

JEFFREY L. COLLETT, JR.

SHORT PROFESSIONAL INFO

Department of Atmospheric Science
Colorado State University
Fort Collins, CO 80523

Education

S.B. (Chemical Engineering) Massachusetts Institute of Technology, 1984
M.S. (Environmental Engineering Science) California Institute of Technology, 1985
Ph.D. (Environmental Engineering Science) California Institute of Technology, 1989

Professional Experience

Department Head	2011 to present
Professor, Assoc. Prof., and Assistant Prof. <i>Department of Atmospheric Science, Colorado State University</i>	1994 to present
Assistant Professor <i>Institute for Environmental Studies and Department of Civil Engineering, University of Illinois</i>	1991 to 1994
Postdoctoral Research Associate <i>Swiss Federal Institute of Technology (ETH), Zurich, Switzerland</i>	1989 to 1991

Select Honors/Awards and Professional Service Contributions

Outstanding Professor of the Year, Colorado State University Atmospheric Science Department, 2008
Fellow, Cooperative Institute for Research in the Atmosphere, Colorado State University, 2007-present
Engineering Faculty Award of Excellence, Colorado State University College of Engineering, 1999
Office of Naval Research Young Investigator Award, 1992-95
American Assoc. for Aerosol Research (Board of Directors 2006-2009, Chair Atmospheric Aerosols Working Group 1997-98, 2001 Tutorial Program Chair, 2002 Education Comm. Chair, 2011 – 2013 Finance Committee) American Meteorological Society (Program Committee, 1998 AMS Cloud Physics Meeting)
6th International Conference on Fog, Fog Collection, and Dew, Yokohama, Japan (Scientific Chair, 2013)

Recent Journal Articles (from 142 total)

2013

- Benedict, K.B., Day, D., Schwandner, F.M., Kreidenweis, S.M., Schichtel, B.A., Malm, W.C., and Collett, J.L. (2013) Observations of atmospheric reactive nitrogen species in Rocky Mountain National Park and across northern Colorado. *Atmos. Environ.*, **64**, 66-76, doi:10.1016/j.atmosenv.2012.08.066.
- Benedict, K.B., Kreidenweis, S.M., Schichtel, B., Malm, W.C., Carrico, C. and Collett, Jr., J. L. (2013) A seasonal nitrogen deposition budget for Rocky Mountain National Park. *Ecol. Appl.*, **23**, 1156-1169.
- Brown, S. G., Lee, T., Roberts, P. T. and Collett, Jr., J. L. (2013) Variations in the OM/OC ratio of urban organic aerosol next to a major roadway. *J. Air Waste Mgmt. Assn.*, in press.
- Desyaterik, Y., Sun, Y., Shen, X., Lee, T., Wang, X., Wang, T., and Collett, Jr., J. L. (2013) Speciation of “brown” carbon in cloud water impacted by agricultural biomass burning in eastern China. *J. Geophys. Res.*, **118**, 1-11, doi:10.1002/jgrd.50561.

1/2/2014

- Harris, E., Sinha, B., van Pinxteren, D., Tilgner, A., Fomba, K. W., Schneider, J., Roth, A., Gnauk, T., Fahlbusch, B., Mertes, S., Lee, T., Collett, J., Foley, S., Borrmann, S., Hoppe, P., and Herrmann, H. (2013) Enhanced role of transition metal ion catalysis during in-cloud oxidation of SO₂, *Science*, 340, 727, doi: 10.1126/science.1230911.
- Herckes, P., Valsaraj, K. T., and Collett, Jr., J. L. (2013) A review of observations of organic matter in fogs and clouds: origin, processing and fate, *Atmos. Res.*, doi: 10.1016/j.atmosres.2013.06.005.
- Li, W., Wang, Y., Collett, Jr., J. L., Chen, J., Zhang, X., Wang, Z., and Wang, W. (2013) Microscopic evaluation of trace metals in cloud droplets in an acid precipitation region. *Env. Sci. Tech.*, 47, 4172-4180, dx.doi.org/10.1021/es304779t.

2012

- Benedict, K.B., Lee, T., and Collett, Jr., J.L. (2012) Cloud water composition over the southeastern Pacific Ocean during the VOCALS regional experiment. *Atmos. Env.*, **46**, 104-114, doi:10.1016/j.atmosenv.2011.10.029.
- Brown, S.G., Lee, T., Norris, G.A., Roberts, P.T., Collett, Jr., J.L., Paatero, P., and Worsnop, D.A. (2012) Receptor modeling of near-roadway aerosol mass spectrometer data in Las Vegas, Nevada, with EPA PMF. *Atmos. Chem. Phys.*, **12**, 309-325, doi:10.5194/acp-12-309-2012.
- Day, D.E., Chen, X., Gebhart, K.A., Carrico, C.M., Schwandner, F.M., Benedict, K.B., Schichtel, B.A., and Collett, Jr., J.L. (2012) Spatial and temporal variability of ammonia and other inorganic aerosol species. *Atmos. Environ.*, **61**, 490-498, dx.doi.org/10.1016/j.atmosenv.2012.06.045.
- Guo, J., Wang, Y., Shen, X., Wang, Z., Lee, T., Wang, X., Li, P., Sun, M., Collett, J.L., Wang, W., and Wang, T. (2012) Characterization of cloud water chemistry at Mount Tai: Seasonal variation, anthropogenic impact, and cloud processing, *Atmos. Environ.*, **60**, 467-476, dx.doi.org/10.1016/j.atmosenv.2012.07.016.
- Heald, C. L., Collett, Jr., J.L., Lee, T., Benedict, K.B., Schwandner, F.M., Li, Y., Clarisse, L., Hurtmans, D. R., Van Damme, M., Clerbaux, C., Coheur, P.-F., Philip, S., Martin, R.V., and Pye, H.O.T. (2012) Atmospheric ammonia and particulate inorganic nitrogen over the United States, *Atmos. Chem. Phys.*, **12**, 10295-10312, doi:10.5194/acp-12-10295-2012.
- Hennigan, C. J., Westervelt, D.M., Riipinen, I., Engelhart, G. J., Lee, T., Collett Jr., J.L., Pandis, S.N., Adams, P.J., and Robinson, A. L. (2012) New particle formation and growth in biomass burning plumes: An important source of cloud condensation nuclei. *Geophys. Res. Lett.*, **39**, L09805, doi:10.1029/2012GL050930.
- LeClair, J. P., Collett, J. L., and Mazzoleni, L. R. (2012) Fragmentation analysis of water-soluble atmospheric organic matter using ultrahigh-resolution FT-ICR mass spectrometry. *Env. Sci. Tech.*, 46, 4312-4322, dx.doi.org/10.1021/es203509b.
- Saide, P.E., Spak, S.N., Carmichael, G.R., Mena-Carrasco, M.A., Yang, Q., Howell, S., Leon, D.C., Snider, J.R., Bandy, A.R., Collett, J.L., Benedict, K.B., de Szoeki, S.P., Hawkins, L.N., Allen, G., Crawford, I., Crosier, J., and Springston, S.R. (2012) Evaluating WRF-Chem aerosol indirect effects in SE Pacific marine stratocumulus during VOCALS-Rex, *Atmos. Chem. Phys.*, **12**, 3045-3064, doi:10.5194/acp-12-3045-2012.
- Sameenoi, Y., Koehler, K., Shapiro, J., Boonson, K., Sun, Y., Collett, Jr., J., Volckens, J. and Henry, C. S. (2012) Microfluidic electrochemical sensor for on-line monitoring of aerosol oxidative activity. *J. Am. Chem. Soc.* **134**, 10562-10568, dx.doi.org/10.1021/ja3031104.
- Shen, X., Lee, T., Guo, J., Wang, X., Li, P., Xu, P., Wang, Y., Ren, Y., Wang, W., Wang, T., Li, Y., and Collett, Jr., J. L. (2012) Aqueous phase sulfate production in clouds at Mt. Tai in eastern China. *Atmos. Environ.*, **62**, 502-511, dx.doi.org/10.1016/j.atmosenv.2012.07.079.
- Spiegel, J.K., Aemisegger, F., Scholl, M., Wienhold, F.G., Collett, Jr., J.L., Lee, T., van Pinxteren, D., Mertes, S., Tilgner, A., Herrmann, H., Werner, R.A., Buchmann, N. and Eugster, W. (2012) Temporal evolution of stable water isotopologues in cloud droplets in a hill cap cloud in central Europe (HCCT-2010), *Atmos. Chem. Phys.*, **12**, 11679-11694, doi:10.5194/acp-12-11679-2012.
- Weiss-Penzias, P.S., Ortiz, Jr., C., Acosta, R.P., Ryan, J.P., Fernandez, D., Collett, Jr., J.L., and Flegal, A.R. (2012) Total and monomethyl mercury in fog water from the central California coast. *Geophys. Res. Lett.*, **39**, L03804, doi:10.1029/2011GL050324.