, "Aerosol optical depth and other aerosol properties" at the Atmospheric Chemistry and Physics at Mountain Sites Symposium, Interlaken, Switzerland, June 2010.

- Participant, NSF Sponsored Biogenic Secondary Organic Aerosol Nordic program (2008–2010). Program included three visits to Nordic research centers in Denmark, Sweden, and Finland.
- Active member of "Earth Science Women's Network" (2007 to present).
- Commonly review NSF, EPA and NASA proposals, both as an adhoc reviewer and via panel service, in atmospheric science and education (2007-present).
- Review for AMS and AGU journals, *Science, Atmospheric Environment, Environmental Science & Technology* (2007-present).
- Featured on CNN, History Channel, The Weather Channel, and nightly news nationally representing Storm Peak Laboratory (2007-present).
- Assisted Timothy R. Gaffney on a chapter for his children's book titled "Extreme Weather Scientists". A chapter features my research experiences at Storm Peak Laboratory (2007-2008).
- Directs a community program at Storm Peak Laboratory, giving field trips middle school students in Northwestern Colorado. This program provides a three-day lesson on the topics of weather and climate and reaches ~ 200 elementary students each year (2007-present).
- Participated in the UCAR Member Representatives Diversity breakout session (2006).
- Seminar Director for Earth Science Division at NASA Ames Research Center (2005).
- Conducted Laboratory Training for students of the Atmospheric Brown Cloud Training School, Hanimaadhoo, Maldives, Oct 9-14, 2004.

MEMBERSHIPS

- 2000-2015 Member, American Geophysical Union
- 2015-2016 Member, American Meteorological Society

PUBLICATIONS

Peer-Reviewed Journal Articles:

Hallar, A.G., N. Molotch, J. Hand, B. Livneh, I. McCubbin, R. Petersen, J. Michalsky, and D. Lowenthal, 2016: Impacts of Increasing Aridity and Wildfires on Aerosol Loading in the Intermountain Western U.S., *Environ. Res. Lett.* **12** 014006.

Taylor, N., D. Collins, D. Lowenthal, B. Zielinska, V. Samburova, N. Kumar, G. Hallar, L. Mazzoleni, and I. McCubbin, 2016: Hygroscopic growth of water soluble organic carbon isolated from atmospheric aerosol collected at U.S. national parks and Storm Peak Laboratory, *Atmospheric Chemistry and Physics,* submitted.

Kassianov , E., M. Pekour, C. Flynn, L. K. Berg, J. Beranek, A. Zelenyuk, C. Zhao, L.R. Leung, P.L. Ma, J. Barnard, A.G. Hallar, I.B. McCubbin, E.W. Eloranta, A. McComiskey, P.J. Rasch, 2016: Large Contribution of Coarse Mode to Aerosol Microphysical and Optical Properties: Evidence from Ground-based Observations of a Trans-Pacific Asian Dust Outbreak at a High-Elevation North American Site, *Journal of Atmospheric Sciences*, submitted.

Sullivan, R. C., Crippa, P., Hallar A. G., Clarisse, L., Leaitch, W. R., Aneja, V. P., and Pryor S.C., 2016: Using satellite-based measurements to explore spatiotemporal scales and variability of drivers of new particle formation, *J. of Geophysical Research*, 121 (20).

Hallar, A.G. E. Andrews, N. Bukowiecki, D. A. Jaffe, N-H Lin, 2016: Overview of the Special Issue "Selected Papers from the 2nd Atmospheric Chemistry and Physics at Mountain Sites Symposium" *Aerosol and Air Quality Research*, Volume 16, No. 3, March 2016, Pages 471-477, doi: 10.4209/aaqr.2016.02.0077

Lowenthal, D., Hallar, A.G., McCubbin, I., David, R., Borys, R., Blossey, P., Muhlbauer, A., Kuang, Z. and Moore,M., 2016. Isotopic Fractionation in Wintertime Orographic Clouds. *Journal of Atmospheric and Oceanic Technology*, *33*(12), pp.2663-2678.

Yu, F., G. Luo, A. G. Hallar: 2016, Vertical profiles and seasonal variations of key parameters controlling particle formation and growth at Storm Peak Laboratory *Aerosol and Air Quality Research*, Volume 16, No. 3, March 2016, Pages 900-908, doi:10.4209/aaqr.2015.05.0341

Hallar, A.G. R. Petersen, I. B. McCubbin, D. Lowenthal, S. Lee, E. Andrews, F. Yu: 2016, Climatology of New Particle Formation and Corresponding Precursors at Storm Peak Laboratory, *Aerosol and Air Quality Research*, Volume 16, No. 3, March 2016, Pages 816-826, doi: 10.4209/aaqr.2015.05.0341.

Hallar, A.G., R. Petersen, E. Andrews, J. Michalsky, I. B. McCubbin, J. A. Ogren: 2015, Contributions of Dust and Biomass-burning to Aerosols at a Colorado Mountain-top Site, Atmos. Chem. Phys., 15, 1–15.

Yu, F., G. Luo, S. C. Pryor, P. R. Pillai, S. H. Lee, J. Ortega, J. J. Schwab, A. G. Hallar, W. R. Leaitch, V. P. Aneja, J. N. Smith, J. T. Walker, O. Hogrefe, and K. L. Demerjian: 2015, Spring and summer contrast in new particle formation over nine forest areas in North America, *Atmospheric Chemistry and Physics*, MS No.: acp-2015-453.

Goliff, W., M. Luria, D. R. Blake, B. Zielinska, A.G. Hallar, R. J. Valente, C. V. Lawson, W.R. Stockwell, 2015: Nighttime air quality under desert conditions, *Atmospheric Environment,* Volume 114, Pages 102-111, ISSN 1352-2310.

Kristensen, T.B., L. Du, Q. T. Nguyen, J. K. Nojgaard, C. Bender Koch, O. Faurskov Nielsen, A. G. Hallar, D. H. Lowenthal, B. Nekat, D. van Pinxteren, H. Herrmann, M. Glasius, H. G. Kjaergaard, M. Bilde, 2015: Physico Chemical Properties of HULIS from Different Environments, *Journal of Atmospheric Chemistry*, Volume 72, Issue 1, pp 65-80.

Yu, F. and A. G. Hallar, 2014: Difference in particle formation at a mountain-top location during the spring and summer: Implications for the role of sulfuric acid and organics in nucleation, *J. of Geophysical Research,* 119, 21, 12,246–12,255.

Yu, H., A. G. Hallar, Y. You, A. Sedlacek, S. Springston, V. P. Kanawade, Y. N. Lee, J. Wang, C. Kuang, R. L. McGraw, I.B. McCubbin, J. Mikkila and S. H. Lee, 2013: Sub-3 nm Particles Observed at the Coastal and Continental Sites in the United States, *J. of Geophysical Research*, *119,* doi:10.1002/2013JD020841.

Hallar, A.G., D. H. Lowenthal, S. L. Clegg, V. Samburova, N. Taylor, L. R Mazzoleni, B. K. Zielinska, T. B Kristensen, G. Chirokova, I. B. McCubbin, C. Dodson, D. Collins, 2013: Chemical and Hygroscopic Properties of Aerosol Organics at Storm Peak Laboratory, *J. of Geophysical Research*, 118, 4767 - 4779, doi:10.1002/jgrd.50373.

Zhao, Y., A. G. Hallar, and L. R. Mazzoleni, 2013: Atmospheric organic matter in clouds: exact masses and molecular formula identification using ultrahigh resolution FT-ICR mass spectrometry; *Atmos. Chem. Phys.,* 13, 12343 -12362, doi:10.5194/acp-13-12343-2013, 2013.

Friedman, B., A. Zelenyuk,, J. Beránek, G. Kulkarni, M. Pekour, A.G. Hallar, I.B. McCubbin, J. A. Thornton, and D. J. Cziczo, 2013: Aerosol measurements at a high elevation site: composition, size, and cloud condensation nuclei activity, *Atmos. Chem. Phys*., 13, 11839-11851.

Asmi, A., M. Collaud Coen,, J.A. Ogren, E. Andrews, P. Sheridan, A. Jefferson, E. Weingartner, U. Baltensperger, N. Bukowiecki, H. Lihavainen, N. Kivekäs, E. Asmi, P. P. Aalto, M. Kulmala,, A. Wiedensohler, W. Birmili, A. Hamed, C. O'Dowd, S.G. Jennings, R. Weller, H. Flentje, A.M. Fjaeraa, M. Fiebig, C.L. Myhre, A. G. Hallar, E. Swietlicki, A. Kristensson, and P. Laj, 2013: Aerosol decadal trends – Part 2: In-situ aerosol particle number concentrations at GAW and ACTRIS stations, *Atmos. Chem. Phys*., 13, 895-916, doi:10.5194/acp-13-895-2013.

Amin, H. S, R. S. Russo, B. Sive, E. R. Hoebeke, C. Dodson, I. B. McCubbin, A. G. Hallar, K. E. Huff Hartz, 2013:

Monoterpene emissions from bark beetle infested Engelmann spruce trees, *Atmospheric Environment,* Volume 72, 130–133.

Berg, A. R., C.L. Heald, K. E. Huff Hartz, A.G. Hallar, A. J. H. Meddens, J.A. Hicke, J.-F. Lamarque, and S. Tilmes, 2013: The impact of bark beetle infestations on monoterpene emissions and secondary organic aerosol formation in western North America, *Atmos. Chem. Phys*., **13**, 3149-3161, doi:10.5194/acp-13-3149-2013.

Samburova, V., A. G. Hallar, L. R. Mazzoleni, P. Saranjampour, D. Lowenthal, S. Kohl, and B. Zielinska, 2013: Composition of the water-soluble organic fraction in atmospheric remote aerosols, *Environmental Chemistry,* http://dx.doi.org/10.1071/EN13079.

Marchand, R., G. G. Mace, A. G. Hallar, I. B. McCubbin, S. Y. Matrosov and M. Shupe, 2013: Enhanced Radar Backscattering due to Oriented Ice Particles at 95 GHz during StormVEx, *J. of Atmospheric and Oceanic Technology*, doi:10.1175/JTECH-D-13-00005.1.

Hallar, A.G., L. Avallone, H. Thiry, and L. Edwards, 2015: ASCENT, A Discipline Specific Model to Support the Retention and Advancement of Women in Science, American Geophysical Union Book Series, *Best Practices towards Gender Parity in the Academic Science Departments,* 70, 135.

Avallone, L, A. G. Hallar, H. Thiry, L. M. Edwards, 2013: Supporting the Retention and Advancement of Women in the Atmospheric Sciences: What women are saying" *Bulletin of the American Meteorological Society, **94**,* 1313–1316.doi: http://dx.doi.org/10.1175/BAMS-D-12-00078.1.

Hallar, A.G., A. Fridlind, J. A. Huffman, 2012: Biological Aerosol Effects on Clouds and Precipitation, *EOS*, Meeting Summary, 93, 51, December 18.

Kristensen, T., H. Wex, B. Nekat, J. K. Nøjgaard, D. van Pinxteren, D. H. Lowenthal, L. R. Mazzoleni, K. Dieckmann, C.B. Koch, T. F. Mentel, H. Herrmann, A. G. Hallar, F. Stratmann, and Merete Bilde, 2012: Hygroscopic growth and CCN activity of HULIS from different environments, *J. of Geophysical Research*, 117, D22, 27.

Mazzoleni, L.R., P. Saranjampour, M. M. Dalbec, V. Samburova, A. G. Hallar, B. Zielinska, D. Lowenthal, and Steve Kohl, 2012: Identification of Water-Soluble Organic Carbon in Nonurban Aerosols using Ultrahigh Resolution FT-ICR Mass Spectrometry: Organic Anions, *Environmental Chemistry*, DOI:10.1071/EN11167 .

Amin, H., P.T. Atkins, R. Russo, A. W. Brown, B. Sive, A. G. Hallar, K.E. Huff Hartz, 2012: Effect of Bark Beetle Infestation on Secondary Organic Aerosol Precursor Emissions, *Environmental Science & Technology*, 46, **11**, 5696–5703, DOI: 10.1021/es204205m.

Matrosov, S.Y., G. G. Mace, R. Marchand, M. D. Shupe, A. G. Hallar, I. B. McCubbin, 2012: Influence of Ice Hydrometeor Habits on Scanning Polarimertic Cloud Radar Measurements, *J. of Atmospheric and Oceanic Technology,* 29, 989-1008.

Baustian, K. J., D. J. Cziczo, M. E. Wise, K. A. Pratt, G. Kulkarni, A. G. Hallar, and M. A. Tolbert, 2012: Importance of aerosol composition, mixing state, and morphology for heterogeneous ice nucleation: A combined field and laboratory approach, *J. of Geophysical Research*, 117, D06217, doi:10.1029/2011JD016784.

Bowers, R.M., I. B. McCubbin, A.G. Hallar, N. Fierer, 2012: Seasonal variability in airborne bacterial communities at a high-elevation site in the Colorado Rocky Mountains, *Atmospheric Environment*, 50, 41–49.

Hallar, A.G., G. Chirokova, I.B. McCubbin, T.H. Painter, C. Wiedinmyer, C. Dodson, 2011: Atmospheric Bioaerosols Transported Via Dust Storms in Western United States, *Geophysical Res. Letters*, 38, L17801, doi:10.1029/2011GL048166.

Hallar, A.G., I. B. McCubbin, J. M. Wright, 2011: CHANGE: A Place-Based Curriculum for Understanding Climate Change at Storm Peak Laboratory, Colorado, *Bulletin of the American Meteorological Society*, doi: 10.1175/2011BAMS3026.1.

Hallar, A.G., D. H. Lowenthal, G. Chirokova. C. Wiedinmyer, R.D. Borys, 2011: Persistent Daily New Particle Formation at a Mountain-Top Location, *Atmospheric Environment*, doi:10.1016/j.atmosenv.2011.04.044.

Hoyle, C.R., M. Boy, N.M. Donahue, J.L. Fry, M. Glasius, A. Guenther, A.G. Hallar, K. Huff Hartz, M.D. Petters, T. Petäjä, T. Rosenoern, and A.P. Sullivan, 2010: Anthropogenic influence on biogenic secondary organic aerosol. *Atmos. Chem. Phys.*, **10**, 19515-19566.

Strawa, A.W., T.W. Kirchstetter, A.G. Hallar, G.A. Ban-Weiss, J.P. McLaughlin, R.A. Harley, and M.M. Lunden, 2010: Optical and physical properties of primary on-road vehicle particle emissions and their implications for climate change. *J. of Aerosol Science,* **41,** 36-50.

Hallar, A.G., I.B. McCubbin, B. Hallar, R. Levine, W. Stockwell, J. Lopez, J. Wright, 2010: Science in the Mountains: A Unique Research Experience to Enhance Diversity in the Geosciences. *J. GeoScience Education*, **58**, 2, 213-220.

Samy, S., L.R. Mazzoleni, S. Mishra, B. Zielinska, and A.G. Hallar, 2010: Water-soluble organic compounds at a mountain-top Site in Colorado, USA. *Atmos. Environ.,* **44,** 1663-1671.

de Wekker, S.F.J., A. Ameen, G. Song, B.B. Stephens, A.G. Hallar, and I.B. McCubbin, 2009: A preliminary investigation of boundary layer effects on daytime atmospheric CO_2 concentrations at a mountaintop location in the Rocky Mountains. *Acta Geophysica,* doi:10.2478/s11600-009-0033-6.

Wiedinmyer, C., R.M. Bowers, N. Fierer, E. Horanyi, M. Hannigan, A.G. Hallar, I. McCubbin, K. Baustian, 2009: The contribution of biological particles to observed particulate organic carbon at a remote high altitude site. *Atmos. Environ.,* **43,** 4278–4282.

Faïn, X., D. Obrist, A. G. Hallar, I. McCubbin, and T. Rahn, 2009: High levels of reactive gaseous mercury observed at a high elevation research laboratory in the Rocky Mountains, *Atmos. Chem. Phys.,* **9**, 8049-8060.

Bowers, R.M., C.L. Lauber, C. Wiedinmyer, M. Hamady, A.G. Hallar, R. Fall, R. Knight, and N. Fierer, 2009: Characterization of Airborne Microbial Communities at a High-Elevation Site and their Potential to Act as Atmospheric Ice Nuclei, *Applied and Environmental Microbiology,* **75** (15), 1–2, doi:10.1128/AEM.00447-09.

Obrist D., A.G. Hallar, I. McCubbin, B.B. Stephens, and T. Rahn, 2008: Measurements of atmospheric mercury at Storm Peak Laboratory in the Rocky Mountains: Evidence for long-range transport from Asia, boundary layer contributions, and plant mercury uptake. *Atmos. Environ.*, doi:10.1016/j.atmosenv.2008.06.051.

Davis, S., A. G. Hallar, L. M. Avallone, T. Campos, B. Engblom, 2006: Measurement of total water with a tunable diode laser hygrometer: Inlet analysis calibration procedure, and ice water content determination. *J. Atmos. and Oceanic Technol.*, **24(**3), 463–475.

Hallar, A.G., A.W. Strawa, B. Schmid, E. Andrews, J. Ogren, P. Sheridan, R. Ferrare, D. Covert, R. Elleman, H. Jonsson, K. Bokarius, A. Luu, 2006: ARM Aerosol Intensive Operating Period: Comparison of aerosol scattering during coordinated flights. *J. of Geophysical Research,* doi: 2005JD006250RR.

Thornton, B.F., D.W. Toohey, L.M. Avallone, A. G. Hallar, H. Harder, M. Martinez, J. B. Simpas, W. H. Brune, M. Koike, Y. Kondo, N. Takegawa, B. E. Anderson, M. A. Avery, 2005: Variability of active chlorine in the lowermost Arctic stratosphere. *J. of Geophysical Research,* **110**, D22304, doi:10.1029/2004JD005580.

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Hallar, A.G., Effects of Bark Beetle Infestation on Secondary Organic Aerosol Precursors, presented at the 2014 Biogenic Hydrocarbons & the Atmosphere Gordon Research Conference, Girona, Spain, July 1, 2014.

Hallar, A.G., Chemical, Biological, and Hygroscopic Properties of Aerosol Organics at Storm Peak Laboratory, presented at the Department of Atmospheric and Oceanic Science, University of Wisconsin, Madison, November 18, 2013.

Hallar, A.G., Chemical, Biological, and Hygroscopic Properties of Aerosol Organics at Storm Peak Laboratory, presented at the Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado May 9, 2013.

Hallar, A.G., R. Bowers, I. B. McCubbin, C. Wiedinmyer, V. Samburova, Recent Primary Biological Aerosol Measurements at Storm Peak Laboratory presented at Department of Earth, Atmospheric and Planetary Sciences Massachusetts Institute of Technology, January 28, 2013.

Hallar, A.G., L.M. Avallone; L.M. Edwards; H. Thiry, Mentors, Networks, and Resources for Early Career Female Atmospheric Scientists (Invited), AbstractED21E-06 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

Hallar A.G., D. Lowenthal, I. McCubbin, and G. Chirokova, Persistent Daily New Particle Formation at a Mountain-Top Location, Brookhaven National Laboratory Atmospheric Science Division Science Seminar, July 2011.

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