

RODNEY J. WEBER**CURRICULUM VITAE**

Weber, Rodney J.

Professor
 College of Sciences
 School of Earth and Atmospheric Sciences
 Georgia Institute of Technology

PERSONAL DATA

Citizenship: Canada, United States

EDUCATIONAL BACKGROUND

B.A.Sc. Mechanical Engineering	1987	University of Waterloo
M.S. Mechanical Engineering	1991	University of Minnesota (V. Marple Advisor).
Ph.D. Mechanical Engineering	1995	University of Minnesota (P. McMurry Advisor)

EMPLOYMENT HISTORY

Assistant Scientist, Brookhaven National Laboratory	1996-1998
Assistant Professor, School of Earth and Atmospheric Science, GIT	1998-2003
Associate Professor, School of Earth and Atmospheric Science, GIT	2003-2008
Professor, School of Earth and Atmospheric Science, GIT	2008-

CURRENT FIELDS OF INTEREST

Atmospheric aerosols, sources and fates of air pollutants, aerosol dynamics, regional air quality and health effects, particle radiative and cloud activation properties, development of particle measurement systems.

TEACHING EXPERIENCE

Spring	2013	EAS 6795	Atmospheric Aerosols	11 Students
Fall	2012	EAS 6790	Air Pollution Phys/Chem	19
Spring	2012	EAS 6430	Air Quality Meas. Lab	11
Fall	2011	EAS 6795	Atmospheric Aerosols	24
Fall	2010	EAS 6790	Air Pollution Phys/Chem	14
Spring	2010	EAS 6430	Air Quality Meas. Lab	12
Fall	2009	EAS 6795	Atmospheric Aerosols	20
Fall	2008	EAS 6790	Air Pollution Phys/Chem	19
Spring	2008	EAS 4801	Undergrad Atm. Chem. Lab	13
Spring	2008	EAS 6430	Air Quality Meas. Lab	7
Fall	2007	EAS 6795	Atmospheric Aerosols	17
Spring	2007	EAS 4641	Undergrad Atm. Chem. Lab	13
Fall	2006	EAS 6790	Air Pollution Phys/Chem	16
Spring	2006	EAS 6430	Air Quality Meas. Lab	10
Spring	2006	EAS 4801	Undergrad Atm. Chem. Lab	4
Spring	2005	EAS 6795	Atmospheric Aerosols	15
Fall	2004	EAS 6790	Air Pollution Phys/Chem	14
Spring	2004	EAS 8803	Air Quality Meas. Lab	14
Fall	2003	EAS 6412	Physical Meteorology	11
Spring	2003	EAS 6795	Atmospheric Aerosols	13
Fall	2002	EAS 6412	Physical Meteorology	19
Spring	2002	EAS 6795	Atmospheric Aerosols	6
Fall	2001	EAS 6412	Physical Meteorology	21

Spring	2001	EAS 6795	Atmospheric Aerosols	6
Fall	2000	EAS 6412	Physical Meteorology	11
Spring	2000	EAS 6795	Atmospheric Aerosols	7
Fall	1999	EAS 6412	Physical Meteorology	10
Spring	1999	EAS 8123B	Aerosol Mechanics and Measurement	11

REFEREED PUBLICATIONS (ISI h-index=45, 6269 citations, w/o self-citations 5516)

a) **Published (underscore indicates Weber graduate student or post doc)**

- 1) Zhang, X., J. Liu, H. Zhang, J. D. Surratt, and R. J. Weber, Sources, Composition and Absorption Angström Exponent of Light-absorbing Organic Components in Aerosol Extracts from the Los Angeles Basin, *Environ. Sci. Technol.*, *47*, 3685-3693, 2013.
- 2) Cheng, Y., G. Engling, F.-K. Duan, K. He, Z. Du, J. Liu, M. Zheng, and R. J. Weber, Biomass burning contribution to Beijing aerosol, *Atm. Chem. Phys.*, *13*, 7765-7781, 2013.
- 3) Verma, V., R. Rico-Martinez, N. Kotra, L. King, T. W. Snell, and R. J. Weber, Investigating Aerosol Ecotoxicity with Freshwater Rotifers (*Brachionus calyciflorus*) *Environ. Pollu.*, , 2013.
- 4) King, L., and R. J. Weber, Development and testing of an online method to measure ambient fine particle reactive oxygen species (ROS) based on the 2',7' dichlorofluorescein (DCFH) assay, *Atmos. Meas. Tech.*, *6*, 1-12, 2013.
- 5) Lathem, T. L., A. J. Byersdorf, K. L. Thronhill, E. L. Winstead, M. J. Cubison, A. Hecobian, J. L. Jimenez, R. J. Weber, B. E. Anderson, and A. Nenes, Analysis of CCN activity of Arctic aerosol and Canadian biomassburning during summer 2008, *Atm. Chem. Phys.*, *13*, 2735-2756, 2013.
- 6) Verma, V., R. Rico-Martinez, N. Kotra, L. King, J. Liu, T. W. Snell, and R. J. Weber, Contribution of water-soluble and insoluble components and their hydrophobic/hydrophilic sub-fractions on the ROS-generating potential of fine ambient aerosols, *Environ. Sci. Technol.*, *46*, 11384-11392, 2012.
- 7) Liu, J., X. Zhang, E. Parker, P. R. Veres, J. M. Roberts, J. d. Gouw, P. L. Hayes, J. L. Jimenez, R. Ellis, and R. J. Weber, On the Partitioning of Soluble Organic Aerosol in Two Urban Atmospheres with Contrasting Emissions: Part 2 Gas and Particle Phase Formic Acid, *J. Geophys. Res.*, *117*, D00V21, doi:10.1029/2012JD017912, 2012.
- 8) Zhang, X., J. Liu, E. T. Parker, P. L. Hayes, J. L. Jimenez, J. d. Gouw, J. H. Flynn, N. Grossberg, B. L. Lefer, and R. J. Weber, On the Partitioning of Soluble Organic Aerosol in Two Urban Atmospheres with Contrasting Emissions: Part 1 Bulk Gas and Particle Phase Water-Soluble Organic Carbon, *J. Geophys. Res.*, *117*, D00V16, doi:10.1029/2012JD017908, 2012.
- 9) You, Y., L. Renbaum-Wolff, S. J. Hanna, N. Hiranuma, S. Kamal, M. L. Smith, X. Zhang, R. J. Weber, J. E. Shilling, D. Dabdub, S. T. Martin, and A. K. Bertram, Images reveal that atmospheric particulate material can undergo liquid-liquid phase separations, *P. Nat. Acad. Sci.*, *109*, 13188-13193, 2012.
- 10) Zhang, X., Z. Liu, A. Hecobian, M. Zheng, N. Frank, E. S. Edgerton, and R. J. Weber, Spatial and seasonal variations of fine particle water-soluble organic carbon (WSOC) over the southeastern United States: Implications for secondary organic aerosol formation, *Atm. Chem. Phys.*, *12*, 6593-6607, 2012.
- 11) Thompson, J. E., P. H. Hayes, J. Jimenez, K. Adachi, X. Zhang, J. Liu, R. J. Weber, P. R. Buseck, Aerosol optical properties at Pasadena, CA during CalNex 2010, *Atmos. Envir.*, *55*, 190-200, 2012.
- 12) Zhang, H., Y.-H. Lin, Z. Zhang, X. Zhang, S. L. Shaw, K. Eladio, R. Weber, A. Gold, R. M. Kamens, and J. D. Surratt, Secondary Organic Aerosol Formation from Methacrolein Photooxidation: Roles of NO_x Level, Relative Humidity, and Aerosol Acidity, *Environ. Chem.*, *9*, 247-262 2012.
- 13) Oakes, M., E. D. Ingall, B. Lai, M. M. Shafer, M. D. Hays, Z. G. Liu, A. G. Russell, and R. J. Weber, Iron Solubility Related to Single Particle Sulfur Content in Source Emission and Ambient Fine Particles, *Environ. Sci. Technol.*, *46*, 6637-6644, 2012.
- 14) Oakes, M., R. J. Weber, B. Lai, A. T. Russell, and E. D. Ingall, Characterization of iron speciation in single particles using XANES spectroscopy and micro X-ray fluorescence measurements: insight into factors controlling iron solubility, *Atm. Chem. Phys.*, *12*, 1-12, 2012.

- 15) Bahreini, R., A. M. Middlebrook, J. A. D. Gouw, C. Warneke, M. Trainer, C. A. Brock, H. Stark, S. S. Brown, W. P. Dube, J. B. Gilman, K. Hall, J. S. Holloway, W. C. Kuster, A. E. Perring, A. S. H. Prevot, J. P. Schwarz, J. P. Sprackman, S. Szidat, N. L. Wagner, R. J. Weber, P. Zotter, and D. D. Parrish, Gasoline emissions dominate over diesel in formation of secondary organic aerosol mass, *Geophys. Res. Lett.*, 39, L06805, doi:06810.01029/02011GL050718, 2012.
- 16) Asa-Awuku, A., R. H. Moore, A. Nenes, R. Bahreini, J. S. Holloway, C. A. Brock, A. M. Middlebrook, T. B. Ryerson, J. L. Jimenez, P. F. Decarlo, A. Hecobian, R. J. Weber, R. Stickel, D. J. Tanner, and L. G. Huey, Airborne cloud condensation nuclei measurements during the 2006 Texas Air Quality Study, *J. Geophys. Res.*, 116, D11201, doi:11210.11029/12010JD014874, 2011.
- 17) Cheng, Y., K. He, M. Zheng, F. Duan, Z. Du, Y. Ma, J. Tan, X. Zhang, R. Weber, M. Bergin, and A. Russell, Optical properties of elemental carbon and water-soluble organic carbon in Beijing, China, *Atm. Chem. Phys.*, 11, 11497-11510, 2011.
- 18) Cubison, M., A. Ortega, P. Hayes, D. Day, M. Lechner, W. Brune, E. Apel, G. Diskin, J. Fisher, H. Fuelberg, A. Hecobian, D. Knapp, D. Riemer, G. Sachse, W. Sessions, R. Weber, A. Weinheimer, A. Wisthaler, and J. Jimenez, Effects of aging on organic aerosol from open biomass burning smoke in aircraft and lab studies, *Atm. Chem. Phys.*, 11, 12049-12064, 2011.
- 19) Docherty, K., A. C. Aiken, J. Huffman, I. Ulbrich, P. DeCarlo, D. Sueper, D. R. Worsnop, D. C. Snyder, R. E. Peltier, R. J. Weber, B. D. Grover, D. J. Eatough, B. J. Williams, A. H. Goldstein, P. J. Ziemann, and J. L. Jimenez, The 2005 Study of Organic Aerosols at Riverside (SOAR-1): Instrumental Intercomparisons and Fine Particle Composition, *Atm. Chem. Phys. Disc.*, submitted, 2011.
- 20) Duong, H. T., A. Sorooshian, J. S. Craven, S. P. Hersey, A. R. Metcalf, X. Zhang, R. J. Weber, H. Jonsson, R. C. Flagan, and J. H. Seinfeld, Water-soluble organic aerosol in the Los Angeles Basin and outflow regions: Airborne and ground measurements during the 2010 CalNex field campaign, *J. Geophys. Res.*, 116, D00V04, doi:10.1029/2011JD016674, 2011.
- 21) Ervens, B., B. Turpin, and R. J. Weber, Secondary organic aerosol formation in cloud drops and aqueous particles (aqSOA): A review of laboratory, field and model studies, *Atm. Chem. Phys.*, 11, 11069-11102, 2011.
- 22) Heald, C. L., H. Coe, J. L. Jimenez, R. J. Weber, R. Bahreini, A. Middlebrook, L. M. Russell, M. Jolleys, T.-M. Fu, J. D. Allan, K. N. Bower, G. Capes, J. Crosier, W. T. Morgan, N. H. Robinson, P. I. Williams, M. J. Cubison, P. F. DeCarlo, and E. J. Dunlea, Exploring the vertical profile of atmospheric organic aerosol: comparing 17 aircraft field campaigns with a global model, *Atm. Chem. Phys.*, 11, 12673-12696, 2011.
- 23) Hecobian, A., Z. Liu, C. J. Hennigan, L. G. Huey, J. Jimenez, M. Cubison, S. Vay, G. Diskin, G. Sachse, A. Wisthaler, T. Mikoviny, A. Weinheimer, J. Liao, D. Knapp, A. Kurten, P. Wennberg, J. Crouse, J. S. Clair, Y. Wang, and R. J. Weber, Comparison of chemical characteristics of 495 biomass burning plumes intercepted by the NASA DC-8 aircraft during the ARCTAS/CARB-2008 field campaign, *Atm. Chem. Phys.*, 11, 13325-13337, 2011.
- 24) Moya, M., S. Madronich, A. Retama, R. Weber, K. Baumann, A. Sullivan, A. Nenes, E. Matias, and M. Castillejos, Identification of chemistry-dependent artifacts on gravimetric fine PM readings at the TI site during the MILAGRO field campaign, *Atm. Envir.*, 45, 244-252, 2011.
- 25) Pachon, J. E., S. Balachandran, Y. Hu, R. J. Weber, J. A. Mulholland, and A. G. Russell, Comparison of SOC estimates and uncertainties from aerosol chemical composition and gas phase data in Atlanta *Atm. Envir.*, 44(32), 3907-3914, 2011.
- 26) Padro, L. T., R. H. Moore, X. Zhang, N. Rastogi, R. J. Weber, and A. Nenes, Mixing state and compositional effects on CCN activity and droplet growth kinetics of size-resolved CCN in an urban environment, *Atm. Chem. Phys. Disc.*, 11, 32723-32768, 2011.
- 27) Rastogi, N., X. Zhang, E. S. Edgerton, E. Ingall, and R. J. Weber, Filterable water-soluble organic nitrogen in fine particles over the southeastern USA during summer, *Atm. Envir.*, 25, 6040-6047, 2011.
- 28) Zhang, X., Y.-H. Lin, J. D. Surratt, P. Zotter, A. S. H. Prevot, and R. J. Weber, Light-absorbing soluble organic aerosol in Los Angeles and Atlanta: A contrast in secondary organic aerosol, *Geophys. Res. Lett.*, 38, L21810, doi:21810.21029/22011GL049385, 2011

- 29) Drury, E., D. J. Jacob, R. J. D. Spurr, J. Wang, Y. Shinozuka, B. E. Anderson, A. D. Clarke, J. Dibb, C. McNaughton, and R. Weber, Synthesis of satellite (MODIS), aircraft (ICARTT), and surface (IMPROVE, EPA-AQS, AERONET) aerosol observations over eastern North America to improve MODIS aerosol retrievals and constrain aerosol concentrations and sources, *J. Geophys. Res.*, 115, D14204, 14210.11029/12009JD012629 2010.
- 30) Hecobian, A., X. Zhang, M. Zheng, N. Frank, E. S. Edgerton, and R. J. Weber, Water-soluble organic aerosol material and the light-absorption characteristics of aqueous extracts measured over the southeastern United States, *Atm. Chem. Phys.*, 10, 5965-5977, 2010.
- 31) Oakes, M., N. Rastogi, B. J. Majestic, M. Shafer, J. J. Schauer, E. S. Edgerton, and R. J. Weber, Characterization of soluble iron in urban aerosols using near-real time data, *J. Geophys. Res.*, 115, D15302, doi:15310.11029/12009JD012532 2010.
- 32) Pachon, J. E., S. Balachandran, Y. Hu, R. Shankaran, R. J. Weber, J. A. Mullholland, and A. G. Russell, Comparison of SOC estimates and uncertainties from aerosol chemical composition and gas phase data in Atlanta, *Atm. Envir.*, 44, 3907-3914, 2010.
- 33) Padro, L. T., D. Tkacik, T. Lathem, C. J. Hennigan, A. P. Sullivan, R. J. Weber, L. G. Huey, and A. Nenes, Investigation of CCN relevant properties and droplet growth kinetics of water-soluble aerosol fraction in Mexico City, *J. Geophys. Res.*, 115, D09204, 09210.01029/02009JD013195, 2010.
- 34) Zhang, X., A. Hecobian, M. Zheng, N. Frank, and R. J. Weber, Biomass burning impact on PM_{2.5} over the southeastern U.S.: Integrating chemically speciated FRM filter measurements, MODIS fire counts and PMF analysis, *Atm. Chem. Phys.*, 10, 6839-6853, 2010.
- 35) Brown, S. S., deGouw, J. A., Warneke, C., Ryerson, T. B., Dube, W. P., Atlas, E., Weber, R. J., Peltier, R., Neuman, J. A., Roberts, J. M., Swanson, A., Flocke, F., McKeen, S. A., Brioude, J., Sommariva, R., Trainer, M., Fehsenfeld, F. C., and Ravishankara, A. R.: Nocturnal isoprene oxidation over the Northeastern United States and its impact on reactive nitrogen partitioning and secondary organic aerosol, *Atm. Chem. Phys.*, 9, 3027-3042, 2009.
- 36) de Gouw, J. A., Welsh-Bon, D., Warneke, C., Kuster, W. C., Alexander, L., Baker, A. K., Beyersdorf, A. J., Blake, D. R., Canagaratna, M., Huey, L. G., Junkermann, W., Onasch, T. B., Sjostedt, S. J., Sullivan, A. P., Tanner, D. J., Vargas, O., Weber, R. J., Worsnop, D. R., Yu, X. Y., and Zaveri, R.: Emission and chemistry of organic carbon in the gas and aerosol phase at a sub-urban site near Mexico City in March 2006 during the MILAGRO study, *Atm. Chem. Phys.*, 9, 3425-3442, 2009.
- 37) Dunlea, E., DeCarlo, P. F., Aiken, A. C., Kimmel, J. R., Peltier, R. E., Weber, R. J., Tomlison, J., Collins, D. R., Shinozuka, Y., McNaughton, C. S., Howell, S. G., Clarke, A. D., Emmons, L. K., Apel, E. C., Pfister, G. G., Donkelaar, A. v., Martin, R. V., Millet, D. B., Heald, C. L., and Jimenez, J. L.: Evolution of Asian aerosols during transpacific transport in INTEX-B, *Atm. Chem. Phys.*, 9, 7257-7287, 2009.
- 38) Fountoukis, C., Nenes, A., Sullivan, A., Weber, R., VanReken, T., Fischer, M., Matias, E., Moya, M., Farmer, D., and Cohen, R.: Thermodynamic characterization of Mexico City Aerosol during MILAGRO 2006, *Atm. Chem. Phys.*, 9, 2141-2156, 2009.
- 39) Hennigan, C. J., Bergin, M. H., Russell, A. G., Nenes, A., and Weber, R. J.: Gas/particle partitioning of water-soluble organic aerosol in Atlanta, *Atm. Chem. Phys.*, 9, 3613-3628, 2009.
- 40) Miyazaki, Y., Kondo, Y., Shiraiwa, M., Takegawa, N., Miyakawa, T., Han, S., Kita, K., Hu, M., Deng, Z. Q., Zhao, Y., Sugimoto, N., Blake, R. D., and Weber, R. J.: Chemical characterization of water-soluble organic carbon aerosols at a rural site in the Pearl River Delta, China, in the summer of 2006, *J. Geophys. Res.*, 114, D14208, doi:14210.11029/12009JD011736, 2009.
- 41) Rastogi, N., Oakes, M. M., Schauer, J. J., Shafer, M. M., Majestic, B. J., and Weber, R. J.: New technique for online measurement of water-soluble Fe(II) in atmospheric aerosols, *Environ. Sci. Tech.*, 43, 2425-2430, 2009.
- 42) Yan, B., Zheng, M., Hu, Y., Ding, X., Sullivan, A., Weber, R., Baek, J., Edgerton, E. S., and Russell, A. G.: Roadside, urban and rural comparison of primary and secondary organic molecular markers in ambient PM_{2.5}, *Environ. Sci. Technol.*, 43, 4287-4293, 2009.
- 43) Donkelaar, A., R.V. Martin, R.W. Leaitch, A.M. Macdonald, T.W. Walker, D.G. Streets, E. Dunlea, J.L. Jimenez, J.E. Dibb, G. Huey, R.J. Weber, and M.O. Andreae, Analysis of aircraft and satellite

- measurements from the Intercontinental Chemical Transport Experiment (INTEX-B) to quantify long-range transport of East Asian Sulfur to Canada, *Atm. Chem. Phys.*, *8*, 2999-3014, 2008.
- 44) Hennigan, C. J., M. H. Bergin, and R. J. Weber, 2008, Correlations between water-soluble organic aerosol and water vapor: A synergistic effect from biogenic emissions?: *Environ. Sci. Tech.*, *42*, 9079-9085, 2008.
 - 45) Carlton, A.G., B.J. Turpin, K.E. Altieri, S.P. Seitzinger, R. Mathur, S.J. Roselle, and R.J. Weber, In-cloud secondary organic aerosol (SOA): Air quality and climate implications, *Environ. Sci. Tech.*, *42*, 8798-8802, 2008.
 - 46) Docherty, K., E.A. Stone, I.M. Ulbrich, P.F. DeCarlo, D.C. Snyder, J.J. Schauer, R.E. Peltier, R.J. Weber, S.M. Murphy, J.H. Seinfeld, B.D. Grover, D.J. Eatough, and J.L. Jimenez, Apportionment of primary and secondary organic aerosols in southern California during the 2005 study of organic aerosols in Riverside (SOAR), *Environ. Sci. Tech.*, *42*, 7655 - 7662, 2008
 - 47) Ding, X., M. Zheng, L. Yu, X. Zhang, R.J. Weber, B. Yan, A.G. Russell, E.S. Edgerton, and X. Wang, Spatial and seasonal trends in biogenic secondary organic tracers and water soluble organic carbon in the southeastern United States, *Environ. Sci. Tech.*, *42*, 5171-5176, 2008.
 - 48) Hennigan, C. J., M. H. Bergin, J. E. Dibb, R. J. Weber, Enhanced secondary organic aerosol formation due to water uptake by fine particles, *Geophys. Res. Lett.*, L18801, 10.1029/2008GL035046, 2008.
 - 49) Hennigan, C.J., A.P. Sullivan, C.I. Fountoukis, A. Nenes, A. Hecobian, O. Vargas, A.T.C. Hanks, L.G. Huey, B.L. Lefer, A.G. Russell, and R.J. Weber, On the volatility and production mechanisms of newly formed nitrate and water soluble organic aerosol in Mexico City, *Atm. Chem. Phys.*, *8*, 3761 - 3768, 2008.
 - 50) Heald, C.L., A.H. Goldstein, J.D. Allan, A.C. Aiken, E. Apel, E.L. Atlas, A.K. Baker, T.S. Bates, A.J. Beyersdorf, D.R. Blake, T. Campos, H. Coe, J.D. Crouse, P.F. DeCarlo, J.A.d. Gouw, E.J. Dunlea, F.M. Flocke, A. Fried, P. Goldan, R.J. Griffin, S.C. Herndon, J.S. Holloway, R. Holzinger, J.L. Jimenez, W. Junkermann, W.C. Kuster, A.C. Lewis, S. Meinardi, D.B. Millet, T. Onasch, A. Polidori, P.K. Quinn, D.D. Riemer, J.M. Roberts, D. Salcedo, B. Sive, A.L. Swanson, R. Talbot, C. Warneke, R.J. Weber, P. Weibring, P.O. Wennberg, A.E. Wittig, R. Zhang, J. Zheng, and W. Zheng, Total observed organic carbon (TOOC): A synthesis of North American observations, *Atm. Chem. Phys.*, *8*, 2007-2025, 2008.
 - 51) Brock, C.A., A. Sullivan, R. Peltier, R.J. Weber, A. Wollny, J. deGouw, A.M. Middlebrook, E. Atlas, A. Stohl, M. Trainer, O.R. Cooper, F.C. Fehsenfeld, G.J. Frost, J.S. Holloway, G. Hubler, J.A. Neuman, T.B. Ryerson, C. Warneke, and J.C. Wilson, Sources of particulate matter in the Northeastern United States in Summer: 2. Evolution of chemical and microphysical properties, *J. Geophys. Res.*, *113*, D08302, 10.1029/2007JD009241, 2008.
 - 52) de Gouw, J.A., C. Brock, E.A. Atlas, T.S. Bates, F.C. Fehsenfeld, P.D. Goldan, J.S. Holloway, W.C. Kuster, B.M. Lerner, B.M. Matthew, A.M. Middlebrook, T.B. Onasch, R.E. Peltier, P.K. Quinn, C.J. Senff, A. Stohl, A.P. Sullivan, M. Trainer, C. Warneke, R.J. Weber, and E.J. Williams, Sources of particulate matter in the Northeastern United States in Summer: 1. Direct emissions and secondary formation of organic matter in urban plumes, *J. Geophys. Res.*, *113*, D08301, 10.1029/2007JD009243, 2008.
 - 53) Stone, E.A., D.C. Snyder, R.J. Sheesley, A. Sullivan, R.J. Weber, and J.J. Schauer, Source apportionment of fine organic aerosol in Mexico City during the MILAGRO Experiment 2006, *Atm. Chem. Phys.*, *8*, 1249-1259, 2008
 - 54) Peltier, R.E., A.H. Hecobian, R.J. Weber, A. Stohl, E.L. Atlas, D.D. Riemer, E. Apel, T. Campos, and T. Karl, Investigating the Sources and Atmospheric Processing of Fine Particles from Asia and North America Measured During INTEX B, *Atm. Chem. Phys.*, *8*, 1835-1853, 2008.
 - 55) Asa-Awuku, A., A. Nenes, A. Sullivan, C. Hennigan, and R.J. Weber, Investigation of molar volume and surfactant characteristics of water-soluble organic compounds in biomass burning aerosol, *Atm. Chem. Phys.*, *8*, 799-812, 2007.
 - 56) Peltier, R.E., R.J. Weber, and A.P. Sullivan, Investigating a liquid-based method for online organic carbon detection in atmospheric particles, *Aerosol Sci. Tech.*, *41*, 1117-1127, 2007.
 - 57) Peltier, R., A. Sullivan, R. J. Weber, C. Brock, A. Wollny, J. Holloway, J.de. Gouw, C. Warneke, Airborne measurements of fine particle ionic and water-soluble organic carbon concentrations during ICARTT, *Atm. Chem. Phys.*, *7*, 3231-3247, 2007.

- 58) Weber, R.J., A.P. Sullivan, R.E. Peltier, A. Russell, B. Yan, M. Zheng, J.A.d. Gouw, C. Warneke, C. Brock, J.S. Holloway, E.L. Atlas, and E. Edgerton, A study of secondary organic aerosol formation in the anthropogenic-influenced southeastern United States, *J. Geophys. Res.*, D13302, doi:10.1029/2007JD008408, 2007
- 59) Peltier, R.E., A.P. Sullivan, R.J. Weber, A.G. Wollny, J.S. Holloway, C.A. Brock, J.A.d. Gouw, and E.L. Atlas, No evidence for acid-catalyzed secondary organic aerosol formation in power plant plumes over metropolitan Atlanta, Georgia, *Geophys. Res. Lett.*, L06801, 10.1029/2006GL028780, 2007.
- 60) Kondo, Y., Y. Miyazaki, N. Takegawa, T. Miyakawa, R.J. Weber, L. Jimenez, Q. Zhang, and D.R. Worsnop, Oxygenated and water-soluble organic aerosols in Tokyo, *J. Geophys. Res.*, 112, D01203, 10.1029/2006JD007056, 2007.
- 61) Greenwald, R., M.H. Bergin, R. Weber, and A. Sullivan, Size-resolved, real-time measurement of water-soluble aerosols in metropolitan Atlanta during the summer of 2004, *Atm. Environ.*, 41, 519-531, 2007.
- 62) Tang, Y.H., G.R. Carmichael, N. Thongboonchoo, T.F. Chai, L.W. Horowitz, P.B. Pierce, J.A. Al-Saadi, G. Pfister, J.M. Vukovich, M.A. Avery, G.W. Sachse, T. B. Ryerson, J.S. Holloway, E.L. Atlas, F.M. Flocke, R.J. Weber, L.G. Huey, J.E. Dibb, D.G. Streets, and W.H. Brune, Influence of lateral and top boundary conditions on regional air quality prediction: A multiscale study coupling regional and global chemical transport models, *J. Geophys. Res.*, 112 (D10), D10S18, 2007.
- 63) Arimoto, R., Y. Kim, Y.P. Kim, P.K. Quinn, T.S. Bates, T.L. Anderson, S. Gong, I. Uno, M. Chin, B.J. Huebert, A.D. Clarke, Y. Shinozuka, R.J. Weber, J.R. Anderson, S.A. Guazzotti, R.C. Sullivan, D.A. Sodeman, K.A. Prather, and I. Sokolik, Characterization of Asian Dust during ACE-Asia, *Global and Planetary Change*, 52 (1-4), 23056, 2006
- 64) Bates, T., T.L. Anderson, T. Baynard, T. Bond, O. Boucher, G. Carmichael, A. Clarke, C. Erlick, H. Guo, L. Horowitz, S. Howell, S. KKukarni, H. Maring, A. McComiskey, A. Middlebrook, K. Noone, C. O'Dowd, J. Ogren, J. Penner, P.K. Quinn, A.R. Ravishankara, D.L. Savoie, S.E. Schwartz, Y. Shinozuka, Y. Tang, R.J. Weber, and Y. Wu, Aerosol direct radiative effects over the northwest Atlantic, northwest Pacific, and North Indian Oceans: Estimates based on in-situ chemical and optical measurements and chemical transport modeling, *Atmos. Chem. Phys.*, 6, 1657-1732, 2006.
- 65) Brown, S.S., T.B. Ryerson, A.G. Wollny, C.A. Brock, R. Peltier, A.P. Sullivan, R.J. Weber, W.P. Dube, M. Trainer, J.F. Meagher, F.C. Fehsenfeld, and A.R. Ravishankara, Variability in nocturnal nitrogen oxide processing and its role in regional air quality, *Science*, 311, 67-70, 2006.
- 66) Brown, S.S., J.A. Neuman, T.B. Ryerson, M. Trainer, W.P. Dube, J.S. Holloway, C. Warneke, J.A.d. Gouw, S.G. Donnelly, E. Atlas, B. Matthew, A.M. Middlebrook, R. Peltier, R.J. Weber, A. Stohl, J.F. Meagher, F.C. Fehsenfeld, and A.R. Ravishankara, The nocturnal odd-oxygen budget and its implications for ozone loss in the lower troposphere, *Geophys. Res. Lett.*, 33 (L08801), 10.1029/2006GL025900, 2006.
- 67) Heald, C.L., D.J. Jacob, S. Turquety, R.C. Hudman, R.J. Weber, A.P. Sullivan, R.E. Peltier, E.L. Atlas, J.A.d. Gouw, C. Warneke, J.S. Holloway, J.A. Neuman, F.M. Flocke, and J.H. Seinfeld, Concentrations and sources of organic aerosols in the free troposphere over North America, *J. Geophys. Res.*, 111, D23S47, 10.1029/2006JD007705, 2006.
- 68) Hennigan, C., S. Sandholm, S. Kim, R. Stickel, G. Huey, and R. Weber, Influence of Ohio River Valley Emissions on Fine Particle Sulfate Measured From Aircraft Over Large Regions of the Eastern U.S. and Canada During INTEX-NA, *J. Geophys. Res.*, D24S04, doi:10.1029/2006JD007282, 2006
- 69) Miyazake, Y., Y. Kondo, N. Takegawa, Y. Komazaki, K. Kawamura, M. Mochida, K. Okuzawa, and R.J. Weber, Time-resolved measurements of water-soluble organic carbon in Tokyo, *J. Geophys. Res.*, 111, D23206, doi:10.1029/2006JD007125, 2006.
- 70) Murphy, D.M., D.J. Cziczo, P.K. Hudson, B.M. Matthew, A.M. Middlebrook, R.E. Peltier, A. Sullivan, D.S. Thomson, and R.J. Weber, Single-particle mass spectrometry of tropospheric aerosol particles, *J. Geophys. Res.*, 111 (D23), D23S32, 10.1029/2006JD007340, 2006.
- 71) Nowak, J., L.G. Huey, A.G. Russell, D. Tian, J.A. Neuman, D. Orsini, S.J. Sjostedt, A.P. Sullivan, D.J. Tanner, R.J. Weber, A. Nenes, E. Edgerton, and F.C. Fehsenfeld, Analysis of urban gas-phase ammonia measurements from the 2002 Atlanta Aerosol Nucleation and Real-time Characterization Experiment (ANARChE), *J. Geophys. Res.*, 111, D17308 10.1029/2006JD007113, 2006.

- 72) Sannigrahi, P., A. Sullivan, R.J. Weber, and E.D. Ingall, Characterization of water-soluble organic carbon in urban atmospheric aerosols using ^{13}C NMR spectroscopy, *Environ. Sci. Tech.*, **40**, 666-672, 2006.
- 73) Sorooshian, A., F.J. Brechtel, Y. Ma, R.J. Weber, A. Corless, R.C. Flagan, and J.H. Seinfeld, Modeling and characterization of a Particle-Into-Liquid Sampler (PILS), *Aerosol Sci. Tech.*, **40**, 396-409, 2006.
- 74) Sullivan, A., and R.J. Weber, Chemical characterization of the ambient organic aerosol soluble in water Part 2: Isolation of acid, neutral, and basic fractions by modified size exclusion chromatography, *J. Geophys. Res.*, **111** (D5), D05315 10.1029/2005JD006486, 2006.
- 75) Sullivan, A., and R.J. Weber, Chemical characterization of the ambient organic aerosol soluble in water Part 1: Isolation of hydrophobic and hydrophilic fractions with a XAD-8 resin, *J. Geophys. Res.*, **111** (D5), D05314 10.1029/2005JD006485, 2006.
- 76) Sullivan, A., R.E. Peltier, C.A. Brock, J.A.d. Gouw, J.S. Holloway, C. Warneke, A.G. Wollny, and R.J. Weber, Airborne measurements of carbonaceous aerosol soluble in water over northeastern United States: Method development and an investigation into water-soluble organic carbon sources, *J. Geophys. Res.*, **111**, D23S46, 10.1029/2006JD007072, 2006.
- 77) Chen, G., L.G. Huey, M. Trainer, D. Nicks, J. Corbett, T. Ryerson, D. Parrish, J.A. Neuman, J. Nowak, D. Tanner, J. Holloway, C. Brock, J. Crawford, J. Olson, A. Sullivan, R. Weber, S. Schauffle, S. Donnelly, E. Atlas, J. Roberts, F. Flocke, G. Hubler, and F. Fehsenfeld, An investigation of the chemistry of ship emission plumes during ITCT 2002, *J. Geophys. Res.*, **110** (D10), D10S90, 10.1029/2004JD005236, 2005
- 78) Heald, C.L., D.J. Jacob, R. Park, L.M. Russell, B.J. Huebert, J.H. Seinfeld, H. Liao, and R.J. Weber, A large organic aerosol source in the free troposphere missing from current models, *Geophys. Res. Lett.*, **32** (L18809), 10.1029/2005GL023831, 2005.
- 79) Miyazaki, Y., Y. Kondo, N. Takegawa, R.J. Weber, M. Koike, K. Kita, M. Fukuda, Y. Ma, A.D. Clarke, V.N. Kapustin, F. Flocke, A.J. Weinheimer, M. Zondlo, F.L. Eisele, D.R. Blake, and B. Liley, Contribution of particulate nitrate to airborne measurements of total reactive nitrogen, *J. Geophys. Res.*, **110**, 10.1029/2004JD005502, 2005.
- 80) Park, R.J., D.J. Jacob, P.I. Palmer, A.D. Clarke, R.J. Weber, M.A. Zondlo, F.L. Eisele, A.R. Bandy, D.C. Thornton, G.W. Sachse, and T.C. Bond, Export efficiency of black carbon aerosol intercontinental outflow: global implications, *J. Geophys. Res.*, **110** (D11), D11205, 2005.
- 81) Song, C.H., K. Maxwell-Meier, R.J. Weber, V. Kapustin, and A. Clarke, Dust composition and mixing state inferred from airborne composition measurements during ACE-Asia C130 Flight#6, *Atm. Environ.*, **39**, 359-369, 2005.
- 82) Song, C.H., Y. Ma, D. Orsini, Y.P. Kim, and R.J. Weber, An investigation of ionic chemical composition and mixture state of biomass burning particles recorded during TRACE-P P3B Flight#10, *J. Atmos. Chem.*, **51**, 43-64, 2005.
- 83) Takegawa, N., Y. Kondo, Y. Komazaki, Y. Miyazaki, T. Miyakawa, J.L. Jimenez, J.T. Jayne, D.R. Worsnop, J. Allan, and R.J. Weber, Characterization of an Aerodyne Aerosol Mass Spectrometer (AMS): Long-term stability and intercomparison with other aerosol instruments, *Aerosol Sci. Tech.*, *in press*, 2005.
- 84) Meier, K.L., R. Weber, D. Orsini, Y. Ma, G. Carmichael, and D. Streets, Inorganic Composition of particles in mixed dust – pollution plumes observed from airborne measurements during ACE -ASIA, *J. Geophys. Res.*, **109**, 10.1029/2003JD004464, 2004.
- 85) Tang, Y., G.R. Carmichael, J.H. Seinfeld, D. Dabdub, R.J. Weber, B. Huebert, A.C. Clarke, S.A. Guazzotti, D.A. Sodeman, K.A. Prather, I. Uno, J.J. Yienger, J.-H. Woo, D.G. Streets, P. Quinn, J.E. Johnson, C.-H. Song, V.H. Grassian, A. Sandu, R.W. Tablot, and J.E. Dibb, Three-dimensional studies of aerosol ions and their size distribution in east Asia during spring 2001, *J. Geophys. Res.*, **109**, D19S23 10.1029/2003JD004201, 2004.
- 86) McNaughton, C.S., A.D. Clarke, S.G. Howell, K.G. Moore, V. Brekhovskikh, R.J. Weber, D. Orsini, D.S. Covert, G. Buzorius, F.J. Brechtel, G.R. Carmichael, Y. Tang, F.L. Eisele, A.R. Bandy, D.C. Thornton, and B. Blomquist, Spatial distribution and size evolution of particles in Asian Outflow: The significance of primary and secondary aerosols during ACE-Asia and TRACE-P, *J. Geophys. Res.*, **109**, D19S06 10.1029/2003JD003528, 2004.

- 87) Sullivan, A.P., R. J. Weber, A.L. Clements, J.R. Turner, M.S. Bae, and J.J. Schauer, A method for on-line measurement of water-soluble organic carbon in ambient aerosol particles: Results from an urban site, *Geophys. Res. Lett.*, *31*, L13105 10.1029/2004GL019681, 2004.
- 88) Seinfeld, J.H., G. Carmichael, R. Arimoto, W. Conant, F. Brechtel, T. Bates, T. Cahill, A. Clarke, P. Flatau, B. Huebert, J. Kim, K. Markowicz, S. Masonis, P. Quinn, L. Russell, P. Russell, A. Shimizu, Y. Shinozuka, C. Song, Y. Tang, I. Uno, A. Vogelmann, R. Weber, J. Woo, and X. Zhang, ACE-Asia: regional climatic and atmospheric chemical effects of Asian dust and pollution, *Bull. Am. Meteorol. Soc.*, *85*, 367-380, 2004.
- 89) Moore, K.G., A.D. Clarke, V.N. Kapustin, C. McNaughton, B.E. Anderson, E.L. Winstead, R.J. Weber, Y. Ma, Y.-N. Lee, J. Talbot, J. Dibb, T. Anderson, S. Masonis, D. Covert, and D. Rodgers, A comparison of similar aerosol measurements made on the NASA P3-B, DC-8 and NSF C-130 aircraft during TRACE P and ACE-Asia, *J. Geophys. Res.*, *109*, D15S15 10.1029/2003JD003543, 2004.
- 90) Millet, D.B., A.H. Goldstein, J.D. Allan, T.S. Bates, H. Boudries, K.N. Bower, H. Coe, Y. Ma, M. McKay, P.K. Quinn, A. Sullivan, R.J. Weber, and D.R. Worsnop, Volatile organic compound measurements at Trinidad Head, California, during ITCT 2K2: Analysis of sources, atmospheric composition, and aerosol residence times, *J. Geophys. Res.*, *109*, D23S16 10.1029/2003JD004026, 2004.
- 91) Kondo, Y., Y. Morino, N. Takegawa, M. Koike, K. Kita, Y. Miyazaki, G.W. Sachse, S.A. Vay, M.A. Avery, F. Flocke, A.J. Weinheimer, F.L. Eisele, M. Zondlo, R.J. Weber, H.B. Singh, G. Chen, J. Crawford, D.R. Blake, A.D. Clarke, R.W. Talbot, S.T. Sandholm, E.V. Browell, D.G. Streets, H.E. Fuelberg, and B. Liley, Impacts of biomass burning in southeast Asia on ozone and reactive nitrogen over the western Pacific in spring, *J. Geophys. Res.*, *109*, D15S12 10.1029/2003JD004203, 2004.
- 92) Kittaka, C., R. Pierce, J. Crawford, M. Hitchman, D. Johnson, G. Tripoli, M. Chin, A. Bandy, R. Weber, R. Talbot, and B. Anderson, A three-dimensional regional modeling study of the impact of clouds on sulfate distributions during TRACE-P, *J. Geophys. Res.*, *109* (D15), D15S11 10.1029/2003JD004353, 2004.
- 93) Clarke, A.D., Y. Shinozuka, V.N. Kapustin, D. Howell, B. Huebert, S. Doherty, T. Anderson, D. Covert, J. Anderson, X. Hua, K.G. Moore, C. McNaughton, G. Carmichael, and R. Weber, Size distributions and mixtures of dust and black carbon aerosol in Asian outflow: Physiochemistry and optical properties, *J. Geophys. Res.*, *109*, D15S09 10.1029/2003JD004378, 2004.
- 94) Brock, C.A., P.K. Hudson, E.R. Lovejoy, A. Sullivan, J.B. Nowak, L.G. Huey, O.R. Cooper, D.J. Cziczo, J.d. Gouw, F.C. Fehsenfeld, J.S. Holloway, G. Hubler, B.G. Lafleur, D.M. Murphy, J.A. Neuman, J. D. K. Nicks, D.A. Orsini, D.D. Parrish, T.B. Ryerson, D.J. Tanner, C. Warneke, R.J. Weber, and J.C. Wilson, Particle characteristics following cloud-modified transport from Asia to North America, *J. Geophys. Res.*, *109*, D23S26 10.1029/2003JD004198, 2004.
- 95) Allan, J.D., K.N. Bower, H. Coe, H. Boudries, J.T. Jayne, M.R. Canagaratna, D.B. Millet, A.H. Goldstein, P.K. Quinn, R.J. Weber, and D.R. Worsnop, Submicron aerosol composition at Trinidad Head, CA during ITCT 2K2, its relationship with gas phase volatile organic carbon and assessment of instrument performance, *J. Geophys. Res.*, *109*, D23S24 10.1029/2003JD004208, 2004.
- 96) Zhang, M., I. Uno, Z. Wang, H. Akimoto, G.R. Carmichael, Y. Tang, J.-H. Woo, D.G. Streets, G.W. Sachse, M.A. Avery, R.J. Weber, and R.W. Talbot, Large-scale structure of trace gas and aerosol distributions over the western Pacific ocean during TRACE-P, *J. Geophys. Res.*, *108*, 8820 10.1029/2002JD002946, 2003a.
- 97) Zhang, J., W.L. Chameides, R. Weber, G. Cass, D. Orsini, E. Edgerton, P. Jongejan, and J. Slanina, Validity of thermodynamic equilibrium assumption for fine particulate composition: Nitrate and ammonium during Atlanta '99 Supersite Experiment, *J. Geophys. Res.*, *108*, 10.1029/2001JD001592, 2003b.
- 98) Youhua, T., G.R. Carmichael, J.-H. Woo, N. Thongboonchoo, G. Kurata, U. Itsush, D.G. Streets, D.R. Blake, R.J. Weber, R.W. Talbot, Y. Kondo, S.B. Singh, and T. Wang, Influences of biomass burning during the Transport and Chemical Evolution Over the Pacific (TRACE-P) experiment identified by the regional chemical transport model, *J. Geophys. Res.*, *108*, 8824 10.1029/2002JD003110, 2003.

- 99) Weber, R.J., S. Lee, B. Wang, R.L. Mauldin, M. Zondlo, F.L. Eisele, K. Moore, V. Kapustin, and A. Clarke, Particle production within and near aged Asian anthropogenic plumes observed during TRACE-P, *J. Geophys. Res.*, *108* (D21), 8814 10.1029/2002JD003112, 2003a.
- 100) Weber, R.J., B. Wang, E. Scheuer, R. Talbot, J. Dibb, C. Seid, and L. DeBell, Investigations into new particle formation in the central Canadian Arctic during the winter/spring transition as part of TOPSE, *J. Geophys. Res.*, *108* (D4), 10.1029/2002JD002239, 2003b.
- 101) Weber, R., D. Orsini, M. Bergin, C.S. Kiang, M. Chang, J.S. John, C.M. Carrico, Y.N. Lee, P. Dasgupta, J. Slanina, B. Turpin, E. Edgerton, S. Hering, G. Allen, P. Solomon, and W. Chameides, Short-Term Temporal Variation In PM_{2.5} Mass And Chemical Composition During The Atlanta Supersite Experiment, 1999, *J. Air & Waste Manage. Assoc.*, *53*, 84-91, 2003c.
- 102) Weber, R.J., D. Orsini, Y. Duan, K. Baumann, C.S. Kiang, W. Chameides, Y.L. Lee, F. Brechtel, P. Klotz, P. Jongejan, H.t. Brink, J. Slanina, P. Dasgupta, S. Hering, M. Stlozenburg, E. Edgerton, B. Hartsell, P. Solomon, and R. Tanner, Intercomparison of near real-time monitors of PM_{2.5} nitrate and sulfate at the EPA Atlanta Supersite, *J. Geophys. Res.*, *108* (D7), 10.1029/2001JD001220, 2003d.
- 103) Tang, Y., G.R. Carmichael, G. Kurata, I. Uno, R.J. Weber, C.-H. Song, S.K. Guttikunda, J.-H. Woo, D.G. Street, C. Wei, A.D. Carke, B. Huebert, and T.L. Anderson, Impacts of dust on regional tropospheric chemistry during the ACE-ASIA Experiment: A model study, *J. Geophys. Res.*, *109*, D19S21 10.1029/2003JD003806, 2003.
- 104) Solomon, P., E. Cowling, and R.J. Weber, Preface to special section: Southern oxidants study 1999 Atlanta Supersite Project (SOS3), *J. Geophys. Res.*, *108*, 10.1029/2003JD003536, 2003a.
- 105) Solomon, P.A., W. Chameides, R. Weber, A. Middlebrook, C.S. Kiang, A.G. Russell, A. Butler, B. Turpin, D. Mikel, R. Scheffe, E. Cowling, E. Edgerton, J.S. John, J. Jansen, P. McMurry, S. Hering, and T. Bahadori, Overview of the 1999 Atlanta Supersites Project, *J. Geophys. Res.*, *108*, 10.1029/2001JD001458, 2003b.
- 106) Orsini, D., Y. Ma, A. Sullivan, B. Sierau, K. Baumann, and R. Weber, Refinements to the Particle-Into-Liquid Sampler (Pils) For Ground and Airborne Measurements Of Water Soluble Aerosol Composition, *Atm. Environ.*, *37*, 1243-1259, 2003.
- 107) Neuman, J.A., J.B. Nowak, C.A. Brock, M. Trainer, F.C. Fehsenfeld, J.S. Holloway, G. Hubler, P. Hudson, D.M. Murphy, J. D. K. Nicks, D. Orsini, D.D. Parrish, T.B. Ryerson, D.T. Sueper, A. Sullivan, and R.J. Weber, Vertical gradients and spatial variability in ammonium nitrate formation and nitric acid depletion over Southern California, *J. Geophys. Res.*, *108* (D17), 10.1029/2003JD003616, 2003.
- 108) Murayama, T., S.J. Masonis, J. Redemann, T.L. Anderson, B. Schmid, J.M. Livingston, P.B. Russell, B. Huebert, S.G. Howell, C.S. McNaughton, A. Clarke, M. Abo, A. Shimizu, N. Sugimoto, M. Yabuki, H. Kuze, S. Fukagawa, K.L. Maxwell, R.J. Weber, D.A. Orsini, B. Blomquist, A. Bandy, and D. Thornton, An intercomparison of lidar-derived aerosol optical properties with airborne measurements near Tokyo during Ace Asia, *J. Geophys. Res.*, *108*, 10.1029/2002JD003259, 2003.
- 109) Mauldin, R.L., C.A. Cantrell, M.A. Zondlo, E. Kosciuch, B. Ridely, R. Weber, and F.E. Eisele, Measurements of OH, H₂SO₄, and MSA during Tropospheric Ozone Production About the Spring Equinox (TOPSE), *J. Geophys. Res.*, *108* (No. D4), 10.1029/2002JD002295, 2003.
- 110) Maria, S.F., L.M. Russell, B.J. Turpin, R.J. Porcja, T.L. Campos, R.J. Weber, and B.J. Huebert, Source signatures of carbon monoxide and organic functional groups in Asian Pacific Regional Aerosol Characterization Experiment (ACE-Asia) submicron aerosol types, *J. Geophys. Res.*, *108* (D23), 8637 10.1029/2003JD003703, 2003.
- 111) Ma, Y., R.J. Weber, K. Meier, D.A. Orsini, Y.-N. Lee, B.J. Huebert, S.G. Howell, T. Bertram, R.W. Talbot, J.E. Dibb, and E. Scheuer, Intercomparisons of airborne measurements of aerosol ionic chemical composition during TRACE-P and ACE-Asia, *J. Geophys. Res.*, *109*, D15S07 10.1029/2003JD003883, 2003a.
- 112) Ma, Y., R.J. Weber, Y.-N. Lee, A. Bandy, D. Thornton, A. Clarke, R. Blake, G. Sachse, H. Fuelberg, J.-H. Woo, D. Streets, G.R. Carmichael, and F.L. Eisele, The characteristics and influence of biomass burning aerosols on fine particle ionic composition measured in Asian Outflows during TRACE P, *J. Geophys. Res.*, *108*, 8816, 10.1029/2002JD003128, 2003b.

- 113) Lee, Y.-N., R. J. Weber, Y. Ma, D. Orsini, K. Maxwell, D. Blake, S. Meinardi, G. Sachse, C. Harward, A.D. Clarke, K. Moore, V.N. Kapustin, T.-Y. Chen, D.C. Thornton, F.H. Tu, and A.R. Bandy, Airborne measurement of inorganic ionic components of fine aerosol particles using the PILS-IC technique during ACE-ASIA and TRACE-P, *J. Geophys. Res.*, *108* (D23), 10.1029/2002JD003265, 2003.
- 114) Koike, M., Y. Kondo, K. Kita, N. Takegawa, Y. Masui, Y. Miyazaki, M.W. Ko, A.J. Weinheimer, F. Flocke, R.J. Weber, D.C. Thornton, G.W. Sachse, S.A. Vay, D.R. Blake, D.G. Streets, F.L. Eisele, S.T. Sandholm, H.B. Singh, and R.W. Talbot, Export of anthropogenic reactive nitrogen and sulfur compounds from the East Asia region in spring, *J. Geophys. Res.*, *108* (D20, 4655), 10.1029/2002JD003284, 2003.
- 115) Drewnick, F., J.J. Schwab, O. Hogrefe, S. Peters, L. Husain, D. Diamond, R. Weber, and K. Demerjian, Intercomparison and evaluation of four semi-continuous pm_{2.5} sulfate instruments, *Atm. Environ.*, *37*, 3335-3350, 2003.
- 116) Chin, M., P. Ginoux, R. Lucchesi, B. Huebert, R. Weber, T. Anderson, S. Masonis, and B. Blomquist, A global aerosol model forecast for the ACE-Asia field experiment, *J. Geophys. Res.*, *10.1029/2003JD003642*, 2003.
- 117) Browell, E.V., M.A. Fenn, C.F. Butler, W.B. Grant, V.G. Brackett, J.W. Hair, M.A. Avery, R.E. Newell, Y. Hu, H.E. Fuelberg, D.J. Jacob, B.E. Anderson, E.L. Atlas, D.R. Blake, W.H. Brune, J.E. Dibb, A. Fried, B.G. Heikes, G.W. Sachse, S.T. Sandholm, H.B. Singh, R.W. Talbot, S.A. Vay, R.J. Weber, and K.B. Bartlett, Large-Scale Ozone and Aerosol Distributions, Air Mass Characteristics, and Ozone Fluxes Over the Western Pacific Ocean in Late-Winter/Early-Spring, *J. Geophys. Res.*, *108*, 10.1029/2002JD003290, 2003.
- 118) Weber, R.J., K. Moore, V. Kapustin, A. Clarke, R.L. Mauldin, E. Kosciuch, C. Cantrell, F. Eisele, B. Anderson, and L. Thornhill, Nucleation in the equatorial pacific during PEM Tropics B: Enhanced boundary layer H₂SO₄ with no particle production, *J. Geophys. Res.*, *106*, 32,767-32,776, 2001a.
- 119) Weber, R.J., G. Chen, D.D. Davis, R.L. Mauldin, D.J. Tanner, F.L. Eisele, A.D. Clarke, D.C. Thornton, and A.R. Bandy, Measurements of enhanced H₂SO₄ and 3-4 nm particles near a frontal cloud during ACE 1, *J. Geophys. Res.*, *106*, 24,107-24,117, 2001b.
- 120) Weber, R.J., D. Orsini, Y. Daun, Y.-N. Lee, P. Klotz, and F. Brechtel, A particle-into-liquid collector for rapid measurements of aerosol chemical composition, *Aerosol Sci. Tech.*, *35*, 718-727, 2001.
- 121) Aalto, P., K. Hämeri, E. Becker, R. Weber, J. Salm, J. Mäkelä, C. Hoell, C. O'Dowd, H. Karlsson, H.-C. Hansson, M. Väkevä, I. Koponen, G. Buzorius, and M. Kulmala, Physical characterization of aerosol particles during nucleation events, *Tellus B*, *53*, 344-358, 2001.
- 122) McMurry, P.H., K.S. Woo, R.J. Weber, D.R. Chen, and D. Pui, Size distributions of 3 to 10 nm atmospheric particles: Implications for nucleation mechanisms, *Phil. Trans. Royal Soc. Lond.*, *358*, 2625-2642, 2000.
- 123) Dick, W.D., P.H. McMurry, R.J. Weber, and F.R. Quant, White light detection for nanoparticle sizing with the new TSI ultrafine condensation particle counter, *J. Nanoparticle Res.*, *2*, 85-90, 2000.
- 124) Weber, R.J., P.H. McMurry, L. Mauldin, D. Tanner, F. Eisele, A. Clarke, and V.N. Kapustin, New particle production in the remote troposphere: A comparison of observations at various sites, *Geophys. Res. Lett.*, *26* (No. 3), 307-310, 1999a.
- 125) Weber, R.J., P.H. McMurry, T.S. Bates, D.S. Covert, F.J. Brechtel, and G.L. Kok, Intercomparison of airborne and surface-based measurements of condensation nuclei in the remote marine troposphere measured during ACE 1, *J. Geophys. Res.*, *104*, 21,673-21,683, 1999b.
- 126) Clarke, A.D., V.N. Kapustin, F.L. Eisele, R.J. Weber, and P.H. McMurry, Particle production near marine clouds: sulfuric acid and predictions from classical binary nucleation, *Geophys. Res. Lett.*, *26*, 2425-2428, 1999.
- 127) Weber, R.J., A.D. Clarke, M. Litchy, J. Li, G. Kok, R.D. Schillawski, and P.H. McMurry, Spurious aerosol measurements when sampling from aircraft in the vicinity of clouds, *J. Geophys. Res.*, *103* (D21), 28,337-28,346, 1998a.
- 128) Weber, R.J., P.H. McMurry, L. Mauldin, D. Tanner, F. Eisele, F. Brechtel, S. Kreidenweis, G. Kok, R. Schillawski, and D. Baumgardner, A study of new particle formation and growth involving biogenic trace gas species measured during ACE 1, *J. Geophys. Res.*, *103* (No. D13), 16385-16396, 1998b.

- 129) Weber, R.J., M. Stolzenburg, S. Pandis, and P.H. McMurry, Inversion of UCNC pulse height distributions to obtain ultrafine (~3 to 10 nm) particle size distributions, *J. Aerosol Sci.*, *29*, 601-615, 1998c.
- 130) McGraw, R., and R.J. Weber, Hydrates in binary sulfuric acid-water vapor: Comparison of CIMS measurements with the liquid-drop model, *Geophys. Res. Lett.*, *25* (No16), 3143-3146, 1998.
- 131) Wiedensohler, A., D. Orsini, D.S. Covert, D. Coffmann, W. Cantrell, H. Halvlicek, F.J. Brechtel, L.M. Russell, R.J. Weber, J. Gras, J.G. Hudson, and M. Litchy, Intercomparison study of the size-dependent counting efficiency of 26 condensation particle counters, *Aerosol Sci. Technol.*, *27*, 224-242, 1997.
- 132) Weber, R.J., J.J. Marti, P.H. McMurry, F.L. Eisele, D.J. Tanner, and A. Jefferson, Measurements of new particle formation and ultrafine particle growth rates at a clean continental site, *J. Geophys. Res.*, *102*, 4375-4385, 1997.
- 133) Murphy, D.M., D.S. Thomson, M. Kaluzhny, J.J. Marti, and R.J. Weber, Aerosol characteristics at Idaho Hill during the OH photochemistry experiment, *J. Geophys. Res.*, *102*, 6325-6330, 1997.
- 134) Marti, J.J., R.J. Weber, P.H. McMurry, F.L. Eisele, D.J. Tanner, and A. Jefferson, New particle formation at a remote continental site: Assessing the contributions of SO₂ and organic precursors, *J. Geophys. Res.*, *102*, 6331-6339, 1997.
- 135) Jefferson, A., F.L. Eisele, P.J. Ziemann, J.J. Marti, R.J. Weber, and P.H. McMurry, Measurements of the H₂SO₄ mass accommodation coefficient onto polydisperse aerosol, *J. Geophys. Res.*, *102*, 19021-19028, 1997.
- 136) Weber, R.J., and P.H. McMurry, Fine particle size distributions at the Manua Loa Obseavtory, Hawaii, *J. Geophys. Res.*, *101*, 14767-14775, 1996.
- 137) Weber, R.J., J.J. Marti, P.H. McMurry, F.L. Eisele, D.J. Tanner, and A. Jefferson, Measured atmospheric new particle formation rates: Implications for nucleation mechanisms, *Chem. Eng. Comm.*, *151*, 53-64, 1996.
- 138) Saros, M.T., R.J. Weber, J.J. Marti, and P.H. McMurry, Ultrafine aerosol measurement using a condensation nucleus counter with pulse height analysis, *Aerosol Sci. Technol.*, *25*, 200-213, 1996.
- 139) Marti, J.J., R.J. Weber, M.T. Saros, J.G. Vasiliou, and P.H. McMurry, Technical Note: Modification of the TSI 3025 condensation particle counter for pulse height analysis, *Aerosol Sci. and Technol.*, *25*, 214-218, 1996.
- 140) Weber, R.J., P.H. McMurry, F.L. Eisele, and D.J. Tanner, Measurement of expected nucleation precursor species and 3 to 500 nm diameter particles at Mauna Loa Observatory, Hawaii, *J. Atmos. Sci.*, *52*, 2242-2257, 1995.

b) Accepted or In Press (underscore indicates Weber graduate student or post doc)

c) Submitted Papers (underscore indicates Weber graduate student or post doc)

- Ellis, R., J. G. Murphy, P. L. Hayes, M. J. Cubison, A. M. Ortega, J. L. Jimenez, J. Liu, R. J. Weber, P. Veres, A. K. Cochran, and J. M. Roberts, Gas-particle partitioning of ammonia at the CalNex-LA ground site and the influence of aerosol pH, *J. Geophys. Res.*, submitted, 2012.
- Hayes, P., A. M. Ortega, M. J. Cubison, W. Hu, D. W. Toohey, J. H. Flynn, B. L. Lefer, N. Grossberg, S. Alvarez, B. Rappengluck, J. Taylor, J. D. Allan, J. S. Hoooway, J. B. Gilman, W. C. Kuster, J. A. d. Gouw, P. Massoli, X. Zhang, J. Liu, R. J. Weber, A. Corrigan, L. M. Russell, y. Zhao, S. S. Cliff, A. S. Wexler, G. Isaacman, D. R. Worton, N. M. Kreisber, S. V. Hering, A. H. Goldstein, R. Thalman, R. Volkamer, Y. H. Lin, J. D. Surratt, J. H. Offenberg, K. D. Froyd, S. Susanter, S. Friffith, P. S. Stevens, J. Brioude, W. M. Angevine, and J. L. Jimenez, Aerosol Composition and Sources in Los Angeles During the 2010 CalNex Campaign *J. Geophys. Res.*, submitted, 2012.

RESEARCH GRANTS AND CONTRACTS

a) Currently Administered

- 1) Collaborative Proposal: Atmospheric mixed phase chemistry for improved climate predictions. Field measurements and modeling for SOAS, NSF, Jan 13 to Dec 2015, \$359,446

2) The Emory/Georgia Tech Collaborative: Multi-Scale Assessment of Health Effects of Air Pollution Mixtures Using Novel Measurements and Models, **EPA-STAR**, Feb.1, 2011 – Jan. 31, 2016, \$8M (CoPI). RW PI of Project 1, \$1.4M.

3) Measurement of Particulate Oxalic Acid on the NASA DC-8 for SEAC4RS to Investigate Organic Aerosol Formation by Clouds **NASA**, 1/12 to 1/15, \$98,248

b) Currently Non-Administered

c) Pending

1) Collaborative Research: Natural and Polluted Secondary Organic Aerosol Production and Optical Properties in Amazônia, **NSF**, July 1, 2013 to June 30 2016, \$359,446

2) Developing multipollutant exposure indicators of traffic pollution: The dorm room inhalation vehicle emission (DRIVE) study, submitted April, 2013, RJW co-PI with A. Russell, PI J. Sarnat (Emory), 1/1/14 to 12/31/16, \$669,419,

d) Past Funding

1) Investigating secondary organic aerosol formation in the Southeastern United States, **NSF**, 6/2008 - 6/2013, \$394,535.

2) Quantitative Measurements Of Bulk Aerosol Particle Inorganic and Organic Composition from the NASA DC-8 During ARCTAS, **NASA**, 1/2008 to 2/2013, \$427,734

3) Collaborative Research: Investigating SOA Formation in Central LA For CalNex 2010, **NSF**, 04/10 to 09/12, \$360,580.

4) Measurement of Organic Nitrogen Using the Suite of AMIGAS 2008 Filters, **EPRI/Southern Company** funded through T. Russell existing **S.C.** project, PI Rodney Weber, co-PI Ellery Ingall, 07/01/09 to 10/01/09, \$15k.

5) An Instrument for Real Time Speciation of Water Soluble Tracers in Atmospheric Particulate Matter **EPA**, 4/06 to 3/09 no cost extension to 5/10, \$492,000

6) **Cullen Peck** \$60k, 7/10.

7) On Line Measurements of Bulk Inorganic and Organic Fine Particle Composition for INTEX-NA Phase B Airborne Measurements, **NASA**, 11/15/05 to 11/14/08 no cost extension to 11/09 \$357,135.

8) Particulate and gas sampling of prescribed fire, **Ga Dept Natural Resources**, 04/01/2008 – 04/01/2009, \$56,562, P.I. A. Russell (CEE GIT).

9) Investigating the Spatial Distribution of Secondary Organic Compounds in Metropolitan Atlanta, **Southern Company**, 6/08 – 10/08, \$11,000.

10) Investigating The Spatial And Temporal Distribution Of SOA And Biomass Burning In The South East, **GA DNR**, 4/08 – 3/09, \$75,000.

11) Continuous Measurement of PM2.5 Ions in Atlanta, Georgia, **EPRI**, 7/ 08 to 10/08, \$16,108.

12) Development of an integrated instrument for quantitative size-resolved measurements for inorganic and organic particle composition for the NASA P3-B, **NASA**, 4/04 to 4/07 no cost extension to 1/08, \$326,649. Supplemented for INTEX-A, \$64,892.

13) Development of instrumentation and methods for measurements of water-soluble organic chemical compounds in ambient aerosol particles, **NSF**, June. 05 – June 06, \$51,000

14) Online measurements of bulk inorganic and organic fine particle composition for Intex-NA phase B airborne measurements, **NASA**, Aug. 1/05 – July 31/08, \$550,000.

15) Airborne Measurements of Fine Particle Bulk Chemical Composition For GoMACCS, **NOAA**, May 06 – April 07, \$95,420.

16) Development of an integrated PILS for autonomous measurements of ionic and water soluble organic carbon aerosol compounds on the NOAA P3 ITCT 2K4, **NOAA**, 5/04 to 5/07, \$207,562.

17) Development and Deployment of an Instrument for Rapid Airborne Measurements of Aerosol Chemical Composition to Better Quantify Fine Particle Intercontinental Transport and Chemical Transformations, **NOAA**, 9/01 to 9/04, \$280k. (RW PI)

- 18) P3 To Better Quantify Processes Affecting Aerosols Advected From East Asia, *NASA* 9/00 to 9/02, \$339k. Augmented, 10/02 to 3/03, \$25.2k. (RW PI)
- 19) Rapid airborne measurements of bulk aerosol ionic composition during ACE-ASIA, *NSF*, 12/01 to 12/03, \$238k. Augmented, 1/03 to 1/03, \$47.1K. (RW PI)
- 20) A One-Month Study of Fine Particle Water Soluble Organic Carbon and Wet Denuder Measurements of Gas Precursors for the St Louis Supersite Study, *EPA*, 1/01 to 12/03, \$50k. (RW PI)
- 21) Measurements Of Particle Inorganic Composition With The PILS-IC for DICE, April 1/02 to March 31/03, *NASA*, \$79.8K. (RW PI)
- 22) Nucleation and Growth of Atmospheric Aerosols, *Subcontract U. of Minnesota*, 1/02 to 12/02, \$20k.
- 23) Fall Line Air Quality Study, (FAQS) P.I. M. Chang, *State of Georgia*, 5/00 to 5/03, \$122k. (RW PI).
- 24) Construction and Demonstration of the 15-LPM PILS/IC For PMEL For Ship-Based Deployments, *NOAA*, 2/02 to 1/03, \$59.6k. (RW PI)
- 25) Airborne studies of new particle formation during the Arctic winter/spring transition, *NSF*, 9/99 – 9/02, \$125k. (RW PI)
- 26) Construction of A PILS/IC System For the St Louis Supersite Study April 1 2001 to March 31 2002, *EPRI*, 4/01 to 4/02, \$50k. (RW PI)
- 27) Demonstration and Evaluation of the 5-LPM PILS/IC at the NOAA Air Monitoring Station for Studies of Acid Particle Dry Deposition, *NOAA*, 7/01 to 7/02, \$40.7k. (RW PI)
- 28) Construction and Operation Of A PILS/IC System For the NYC Supersite Study July 1 2001 to July 28 2001, *EPA/NY State*, 4/01 to 4/02, \$75k.. (RW PI)
- 29) Assessment and Application of IC-Based Near-Continuous Analysis of Soluble PM2.5 Species; *EPA*, 4/99 to 10/01, \$32k. (Co-PI)
- 30) Texas 2000 Air Quality Study, *EPA/SOS*, (P.I. T. Russell) 5/00 to 5/01, \$100k. (Co-PI)
- 31) Size Resolved Aerosol Nuclei and Physico-Chemistry for PEM-Tropics B Aboard the P3B, R. Weber subcontract to U of Hawaii, *NASA- University of Hawaii Subcontract*, 9/98 to 9/00, \$90k (Co-PI)

MEETINGS AND SYMPOSIA (*underscore indicates Weber graduate student or post doc*)

a) Invited

1. Studies of secondary organic aerosols in the Southeastern US through measurements of water-soluble organic carbon and its properties: Brown Carbon, SERMACS 2012, Raleigh NC, Nov 14-17, 2012.
2. PM2.5 Soluble Brown-Carbon Measured in Rural and Contrasting Urban Environments, Fall AGU, Dec 5-9, San Francisco, 2011.
3. A tale of SOA in two cities, Los Angeles versus Atlanta, Cal. Tech. Nov 16, 2011.
4. Invited Talk: A comparison of SOA formation in Atlanta and Los Angeles and the formation of soluble brown carbon, Gordon Research Conference – Atmospheric Chemistry, Mount Snow VT, July 24-29, 2011
5. Aerosols Metrology for Climate Workshop, Invited speaker and Panel Co-Chair, NIST, Gaithersburg MD, March 14, 2011.
6. An Instrument for Real Time Speciation of Water Soluble Tracers in Atmospheric Particulate Matter, EPA Webinar on Developing the Next Generation of Air Quality Measurement Technology, Spring 2010.
7. (Invited Tutorial) Semi-Continuous Measurements of Aerosol Chemical Composition, American Association for Aerosol Research, Fall, 2009
8. Recent Investigations into Secondary Organic Aerosol Formation Liquid Water, SOA and the Resulting Aerosol Volatility, Joint Meeting (AGU), Toronto, Canada, May 2009.
9. Recent studies into water-soluble components of the ambient aerosol, Environment Canada, Downsview, Ontario, Canada, May 2009.
10. (Invited Tutorial) Semi-Continuous Measurements of Aerosol Chemical Composition, American Association for Aerosol Research, Fall, 2008
11. Investigating Ambient Aerosols Through Development of Novel Measurement Techniques: SOA and Soluble Metals, Dalhousie University, Feb, 2008.
12. The Atlanta Aerosol, 2006 National Environmental Public Health Conference, Dec 4-6, Atlanta, GA. 2006.

13. Formation of Ambient Secondary Organic Aerosol in Southeastern USA, : *American Geophysical Union, Dec 10-15, San Francisco CA. 2006.*
14. Secondary Organic Aerosol Formation, Harvard University, April 2006.
15. Investigating the Formation of Ambient Secondary Organic Aerosol in the Southeastern USA, *Southeastern Regional Meeting American Chemical Society, Nov. 1-4, Augusta GA, 2006.*
16. A Method for Chemical Characterization of the Ambient Organic Aerosol Soluble in Water by Group Speciation: Results from Urban Atlanta American Geophysical Union, *San Francisco CA. 2005*
17. Measurements of ambient carbonaceous particles that are soluble in water, American Chemical Society, 2004
18. (Invited Tutorial) Semi-Continuous Measurements of Aerosol Chemical Composition, American Association for Aerosol Research, Fall, 2004
19. EMEP Workshop on Particulate Matter Measurement & Modeling New Orleans LA April 20-23, 2004.
20. University of California, Berkeley, 2003
21. American Chemical Society, 2002.
22. National Academy of Sciences, National Research Council's Committee on Air Quality Management in the United States, 2001.

b) Contributed (underscore indicates Weber graduate student or post doc)

1. Bahreini, R., A. M. Middlebrook, J. A. D. Gouw, C. Warneke, M. Trainer, C. A. Brock, H. Stark, S. S. Brown, W. P. Dube, J. B. Gilman, K. Hall, J. S. Holloway, W. C. Kuster, A. E. Perring, A. S. H. Prevot, J. P. Schwarz, J. P. Sprackman, S. Szidat, N. L. Wagner, R. J. Weber, P. Zotter, and D. D. Parrish , Organic Aerosol Formation and Processing in the Los Angeles Basin: Role of Gasoline vs. Diesel Emissions, *American Association of Aerosol Research, Minneapolis MN, Oct 8-12, 2012.*
2. Hayes, P., A. Ortega, M. J. Cubison, W. Hu, D. Toohey, J. Flynn, N. Grossberg, B. Lefter, S. Alvarez, B. Rappengluck, J. D. Allan, J. S. Holloway, P. Massoli, K. Froyd, S. Murphy, J. Liu, R. J. Weber, A. Corrigan, L. M. Russell, and J. Jimenez , Organic Aerosol Composition, Sources, and Modeling for Los Angeles during the 2010 CalNex Campaign, *American Association of Aerosol Research, Minneapolis MN, Oct 8-12, 2012.*
3. King, L., V. Verma, and R. J. Weber , Semi-continuous online measurements of reactive oxygen species in the particle and gas phase, *American Association of Aerosol Research, Minneapolis MN, Oct 8-12, 2012.*
4. Kotra, N., V. Verma, J. Liu, J. D. Surratt, E. Edgerton, N. L. Ng, and R. J. Weber , Performance Evaluation of a Recently Developed Aerosol Chemical Speciation Monitor (ACSM), *American Association of Aerosol Research, Minneapolis MN, Oct 8-12, 2012.*
5. Liu, J., M. H. Bergin, and R. J. Weber , MOUDI Size-Resolved Measurements of Elemental and Brown Carbon and Their Contributions to Light Absorption based on Mie Theory Calculations, *American Association of Aerosol Research, Minneapolis MN, Oct 8-12, 2012.*
6. Verma, V., N. Kotra, L. King, J. Liu, R. Rico-Martinez, T. W. Snell, and R. J. Weber , Comparative analysis of the contribution of water-soluble and insoluble PM components in the toxicological properties of ambient atmospheric aerosols, *American Association of Aerosol Research, Minneapolis MN, Oct 8-12, 2012.*
7. You, Y., L. Renbaum-Wolff, M. Carreras-Sospedra, S. Hanna, N. Hiranuma, S. Kamal, M. Smith, X. Zhang, R. Weber, J. Shilling, D. Dabdub, S. Martin, and A. Bertram , Images Reveal That Atmospheric Particles Can Undergo Liquid-Liquid Phase Separations., *American Association of Aerosol Research, Minneapolis MN, Oct 8-12, 2012.*
8. Hayes, P., A. Ortega, M. J. Cubison, W. Hu, D. Toohey, J. Flynn, N. Grossberg, B. Lefter, S. Alvarez, B. Rappengluck, J. D. Allan, J. S. Holloway, P. Massoli, K. Froyd, S. Murphy, J. Liu, R. J. Weber, A. Corrigan, L. M. Russell, and J. Jimenez, Aerosol Composition in the Los Angeles Basin Studied by High Resolution Aerosol Mass Spectrometry, *Amer. Geophys. Union, Dec. 5-9, San Francisco, 2011.*
9. Murphy, J. G., R. A. Ellis, M. Z. Markovic, T. C. VandenBoer, P. L. Hayes, M. J. Cubison, J. L. Jimenez, J. Liu, R. J. Weber, P. Veres, A. K. Cochran, and J. M. Roberts, Ammonia as an observational constraint on aerosol pH in rural and urban environments, *Amer. Geophys. Union, Dec. 5-9, San Francisco, 2011.*

10. Roberts, J. M., P. Veres, J. Jimenez, P. Hayes, and R. Weber, What do Nitryl Chloride Observations imply about Chloride – Active Chlorine Chemistry taking place on Aerosols?, Amer. Geophys. Union, Dec. 5-9, San Francisco, 2011.
11. Zhang, X., J. Liu, E. Parker, and R. J. Weber, Evidence for different SOA formation mechanisms in Los Angeles and Atlanta with contrasting emissions, Amer. Geophys. Union, Dec. 5-9, San Francisco, 2011.
12. Hayes, P., A. Ortega, M. J. Cubison, W. Hu, D. Toohey, J. Flynn, N. Grossberg, B. Lefer, S. Alvarez, B. Rappengluck, J. D. Allan, J. S. Holloway, P. Massoli, K. Froyd, S. Murphy, J. Liu, R. J. Weber, A. Corrigan, L. M. Russell, and J. Jimenez, Aerosol Composition in Los Angeles During the 2010 CalNex Campaign Studied by High Resolution Aerosol Mass Spectrometry, American Association of Aerosol Research, Orlando FL, Oct. 3-7, 2011.
13. King, L., V. Verma, and R. Weber, Refinement and testing of a fluorometric assay for continuous online ROS measurement and results from preliminary field deployments, American Association of Aerosol Research, Orlando FL, Oct. 3-7, 2011.
14. Kotra, N., L. King, and R. J. Weber, Optimization of ROS measurement with Amplex Red, American Association of Aerosol Research, Orlando FL, Oct. 3-7, 2011.
15. Liu, J., X. Zhang, E. Parker, R. J. Weber, P. Veres, and P. Hayes, Investigating the Partitioning of Nitric and Organic Acids in Los Angeles During 2010 CalNex Campaign, American Association of Aerosol Research, Orlando FL, Oct. 3-7, 2011.
16. Oakes, M., E. D. Ingall, M. M. Shafer, B. Lai, M. Hays, T. Russell, and R. J. Weber, nsight on the Relationship between Iron Solubility and Speciation in Ambient and Source Particles, American Association of Aerosol Research, Orlando FL, Oct. 3-7, 2011.
17. Surratt, J., Y. Lin, C. Rubitschum, J. Offenberg, T. Kleindienst, X. Zhang, R. Weber, K. Prather, K. Suski, J. deGouw, A. Corrigan, and L. Russell, Chemical Characterization and Quantification of Organosulfates and Nitrated Organosulfates Derived from BVOCs in PM2.5 Collected During the CalNex 2010 Campaign, American Association of Aerosol Research, Orlando FL, Oct. 3-7, 2011.
18. Zhang, X., J. Liu, and R. J. Weber, Measurements of light absorption spectra of fine particle aqueous extracts during CalNex, American Association of Aerosol Research, Orlando FL, Oct. 3-7, 2011.
19. Zhang, X., J. Liu, and R. J. Weber, Contrasting SOA formation mechanisms observed at two urban sites, American Association of Aerosol Research, Orlando FL, Oct. 3-7, 2011.
20. Davis, D., W. Neff, Y. Wang, T. Zeng, K. Brady, R. Weber, P. Wine, M. Nicovitch, A. Beyersdorf, and R. Arimoto, Yearly trends in south pole atmospheric surlur and nitrogen species and their potential use in ice core interpretations, American Geophysical Union, Dec 13-17 San Francisco CA, 2010.
21. Ellis, R. A., J. G. Murphy, P. L. Hayes, M. J. Cubison, J. L. Jimenez, and R. J. Weber, Gas-particle partitioning of atmospheric ammonia at the CalNex-LA ground site, American Geophysical Union, Dec 13-17 San Francisco CA, 2010.
22. Goldstein, A. H., D R Gentner, G. A. Isaacman, D. R. Worton, Y. Zhao, R. Weber, N. M. Kreisberg, S. V. Hering, B. J. Williams, T. Hohaus, J. Jayne, A. Lambe, L. R. Williams, and J. L. Jimenez, In-Situ observations of speciated organics in gas and particle phases: CalNex2010 Bakersfield and Los Angeles American Geophysical Union, Dec 13-17 San Francisco CA, 2010.
23. Hayes, P. L., A. M. Ortega, M. J. Cubison, W. Hu, D. W. Toohey, J. H. Flynn, N. Grossberg, B. L. Lefer, S. Alvarez, B. Rappengluck, J. D. Allan, J. S. Holloway, K. D. Froyd, D. M. Murphy, J. Liu, R. J. Weber, and J. L. Jimenez, Aerosol composition in Los Angeles during the 2010 CalNex campaign studied by high resolution aerosol mass spectrometry, American Geophysical Union, Dec 13-17 San Francisco CA, 2010.
24. Hecobian, A., C. Hennigan, L. G. Huey, M. Cubison, J. Jimenez, S. Vay, G. Diskin, G. Sachse, A. Wisthaler, T. Mikoviny, A. Weinheimer, D. Knapp, P. Wennberg, J. Crouse, and R. J. Weber, Investigating Emissions and Evolution of Trace Gases and Aerosol Components from Biomass Burning Plumes in Canadian Boreal Forests during ARCTAS-2008, American Geophysical Union, Dec 13-17 San Francisco CA, 2010.
25. Hecobian, A., R. J. Weber, and et al., Investigating emissions and evolution of trace gases and aerosols from biomass burning plumes measured during the ARCTAS-2008 field campaign, Amer. Met. Society, 17–21 January, Atlanta, Ga., 2010.

26. Lathem, T. L., R. H. Moore, B. E. Anderson, R. Bahreini, C. Brock, T. Clarke, J. Cozic, J. Jimenez, A. Middlebrook, R. Weber, and A. Nenes, Measurements of Cloud Condensation Nuclei and Droplet Activation Kinetics in Pollution-influenced Arctic Air Masses during the Spring and Summer of 2008 (NASA ARCTAS / NOAA ARCPAC), Amer. Met. Society, 17–21 January, Atlanta, Ga., 2010.
27. Moore, R. H., L. T. Padro, A. Nenes, X. Zhang, N. Rastogi, W. Shi, M. Zheng, and R. J. Weber, Compositional and mixing state impacts on CCN concentrations in an Heterogeneous Urban Environment, Amer. Met. Society, 17–21 January, Atlanta, Ga., 2010.
28. Oakes, M., J. J. Schauer, M. Shafer, and R. J. Weber, Characterization of water-soluble ferrous iron sources and temporal variability in Atlanta GA, American Association of Aerosol Research, San Diego CA, March, 2010.
29. Oakes, M., R. J. Weber, E. Ingall, and R. Russell, Characterization of Soluble Iron in Urban and Rural Aerosols Using Synchrotron Technology and Online Measurements, Amer. Met. Society, 17–21 January, Atlanta, Ga., 2010.
30. Rastogi, N., R. J. Weber, X. Zhang, E. Edgerton, and E. Ingall, Water-Soluble Organic Nitrogen in Ambient Aerosols over southeast USA during AMIGAS study, IGAC, Halifax NS, July 2010, 2010.
31. Rastogi, N., R. J. Weber, X. Zhang, E. Edgerton, and E. Ingall, Characterization of water-soluble organic nitrogen in ambient aerosols over the southeastern USA during AMIGAS study, American Association of Aerosol Research, Portland, Oct 25 - 29, 2010.
32. Weber, R., X. Zhang, A. Hecobian, M. Zheng, and N. Frank, Water-soluble secondary organic aerosol, brown carbon and oxalic acid in the south-eastern united states, American Association of Aerosol Research, Portland, Oct 25 - 29, 2010.
33. Weber, R. J., Secondary organic aerosol in the Southeastern United States: A summary of findings from ambient studies, Amer. Met. Society, 17–21 January, Atlanta, Ga., 2010.
34. Zhang, X., N. Frank, and R. J. Weber, Assessment of biomass burning impacts on ambient PM_{2.5} over the Southeastern U.S. in 2007 from analysis of archived FRM filters, American Met. Society, , 17–21 January, Atlanta, Ga., 2010.
35. Zhang, X., and R. J. Weber, Sources of Water-soluble Organic Aerosol in the Southeastern United States - Evidence of SOA Formed Through Heterogeneous Reactions, American Geophysical Union, Dec 13-17 San Francisco CA, 2010.
36. Zheng, M., X. Zhao, W. Shi, E. S. Edgerton, X. Zhang, R. J. Weber, and J. Schauer, Investigating organic aerosol at two sites in Georgia, USA, American Association of Aerosol Research, San Diego CA, March, 2010.
37. Hecobian, A., Weber, R. J., and Team, A. S.: Comparison of the Chemical and Physical Evolution and Characteristics of 495 Biomass Burning Plumes Intercepted by the NASA DC-8 Aircraft during the ARCTAS/CARB-2008 Field Campaign, American Geophysical Union, Dec 14-18, San Francisco CA, 2009.
38. Hecobian, A., Zhang, X., Frank, N., and Weber, R. J.: The relationship between UV/VIS light absorption spectra and water-soluble aerosol composition at various rural and urban sites in Southeastern United States, American Association of Aerosol Research, Minneapolis MN, Oct. 26-30, 2009.
39. Lange, S., Shafer, M., Schauer, J., and Weber, R. J.: Novel Approaches for Online Measurement of Nitrate in Ambient Aerosols: Development and Comparison of a UV-Spectrophotometric and a Biosensor Method., American Association of Aerosol Research, Minneapolis MN, Oct. 26-30, 2009.
40. Lathem, T., Moore, R., Nenes, A., Anderson, B., Beyersdorf, A., Thornhill, L., Winstead, E., Jimenez, J., Cubison, M., Weber, R., Hecobian, A., Clarke, A., McMaughton, C., and Howell, S.: Investigating the CCN Activation Kinetics of aerosol in Arctic Haze and Canadian Boreal Forest Fires American Geophysical Union, Dec 14-18, San Francisco CA, 2009.
41. Moore, R. H., Lathem, T., Nenes, A., Bahreine, R., Middlebrook, A., Cozic, J., Brock, C., Anderson, B., Beyersdorf, A., Thornhill, L., Winstead, E., Cubison, M., Jimenez, J., Weber, R., and Hecobian, A.: An Overview of CCN Activity and Droplet Growth Kinetics Measurements of Arctic Aerosol During the 2008 NOAA ARCPAC and NASA ARCTAS Campaigns, American Geophysical Union, Dec 14-18, San Francisco CA, 2009.

42. Nenes, A., Latham, T., Moore, R., Anderson, B., Bahreini, R., Brock, C., Beyersdorf, A., Clarke, A., Cozic, J., Cubison, M., Hecobian, A., Howell, S., Jimenez, J., McNaughton, C., Middlebrook, A., Thornhill, L., Weber, R., and Winstead, E.: Understanding the aerosol-cloud droplet link in the Arctic: A perspective derived from ARCTAS and ARCPAC data, American Geophysical Union, Dec 14-18, San Francisco CA, 2009.
43. Nowak, J. B., Neuman, J., Holloway, J., Parrish, D., Gouw, J. d., Warneke, C., Ryerson, T., Brock, C., Wollny, A., Weber, R., Peltier, R., Trainer, M., and Fehsenfeld, F.: Airborne Observations of Ammonia in Aged Forest Fire Plumes, American Geophysical Union, Dec 14-18, San Francisco CA, 2009.
44. Padro, L. T., Moore, R. H., Zhang, X., Rastogi, N., Shi, W., Zheng, M., Weber, R. J., and Nenes, A.: Mixing state, CCN activity and droplet growth kinetics of size-resolved CCN in an urban environment, American Association of Aerosol Research, Minneapolis MN, Oct. 26-30, 2009.
45. Thornhill, L., Anderson, B. E., Chen, G., Winstead, E., Beyersdorf, A., Diskin, G., Sasche, G., Vay, S., Nenes, A., Latham, T., Jimenez, J., Cubison, M., Wisthaler, A., Weinheimer, A., Weber, R., Dibb, J., and Kondo, Y.: Assessment of anthropogenic and biomass burning impact on aerosol properties over California as observed during ARCTAS-CA, American Association of Aerosol Research, Minneapolis MN, Oct. 26-30, 2009.
46. Wang, Q., Jacob, D., Kondo, Y., Jimenez, J., Weber, R., and Apel, E.: Sources and Sinks of Carbonaceous Aerosols in the Arctic in Spring, American Geophysical Union, Dec 14-18, San Francisco CA, 2009.
47. Weber, R. J.: Secondary organic aerosol in the southeastern U.S.A., GA Air Policy Symposium (GAPS), 4 Aug. 2009, Atlanta GA, 2009.
48. Weber, R. J. I.: Recent investigations into secondary organic aerosol formation, 2009 Joint Assembly (AGU), 24-27 May 2009, Toronto, Ontario, Canada, 2009.
49. Zhang, X., Edgerton, E., Frank, N., and Weber, R. J.: On the Spatial Distribution of Fine Particle Water-Soluble Organic Aerosol in the Southeastern United States, American Association of Aerosol Research, Minneapolis MN, Oct. 26-30, 2009.
50. Zhang, X., Frank, N., and Weber, R. J.: A year-long study on the spatial and temporal variability in aerosol chemistry in the Southeastern United States from analysis of archived FRM Filters, American Association of Aerosol Research, Minneapolis MN, Oct. 26-30, 2009.
51. Weber, R. J., C. Hennigan, M. Bergin, J. Dibb, A. Russell, and A. Nenes, Evidence for secondary organic aerosol formation involving liquid—phase partitioning of haze particles in summertime Atlanta: American Geophysical Union, v. Dec 15-19, San Francisco CA, 2008
52. Brown, S. S., J. A. deGouw, C. Warneke, T. B. Ryerson, W. P. Dube, E. Atlas, R. J. Weber, R. Peltier, J. A. Neuman, J. M. Roberts, A. Swanson, F. Flocke, S. A. McKeen, J. Brioude, R. Sommariva, M. Trainer, F. C. Fehsenfeld, and A. R. Ravishankara, Nocturnal isoprene oxidation over the Northeast United States and its impact on reactive nitrogen partitioning and secondary organic aerosol: American Geophysical Union, v. Dec 15-19, San Francisco CA., 2008
53. de Gouw, J. A., C. Warneke, J. S. Holloway, D. D. Parrish, M. Trainer, and F. C. Fehsenfeld, Is carbonyl sulfide an inverse tracer for biogenic organic carbon in the gas and aerosol phases?: American Geophysical Union, v. Dec 15-19, San Francisco CA, 2008.
54. Kulkarni, S., B. Adhikary, A. Dallura, C. Wei, G. Carmichael, Y. Tang, D. Streets, Q. Zhang, R. B. Pierce, J. A. Al-Saadi, J. E. Dibb, A. J. Weinheimer, G. S. Diskin, R. J. Weber, J. Jimenez, and Y. Kondo, Influence of biomass burning and mid-latitude pollution on the Arctic Atmosphere during the ARCTAS field campaign: A three dimensional modeling analysis: American Geophysical Union, v. Dec 15-19, San Francisco CA, 2008.
55. Docherty, K. S., I. M. Ulbrich, A. C. Aiken, J. A. Huffman, M. J. Cubison, P. F. DeCarlo, E. J. Dunlea, D. Sueper, J. R. Kimmel, R. E. Peltier, R. J. Weber, D. C. Snyder, J. J. Schauer, B. D. Grover, D. J. Eatough, B. J. Williams, M. McKay, A. Goldstein, and J. L. Jimenez, Characterization of ambient southern California organic aerosols during the 2005 study of organic aerosol in Riverside (SOAR-1) campaign using positive matrix factorization of high resolution aerosol mass spectra: American Association of Aerosol Research, v. October 20-24 Orlando, Florida, 2008.

56. Hennigan, C. J., M. H. Bergin, J. E. Dibb, and R. J. Weber, , Enhanced SOA formation due to water uptake by ambient particles: American Association of Aerosol Research, v. October 20-24 Orlando, Florida, 2008.
57. Oakes, M., N. Rastogi, R. J. Weber, B. Majestic, J. J. Schauer, M. Shafer, and D. S. Gross, Development and field deployment of an online system for speciation of water-soluble iron in aerosols: American Association of Aerosol Research, v. October 20-24 Orlando, Florida, 2008.
58. Rastogi, N., R. J. Weber, J. J. Schauer, and M. Shafer, On The Use of Ion Selective Electrodes for Online Measurement of Aerosol Inorganic Composition: American Association of Aerosol Research, v. October 20-24 Orlando, Florida, 2008.
59. Hennigan, C. J., M. H. Bergin, J. E. Dibb, and R. J. Weber, Enhanced SOA formation due to water uptake by fine particles: 9th International Conference on Carbonaceous Particles in the Atmosphere, v. August 12-14 Lawrence Berkeley National Laboratory, Berkeley, CA, 2008.
60. Rastogi, N., M. Oakes, R. Weber, B. Majestic, M. Shafer, D. Snyder, and J. Schauer, 2008a, Online measurements of water-soluble iron in ambient aerosols: A new technique: 2008 Joint Assembly (AGU), v. 27-30 May Fort Lauderdale, FL.
61. Brock, C., J.d. Gouw, A. Wollny, R. Weber, R. Peltier, and A. Sullivan, What controls the relative abundance of organic and sulfate aerosol mass in the northeastern United States?, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.
62. de Gouw, J.A., C. Brock, A. Middlebrook, R.J. Weber, and T. Bates, Emissions and secondary formation of organic aerosols in the polluted atmosphere: New results from the northeastern U.S. in 2004 and Texas in 2006, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.
63. de Gouw, J.A., D. Welsh-Bon, C. Warneke, W.C. Kuster, L.G. Huey, A.P. Sullivan, R.J. Weber, E.A. Stone, and J.J. Schauer, Chemistry of Volatile Organic Compounds and Organic Aerosol in the Outflow from Mexico City, *American Geophysical Union, Dec 10-14, San Francisco CA, 2007*.
64. Ding, X., L. Yu, R. Weber, M. Zheng, E. Edgerton, and A. Russell, Spatial and seasonal variations of secondary organic tracers in the southeastern United States, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.
65. Dunlea, E., P. DeCarlo, A. Aiken, J. Kimmel, R. Bahreini, R. Peltier, R. Weber, J. Tomlinson, D. Collins, Y. Shinozuka, S. Howell, A. Clarke, L. Emmons, E. Apel, G. Pfister, A.v. Donkelaar, D. Millet, and J. Jimenez, Observations of Processed Asian Pollution with a High-Resolution Time-of-Flight Aerosol Mass Spectrometer (HR-ToF-AMS) from the C-130 Aircraft During the INTEX-B Field Campaign, *American Geophysical Union, Dec 10-14, San Francisco CA, 2007*.
66. Fountoukis, A., A. Sullivan, R. Weber, T. Vanreken, M. Ficher, E. Matias, M. Moya, D. Farmer, and R. Cohen, Simulating the partitioning of semivolatile inorganic aerosol during the MILAGRO 2006 Campaign, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.
67. Hennigan, C.J., A.P. Sullivan, R.E. Peltier, R.J. Weber, C. Fountoukis, A. Nenes, D. Farmer, P. Wooldridge, and R.C. Cohen, Investigating the volatility of SOA in different urban environments, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.
68. Lance, S., L. Padro, A. Sullivan, R. Weber, A. Nenes, E. Cross, T. Onasch, D. Worsnop, X. Yu, L. Alexander, and J.N. Smith, Water-Aerosol Interactions Downwind of Mexico City: Inferences about Mixing State, Droplet Growth Kinetics and Aging of Ambient Aerosol, *American Geophysical Union, Dec 10-14, San Francisco CA, 2007*.
69. Oakes, M., N. Rastogi, R. Weber, B. Majestic, M. Shafer, and J. Schauer, Hourly speciation of water-soluble metals in aerosols using a Particle-Into-Liquid Sampler and Liquid Wave Guide Capillary Cell, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.
70. Padro, L., C. Hennigan, T. Lathem, A. Nenes, and R. Weber, Investigation of thermodynamic properties, CCN activity and droplet growth kinetics of carbonaceous aerosol in Mexico City, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.
71. Stone, E., D. Snyder, R. Sheesley, J. Schauer, R. Weber, and A. Sullivan, Source apportionment of fine organic aerosol in Mexico City during the MILAGRO-2006 field campaign, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.

72. Weber, R., R. Peltier, A. Hecobian, D. Blake, E. Atlas, D. Riemer, T. Karl, E. Apel, T. Campos, and A. Stohl, Contrast Between the Sources and Atmospheric Processing of Fine Particles from Asia and North America Measured During INTEX B, *American Geophysical Union, Dec 10-14, San Francisco CA*, 2007.
73. Yan, B., M. Zheng, A. Sullivan, R. Weber, S. Lee, C.E. Cobb, S. Chandru, H. Kim, and A. Russell, Temporal and spatial variations of primary organic carbon sources and biogenic SOA impacts, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007*.
74. Lance, S., T. VanReken, M.J. Dunn, J.N. Smith, L. Padro, A. Asa-Awuku, A. Sullivan, R. Weber, A. Nenes, and M. Hannigan (2006), Measuring water-aerosol interactions downwind of Mexico City: Inferences about chemical composition and aging of ambient aerosols, *International Aerosol Conference, St Paul MN, Sept 10-15, 2006*.
75. Peltier, R., A. Sullivan, R.J. Weber, J.J. Schauer, and D. Snyder (2006), A method for online OC detection: The PILS-WSOC transformed to PILS-OC, *International Aerosol Conference, St Paul MN, Sept 10-15, 2006*.
76. Song, C.H., C.M. Kim, Y.J. Lee, R.J. Weber, B.K. Lee, and D.S. Lee, Reaction probabilities of sulfate and nitrate precursors onto east asian dust particles, *International Aerosol Conference, St Paul MN, Sept 10-15., 2006*.
77. Weber, R.J., A. Sullivan, R. Peltier, C. Hennigan, A. Russell, B. Yan, M. Zheng, J.d. Gouw, C. Warneke, J. Holloway, E. Atlas, and E. Edgerton (2006), Secondary organic aerosol formation in metropolitan Atlanta GA, *International Aerosol Conference, St Paul MN, Sept 10-15, 2006*.
78. Brock, C.A., A. Sullivan, R. Peltier, R.J. Weber, J. deGouw, T.S. Bates, T. Quinn, A.M. Middlebrook, D.M. Murphy, E. Atlas, A. Stohl, M. Trainer, O.R. Cooper, F.C. Fehsenfeld, J.S. Holloway, G. Hubler, P.K. Hudson, J.A. Neuman, T.B. Ryerson, C. Warneke, and J.C. Wilson, Chemical and microphysical evolution of aerosols transported from the east coast of United States, *American Geophysical Union, Dec 10-15, San Francisco CA, 2006*.
79. de Gouw, J.A., C. Brock, C. Warneke, A.M. Middlebrook, W.C. Kuster, P.D. Goldan, B.M. Lerner, E.J. Williams, J.S. Holloway, F.C. Fehsenfeld, R.E. Peltier, A.P. Sullivan, R.J. Weber, T.B. Onasch, P.K. Quinn, T.S. Bates, and E.L. Atlas, Organic aerosol is formed in unexpectedly large amounts in urban plumes, *American Geophysical Union, Dec 10-15, San Francisco CA., 2006*.
80. Bahreini, R., B. Matthew, A.M. Middlebrook, F.C. Fehsenfeld, R. Peltier, R. Weber, K. Shulz, and P. Quinn, Comparisons of Aerosol Phase Sulfate, Nitrate, and Ammonium Concentrations Measured by an Aerodyne Aerosol Mass Spectrometer and a Particle Into Liquid Sampler, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005*.
81. Brock, C., A. Wollny, J.d. Gouw, C. Warneke, J. Holloway, A.M. Middlebrook, D. Murphy, A. Neuman, R. Peltier, and R. Weber, Transport and Evolution of Aerosol Plumes from Urban and Industrial Sources in the Eastern U.S., *American Geophysical Union, Dec 5-9, San Francisco CA, 2005*.
82. Brown, S.S., T.B. Ryerson, A.G. Wollny, C.A. Brock, R. Peltier, A.P. Sullivan, R.J. Weber, W.P. Dube, M. Trainer, J. Meagher, F.C. Fehsenfeld, and A.R. Ravishankara, Variability in nocturnal nitrogen oxide processing and its role in regional air quality, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005*.
83. Chen, G., C. Brock, A. Clarke, Y. Shinozuka, C. McNaughton, A. Wollny, B. Anderson, L. Thornhill, T. Ryerson, R. Weber, and B. Brune, ICARTT Measurement Comparison of Dry Particle Size Distributions: NASA DC-8 vs. NOAA WP-3D, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005*.
84. Hecobian, A., H. G. Huey, and R. Weber, Development of a Method for Aerosol Composition Measurement by Chemical Ionization Mass Spectrometry, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005*.
85. Hennigan, C., S. Sandholm, R.J. Weber, R. Peltier, G. Huey, R. Stickel, and S. Kim, Regional impact of the Ohio River Valley on boundary-layer SO₄ concentrations: Results from INTEX-NA, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005*.
86. Middlebrook, A.M., B. Mathew, R. Bahreini, C. Brock, A. Wollny, J.d. Gouw, C. Warneke, J. Holloway, F.C. Fehsenfeld, R. Peltier, and R. Weber, Airborne Aerosol Mass Spectrometer Measurements of the

- Submicron Aerosol Chemical Composition Downwind of Sources, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005.*
87. Peltier, R., C. Hennigan, A. Sullivan, R. Weber, C. Brock, A. Wollny, J. Holloway, J. deGouw, and C. Warneke, Fine Particle Composition Measured During ICARTT – An Overview of Inorganic Ions and Water Soluble Organic Carbon, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005.*
 88. Sullivan, A., and R.J. Weber, The Use of Solid Phase Extraction and Size-Exclusion Chromatography to Characterize the Fine Particle Carbonaceous Aerosols Soluble in Water, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005.*
 89. T.J. Fortin, T.J., T.B. Ryerson, J.S. Holloway, J.A. Neuman, F. Flocke, A. Swanson, J.A.d. Gouw, C. Warneke, L.G. Huey, D.J. Tanner, H. Stark, C.A. Brock, A.G. Wollny, R.J. Weber, R. Peltier, A. Sorooshian, J.H. Seinfeld, and F.C. Fehsenfeld, Characteristics and Chemistry of Power Plant Plumes: Conesville Case Study, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005.*
 90. Weber, R.J., and A. Sullivan, A Method for Chemical Characterization of the Ambient Organic Aerosol Soluble in Water by Group Speciation: Results from Urban Atlanta, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005.*
 91. Wollny, A., C. Brock, O. Cooper, F.C. Fehsenfeld, J. DeGouw, P. Hudson, A.M. Middlebrook, D. Murphy, A. Stohl, C. Warneke, R. Peltier, and R. Weber, Chemical and microphysical properties of particles in aged plumes from forest fire in Alaska and western Canada, *American Geophysical Union, Dec 5-9, San Francisco CA, 2005.*
 92. Sullivan, A., and R.J. Weber, Isolation and Characterization of Fine Particle Carbonaceous Aerosols Soluble in Water Using Solid Phase Extraction and Size-Exclusion Chromatography, *ACESS/Gorden Conference, Aug 31-Sept 7, 2005.*
 93. Hennigan, C., S. Sandholm, and R.J. Weber, Regional impact of the Ohio River Valley on boundary-layer Sulfate concentrations: Results from INTEX-NA, *American Association of Aerosol Research, Austin TX, Oct 17-21, 2005.*
 94. Middlebrook, A.M., B. Mathew, C. Brock, A. Wollny, J.d. Gouw, C. Warneke, J. Holloway, F.C. Fehsenfeld, R. Peltier, and R. Weber, Major Sources of Submicron Aerosol Mass above the Northeastern United States Inferred from Airborne Aerosol Mass Spectrometer Measurements during ICARTT, *American Association of Aerosol Research, Austin TX, Oct 17-21, 2005.*
 95. Peltier, R., C. Hennigan, A. Sullivan, R. Weber, C. Brock, and A. Wollny, Fine Particle Composition Measured During ICARTT – An Overview of Inorganic Ions and Water Soluble Organic Carbon, *American Association of Aerosol Research, Austin TX, Oct 17-21, 2005.*
 96. Sullivan, A., and R.J. Weber, A Method to Isolate Carbonaceous Aerosols soluble in water by organic functional group Using Solid Phase Extraction (SPE), *American Association of Aerosol Research, Austin TX, Oct 17-21, 2005.*
 97. Sullivan, A., R. Peltier, and R. Weber, A Method for Airborne Measurements of Water-Soluble Organic Carbon: PILS-TOC results from the NOAA WP-3D during ICARTT, *American Association of Aerosol Research, Austin TX, Oct 17-21, 2005.*
 98. Sullivan, A., P. Sannigrahi, E. Ingall, and R. Weber, Investigation of the Physical Properties of Group Speciated Fine Particle Water-Soluble Organic Carbon Aerosols, *American Association of Aerosol Research, Austin TX, Oct 17-21, 2005.*
 99. Nowack, J., L.G. Huey, E. Edgerton, F. Fehsenfeld, J. Neuman, D. Orsini, S. Sjostedt, A.P. Sullivan, D. Tanner, and R. Weber, Analysis of gas-phase ammonia measurements made during the 2002 Atlanta aerosol nucleation and real-time characterization experiment (ANARCHE) at the 1999 Atlanta Supersite, *American Association of Aerosol Research Particulate Matter and Supersite Program, Feb. 7-11 Atlanta, 2005.*
 100. Turner, J., G. Allen, T. Bakadori, J. Chow, J. Watson, A. Hansen, P. Koutrakis, P. McMurry, J. Ondov, J. Schauer, R. Weber, and W. White, Aerosol climatology at the St. Louis-Midwest supersite, *American Association of Aerosol Research Particulate Matter and Supersite Program, Feb. 7-11 Atlanta, 2005.*

101. Yu, M., J. Turner, A. Clements, and R. Weber, Fine particulate matter ion measurements at the St. Louis Midwestern Supersite by the Particle-Into-Liquid Sampler, *American Association of Aerosol Research Particulate Matter and Supersite Program, Feb. 7-11 Atlanta, 2005.*
102. Brock, C., A. Wollny, R. Peltier, R. Weber, J. Holloway, A. Middlebrook, P. Hudson, D. Murphy, A. Neuman, L. Huey, Transport and evolution of an urban aerosol plume from the east coast of the United States, *European Geophysical Union, Vienna, Austria, 2005.*
103. Wollny, A.G., Brock, C.A, O.R. Cooper, F. C. Fehsenfeld, J.A.d. Gouw, P. K.Hudson, B.M. Matthew, A. M. Middlebrook, D.M. Murphy, C. Simons, A. Stohl, C. Warneke, R. Peltier, R.J. Weber, and J.C. Wilson, Chemical and microphysical properties of particles in aged forest fire plumes from Alaska and western Canada observed over the Northeastern U.S., *European Geophysical Union, Vienna, Austria, 2005.*
104. de Gouw, J.A., C. Warneke, A. Stohl, O.R. Cooper, P.K. Hudson, D.M. Murphy, C.A. Brock, F. Flocke, F.C. Fehsenfeld, J.S. Holloway, B. Matthew, A.M. Middlebrook, A. Neuman, J. Nowak, R. Peltier, J. Roberts, T. Ryerson, A. Swanson, M. Trainer, R. Weber, and A. Wollny, Long-range transport of smoke from 2004 forest fires in Alaska and western Canada, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2004.*
105. Middlebrook, A.M., B.M. Matthew, C.A. Brock, A. Wollny, J.A.d. Gouw, C. Warneke, F.C. Fehsenfeld, R. Peltier, and R. Weber, Preliminary Results of Aerosol Chemical Composition Measurements Above the Northeastern U. S. with an Aerodyne Aerosol Mass Spectrometer, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2004.*
106. Peltier, R., C. Hennigan, A. Sullivan, R.J. Weber, C. Brock, and A. Wollny, Initial Results of Airborne Measurements of PM1.0 Inorganic Ions and Water Soluble Organic Carbon During the New England Air Quality Study, Summer 2004, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2004.*
107. Sullivan, A., and R.J. Weber, Investigation into the hydrophilic versus hydrophobic fraction of ambient PM2.5 organic particles soluble in water, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2004a.*
108. Sullivan, A., and R.J. Weber, Investigation into the organic composition of ambient PM2.5 particles soluble in water, *American Association of Aerosol Research, Atlanta GA, 2004b.*
109. Sullivan, A., R.J. Weber, A. Clements, J. Turner, M. Bae, and J. Schauer, On-line measurements of ambient particle humic-like substances (HULIS) using a Particle-into-Liquid-Sampler (PILS) coupled to a Total Organic Carbon (TOC) analyzer and XAD-8 column, *American Association of Aerosol Research, Atlanta GA, 2003.*
110. Song, C., Y. Ma, K. Meier, D. Orsini, R. Weber, V. Kaputsin, and A. Clarke, Aerosol mixing state inferred from airborne composition measurements and an aerosol thermodynamic model: Case studies from ACE-Asia and TRACE-P, *American Association of Aerosol Research, Anaheim CA, Oct. 20-24, 2003a.*
111. Song, C.H., Y. Ma, K. Maxwell-Meier, D. Orsini, and R.J. Weber, Aerosol mixing state inferred from airborne fine particle composition measurements and an aerosol thermodynamic model: Case studies from ACE-Asia and TRACE-P, *American Geophysical Union, Dec 7-11, San Francisco, CA, 2003b.*
112. Sullivan, A., R. Weber, A. Clements, J. Turner, M. Bae, and J. Schauer, Diurnal trends in water-soluble organic carbon and elemental carbon in St. Louis using near real-time aerosol monitors, *American Association of Aerosol Research, Anaheim CA, Oct. 20-24, 2003.*
113. Weber, R., O. D, A. Sullivan, Y. Ma, and K. Meier, Measurements of particle inorganic and organic chemical composition with the particle-into-liquid sampler (PILS), *Particulate Matter: Atmospheric Sciences, Exposure and the Fourth Colloquium on PM and Health, American Association of Aerosol Research, Pittsburgh, PA, March 31-April 4, 2003.*
114. Ma, Y., R.J. Weber, Y. Lee, D.R. Blake, G. Sachse, A. Bandy, D. Thornton, A. Clarke, H. Fuelberg, and G. Carmichael, Chemical characterization of biomass burning aerosols over the western Pacific as part of TRACE P, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2002.*
115. Meier, K., D. Orsini, R.J. Weber, B. Blomquist, and B. Huebert, Evidence of heterogeneous surface chemistry in Asian springtime aerosol: A Focus on the interactions of fine Asian mineral dust with urban plumes, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2002.*

115. Weber, R.J., D. Orsini, A. Sullivan, Y. Ma, and K. Meier, On-line measurements of particle chemical composition with the particle-into-liquid sampler (PILS), *American Geophysical Union, Dec 6-10, San Francisco, CA, 2002.*
116. Chin, M., D. Davis, C. Song, R. Weber, J. Dibb, R. Talbot, A. Bandy, D. Thornton, B. Huebert, and B. Blomquist, Model analysis of sulfate and SO₂ over the Asian-Pacific region during Spring 2001: Sources distributions and intercontinental transport, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2002.*
117. Clarke, A., S. Howell, V. Kapustin, S. Masonis, T. Anderson, R. Weber, C. McNaughton, and K. Moore, Absorbing aerosols in asian outflow: Size dependent properties, links to chemistry, and humidity growth, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2002.*
118. Koike, M., Y. Kondo, K. Kita, N. Takegawa, Y. Masui, R. Weber, Y. Lee, Y. Ma, D. Thornton, A. Bandy, G. Sachse, M. Avery, S. Vay, D. Streets, Y. Miyazaki, and H. Ikeda, Export of sulfur and nitrogen compounds from east Asia region in spring, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2002.*
119. Kondo, Y., K. Kita, N. Takegawa, Y. Masui, R. Weber, Y. Lee, Y. Ma, D. Thornton, A. Bandy, G. Sachse, M. Avery, S. Vay, D. Streets, Y. Miyazaki, and H. Ikeda, Effects of biomass burning on the distributions of trace species over the western Pacific Ocean, *American Geophysical Union, Dec 6-10, San Francisco, CA, 2002.*
120. Orsini, D., and R. Weber, Improvements To The Particle-Into-Liquid Sampler For Rapid And Continuous Measurements Of Aerosol Bulk Chemical Composition, *American Association of Aerosol Research, Charlotte, NC, Oct 7-11, 2002.*
121. Weber, R., D. Orsini, and S. Lee, Particle Production Within And Near Aged Asian Anthropogenic Plumes Observed During TRACE P, *American Association of Aerosol Research, Charlotte, NC, Oct 7-11, 2002.*
122. Weber, R., D. Orsini, Y. Ma, M. Bergin, J. Slanina, and B. Turpin, The Nature Of Transient Pm_{2.5} Events In Atlanta And Houston, *American Association of Aerosol Research, Charlotte, NC, Oct 7-11, 2002.*
123. Meier-Maxwell, K., D. Orsini, Y. Ma, R. Weber, S. Howell, B. Blomquist, and B. Huebert, PILS/IC Evidence of Heterogeneous Reactions on Asian Mineral Aerosol from the ACE-Asia C-130 Aircraft, *Sixth International Aerosol Conference, Taipei, Taiwan, Sept. 9 – 13, 2002.*
124. Ma, Y., O. D. K. Meier, Y.-N. Lee, and R. Weber, Near Real Time measurements of aerosol composition for Asian outflow studies, *Sixth international Aerosol Conference, Taipei, Taiwan, Sept. 9 – 13, 2002.*
125. Ma, Y., K. Meier, O. D. Y.-N. Lee, B. Huebert, S. Howell, T. Bertram, R. Talbot, J. Dibb, E. Scheuer, and R. Weber, Intercomparisons of Airborne Measurements of Aerosol Ionic Chemical Composition during TRACE-P and ACE-Asia, *Sixth International Aerosol Conference, Taipei, Taiwan, Sept. 9 – 13, 2002.*
126. Weber, R. J., D. Orsini, Y. Ma, K. Maxwell, Airborne measurements of the aerosol chemical composition of Asian plumes during ACE-Asia and TRACE-P: Preliminary results, *American Association for Aerosol Research, Portland, OR, Oct 15-19, 2000.*
127. Hering, S., P. Solomon, E. Edgerton, K. Baumann, M. Bergin, P. Dasgupta, H.t. Brink, J. Ondov, B. Turpin, and R. Weber, Hourly chemical composition profiles for fine particulate matter during the Atlanta Supersite Study, August 1999, *Amer. Geophys. Union, San. Fran., Dec. 15-19, 2000.*
128. Ift, F., K. Baumann, W. Chameides, D. DiPasquale, R. Weber, J. Zhao, C. Baxter, M. Bergin, and E. Edgerton, Discrete measurements of PM_{2.5} mass and composition by use of the three-channel particle composition monitor (PCM), *Amer. Geophys. Union, San. Fran., Dec. 15-19, 2000.*
129. Ma, Y., D. Orsini, and R.J. Weber, Contrasting Observations of PM_{2.5} ionic composition at the EPA Atlanta Supersite and the EPA TEXAQS 2000 Studies, *Amer. Geophys. Union, San. Fran., Dec. 15-19, 2000.*
130. Orsini, D., and R.J. Weber, New developments using the particle-into-liquid sampler (PILS) for rapid measurements of bulk aerosol chemical composition, *American Association for Aerosol Research, St. Louis MI, Nov 6-10, 2000.*
131. Orsini, D. A., Y. Ma, and R.J. Weber, Fast measurements of fine particle ionic composition in Houston during the TEXAQS 2000 Study, *Amer. Geophys. Union, San. Fran., Dec. 15-19, 2000.*

132. Wang, B., D. Orsini, and R. Weber, Measurements of new particle formation in the arctic as part of TOPSE, *American Association for Aerosol Research, St. Louis MI, Nov 6-10, 2000.*
133. Weber, R.J., D. Orsini, Y. Daun, Y.-N. Lee, P. Klotz, F. Brechtel, and K. Okuyama, A new instrument for rapid near-continuous measurement of soluble aerosol chemical components, *PM2000, Air and Waste Management Association, Charleston, SC, Jan 24-28, 2000.*
134. Weber, R.J., D. Orsini, D. Yang, Y.-L. Lee, F. Brechtel, P. Klotz, H.t. Brink, J. Slanina, P. Jongejan, P. Dasgupta, C. Boring, Z. Purnedu, K. Dasgupta, K. Baumann, and W. Chameides, Intercomparison of semi-continuous techniques for measurement of sulfate and nitrate, *Amer. Geophys. Union, San. Fran., Dec. 15-19, 2000.*
135. Zhang, J., W. Chameides, D. Worsnop, G. Cass, M. Bergin, A. Russell, R. Weber, and D. Orsini, Validity of equilibrium models for inorganic aerosol composition, *Amer. Geophys. Union, San. Fran., Dec. 15-19, 2000.*
136. Weber, R. J., B. Anderson, L. Thornhill, D. Tanner, R. Mauldin, E. Kosciuch, C. Cantrell, F. Eisele, A. Clarke, V. Kapustin, K. Moore, A comparison of atmospheric physical and chemical conditions under which large marine new particle formation events occur, *American Geophysical Union, Washington D.C., May 30 – June 3, 2000.*
137. Dick, W., D. Lappen, F. Quant, R. Weber, and P. McMurry, New pulse height analysis modifications to the TSI 3025 condensation particle counter, *American Association for Aerosol Research, Tacoma, WA, Oct. 11-15, 1999.*
138. Weber, R.J., D. Orsini, Y. Daun, Y.-N. Lee, P. Klotz, F. Brechtel, and K. Okuyama, A new particle-in-liquid collector for rapid measurements of aerosol chemical composition, *American Association for Aerosol Research, Tacoma, WA, Oct. 11 - 15, 1999.*
139. Weber, R.J., D. Orsini, Y. Daun, Y.-N. Lee, P. Klotz, F. Brechtel, and K. Okuyama, A new instrument for rapid near-continuous measurement of soluble aerosol chemical components, *PM2000, Air and Waste Management Association, Charleston, SC, Jan 24 - 28, 2000.*
140. Weber, R. J., P. H. McMurry, F. L. Eisele, L. Mauldin, D. Tanner, Rapid growth of freshly formed nanoparticles in the remote troposphere, *5th International Aerosol Conference, Edinburg, Scotland, Sept. 14-18, 1998.*
141. Weber, R. J., P. H. McMurry, F. L. Eisele, L. Mauldin, D. Tanner, Evidence for new sulfate particle formation in the remote troposphere involving biogenic trace gas species, *5th International Aerosol Conference, Edinburg, Scotland, Sept. 14 - 18, 1998.*
142. Jefferson, A., F. L. Eisele, P. J. Ziemann, J. J. Marti, R. J. Weber, P. H. McMurry, Measurements of the H₂SO₄ mass accommodation coefficient onto polydisperse aerosol, *American Association for Aerosol Research, Denver, CO., Oct. 13 - 17, 1997.*
143. Eisele, F., A. Jefferson, D. Tanner, R. Mauldin, R. Weber, J. Marti, P. McMurry, Particle nucleation and growth precursors, *American Association for Aerosol Research, Denver, CO., Oct. 13 - 17, 1997.*
144. Weber, R. J., P. H. McMurry, F. L. Eisele, D. J. Tanner, L. Mauldin, Correlation between gas phase species and nucleation episodes observed during ACE 1, *American Association for Aerosol Research, Denver, CO., Oct. 13 - 17, 1997.*
145. Weber, R. J., P. McMurry, A. Clarke, J. Li, M. Litchy, D. Baumgardner, Cloud particle shatter when sampling from aircraft, *American Association for Aerosol Research, Denver, CO., Oct. 13-17, 1997.*
146. Weber, R., P. McMurry, F. Eisele, L. Mauldin, D. Tanner, Measurements of ultrafine particle formation and growth downwind of Macquarie Island during ACE-1, *American Geophysical Union, San Francisco, CA., Dec. 15-19, 1996.*
147. Weber, R. J., P. H. McMurry, M. R. Stolzenburg, S. Pandis, Inversion of UCNC pulse height distributions to obtain ultrafine (~3 to 10nm) particle size distributions, *American Association for Aerosol Research, Orlando, FL., Oct. 14-18, 1996.*
148. Weber, R. J., J. Marti, P. H. McMurry, F. Eisele, D. Tanner, A. Jefferson, Growth rates of ultrafine particles at a clean continental site, *American Association for Aerosol Research, Pittsburgh, PA., Oct. 9-13, 1995.*

149. Murphy, D., D. Thomson, M. Kaluzhny, J. Marti, R. Weber, P. McMurry, Physical and chemical characterization of aerosols at Idaho Hill, Colorado, *American Geophysical Union*, San Francisco, CA., Dec. 5-9, 1994.
150. Marti, J., R. Weber, P. McMurry, F. Eisele, D. Tanner, A. Jefferson, P. Golden, W. Kuster, Measurements of newly formed ultrafine aerosols and possible precursor species at a background continental site, *American Geophysical Union*, San Francisco, CA., Dec. 5-9, 1994.
151. Weber, R. J. Marti, P. McMurry, F. Eisele, D. Tanner, A comparison of measured atmospheric nucleation rates to classical and collision controlled nucleation theories, *American Geophysical Union*, San Francisco, CA., Dec. 5-9, 1994.
152. Marple, V., K. Rubow, B. Olson, R. Weber, Low pressure stages for the micro-orifice uniform deposit impactor (MOUDI), *Fourth International Aerosol Conference*, Los Angeles CA., Aug. 29-Sept. 2, 1994.
153. Weber, R., J. Marti, P. McMurry, F. Eisele, D. Tanner, Measurements at Idaho Hill Colorado of expected nucleation precursor species, ultrafine and fine aerosols, *Fourth International Aerosol Conference*, Los Angeles CA., Aug. 29-Sept. 2, 1994.
154. Weber, R., P. McMurry, F. Eisele, D. Tanner, Measurement of expected nucleation precursor species and ultrafine and fine particles at Mauna Loa Observatory, Hawaii, *American Meteorological Society, Conference on Atmospheric Chemistry*, Nashville TN., Jan. 23-28, 1994.
155. Weber, R. J., P. McMurry, F. Eisele, D. Tanner, Measurement of expected nucleation precursor species and ultrafine particles at Mauna Loa Observatory Hawaii, *American Association for Aerosol Research*, Oak Brook, IL., Oct. 11-15, 1993.
156. Weber, R., J., V. Marple, K. Rubow, Particle sampling into simulated lung fluid, *American Association for Aerosol Research*, Traverse City, MI., Oct. 7-11, 1991.

FIELD STUDIES

Airborne	Ground-Based
PEM TROPICS-B, NASA, 1999	Atlanta Super Site, EPA, 1999
TOPSE, NSF, 2000	FAQS, State of Georgia, 2000
TRACE-P, NASA, 2001	Houston Supersite, (TEXAQS) EPA, 2000
ACE-ASIA, NSF, 2001	St. Louis Midwest Supersite, EPA, 2002-2004
ITCT-2K2, NOAA, 2002	New York Supersite, (PEMTAQS), EPA, 2002
DICE, NASA, 2003	Pensacola Air Quality Study, EPA, 2003
INTEX-A, NASA, 2004	MIRAGE-MEX, NSF, 2006
ITCT-2K4, NOAA, 2004	Georgia Prescribed Fires Study, 2008
MIRAGE-MEX/INTEX-B, NASA, 2006	AMIGAS, EPRI 2008
Houston Air Quality Study, NOAA, 2006	CalNex, NSF 2010
ARCTAS, NASA, 2008	SCAPE, EPA, 2011-2014
DC3, NSF, 2012	
SEAC4RS, NASA, 2013	

HONORS AND AWARDS

- NASA Global Change Fellowship (Graduate Student), 1991.
- Whitby Award, American Association for Aerosol Research, 2004
- Group Achievement Award, National Aeronautics and Space Administration, 2007
- GIT College of Sciences Cullen-Peck Faculty Fellow, 2008
- GIT EAS Outstanding Achievement in Research Program Development Award 2008
- Group Achievement Award, National Aeronautics and Space Administration, 2009
- GIT EAS Outstanding Faculty Research Author Award 2010

PATENTS

Patent Inventors, Rodney Weber, Yin-Nan Lee, "Apparatus for Rapid Measurements of Aerosol Bulk Chemical Composition", US Pat. No. 6,506,345, New disclosure No 7,029,921 B2. April 18, 2006.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Association for Aerosol Research (AAAR).
American Geophysical Union (AGU).

SERVICE

American Assoc. for Aerosol Research Membership Committee, 2012-2015
American Assoc. for Aerosol Research Awards Committee Member, 2009 - 2012
American Assoc. for Aerosol Research Organizational Committee, Conference Tutorial Co-Chair, 2006.
American Assoc. for Aerosol Research Organizational Committee, Education Co-Chair, 2007.
Panel and Proposal (~5/yr) reviewer for EPA, NASA, NSF, DOE (and many others).
Manuscript reviews for various journals (~10-20/yr) (e.g., Science, Nature, Atm Chem Phys, Envir Sci and Tech, Aerosol Sci and Tech, GRL, J Geophys Res, Atmos Enviro, etc)

GEORGIA TECH COMMITTEES

Provost Committee, Interdisciplinary Research 2007-08

Departmental/School

10/12 EAS Chair Search
10/12 Graduate Admissions Committee
10/12 Tenure and Promotion
10/11 Graduate Admissions Committee
10/11 Tenure and Promotion
10/11 Tenure Committee College of Science
09/10 Tenure and Promotion: Chair
09/10 Tenure Committee College of Science
08/09 Tenure and Promotion: Chair
08/08 Member EAS Faculty Search Committee
08/09 Tenure Committee College of Science
07/08 Member EAS Chair Review Committee
07/08 Tenure and Promotion: Chair
06/07 Tenure and Promotion: Chair
05/06 Tenure and Promotion: Chair
04/05 Tenure and Promotion: Chair
03/04 Tenure and Promotion
02/03 EAS Colloquium co-Chair
00/02 and 02/03 Long-Range Planning and Atmospheric Chemistry Search
99/00 Graduate Studies and Awards

Examination

1. PhD Candidacy Examination Committee, Yilin Ma (EAS) 9/01
2. PhD Candidacy Examination Committee, Amy Sullivan (EAS) 11/02
3. PhD Candidacy Examination Committee, Kari Maxwell (EAS) 11/02
4. PhD Examination Committee, Nicholas Meskhidze (EAS) 11/03
5. PhD Examination Committee, Yilin Ma (EAS) 3/04
6. PhD Candidacy Examination Committee, Sara Lance (EAS) 4/04
7. PhD Candidacy Examination Committee, Jun Jiang (EAS) 4/04
8. PhD Candidacy Examination Committee, Rick Peltier (EAS) 4/04
9. PhD Candidacy Examination Committee, Jiangfeng Wei (EAS) 5/04
10. PhD Examination Committee, Zohir Chowdhury (CEE) 5/04

11. PhD Examination Committee, Lei Zhu (EAS) 11/04
12. PhD Candidacy Examination Committee, Saewung Kim (EAS) 3/05
13. PhD Candidacy Examination Committee, Bo Yan (EAS) 3/05
14. PhD Candidacy Examination Committee, Jun Jian (EAS) 3/05
15. PhD Examination Committee, Roby Greenwald (CEE) 7/05
16. PhD Examination Committee, Poulomi Sannigrahi (EAS) 2/05
17. PhD Examination Committee, Amy Sullivan (EAS) 4/06
18. PhD Examination Committee, Kari Maxwell-Meier (EAS) 4/06
19. PhD Candidacy Examination Committee, Wei-Chun Hsieh (EAS) 5/06
20. PhD Candidacy Examination Committee, Zhijun Zhao (EAS) 5/06
21. PhD Candidacy Examination Committee, Yang Yang (EAS) 5/06
22. PhD Examination Committee, Willis Shem (EAS) 6/06
23. PhD Examination Committee, Changsub Shim (EAS) 6/06
24. PhD Candidacy Examination Committee, Luz Teresa Padro (ChemBio Eng) 7/06
25. PhD Examination Committee, Steven Sjostedt (EAS) 10/06
26. PhD Candidacy Examination Committee, Yang Yang (EAS) 5/06
27. PhD Candidacy Examination Committee, Chun Zhao (EAS) 5/07
28. PhD Examination Committee, Gayle Hagler (CEE) 5/07
29. PhD Examination Committee, Christos.Fountouki (ChE) 5/07
30. PhD Examination Committee, Gill-Ran Jeong, (EAS) 8/07
31. PhD Examination Committee, Sara Lance, (EAS) 10/07
32. PhD Committee, Sae Wung Kim (EAS) 11/07
33. PhD Examination Committee, Venus Dookwah-Roberts (EAS) 4/08
34. PhD Examination Committee, Wei-Chun Hsieh (EAS) 3/09
35. PhD Candidacy Examination Committee, Luz Padro (ChE) 7/09
36. PhD Examination Committee, Bo Yan (EAS) 8/09
37. PhD Examination Committee, Jaemeen Baek (CEE) 8/09
38. PhD Examination Committee, Zhijun Zhao (EAS) 8/09
39. PhD Candidacy Examination Committee, Jiumeng Liu (EAS) 4/10
40. PhD Candidacy Examination Committee, Zhen Liu (EAS) 4/10
41. PhD Candidacy Examination Committee, Ja-Ho Koo (EAS) 4/10
42. PhD Examination Committee, Prashant Kumar (EAS) 3/11
43. PhD Examination Committee, Jorge Pachon (CEE) 8/11
44. PhD Examination Committee, Patrick Lane (EAS) 9/11
45. PhD Examination Committee, Michelle Oakes (EAS) 10/11
46. PhD Examination Committee, Jin Liao (EAS) 10/11
47. PhD Examination Committee, Richard Moore (ChE) 11/11
48. PhD Examination Committee, Sunny Choi (EAS) 3/12
49. PhD Examination Committee, Zhen Liu (EAS) 3/12
50. PhD Candidacy Examination Committee, Jack Lin (EAS) 4/12
51. PhD Candidacy Examination Committee, Wei-Ching Hsu (EAS) 4/12
52. PhD Candidacy Examination Committee, Yuzhong (EAS) 4/12
53. PhD Candidacy Examination Committee, Hongyu Gao (EAS) 4/13
54. PhD Candidacy Examination Committee, Laura King (EAS) 4/13
55. PhD Candidacy Examination Committee, James Hite (EAS) 4/13
56. PhD Examination Committee, Boris Galvis (CEE) 8/13
57. PhD Examination Committee, Sivaraman Balachandran (CEE) 8/13
58. PhD Examination Committee, Wenxian Zhang (CEE) 9/13

GRADUATE STUDENTS ADVISED

Graduated

1. Duan Yang, MS 2000
2. Baoan Wang, MS 2001
3. Dan Diamond, MS 2002
4. Sangil Lee, MS 2002
5. Yilin Ma, Ph.D 2004 (Post Doc, EPA RTP, Now at Calif. Air Resources Board)
6. Amy Sullivan, Ph.D. 2006 (Res. Scientist, Colorado State University)
7. Kari Maxwell-Meier, Ph.D. 2006 (Army Corps of Engineers)
8. Rick Peltier, Ph.D. 2007, (Assistant Prof. University of Massachusetts, Amherst)
9. Chris Hennigan, Ph.D. 2008, (Assistant Prof. University of Maryland, Baltimore County)
10. Arsineh Hecobian, Ph.D. 2010, (Post Doc, Colorado State University)
11. Jennifer Williams M.S. 2010 (non-Thesis Advisor) (Weber Lab Research Assistant)
12. Michelle Oakes Ph.D. 2011 (Post Doc, EPA RTP, North Carolina)
13. Eric Parker (Coadvise with L. Huey), MS 2011
14. Xiaolu Zhang, Ph.D 2012, (Post Doc, U of Calif. Davis)
15. Neel Kotra M.S Student 2013, Environmental Consulting

Current Students

1. Jiumeng Liu, Ph.D Student
2. Laura King Ph.D Student
3. Hongyu Guo, Ph.D Student
4. Ting Fang, Ph.D. Student

Undergraduate Students Advised (as of 2009)

1. Kurt Russell (2012)
2. Kayla Hosking (2010-2011)
3. Raymond Myer (2010)
4. Thom Muccillo (2009)
5. Kimberly Brady (2007)
6. Abigail Wintemute (2006)

POSTDOCTORAL AND RESEARCH FELLOWS ADVISE

1. Douglas Orsini, Post Doc/Research Scientist 1999-2003
2. Chul Song, Research Scientist 2003-2005 (Prof. Department of Environmental Science and Engineering, Gwangju Institute of Science and Technology (GIST), Gwangju 500-712, South Korea)
3. Neeraj Rastogi, Post Doc 2006-2009, (Post Doc University of Toronto)
4. Yuang Cheng, Tsinghua University, China, hosted for work in my lab March – July 2010 & Sept 2012 to April 2013.
5. Vishal Verma, March 2011 -- present
6. Ying Wang, Jan. 2013 -- present