

**RODNEY J. WEBER**  
**Professor**  
**School of Earth and Atmospheric Sciences, Georgia Institute of Technology**

**I. EARNED DEGREES**

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)

**II. 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-

**III. HONORS AND AWARDS**

NASA Global Change Fellowship 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  
American Geophysical Union Ascent Award 2014  
Thomson Reuters Highly Cited Researcher 2014  
Group Achievement Award, National Aeronautics and Space Administration, 2015  
College of Sciences Young Faculty Mentorship Award, 2016  
Ben Liu Award, American Association for Aerosol Research, 2016  
Clarivate Analytics Highly Cited Researcher 2017.  
Guo, Weber, Nenes; High levels of ammonia... 2017 paper cited as *one of the top 100 read Earth sciences papers for Scientific Reports in 2017*.  
Aerosol Science and Technology Editors' selection of Notable 2017 Papers, Zhang et al, 2017 3D printer emissions paper.  
Aerosol Science and Technology 2018 Outstanding Reviewer Award  
Aerosol Science and Technology Editors' annual selection of Notable 2018 Papers, Zhang et al, 2018 3D printer emissions modeling.  
Clarivate Analytics Highly Cited Researcher 2019.  
Group Achievement Award, National Aeronautics and Space Administration, Atmospheric Tomography Mission, 2019  
Clarivate Analytics Highly Cited Researcher 2020.

**IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES**

**A. REFEREED PUBLICATIONS**

**A1. Books**

**A2. Refereed Book Chapters**

1. Weber, R. J. T. Fang, W. Verma, Insights on Aerosol Oxidative Potential from Measurements of Particle Size Distributions, Chapt. 20, pp 417-437, Multiphase Envi. Chem. In the Atmos, Editors S. Hunt, A. Laskin, S. A. Nizkorodov, Vol 1299, Nov. 1, 2018, Amer. Chem Society.
2. Verma, V., C. Siotas, R. J. Weber, Oxidative Properties of Ambient Particulate Matter-An Assessment of the Relative Contributions From Various Aerosol Components and Their Emission Sources, Chapt. 19, pp389-416, Multiphase Envi. Chem. In the Atmos, Editors S. Hunt, A. Laskin, S. A. Nizkorodov, Vol 1299, Nov. 1, 2018, Amer. Chem Society.

### A3. Edited Volumes

1. Weber, R. J., News and Views: Potentially harmful aerosols concentrate in European urban centres, *Nature*, 587, 369-370, 2020.

## B. REFEREED PUBLICATIONS AND SUBMITTED ARTICLES

### B.1 Published and Accepted (underscore indicates Weber graduate student or post doc)

1. Chen, Y., M. Takeuchi, T. Nah, L. Xu, M. R. Canagaratna, H. Stark, F. Canonaco, A. S. H. Prévôt, L. G. Huey, R. J. Weber, and N. L. Ng, Chemical Characterization of Secondary Organic Aerosol at a Rural Site in the Southeastern U.S.: Insights from Simultaneous HR-ToF-AMS and FIGAERO-CIMS Measurements, *Atmos Chem Phys*, 20, 8421-8440, 2020.
2. Gao, D., J. A. Mulholland, A. G. Russell, and R. J. Weber, Characterization of water-insoluble oxidative potential of PM<sub>2.5</sub> using the dithiothreitol assay, *Atmos. Env.*, 224, 117327, 2020.
3. Gao, D., K. J. G. Pollitt, J. A. Mulholland, A. G. Russell, and R. J. Weber, Characterization and comparison of PM<sub>2.5</sub> oxidative potential assessed by two acellular assays, *Atmos Chem Phys*, 20, 5197-5210, 2020.
4. Haskins, J. D., F. D. Lopez-Hilfiker, B. H. Lee, V. Shaw, G. M. Wolfe, J. DiGangi, D. Fibiger, E. E. McDuffie, P. Veres, J. C. Schroder, Campuzano-Jost, D. A. Day, J. Jimenez, A. Weinheimer, T. Sparks, C. Ebben, R. C. Cohen, T. Campos, A. Sullivan, H. Guo, R. Weber, J. Dibb, J. Greene, M. Fiddler, S. Bililign, L. Jaegle, S. S. Brown, and J. A. Thornton, Anthropogenic control over wintertime oxidation of atmospheric pollutants, *Geophys. Res. Lett.*, 46, 14826-14835, 2020.
5. Moutinho, J. L., D. Liang, R. Golan, S. T. Ebel, R. J. Weber, J. A. Sarnat, and A. G. Russell, Evaluating a multipollutant metric for use in characterizing traffic-related T air pollution exposures within near-road environments, *Envir. Res.*, 184, 109389, 2020.
6. Moutinho, J. L., D. Liang, R. Golan, S. E. Sarnat, R. Weber, J. A. Sarnat, and A. G. Russell, Near-road vehicle emissions air quality monitoring for exposure modeling, *Atmos. Env.*, 224, 117318, 2020.
7. Nenes, A., S. N. Pandis, R. J. Weber, and A. Russell, Aerosol pH and liquid water content determine when particulate matter is sensitive to ammonia and nitrate availability, *Atmos. Chem. Phys.*, 20, 3249-3258, 2020.
8. Pye, H. O. T., A. Nenes, B. Alexander, A. Ault, M. Barth, S. Clegg, J. Collett, K. Fahey, C. Hennigan, H. Herrmann, M. Kanakidou, J. Kelly, I. Ku, V. F. McNeill, N. Riemer, T. Schaefer, G. Shi, A. Tilgner, J. T. Walker, T. Wang, R. Weber, J. Xing, R. Zaveri, and Z. Zuend, The acidity of atmospheric particles and clouds, *Atm. Chem. Phys.*, 20, 4809-4888, 2020.
9. Wong, J. P. S., Y. Yang, T. Fang, J. A. Mulholland, A. Russell, S. Ebel, A. Nenes, and R. J. Weber, Fine particle iron in soils and road dust is modulated by coal-fired power plant sulfur, *Envir. Sci Technol.*, <https://dx.doi.org/10.1021/acs.est.0c00483>, 2020.
10. Zeng, L., A. Zhang, Y. Wang, N. Wagner, J. Katich, J. Schwarz, G. Schill, C. Brock, K. Froyd, D. Murphy, C. Williamson, A. Kupc, E. Scheuer, J. Dibb, and R. J. Weber, Global Measurements of Brown Carbon and Estimated Direct Radiative Effects, *Geophys. Res. Lett.*, 47, e2020GL088747, 2020.
11. Zhang, A., Y. Wang, Y. Zhang, R. J. Weber, Y. Song, Z. Ke, and Y. Zou, Modeling global radiative effect of brown carbon: A larger heating source in the tropical free troposphere than black carbon, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-2019-594>, 2020.

12. Bates, J. T., T. Fang, V. Verma, L. Zeng, R. J. Weber, P. E. Tolbert, J. Y. Abrams, S. E. Sarnat, M. Klein, J. A. Mulholland, and A. G. Russell, Review of Acellular Assays of Ambient Particulate Matter Oxidative Potential: Methods and Relationships with Composition, Sources, and Health Effects, *Env Sci. Tech.*, *53*, 4003-4019, 2019.
13. Battaglia, M. A., R. J. Weber, A. Nenes, and C. J. Hennigan, Effects of water-soluble organic carbon on aerosol pH, *Atmos. Chem. Phys.*, *19*, 14607-14620, 2019.
14. Davis, A. Y., Q. Zhang, J. P. S. Wong, R. J. Weber, and M. S. Black, Characterization of volatile organic compound emissions from consumer level material extrusion 3D printers, *Building and Environ.*, *160*, 106209, 2019.
15. Fang, T., P. S. J. Lakey, R. J. Weber, and M. Shiraiwa, Oxidative potential of particulate matter and generation of reactive oxygen species in epithelial lining fluid, *Env Sci. Tech.*, DOI: 10.1021/acs.est.1029b03823, 2019.
16. McDaniel, M. F. M., E. D. Ingall, P. L. Morton, E. Castrorina, R. J. Weber, R. U. Shelley, W. M. Landing, A. F. Longo, Y. Feng, and B. Lai, Relationship between atmospheric aerosol mineral surface area and iron solubility, *ACS Earth and Space Chem.*, *3*(11), 2443-2451, 2019.
17. Moravek, A., J. G. Murphy, A. Hrdina, J. C. Lin, C. Pennell, A. Franchin, A. M. Middlebrook, D. L. Fibiger, C. C. Womack, E. E. McDuffie, R. Martin, K. Moore, M. Baasandorj, and S. S. Brown, Wintertime spatial distribution of ammonia and its emission sources in the Great Salt Lake region, *Atmos. Chem. Phys.*, *19*, 15691-15709, 2019.
18. Paraskevopoulou, D., A. Bougiatioti, I. Stavroulas, T. Fang, M. Lianou, E. Liakakou, R. J. Weber, A. Nenes, and N. Mihalopoulos, Yearlong variability of oxidative potential of particulate matter in an urban Mediterranean environment, *Atmos. Env.*, *206*, 183-196, 2019.
19. Sullivan, A. P., H. Guo, J. Schroder, P. Campuzno-Jost, J. L. Jimenez, T. Campos, V. Shah, L. Jaegle, B. H. Lee, F. D. Lopez-Hilfiker, J. A. Thornton, S. S. Brown, and R. J. Weber, Biomass Burning Markers and Residential Burning in the WINTER Aircraft Campaign, *J. Geophys. Res. Atmos.*, *124*, 1846-1861, 2019.
20. Wong, J. P. S., M. Tsgaraki, I. Tsiadra, N. Mihalopoulos, K. Vilaki, M. Kanakidou, J. Sciare, A. Nenes, and R. J. Weber, Atmospheric evolution of molecular weight separated brown carbon from biomass burning, *Atm. Chem. Phys.*, *19*, 7319-7334, 2019.
21. Xu, J., J. Chen, Y. Shi, N. Zhao, X. Qin, G. Yu, J. Liu, Y. Lin, Q. Fu, R. J. Weber, S. L. Clegg, C. Deng, and K. Huang, First continuous measurement of gaseous and particulate formic acid in a suburban area of East China: Seasonality, gas-particle partitioning and impact on aerosol properties, *Earth Space Chem.*, DOI: 10.1021/acsearthspacechem.9b00210, 2019.
22. Zhang, Q., M. Pardo, Y. Rudich, I. Kaplan-Ashiri, J. P. S. Wong, A. Y. Davis, M. S. Black, and R. J. Weber, Chemical Composition and Toxicity of Particles Emitted from a Consumer-level 3D Printer using Various Materials, *Env Sci. Tech.*, DOI: 10.1021/acs.est.9b04168, 2019.
23. Guo, H., A. Nenes, and R. J. Weber, The underappreciated role of nonvolatile cations on aerosol ammonium-sulfate molar ratios *Atmos. Chem. Phys.*, *18*, 17307-17323, 2018.
24. Guo, H., R. Otjes, P. Schlag, A. Kiendler-Scharr, A. Nenes, and R. J. Weber, Effectiveness of ammonia reduction on control of fine particle nitrate, *Atm. Chem. Phys.*, *18*, 12241-12256, 2018.
25. Haskins, J. D., L. Jaegle, V. Shah, B. H. Lee, F. D. Lopez-Hilfiker, P. Campuzano-Jost, J. C. Schroder, D. Day, H. Guo, A. Sullivan, R. Weber, J. Dibb, T. Campos, J. L. Jimenez, S. S. Brown, and J. A. Thornton, Inorganic Chlorine Budget and Gas-Particle Partitioning in the Winter Lower Troposphere over the Northeast United States, *J. Geophys. Res.*, *123*, 12,897-812,916, 2018.
26. Hettiyadura, A., F. Jayarathne, L. Xu, K. Skog, H. Guo, R. J. Weber, A. Nenes, F. N. Keutsch, N. L. Ng, and E. A. Stone, Source Apportionment of Organic Carbon in Centreville, AL using Organosulfates in Organic Tracer-based Positive Matrix Factorization, *Atmos. Env.*, *186*, 74-88, 2018.
27. Jaegle, L., V. Shah, F. D. Lopez-Hilfiker, B. H. Lee, J. A. Thornton, E. McDuffie, D. Fibiger, S. S. Brown, P. Veres, T. Sparks, C. Ebben, P. J. Wooldridge, R. C. Cohen, A. Weinheimer, T. Campos, D. D. Montzka, J.

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28. Lawal, A., X. Guan, C. Liu, L. Henneman, V. Bhogineni, R. J. Weber, A. Nenes, and A. G. Russell, Linked Response of aerosol acidity and Ammonia to SO<sub>2</sub> and NO<sub>x</sub> Emissions Reductions in the US, *Envir. Sci Technol.*, *52*, 9861-9873, 2018.
29. McDuffie, E. E., D. L. Fibiger, W. P. Dube, F. Lopez-Hilfiker, B. H. Lee, V. Shah, L. Jaegle, H. Guo, R. J. Weber, J. M. Reeves, A. J. Weinheimer, J. C. Schroder, P. Campuzano-Jost, J. L. Jimenez, J. E. Dibb, P. Veres, C. Ebben, T. L. Sparks, P. J. Wooldridge, R. C. Cohen, R. S. Hornbrook, E. C. Apel, T. Campos, S. R. Hall, K. Ullmann, J. A. Thornton, and S. S. Brown, ClNO<sub>2</sub> yields from aircraft measurements during the 2015 WINTER campaign and critical evaluation of current parameterizations, *J. Geophys. Res.*, *123*, 12,994-913,015, 2018.
30. Nah, T., Y. Ji, D. J. Tanner, H. Guo, A. P. Sullivan, N. L. Ng, R. J. Weber, and L. G. Huey, Real-time measurements of gas-phase organic acids using SF<sub>6</sub>- chemical ionization mass spectrometry, *Atmos. Meas. Tech.*, *11*, 5087-5104, 2018.
31. Nah, T., H. Guo, A. P. Sullivan, Y. Chen, D. J. Tanner, A. Nenes, A. Russell, N. L. Ng, L. G. Huey, and R. J. Weber, Characterization of Aerosol Composition, Aerosol Acidity and Water-soluble Organic Acids at an Agriculture-intensive Rural Southeastern U.S. Site, *Atm. Chem. Phys.*, *18*, 11471-11491, 2018.
32. Schroder, J. C., P. Campuzano-Jost, D. A. Day, V. Shah, K. Larson, J. M. Sommers, A. P. Sullivan, T. Campos, J. M. Reeves, A. Hills, R. S. Hornbrook, N. J. Blake, E. Scheuer, H. Guo, D. L. Fibiger, E. E. McDuffie, P. L. Hayes, R. J. Weber, J. E. Dibb, E. C. Apel, L. Jaegle, S. S. Brown, J. A. Thornton, and J. L. Jimenez, Sources and Secondary Production of Organic Aerosols in the Northeastern US during WINTER, *J. Geophys. Res.*, *123*, 7771-7796, 2018.
33. Shah, V., L. Jaegle, F. D. Lopez-Hilfiker, B. H. Lee, J. A. Thornton, J. C. Schroder, P. Campuzano-Jost, J. L. Jimenez, H. Guo, A. P. Sullivan, R. J. Weber, J. Green, M. Fiddler, and S. Bililign, Weak Response of Atmospheric Sulfate and Nitrate Particles to Emission Reductions over the Eastern U.S. during Winter, *P. Natl. Acad. Sci.*, [www.pnas.org/cgi/doi/10.1073/pnas.1803295115](http://www.pnas.org/cgi/doi/10.1073/pnas.1803295115), 2018.
34. Vasilakos, P., A. Russell, R. J. Weber, and A. Nenes, Understanding nitrate formation in a world with less sulfate, *Atmos. Chem. Phys.*, *18*, 12765-12775, 2018.
35. Wang, X., C. L. Heald, J. Liu, R. J. Weber, P. Campuzano-Jost, J. L. Jimenez, J. P. Schwarz, and A. E. Perring, Exploring the observational constraints on the simulation of brown carbon, *Atm. Chem. Phys.*, *18*, 635-653, 2018.
36. Ye, D., M. Klein, J. A. Mulholland, A. G. Russell, R. J. Weber, E. S. Edgerton, H. H. Chang, J. A. Sarnat, P. E. Tolbert, and S. E. Sarnat, Estimating acute cardiovascular effects of ambient PM<sub>2.5</sub> metals, *Envir. Health Perspectives*, <https://doi.org/10.1289/EHP2182>, 2018.
37. Zhang, H., L. Yee, B. Lee, M. Curtis, D. Worton, G. Isaacman-VanWertz, J. Offenberg, M. Lewandowski, T. E. Kleindienst, M. Beaver, A. Holder, W. Lonneman, K. Docherty, M. Jaoui, H. Pye, W. Hu, D. Day, P. Campuzano-Jost, J. Jimenez, H. Guo, R. Weber, J. deGouw, A. Koss, E. Edgerton, W. Brune, C. Hohn, F. Lopez-Hilfiker, A. Lutz, N. Kreisberg, S. Spielman, S. Hering, K. Wilson, J. Thornton, and A. Goldstein, Monoterpenes are the largest source of summertime organic aerosol in the southeastern United States, *P. Natl. Acad. Sci.*, *115*(9), 2038-2043, 2018.
38. Zhang, Q., G. Sharma, J. S. Wong, A. Y. Davis, M. S. Black, P. Biswas, and R. J. Weber, Investigating particle emissions and aerosol dynamics from a consumer fused deposition modeling 3D printer with a lognormal moment aerosol model, *Aerosol Sci. Technol.*, *52*(10), 1099-1111, 2018.
39. Abrams, J., R. J. Weber, M. Klein, S. E. Samat, H. H. Chang, M. J. Strickland, V. Verma, T. Fang, J. T. Bates, J. A. Mulholland, A. G. Russell, and P. E. Tolbert, Associations between ambient fine particulate oxidative potential and cardiorespiratory emergency department visits, *Envir. Health Perspectives*, <https://doi.org/10.1289/EHP1545>, 2017.

40. Tuet, W. Y., U. Chen, S. Fok, D. Gao, R. J. Weber, J. A. Champion, and N. L. Ng, Chemical and cellular oxidant production induced by naphthalene secondary organic aerosol (SOA): Effect of redox-active metals and photochemical aging, *Scientific Reports*, 7, DOI:10.1038/s41598-41017-15071-41598, 2017.
41. Guo, H., R. J. Weber, and A. Nenes, High levels of ammonia do not raise fine particle pH sufficiently to yield nitrogen oxide-dominated sulfate production, *Sci. Reports*, 7, 12109, DOI:10.1038/s41598-017-11704-0, 2017.
42. Wong, J. P. S., A. Nenes, and R. J. Weber, Changes in light absorptivity of molecular weight separated brown carbon due to photolytic aging, *Envir. Sci. Technol*, DOI: 10.1021/acs.est.7b01739, 2017.
43. Vreeland, H., R. Weber, M. H. Bergin, R. Greenwald, R. Golan, A. G. Russell, V. Verma, and J. Sarnat, Oxidative Potential of PM<sub>2.5</sub> during Atlanta Rush Hour: Measurements of In-Vehicle Dithiothreitol (DTT) Activity, *Atmos. Env.*, 165, 169-178, 2017.
44. Guo, H., R. J. Weber, and A. Nenes, High levels of ammonia do not raise fine particle pH sufficiently to yield nitrogen oxide-dominated sulfate production, *Sci. Reports*, 7, 12109, DOI:10.1038/s41598-017-11704-0, 2017.
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48. Zhang, Y., H. Forrister, J. Liu, J. Dibb, B. Anderson, J. Schwarz, A. A. Perring, J. L. Jimenez, P. Campuzano-Jost, Y. Wang, A. Nenes, and R. J. Weber, Brown Carbon in the Upper Troposphere Affects Top of Atmosphere Radiative Forcing *Nature Geoscience*, 10.1038/ngeo2960, 2017.
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51. Fang, T., H. Guo, L. Zeng, V. Verma, A. Nenes, and R. J. Weber, Highly acidic sulfate makes aerosols toxic by dissolving metals, *Environ. Sci. Tech.* doi: 10.1021/acs.est.6b06151, 2017.
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54. Xu, L., H. Guo, R. J. Weber, and N. L. Ng, Chemical Characterization of Water Soluble Organic Aerosol in Contrasting Rural and Urban Environments in the Southeastern United States, *Envir. Sci. Technol*, 51, 78-88, 2017.
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57. Sarnat, S. E., H. H. Chang, and R. J. Weber, Editorial: Ambient PM<sub>2.5</sub> and Health: Does PM<sub>2.5</sub> Oxidative Potential Play a Role?, *Am J Resp Crit Care Med*, *194*, 530-531, 2016.
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**B2. Conference Presentations with Proceedings (Refereed – Included in B4 and B5)**

**B3. Other Refereed Material (Book Chapters)**

**B4. Submitted Papers (underscore indicates Weber graduate student or post doc)**

1. Ginn, O., D. Berendes, A. Wood, L. Rocha-Melogno, S. Tripathi, F. Soria, M. Andrade, M. Deshusses, R. J. Weber, M. Bergin, and J. Brown, Airborne antimicrobial resistance genes in urban India and Bolivia, *Envir. Sci Technol.*, *submitted*, 2020.
2. Ibikunle, I., T. P. Bui, P. Campuzano-Jost, J. Dibb, G. Diskin, J.-L. Jimenez, G. Huey, E. Scheuer, P. Wennberg, L. Ziemba, R. Weber, and A. Nenes, Fine particle pH and PM sensitivity regimes over South Korean during the NASA KORUS-AQ Study, *Atmos Chem Phys*, <https://doi.org/10.5194/acp-2020-501>, 2020.
3. Nenes, A., S. N. Pandis, A. Russell, S. Song, P. Vasilakos, and R. J. Weber, Aerosol acidity and liquid water content regulate the dry deposition of inorganic reactive nitrogen, *Atmos. Chem. Phys. Disc.*, <https://doi.org/10.5194/acp-2020-266>, 2020.

**C. OTHER PUBLICATIONS AND CREATIVE PRODUCTS**

**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.

Companies that produce/sell the PILS:

Brechtel Manufacturing Inc <http://www.brechtel.com/products-item/particle-into-liquid-sampler/>

Metrohm USA <http://www.metrohmusa.com/MISP/gaseous/PILS.html>,

Internationally, <http://www.metrohm.com/en/products-overview/voltammetry/va%20computrace/pils>

**D. PRESENTATIONS (underscore indicates Weber graduate student or post doc)****a) Invited**

1. Weber, R. J, Particle pH: A Critical air quality parameter, *Amer. Met. Society, Boston, MA*, Jan. 13 to 17, 2020.
2. Weber, R. J., J. Wong, A. Nenes, J. Mulholland, A. Russell, D. Ye, and S. Sarnat, Links Between Sulfur Dioxide, Transition Metals and Adverse Health Effects, *Amer. Geophys. Union, Washington, D.C.*, Dec. 10-14, 2018.
3. Weber, R. On the acidity of fine particles and some implications, Goldschmidt Conf., 12-17 Aug. 2018, Boston, MA, 2018.
4. Weber, R. Aerosols and Health; Does PM2.5 Oxidative Potential Play a Role?, Universit of Toronto, March 14, 2017.
5. Weber, R. The Unexpected behavior of fine particle acidity, *American Chemical Society*, Aug. 22-25, 2016.
6. Weber, R. J., TSRC Organic aerosols in the atmosphere, Telluride CO, July 2016.
7. Weber, R. Fine particle pH: Particles remain acidic despite dramatic reductions in sulfate, Harvard, Environmental Science and Engineering, 2015
8. Weber, R., Brown Carbon: Results from ground and airborne studies, *Amer. Geophys. Union, San Francisco, CA*, Dec. 14-18, 2015.
9. Weber, R. J., H. Forrister, J. Liu, J. Dibb, E. Scheuer, B. Anderson, L. Ziemba, K. Thornhill, M. Bergin, and A. Nenes, Brown carbon in the continental troposphere: sources, evolution and radiative impacts, *Amer. Geophys. Union, San Francisco, CA*, Dec. 15-19, 2014.
10. Weber, R. J., Fine particle water-soluble organic carbon over the southeastern United States, *Amer. Geophys. Union*, Dec 9-13, San Francisco, 2013.
11. 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.
12. PM2.5 Soluble Brown-Carbon Measured in Rural and Contrasting Urban Environments, Fall AGU, Dec 5-9, San Francisco, 2011.
13. A tale of SOA in two cities, Los Angles versus Atlanta, Cal. Tech. Nov 16, 2011.
14. 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
15. Aerosols Metrology for Climate Workshop, Invited speaker and Panel Co-Chair, NIST, Gaithersburg MD, March 14, 2011.
16. 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.
17. (Invited Tutorial) Semi-Continuous Measurements of Aerosol Chemical Composition, American Association for Aerosol Research, Fall, 2009
18. Recent Investigations into Secondary Organic Aerosol Formation Liquid Water, SOA and the Resulting Aerosol Volatility, Joint Meeting (AGU), Toronto, Canada, May 2009.
19. Recent studies into water-soluble components of the ambient aerosol, Environment Canada, Downsview, Ontario, Canada, May 2009.
20. (Invited Tutorial) Semi-Continuous Measurements of Aerosol Chemical Composition, American Association for Aerosol Research, Fall, 2008
21. Investigating Ambient Aerosols Through Development of Novel Measurement Techniques: SOA and Soluble Metals, Dalhousie University, Feb, 2008.
22. The Atlanta Aerosol, *2006 National Environmental Public Health Conference, Dec 4-6, Atlanta, GA*. 2006.

23. Formation of Ambient Secondary Organic Aerosol in Southeastern USA,; *American Geophysical Union, Dec 10-15, San Francisco CA.* 2006.
24. Secondary Organic Aerosol Formation, Harvard University, April 2006.
25. Investigating the Formation of Ambient Secondary Organic Aerosol in the Southeastern USA, *Southeastern Regional Meeting American Chemical Society, Nov. 1-4, Augusta GA,* 2006.
26. 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
27. Measurements of ambient carbonaceous particles that are soluble in water, American Chemical Society, 2004
28. (Invited Tutorial) Semi-Continuous Measurements of Aerosol Chemical Composition, American Association for Aerosol Research, Fall, 2004
29. EMEP Workshop on Particulate Matter Measurement & Modeling New Orleans LA April 20-23, 2004.
30. University of California, Berkeley, 2003
31. American Chemical Society, 2002.
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#### **b) Contributed**

1. Zhang, Q., A. Davis, M. Black, and R. J. Weber, Particle and volatile organic compound emissions from 3D printers and their potential exposure risks, *Indoor Air, Virtual*, 2020.
2. Zeng, L., Z. Zhang, Y. Wang, N. Wagner, J. Katich, J. Schwarz, G. Schill, C. Brock, K. Froyd, D. Murphy, C. Williamson, A. Kupc, E. Scheuer, J. Dibb, and R. J. Weber, Brown carbon global radiative effects, *Amer. Assoc. for Aerosol Res., Remote due to COVID-19*, Oct. 5-9, 2020.
3. Zeng, L., E. Scheuer, J. Dibb, J. M. Katich, J. P. Schwarz, N. L. Wagner, and R. J. Weber, Measurement of Aerosol Chromophores Contributing to Brown Carbon during FIREX-AQ, *American Geophysical Union, Virtual Due to COVID-19*, Dec. 17, 2020.
4. Zeng, L., E. Scheuer, J. Dibb, J. M. Katich, J. P. Schwarz, N. L. Wagner, and R. J. Weber, Measurement of aerosol chromophores contributing to brown carbon during FIREX-AQ, *American Geophysical Union, Virtual Due to COVID-19*, Dec. 17, 2020.
5. Weber, R. J., Particle pH: A Critical air quality parameter, *Amer. Met. Society, Boston, MA*, Jan. 13 to 17, 2020.
6. Wagner, N. L., A. Ahern, C. A. Brock, D. Murphy, M. Lyu, J. Schwarz, J. M. Katich, A. Perrring, B. Mediavilla, R. Moore, E. Wiggins, R. J. Weber, L. Zeng, J. Dibb, E. Scheuer, E. Winstead, and C. Robinson, Observations of Aerosol Absorption and Attribution to Black Carbon, Brown Carbon, and Coating Enhancement in Wildfire Smoke during the FIREX-AQ Mission, *American Geophysical Union, Virtual Due to COVID-19*, Dec. 17, 2020.
7. Wagner, N. L., A. Ahern, C. A. Brock, D. Murphy, M. Lyu, J. Schwarz, J. M. Katich, A. Perrring, B. Mediavilla, R. Moore, E. Wiggins, R. J. Weber, and L. Zeng, Observations of Aerosol Absorption and Attribution to Black Carbon, Brown Carbon, and Coating Enhancement in Wildfire Smoke during the FIREX-AQ Mission, *Amer. Assoc. for Aerosol Res., Remote due to COVID-19*, Oct. 5-9, 2020.
8. Gao, D., J. Mulholland, A. G. Russell, and R. J. Weber, Characterization of water-insoluble oxidative potential of PM<sub>2.5</sub> using the dithiothreitol assay, *Amer. Assoc. for Aerosol Res., Remote due to COVID-19*, Oct. 5-9, 2020.
9. Campbell, J., M. Gattaglia, M. Cesler-Maloney, H. S. Clair, T. Hanisco, W. Simpson, R. J. Weber, and J. Mao, Sources and chemistry of hydroxymethanesulfonate (HMS) in Fairbanks, Alaska, *American Geophysical Union, Virtual Due to COVID-19*, Dec. 17, 2020.
10. Brock, C., A. Kupc, C. Williamson, K. Froyd, G. Schill, D. murphy, J. Jimenez, P. Camuzno-Jost, B. Weinzierl, M. Dollner, J. Schwarz, J. Katich, J. Dibb, R. Weber, L. Zeng, G. Diskin, and T. Bui, A Global-

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271. 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.
272. 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.
273. 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.
274. 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.
275. 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.
276. 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.
277. 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.
278. 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.
279. 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.
280. 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.

## E. GRANTS AND CONTRACTS

### E1. AS PRINCIPLE INVESTIGATOR

1. Measurements of Brown Carbon and Water-Soluble Organic Carbon for FIREX-AQ, **NASA** 1 Jan 2018 to 31 Dec 2022, \$520,872.
2. An Improved Understanding of Fuel Dynamics, Fire Behavior and Regional Air Quality Impacts of Prescribed Burning at DoD Lands, 1 Sept. 2020 to 31 Aug. 2023, Huey and Weber \$1.004M.
3. Impacts Of Energy Sector Emissions On Air Quality, Phillips 66 Company, Jan 1, 2021 To Dec. 31, 2021, \$87,659.
4. Sustainably Navigating Arctic Pollution -- Through Engaging Communities (SNAP-TEC), **NSF NNA**, Oct. 1, 2019 to Sept. 30, 2023, \$350,000.
5. Collaborative Research: Investigating Formation of Sulfur Aerosols in Fairbanks, Alaska, **NSF**, Nov. 15, 2020 to Nov. 14 2023, 0.25 mnth, \$411,945.
6. In-Situ Aerosol and Cloud Property Measurements: Cloud and Aerosol Monsoonal Processes – Philippines Experiment (CAMP2EX), **NASA** Feb. 27, 2018 to Feb. 26, 2022, \$317,401.



**E2. AS CO-PRINCIPLE INVESTIGATOR****E3. AS SENIOR PERSONNEL OR CONTRIBUTOR****E4. PENDING PROPOSALS**

1. Using NASA field observations to improve the simulations and impact assessment of brown carbon from biomass burning in a climate model, April 1, 2021-March 31, 2024, R. Weber CoPI, \$666,074.
2. Near Real-Time Aerosol Composition Measurements during the Atmospheric Emissions and Reactions Observed from Megacities to Marine Areas (AEROMMA), 1 May 2021 to 30 April 2024, \$197,178.

**E5. PROPOSALS SUBMITTED BUT NOT FUNDED (Last Two Years)****F. OTHER SCHOLARLY AND CREATIVE ACCOMPLISHMENTS****FIELD STUDIES**

<b>Airborne</b>	<b>Ground-Based</b>
PEM TROPICS-B, NASA, 1999	Atlanta Super Site, EPA, 1999
TOPSE, NSF, 2000	FAQS, Sate 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	DRIVE, HEI, 2014
SEAC4RS, NASA, 2013	EPA-NH3-SOA, 2016
WINTER, NSF, 2015	JST-SEARCH, 2017
AToms, NASA, 2017	DOD Prescribed Burns, 2021
ACE-ENA, DOA, 2017	

**G. SOCIETAL AND POLICY IMPACTS****H. OTHER PROFESSIONAL ACTIVITIES****V. EDUCATION****A. Courses Taught**

				Students
Fall	2020	EAS 6790	Air Pollution Phys/Chem	13
Spring	2020	EAS 6430	Air Quality Meas. Lab	14
Fall	2019	EAS 6790	Air Pollution Phys/Chem	14
Spring	2019	EAS 6795	Atmospheric Aerosols	9
Fall	2018	EAS 6790	Air Pollution Phys/Chem	7
Spring	2018	EAS 6430	Air Quality Meas. Lab	7
Fall	2017	EAS 6795	Air Pollution Phys/Chem	12
Spring	2017	EAS 6795	Atmospheric Aerosols	18
Fall	2016	EAS 6790	Air Pollution Phys/Chem	34
Spring	2016	EAS 6430	Air Quality Meas. Lab	16
Fall	2015	EAS 6790	Air Pollution Phys/Chem	24
Spring	2015	EAS 6795	Atmospheric Aerosols	16

Fall	2014	EAS 6790	Air Pollution Phys/Chem	27
Spring	2014	EAS 6430	Air Quality Meas. Lab	15
Fall	2013	EAS 6790	Air Pollution Phys/Chem	17
Spring	2013	EAS 6795	Atmospheric Aerosols	11
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

## B. INDIVIDUAL STUDENT GUIDANCE

### *B1. PhD Students*

1. Yilin Ma, Ph.D 2004 (Calif. Air Resources Board)
2. Amy Sullivan, Ph.D. 2006 (Res. Scientist, Colorado State University)
3. Kari Maxwell-Meier, Ph.D. 2006 (Army Corps of Engineers)
4. Rick Peltier, Ph.D. 2007, (Assistant Prof. University of Massachusetts, Amherst)
5. Chris Hennigan, Ph.D. 2008, (Assistant Prof. University of Maryland, Baltimore County)
6. Arsineh Hecobian, Ph.D. 2010, (Res. Scientist, Colorado State University)
7. Michelle Oakes Ph.D. 2011 (Post Doc, EPA RTP, North Carolina)
8. Xiaolu Zhang, Ph.D 2012, (Post Doc, U of Calif. Davis)
9. Jiumeng Liu, PhD 2013 (Post Doc, Pacific Northwest National Labs)
10. Ting Fang, PhD 2017, Post Doc, Post Doc, UC Irvine
11. Hongyu Guo, PhD 2017, U. of Colorado
12. Qian Zhang, Ph.D 2018, Post Doc, Underwriters Laboratories
13. Jennifer Moutinho Ph.D. 2018 (co-advise with A. Russell CEE)
14. Ifayoyinsola Ibikunle, Ph.D Student 2019 (ChBe, with new advisor)

15. Dong Gao Ph.D 2019 (Post Doc, Yale)
16. Linghan Zeng Ph.D Student current
17. Yuhan Yang, Ph.D Student current

**B2. M.S. Students**

1. Duan Yang, MS 2000
2. Baoan Wang, MS 2001
3. Dan Diamond, MS 2002
4. Sangil Lee, MS 2002
5. Jennifer Williams M.S. 2010 (Thesis Advisor)
6. Eric Parker (Coadvise with L. Huey), MS 2011 (PhD Student GIT-Chem)
7. Neel Kotra M.S Student 2013, Environmental Consulting
8. Haviland Forrester, MS 2017
9. Justin Min, M.S. 2020

**B3. Undergraduate Students Advised (after 2005)**

1. Gertrude (Gigi) Pavur (2017)
2. Janessa Rowland (2013-2015)
3. Kurt Russell (2012)
4. Kayla Hosking (2010-2011)
5. Raymond Myer (2010)
6. Thom Muccillo (2009)
7. Kimberly Brady (2007)
8. Abigail Wintemute (2006)

**B3. Service on thesis or Dissertation Committees**

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
59. PhD Examination Committee, Ka-Ho Koo (EAS) 2/14
60. PhD Examination Committee, Xin Xi (EAS) 3/14
61. PhD Candidacy Examination Committee, Ting Fang (EAS) 4/14
62. PhD Candidacy Examination Committee, Yufei Zou (EAS) 4/14
63. PhD Examination Committee, Zheng Lu (EAS) 6/14
64. PhD Candidacy Examination Committee, Ruixiong Zhang (EAS) 4/15
65. PhD Candidacy Examination Committee, Hang Qu (EAS) 4/15
66. PhD Candidacy Examination Committee, Wing-Yin Tuet (ChBE) 6/15
67. PhD Examination Committee, Yuzhong Zhang (EAS) 11/15
68. PhD Examination Committee, Jack Lin (EAS) 4/16
69. PhD Candidacy Examination Committee, Ye Cheng (EAS) 4/15
70. PhD Candidacy Examination Committee, Jianfeng Li (EAS) 4/15
71. PhD Examination Committee, Cesunica Ivey (CEE) 4/16

72. PhD Candidacy Examination Committee, Qian Zhang (CEE) 4/15
73. PhD Candidacy Examination Committee, Aoxing Zhang (EAS) 4/17
74. PhD Examination Committee, Lu Xu (ChBE) 5/16
75. PhD Examination Committee, Christopher Boyd (ChBE) 5/16
76. PhD Examination Committee, Ting Fang (EAS) 7/17
77. PhD Examination Committee, Hongyu Guo (EAS) 7/17
78. PhD Candidacy Examination Committee, Linghan Zeng (EAS 10/17)
79. PhD Candidacy Examination Committee, Arnaldo Negron (EAS 10/17)
80. PhD Examination Committee, Ye Cheng (EAS) 10/17
81. PhD Examination Committee, Xinxin Zhai (CEE) 10/17
82. PhD Examination Committee, Ruixiong Zhang (EAS) 10/17
83. PhD Examination Committee, Wing Tuet, (ChBE), 3/18
84. PhD Candidacy Examination, Yunle Chen, (ChBE), 10/18
85. PhD Candidacy Examination, Taekyu Joo, (EAS), 10/18
86. PhD Examination Committee, Ran Huang, (CEE), 3/19
87. PhD Examination Committee, Jianfeng Li (EAS) 3/19
88. PhD Candidacy Examination Committee, Linghan Zeng (EAS 3/19)
89. PhD Candidacy Examination Committee, Yi Ji (EAS 3/19)
90. PhD Candidacy Examination Committee, Young Ro Lee (EAS 4/19)
91. PhD Examination Committee, Arnaldo Negron (EAS) 11/19
92. PhD Examination Committee, Dong Gao (CEE) 11/19
93. PhD Examination Committee, Raj Lal (CEE) 02/20
94. PhD Candidacy Examination Committee, Yuhan Yang (EAS 4/20)

#### **B4. POSTDOCTORAL AND RESEARCH FELLOWS ADVISED**

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, Reader, Geosci. Div., Physical Research Laboratory, India
4. Yuang Cheng, Tsinghua University, China, hosted for work in my lab March – July 2010 & Sept 2012 to April 2013.
5. Ying Wang, Jan. 2013-Dec 2014
6. Vishal Verma, March 2011- 2015 University of Illinois, tenure track
7. Yuzhong Zhang, Jan. 2016-2017 (Harvard Postdoc)
8. Ting Fang, Aug. 2017 – Jan. 2018 (Post Doc U. Cal. Irvine)
9. Jenny Wong, July 2015 – 2018
10. Theodora Nah, June 2016-2018
11. Hongyu Guo, Aug. 2017 – 2018
12. Michael Battaglia Aug. 2019-present

#### **VI. SERVICE**

##### **A. Professional Contributions**

- American Assoc. for Aerosol Research Awards Committee Member; 2017-2020.  
American Assoc. for Aerosol Research Chair Special Symposia Aerosols and Health; 2014-2015.  
American Assoc. for Aerosol Research Membership Committee: Chair, 2014-2015  
American Assoc. for Aerosol Research Membership Committee, 2012-2014  
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)

**B. Public and Community Service**

**C. Institute Contributions GEORGIA TECH COMMITTEES**

*Georgia Tech Research Advisor Committee (GTRAC) 2014-2017*

*Provost Committee, Interdisciplinary Research 2007-08*

*Departmental/School*

2020/2021 Tenure and Promotion  
2020/2021 Awards Committee  
2019/2020 Member EAS Chair Advisor Committee  
2019/2020 Tenure and Promotion  
2019/2020 Awards Committee  
2019 EAS Member EAS Chair Review Committee  
2018/2019 EAS Chair Faculty Search Committee  
2018/2019 Member EAS Chair Advisor Committee  
2010/2019 Tenure and Promotion  
2015/2019 Awards Committee  
2017/2018 EAS Chair Advisory Committee  
2017 Ad-hoc Committee to Promote Excellence Through Diversity in COS Faculty Hiring  
2017/2018 EAS Undergraduate Committee  
2013/2014 EAS Chair Search  
2010/2014 Graduate Admissions Committee  
2010/2011 Graduate Admissions Committee  
2010/2011 Tenure and Promotion  
2010/2011 Tenure Committee College of Science  
2009/2010 Tenure and Promotion: Chair  
2009/2010 Tenure Committee College of Science  
2008/2009 Tenure and Promotion: Chair  
2008/2008 Member EAS Faculty Search Committee  
2008/2009 Tenure Committee College of Science  
2007/2008 Member EAS Chair Review Committee  
2007/2008 Tenure and Promotion: Chair  
2006/2007 Tenure and Promotion: Chair  
2005/2006 Tenure and Promotion: Chair  
2004/2005 Tenure and Promotion: Chair  
2003/2004 Tenure and Promotion  
2002/2003 EAS Colloquium co-Chair  
2000/2003 Long-Range Planning and Atmospheric Chemistry Search  
1999/2000 Graduate Studies and Awards