

Jeffrey R. Pierce

Department of Atmospheric Science, ATS 220
Colorado State University
Fort Collins, CO 80523, USA
970-491-8572
jeffrey.pierce@colostate.edu

Research Interests

Air pollution; environmental health, climate change; atmospheric particulate matter; aerosol-cloud interactions; global and regional atmospheric modeling; atmospheric chemistry and physics

Education

Carnegie Mellon University, Ph.D., Chemical Engineering, 5/2008

Dissertation: Ultrafine atmospheric aerosols, clouds and climate

Northeastern University, B.S., Chemical Engineering, Summa Cum Laude, 6/2003

Professional experience

Colorado State University (7/2016-): Associate Professor of Atmospheric Science

Colorado State University (1/2013-6/2016): Assistant Professor of Atmospheric Science

Dalhousie University (1/2013-): Adjunct Professor of Physics and Atmospheric Science

Dalhousie University (7/2009-12/2012): Assistant Professor of Physics and Atmospheric Science

NASA Postdoctoral Program Fellow (7/2008-6/2009): Postdoctoral fellowship at NASA's Goddard Space Flight Center

Northeastern University, Boston, MA, Research Assistant, Interface Engineering Laboratory (2001-2002)

C.S. Draper Laboratory, Cambridge, MA, Test Engineer, Micro-Electro-Mechanical Systems (MEMS) Chem/Bio sensor project (2000-2001)

Aspen Technology, Cambridge, MA, Test Engineer, Chemical engineering software testing (1999)

Teaching Experience

Assistant/associate Professor, Colorado State University:

Computational Methods in the Atmospheric Sciences (graduate)

Air pollution (3rd-4th year undergraduate, 1st year graduate)

Aerosol Chemistry and Physics (graduate)

Assistant Professor, Dalhousie University:

Computational Methods in Physics (3rd-4th year undergraduate),

Introduction to Atmospheric Science (3rd-4th year undergraduate, 1st year graduate),

Physics and Chemistry of Aerosols and Clouds (graduate),

Atmospheric Physics (3rd-4th year undergraduate, 1st year graduate)

Guest Lecturer, Carnegie Mellon: Air Quality Engineering, Fluid Dynamics

Teaching Assistant, Carnegie Mellon: Biotechnology and Environmental Processes, Senior Design and Optimization, Thermodynamics

Honors and Awards

Langstroth Memorial Teaching Excellence Award (5/2012): Awarded by undergraduates in Dalhousie's Department of Physics and Atmospheric Science

NASA Postdoctoral Program Fellowship (7/2008): Postdoctoral fellowship at NASA's Goddard Space Flight Center

Ken Meyer Award (5/2008): Awarded to graduating Ph.D. student in Chemical Engineering at CMU with greatest impact of research

Symposium Award (10/2007): Award for outstanding research talk at Carnegie Mellon University Chemical Engineering Graduate Symposium

EPA STAR Fellowship (2006-2008): Environmental Protection Agency's Science to Achieve Results (STAR) Graduate Fellowship

Robert Rothfus Fellowship (2005-2006): Carnegie Mellon University Chemical Engineering department fellowship for outstanding coursework

National Science Foundation (2004): Honorable mention, Graduate fellowship

William Cunningham Award (11/2003): American Institute of Chemical Engineers' award for best senior design project

Ralph Buonopane Scholarship (2002-2003): Northeastern University Chemical Engineering department award for excellence in coursework and hands-on projects

Department Outstanding Service Award (2001): Northeastern University Chemical Engineering department award for extracurricular service in the department

Chemical Engineering Car Competition (2001): Captain of Northeastern University's national competition runner-up Chem-E-Car

Undergraduate Honors Societies: Tau Beta Pi (Engineering), Omega Chi Epsilon (Chemical Engineering), Phi Kappa Phi (General)

Peer Reviewed Journal Articles (advisees in *bold italics*)

(<http://www.researcherid.com/rid/E-4681-2013>)

1. **Lassman, W., Ford, B., Gan, R.W., Pfister, G., Magzamen, S., Fischer, E.V., Pierce, J.R.:** Spatial and Temporal Estimates of Population Exposure to Wildfire Smoke during the Washington State 2012 Wildfire Season Using Blended Model, Satellite, and In-Situ Data, *in press, GeoHealth*, 2017.
2. **Kodros, J. K., Pierce, J. R.:** Important global and regional differences in cloud-albedo aerosol indirect effect estimates between simulations with and without prognostic aerosol microphysics, *in press, J. Geophys. Res.*, 2017.
3. **Bian, Q., Jathar, S. H., Kodros, J. K., Barsanti, K. C., Hatch, L. E., May, A. A., Kreidenweis, S. M., and Pierce, J. R.:** Secondary organic aerosol formation in biomass-burning plumes: Theoretical analysis of lab studies and ambient plumes, *Atmos. Chem. Phys.*, doi:10.5194/acp-2016-949, in press, 2017.
4. **Stolz, D.C., Rutledge, S.A., Xu, W., Pierce, J. R.:** Interactions between the MJO, aerosols, and convection over the central Indian Ocean, *J. Atmos. Sci.*, doi:10.1175/JAS-D-16-0054.1, 2017.
5. **T. Nah, R. McVay, Pierce, J. R., J. Seinfeld, and N. L. Ng:** Constraining uncertainties in particle wall-deposition correction during SOA formation in chamber experiments, *Atmos. Chem. Phys.*, 17, 2297-2310, doi:10.5194/acp-17-2297-2017, 2017.
6. **Kodros, J. K., Weidinmyer, C., Ford, B., Cucinotta, R., Gan, R., Magzamen, S., Pierce, J. R.:** Global burden of mortalities due to chronic exposure to ambient PM2.5 from open combustion of domestic waste, *Env. Res. Lett.*, 11 (12), 2016.
7. **Croft, B., Wentworth, G. R., Martin, R. V., Leitch, W. R., Murphy, J. G., Murphy, B. N., Kodros, J., Abbatt, J. P. D., Pierce, J. R.:** Contribution of Arctic seabird ammonia to

atmospheric particles and cloud radiative effect, *Nature Communications*, doi:10.1038/ncomms13444, 2016.

8. **Hodshire, A. L.**, Lawler, M. J., Zhao, J., Ortega, J., Jen, C., Yli-Juuti, T., Brewer, J. F., **Kodros, J. K.**, Barsanti, K. C., Hanson, D. R., McMurry, P. H., Smith, J. N., and **Pierce, J. R.**: Multiple new-particle growth pathways observed at the US DOE Southern Great Plains field site, *Atmos. Chem. Phys.*, 16, 9321-9348, doi:10.5194/acp-16-9321-2016, 2016.
9. **Kodros, J. K.**, **Cucinotta, R.**, Ridley, D. A., Wiedinmyer, C., and **Pierce, J. R.**: The aerosol radiative effects of uncontrolled combustion of domestic waste, *Atmos. Chem. Phys.*, 16, 6771-6784, doi:10.5194/acp-16-6771-2016, 2016.
10. **Croft, B.**, Martin, R. V., Leaitch, W. R., Tunved, P., Breider, T. J., **D'Andrea, S. D.**, **Pierce, J. R.**: Processes controlling the seasonal cycle of Arctic aerosol number and size distributions, *Atmos. Chem. Phys.*, 16, 3665-3682, doi:10.5194/acp-16-3665-2016, 2016.
11. **D'Andrea, S.D.**, **Ng, J.Y.**, **Kodros, J.K.**, Atwood, S.A., Wheeler, M.J., Macdonald, A.M., Leaitch, W.R., **Pierce, J. R.**: Source Attribution of Aerosol Size Distributions and Model Evaluation Using Whistler Mountain Measurements and GEOS-Chem-TOMAS Simulations, *Atmos. Chem. Phys.*, 16, 383-396, doi:10.5194/acp-16-383-2016, 2016.
12. **Sakamoto, K. M.**, Laing, J. R., **Stevens, R. G.**, Jaffe, D. A., and **Pierce, J. R.**: The evolution of biomass-burning aerosol size distributions due to coagulation: dependence on fire and meteorological details and parameterization, *Atmos. Chem. Phys.*, 16, 7709-7724, doi:10.5194/acp-16-7709-2016, 2016.
13. Wentworth, G. R., Murphy, J. G., **Croft, B.**, Martin, R. V., **Pierce, J. R.**, Cote, J.-S., Courchesne, I., Tremblay, J.-E., Gagnon, J., Thomas, J. L., Sharma, S., Toom-Saunty, D., Chivulescu, A., Lévassieur, M., and Abbatt, J. P. D.: Ammonia in the summertime Arctic marine boundary layer: Sources, Sinks and Implications, *Atmos. Chem. Phys.*, 16, 1937-1953, doi:10.5194/acp-16-1937-2016, 2016.
14. **Gagne, S.**, **MacDonald, L.P.**, Leaitch, W.R., **Pierce, J.R.**: Software and database structure to analyze the relationship between aerosol, clouds and precipitation: SAMAC. *Atmos. Meas. Tech.*, 9, 619-630, doi:10.5194/amt-9-619-2016, 2016.
15. Kristiansen, N. I., Stohl, A., Olivie, D. J. L., **Croft, B.**, Sovde, O. A., Klein, H., Christoudias, T., Kunkel, D., Leadbetter, S. J., Lee, Y. H., Zhang, K., Tsigaridis, K., Bergman, T., Evangeliou, N., Wang, H., Ma, P.-L., Easter, R. C., Rasch, P. J., Liu, X., Pitari, G., Di Genova, G., Zhao, S. Y., Balkanski, Y., Bauer, S. E., Faluvegi, G. S., Kokkola, H., Martin, R. V., **Pierce, J. R.**, Schulz, M., Shindell, D., Tost, H., and Zhang, H.: Evaluation of observed and modelled aerosol lifetimes using radioactive tracers of opportunity and an ensemble of 19 global models, *Atmos. Chem. Phys.*, 16, 3525-3561, doi:10.5194/acp-16-3525-2016, 2016.
16. Schill, G.P., S. H. Jathar, **J. K. Kodros**, E. J. T. Levin, A. M. Galang, B. Friedman, M. F. Link, D. K. Farmer, **J. R. Pierce**, S. M. Kreidenweis, and P. J. DeMott: Ice nucleating particle emissions from photochemically-aged diesel and biodiesel exhaust, *Geophys. Res. Lett.*, 42, doi: 10.1002/2016GL069529, 2016.
17. **Bian, Q.**, May, A. A., Kreidenweis, S. M., **Pierce, J. R.**: Investigation of particle and vapor wall-loss effects on controlled wood-smoke smog-chamber experiments, *Atmos. Chem. Phys.*, 15, 11027-11045, doi:10.5194/acp-15-11027-2015, 2015.
18. **Kodros, J. K.**, Scott, C. E., **Farina, S. C.**, Lee, Y. H., L'Orange, C., Volckens, J., **Pierce, J. R.**: Uncertainties in global aerosols and climate effects due to biofuel emissions, *Atmos. Chem. Phys.*, 15, 8577-8596, doi:10.5194/acp-15-8577-2015, 2015.
19. Humphries, R. S., Schofield, R., Keywood, M., Ward, J., **Pierce, J. R.**, Gionfriddo, C. M., Tate, M., Krabbenhoft, D., Galbally, I. E., Molloy, S. B., Klekociuk, A., Johnston, P. V., Kreher, K., Thomas, A. J., Robinson, A. D., Harris, N. R. P., Johnson, R., and Wilson, S. R.: Boundary layer new particle formation over East Antarctic sea ice"

- possible Hg driven nucleation?, *Atmos. Chem. Phys.*, 15, 13339-13364, doi:10.5194/acp-15-13339-2015, 2015.
20. Scott, C. E., Spracklen, D. V., **Pierce, J. R.**, Riipinen, I., **D'Andrea, S. D.**, Rap, A., Carslaw, K. S., Forster, P. M., Kulmala, M., Mann, G. W., and Pringle, K. J.: Impact of gas-to-particle partitioning approaches on the simulated radiative effects of biogenic secondary organic aerosol, *Atmos. Chem. Phys.*, 15, 12989-13001, doi:10.5194/acp-15-12989-2015, 2015.
 21. Fuchs, B.R., S.A. Rutledge, E.C. Bruning, **J.R. Pierce, J.K. Kodros**, T.J. Lang, D. MacGorman, P. Krehbiel, W. Rison: Environmental controls on storm intensity and charge structures in multiple regions of the continental United States, *Journal of Geophysical Research*, 120, doi:10.1002/2015JD023271, 2015.
 22. Stolz, D.C., Rutledge, S.A., **Pierce, J.R.**: Simultaneous influences of thermodynamics and aerosols on deep convection and lightning in the tropics, *Journal of Geophysical Research*, 120, doi:10.1002/2014JD023033, 2015.
 23. **Pierce, J. R., Croft, B., Kodros, J. K., D'Andrea, S. D.**, Martin, R. V.: The importance of interstitial particle scavenging by cloud droplets in shaping the remote aerosol size distribution and global aerosol-climate effects, *Atmos. Chem. Phys.*, 15, 6147-6158, doi:10.5194/acp-15-6147-2015, 2015.
 24. **D'Andrea, S.D.**, Acosta Navarro, J.C., **Farina, S.C.**, Scott, C.E., Rap, A., Farmer, D.K., Spracklen, D.V., Riipinen, I., **Pierce, J.R.**: Aerosol size distribution and radiative forcing response to anthropogenically driven historical changes in biogenic secondary organic aerosol formation, *Atmos. Chem. Phys.*, 15, 2247-2268, doi:10.5194/acp-15-2247-2015, 2015.
 25. **Sakamoto, K. M.**, Allan, J. D., Coe, H., Taylor, J. W., Duck, T. J., and **Pierce, J. R.**: Aged boreal biomass burning aerosol size distributions from BORTAS 2011, *Atmos. Chem. Phys.*, 15, 1633-1646, doi:10.5194/acp-15-1633-2015, 2015.
 26. Gibson, M. D., Haelssig, J., **Pierce, J. R.**, Parrington, M., Franklin, J. E., Hopper, J. T., Li, Z., and Ward, T. J.: A comparison of four receptor models used to quantify the boreal wildfire smoke contribution to surface PM_{2.5} in Halifax, Nova Scotia during the BORTAS-B experiment, *Atmos. Chem. Phys.*, 15, 815-827, doi:10.5194/acpd-14-815-2015, 2015.
 27. **Stevens, R.G., Pierce, J.R.**: The contribution of plume-scale nucleation to global and regional aerosol and CCN concentrations: evaluation and sensitivity to emissions changes: *Atmos. Chem. Phys.*, 14, 13661-13679, doi:10.5194/acp-14-13661-2014, 2014.
 28. **Pierce, J.R.**, Westervelt, D.M., Atwood, S.A., Barnes, E.A., Leitch, W.R.: New-particle formation, growth and climate-relevant particle production in Egbert, Canada: Analysis from one year of size-distribution observations, *Atmos. Chem. Phys.*, 8647-8663, doi:10.5194/acp-14-8647-2014, 2014.
 29. Franklin, J. E., Drummond, J. R., Griffin, D., **Pierce, J. R.**, Waugh, D. L., Palmer, P. I., Parrington, M., Lee, J. D., Lewis, A. C., Rickard, A. R., Taylor, J. W., Allan, J. D., Coe, H., Walker, K. A., Chisholm, L., Duck, T. J., Hopper, J. T., Blanchard, Y., Gibson, M. D., Curry, K. R., **Sakamoto, K. M.**, Lesins, G., Dan, L., Kliever, J., and Saha, A.: A case study of aerosol scavenging in a biomass burning plume over eastern Canada during the 2011 BORTAS field experiment, *Atmos. Chem. Phys.*, 14, 8449-8460, doi:10.5194/acp-14-8449-2014, 2014.

30. Westervelt, D.M., **Pierce, J.R.**, Adams, P.J.: Analysis of feedbacks between nucleation rate, survival probability, and cloud condensation nuclei formation, *Atmos. Chem. Phys.*, 14, 5577-5597, doi:10.5194/acp-14-5577-2014, 2014.
31. **Croft, B.**, **Pierce, J.R.**, Martin, R.V.: Interpreting aerosol lifetimes using the GEOS-Chem model and constraints from radionuclide measurements *Atmos. Chem. Phys.*, 14, 4313-4325, doi:10.5194/acp-14-4313-2014, 2014.
32. Philip, S., R. V. Martin, **J. R. Pierce**, J. L. Jimenez, Q. Zhang, M. R. Canagaratna, D. V. Spracklen, C. R. Nowlan, L. N. Lamsal, M. J. Cooper, N. A. Krotkov: Spatially and seasonally resolved estimate of the ratio of global organic matter to organic carbon, *Atmospheric Environment*, 87, 34-40, DOI: 10.1016/j.atmosenv.2013.11.065, 2014.
33. Jaffe, D.A., Hof G., Malashanka S., Putz J., Thayer J., Fry J.L., Ayres B., **Pierce J.R.**: Diesel Particulate Matter Emission Factors and Air quality Implications from In-Service Rail in Washington State, USA, *Atmospheric Pollution Research*, 5, 344-351, 2014.
34. Carey Friedman, **Jeffrey Pierce**, Noelle Selin: Assessing the Influence of Secondary Organic versus Primary Carbonaceous Aerosols on Long-Range Atmospheric Polycyclic Aromatic Hydrocarbon Transport *Environmental Science & Technology*, 48, 3293-3302, DOI: 10.1021/es405219r, 2014.
35. **Folkins, I.**, **Mitovski, T.**, **Pierce, J.R.**: A Simple Way to Improve the Diurnal Cycle in Convective Rainfall over Land in Climate Models, *Journal of Geophysical Research*, 119, 2113-2130, DOI: 10.1002/2013JD020149, 2014.
36. **Stevens, R.S.**, **Pierce, J.R.**: A parameterization of sub-grid particle formation in sulphur-rich plumes for global and regional-scale models, *Atmos. Chem. Phys.*, 13, 12117-12133, doi:10.5194/acp-13-12117-2013, 2013.
37. **Stuart, G. S.**, **Stevens, R. G.**, Partanen, A.-I., Jenkins, A. K. L., Korhonen, H., Forster, P. M., Spracklen, D. V., and **Pierce, J. R.**: Reduced efficacy of marine cloud brightening geoengineering due to in-plume aerosol coagulation: parameterization and global implications, *Atmos. Chem. Phys.*, 13, 10385-10396, doi:10.5194/acp-13-10385-2013, 2013.
38. **D'Andrea, S. D.**, Hakkinen, S. A. K., Westervelt, D. M., Kuang, C., Levin, E. J. T., Kanawade, V. P., Leaitch, W. R., Spracklen, D. V., Riipinen, I., and **Pierce, J. R.**: Understanding global secondary organic aerosol amount and size-resolved condensational behavior, *Atmos. Chem. Phys.*, 13, 11519-11534, doi:10.5194/acp-13-11519-11534, 2013.
39. Leaitch, W.R., S. Sharma, L. Huang, A. M. Macdonald, D. Toom-Sauntry, A. Chivulescu, K. von Salzen, **J.R. Pierce**, N.C. Shantz, A. Bertram, J. Schroder, A.-L. Norman, R.Y.-W. Chang, A.-L. Norman: Dimethyl Sulphide Control of the Clean Summertime Arctic Aerosol and Cloud, *Elementa: Science of the Anthropocene*, DOI 10.12952/journal.elementa.000017, 2013.
40. Carslaw, K.S., L.A. Lee, C.L. Reddington, K. Pringle, A. Rap, P. M. Forster, G.W. Mann, D.V. Spracklen, Woodhouse, M.T., Regayre, L.A., **J.R. Pierce**: Large contribution of natural aerosols to uncertainty in indirect forcing, *Nature*, 503, 67-71, 2013.
41. Lee, L. A., Pringle, K. J., Reddington, C. L., Mann, G. W., Stier, P., Spracklen, D. V., **Pierce, J. R.**, and Carslaw, K. S.: The magnitude and causes of uncertainty in global

- model simulations of cloud condensation nuclei, *Atmos. Chem. Phys. Discuss.*, 13, 6295-6378, doi:10.5194/acpd-13-6295-2013, 2013.
42. Westervelt, D. M., **Pierce, J. R.**, Riipinen, I., Trivitayanurak, W., Hamed, A., Kulmala, M., Laaksonen, A., Decesari, S., and Adams, P. J.: Formation and growth of nucleated particles into cloud condensation nuclei: model-measurement comparison, *Atmospheric Chemistry and Physics*, 13, 7645-7663, doi:10.5194/acp-13-7645-2013, 2013.
 43. Hakkinen, S. A. K., Manninen, H. E., Yli-Juuti, T., Merikanto, J., Kajos, M. K., Nieminen, T., **D'Andrea, S. D.**, Asmi, A., **Pierce, J. R.**, Kulmala, M., and Riipinen, I.: Semi-empirical parameterization of size-dependent atmospheric nanoparticle growth in continental environments, *Atmos. Chem. Phys.*, 13, 7665-7682, doi:10.5194/acp-13-7665-2013, 2013.
 44. Ghan, S.J., Smith, S.J., Wang, M., Zhang, K., Bauer, S., Pringle, K.J., Carslaw, K.S., **Pierce, J.R.**, Adams, P.J.: A Simple Model of Global Aerosol Indirect Effects, *Journal of Geophysical Research*, 118, 6688-6707, DOI: 10.1002/jgrd.50567, 2013.
 45. Gibson, M. D., **Pierce, J. R.**, Waugh, D., Kuchta, J. S., Chisholm, L., Duck, T. J., Hopper, J. T., Beauchamp, S., King, G. H., Franklin, J. E., Leitch, W. R., Wheeler, A. J., Li, Z., Gagnon, G. A., and Palmer, P. I.: Identifying the sources driving observed PM_{2.5} variability over Halifax, Nova Scotia, during BORTAS-B, *Atmos. Chem. Phys.*, 13, 7199-7213, doi:10.5194/acp-13-7199-2013, 2013.
 46. Palmer, P.I., M. Parrington, J.D. Lee, A.C. Lewis, A.R. Rickard, P.F. Bernath, T.J. Duck, D.L. Waugh, D.W. Tarasick, S. Andrews, E. Aruffo, L.J. Bailey, E. Barrett, S.J.B. Bauguitte, K.R. Curry, P. Di Carlo, L. Chisholm, L. Dan, J.R. Drummond, G. Forster, J.E. Franklin, M. Gibson, D. Griffin, D. Helmig, J.R. Hopkins, J.T. Hopper, M.E. Jenkin, D. Kindred, J. Kliever, M. Le Breton, S. Matthiesen, M. Maurice, S. Moller, D.P. Moore, D.E. Oram, S.J. O'Shea, R.C. Owen, C.M.L.S. Pagnello, S. Pawson, C.J. Percival, **J.R. Pierce**, S. Punjabi, R.M. Purvis, J.J. Remedios, K.M. Rotermund, **K.M. Sakamoto**, K.B. Strawbridge, K. Strong, J. Taylor, R. Trigwell, K.A. Tereszchuk, K.A. Walker, D. Weaver, C. Whaley, and J.C. Young, Quantifying the impact of BOREal forest fires on Tropospheric oxidants over the Atlantic using Aircraft and Satellites (BORTAS) experiment: design, execution and science overview, *Atmos. Chem. Phys.*, 13, 6239-6261, doi:10.5194/acp-13-6239-2013, 2013.
 47. Lee, Y.H., **Pierce, J.R.**, Adams, P.J.: Representation of nucleation mode microphysics in global aerosol microphysics models, *Geosci. Model Dev.*, 6, 1221-1232, doi:10.5194/gmd-6-1221-2013, 2013.
 48. Gong, L., Lewicki, R., Griffin, R.J., Tittel, F.K., **Lonsdale, C.R.**, **Stevens, R.G.**, **Pierce, J.R.**, Malloy, Q.G.J., Travis, S.A., Bobmanuel, L.M., Lefer, B.L., Flynn, J.H.: Atmospheric ammonia measurements and implications for particulate matter formation in Houston, TX, *Atmospheric Environment*, 77, 893-900, doi:10.1016/j.atmosenv.2013.04.079, 2013.
 49. Ridley, D.A., Heald, C.L., **Pierce, J.R.**, Evans, M.J.: Towards resolution-independent dust emissions in global models, *Geophysical Research Letters*, 40, 1-5, doi:10.1002/grl.50409, 2013.
 50. **Pierce, J.R.**, Evans, M.J., Scott, C.E., **D'Andrea, S.D.**, Farmer, D.K., Swietlicki, E., Spracklen, D.V.: Weak sensitivity of cloud condensation nuclei and the aerosol indirect effect to Criegee+SO₂ chemistry, *Atmospheric Chemistry and Physics*, 13, 3163-3176, doi:10.5194/acp-13-3163-2013, 2013.

51. **Lonsdale, C.R., Stevens, R.G.,** Brock, C.A., Makar, P.A., Knipping, E.M., **Pierce, J.R.:** The effect of coal-fired power-plant SO₂ and NO_x control technologies on aerosol nucleation and growth in the source plumes, *Atmospheric Chemistry and Physics*, 12, 11519-11531, doi:10.5194/acp-12-11519-2012, 2012.
52. **Wainwright, C.D., Pierce, J.R.,** Liggiio, J., Strawbridge, K.B., Macdonald, A.M., Leaitch, W.R.: The effect of model spatial resolution on Secondary Organic Aerosol predictions: A case study at Whistler, BC, Canada, *Atmospheric Chemistry and Physics*, 12, 10911-10923, doi:10.5194/acp-12-10911-2012, 2012.
53. Riipinen, I., Yli-Juuti, T., **Pierce, J.R.,** Petaja, T., Worsnop, D.R., Kulmala, M., Donahue, N.: Role of organics in atmospheric nanoparticle growth – recent breakthroughs and major unknowns, *Nature Geoscience*, 5, 453-458, 2012.
54. Shantz, N.C., **Pierce, J.R.,** Chang, R.Y.-W., Vlasenko, A., Riipinen, I., Sjostedt, S., Slowik, J.G., Wiebe, A., Abbatt, J.P.D., Leaitch, W.R.: Cloud condensation nuclei droplet growth kinetics of ultrafine particles during anthropogenic nucleation events, *Atmospheric Environment*, 47, 389-398, 2012.
55. **Croft, B., Pierce, J.R.,** Martin, R.V., Hoose, C., Lohmann, U., Strong sensitivity of aerosol concentrations to convective wet scavenging parameterizations in a global model, *Atmospheric Chemistry and Physics*, 12, 10725-10748, doi:10.5194/acp-12-10725-2012, 2012.
56. **Stevens, R.G., Pierce, J.R.,** Brock, C.A., Reed, M.K., Crawford, J.H., Holloway, J.S., Ryerson, T.B., Huey, L.G., and Nowak, J.B.: Nucleation and growth of sulfate aerosol in coal-fired power plant plumes: sensitivity to background aerosol and meteorology, *Atmospheric Chemistry and Physics*, 12, 189-206, doi:10.5194/acp-12-189-2012, 2012.
57. **Pierce, J. R.,** W. R. Leaitch, J. Liggiio, D. M. Westervelt, **C. D. Wainwright,** J. P. D. Abbatt, L. Ahlm, W. Al-Basheer, D. J. Cziczo, K. L. Hayden, A. K. Y. Lee, S.-M. Li, L. M. Russell, S. J. Sjostedt, K. B. Strawbridge, M. Travis, A. Vlasenko, J. J. B. Wentzell, H. A. Wiebe, J. P. S. Wong, A. M. Macdonald: Nucleation and condensational growth to CCN sizes during a sustained pristine biogenic SOA event in a forested mountain valley, *Atmos. Chem. Phys.*, 12, 3147-3163, doi:10.5194/acp-12-3147-2012, 2012.
58. **Pierce, J.R.,** Riipinen, I., Kulmala, M., Ehn, Petaja, T., Junninen, H., Worsnop, D.R., Donahue, N.M.: Quantification of the volatility of secondary organic compounds in ultrafine particles during nucleation events, *Atmospheric Chemistry and Physics*, 11, 9019-9036, doi:10.5194/acp-11-9019-2011, 2011.
59. Chang, R.Y.-W., Sjostedt, S.J., **Pierce, J.R.,** Papakyriakou, T.N., Scarratt, M.G., Michaud, S., Levasseur, M., Leaitch, W.R., Abbatt, J.,P.,D., Relating Atmospheric and Oceanic DMS Levels to Particle Nucleation Events in the Canadian Arctic, *Journal of Geophysical Research*, 116, D00S03, do:10.1029/2011JD015926, 2011.
60. Donahue, N.M., Trump, E.R., **Pierce, J.R.,** Riipinen, I.: Theoretical Constraints on Pure Vapor-Pressure Driven Condensation of Organics to Ultrafine Particles, *Geophysical Research Letters* , 38, L16801, doi:10.1029/2011GL048115, 2011.
61. **Snow-Kropla, E. J., Pierce, J. R.,** Westervelt, D. M., Trivitayanurak, W.: Cosmic rays, aerosol formation and cloud-condensation nuclei: Sensitivities to model uncertainties, *Atmospheric Chemistry and Physics*, 11, 4001-4013, doi:10.5194/acp-11-4001-2011, 2011
62. Riipinen, I., **Pierce, J. R.,** Yli-Juuti, T., Nieminen, T., Häkkinen, S., Ehn, M., Junninen, H., Lehtipalo, K., Petäjä, T., Slowik, J., Chang, R., Shantz, N. C., Abbatt, J., Leaitch, W.

- R., Kerminen, V.-M., Worsnop, D. R., Pandis, S. N., Donahue, N. M., and Kulmala, M.: Organic condensation: a vital link connecting aerosol formation to cloud condensation nuclei (CCN) concentrations, *Atmospheric Chemistry and Physics*, 11, 3865-3878, doi:10.5194/acp-11-3865-2011, 2011.
63. Lee, B.-H., **Pierce, J.R.**, Engelhart, G.J., Pandis, S.N., Volatility of secondary organic aerosol from the ozonolysis of monoterpenes, *Atmospheric Environment*, 2443-2452, 2011.
64. **Pierce, J.R.**, Weisenstein, D.K., Heckendorn, P., Peter, T., Keith, D.W., Efficient formation of stratospheric aerosol for climate engineering by emission of condensible vapor from aircraft, *Geophysical Research Letters*, 37, L18805, doi:10.1029/2010GL043975, 2010.
65. **Pierce, J.R.**, Kahn, R.A., Davis, M.R., and Comstock, J.M., Detecting thin cirrus in MISR aerosol retrievals, *Journal of Geophysical Research*, 115, D08201, doi:10.1029/2009JD013019, 2010.
66. Riipinen, I., **Pierce, J.R.**, Donahue, N.M., Pandis, S.N., Equilibration time scales of organic aerosol inside thermodenuders: Evaporation kinetics versus thermodynamics, *Atmospheric Environment*, 44, 597-607, 2010.
67. **Pierce, J.R.**, Adams, P.J., Can cosmic rays affect cloud condensation nuclei by altering new particle formation rates, *Geophysical Research Letters*, 36, L09820, 2009.
68. Kostenidou, E., Lee B.-H., Engelhart, G.J., **Pierce, J.R.**, Pandis, S.N., Mass Spectra Deconvolution of Low, Medium and High Volatility Biogenic Secondary Organic Aerosol, *Environmental Science and Technology*, 43, 4884-4889, 2009.
69. **Pierce, J.R.**, Theodoritsi, G., Adams, P.J., Pandis, S.N., Parameterization of the effect of sub-grid scale aerosol dynamics on aerosol number emission rates, *Journal of Aerosol Science*, 40, 385-393, 2009.
70. **Pierce, J.R.**, Adams, P.J., Uncertainty in global CCN concentrations from uncertain aerosol nucleation and primary emission rates, *Atmospheric Chemistry and Physics*, 9, 1339-1356, 2009.
71. **Pierce, J.R.**, Adams, P.J., A computationally efficient aerosol nucleation/condensation method: Pseudo-steady-state sulfuric acid, *Aerosol Science and Technology*, 43, 216-226 2009.
72. **Pierce, J.R.**, Engelhart, G.J., Hildebrandt, L., Weitkamp, E.A., Pathak, R.K., Donahue, N.M., Robinson, A.R., Adams, P.J., Pandis, S.N., Constraining particle evolution from wall losses, coagulation, and condensation evaporation in smog-chamber experiments: optimal estimation based on size distribution measurements, *Aerosol Science and Technology*, 42, 1001-1015, 2008.
73. L.-H. Young, D. Benson, F. Kameel, **J. R. Pierce**, H. Junninen, M. Kulmala, and S.-H. Lee, Laboratory Studies of H₂SO₄/H₂O Binary Homogeneous Nucleation from the SO₂+OH Reaction: Evaluation of the Experimental Setup and Preliminary Results, *Atmospheric Chemistry and Physics*, 8, 4997-5016, 2008.
74. **Pierce, J.R.**, Chen, K., and Adams, P.J., Contribution of carbonaceous aerosol to cloud condensation nuclei: processes and uncertainties evaluated with a global aerosol microphysics model, *Atmospheric Chemistry and Physics*, 7, 5447-5466, 2007
75. Weitkamp, E.A., Sage, A.M., **Pierce, J.R.**, Donahue, N.M., Robinson, A.L., Organic aerosol formation from photochemical oxidation of diesel exhaust in a smog chamber, *Environmental Science and Technology*, 41 (20), 6969 -6975, 2007.

76. **Pierce, J.R.**, and Adams, P.J., Efficiency of cloud condensation nuclei formation from ultrafine particles, *Atmospheric Chemistry and Physics*, 7, 1367-1379, 2007.
77. Robinson, A.L., Donahue, N.M., Shrivastava, M.K., Weitkamp, E.A., Sage, A.M., Grieshop, A.P., Lane, T.E., **Pierce, J.R.**, Pandis, S.N., Rethinking organic aerosols: Semivolatile emissions and photochemical aging, *Science*, 315, March 2, 2007.
78. **Pierce, J.R.**, and Adams P.J., Global evaluation of CCN formation by direct emission of sea salt and growth of ultrafine sea salt, *Journal of Geophysical Research-Atmospheres*, 111 (D6), doi:10.1029/2005JD006186, 2006.

Peer reviewed conference proceedings

1. Kenneth S. Carslaw, Lindsay A. Lee, Kirsty J. Pringle, Graham W. Mann, Dominick V. Spracklen, Philip Stier, **Jeffrey R. Pierce**: New approaches to quantifying the magnitude and causes of uncertainty in global aerosol models, AIP Conf. Proc.: Nucleation and Atmospheric Aerosols, 1527, 641, 2013.
2. **J. R. Pierce**, M. J. Evans, C. E. Scott, **S. D. D'Andrea**, D. K. Farmer, E. Swietlicki, D. V. Spracklen: The sensitivity of global nucleation, cloud condensation nuclei and climate to SO₂ and Criegee-intermediate chemistry, AIP Conf. Proc.: Nucleation and Atmospheric Aerosols, 1527, 675, 2013.
3. W. Richard Leitch, L. Huang, A. M. Macdonald, S. Sharma, D. Toom-Sauntry, K. von Salzen, **Jeffrey R. Pierce**: A comparison of measurements and global model simulations of the atmospheric aerosol at two remote sites, AIP Conf. Proc.: Nucleation and Atmospheric Aerosols, 1527, 511, 2013.
4. **Stephanie Gagne, Landan MacDonald**, Michael Earle, W. Richard Leitch, **Jeffrey R. Pierce**: Aircraft measurements of aerosol, cloud droplets and drizzle in stratiform clouds over the northwest Atlantic ocean, AIP Conf. Proc.: Nucleation and Atmospheric Aerosols, 1527, 722, 2013.
5. **Robin Stevens, Chantelle Lonsdale**, Charles Brock, Paul Makar, Eladio Knipping, Molly Reed, James Crawford, John Holloway, Tim Ryerson, L. Greg Huey, John Nowak, **Jeffrey Pierce**: Aerosol nucleation in coal-fired power-plant plumes, AIP Conf. Proc.: Nucleation and Atmospheric Aerosols, 1527, 417, 2013.
6. **S. D. D'Andrea**, S. A. K. Hakkinen, D. M. Westervelt, C. Kuang, D. V. Spracklen, I. Riipinen, **J. R. Pierce**: Effect of secondary organic aerosol amount and condensational behavior on global aerosol size distributions, AIP Conf. Proc.: Nucleation and Atmospheric Aerosols, 1527, 667, 2013.

Other relevant publications

1. **Pierce, J.R.**: Particulars of particle formation, News and Views article in *Nature Geoscience*, 4, 665-666, 2011.
2. **Pierce, J.R.**: Cosmic rays and clouds: Potential mechanisms, guest article for *realclimate.org*, September 26, 2011, <http://www.realclimate.org/index.php/archives/2011/09/cosmic-rays-and-clouds-potential-mechanisms/>.
3. Val Martin, M., **Pierce, J. R.**, Heald, C. L.: Studying the effects of changing climate on wildfires and impacts to the United States air quality, *Fire Management Today*, 74, 3, 2015.

Invited presentations

1. Pierce, J.R., et al., "On nucleation and growth in the free tropospheric and the Arctic", University of Helsinki, Atmospheric Physics Seminar, Helsinki, Finland, 11/2016.
2. Pierce, J.R., et al., "Exploring the evolution of biomass-burning aerosol in chambers and the atmosphere", University of Colorado, Environmental Chemistry Seminar, Boulder, CO, 11/2016.
3. Pierce, J.R., et al., "On the two-way aerosol-cloud coupling in the tropics", University of Washington, Atmospheric Science Seminar, Seattle, WA, 10/2016.
4. Pierce, J.R., William Lassman, Bonne Ford, Emily Fischer, Gabriele Pfister, Ryan Gan, Sheryl Magzamen, and John Volckens, "Downwind of the Flames: Assessing and predicting wildfire smoke related morbidity using satellites, in-situ measurements and models", NASA Applied Science Meeting, Ashville, NC, 9/2016.
5. Pierce, J.R. et al., "The aerosol-cloud circuit in the Hadley cell", Telluride Aerosol/Cloud Meeting, Telluride, CO, 6/2016.
6. Pierce, J.R. et al., "Aerosol nucleation and growth in the tropical free troposphere: What are our initial conditions? And why do they matter?", CLOUD Science Meeting, Frankfurt, Germany, 6/2016.
7. Pierce, J.R. et al., "Need for accurate chemistry in aerosol models: Aerosols effects on deep-convective clouds and lightning", American Chemical Society, Boston, MA, 8/2015.
8. Pierce, J.R., "Atmospheric Aerosols, Heath and Climate", CMMAP REU Seminar Series, CSU, Ft. Collins, CO, 6/2015.
9. Pierce, J.R., "Low-volatility organics and climate", Pacific Northwest National Lab, Richland, WA, 6/2015
10. Pierce, J.R., et al., "The Contribution of Sub-Grid, Plume-Scale Nucleation to Global CCN Concentrations", American Chemical Society, Denver, CO, 3/2015.
11. Pierce, J.R., et al., "New-particle formation and growth at the DOE Southern Great Plains field site in Oklahoma", Department of Energy Atmospheric Systems Research annual meeting, Washington D.C., 3/2015.
12. Pierce, J.R., et al., "The Contribution of Sub-Grid, Plume-Scale Nucleation to Global CCN Concentrations", American Meteorological Society, Pheonix, AZ, 1/2015.
13. Pierce, J.R., et al., "Why chemistry matters for aerosol size and aerosol-cloud-climate interactions: Where do aerosol-climate researchers need help from chemists?", American Chemical Society, San Francisco, CA, 8/2014.
14. Pierce, J.R., et al., "Estimating the climate impact of biofuel emissions", Telluride Aerosol and Cloud Workshop, Telluride, CO, 8/2014.
15. Pierce, J.R., et al., "New-particle formation, growth and climate-relevant particle production in Egbert, Canada: Analysis from one year of size-distribution observations", Dalhousie University, Halifax, NS, Canada, 11/2013.
16. Pierce, J.R., et al., "Atmospheric organics, ultrafine aerosols, CCN and climate", National Center for Atmospheric Research, Boulder, CO, 4/2013.
17. Pierce, J.R., et al., "Cloud Condensation Nuclei and the Aerosol Indirect Effect: How do we moving forward?", Dalhousie University, Halifax, Canada, 12/2012.
18. Pierce, J.R., et al., "Uncertainties in SO₂ and aerosol formation: (1) Anthropogenic sulfur plumes, (2) SO₂ + criegee", Leeds University, Leeds, UK, 9/2012.
19. Pierce, J.R., et al., "The formation and growth of ultrafine atmospheric aerosols: Uncertainties in sulfur chemistry", York University, York, UK, 9/2012.

20. Pierce, J.R., et al., “CCN predictions in global aerosol models: Where do we need improvements?”, Telluride Aerosol and Cloud Workshop, Telluride, CO, 8/2012.
21. Pierce, J.R., et al., “Aerosol chemistry in coal-fired power-plant plumes: Can emissions controls increase particle number concentrations?”, Canadian Chemistry Conference, Calgary, Alberta, 5/2012.
22. Pierce, J.R., “What would it take for cosmic-ray fluctuations to have a significant impact on CCN?”, CLOUD ITN meeting, Frankfurt, Germany, 5/2012.
23. Pierce, J.R., “The formation and growth of ultrafine atmospheric aerosols”, invited talk at Stockholm University, Sweden, 5/2012.
24. Pierce, J.R., “The formation and growth of ultrafine atmospheric aerosols”, invited talk at Colorado State University, 3/2012.
25. Pierce, J.R., Ilona Riipinen, Markku Kulmala, Mikael Ehn, Tukka Petäjä, Heikki Junninen, Doug Worsnop, Neil Donahue, “The volatility of secondary organic compounds in ultrafine particles during nucleation events”, invited talk at International Aerosol Modeling Algorithms meeting, Davis, CA, 11/2011.
26. Pierce, J.R., “Adventures in aerosol microphysics... Episode 1: Power plants, pollution controls and CCN formation; Episode 2: Cosmic rays, aerosols, clouds and climate”, invited talk at NOAA, Boulder, CO, 11/2011.
27. Pierce, J.R., “Cosmic rays, aerosols, clouds and other adventures in aerosol microphysics”, invited talk at Colorado State University, 11/2011.
28. Pierce, J.R., “Cosmic rays, aerosols, clouds and climate”, invited talk at US National Research Council Meeting on Solar Variability and Climate, Boulder, CO, 9/2011.
29. Pierce, Jeffrey R.; Weisenstein, Debra K.; Heckendorn, Patricia; Peter, Thomas; Keith, David, “Efficient formation of stratospheric aerosol for geoengineering by emission of condensable vapour from aircraft”, invited talk at American Geophysical Union, San Francisco, 12/2010.
30. Pierce, J.R., “The global impact of plume-scale nucleation events”, invited talk at Clarkson University, Potsdam, NY, USA, 11/2010.
31. Pierce, Jeffrey R.; Weisenstein, Debra K.; Heckendorn, Patricia; Peter, Thomas; Keith, David, “Efficient formation of stratospheric aerosol for geoengineering by emission of condensable vapour from aircraft”, invited talk at American Association of Aerosol Research, Portland, Oregon, 10/2010.
32. Pierce, J.R., Stevens, R.G., et al., “New aerosol formation and growth in coal-fired power-plant plumes”, invited talk at Electric Power Research Institute annual modeling meeting, Palo Alto, CA, 7/2010.
33. Pierce, J.R., Weisenstein, D.K., Heckendorn, P., Peter, T., Keith, D.W., “Efficient formation of stratospheric aerosol for geoengineering by emission of condensable vapour from aircraft”, invited talk at the European Geophysical Union Annual Conference, Vienna, Austria, 5/2010.
34. Pierce, J.R., “The global impact of plume-scale nucleation events”, invited talk at Environment Canada, Dartmouth, NS, Canada, 2/2010.
35. Pierce, J.R., “The global impact of plume-scale nucleation events”, invited talk at Environment Canada, Downsview, ON, Canada, 1/2010.
36. Pierce, J.R., Stevens, R.G., Brock, C.A., “How do uncertainties in plume-scale aerosol processes inhibit our understanding of aerosols, clouds and climate?”, invited talk at Cloud-Aerosol Feedbacks on Climate meeting, Toronto, Canada, 2/2010.

37. Pierce, J.R., “The global impact of plume-scale nucleation events”, invited talk at Danish Technical University, Copenhagen, Denmark, 1/2010.
38. Pierce, J.R., “The global impact of plume-scale nucleation events”, invited talk at University of Helsinki, Helsinki, Finland, 1/2010.
39. Pierce, J.R., Stevens, R.G., Brock, C.A., “How do uncertainties in plume-scale aerosol processes inhibit our understanding of aerosols, clouds and climate?”, invited talk at Canadian Center for Climate Modelling and Analysis, Victoria, BC, 11/2009.
40. Pierce, J.R., Stevens, R.G., Brock, C.A., “How do uncertainties in plume-scale aerosol processes inhibit our understanding of aerosols, clouds and climate?”, invited talk at Atmospheric Colloquium for Emerging Senior Scientists, 8/2009.
41. Pierce, J.R., “New developments in aerosol-cloud interactions”, invited talk at Carnegie-Mellon University, 6/2009.
42. Pierce, J.R., “Understanding sub-grid aerosol processes in chemical-transport models”, invited talk at AEROCENTER, NASA Goddard Space Flight Center, 6/2009.
43. Pierce, J.R., “Jointly retrieving aerosols and thin cirrus using MISR”, invited talk at NASA Goddard Space Flight Center, Climate and Radiation Branch, 5/2009.
44. Pierce, J.R., “Understanding sub-grid aerosol processes in chemical-transport models”, invited talk at NASA Langley Research Center, 5/2009.
45. Pierce, J.R., “Towards understanding aerosol physical and chemical properties”, invited talk at Dalhousie University, Department of Physics and Atmospheric Science, 3/2009.
46. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at University of Toronto, Department of Chemistry, 1/2009.
47. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at University of Connecticut, Department of Chemical Engineering, 4/2008.
48. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at Dalhousie University, Department of Physics and Atmospheric Science, 4/2008.
49. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at Duke University, Department of Civil and Environmental Engineering, 3/2008.
50. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at Goddard Space Flight Center, 3/2008.
51. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at Brookhaven National Lab, 3/2008.
52. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at Purdue University, Department of Earth and Atmospheric Science, 3/2008.
53. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at Northeastern University, Department of Chemical Engineering, 3/2008.
54. Pierce, J.R., “Ultrafine atmospheric aerosols, clouds and climate”, invited talk at Massachusetts Institute of Technology, MASS seminar, 2/2008.
55. Pierce, J.R., “Impact of ultrafine aerosols on cloud condensation nuclei”, invited talk at Penn State, Department of Meteorology, 11/2007.
56. Pierce, J.R., “Climate change and chemical engineering”, invited talk for Northeastern University student American Institute of Chemical Engineers, Boston, MA, 3/2007.

Selected other presentations

1. December 2016, "Climate and human intervention effects on future fire activity and consequences for air pollution across the 21st century", American Geophysical Union, Val Martin, M., Pierce, J. R., O., peer-reviewed/refereed.
2. December 2016, "Implications of Sub-Grid NO₂ Dry Deposition in a Chemical Transport Model", American Geophysical Union, Boys, B., Pierce, J. R., Murphy, J., Martin, R., peer-reviewed/refereed.
3. December 2016, "Recent advances in measurement-based insights of secondary organic aerosols and their impact on global climate sensitivity", American Geophysical Union, Shrivastava, M., Pierce, J. R., others, peer-reviewed/refereed.
4. December 2016, "Regional Modeling of Biomass-Burning Aerosol Impacts", American Geophysical Union, Lonsdale, C., Pierce, J. R., Alvarado, M., Henderson, J., Brodowski, C., Lin, J., peer-reviewed/refereed.
5. December 2016, "Who, what, when, where? Determining the health implications of wildfire smoke exposure.", American Geophysical Union, Hotmann, B. J. (Author & Presenter), Lassman, W. (Author), Gan, R. W. (Author), Pfister, G. (Author), Magzamen, S. L. (Author), Fischer, E. V. (Author), Pierce, J. R. (Author), Volckens, J. (Author), Burke, M. (Author), peer-reviewed/refereed.
6. November 2016, "Secondary organic aerosol formation in biomass-burning plumes: Theoretical analysis of lab studies", International Smoke Symposium, IAWF, Bian, Q.-j., Pierce, J. R., Kodros, J. K., Kreidenweis-Dandy, S. M., Jathar, S., May, A., Barsanti, K., Hatch, L., peer-reviewed/refereed.
7. November 2016, "Who, what, when, where? Determining the health implications of wildfire smoke exposure.", International Smoke Symposium, Hotmann, B. J. (Author & Presenter), Lassman, W. (Author), Gan, R. W. (Author), Pfister, G. (Author), Magzamen, S. L. (Author), Fischer, E. V. (Author), Pierce, J. R. (Author), Volckens, J. (Author), Burke, M. (Author), peer-reviewed/refereed.
8. October 2016, "Does it blend? Combining observations and model output to determine health implications of wildfire smoke", American Association for Aerosol Research, Lassman, W. (Author & Presenter), Hotmann, B. J. (Author), Gan, R. W. (Author), Pfister, G. (Author), Fischer, E. V. (Author), Magzamen, S. L. (Author), Volckens, J. (Author), Pierce, J. R. (Author), peer-reviewed/refereed.
9. October 2016, "Field Measurements of Solid-Fuel Cookstove Emissions from Uncontrolled Cooking Tests in China, Honduras, Uganda, and India", American Association of Aerosol Research, Eilenberg, R., Pierce, J. R., Bilsback, K. R., Fedak, K. M., Johnson, M., Kodros, J. K., Lipsky, E., L'Orange, C., Peel, J. L., Subramanian, R., Robinson, A., Volckens, J., peer-reviewed/refereed.
10. October 2016, "Integrating Laboratory and Field Measurements to Reduce Uncertainties in Cookstove Emissions Estimates", American Association of Aerosol Research, Bilsback, K. R., Eilenberg, R., Pierce, J. R., Fedak, K. M., Johnson, M., Kodros, J. K., Lipsky, E., L'Orange, C., Peel, J. L., Subramanian, R., Robinson, A., Volckens, J., peer-reviewed/refereed.
11. October 2016, "Is smoke on your mind?: Using social media to improve estimates of smoke exposure", American Association of Aerosol Research, Hotmann, B. J., Lassman, W., Pierce, J. R., Pfister, G., Burke, M., peer-reviewed/refereed.

12. October 2016, "Modeling the Impact of Biomass-Burning Aerosol on Urban Areas", American Association of Aerosol Research, Lonsdale, C., Pierce, J. R., Alvarado, M., Henderson, J., Brodowski, C., Lin, J., peer-reviewed/refereed.
13. October 2016, "Secondary organic aerosol formation in biomass-burning plumes: Theoretical analysis of lab studies", American Association of Aerosol Research, Bian, Q.-j., Pierce, J. R., Kodros, J. K., Kreidenweis-Dandy, S. M., Jathar, S., May, A., Barsanti, K., Hatch, L., peer-reviewed/refereed.
14. October 2016, "Sensitivity of Cloud-Albedo Aerosol Indirect Effect on Assumed Aerosol Size Distribution Shape", American Association of Aerosol Research, Kodros, J. K., Pierce, J. R., peer-reviewed/refereed.
15. October 2016, "The Aerosol Radiative Effects and Global Burden of Mortality from Uncontrolled Combustion of Domestic Waste", American Association of Aerosol Research, Kodros, J. K., Pierce, J. R., Gan, R. W., Magzamen, S. L., Hotmann, B. J., Ridley, D., Cucinotta, R., Wiedinmyer, C., peer-reviewed/refereed.
16. October 2016, "The role of MSA for new-particle growth and the cloud-albedo aerosol indirect effect", American Association of Aerosol Research, Hodshire, A. L., Pierce, J. R., Croft, B., peer-reviewed/refereed.
17. October 2016, "Uncertainties in Particle Wall Loss Correction during Secondary Organic Aerosol Formation in Chamber Experiments", American Association of Aerosol Research, McVay, R., Pierce, J. R., Nah, T., Seinfeld, J., Ng, N. L., peer-reviewed/refereed.
18. October 2016, "Use of Machine Learning and Particle-resolved Simulations to Predict Global Distributions of Aerosol Mixing State Metrics", American Association of Aerosol Research, Hughes, M., Pierce, J. R., Kodros, J. K., West, M., Riemer, N., peer-reviewed/refereed.
19. September 2016, "Contribution of Arctic Seabird-colony Ammonia to Atmospheric Particles and Cloud-albedo Radiative Effect", International Global Atmospheric Chemistry, Croft, B., Pierce, J. R., Martin, R., Wentworth, G., Leaitch, R., Murphy, J., Kodros, J. K., Tunven, P., D'Andrea, S., Abbatt, J., peer-reviewed/refereed.
20. September 2016, "The Aerosol Radiative Effects and Global Burden of Mortality from Uncontrolled Combustion of Domestic Waste", International Global Atmospheric Chemistry, Kodros, J. K., Pierce, J. R., Hotmann, B. J., Gan, R. W., Magzamen, S. L., Ridley, D., Cucinotta, R., Wiedinmyer, C., peer-reviewed/refereed.
21. May 2016, "Downwind of the flames: Assessing and predicting wildfire smoke related morbidity using satellites, in-situ measurements, and models.", American Thoracic Society, Gan, R. W. (Author), Lassman, W. (Author), Hotmann, B. J. (Author & Presenter), Pfister, G. (Author), Fischer, E. V. (Author), Volckens, J. (Author), Magzamen, S. L. (Author), Pierce, J. R. (Author), peer-reviewed/refereed.
22. May 2016, "Nucleation and growth at the DoE ASR SGP site", DoE ASR meeting, DoE, Pierce, J. R., Hodshire, A. L., Smith, J., McMurry, P., Zhao, J., Lawler, M., Ortega, J., Hansen, D., Barsanti, K.
23. April 2016, "How Wild is Your Model Fire? Constraining WRF-Chem wildfire smoke simulations with satellite and in-situ observations", International Association of Wildland Fire, Pierce, J. R., Lassman, W., Hotmann, B. J., Fischer, E. V., Pfister, G., Gan, R. W., Magzamen, S. L., Volckens, J., peer-reviewed/refereed.

24. April 2016, "Investigation of particle and vapor wall-loss effects on controlled wood-smoke smog-chamber experiments", International Association of Wildland Fire, Pierce, J. R., Bian, Q.-j., Kreidenweis-Dandy, S. M., Kodros, J. K., Jathar, S., May, A., Hatch, L., Barsanti, K., peer-reviewed/refereed.
25. January 2016, "How Wild is Your Model Fire? Constraining WRF-Chem wildfire smoke simulations with satellite and in-situ observations", American Meteorological Society, Lassman, W., Pierce, J. R., Hotmann, B. J., Fischer, E. V., Pfister, G., Gan, R. W., Magzamen, S. L., Volckens, J., peer-reviewed/refereed.
26. QIJING BIAN, Shantanu H. Jathar, John K. Kodros, Kelly Barsanti, Lindsay Hatch, Andrew A. May, Sonia M. Kreidenweis, Jeffrey R. Pierce, " Secondary organic aerosol formation in biomass-burning plumes: Theoretical analysis of lab studies", 2nd International Smoke Symposium, Long Beach, CA, 11/2016.
27. JOHN KODROS, Jeffrey R. Pierce, "Sensitivity of Cloud-Albedo Aerosol Indirect Effect on Assumed Aerosol Size Distribution Shape", American Association of Aerosol Research, Portland, OR, 10/2016.
28. JOHN KODROS, Bonne Ford, David Ridley, Rachel Cucinotta, Christine Wiedinmyer, Ryan Gan, Sheryl Magzamen, Jeffrey R. Pierce, "The Aerosol Radiative Effects and Global Burden of Mortality from Uncontrolled Combustion of Domestic Waste", American Association of Aerosol Research, Portland, OR, 10/2016.
29. BONNE FORD, Moira Burke, William Lassman, Gabriele Pfister, and Jeffrey R. Pierce, "Is smoke on your mind?: Using social media to improve estimates of smoke exposure", American Association of Aerosol Research 34th Annual Conference, Portland, OR, 10/2016.
30. WILLIAM LASSMAN, Bonne Ford, Ryan Gan, Gabriele Pfister, Sheryl Magzamen, John Volckens, Emily Fischer, Jeffrey R. Pierce, "Does it Blend? Combining Observations and Model Output to Determine Health implications of Wildfire Smoke Exposure", American Association of Aerosol Research, Portland OR, 10/21/2016.
31. ANNA HODSHIRE, Betty Croft, Jeffery R. Pierce, "The role of MSA for new-particle growth and the cloud-albedo aerosol indirect effect", American Association of Aerosol Research, Portland, OR, 10/2016.
32. QIJING BIAN, Shantanu H. Jathar, John K. Kodros, Kelly Barsanti, Lindsay Hatch, Andrew A. May, Sonia M. Kreidenweis, Jeffrey R. Pierce, " Secondary organic aerosol formation in biomass-burning plumes: Theoretical analysis of lab studies", American Association of Aerosol Research, Portland, OR, 10/2016.
33. ROSE EILENBERG, Kelsey Bilsback, Kristen Fedak, Michael Johnson, Jack Kodros, Eric Lipsky, Christian L'Orange, Jennifer Peel, Jeffrey R. Pierce, R. Subramanian, John Volckens, Allen Robinson, " Field Measurements of Solid-Fuel Cookstove Emissions from Uncontrolled Cooking Tests in China, Honduras, Uganda, and India", American Association of Aerosol Research, Portland, OR, 10/2016.
34. KELSEY BILSBACK, Rose Eilenberg, Kristen Fedak, Michael Johnson, Jack Kodros, Eric Lipsky, Christian L'Orange, Jennifer Peel, Jeffrey R. Pierce, Allen Robinson, R. Subramanian, John Volckens, " Integrating Laboratory and Field Measurements to Reduce Uncertainties in Cookstove Emissions Estimates", American Association of Aerosol Research, Portland, OR, 10/2016.
35. MICHAEL HUGHES, Jack Kodros, Jeffrey R. Pierce, Matthew West, Nicole Riemer, " Use of Machine Learning and Particle-resolved Simulations to Predict Global

- Distributions of Aerosol Mixing State Metrics", American Association of Aerosol Research, Portland, OR, 10/2016.
36. CHANTELE LONSDALE, Chris Brodowski, Matthew Alvarado, John Henderson, Jeffrey R. Pierce, John Lin, " Modeling the Impact of Biomass-Burning Aerosol on Urban Areas", American Association of Aerosol Research, Portland, OR, 10/2016.
 37. RENEE MCVAY, Theodora Nah, Jeffrey R. Pierce, John Seinfeld, Nga Lee Ng, Uncertainties in Particle Wall Loss Correction during Secondary Organic Aerosol Formation in Chamber Experiments", American Association of Aerosol Research, Portland, OR, 10/2016.
 38. BETTY CROFT, Randall V. Martin, Gregory R. Wentworth, W. Richard Leitch, Jennifer G. Murphy, Jack K. Kodros, Peter Tunved, Stephen D. D'Andrea, Jonathan P. D. Abbatt, Jeffery R. Pierce, "Contribution of Arctic Seabird-colony Ammonia to Atmospheric Particles and Cloud-albedo Radiative Effect ", 2016 IGAC Science Conference, Breckenridge, CO, 09/2016.
 39. JOHN KODROS, Bonne Ford, David Ridley, Rachel Cucinotta, Christine Wiedinmyer, Ryan Gan, Sheryl Magzamen, Jeffrey R. Pierce, "The Aerosol Radiative Effects and Global Burden of Mortality from Uncontrolled Combustion of Domestic Waste", International Global Atmospheric Chemistry, Breckenridge, CO, 9/2016.
 40. Ryan Gan, William Lassman, BONNE FORD, Gabriele Pfister, Emily V. Fischer, John Volckens, Sheryl Magzamen, Jeffrey R. Pierce. "Downwind of the Flames: Assessing and predicting wildfire smoke related morbidity using satellites, in-situ measurements and models", American Thoracic Society Conference, San Francisco, CA, 05/2016.
 41. JEFFREY PIERCE, Anna Hodshire, James N. Smith, Peter H. McMurry, Jun Zhao, Michael J. Lawler, John Ortega, David Hanson, Kelley C. Barsanti, "Nucleation and growth at the DoE ASR SGP site", DoE ASR meeting, Tyson's Corner, VA, 5/2016.
 42. JEFFREY PIERCE, William Lassman, Bonne Ford, Emily Fischer, Gabriele Pfister, Ryan Gan, Sheryl Magzamen, and John Volckens, "How Wild is Your Model Fire? Constraining WRF-Chem wildfire smoke simulations with satellite and in-situ observations", IAWF meeting, Portland, OR, 4/2016.
 43. Emily Bian, Andrew May, Shantanu Jathar, Jack Kodros, Kelley Barsanti, Lindsay Hatch, Sonia Kreidenweis, JEFFREY PIERCE, "Investigation of particle and vapor wall-loss effects on controlled wood-smoke smog-chamber experiments", IAWF meeting, Portland, OR, 4/2016.
 44. WILLIAM LASSMAN, Bonne Ford, Ryan Gan, Gabriele Pfister, Sheryl Magzamen, John Volckens, Emily Fischer, Jeffrey R. Pierce, "How Wild is your Model Fire? Constraining WRF-Chem Wildfire Smoke Simulations with Satellite Observations", American Meteorological Society, New Orleans, LA, 1/12/2016.
 45. GREGORY WENTWORTH, Jennifer Murphy, Betty Croft, Randall Martin, Jeffrey Pierce, Jean-Eric Tremblay, Isabelle Courchesne, Jean-Sebastien Cote, Jonathan Gagnon, Maurice Lévassieur, Jennie Thomas, Jonathan Abbatt, "Ammonia in the summer Arctic Marine Boundary Layer: Sources, Sinks and Implications", 2015 AGU Fall Meeting, San Francisco, CA, 12/2015.
 46. Betty Croft, Randall Martin, Richard Leitch, Peter Tunved, Thomas Breider, Stephen D' Andrea, Jeffery Pierce, GREGORY WENTWORTH, Jennifer G. Murphy, Jack Kodros, Jonathan Abbatt, "Processes Controlling the Seasonal Cycle of Arctic Aerosol Number and Size Distributions", 2015 AGU Fall Meeting, San Francisco, CA, 12/2015.

47. Vandana Jha, et al., "Sensitivity studies using Regional Atmospheric Modeling System to analyze the impact of dust and aerosol on precipitation in the Colorado River Basin", American Geophysical Union, San Francisco, 12/2015.
48. Bonne Ford, William Lassman, Emily V. Fischer, Gabriele Pfister, and Jeffrey R. Pierce, "How wild is your model fire? Constraining WRF-Chem wildfire smoke simulations with satellite observations", American Geophysical Union Fall Meeting 2015, San Francisco, CA, 12/2015.
49. Emily Fischer, et al., "Seeing through the Smoke: A collaborative, multidisciplinary effort to address the interplay between wildfire, climate, air quality, and health", American Geophysical Union, San Francisco, 12/2015.
50. BETTY CROFT, Gregory R. Wentworth, Randall V. Martin, W. Richard Leaitch, Jennifer G. Murphy, Benjamin N. Murphy, Jack K. Kodros, Jonathan P. D. Abbatt, Jeffery R. Pierce, "Processes Controlling Arctic Aerosol Number and Size: Seabird-Climate Connections", NETCARE 2015 Workshop, Toronto, ON, 11/2015.
51. BETTY CROFT, Jeffrey R. Pierce, W. Richard Leaitch, Stephen D'Andrea, Randall V. Martin, "Processes Controlling the Seasonal Cycle of Arctic Aerosol Number and Size", American Association of Aerosol Research, Minneapolis, MN, 10/2015.
52. Qijing Bian, Andrew May, Sonia Kreidenweis, JEFFREY R. PIERCE, "Investigation of Particle and Vapor Wall-loss Effects on Controlled Wood-smoke Smog-chamber Experiments", American Association of Aerosol Research, Minneapolis, MN, 10/2015.
53. KELSEY BILSBACK, Kelley Hixson, Michael Johnson, Jack Kodros, James Liacos, Eric Lipsky, Christian L'Orange, Jeffrey R. Pierce, Brooke Reynolds, Allen Robinson, R. Subramanian, John Volckens, "Combustion Emissions from Biomass Cookstoves vs. Operational Firepower: Lab and Field Observations", American Association of Aerosol Research, Minneapolis, MN, 10/2015.
54. WILLIAM LASSMAN, Bonne Ford, Gabriele Pfister, Emily Fischer, Jeffrey R. Pierce, "n Harm's Way: High-Resolution Modeling of Wildfire Plumes in the Western US for Use in Human Health Studies", American Association of Aerosol Research, Minneapolis, MN, 10/2015.
55. JOHN KODROS, Catherine Scott, Salvatore Farina, Lee Yunha, Christian L'Orange, John Volckens, Jeffrey R. Pierce, "Unconstrained Climate Impacts of Biofuel Combustion Due to Uncertain Carbonaceous Radiative and Cloud Effects", American Association of Aerosol Research, Minneapolis, MN, 10/2015.
56. ANNA HODSHIRE, Jeffrey R. Pierce, James N. Smith, Peter H. McMurry, Jun Zhao, Michael J. Lawler, John Ortega, David Hanson, Kelley C. Barsanti, "Multiple New-Particle-Growth Pathways at the DOE Southern Great Plains Field Site in Oklahoma.", American Association of Aerosol Research, Minneapolis, MN, 10/2015.
57. BONNE FORD, Jeffrey R. Pierce, William Lassman, Gabriele Pfister, Emily Fischer, "Estimating Smoke Exposure Concentrations in Fort Collins, CO from Local and Transported Wildfire Plumes.", American Association of Aerosol Research, Minneapolis, MN, 10/2015.
58. R. SUBRAMANIAN, Antonios Tasoglou, Adam Ahern, Eric Lipsky, Christian L'Orange, Kelsey Bilsback, Brooke Reynolds, Kelley Hixson, Jack Kodros, Jeffrey R. Pierce, Michael Johnson, John Volckens, Allen Robinso, "PShootout at the CSU Corral: Soot Composition and Optical Properties for 23 Cookstove/Fuel

- Combinations”, American Association of Aerosol Research, Minneapolis, MN, 10/2015.
59. JOHN KODROS, Rachel Cucinotta, Bonne Ford, Christine Wiedinmyer, Jeffrey R. Pierce, “Global Changes in Aerosol Concentration, Radiative Effects, and Health Impacts Due to Open Combustion of Domestic Waste.”, American Association of Aerosol Research, Minneapolis, MN, 10/2015.
 60. BETTY CROFT, Greg Wentworth, W. Richard Leaitch, Jennifer Murphy, Jack Kodros, Jonathan Abbatt, Randall V. Martin, Jeffrey R. Pierce, “The Importance of Arctic Seabird Colony Emissions in New Particle Formation and Summertime Arctic Clouds.”, American Association of Aerosol Research, Minneapolis, MN, 10/2015.
 61. JEFFREY R. PIERCE, Betty Croft, Jack Kodros, Stephen D'Andrea, Randall V. Martin, “The Importance of Interstitial Particle Scavenging by Cloud Droplets in Shaping the Remote Aerosol Size Distribution and Global Aerosol-climate Effects”, American Association of Aerosol Research, Minneapolis, MN, 10/2015.
 62. J.K. Kodros, J.R.Pierce, “Investigating global aerosol and climate-forcing uncertainties due to biofuel emissions/properties in GEOS-Chem”, 7th International GEOS-Chem meeting, Boston, MA, 5/2015.
 63. J.R. Pierce, R.G. Stevens, “Plume-scale sulfur chemistry and aerosol physics in GEOS-Chem”, 7th International GEOS-Chem meeting, Boston, MA, 5/2015.
 64. B. Croft, R.V. Martin, J.R. Pierce, “Processes controlling the seasonal cycle of Arctic aerosol size and number”, 7th International GEOS-Chem meeting, Boston, MA, 5/2015.
 65. Douglas C. Stolz, S. Rutledge and J. R. Pierce, “The Influences of Thermodynamics and Aerosols on Deep Convection and Lightning in the Tropics”, American Meteorological Society, Phoenix, AZ, 1/2015.
 66. Jessica Y. Ng, S. D'Andrea, M. Wheeler, A. M. Macdonald, R. Leaitch, and J. R. Pierce, “Source Attribution of Aerosol Size Distributions at Whistler Mountain”, American Meteorological Society, Phoenix, AZ, 1/2015.
 67. Landan P. MacDonald, B. L. Wells, A. Hecobian, A. Clements, K. Shonkwiler, J. R. Pierce, J. Ham, and J. L. Collett Jr., “Testing Methods for Determining Emission Rates via Controlled Field Experiments”, American Meteorological Society, Phoenix, AZ, 1/2015.
 68. Bradley Wells, Landan MacDonald, Arsineh Hecobian, Andrea Clements, Kira Shonkwiler, Christina Williams, Jeffery Collett Jr., Jeffery Pierce, and Jay Ham, "Evaluation of an Atmospheric Tracer Method at an Airfield for Use in Quantifying Natural Gas Well Development and Completion Emissions", American Meteorological Society Annual Meeting, Atlanta, GA, 02/14.
 69. Stephen D'Andrea, Jeff Pierce, et al., “Understanding and Constraining Global Secondary Organic Aerosol Amount and Size-Resolved Condensational Behavior”, Goldschmidt Conference, Sacramento, CA, 5/2014.
 70. Stephen D'Andrea, Jeff Pierce, et al., “Aerosol Size Distribution Response to Anthropogenically Driven Historical Changes in Biogenic Secondary Organic Aerosol Formation”, Goldschmidt Conference, Sacramento, CA, 5/2014.
 71. Stéphanie Gagné, Landan MacDonald, Richard W. Leaitch and Jeffrey R. Pierce, "SAMAC: new data analysis software promoting transparency, reproducibility and comparability" Summer Workshop on Data Analysis Of Cloud Microphysical Measurements, Boston, Ma., 7/2014)

72. Stephen D'Andrea, Jeffrey Pierce, Jessica Ng, Jack Kodros, Anne Marie Macdonald, Richard Leaitch, Michael Wheeler, "Source Attribution of Aerosol Size Distributions from Whistler Mountain with GEOS-Chem-TOMAS", Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Steamboat Springs, CO, 8/2014.
73. JOHN KODROS, Catherine Scott, Salvatore Farina, Jeffrey Pierce, "Uncertainties in Global Aerosol and Climate Forcings from Biofuel Emissions", Young Scientist Symposium on Atmospheric Research, Fort Collins, CO 10/2014.
74. ANNA HODSHIRE, Jeffery Pierce, Jim Smith, Peter McMurry, Jun Zhao, "New-particle Growth at the DOE Southern Great Plains field site in Oklahoma", Young Scientist Symposium on Atmospheric Research, Fort Collins, CO, 10/2014.
75. Landan MacDonald, Bradley Wells, Arsineh Hecobian, Andrea Clements, Jeff Collett, Jeff Pierce, "Estimating Front Range VOC concentrations using AERMOD", Young Scientist Symposium on Atmospheric Research, Fort Collins, CO, 10/2014.
76. STEPHEN D'ANDREA, Jessica Ng, Michael Wheeler, Annie-Marie Macdonald, Richard Leaitch, Jeffrey Pierce, John Kodros, "Source Attribution of Aerosol Size Distributions and Model Evaluation Using Whistler Mountain Measurements and GEOS-Chem-TOMAS Simulations", Young Scientist Symposium on Atmospheric Research, Fort Collins, CO, 10/2014.
77. KIMIKO SAKAMOTO, James Allan, Hugh Coe, Jonathan Taylor, Thomas Duck, Jeffrey Pierce, "Aged Biomass Burning Size Distributions from BORTAS 2011", American Association of Aerosol Research, Orlando, FL, 10/2014.
78. ILONA RIIPINEN, Jan Julin, Taina Yli-Juuti, Silja Häkkinen, Lars Ahlm, Juan-Camillo Acosta Navarro, Ivica Crljenica, Katrianne Lehtipalo, Stephen D'Andrea, Jeffrey Pierce, "Atmospheric Nanoparticle Growth: From Nano- to Global Scale", American Association of Aerosol Research, Orlando, FL, 10/2014.
79. CHARLES BROCK, Steven G. Brown, Timothy Gordon, Joost de Gouw, John Holloway, Jin Liao, Ann M. Middlebrook, J. Andrew Neuman, John B. Nowak, Jeff Peischl, Ilana Pollack, Thomas Ryerson, Michael Trainer, Nick Wagner, Jeffrey Pierce, Robin Stevens, André Welti, "Particle Formation in Power Plant Plumes in the Southeastern United States", American Association of Aerosol Research, Orlando, FL, 10/2014.
80. STEPHEN D'ANDREA, Jessica Ng, Michael Wheeler, Annie-Marie Macdonald, Richard Leaitch, Jeffrey Pierce, John Kodros, "Source Attribution of Aerosol Size Distributions and Model Evaluation Using Whistler Mountain Measurements and GEOS-Chem-TOMAS Simulations", American Association of Aerosol Research, Orlando, FL, 10/2014.
81. ROBIN STEVENS, Jeffrey Pierce, "The Contribution of Sub-Grid, Plume-Scale Nucleation to Global CCN Concentrations", American Association of Aerosol Research, Orlando, FL, 10/2014.
82. STEPHEN D'ANDREA, Juan-Camillo Acosta Navarro, Salvatore Farina, Catherine Scott, Delphine Farmer, Ilona Riipinen, Jeffrey Pierce, "Aerosol Size Distribution Response to Anthropogenically Driven Historical Changes in Biogenic Secondary Organic Aerosol Formation", American Association of Aerosol Research, Orlando, FL, 10/2014.

83. PETROS VASILAKOS, Yong-Ha Kim, Sotira Yiacoumi, Costas Tsouris, Jeffrey Pierce, Athanasios Nenes, “The Impact of Radioactive Charging on the Microphysical Evolution and Transport of Radioactive Aerosols”, American Association of Aerosol Research, Orlando, FL, 10/2014.
84. JOHN KODROS, Catherine Scott, Salvatore Farina, Jeffrey Pierce, “Uncertainties in Global Aerosol and Climate Forcings from Biofuel Emissions”, American Association of Aerosol Research, Orlando, FL, 10/2014.
85. DIEP VU, Shaokai Gao, Jeffrey Pierce, Akua Asa-Awuku, “Understanding Cloud Condensation Nuclei Mixing States from Flow Tube Experiments”, American Association of Aerosol Research, Orlando, FL, 10/2014.
86. Betty Croft, Randall Martin, Jeff Pierce, Richard Leaitch, Tom Breider, and Stephen D'Andrea, "Processes Controlling the Seasonal Cycle of Arctic Number and Size" NETCARE workshop, University of Toronto, Toronto, Canada, 11/2014.
87. STEPHEN D'ANDREA, Juan-Camillo Acosta Navarro, Salvatore Farina, Catherine Scott, Delphine Farmer, Ilona Riipinen, Jeffrey Pierce, “Aerosol Size Distribution Response to Anthropogenically Driven Historical Changes in Biogenic Secondary Organic Aerosol Formation”, American Geophysical Union, San Francisco, CA, 12/2014.
88. KIMIKO SAKAMOTO, James Allan, Hugh Coe, Jonathan Taylor, Thomas Duck, Jeffrey Pierce, “Aged Biomass Burning Size Distributions from BORTAS 2011”, American Geophysical Union, San Francisco, CA, 12/2014.
89. DIEP VU, Shaokai Gao, Jeffrey Pierce, Akua Asa-Awuku, “Understanding Cloud Condensation Nuclei Mixing States from Flow Tube Experiments”, American Geophysical Union, San Francisco, CA, 12/2014.
90. MICHAL CLAVNER, William R. Cotton, Susan C. van den Heever, Jeffrey R. Pierce, “Investigations of aerosol impacts on MCSs convection and precipitation: a modelling study”, American Geophysical Union, San Francisco, CA, 12/2014.
91. Vandana Jha, William R. Cotton, Gustavo G. Carrio, Jeffrey R. Pierce, “Potential Impacts of Dust and Aerosol Pollution on Precipitation in the Colorado River Basin”, American Geophysical Union, San Francisco, CA, 12/2014. Robin Stevens and Jeff Pierce, “The Contribution of Sub-Grid, Plume-Scale Nucleation to Global CCN Concentrations.”, Invited talk at Memorial University, St. John's, NL, Canada 11/2014.
92. Robin Stevens and Jeff Pierce, “The Contribution of Sub-Grid, Plume-Scale Nucleation to Global CCN Concentrations.”, Invited talk at the National Oceanic and Atmospheric Administration Chemical Sciences Division, Boulder, CO, USA, 08/2014.
93. JEFFREY PIERCE, Daniel Westervelt, Samuel Atwood, Elizabeth Barnes, Richard Leaitch, “New-particle Formation, Growth and Climate-relevant Particle Production in Egbert, Canada: Analysis from one Year of Size-distribution Observations”, American Association of Aerosol Research, Orlando, FL, 10/2014.
94. Stephen D'Andrea; Silja Hakkinen; Daniel M. Westervelt; Chongai Kuang; Ezra J. Levin; Warren R. Leaitch; Dominick V. Spracklen; Ilona Riipinen; Jeffrey R. Pierce, “Understanding and constraining global secondary organic aerosol amount and size-resolved condensational behavior”, American Geophysical Union, San Francisco, CA, 12/2013.

95. Betty Croft; Randall Martin; Ulrike Lohmann; Jeffrey R. Pierce, “Impacts of Wet Scavenging Parameterizations on Global Simulations of Aerosol Concentrations and Lifetimes”, American Geophysical Union, San Francisco, CA, 12/2013.
96. Robin Stevens; Jeffrey R. Pierce, “The contribution of sub-grid, plume-scale nucleation to global and regional aerosol and CCN concentrations”, American Geophysical Union, San Francisco, CA, 12/2013.
97. Dominick V. Spracklen; Catherine Scott; Alexandru Rap; Stephen D'Andrea; Kenneth S. Carslaw; Piers Forster; Graham Mann; Jeffrey R. Pierce; Kirsty J. Pringle; Ilona Riipinen, “The role of organics in new particle formation and the impact on global climate”, American Geophysical Union, San Francisco, CA, 12/2013.
98. Arsineh Hecobian; Andrea L. Clements; Kira B. Shonkwiler; Christina M. Williams; Bradley L. Wells; Landan P. MacDonald; Jeffrey R. Pierce; Jay M. Ham; Jeffrey L. Collett, “Evaluation of a tracer release and measurement system for the detection and quantification of air emissions using the tracer ratio method”, American Geophysical Union, San Francisco, CA, 12/2013.
99. Ken S. Carslaw; Lindsay A. Lee; Carly Reddington; Kirsty J. Pringle; Alexandru Rap; Piers Forster; Graham Mann; Dominick V. Spracklen; Jeffrey R. Pierce, “Dominant contribution of pre-industrial and natural aerosols to the uncertainty in the indirect effect”, American Geophysical Union, San Francisco, CA, 12/2013.
100. Pierce, J.R. Stevens, R.G, “Representing Plume-Scale Aerosol Nucleation and Growth in Global and Regional Aerosol Models”, International Aerosol Modeling Algorithms, Davis, CA, 12/2013.
101. Daniel Westervelt, Jeffrey Pierce, Peter Adams, “Development and Application of a Particle Number Source Tagging Algorithm in an Aerosol Microphysics Model”, American Association of Aerosol Research, Portland OR, 10/2013.
102. Richard Leaitch, Sangeeta Sharma, Lin Huang, Desiree Toom-Saunty, Alina Chivulescu, Annie-Marie Macdonald, Knut von Salzen, Jeffrey Pierce, Allan Bertram, Jason Schroder, Nicole Shantz, Rachel Chang, Ann-Lise Norman, “Dimethyl Sulfide Control of the Clean Summertime Arctic Aerosol and Cloud”, American Association of Aerosol Research, Portland OR, 10/2013.
103. Kimiko Sakamoto, James Allan, Hugh Coe, Jonathan Taylor, Thomas Duck, Jeffrey Pierce, “Microphysical Simulation of Biomass-Burning Aerosol Size Distributions from BORTAS 2011”, American Association of Aerosol Research, Portland OR, 10/2013.
104. Geoff Stuart, Robin Stevens, Dominick Spracklen, Hannele Korhonen, “Parameterization of In-Plume Aerosol Processing Effects on the Efficacy of Marine Cloud Albedo Enhancement from Controlled Sea-Spray Injections”, American Association of Aerosol Research, Portland OR, 10/2013.
105. Silja Hakkinen, Hanna Manninen, Taina Yli-Juuti, Joonas Merikanto, Maija Kajos, Tuomo Nieminen, Stephen D'Andrea, Ari Asmi, Jeffrey Pierce, Markku Kulmala, Ilona Riipinen, “Size-Dependent Condensation of Organics – Parameterization for Nanoparticle Growth”, American Association of Aerosol Research, Portland OR, 10/2013.
106. Sajeev Philip, Randall Martin, Jeffrey Pierce, Caroline Nowlan, Dominick Spracklen, Jose-Luis Jimenez, Qi Zhang, Lok Lamsal, Nickolay Krotkov, “Spatially and Seasonally Resolved Estimate of the Global Organic Matter to Organic Carbon Ratio

- Inferred from Aerosol Mass Spectrometer Measurements and Satellite-Derived Ground-Level Nitrogen Dioxide Concentrations”, American Association of Aerosol Research, Portland OR, 10/2013.
107. Robin Stevens, Jeffrey Pierce, “The Contribution of Sub-Grid, Plume-Scale Nucleation to Global and Regional Aerosol and CCN Concentrations”, American Association of Aerosol Research, Portland OR, 10/2013.
 108. Stephen D'Andrea, Silja Häkkinen, Daniel Westervelt, Chongai Kuang, Ezra Levin, Richard Leaitch, Dominick Spracklen, Ilona Riipinen, Jeffrey Pierce, “Understanding and Constraining Global Secondary Organic Aerosol Amount and Size-Resolved Condensational Behavior”, American Association of Aerosol Research, Portland OR, 10/2013.
 109. Jeffrey Pierce, Mat Evans, Catherine Scott, Stephen D'Andrea, Delphine Farmer, Erik Swietlicki, Dominick Spracklen, “Weak Global Sensitivity of Cloud Condensation Nuclei and the Aerosol Indirect Effect to Criegee+SO₂ Chemistry”, American Association of Aerosol Research, Portland OR, 10/2013.
 110. Silja Hakkinen, Hanna Manninen, Taina Yli-Juuti, Joonas Merikanto, Maija Kajos, Tuomo Nieminen, Stephen D'Andrea, Ari Asmi, Jeffrey Pierce, Markku Kulmala, Ilona Riipinen, “Semi-empirical parameterization for sub-20 nm particle growth”, European Aerosol Conference, Prague, Czech Republic, 9/2013.
 111. Pierce, J. R., D'Andrea, S. D., Hakkinen, S. A. K., Westervelt, D. M., Kuang, C., Levin, E. J. T., Leaitch, W. R., Spracklen, D. V., Riipinen, I., “Understanding and constraining global secondary organic aerosol amount and size-resolved condensational behavior”, Atmospheric Chemistry Gordon Research Conference, Mt. Snow, VT, 8/2013.
 112. Kenneth S. Carslaw, Lindsay A. Lee, Kirsty J. Pringle, Graham W. Mann, Dominick V. Spracklen, Philip Stier, Jeffrey R. Pierce, “New approaches to quantifying the magnitude and causes of uncertainty in global aerosol models”, International Conference on Nucleation and Atmospheric Aerosols (ICNAA), Fort Collins, CO, 6/2013.
 113. J. R. Pierce, M. J. Evans, C. E. Scott, S. D. D'Andrea, D. K. Farmer, E. Swietlicki, D. V. Spracklen, “The sensitivity of global nucleation, cloud condensation nuclei and climate to SO₂ and Criegee-intermediate chemistry”, International Conference on Nucleation and Atmospheric Aerosols (ICNAA), Fort Collins, CO, 6/2013.
 114. W. Richard Leaitch, L. Huang, A. M. Macdonald, S. Sharma, D. Toom-Saunty, K. von Salzen, Jeffrey R. Pierce, “A comparison of measurements and global model simulations of the atmospheric aerosol at two remote sites”, International Conference on Nucleation and Atmospheric Aerosols (ICNAA), Fort Collins, CO, 6/2013.
 115. Stephanie Gagne, Landan MacDonald, Michael Earle, W. Richard Leaitch, Jeffrey R. Pierce, “Aircraft measurements of aerosol, cloud droplets and drizzle in stratiform clouds over the northwest Atlantic ocean”, International Conference on Nucleation and Atmospheric Aerosols (ICNAA), Fort Collins, CO, 6/2013.
 116. Robin Stevens, Chantelle Lonsdale, Charles Brock, Paul Makar, Eladio Knipping, Molly Reed, James Crawford, John Holloway, Tim Ryerson, L. Greg Huey, John Nowak, Jeffrey Pierce, “Aerosol nucleation in coal-fired power-plant plumes”, International Conference on Nucleation and Atmospheric Aerosols (ICNAA), Fort Collins, CO, 6/2013.

117. S. D. D'Andrea, S. A. K. Hakkinen, D. M. Westervelt, C. Kuang, D. V. Spracklen, I. Riipinen, J. R. Pierce, "Effect of secondary organic aerosol amount and condensational behavior on global aerosol size distributions", International Conference on Nucleation and Atmospheric Aerosols (ICNAA), Fort Collins, CO, 6/2013.
118. S. D. D'Andrea, S. A. K. Hakkinen, D. M. Westervelt, C. Kuang, D. V. Spracklen, I. Riipinen, J. R. Pierce, "Effect of secondary organic aerosol amount and condensational behavior on global aerosol size distributions", 6th International GEOS-Chem Meeting, Boston, MA, 5/2013.
119. Ken Carslaw, Lindsay Lee, Carly Reddington, Graham Mann, Dominick Spracklen, Philip Stier, and Jeffrey Pierce, "Quantifying uncertainty in global aerosol and forcing", European Geophysics Union, Vienna, Austria, 4/2013.
120. Jonathan E. Franklin, Debora Griffin, Jeffrey R. Pierce, James R. Drummond, David Waugh, Paul Palmer, Lucy Chisholm, Thomas J. Duck, Glen Lesins, Kaley A. Walker, Jason T. Hopper, Kevin R. Curry, Kimiko M. Sakamoto, Lin Dan, Jenny Kliever, and Norm O'Neill, "A case study of aerosol depletion in a biomass burning plume over Eastern Canada during the BORTAS field experiment", European Geophysics Union, Vienna, Austria, 4/2013.
121. Mark D. Gibson, James Kuchta, Lucy Chisholm, Tom Duck, Jason Hopper, Stephen Beauchamp, David Waugh, Gavin King, Jeffrey Pierce, Zhengyan Li, Richard Leitch, Tony J. Ward, and Paul I. Palmer, "Receptor modelling of boreal wildfire associated PM_{2.5} in Halifax, Nova Scotia, Canada", European Geophysics Union, Vienna, Austria, 4/2013.
122. Kimiko Sakamoto, James Allen, Hugh Coe, Jonathan Taylor, Thomas Duck, and Jeffrey Pierce, "Aerosol microphysical processes and properties in Canadian boreal forest fire plumes measured during BORTAS", European Geophysics Union, Vienna, Austria, 4/2013.
123. Jeff Pierce, Mat Evans, Steve D'Andrea, Delphine Farmer and Dom Spacklen, "The importance of SO₂ chemistry in predicting aerosol nucleation, growth and CCN", American Association of Aerosol Research, Minneapolis, MN, 10/2012.
124. Stéphanie Gagné, Landan MacDonald, Michael Earle, W. Richard Leitch, Jeffrey R. Pierce, "Aerosol-clouds-precipitation: aircraft measurements on the east coast of Canada", American Association of Aerosol Research, Minneapolis, MN, 10/2012.
125. Pierce, J.R., Ilona Riipinen, Markku Kulmala, Mikael Ehn, Tukka Petäjä, Heikki Junninen, Doug Worsnop, Neil Donahue, "Quantification of the volatility of secondary organic compounds in ultrafine particles during nucleation events", American Geophysical Union, San Francisco, CA, 12/2011.
126. Pierce, J.R., Wainwright, C., Leitch, W.R., Macdonald, A.M., Alhm, L., Russel, L. et al., "Nucleation and condensational growth to CCN sizes during a sustained pristine biogenic SOA event in a forested mountain valley.", American Association of Aerosol Research, Orlando, FL, 10/2011.
127. Pierce, J.R., Ilona Riipinen, Markku Kulmala, Mikael Ehn, Tukka Petäjä, Heikki Junninen, Doug Worsnop, Neil Donahue, "Quantification of the volatility of secondary organic compounds in ultrafine particles during nucleation events", American Association of Aerosol Research, Orlando, FL, 10/2011.

128. Pierce, J.R.; Snow-Kropla, E., Westervelt, D.M.; Trivitayanurak, W.: The sensitivity of aerosol formation and cloud-condensation nuclei to cosmic rays in GEOS-Chem/TOMAS, 5th International GEOS-Chem Users Meeting, Boston, MA, 5/2011.
129. Pierce, J.R.; Wainwright, C.; Leitch; W.R.: Aerosol microphysical modelling of the Whistler 2010 campaign, WACS2010 meeting, Environment Canada, Downsview, ON, 2/2011.
130. Pierce, Jeffrey R.; Weisenstein, Debra K.; Heckendorn, Patricia; Peter, Thomas; Keith, David, “Enhanced geoengineering efficacy through direct emission of sulphuric acid to stratosphere”, International Aerosol Conference, Helsinki, Finland, 8/2010.
131. Pierce, J.R., Riipinen, I., et al., “Organic condensation: A vital link connecting new-particle formation to climate forcing”, International Global Atmospheric Chemistry conference, Halifax, NS, 7/2010.
132. Pierce, J.R., Kahn, R.A., Davis, M.R., Comstock, J.M., “Detecting thin cirrus in MISR aerosol retrievals”, MISR-Users Meeting, Pasadena, California, 12/2009.
133. Pierce, J.R., Davis, M.R., Kahn, R.A., “Resolving thin cirrus in Multi-angle Imaging SpectroRadiometer aerosol retrievals”, Cloud-Aerosol Feedbacks on Climate meeting, Toronto, Canada, 1/2009.
134. Pierce, J.R., Adams, P.J., “Can cosmic rays affect clouds by altering new particle formation rates?”, American Geophysical Union, San Francisco, CA, 12/2008.
135. Pierce, J.R., Adams, P.J., “Uncertainty in global CCN concentrations from aerosol nucleation, primary emissions and SOA”, American Association of Aerosol Research, Orlando, FL, 9/2008.
136. Pierce, J.R., Adams, P.J., “Can cosmic rays affect clouds by altering new particle formation rates?”, American Association of Aerosol Research, Orlando, FL, 9/2008.
137. Pierce, J.R., Adams, P.J., “Global CCN Formation from Aerosol Nucleation”, European Aerosol Conference, Thessaloniki, Greece, 8/2008.
138. Pierce, J.R., Adams, P.J., “Global contribution of nucleation to aerosol number and cloud condensation nuclei”, American Geophysical Union, San Francisco, CA, 12/2007.
139. Pierce, J.R., Adams, P.J., “A computationally efficient aerosol nucleation/condensation method: Pseudo-steady state gas phase sulfuric acid”, American Institute of Chemical Engineers, Salt Lake City, UT, 11/2007.
140. Pierce, J.R., Engelhart, G.J., Weitkamp, E.A., Pathak, R.K., Pandis, S.N., Donahue, N.M., Robinson, A.R., Adams, P.J., “Estimating the contribution of wall loss and condensation/evaporation to aerosol size evolution in smog chamber experiments”, American Association of Aerosol Research, Reno, NV, 9/2007.
141. Pierce, J.R., Adams, P.J., “A computationally efficient aerosol nucleation/condensation method: Pseudo-steady state gas phase sulfuric acid”, American Association of Aerosol Research, Reno, NV, 9/2007.
142. Pierce, J.R., Chen, K., Adams, P.J., “The contribution of carbonaceous aerosol to global cloud condensation nuclei”, American Geophysical Union, San Francisco, CA, 12/2006.
143. Pierce, J.R., Adams, P.J., “Probability of the growth of ultrafine atmospheric aerosol to cloud condensation nuclei,” American Institute of Chemical Engineers Annual Meeting, San Francisco, CA, 11/2006.

144. Pierce, J.R., Adams, P.J., “Sea-salt and CCN uncertainty,” American Association of Aerosol Research Annual Meeting, Austin, TX, 10/2005.

Memberships and Professional Service

Executive committee member for the Canadian Network on Climate and Aerosols (NETCARE) (2013-)
Co-organized the Telluride Aerosols and Clouds workshop (2014)
American Association for Aerosol Research (AAAR): member, Atmospheric Aerosols Working Group Chair (2009-2010), Young Investigators Committee (Chair, 2010-2011), Newsletter Committee (2015-), co-organized 2 special symposia at annual meetings.
American Geophysical Union (AGU): member, organized “Characterizing Global Aerosol Through Multi-sensor and Model Synergy” session (2014).
European Geophysical Union (EGU): member
International Global Atmospheric Chemistry (IGAC): member
GEOS-Chem: Atmospheric Aerosol steering committee co-chair (2011-)
Peer reviewed over 100 manuscripts since 2006.

Research Advisees

Colorado State:

Ph.D.: John (Jack) Kodros (2015-), Anna Hodshire (2016-), William Lassman (2016-), Ali Akherati (Mech E, 2016-)

Masters: Kimiko Sakamoto (2013-2014), John (Jack) Kodros (2013-2015), Landan Macdonald (2013-2015), Brad Wells (2013-2015), Anna Hodshire (2014-2016), William Lassman (2014-2016), Emily Ramnarine (2016-), Katelyn O’Dell (2016-)

Undergraduate: Jessica Ng (2014), Rachel Cucinotta (2015)

Masters Advisory Committees: Christina McCluskey, Stephen Brey, Kevin Dischino (Mechanical Engineering), Scott Kelleher (Mechanical Engineering), Sailaja Eluri (Mechanical Engineering)

Doctoral Advisory Committees: Sam Atwood, Ali Boris, Ashley Evanski-Cole, Vandana Jha, Doug Stolz, Christina McCluskey, Travis Ashby, Brody Fuchs, Robert Nelson, Zitely Tzompa, Stephen Brey, Patrick Brophy (Chemistry), Holly Debolt (Chemistry), Kelsey Bilsback (Mechanical Engineering), Laurie McHale (Mechanical Engineering)

Dalhousie:

Undergraduate: Robert Archibald (2010), Elliot Snow-Kropla (2010-2011), Christopher Wainwright (2010-2011), Geoffrey Stuart (2011-2013), Landan MacDonald (2012-2013)

Masters: Robin Stevens, (2009-2010; transferred to Ph.D.), Chantelle Lonsdale (2010-2012), Stephen D’Andrea (2012-2013)

Ph.D.: Robin Stevens, (2010-2014)

Postdoctoral: Betty Croft (2011-), Stephanie Gagne (2011-)

Research assistant: Christopher Wainwright (2011-2012), Kimiko Sakamoto (2012)

Doctoral Advisory Committees: Aaron van Donkelaar, Betty Croft, Colin Lee, Brian Boys, Sajeev Philip

Masters Advisory Committees: Gray O'Byrne, Jonathan Doyle, Lubna Bitar, Colin Pike-Thackray, Sara Torbatian, Sajeev Philip, Ryan Robski, Chris Perro, Akhila Padmanabhan, Zalalem Engida

Other institutions:

Ph.D. external examiner: Torsten Bondo, Danish Technical University, January, 2010;
Amar Hamed, University of Helsinki, August, 2010;
Eimear Dunne, University of Leeds, September, 2012.
Jenni Kontkanen, University of Helsinki, November, 2016.

University Activities

CSU ATS Faculty Search Committee: 2015-2016
CSU Engineering Network Services review committee: 2015
CSU AAAR Student Group mentor: 2013-
CSU Colloquium Committee: 2014-
CSU ATS Awards Committee: 2013, 2015
CSU Faculty Council: (Substitute councilman 2x, 2013, 1x 2014)
Dal Faculty Senator: 2011-2012
Dal Atmospheric Science Seminar organizer: 2009-2012
Dal Atmospheric Science graduate student presentation organizer: 2009-2012
Dal Faculty of Graduate Studies NSERC PGF-D committee: 2009-2011
CMU Chemical Engineering Graduate Student Association (ChEGSA), Graduate Symposium organizer (2004), President (2005), Secretary (2007).
CMU Student Chemical Engineering Car Team (Chem-E-Car), Advisor (2005-2008)
NU Tau Beta Pi (Engineering Honor Society), President (2002-2003)
NU Student Chemical Engineering Car Team (Chem-E-Car), Member (2001-2003), Captain (2001-2002)
NU Student American Institute of Chemical Engineers, Class Representative (1999-2003)
NU Jazz Ensemble, Piano and Organ (1999-2003)

Volunteer Work

Feed Nova Scotia, Food bank (2010)
Big Brothers Big Sisters, “Big brother” mentor to child through BBBS of Greater Pittsburgh (2005-2008)
National Chemistry Week and National Engineers week, “Made science” with children during outreach days at Pittsburgh Science Center (2003-2007)
Society of Women Engineers outreach, Community outreach days with local high school girls and the CMU Colloids, Polymers and Surfaces Lab (2004-2005)
Greater Boston Food Bank, Organized Tau Beta Pi trips to sort donated food (2002-2003)
St. Jude’s Children’s Hospital, Organized event to make Valentines Day cards for St. Jude’s children (2/2003)