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EDUCATION

2010 Ph.D., Chemistry, California Institute of Technology, Pasadena, CA
Research Advisor: John H. Seinfeld
2003 B.A., Chemistry, North Carolina State University, Raleigh, NC
2003 B.S., Meteorology, North Carolina State University, Raleigh, NC

PROFESSIONAL EXPERIENCE

2017 – Present, *Co-Director for Undergraduate Studies*, University of North Carolina at Chapel Hill (UNC-CH), Department of Environmental Sciences and Engineering (ESE), Chapel Hill, NC
2015 – Present, *Associate Professor*, UNC-CH, Department of ESE, Chapel Hill, NC
2010 – 2015, ***Assistant Professor***, UNC-CH, Department of ESE, Chapel Hill, NC

HONORS AND AWARDS

2017 *Environmental Science & Technology Letters* Selected Highly Prolific Authors
2017 Newton Underwood Award for Excellence in Teaching, University of North Carolina at Chapel Hill, Gillings School of Global Public Health
2016 James J. Morgan Early Career Award Lectureship, *Environmental Science & Technology* (*ES&T*), American Chemical Society
2015 Ruth and Philip Hettleman Prize for Artistic and Scholarly Achievement, University of North Carolina at Chapel Hill
2015 Editors' Citation For Excellence in Refereeing, *Journal of Geophysical Research (JGR) – Atmospheres*
2013 Sheldon K. Friedlander Award, American Association for Aerosol Research
2013 Camille & Henry Dreyfus Environmental Chemistry Mentor
2013 Early Career Award, U.S. Environmental Protection Agency (EPA)
2013 *ES&T* Excellence in Review Award
2012 Walter A. Rosenblith New Investigator Award, Health Effects Institute (HEI)
2011 Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS)
2008 ScienceWatch.com Fast Breaking Paper – February 2008: In the field of Environment/Ecology for the manuscript entitled "Evidence for Organosulfates in Secondary Organic Aerosol."
2004–2007 EPA Science to Achieve Results (STAR) Graduate Fellowship

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PROFESSIONAL MEMBERSHIPS

American Association for Aerosol Research
American Geophysical Union
American Chemical Society

BIBLIOGRAPHY

Refereed Articles – Published Status (110 Total; 9,363 total citations, h-index of 48 and i10-index of 83 based on Google Scholar)

(Annotations: S = graduate student advisee; V = visiting graduate student advisee; U = undergraduate advisee; P = postdoctoral scholar advisee; * = corresponding author)

1. Carlton, A. G.; de Gouw, J.; Jimenez, J.-L.; Ambrose, J. L.; Attwood, A.; Brown, S.; Baker, K. R.; Brock, C.; Cohen, R. C.; Edgerton, S.; Farkas, C.; Farmer, D.; Goldstein, A. H.; Gratz, L.; Guenther, A.; Hunt, S.; Jaeglé, L.; Jaffe, D. A.; Mak, J.; McClure, C.; Nenes, A.; Nguyen, T. K.; Pierce, J. R.; de Sa, S. S.; Selin, N. E.; Shah, V.; Shaw, S.; Shepson, P. B.; Song, S.; Stutz, J.; **Surratt, J. D.**; Turpin, B. J.; Warneke, C.; Washenfelder, R. A.; Wennberg, P. O.; Zhou, X. (2017) Synthesis of the Southeast Atmosphere Studies: Investigating Fundamental Atmospheric Chemistry Questions, *Bulletin of the American Meteorological Society*, in press.
2. Rattanavaraha, W.[S]; Canagaratna, M. R.; Budisulistiorini, S. H.[P]; Croteau, P. L.; Baumann, K.; Canonaco, F.; Prevot, A. S. H.; Edgerton, E. S.; Zhang, Z.; Jayne, J. T.; Worsnop, D. R.; Gold, A.; Shaw, S. L.; **Surratt, J. D.*** (2017) Source Apportionment of Submicron Organic Aerosol Collected from Atlanta, Georgia, During 2014-2015 Using the Aerosol Chemical Speciation Monitor (ACSM). *Atmospheric Environment*, 167, 389–402.
3. Liu, J.; Russell, L. M.; Lee, A. K. Y.; McKinney, K. A.; **Surratt, J. D.**; Ziemann, P. J. (2017) Observational Evidence for Pollution-Influenced Selective Uptake Contributing to Biogenic Secondary Organic Aerosols in the Southeastern U.S., *Geophysical Research Letters*, 44, 8056–8064.
4. Sheesley, R. J.; Dev Nallathamby, P.; **Surratt, J. D.**; Lee, A.; Lewandowski, M.; Offenberg, J. H.; Jaoui, M.; Kleindienst, T. E. (2017) Constraints on Primary and Secondary Particulate Carbon Sources Using Chemical Tracer and ^{14}C Methods During CalNex-Bakersfield. *Atmospheric Environment*, 166, 204–214.
5. Lin, Y-H.[P]; Arashiro, M.[S]; Clapp, P. W.; Cui, T.[S]; Sexton, K. G.; Vizuete, W. G.; Gold, A.; Jaspers, I.; Fry, R. C.; **Surratt, J. D.*** (2017) Gene Expression Profiling in Human Lung Cells Exposed to Isoprene-Derived Secondary Organic Aerosol. *Environmental Science & Technology*, 51 (14), 8166–8175.
6. de Sá, S. S.; Palm, B. B.; Campuzano-Jost, P.; Day, D. A.; Newburn, M. K.; Hu, W.; Isaacman-VanWertz, G.; Yee, L. D.; Thalman, R.; Brito, J.; Carbone, S.; Artaxo, P.; Goldstein, A. H.; Manzi, A. O.; Souza, R. A. F.; Mei, F.; Shilling, J.; Springston, S. R.; Wang, J.; **Surratt, J. D.**; Alexander, M. L.; Jimenez, J. L.; Martin, S. T. (2017) Influence of Urban Pollution on the Production of Organic Particulate Matter from Isoprene

Epoxydiols in Central Amazonia. *Atmospheric Chemistry & Physics*, 17 (11), 6611–6629.

7. Zhang, X.; Lambe, A. T.; Upshur, M. A.; Brooks, W. A.; Be, A.G.; Thomson, R. J.; Geiger, F. Z.; **Surratt, J. D.**; Zhang, Z.; Gold, A.; Graf, S.; Cubison, M. J.; Groessl, M.; Jayne, J. T.; Worsnop, D. R.; Canagaratna, M. R. (2017) Highly Oxygenated Molecules in α-Pinene Secondary Organic Aerosol. *Environmental Science & Technology*, 51 (11), 5932–5940.
8. Barbosa, T. S.[V]; Riva, M.[P]; Chen, Y.[S]; da Silva, C. M.; Ameida, J. C. S.; Zhang, Z.; Gold, A.; Arbilla, G.; Bauerfeldt, G. F.; **Surratt, J. D.*** (2017) Chemical Characterization of Organosulfates from the Hydroxyl Radical-Initiated Oxidation and Ozonolysis of *Cis*-3-Hexen-1-ol. *Atmospheric Environment*, 162, 141–151.
9. Budisulistiorini, S. H.[P]; Nenes, A.; Carlton, A. G.; **Surratt, J. D.**; McNeill, V. F.; Pye, H. O. T. (2017) Simulating Aqueous-Phase Isoprene-Epoxydiol (IEPOX) Secondary Organic Aerosol Production During the 2013 Southern Oxidant and Aerosol Study (SOAS). *Environmental Science & Technology*, 51 (9), 5026–5034.
10. Budisulistiorini, S. H.; Riva, M.[P]; M. Williams[S]; Chen, J.; Itoh, M.; **Surratt, J. D.**; Kuwata, M. (2017) Light-absorbing Brown Carbon Aerosol Constituents from Combustion of Indonesian Peat and Biomass. *Environmental Science & Technology*, 51 (8), 4415–4423
11. Burkholder, J. B.; Abbatt, J. P. D.; Barnes, I.; Roberts, J. M.; Melamed, M. L.; Ammann, M.; Bertram, A. K.; Cappa, C. D.; Carlton, A. G.; Carpenter, L. J.; Crowley, J. N.; Dubowski, Y.; Geroge, C.; Heard, D. E.; Herrmann, H.; Keutsch, F. N.; Kroll, J. H.; McNeill, V. F.; Ng, N. L.; Nizorodov, S. A.; Orlando, J. J.; Percival, C. J.; Picquet-Varrault B.; Rudich, Y.; Seakins, P. W.; **Surratt, J. D.**; Tanimoto, H.; Thornton, J. A.; Tong, Z.; Tyndall, G. S.; Wahner, A.; Weschler, C. J.; Wilson, K. R.; Ziemann, P. J. (2017) The Essential Role for Laboratory Studies in Atmospheric Chemistry. *Environmental Science & Technology*, 51 (5), 2519–2528.
12. Riva, M.[P]; Budisulistiorini, S. H.[P,S]; Zhang, Z.; Gold, A.; Thornton, J. A.; Turpin, B. J.; **Surratt, J. D.*** (2017) Multiphase Reactivity of Gaseous Hydroperoxide Oligomers Produced from Isoprene Ozonolysis in the Presence of Acidified Aerosols. *Atmospheric Environment*, 152, 314–322.
13. Pye, H. O. T.; Murphy, B. N.; Xu, L.; Ng, N. L.; Carlton, A. G.; Guo, H.; Weber, R.; Vasilakos, P.; Appel, K. W.; Budisulistiorini, S. H.[P,S]; **Surratt, J. D.**; Nenes, A.; Hu, W. W.; Jimenez, J. L.; Isaacman-VanWertz, G.; Misztal, P. K.; Goldstein, A. H. (2017) On the Implications of Aerosol Liquid Water and Phase Separation for Organic Aerosol Mass. *Atmospheric Chemistry & Physics*, 17 (1), 343–369.
14. D'Ambro, E. L.; Lee, B. H.; Liu, J.; Shilling, J. E.; Gaston, C. J.; Lopez-Hilfiker, F. D.; Schobesberger, S.; Zaveri, R. A.; Mohr, C.; Lutz, A.; Zhang, Z.; Gold, A.; **Surratt, J. D.**; Rivera-Rios, J. C.; Keutsch, F. N.; Thornton, J. A. (2017) Molecular Composition and Volatility of Isoprene Photochemical Oxidation Secondary Organic Aerosol Under Low- and High-NO_x Conditions. *Atmospheric Chemistry & Physics*, 17 (1), 159–174.

15. Sareen, N.; Carlton, A. G.; **Surratt, J. D.**; Gold, A.; Lee, B.; Lopez-Hilfiker, F. D.; Mohr, C.; Thornton, J. A.; Zhang, Z.; Lim, Y. B.; Turpin, B. J. (2016) Identifying Precursors and Aqueous Organic Aerosol Formation Pathways During the SOAS Campaign. *Atmospheric Chemistry & Physics*, 16 (22), 14409–14420.
16. Arashiro, M.[S]; Lin, Y.-H.[P]; Sexton, K. G.; Zhang, Z.; Jaspers, I.; Fry, R. C.; Gold, A.; **Surratt, J. D.*** (2016) *In Vitro* Exposure to Isoprene-Derived Secondary Organic Aerosol by Direct Deposition and its Effects on COX-2 and IL-8 Gene Expression. *Atmospheric Chemistry & Physics*, 16 (22), 14079–14090.
17. Isaacman-VanWertz, G.; Yee, L. D.; Kreisberg, N. M.; Wernis, R.; Moss, J. A.; Hering, S. V.; de Sá, S. S.; Martin, S. T.; Alexander, L.; Palm, B. B.; Hu, W.; Campuzano-Jost, P.; Day, D. A.; Jimenez, J.-L.; Riva, M.[P]; **Surratt, J. D.**; Viegas, J.; Manzi, A.; Edgerton, E.; Baumann, K.; Souza, R.; Artaxo, P.; Goldstein, A. H. (2016) Observed Ambient Gas-Particle Partitioning of Tracers for Biogenic Oxidation. *Environmental Science & Technology*, 50 (18), 9952–9962.
18. Riva, M.[P]; Budisulistiorini, S. H.[P]; Chen, Y.[S]; Zhang, Z.; D'Ambro, E.; Zhang, X.; Gold, A.; Turpin, B. J.; Thornton, J. A.; Canagaratna, M. R.; **Surratt, J. D.*** (2016) Chemical Characterization of Secondary Organic Aerosol from Oxidation of Isoprene Hydroxy Hydroperoxides. *Environmental Science & Technology*, 50 (18), 9889–9899.
19. Meade, L. E.; Riva, M.[P]; Blomberg, M. Z.; Brock, A. K.; Qualters, E. M.; Siejack, R. A.; Ramakrishnan, K.; **Surratt, J. D.**; Kautzman, K. E. (2016) Seasonal Variations of Fine Particulate Organosulfates Derived from Biogenic and Anthropogenic Hydrocarbons in the Mid-Atlantic United States. *Atmospheric Environment*, 145, 405–414.
20. Liu, J.; D'Ambro, E.; Lee, B. H.; Lopez-Hilfiker, F.; Zaveri, R. A.; Rivera-Rios, J. C.; Keutsch, F. N.; Iyer, S.; Kurten, T.; Zhang, Z.; Gold, A.; **Surratt, J. D**; Shilling, J. E.; Thornton, J. A. (2016) Efficient Organic Aerosol Formation from Isoprene Photooxidation in Pristine Conditions. *Environmental Science & Technology*, 50 (18), 9872–9880.
21. Lin, Y-H.[P]; Arashiro, M.[S]; Martin, E.; Chen, Y.; Zhang, Z.; Sexton, K. G.; Gold, A.; Jaspers, I.; Fry, R. C.; **Surratt, J. D.*** (2016) Isoprene-Derived Secondary Organic Aerosol Induces the Expression of Oxidative Stress Response Genes in Human Lung Cells. *Environmental Science & Technology Letters*, 3 (6), 250–254.
22. Riva, M.[P]; Bell, D. M.; Hansen, A.-M. K.; Drozd, G. T.; Zhang, Z.; Gold, A.; Imre, D.; **Surratt, J. D.**; Glasius, M.: Zelenuyk, A. (2016) Effect of Organic Coatings, Humidity, and Aerosol Acidity on Multiphase Chemistry of Isoprene Epoxydiols. *Environmental Science & Technology*, 50 (11), 5580–5588.
23. Krechmer, J. E.; Groessl, M.; Zhang, X.; Junninen, H; Massoli, P.; Lambe, A. T.; Kimmel, J. R.; Cubison, M. J.; Graf, S.; Lin, Y.-H.[S,P]; Budisulistiorini, S. H.[S,P]; Zhang, H.[S]; **Surratt, J. D.**; Knochenmuss, R.; Jayne, J. T.; Worsnop, D. R.; Jimenez, J. L.; Canagaratna, M. R. (2016) Ion Mobility Spectrometry-Mass Spectrometry (IMS-MS)

for On- and Off-Line Analysis of Atmospheric Gas and Aerosol Species. *Atmospheric Measurement Techniques*, 9 (7), 3245–3262.

24. **Surratt, J. D.***; Szmigielski, R.; McNeill, V.F. (2016) Preface Special Issue: Chemical Characterziation of Secondary Organic Aerosol – Dedication to Professor Magda Claeys. *Atmospheric Environment*, 130, 1–4.
25. Riva, M.[P]; Budisulistiorini, S. H.[P]; Zhang, Z.; Gold, A.; **Surratt, J. D.*** (2016) Chemical Characterization of Secondary Organic Aerosol Constituents from Isoprene Ozonolysis in the Presence of Acidic Aerosol. *Atmospheric Environment*, 130, 5–13.
26. Kramer, A. J.[U]; Rattanavaraha, W.[S]; Zhang, Z.; Gold, A.; **Surratt, J. D.***; Lin, Y.-H.[P] (2016) Assessing the Oxidative Potential of Isoprene-Derived Epoxides and Secondary Organic Aerosol. *Atmospheric Environment*, 130, 211–218.
27. Riedel, T. P.[P]; Lin, Y-H.[P]; Zhang, Z.; Chu, K.[S]; Thornton, J. A.; Vizuete, W. G.; Gold, A.; **Surratt, J. D.*** (2016) Constraining Condensed-Phase Formation Kinetics of Secondary Organic Aerosol Components from Isoprene Epoxydiols. *Atmospheric Chemistry & Physics*, 16 (3), 1245–1254.
28. Lopez-Hilfiker, F. D.; Mohr, C.; D'Ambro, E. L.; Lutz, A.; Riedel, T. P.[P]; Gaston, C. J.; Iyer, S.; Zhang, Z.; Gold, A.; **Surratt, J. D.**; Lee, B. H.; Kurten, T.; Hu, W. W.; Jimenez, J.; Hallquist, M.; Thornton, J. A. (2016) Molecular Composition and Volatility of Organic Aerosol in the Southeastern U.S.: Implications for IEPOX-derived SOA. *Environmental Science & Technology*, 50 (5), 2200–2209.
29. Riva, M.[P]; Da Silva Barbosa, T.V; Lin, Y.-H.[P,S]; Stone, E. A.; Gold, A.; **Surratt, J. D.*** (2016) Chemical Characterization of Organosulfates in Seondary Organic Aerosol Derived from the Photooxidation of Alkanes. *Atmospheric Chemistry & Physics*, 16 (17), 11001–11018.
30. Rattanavaraha, W.[S]; Chu, K.[S]; Budisulistiorini, S. H.[P]; Riva, M.[P]: Lin, Y.-H.[P]; Edgerton, E. S.; Baumann, K.; Shaw, S. L.; Guo, H.; Weber, R. J.; Stone, E. A.; Neff, M. E.; Offenberg, J. H.; Zhang, Z.; Gold, A.; **Surratt, J. D.*** (2016) Assessing the Impact of Anthropogenic Pollution on Isoprene-Derived Secondary Organic Aerosol Formation in $PM_{2.5}$ Collected from the Birmingham, Alabama Ground Site During the 2013 Southern Oxidant and Aerosol Study. *Atmospheric Chemistry & Physics*, 16 (8), 4897–4914.
31. Budisulistiorini, S. H.[S,P]; Baumann, K.; Edgerton, E. S.; Bairai, S. T.; Mueller, S.; Shaw, S. L.; Knipping, E. M.; Gold, A.; **Surratt, J. D.*** (2016) Seasonal Characterization of Ambient Submicron Aerosol Chemical Composition and Organic Aerosol Sources in the Southeastern United States: Atlanta, Georgia and Look Rock, Tennessee. *Atmospheric Chemistry & Physics,* 16 (8), 5171–5189.
32. Nguyen, T. B.; Bates, K. H.; Crounse, J. D.; Schwantes, R. H.; Zhang, X.; Kjaergaard, H. G.; **Surratt, J. D.**; Lin, P.; Laskin, A.; Seinfeld, J. H; Wennberg, P. O. (2015) Mechanism of the Hydroxyl Radical (OH) Oxidation of Methacryoyl Pexoynitrate (MPAN) and its Pathway Toward Secondary Organic Aerosol Formation in the Atmosphere. *Physical Chemistry Chemical Physics*, 17, 17914–17926.

33. Riva, M.[P]; Tomaz, S.[V]; Cui, T.[S]; Lin, Y.-H.[P]; Perraudin, E.; Gold, A.; Stone, E. A.; Villenave, E.; **Surratt, J. D.*** (2015) Evidence for an Unrecognized Secondary Anthropogenic Source of Organosulfates and Sulfonates: Gas-Phase Oxidation of Polycyclic Aromatic Hydrocarbons in the Presence of Sulfate Aerosol. *Environmental Science & Technology*, 49 (11), 6654–6664.
34. Hu, W. W.; Campuzano-Jost, P.; Palm, B. B.; Day, D. A.; Ortega, A. M.; Hayes, P. L.; Krechmer, J. E.; Chen, Q.; Kuwata, M.; Liu, Y. J.; de Sa, S. S.; Martin, S. T.; Hu, M.; Budisulistiorini, S. H.[S]; Riva, M.[P]; **Surratt, J. D.**; St. Clair, J. M.; Crounse, J. D.; Wennberg, P. O.; Isaacman-Van Wertz, G.; Yee, L. D.; Goldstein, A. H.; Carbone, S.; Artaxo, P.; de Gouw, J. A.; Koss, A.; Whistaler, A.; Mikoviny, T.; Karl, T.; Kaser, L.; Jud, W.; Hansel, A.; Docherty, K. S.; Robinson, N. H.; Coe, H.; Allan, J. D.; Canagaratna, M. R.; Paulot, F.; Jimenez, J.-L. (2015) Characterization of a Real-Time Tracer for Isoprene Epoxydiols-Derived Secondary Organic Aerosol (IEPOX-SOA) from Aerosol Mass Spectrometer Measurements. *Atmospheric Chemistry & Physics,* 15 (20), 11807–11833.
35. Budisulistiorini, S. H.[S]; Li, X.[S]; Bairai, S. T.; Renfro, J.; Liu, Y.; Liu, Y. J.; Mckinney, K. A.; Martin, S. T.; McNeill, V. F.; Pye, H. O. T.; Neff, M. E.; Stone, E. A.; Mueller, S.; Knote, C.; Shaw, S. L.; Zhang, Z.; Gold, A.; **Surratt, J. D.*** (2015) Examining the Effects of Anthropogenic Emissions on Isoprene-Derived Secondary Organic Aerosol Formation During the 2013 Southern Oxidant and Aerosol Study (SOAS) at the Look Rock, Tennessee, Ground Site. *Atmospheric Chemistry & Physics*, 15 (15), 8871–8888.
36. Riedel, T. P.[P]; Lin, Y.-H.[P]; Budisulistiorini, S. H.[S]; Gaston, C. J.; Thornton, J. A.; Zhang, Z.; Vizuete, W. G.; Gold, A.; **Surratt, J. D.*** (2015) Heterogeneous Reactions of Isoprene-Derived Epoxides: Reaction Probabilities and Molar SOA Yield Estimates, *Environmental Science & Technology Letters*, 2 (2), 38–42.
37. Chen, Y.; Sexton, K. G.; Jerry, R. E.[S]; **Surratt, J. D.**; Vizuete, W. (2015) Assessment of SAPRC07 with Updated Isoprene Chemistry against Outdoor Chamber Experiments. *Atmospheric Environment*, 105, 109–120.
38. Canagaratna, M. R.; Jimenez, J. L.; Kroll, J. H.; Chen, Q., Kessler, S.; Massoli, P.; Hildebrandt-Ruiz, L.; Fortner, E.; Williams, L. R.; Wilson, K. R.; **Surratt, J. D.**; Donahue, N. M.; Jayne, J. T.; Worsnop, D. R. (2015) Elemental Ratio Measurements of Organic Compounds using Aerosol Mass Spectrometry: Characterization, Improved Calibration, and Implications. *Atmospheric Chemistry & Physics*, 15 (1), 253–272.
39. Baker, K. R.; Carlton, A. G.; Kleindienst, T. E.; Offenberg, J. H.; Beaver, M. R.; Gentner, D. R.; Goldstein, A. H.; Hayes, P. L.; Jimenez, J. L.; Gilman, J. B.; de Gouw, J. A.; Woody, M.; Pye, H. O. T.; Kelly, J. T.; Lewandowski, M.; Jaoui, M.; Stevens, P. S.; Brune, W. H.; Lin, Y.-H.[S]; Rubitschun, C. L.[S]; **Surratt, J. D.** (2015) Gas and Aerosol Carbon in California: Comparison of Measurements and Model Predictions in Pasadena and California. *Atmospheric Chemistry & Physics,* 15 (9), 5243–5258.

40. Nozière, B.; Kalberer, M.; Claeys, M.; Allan, J.; D'Anna, B.; Decesari, S.; Finessi, E.; Glasius, M.; Grgic, I.; Hamilton, J.; Hoffmann, T.; Iinuma, Y.; Jaoui, M.; Kahnt, A.; Kampf, C. J.; Kourtchev, I.; Maenhaut, W.; Marsden, N.; Saarikoski, S.; Schnelle-Kreis, J.; **Surratt, J. D.**; Szidat, S.; Szmigielski, R.; Wisthaler, A. (2015) The Molecular Identification of Organic Compounds in the Atmosphere: State of the Art and Challenges. *Chemical Reviews*, 115 (10), 3919–3983.
41. Baldridge, K. C.; Zavala, J.; **Surratt, J. D.**; Sexton, K. G.; Contreras, L. M. (2015) Cellular RNA in Human Lung Cells is Chemically Modified by Exposure to Air Pollution Mixtures. *Inhalation Toxicology*, 27 (1), 74–82.
42. Lin, Y.-H.[P,S]; Sexton, K. G.; Jaspers, I.; Li, Y.-R.; **Surratt, J. D.**; Vizuete, W. (2014) Application of Chemical Vapor Generation Systems to Deliver Constant Gas Concentrations for In Vitro Exposure to Volatile Organic Compounds. *Environmental Science: Processes and Impacts*, 16 (12), 2703–2710.
43. Lin, Y.-H.[P,S]; Budisulistiorini, S. H.[S]; Chu, K.[U]; Siejack, R. A.; Zhang, H.[S]; Riva, M.[P]; Zhang, Z.; Gold., A.; Kautzman, K. E.; **Surratt J. D.*** (2014) Light-Absorbing Oligomer Formation in Secondary Organic Aerosol from Reactive Uptake of Isoprene Epoxydiols. *Environmental Science & Technology*, 48 (20), 12012–12021.
44. O'Brien, R. E.; Laskin, A.; Laskin, J.; Rubitschun, C. L.[S]; **Surratt, J. D.**, Goldstein, A. H. (2014) Molecular Characterization of S- and N-Containing Organic Constituents in Ambient Aerosols by Negative Ion Mode High-Resolution Nanospray Desorption Electrospray Ionization Mass Spectrometry: CalNex 2010 Field Study. *Journal of Geophysical Research – Atmospheres,* 119 (22), 12,706–12,720.
45. Gaston, C. J.; Riedel, T. P.[P]; Zhang, Z.; Gold, A.; **Surratt, J. D.**; Thornton, J. A. (2014) Reactive Uptake of an Isoprene-Derived Epoxydiol To Submicron Aerosol Particles. *Environmental Science & Technology*, 48 (19), 11178–11186.
46. Nallathamby, P. D.; Lewandowski, M.; Jaoui, M.; Offenberg, J. H.; Kleindienst, T. E.; Rubitschun, C. L.[S], **Surratt, J. D.**; Usenko, S.; Sheesley, R. J. (2014) Qualitative and Quantitative assessment of unresolved complex mixture in $PM_{2.5}$ of Bakersfield, CA. *Atmospheric Environment*, 98, 368–375.
47. Karambelas, A.; Pye, H. O. T.; Budisulistiorini, S. H.[S]; **Surratt, J. D.**; Pinder, R. W. (2014) Isoprene Epoxydiol Contribution to Urban Organic Aerosol: Evidence from Modeling and Measurements. *Environmental Science & Technology Letters*, 1 (6), 278–283.
48. Budisulistiorini, S. H.[S]; Canagaratna, M. R.; Croteau, P. L.; Baumann, K.; Edgerton, E. S.; Kollman, M. S.; Ng, N. L.; Verma, V.; Shaw, S. L.; Knipping, E. M.; Worsnop, D. R.; Jayne, J. T.; Weber, R. J.; **Surratt, J. D.*** (2014) Intercomparison of an Aerosol Chemical Speciation Monitor (ACSM) with Ambient Fine Aerosol Measurements in Downtown Atlanta, Georgia. *Atmospheric Measurement Techniques*, 7 (7), 1929–1941.
49. Staudt, S.; Kundu, S.; Lehmler, H.-J.; He, X.; Cui, T.[S]; Lin, Y.-.H.[S]; Kristensen, K.[V]; Glasuis, M.; Zhang, X.; Weber, R. J.; **Surratt, J.D.**; Stone, E. A. (2014) Aromatic

Organosulfates in Atmospheric Aerosols: Synthesis, Characterization and Abundance. *Atmospheric Environment*, 94, 366–373.

50. Zotter, P.; El-Haddad, I.; Zhang, Y.; Hayes, P. L.; Zhang, X.; Lin, Y.-H.[S], Wacker, L., Schnelle-Kreis, J.; Abbaszade, G.; Zimmermann, R.; **Surratt, J. D.**; Weber, R. J.; Jimenez, J.-L.; Szidat, S.; Baltensperger, U.; Prévôt, A. S. H. (2014) Diurnal Cycle of Fossil and Non-Fossil Carbon Using Radiocarbon Analyses During CalNex. *Journal of Geophysical Research – Atmospheres*, 119 (11), 6818–6835.
51. Zhang, H.[S]; Zhang, Z.; Cui, T.[S]; Lin, Y.-H.[S]; Bhathela, N. A.[U]; Ortega, J.; Worton, D. R.; Goldstein, A. H.; Guenther, A.; Jimenez, J.L.; Gold, A.; **Surratt, J. D.*** (2014) Secondary Organic Aerosol Formation from 2-Methyl-3-Buten-2-ol (MBO) Photooxidation: Evidence for Acid-Catalyzed Reactive Uptake of Epoxides. *Environmental Science & Technology Letters*, 1 (4), 242–247.
52. Kristensen, K.[V]; Cui, T.[S]; Zhang, H.[S]; Gold, A.; Glasius, M.; **Surratt, J. D.*** (2014) Dimers in α-Pinene Secondary Organic Aerosol: Effect of Hydroxyl Radical, Ozone, Relative Humidity and Aerosol Acidity. *Atmospheric Chemistry & Physics,* 14 (8), 4201–4218.
53. Alier, M.; Osto, M. D.; Lin, Y.-H.[S], **Surratt, J. D.**; Tauler, R.; Grimalt, J. O., van Drooge, B. L. (2014) On the Origin of Water-Soluble Organic Tracer Compounds in Fine Aerosols in Two Cities: The Case of Los Angeles and Barcelona. *Environmental Science and Pollution Research*, 21 (20), 11649–11660.
54. **Surratt, J. D.*** (2013) Atmospheric Chemistry: Radical Regeneration from Isoprene. *Nature Geoscience*, 6 (12), 995–996.
55. Lin, Y.-H.[S], Zhang, H.[S]; Pye, H. O. T.; Marth, W. J.[S]; Zhang, Z.; Park, S.[U]; Arashiro, M.[S]; Cui, T.[S]; Budisulistiorini, S. H.[S]; Sexton, K. G.; Vizuete, W.; Xie, Y.; Luecken, D. J.; Piletic, I. R.; Edney, E. O.; Bartolotti, L. J.; Gold, A.; **Surratt, J. D.*** (2013) Epoxide as a Precursor to Secondary Organic Aerosol Formation from the Photooxidation of Isoprene in the Presence of Nitrogen Oxides. *Proceedings of the National Academy of Sciences of the United States of America*, 110 (17), 6718–6723.
56. Pye, H. O. T.; Pinder, R. W.; Piletic, I. R.; Xie, Y.; Capps, S. L.; Lin, Y.-H.[S]; **Surratt, J. D.**; Zhang, Z.; Gold, A.; Luecken, D. J.; Hutzell, W. T.; Jaoui, M.; Offenberg, J. H.; Kleindienst, T. E.; Lewandowski, M.; Edney, E. O. (2013) Epoxide Pathways Improve Model Predictions of Isoprene Markers and Reveal Key Role of Acidity in Aerosol Formation. *Environmental Science & Technology*, 47 (19), 11056–11064.
57. Worton, D. R.; **Surratt, J. D.**; LaFranchi, B. W.; Chan, A. W. H.; Zhao, Y.; Weber, R. J.; Park, J.-H.; Gilman, J. B.; de Gouw, J.; Park, C.; Schade, G.; Beaver, M.; St. Clair, J. M.; Crounse, J.; Wennberg, P.; Wolfe, G. M.; Harrold, S.; Thornton, J. A.; Farmer, D. K.; Docherty, K. S.; Cubison, M. J.; Jimenez, J.-L.; Frossard, A. A.; Russell, L. M.; Kristensen, K.; Glasius, M.; Mao, J.; Ren. X.; Brune, W.; Browne, E. C.; Pusede, S. E.; Cohen, R. C.; Seinfeld, J. H.; Goldstein, A. H. (2013) Observational Insights into Aerosol Formation from Isoprene. *Environmental Science & Technology*, 47 (20), 11403-11413.

58. Hayes, P. L.; Ortega, A. M.; Cubison, M. J.; Hu, W.; Toohey, D. W.; Flynn, J. H.; B. Lefer, L.; Grossberg, N.; Alvarez, S.; Rappenglück, B.; Taylor, J.; Allan, J. D.; Holloway, J. S.; Gilman, J. B.; Kuster, W. C.; de Gouw, J. A.; Massoli, P.; Zhang, X.; Liu, J.; Weber, R. J.; Corrigan, A.; Russell, L. M.; Zhao, Y.; Cliff, S. S.; Wexler, A. S.; Isaacman, G.; Worton, D. R.; Kreisberg, N. M.; Hering, S. V.; Goldstein, A. H.; Thalman, R.; Volkamer, R.; Lin, Y.-H.[S]; **Surratt, J. D.**; Offenberg, J. H.; Froyd, K. D.; Dusanter, S.; Griffith, S.; Stevens, P. S.; Brioude , J.; Angevine, W. M.; Jimenez, J. L. (2013) Aerosol Composition and Sources in Los Angeles During the 2010 CalNex Campaign. *Journal of Geophysical Research – Atmospheres*, 118 (16), 9233–9257.

59. Zhang, X.; Lin, Y.-H.[S]; **Surratt, J. D.**; Weber, R. J. (2013) Sources, Composition and Absorption Angstrom Exponent of Light-absorbing Organic Components in Aerosol Extracts from the Los Angeles Basin. *Environmental Science & Technology*, 47 (8), 3685–3693.

60. Chan, A. W. H.; Isaacman, G.; Wilson, K. R.; Worton, D. R.; Ruehl, C. R.; Nah, T.; Gentner, D. R.; Dallmann, T. R.; Kirchstetter, T. W.; Harley, R. A.; Gilman, J. B.; Kuster, W. C.; de Gouw, J. A.; Offenberg, J. H.; Kleindienst, T. E.; Lin, Y.-H.[S]; Rubitschun, C. L.[S]; **Surratt, J. D.**; Goldstein, A. H. (2013) Detailed Chemical Characterization of Unresolved Complex Mixtures (UCM) in Atmospheric Organics: Insights into Emission Sources and Atmospheric Processing. *Journal of Geophysical Research – Atmospheres*, 118 (12), 6783–6796.

61. Pratt, K. A.; Fiddler, M. N.; Shepson, P. B.; Carlton, A. G.; **Surratt, J. D.** (2013) Organosulfates in Cloud Water Above the Ozarks' Isoprene Source Region. *Atmospheric Environment*, 77, 231–238.

62. Budisulistiorini, S. H.[S]; Canagaratna, M. R.; Croteau, P. L.; Marth, W. J.[S]; Baumann, K.; Edgerton, E. S.; Shaw, S. L.; Knipping, E. M.; Worsnop, D. R.; Jayne, J. T.; Gold, A.; **Surratt, J. D.*** (2013) Real-time Continuous Characterization of Secondary Organic Aerosol Derived from Isoprene Epoxydiols (IEPOX) in Downtown Atlanta, Georgia, using the Aerodyne Aerosol Chemical Speciation Monitor (ASCM). *Environmental Science & Technology*, 47 (11), 5686–5694.

63. Zhang, H.[S]; Parikh, H. M.; Bapat, J.; Lin, Y.-H.[S]; **Surratt, J. D.**; Kamens, R. M. (2013) Modeling of SOA Formation from Isoprene Photooxidation Chamber Studies Using Different Approaches. *Environmental Chemistry*, 10 (3), 194–209.

64. Lund, A. K.; Doyle-Eisele, M.; Lin, Y.-H.[S]; Arashiro, M.[S]; **Surratt, J. D.**; Holmes, T.; Schilling, K. A.; Seinfeld, J. H.; Rohr, A. C.; Knipping, E. M.; McDonald, J. D. (2013) The Effects of α-Pinene Versus Toluene-Derived Secondary Organic Aerosol Exposure on the Expression of Markers Associated with Vascular Disease. *Inhalation Toxicology*, 25 (6), 309–324.

65. Ryerson, T. B.; Andrews, A. E.; Angevine, W. M.; Bates, T. S.; Brock, C. A.; Cairns, B.; Cohen, R. C.; Cooper, O. R.; de Gouw, J. A.; Fehsenfeld, F. C.; Ferrare, R. A.; Fischer, M. L.; Flagan, R. C.; Goldstein, A. H.; Hair, J. W.; Hardesty, R. M.; Hostetler, C. A.; Jimenez, J. L.; Langford, A. O.; McCauley, E.; McKeen, S. A.; Molina, L. T.; Nenes, A.; Oltmans, S. J.; Parrish, D. D.; Pederson, J. R.; Pierce, R. B.; Prather, K.; Quinn, P. K.;

Seinfeld, J. H.; Senff, C. J.; Sorooshian, A.; Stutz, J.; **Surratt, J. D.**; Trainer, M.; Volkamer, R.; Williams, E. J.; Wofsy, S. C. (2013) The 2010 California Research at the Nexus of Air Quality and Climate Change (CalNex) Field Study. *Journal of Geophysical Research – Atmospheres*, 118 (11), 5830–5866.

66. Rollins, A. W.; Min, K.-E.; Pusede, S.; Wooldridge, P.; Gentner, D. R.; Goldstein, A.; Liu, S.; Day, D. A.; Russell, L. M.; Rubitschun, C. L.[S]; **Surratt, J. D.**; Cohen, R. C. (2013) Gas/Particle Partitioning of Total Alkyl Nitrates Observed with TD-LIF in Bakersfield. *Journal of Geophysical Research – Atmospheres*, 118 (12), 6651–6662.

67. Lin, Y.-H.[S]; Knipping, E. M.; Edgerton, E. S.; Shaw, S. L.; **Surratt, J. D.*** (2013) Investigating the Influences of SO_2 and NH_3 Levels on Isoprene-Derived Secondary Organic Aerosol Formation Using Conditional Sampling Approaches. *Atmospheric Chemistry & Physics*, 13 (16), 8457–8470.

68. Kristensen, K.; Enggrob, K. L.; King, S. M.; Worton, D. R.; Platt, S. M.; Mortensen, R.; Rosenoern, T.; **Surratt, J. D.**; Bilde, M.; Goldstein, A. H.; Glasius, M. (2013) Formation and Occurrence of Dimer Esters of Pinene Oxidation Products in Atmospheric Aerosols. *Atmospheric Chemistry & Physics*, 13 (7), 3763–3776.

69. Liu, S.; Ahlm, L.; Day, D. A.; Russell, L. M.; Zhao, Y.; Gentner, D. R.; Weber, R. J.; Goldstein, A. H.; Jaoui, M.; Offenberg, J. H.; Kleindienst, T. E.; Rubitschun, C. L.[S]; **Surratt, J. D.**; Sheesley, R. J.; Scheller, S. (2012) Secondary Organic Aerosol Formation from Fossil Fuel Sources Contribute Majority of Summertime Organic Mass at Bakersfield. *Journal of Geophysical Research – Atmospheres*, 117 (D24), doi:10.1029/2012JD018170.

70. Zhang, H.[S]; Worton, D. R.; Lewandowski, M.; Ortega, J.; Rubitschun, C. L.[S]; Park, J.-H.; Kristensen, K.; Campuzano-Jost, P.; Day, D. A.; Jimenez, J. L.; Jaoui, M.; Offenberg, J. H.; Kleindienst, T. E.; Gilman, J.; Kuster, W. C.; de Gouw, J.; Park, C.; Schade, G. W.; Frossard, A. A.; Russell, L. M.; Kaser, L.; Jud, W.; Hansel, A.; Cappellin, L.; Karl, T.; Glasius, M.; Guenther, A.; Goldstein, A. H.; Seinfeld, J. H.; Gold, A.; Kamens, R. M.; **Surratt, J. D.*** (2012) Organosulfate Formation from 2-Methyl-3-Buten-2-ol (MBO) as a Secondary Organic Aerosol (SOA) Tracer in the Atmosphere. *Environmental Science & Technology*, 46 (17), 9437–9446.

71. Zhang, Z.; Lin, Y.-H.[S]; Zhang, H.[S]; **Surratt, J. D.**; Ball, L. M.; Gold, A. (2012) Technical Note: Synthesis of Isoprene Atmospheric Oxidation Products: Isomeric Epoxydiols and the Rearrangement Products *cis*- and *trans*-3-methyl-3,4-dihydroxytetrahydrofurans. *Atmospheric Chemistry & Physics*, 12 (18), 8529–8535.

72. McDonald, J. D.; Doyle-Eisele, M.; Kracko, D.; Lund, A.; **Surratt, J. D.**; Hersey, S. P.; Seinfeld, J. H.; Rohr, A. C.; Knipping, E. M. (2012) Cardiopulmonary Response to Inhalation of Secondary Organic Aerosol Derived from Gas-Phase Oxidation of Toluene. *Inhalation Toxicology*, 24 (11), 689–697.

73. Zhang, H.[S]; Lin, Y.-H.[S]; Zhang, Z.; Zhang, X.; Shaw, S. L.; Knipping, E. M.; Weber, R. J.; Gold, A.; Kamens, R. M.; **Surratt, J. D.*** (2012) Secondary Organic Aerosol Formation from Methacrolein Photooxidation: Roles of NO_x Level, Relative Humidity, and Aerosol Acidity. *Environmental Chemistry*, 9 (3), 247–262.

74. Lin, Y.-H.[S]; Zhang, Z.; Docherty, K. S.; Zhang, H.[S]; Budisulistiorini, S. H.[S]; Rubitschun, C. L.[S]; Shaw, S. L.; Knipping, E. M.; Edgerton, E. S.; Kleindienst, T. E.; Gold, A.; **Surratt, J. D.*** (2012) Isoprene Epoxydiols as Precursors to Secondary Organic Aerosol Formation: Acid-Catalyzed Reactive Uptake Studies with Authentic Compounds. *Environmental Science & Technology*, 46 (1), 250–258.
75. Zhang, X.; Lin, Y.-H.[S]; **Surratt, J. D.**; Zotter, P.; Prevot, A. S. H.; Weber, R. J. (2011) Light-absorbing soluble organic aerosol in Los Angeles and Atlanta: A Contrast in Secondary Organic Aerosol. *Geophysical Research Letters*, 38 (21), doi:10.1029/2011GL049385.
76. Zhang, H.[S]; **Surratt, J. D.***; Lin, Y.-H.[S]; Bapat, J.; Kamens, R. M. (2011) Effect of Relative Humidity on SOA Formation from Isoprene/NO Photooxidation: Enhancement of 2-Methylglyceric Acid and its Corresponding Oligoesters under Dry Conditions. *Atmospheric Chemistry & Physics*, 11 (13), 6411–6424.
77. Hatch, L. E.; Creamean, J. M.; Ault, A. P.; **Surratt, J. D.**; Chan, M. N.; Seinfeld, J. H.; Edgerton, E. S.; Su, Y.; Prather, K. A. (2011) Measurements of Isoprene-Derived Organosulfates in Ambient Aerosols by Aerosol Time-of-Flight Mass Spectrometry – Part 2: Temporal Variability and Formation Mechanisms. *Environmental Science & Technology*, 45 (20), 8648–8655.
78. Hatch, L. E.; Creamean, J. M.; Ault, A. P.; **Surratt, J. D.**; Chan, M. N.; Seinfeld, J. H.; Edgerton, E. S.; Su, Y.; Prather, K. A. (2011) Measurements of Isoprene-Derived Organosulfates in Ambient Aerosols by Aerosol Time-of-Flight Mass Spectrometry – Part 1: Single Particle Atmospheric Observations in Atlanta. *Environmental Science & Technology*, 45 (12), 5105–5111.
79. Worton, D. R.; Goldstein, A. H.; Farmer, D. K.; Docherty, K. S.; Jimenez, J.-L.; Gilman, J. B.; Kuster, W. C.; de Gouw, J.; Williams, B. J.; Kreisberg, N. M.; Hering, S. V.; Bench, G.; McKay, M.; Kristensen, K.; Glasius, M.; **Surratt, J. D.**; Seinfeld, J. H. (2011) Origins and Composition of Fine Atmospheric Carbonaceous Aerosol in the Sierra Nevada Mountains, California. *Atmospheric Chemistry & Physics,* 11 (19), 10219–10241.
80. Yasmeen, F.; Szmigielski, R.; Vermeylen, R.; Gómez-González, Y.; **Surratt, J. D**.; Chan, A. W. H.; Seinfeld, J. H.; Maenhaut, W.; Claeys, M. (2011) Mass Spectrometric Characterization of Isomeric Terpenoic Acids in Fine Forest Aerosol from the Oxidation of α-Pinene, β-Pinene, d-Limonene, and Δ^3-Carene. *Journal of Mass Spectrometry*, 46 (4), 425–442.
81. Chan, M. N.; **Surratt, J. D.**; Chan, A. W. H.; Schilling, K.; Offenberg, J. H.; Lewandowski, M.; Edney, E. O.; Kleindienst, T. E.; Jaoui, M.; Edgerton, E. S.; Tanner, R. L.; Shaw, S. L.; Zheng, M.; Knipping, E. M.; Seinfeld, J. H. (2011) Influence of aerosol acidity on the chemical composition of secondary organic aerosol from β-caryophyllene. *Atmospheric Chemistry & Physics*, 11(4), 1735–1751.
82. Chan, A. W. H.; Chan, M. N.; **Surratt, J. D.**; Chhabra, P. S.; Loza, C. L.; Crounse, J. D.; Yee, L. D.; Flagan, R. C.; Wennberg, P. O.; Seinfeld, J. H. (2010) Role of Aldehyde

Chemistry and NO_x Concentrations in Secondary Organic Aerosol Formation. *Atmospheric Chemistry & Physics*, 10 (15), 7169–7188.

83. Chan, M. N.; **Surratt, J. D.**; Claeys, M.; Edgerton, E. S.; Tanner, R. L.; Shaw, S. L.; Zheng, M.; Knipping, E. M.; Eddingsaas, N. C.; Wennberg, P. O.; Seinfeld, J. H. (2010) Characterization and Quantification of Isoprene-Derived Epoxydiols in Ambient Aerosol in the Southeastern United States. *Environmental Science & Technology*, 44 (12), 4590–4596.
84. Wang, X.; Gao, S.; Yang, X.; Chen, H.; Chen, J.; Zhuang, G.; **Surratt, J. D.**; Chan, M. N.; Seinfeld, J. H. (2010) Evidence for High Molecular Weight Nitrogen-Containing Organic Salts in Urban Aerosols. *Environmental Science & Technology*, 44 (12), 4441–4446.
85. **Surratt, J. D.**; Chan, A. W. H.; Eddingsaas, N. C.; Chan, M. N.; Loza, C. L.; Kwan, A. J.; Hersey, S. P.; Flagan, R. C.; Wennberg, P. O.; Seinfeld, J. H. (2010) Reactive Intermediates Revealed in Secondary Organic Aerosol Formation from Isoprene. *Proceedings of the National Academy of Sciences of the United States of America*, 107 (15), 6640–6645.
86. Farmer, D. K.; Matsunaga, A.; Docherty, K. S.; **Surratt, J. D.**; Seinfeld, J. H.; Ziemann, P. J.; Jimenez, J. L. (2010) Response of an Aerosol Mass Spectrometer to Organonitrates and Organosulfates and Implications for Atmospheric Chemistry. *Proceedings of the National Academy of Sciences of the United States of America*, 107 (15), 6670–6675.
87. Claeys, M.; Wang, W.; Vermeylen, R.; Kourtchev, I.; Chi, X.; Farhat, Y.; **Surratt, J. D.**; Gómez-González, Y.; Sciare, J.; Maenhaut, W. (2010) Characterisation of Marine Aerosol at Amsterdam Island During the Austral Summer of 2006-2007. *Journal of Aerosol Science*, 41(1), 13–22.
88. Kautzman, K. E.; **Surratt, J. D.**; Chan, A. W. H.; Chan, M. N.; Hersey, S. P.; Chhabra, P. S.; Dalleska, N. F.; Wennberg, P. O.; Flagan, R. C.; Seinfeld, J. H. (2010) Chemical Composition of Gas- and Aerosol-Phase Products from the Photooxidation of Naphthalene. *Journal of Physical Chemistry A*, 114 (2), 913–934.
89. McDonald, J. D.; Doyle-Eisele, M.; Campen, M. J.; Seagrave, J-C.; Holmes, T.; Lund, A.; **Surratt, J. D.**; Seinfeld, J. H.; Rohr, A. C.; Knipping, E. M. (2010) Cardiopulmonary Response to Inhalation of Biogenic Secondary Organic Aerosol. *Inhalation Toxicology*, 22 (3), 253–265.
90. Claeys, M.; Iinuma, Y.; Szmigielski, R.; **Surratt, J. D.**; Blockhuys, F.; Van Alsenoy, C.; Böge, O.; Sierau, B.; Gómez-González, Y.; Vermeylen, R.; Van der Veken, P.; Shahgholi, M.; Chan, A. W. H.; Herrmann, H.; Seinfeld, J. H.; Maenhaut, W. (2009) Terpenylic Acid and Related Compounds from the Oxidation of α-Pinene: Implications for New Particle Formation and Growth Above Forests. *Environmental Science & Technology*, 43 (18), 6976–6982.

91. Chan, M. N.; Chan, A. W. H.; Chhabra, P. S.; **Surratt, J. D.**; Seinfeld, J. H. (2009) Modeling of Secondary Organic Aerosol Yields from Laboratory Chamber Data. *Atmospheric Chemistry & Physics*, 9 (15), 5669–5680.
92. Hallquist, M.; Wegner, J. C.; Baltensperger, U.; Rudich, Y.; Simpson, D.; Claeys, M.; Dommen, J.; Donahue, N. M.; George, C.; Goldstein, A. H.; Hamilton, J. F.; Herrmann, H.; Hoffmann, T.; Iinuma, Y.; Jang, M.; Jenkin, M. E.; Jimenez, J.-L.; Kiendler-Scharr, A.; Maenhaut, W.; McFiggans, G.; Mentel, Th. F.; Monod, A.; Prévôt, A. S. H.; Seinfeld, J. H.; **Surratt, J. D.**; Szmigielski, R.; Wildt, J. (2009) The Formation, Properties and Impact of Secondary Organic Aerosol: Current and Emerging Issues. *Atmospheric Chemistry & Physics*, 9 (14), 5155–5236.
93. Galloway, M. M.; Chhabra, P. S.; Chan, A. W. H.; **Surratt, J. D.**; Flagan, R. C.; Seinfeld, J. H.; Keutsch, F. N. (2009) Glyoxal Uptake on Ammonium Sulphate Seed Aerosol: Reaction Products and Reversibility of Uptake Under Dark and Irradiated Conditions. *Atmospheric Chemistry & Physics*, 9 (10), 3331–3345.
94. Chan, A. W. H.; Kautzman, K. E.; Chhabra, P. S.; **Surratt, J. D.**; Chan, M. N.; Crounse, J. D.; Kürten, A.; Wennberg, P. O.; Flagan, R. C.; Seinfeld, J. H. (2009) Secondary Organic Aerosol Formation from Photooxidation of Naphthalene and Alkylnaphthalenes: Implications for Oxidation of Intermediate Volatility Organic Compounds (IVOCs). *Atmospheric Chemistry & Physics*, 9 (9), 3049–3060.
95. **Surratt, J. D.**; Gómez-González, Y.; Chan. A. W. H.; Vermeylen, R.; Shahgholi, M.; Kleindienst, T. E.; Edney, E. O.; Offenberg, J. H.; Lewandowski, M.; Jaoui, M.; Maenhaut, W.; Claeys, M.; Flagan, R. C.; Seinfeld, J. H. (2008) Organosulfate Formation in Biogenic Secondary Organic Aerosol. *Journal of Physical Chemistry A*, 112 (36), 8345–8378.
96. Jaoui, M.; Edney, E. O.; Kleindienst, T. E.; Lewandowski, M.; Offenberg, J. H.; **Surratt, J. D.**; Seinfeld, J. H. (2008) Formation of Secondary Organic Aerosol from Irradiated α-Pinene/Toluene/NO_x Mixtures and the Effect of Isoprene and Sulfur Dioxide. *Journal of Geophysical Research - Atmospheres*, 113 (D9), doi:10.1029/2007JD009426.
97. Ng, N. L.; Kwan, A. J.; **Surratt, J. D.**; Chan, A. W. H.; Chhabra, P. S.; Sorooshian, A.; Pye, H. O. T.; Crounse, J. D.; Wennberg, P. O.; Flagan, R. C.; Seinfeld, J. H. (2008) Secondary Organic Aerosol (SOA) Formation from Reaction of Isoprene with Nitrate Radicals (NO_3). *Atmospheric Chemistry & Physics*, 8 (14), 4117–4140.
98. Gómez-González, Y.; **Surratt, J. D.**; Cuyckens, F.; Szmigielski, R.; Vermeylen, R.; Jaoui, M.; Lewandowski, M.; Offenberg, J. H.; Kleindienst, T. E.; Edney, E. O.; Blockhuys, F.; Van Alsenoy, C.; Maenhaut, W.; Claeys, M. (2008) Characterization of Organosulfates from the Photooxidation of Isoprene and Unsaturated Fatty Acids in Ambient Aerosol Using Liquid Chromatography/(–)Electrospray Ionization Mass Spectrometry. *Journal of Mass Spectrometry*, 43 (3), 371–382.
99. Szmigielski, R.; **Surratt, J. D.**; Gómez-González, Y.; Van der Veken, P.; Kourtchev, I.; Vermeylen, R.; Blockhuys, F.; Jaoui, M.; Kleindienst, T. E.; Lewandowski, M.; Offenberg, J. H.; Edney, E. O.; Seinfeld, J. H.; Maenhaut, W.; Claeys, M. (2007) 3-

Methyl-1,2,3-Butanetricarboxylic Acid: An Atmospheric Tracer for Terpene Secondary Organic Aerosol. *Geophysical Research Letters*, 34 (24), doi:10.1029/2007GL031338.

100. Ng, N. L.; Chhabra, P. S.; Chan, A. W. H.; **Surratt, J. D.**; Kroll, J. H.; Kwan, A. J.; McCabe, D. C.; Wennberg, P. O.; Sorooshian, A.; Murphy, S. M.; Dalleska, N. F.; Flagan, R. C.; Seinfeld, J. H. (2007) Effect of NO_x Level on Secondary Organic Aerosol (SOA) Formation from the Photooxidation of Terpenes. *Atmospheric Chemistry & Physics*, 7 (19), 5159–5174.

101. **Surratt, J. D.**; Lewandowski, M.; Offenberg, J. H.; Jaoui, M.; Kleindienst, T. E.; Edney, E. O.; Seinfeld, J. H. (2007) Effect of Acidity on Secondary Organic Aerosol Formation from Isoprene. *Environmental Science & Technology*, 41 (15), 5363–5369.

102. Rissman, T. A.; Varutbangkul, V.; **Surratt, J. D.**; Topping, D. O.; McFiggans, G.; Flagan, R. C.; Seinfeld, J. H. (2007) Cloud Condensation Nucleus (CCN) Behavior of Organic Aerosol Particles Generated by Atomization of Water and Methanol Solutions. *Atmospheric Chemistry & Physics*, 7 (11), 2949–2971.

103. Murphy, S. M.; Sorooshian, A.; Kroll, J. H.; Ng, N. L.; Chhabra, P. S.; Tong, C.; **Surratt, J. D.**; Knipping, E.; Flagan, R. C.; Seinfeld, J. H. (2007) Secondary Aerosol Formation from Atmospheric Reactions of Aliphatic Amines. *Atmospheric Chemistry & Physics*, 7 (9), 2313–2337.

104. Szmigielski, R.; **Surratt, J. D.**; Vermeylen, R.; Szmigielska, K.; Kroll, J. H.; Ng, N. L.; Murphy, S. M.; Sorooshian, A.; Seinfeld, J. H.; Claeys, M. (2007) Characterization of 2-Methylglyceric Acid Oligomers in Secondary Organic Aerosol Formed from the Photooxidation of Isoprene Using Trimethylsilylation and Gas Chromatography/Ion trap Mass Spectrometry. *Journal of Mass Spectrometry*, 42 (1), 101–116.

105. **Surratt, J. D.**; Kroll, J. H.; Kleindienst, T. E.; Edney, E. O.; Claeys, M.; Sorooshian, A.; Ng, N. L.; Offenberg, J. H.; Lewandowski, M.; Jaoui, M.; Flagan, R. C.; Seinfeld, J. H. (2007) Evidence for Organosulfates in Secondary Organic Aerosol. *Environmental Science & Technology*, 41 (2), 517–527.

106. **Surratt, J. D.**; Murphy, S. M.; Kroll, J. H.; Ng, N. L.; Hildebrandt, L.; Sorooshian, A.; Szmigielski, R.; Vermeylen, R.; Maenhaut, W.; Claeys, M.; Flagan, R. C.; Seinfeld, J. H. (2006) Chemical Composition of Secondary Organic Aerosol Formed from the Photooxidation of Isoprene. *Journal of Physical Chemistry A*, 110 (31), 9665–9690.

107. Gao, S.; **Surratt, J. D.**; Knipping, E. M.; Edgerton, E. S.; Shahgholi, M.; Seinfeld, J. H. (2006) Characterization of Polar Organic Components in Fine Aerosols in the Southeastern United States: Identity, Origin, and Evolution. *Journal of Geophysical Research – Atmospheres*, 111 (D14), doi:10.1029/2005JD006601.

108. Gao, S.; Keywood, M.; Ng, N. L.; **Surratt, J. D.**; Varutbangkul, V.; Bahreini, R.; Flagan, R. C.; Seinfeld, J. H. (2004) Low-Molecular-Weight and Oligomeric

Components in Secondary Organic Aerosol from the Ozonolysis of Cycloalkenes and α-Pinene. *Journal of Physical Chemistry A*, 108 (46), 10147–10164.

109. Negri, A. J.; Adler, R. F.; Xu, L.; **Surratt, J. D.** (2004) The Impact of Amazonian Deforestation on Dry Season Rainfall. *Journal of Climate*, 17 (6), 1306–1319.
110. Wise, M. E.; **Surratt, J. D.**; Curtis, D. B.; Shilling, J. E.; Tolbert, M. A. (2003) Hygroscopic Growth of Ammonium Sulfate/Dicarboxylic Acids. *Journal of Geophysical Research - Atmospheres*, 108 (D20), 4638–4645.

Refereed Journal Articles – Under Review and to be Submitted Status (6 Total)

1. Rattanavaraha, W.[S]; Canagaratna, M. R.; Budisulistiorini, S. H.[P]; Croteau, P. L.; Baumann, K.; Edgerton, E. S.; Zhang, Z.; Jayne, J. T.; Worsnop, D. R.; Gold, A.; Shaw, S. L.; **Surratt, J. D.*** (2017) Source Apportionment of Submicron Organic Aerosol Collected from Centreville, Alabama, During 2015-2016 Using the Aerosol Chemical Speciation Monitor (ACSM). *Atmospheres*, to be submitted (37 pages).
2. Riva, M.[P]; Baumann, K.; Yee, L. D.; Budisulistiorini, S. H.[S]; Cui, T.[S]; Hu, W.; Edgerton, E. S.; Knipping, E. M.; Shaw, S. L.; Zhang, Z.; Gold, A.; Jimenez, J.-L.; Goldstein, A. H.; **Surratt, J. D.*** (2017) Evidence for a Substantial Missing Source of Fine Particulate Organosulfur Compounds During the 2013 Southern Oxidant and Aerosol Study (SOAS). *Environmental Science & Technology Letters*, to be submitted (21 pages).
3. Cui, T.[S], Green, H. S.[U]; Selleck, P. W.; Zhang, Z.; O'Brien R. E.; Gold, A.; Keywood M.; Kroll, J. H.; **Surratt, J. D.*** (2017) Chemical Characterization of Isoprene- and Monoterpene-Derived SOA Tracers in Remote Marine Aerosols over Several Decades. *ACS Earth and Space Chemistry*, to be submitted (16 pages).
4. Arashiro, M.[S]; Lin, Y-H.[P]; Zhang, Z.; Sexton, K. G.; Gold, A.; Jaspers, I.; Fry, R. C.; **Surratt, J. D.*** (2017) Effect of Secondary Organic Aerosol from Isoprene-Derived Hydroxyhydroperoxides on the Expression of Oxidative Stress Response Genes in Human Bronchial Epithelial Cells. *Environmental Sciences & Technology Letters*, to be submitted (17 pages).
5. Green, H.[U]; Ribeiro, I. O.; Cui, T.[S]; Riva, M.; Oliveira, E.; de Sa, S. S.; Gomes, E.; Zhang, Z.; Gold, A.; Machado, C.; Duvoison, S.; de Souza, R. A. F.; Martin, S. T.; **Surratt, J. D.*** (2017) Chemical Characterization of Fine Aerosol Collected from Central Amazonia Using Authentic Standards Reveals Substantial Contribution of Isoprene Epoxydiol (IEPOX)-Derived Organosulfates, *Environmental Science & Technology Letters*, to be submitted (26 pages).
6. Zhang, Y.[P]; Chen, Y.[S]; Lambe, A. T.; Olson, N. E.; Lei, Z.; Craig, R. L.; Zhang, Z.; Gold, A.; Onasch, T. B.; Jayne, J. T.; Worsnop, D. R.; Gaston, C. J.; Vizuete, W.; Thornton, J. A.; Ault, A. P. **Surratt, J. D.*** (2017) Effects of Aerosol Phase State on Secondary Organic Aerosol Formation from the Reactive Uptake of Isoprene-Derived Epoxydiols (IEPOX), *Environmental Science & Technology Letters*, to be submitted (16 pages).

Invited Oral Presentations (38 Total, * = presenter)

1. **Surratt, J.D.*** (2017) Multiphase Chemistry of Isoprene-Derived Oxidation Products Leads to Secondary Organic Aerosol Formation. University of Manchester. Manchester, United Kingdom. September 7.
2. **Surratt, J. D.*** (2017) Multiphase Chemistry of Isoprene-Derived Oxidation Products Leads to Secondary Organic Aerosol Formation. University of York. York, United Kingdom. September 6.
3. **Surratt, J. D.*** (2017) Multiphase Chemistry of Isoprene-Derived Oxidation Products Leads to Secondary Organic Aerosol Formation: Implications for Air Quality and Public Health. University of Birmingham, Birmingham, United Kingdom. September 4.
4. **Surratt, J. D.*** (2017) Multiphase Chemistry of Isoprene-Derived Oxidation Products Leads to Secondary Organic Aerosol Formation. American Chemical Society (ACS). Invited Speaker for Multiphase Chemistry Symposium – Aerosol Chemistry. Washington, D.C. August 22.
5. **Surratt, J. D.*** (2017) Secondary Organic Aerosol Formation from the Atmospheric Oxidation of Isoprene: Implications for Air Quality, Climate and Public Health. Analytical and Environmental Chemistry Seminar. University of Colorado – Boulder. Boulder, CO USA. March 6.
6. **Surratt, J. D.*** (2017) Secondary Organic Aerosol Formation from the Atmospheric Oxidation of Isoprene: Implications for Air Quality, Climate and Public Health in the Southeastern USA. Institute for the Environment Seminar. University of North Carolina at Chapel Hill, Chapel Hill, NC USA. February 22.
7. **Surratt, J. D.*** (2016) Secondary Organic Aerosol Formation from the Atmospheric Oxidation of Isoprene: Implications for Air Quality, Climate and Public Health in the Southeastern US. Berkeley Atmospheric Sciences Center (BASC) Seminar. University of California, Berkeley, CA USA. December 7.
8. **Surratt, J. D.*** (2016) Secondary Organic Aerosol Formation from the Atmospheric Oxidation of Isoprene: Implications for Air Quality, Climate and Public Health in the Southeastern US. UNC's Ruth and Philip Hettleman Lecture for Artistic and Scholarly Achievement. Chapel Hill, NC USA. May 18.
9. **Surratt, J. D.*** (2016) *Multiphase Chemistry Promotes Isoprene-Derived Secondary Organic Aerosol Formation: Implications for Air Quality, Climate and Public Health in the Southeastern USA.* Invited Plenary Lecture. Nordic Society for Aerosol Research (NOSA) Symposium. Aarhus University, Aarhus, Denmark. April 5.
10. **Surratt, J. D.*** (2016) *Aerosol Characterization Tutorial: Organic Aerosols.* Nordic Society for Aerosol Research (NOSA) Symposium. Aarhus University, Aarhus, Denmark. April 3.
11. **Surratt, J. D.*** (2016) *Multiphase Chemistry Promotes Isoprene-Derived Secondary Organic Aerosol Formation in the Southeastern USA.* ES&T @ 50: Award Winning Researchers, Past, Present and Future Session. James J. Morgan Early Career Award Lectureship. American Chemical Society (ACS), San Diego, CA USA. March 16.

12. **Surratt, J. D.*** (2016) Impacts of Anthropogenic Emissions in the Southeastern U.S. on Heterogeneous Chemistry of Isoprene-Derived Epoxides Leading to Secondary Organic Aerosol Formation. U.S. EPA STAR Progress Review Meeting. Research Triangle Park, NC USA. March 14.
13. **Surratt, J. D.*** (2016) *Secondary Organic Aerosol Formation from the Atmospheric Oxidation of Isoprene: Implications for Air Quality, Climate and Public Health in the Southeastern U.S.* Engineering and Applied Sciences, Harvard University, Boston, MA USA. January 29.
14. **Surratt, J. D.*** (2015) *Multiphase Chemistry Promotes Isoprene-Derived Secondary Organic Aerosol Formation in the Southeastern United States.* Department of Physics, NC A&T State University, Greensboro, NC USA. November 16.
15. **Surratt, J. D.*** (2015) *Multiphase Chemistry Promotes Isoprene-Derived Secondary Organic Aerosol Formation in the Southeastern United States.* Department of Chemistry, University of Toronto, Toronto, Canada. November 12.
16. **Surratt, J. D.*** (2015) *Multiphase Chemistry Promotes Isoprene-Derived Secondary Organic Aerosol Formation.* Gordon Research Conference on Atmospheric Chemistry. Invited Speaker for the Organic Chemistry in the Particle Phase Session. Waterville Valley, NH USA. August 4.
17. **Surratt, J. D.*** (2015) *Isoprene-Derived Secondary Organic Aerosol Formation Across Multiple Sites in the Southeastern U.S.: Implications for Air Quality and Human Health.* American Chemical Society (ACS). Invited Speaker for Atmospheric Chemistry: Transformations of Matter in the Troposphere Session. Denver, CO USA. March 25.
18. **Surratt, J. D.*** (2015) *Secondary Organic Aerosol Formation from the Atmospheric Oxidation of Isoprene: Implications for Air Quality, Climate, and Human Health.* Department of Chemical and Environmental Engineering, Yale University, New Haven, CT USA. Feburary 25.
19. **Surratt, J. D.*** (2014) *Secondary Organic Aerosol from the Heterogeneous Chemistry of Isoprene-Derived Epoxides.* 13th International Global Atmospheric Chemistry (IGAC) Science Conference: Changing Chemistry in a Changing World. Invited Speaker for Atmospheric Chemistry Fundamentals Session. Natal, Brazil. September 23.
20. **Surratt, J. D.*** (2014) *Secondary Organic Aerosol Production from Heterogeneous Chemistry of Isoprene-Derived Epoxides: Implications for Air Quality, Climate and Public Health.* Columbia University, Department of Chemical Engineering, New York, NY USA. September 8.
21. **Surratt, J. D.*** (2014) *Anthropogenic Pollutants Enhance Secondary Organic Aerosol Production from the Heterogeneous Chemistry of Isoprene-Derived Epoxides: Implications for Air quality, Climate, and Public Health in the Southeastern U.S.* American Chemical Society (ACS). Environmental Interfaces in the Atmosphere: From Surface Chemistry to Air Quality, Climate, and Health Effects. San Francisco, CA USA. August 10.

22. **Surratt, J. D.*** (2014) *SOA Formation from Isoprene-Derived Epoxides: Smog Chamber, Flow Tube, and Field Studies.* Telluride Science Research Center (TSRC) Meeting on "Organic Particles in the Atmosphere: Formation, Properties, Processing, and Impact." Telluride, CO USA. August 1.
23. **Surratt, J. D.*** (2014) *Overview of Look Rock Mountain, TN, Ground Site During SOAS 2013 Campaign.* Southeast Atmosphere Study (SAS) Data Meeting. Boulder, CO USA. March 31.
24. **Surratt, J. D.*** (2013) *Impacts of Anthropogenic Emissions in the Southeastern U.S. on Heterogeneous Chemistry of Isoprene-Derived Epoxides Leading to Secondary Organic Aerosol Formation.* American Geophysical Union (AGU) Meeting – Molecular Chemistry and Physicochemical Properties of Organic Aerosols, Session 2. San Francisco, CA USA. December 11.
25. **Surratt, J. D.*** (2013) *Secondary Organic Aerosol Formation from Photochemical Oxidation of Isoprene: Role of Epoxides.* University of North Carolina at Wilmington (UNCW) – Department of Chemistry. Wilmington, NC USA. April 26.
26. **Surratt, J. D.*** (2013) *An Overview of Isoprene Chemistry and Secondary Organic Aerosol Formation.* European Science Foundation (ESF) Strategic Workshop on The Molecular Identification of Organic Compounds in the Atmosphere. The University of Cambridge, Cambridge, United Kingdom. March 27.
27. **Surratt, J. D.*** (2012) *Secondary Organic Aerosol Formation from Isorpene Oxidation: Role of Epoxides.* Atmospheric Chemical Mechansisms (ACM) Meeting. University of California – Davis. Davis, CA USA. December 10.
28. **Surratt, J. D.*** (2012) *Impacts of Anthropogenic Emissions in the S.E. USA on Heterogeneous Chemistry of Isoprene-Derived Epoxides Leading to Secondary Organic Aerosol (SOA) Formation.* The Southeastern Regional Meeting of the American Chemical Society – Atmospheric Chemistry: Gas-Particle Interactions and Climate Session 1. Raleigh, NC USA. November 16.
29. **Surratt, J. D.*** (2012) *Secondary Organic Aerosol Formation from Isorpene Oxidation: Role of Epoxides.* Colorado State University, Department of Chemistry. Fort Collins, CO USA. September 26.
30. **Surratt, J. D.*** (2012) *The Chemistry of Isoprene and Terpenes*. American Chemical Society (ACS). Kinetics and Mechanism in the Earth's Atmosphere Symposium. Philadelphia, PA USA. August 20.
31. **Surratt, J. D.*** (2012) *The Chemistry of Isoprene SOA Formation*. Telluride Science Research Center (TSRC) Meeting on Organic Particles in the Atmosphere: Formation, Properties, Processing, and Impact. Telluride, CO USA. August 1.
32. **Surratt, J. D.*;**. Lin, Y.-H.[S]; Zhang, Z.; Docherty, K. S.; Zhang, H.[S]; Budisulistiorini, S. H.[S]; Rubitschun, C. L.[S]; Shaw, S. L.; Knipping, E. M.; Edgerton, E. S.; Kleindienst, T. E.; Gold, A. (2011) *Isoprene Epoxydiols as Precursors to Secondary Organic Aerosol Formation: Acid Catalyzed Reactive Uptake Studies with Authentic Standards*. American

Geophysical Union (AGU). Formation and Properties of Organic Aerosols IV: SOA Formation Mechanisms Section. San Francisco, CA USA. December 6.

33. **Surratt, J. D.*** (2011) *SOA Formation from the Photooxidation of Isoprene: Effects of NO_x, Aerosol Acidity, and Relative Humidity*. Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS). Brookhaven National Laboratory, NY USA. July 23.
34. **Surratt, J. D.*** (2011) *Effect of NO_x and Aerosol Acidity on Biogenic SOA Formation*. Southern Oxidant and Aerosol Study (SOAS) Planning Workshop. Rutgers University, New Brunswick, NJ USA. May 26.
35. **Surratt, J. D.*** (2011) *Secondary Organic Aerosol (SOA) Formation from the Photooxidation of Isoprene: Effect of NO_x, Aerosol Acidity, and RH*. Environmental Protection Agency. Research Triangle Park, NC USA. March 30.
36. **Surratt, J. D.*;** Chan, A. W. H.; Kautzman, K. E.; Chhabra, P. S., Galloway, M. M., Chan, M. N.; Crounse, J. D.; Kurten, A.; Wennberg, P. O.; Keutsch, K. N.; Flagan, R. C.; Seinfeld, J. H. (2009) *Recent Results on Secondary Organic Aerosol Formation at Caltech: Photooxidation of Polycyclic Aromatic Hydrocarbons (PAHs) and Reactive Uptake of Glyoxal.* European Science Foundation (ESF) Sponsored Interdisciplinary Tropospheric Research (INTROP) Final Conference. Aerosols and Global Change Session. Portoroz, Slovenia. April 14.
37. **Surratt, J. D.*** (2009) *Chemical Characterization of Organic Aerosol: Sources and Formation Mechanisms.* University of California, San Diego. San Diego, CA USA. February 9.
38. **Surratt, J. D.*;** Gómez-González, Y.; Chan, A. W. H.; Vermeylen, R.; Shahgholi, M.; Claeys, M.; Flagan, R. C.; Seinfeld, J. H. (2007) *Investigation of Organosulfate Formation in Biogenic Secondary Organic Aerosol*. Biogenic Volatile Organic Compounds: Sources and Fates in a Changing World International Science Meeting. Montpellier, France. October 4.

Conference Oral Presentations (21 Total, S = graduate student, U= undergraduate student, P = postdoctoral scholar, * = speaker)

1. Riedel, T. P.[P]; Chu, K.[S]; Cui, T.[S]; Lin, Y.-H.[P]; Budisulistiorini, S. H.[P]; Zhang, Z.; Thornton, J. A.; Gold, A.; **Surratt, J. D.*** (2015) *Constraining Condensed-Phase Kinetics of Secondary Organic Aerosol Components from Isoprene Epoxydiols.* American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN USA. October 13.
2. Lin, Y.-H.[P]; Kramer, A.[U]; Arashiro, M.[S]; Rattanvaraha, W.[S]; Martin, E.; Zhang, Z.; Sexton, K. G.; Gold, A.; Jaspers, I.; Fry, R. C.; **Surratt, J. D.*** (2015) *Isoprene-derived Secondary Organic Aerosol Induces Expression of Nuclear Factor Erythroid 2-like 2 (NRF2)-mediated Oxidative Stress Response Genes in Human Lung Cells.* American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN USA. October 13.

3. Budisulistiorini, S. H.[P]; McNeill, V. F.; Pye, H. O. T.; **Surratt, J. D.*** (2015) *Understanding Aqueous-Phase Isoprene-Epoxydiol (IEPOX) Secondary Organic Aerosol (SOA) Production During SOAS 2013.* American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN USA. October 15.
4. Rattanavaraha, W.[S,]*; Budisulistiorini, S. H.[P]; Croteau, P.; Baumann, K.; Edgerton, E. S.; Canagaratna, M.; Jayne, J.; Worsnop, D.; Shaw, S. L.; **Surratt, J. D.** (2015) *Chemical Characterization of Atmospheric Fine Aerosol Collected from Atlanta, GA and Centerville, AL Using the Aerodyne Aerosol Chemical Speciation Monitor.* American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN USA. October 15.
5. Riva, M.[P,]*; Cui, T.[S]; Gold, A.; **Surratt, J. D.** (2015) *Evidence for Unrecognized Anthropogenic Sources of Organosulfates: Gas-Phase Oxidation of Anthropogenic Precursors in the Presence of Sulfate Aerosol.* American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN USA. October 15.
6. Cui, T.[S,]*; Selleck, P.; Lin, Y.-H.[P]; Boulanger, K.; O'Brien, R.; Zhang, Z.; Gold, A.; Keywood, M.; Kroll, J. H.; **Surratt, J. D.** (2015) Organic Nitrogen and Carbon in Atmospheric Aerosols: Concentration, Chemical Composition, and Properties. American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN USA. October 16.
7. Arashiro, M.[S,]*; Lin, Y.-H. [P]; Sexton, K. G.; Jaspers, I.; Fry, R.; Gold, A.; **Surratt, J. D**. (2014) *In Vitro Exposures to Isoprene-Derived Secondary Organic Aerosol: Assessing the Effects of Cytotoxicity and Inflammation on BEAS-2B using Resuspension and Direct Deposition Approaches.* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 13.
8. Budisulistiorini, S. H.[S,*]; Li, X.[S]; Croteau, P.; Canagaratna, M.; Bairai, S.; Tanner, R.; Shaw, S. L.; Knipping, E. M.; Jayne, J.; Zhang, Z.; Gold, A.; **Surratt, J. D.** (2014) *Seasonal Characterization of Atmospheric Organic Aerosol at the Look Rock Site, Great Smoky Mountains National Park during 2013 Using the Aerodyne Aerosol Chemical Speciation Monitor (ACSM).* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 22.
9. Riedel, T. P.[P,*]; Gaston, C.; Budisulistiorini, S. H.[S]; Lin, Y.-H.[P,S]; Zhang, Z.; Gold, A.; Thornton, J. A.; **Surratt, J. D.** (2014) *Heterogeneous Reaction Kinetics of Isoprene-Derived Epoxides.* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 22.
10. Riva, M.[P,*]; Yee, L.; Budisulistiorini, S. H.[S]; Edgerton, E.; Goldstein, A. H.; Zhang, Z.; Gold, A.; **Surratt, J. D**. (2014) *Chemical Characterization of Isoprene- and Monoterpene-Derived SOA Tracers in $PM_{2.5}$ Collected from Centerville, AL, during SOAS 2013.* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 22.
11. Lin, Y.-H. [P,*]; Arashiro, M.[S]; Zhang, Z.; Gold, A.; Jaspers, I.; Fry, R.; **Surratt, J. D.** (2014) *Isoprene-derived Secondary Organic Aerosol and Epoxide Intermediates Induce Altered Expression of Inflammation-Associated Genes in Lung Cells.* American

Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 22.

12. Budisulistiorini, S. H.[S]; McNeill, V. F.*; Pye, H. O. T.; Carlton, A. M.; **Surratt, J. D.** (2014) *Aqueous Sources of Secondary Organic Aerosol in the Southeast Atmosphere Study (SAS).* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 22.
13. Budisulistiorini, S. H.[S,]*; Li, X.[S]; Rattanavaraha, W.[S]; Yee, L. D.; Edgerton, E. S.; Shaw, S. L.; Hicks, W. R.; Bairai, S. T.; Mueller, S. F.; Renfro, J.; Goldstein, A. H.; Zhang, Z.; Gold, A.; **Surratt, J. D.** (2014) *Real-time Characterization of Isoprene-Derived Secondary Organic Aerosol Formation at the Look Rock Site, Tennessee during the 2013 Southern Oxidant and Aerosol Study (SOAS).* Southeast Atmosphere Study (SAS) Data Meeting. Boulder, CO USA. March 31.
14. Budisulistiorini, S. H.[S,]*: Li, X.[S]; Bairai, S. T.; Hicks, W. R.; Renfro, J.; Corrigan, A.; Guzman, J. M.; Russell, L. M.; Liu, Y.; Li, Y.; McKinney, K.; Zhang, X.; Cappa, C. D.; Zimmermann, K.; Bertram, T. H.; Canagaratna, M. R.; Croteau, P. L.; Worsnop, D. R.; Jayne, J. T.; Zhang, Z.; Gold, A.; **Surratt, J. D.** (2013) *Real-time Characterization of Isoprene-Derived Secondary Organic Aerosol Formation at the Look Rock Site, Tennessee during the 2013 Southern Oxidant and Aerosol Study (SOAS).* American Geophysical Union (AGU) Fall Meeting – Air Quality and Climate in the Southeast US, Session 5. San Francisco, CA USA. December 11.
15. Budisulistiorini, S. H.[S,]*; Canagaratna, M. R.; Croteau, P. L.; Baumann, K.; Edgerton, E. S.; Ng, N. L.; Verma, V.; Shaw, S. L.; Knipping, E. M.; Worsnop, D. R.; Jayne, J. T.; Weber, R. J.; **Surratt, J. D.** (2013) *Intercomparison of an Aerosol Chemical Speciation Monitor (ACSM) with Ambient Fine Aerosol Measurements in Downtown Atlanta, Georgia.* American Association for Aerosol Research (AAAR) Annual Meeting. Portland, OR USA. October 2.
16. Budisulistiorini, S. H.[S,]*; Canagaratna, M. R.; Croteau, P. L.; Marth, W. J.[S]; Baumann, K.; Edgerton, E. S.; Shaw, S. L.; Knipping, E. M.; Jansen, J.; Tanner, R. L.; Worsnop, D. R.; Jayne, J. T.; Gold, A.; **Surratt, J. D.** (2012) *Real-time Continuous Characterization of Secondary Organic Aerosol Derived from Isoprene Epoxydiols (IEPOX) in Downtown Atlanta, Georgia, using the Aerodyne Aerosol Chemical Speciation Monitor (ASCM).* American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN USA. October 10.
17. Lin, Y.-H.[S,]*; Knipping, E. M.; Edgerton, E. S.; Shaw, S. L.; **Surratt, J. D.** (2012) *Influences of SO_2 and NH_3 Levels on Ambient Isoprene Epoxydiols (IEPOX)-Derived SOA Formation in the Rural Southeastern United States.* American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN USA. October 10.
18. Zhang, H.[S,]*; **Surratt, J. D.**; Lin, Y.-H.[S]; Bapat, J.; Kamens, R. M. (2011) *Effect of Relative Humidity on SOA Formation from Isoprene/NO Photooxidation: Enhancement of 2-Methylglyceric Acid and its Corresponding Oligoesters under Dry Conditions.* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 7.

19. **Surratt, J. D.***; Lin, Y.-H.[S]; Rubitschun, C. L.[S]; Offenberg, J. H.; Kleindienst, T. E.; Weber, R. J.; Zhang, X. (2011) *Chemical Characterization and Quantification of Organosulfates and Nitrated Organosulfates Derived from BVOCs in $PM_{2.5}$ Collected During the CalNex 2010 Campaign*. American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 7.
20. Zhang, X.*; Lin, Y.-H.[S]; **Surratt, J. D.**; Zotter, P.; Prevot, A. S. H.; Weber, R. J. (2011) *Light-Absorbing Soluble Organic Aerosol in Los Angeles and Atlanta: A Contrast in Secondary Organic Aerosol.* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 7.
21. **Surratt, J. D.***; Gómez-González, Y.; Chan, A. W. H.; Vermeylen, R.; Shahgholi, M.; Claeys, M.; Flagan, R. C.; Seinfeld, J. H. (2007) *Investigation of Organosulfate Formation in Biogenic Secondary Organic Aerosol.* American Association for Aerosol Research (AAAR) Meeting. Reno, NV USA. September 25.

Poster Presentations (15 Total, S = graduate student, P = postdoctoral scholar, * = presenter)

1. Cui, T.[S,]*; Kamens, R. M.; Pedit, J.; **Surratt, J. D.**; Jaspers, I.; Sexton, K. (2015) *Effect of Titanium Dioxide Particles on Secondary Organic Aerosol Formation from Photooxidation of Toluene.* American Association for Aerosol Research (AAAR) Meeting. Minneapolis, MN USA. October 13.
2. Riva, M.[P,]*; Budisulistiorini, S. H.[P]; Zhang, Z.; Gold, A.; **Surratt, J. D.** (2015) *Chemical Characterization of Gas- and Aerosol-Phase Products from Isoprene Ozonolysis in Presence of Acidic Aerosol: Re-examination of Secondary Organic Aerosol Formation.* American Association for Aerosol Research (AAAR) Meeting. Minneapolis, MN USA. October 13.
3. Rattanavaraha, W.[S,]*; Chu, K.[S]; Budisulistiorini, S. H.[P]; Riva, M.[P]; Lin, Y.-H.[P]; Riedel, T. P.[P]; Edgerton, E. S.; Baumann, K.; Guo, H.; Weber, R. J.; Stone, E.; Zhang, Z.; Gold, A.; **Surratt, J. D.** (2015) Investigation of the Impact of Anthropogenic Pollution on Isoprene-Derived Secondary Organic Aerosol (SOA) in $PM_{2.5}$ Collected at Brimingham, AL during the 2013 Southern Oxidant and Aerosol Study (SOAS). American Association for Aerosol Research (AAAR) Meeting. Minneapolis, MN USA. October 13.
4. Riva, M.[P,]*; Budisulistiorini, S. H.[S,*]; Detwiler, T.; Zhang, Z.; Gold, A.; **Surratt, J. D**. (2014) *Chemical Characterization of Gas- and Aerosol-Phase Products from Isoprene Ozonolysis in Presence of Acidic Aerosol: Re-examination of Secondary Organic Aerosol Formation.* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 23.
5. Rattanavaraha, W.[S,]*; Budisulistiorini, S. H.[S]; Croteau, P.; Baumann, K.; Edgerton, E. S.; Canagaratna, M.; Jayne, J.; Worsnop, D.; Shaw, S. L.; **Surratt, J. D**. (2014) *Chemical Characterization of Atmospheric Fine Aerosol at the Jefferson Street, Atlanta, GA Using the Aerodyne Aerosol Chemical Speciation Monitor (ACSM): Results from Winter, Spring, and*

Summer 2014. American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 21.

6. Riva, M.[P,*]; Yee, L. D.; Budisulistiorini, S. H.[S]; Edgerton, E. S.; Knipping, E. M.; Goldstein, A. H.; **Surratt, J. D.** (2014) *Chemical Characterization of Isoprene- and Monoterpene-Derived SOA Tracers in $PM_{2.5}$ Collected from Centerville, AL, During SOAS 2013.* Southeast Atmosphere Study (SAS) Data Meeting in Boulder, CO USA. March 31.
7. Li, X.[S,*]; Budisulistiorini, S. H.[S]; Rattanavaraha, W.[S]; Yee, L D.; Edgerton, E. S.; Shaw, S. L.; Hicks, W. R.; Bairai, S. T.; Mueller, S. F.; Renfro, J.; Goldstein, A. H.; Zhang, Z.; Gold, A.; **Surratt, J. D.** (2014) *Molecular Characterization of Biogenic SOA in $PM_{2.5}$ Collected at the Look Rock Site During SOAS.* Southeast Atmosphere Study (SAS) Data Meeting in Boulder, CO USA. March 31.
8. Zhang, H.[S,*]; Parikh, H. M.; Bapat, J.; Lin, Y.-H.[S]; **Surratt, J. D.**; Kamens, R. M. (2012) *Modeling of SOA Formation from Isoprene Photooxidation Chamber Studies Using Different Approaches.* Atmospheric Chemical Mechanisms (ACM) Meeting. University of California – Davis. Davis, CA USA. December 10.
9. Zhang, H.[S,*]; Worton, D. R.; Lewandowski, M.; Ortega, J.; Rubitschun, C. L.[S]; Park, J. H.; Kristensen, K.; Campuzano-Jost, P.; Day, D. A.; Jimenez, J. L.; Jaoui, M.; Offenberg, J. H.; Kleindienst, T. E.; Gilman, J.; de Gouw, J.; Park, C. H.; Schade, G. W.; Frossard, A. A.; Russell, L. M.; Kaser, L.; Jud, W.; Hansel, A.; Cappellin, L.; Karl, T.; Glasius, M.; Guenther, A.; Goldstein, A. H.; Seinfeld, J. H.; Gold, A.; Kamens, R. M.; **Surratt, J. D.** (2012) *Organosulfates as Tracers for SOA Formation from 2-Methyl-3-Buten-2-ol (MBO) in the Atmosphere.* American Association for Aerosol Research (AAAR) Annual Meeting. Minneapolis, MN, USA. October 16.
10. Lin, Y.-H.[S,*]; **Surratt, J. D.**; Knipping, E. M.; Edgerton, E. S.; Shaw, S. L. (2011) *Chemical Characterization of $PM_{2.5}$ Collected with Conditional Sampling Strategies from the Southeastern United States: Influences of SO_2 and NH_3 on Ambient Biogenic SOA Formation*. American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 4.
11. Lin, Y.-H.[S,*]; Zhang, Z.; Docherty, K. S.; Zhang, H.[S]; Budisulistiorini, S. H.[S]; Rubitschun, C. L.[S]; Shaw, S. L.; Knipping, E. M.; Kleindiesnt, T. E.; Gold, A.; **Surratt, J. D.** (2011) *Isoprene Epoxydiols as Precursors to Secondary Organic Aerosol Formation: Acid-Catalyzed Reactive Uptake Studies with Authentic Compounds.* Gordon Research Conference on Atmospheric Chemistry. Mount Snow Resort, West Dover, VT USA. July 24-29.
12. Lin, Y.-H.[S,*]; Offenberg, J. H.; Zhang, X.; Weber, R. J.; Kleindienst, T. E.; **Surratt, J. D.** (2011) *Off-line UPLC/ESI-HR-Q-TOFMS Analyses of SOA Heterogeneous-Reaction Products in PM2.5 Collected from the CalNex-Pasadena Ground Site*. CalNex Data Analysis Workshop, Cal EPA Building, Sacramento, CA USA. May 18.
13. Rubitschun, C. L.[S,*]; Offenberg, J. H.; Kleindienst, T. E.; **Surratt, J. D.** (2011) *Isoprene- and Monoterpene-Derived Organosulfates in $PM_{2.5}$ During the CalNex Campaign in*

Bakersfield, CA. CalNex Data Analysis Workshop, Cal EPA Building, Sacramento, CA USA. May 17.

14. **Surratt, J. D.***; Murphy, S. M.; Kroll, J. H.; Ng, N. L.; Hildebrandt, L.; Sorooshian, A.; Szmigielski, R.; Vermeylen, R.; Maenhaut, W.; Claeys, M.; Flagan, R. C.; Seinfeld, J. H. (2006) *Chemical Composition of Secondary Organic Aerosol Formed from the Photooxidation of Isoprene.* EPA Graduate Fellowship Conference. Washington D.C. USA. September 15.
15. **Surratt, J. D.***; Gao, S.; Knipping, E. M.; Edgerton, E. S.; Shahgholi, M.; Edney, E. O.; Kleindienst, T. E.; Lewandowski, M.; Offenberg, J. H.; Jaoui, M.; Seinfeld, J. H. (2005) *Secondary Organic Aerosol Formation from the Photooxidation of Complex Hydrocarbon Mixtures: Composition, Effect of SO_2, and Relevance to Ambient Aerosol.* American Geophysical Union (AGU) Fall Meeting. San Francisco, CA USA. December 7.

TEACHING RECORD

UNC Courses

Term	Course #	Course Title	Credit Hours	Role	Enrolled Students
Fall 2011	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	5
Spring 2012	ENVR 403	Environmental Chemistry	3	Instructor	15
Fall 2012	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	3
	ENVR 411	Laboratory Techniques & Field Measurements	3	Guest Lecturer	8
	ENVR 451	Elements of Chemical Reaction Engineering	3	Guest Lecturer	8
	ENVR 890	Epidemiology for Environmental Scientists and Engineers	3	Guest Lecturer	8
Spring 2013	ENVR 403	Environmental Chemistry	3	Instructor	11
Fall 2013	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	3
	ENVR 411	Laboratory Techniques & Field Measurements	3	Guest Lecturer	6
	PATH 726	Human Environmental Disease	2	Guest Lecturer	4

Spring 2014	ENVR 403	Environmental Chemistry	3	Instructor	12
Fall 2014	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	7
Spring 2015	ENVR 403	Environmental Chemistry	3	Instructor	8
Fall 2015	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	5
Spring 2016	ENVR 403	Environmental Chemistry	3	Instructor	7
Fall 2016	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	7
Spring 2017	ENVR 403	Environmental Chemistry	3	Instructor	17
Fall 2017	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	13

ADVISING RECORD

Current Graduate Student Supervision – Primary Advisor (2 Ph.D., 2 M.S.)

1. Zhexi Zeng (M.S., UNC ESE), began Spring 2017.
2. Caitlin Rose (M.S., UNC ESE), began Spring 2017.
3. Yuzhi Chen (Ph.D., UNC ESE), began Summer 2015.
4. Tianqu Cui (Ph.D., UNC ESE), began Spring 2014, passed written exam.

Current Graduate Student Supervision – Co-Advisor Advisor (2 Ph.D.)

1. Marc Webb (Ph.D., UNC ESE), began Fall 2016
2. Hang Nguyen (Ph.D., UNC ESE), began Fall 2015.

Current Postdoctoral Scholar Supervision – Primary Advisor (2 Total)

1. Yue Zhang (Postdoctoral Scholar, UNC ESE), began Summer 2016.
2. Sophie Tomaz (Postdoctoral Scholar, UNC ESE), began Summer 2016.

Research Advisor to Visiting Scholars (4 total)

1. Erickson Oliveira dos Santos (Ph.D., Universidade Federal do Amazonas, Chemistry), June 2017 – May 2018.
2. Thais Da Silva Barbosa (Ph.D., Universidade Federal Rural do Rio de Janeiro, Chemistry), May 2015 – April 2016.
3. Sophie Tomaz (Ph.D., University of Bordeaux, Chemistry) – September 2014 – November 2014.
4. Kasper Kristensen (Ph.D., Aarhus University, Chemistry) – July 2012 – December 2012.

Completed Graduate and Undergraduate Student Supervision – Primary Advisor (17)
(5 Ph.D., 4 M.S., 3 M.S.P.H., 1 M.S.E.E., 3 B.S.P.H. Honors Thesis, 1 B.S. Honors Thesis)

1. Rachel Long (M.S.P.H., UNC ESE), "Chemical Characterization and Dithiothreitol Reactivity of Fine Particulate Matter Derived from Fourth Generation E-Cigarette Usage," May 2017.
2. Michael M. Williams (M.S., UNC ESE), "Chemical Characterization and Reactive Oxidant Potential of Indonesian Biomass Burning Emissions," April 2017.
3. Hilary S. Green (B. S., Honors Thesis, UNC Chemistry), "Chemical Characterization of Fine Aerosol Collected from Central Amazonia Reveals that Isoprene-Derived Epoxides and Multifunctional Hydroperoxides Substantially Contributes to the Organic Mass Fraction," March 2017.
4. Maiko Arashiro (Ph.D., UNC ESE), "Understanding the Biological Effects of Isoprene-Derived Secondary Organic Aerosol," January 2017.
5. Weruka Rattanavaraha (Ph.D., UNC ESE), "Chemical Characterization and Source Apportionment of Organic Aerosol, at Urban and Rural Sites in the Southeastern U.S.," August 2016.
6. Vineet Raja Gopinathan (B.S.P.H., Honors Thesis, UNC ESE), *"Investigation of the Effect of Aerosol Acidity, Oxidant Type, and Nucleation on MBO-Derived SOA Composition and Yield,"* April 2016.
7. Kevin Chu (M.S., UNC ESE), *"Investigation of the Influences of Anthropogenic Emissions on Isoprene-Derived Secondary Organic Aerosol Formation During the 2013 Southern Oxidant & Aerosol Study at the Birmingham, Alabama Ground Site,"* August 2015.
8. Amanda Kramer (B.S.P.H. Honors Thesis, UNC ESE), *"Assessing the Reactive Oxidant Potential of Isoprene-Derived Epoxides and Secondary Organic Aerosol,"* April 2015.
9. Sri Hapsari Budisulistiorini (Ph.D., UNC ESE), *"Real-Time Chemical Characterization of Atmospheric Organic Aerosol in the Southeastern United States by Aerosol Mass Spectrometry,"* December 2014.
10. Xinxin Li (M.S.P.H., UNC ESE), *"Investigation of the Influences of Anthropogenic Emissions on Isoprene-Derived Secondary Organic Aerosol (SOA) Formation During the 2013 Southern Oxidant & Aerosol Study (SOAS) at the Look Rock, TN, Ground Site,"* August 2014.
11. Kevin Chu (B.S.P.H. Honors Thesis, UNC ESE), *"Formation of Light-Absorbing Secondary Organic Aerosol from Reactive Uptake of Isoprene Epoxydiols,"* April 2014.
12. Tianqu Cui (M.S., UNC ESE), *"Secondary Organic Aerosol Formation from α-Pinene and Toluene: Laboratory Studies Examining the Role of Pre-existing Particles, Relative Humidity and Oxidant Type,"* December 2013.
13. Roger Jerry (M.S.P.H., UNC ESE), *"Model Intercomparison Study of Methacrolein and Methyl Vinyl Ketone from Isoprene Photooxidation,"* December 2013.

14. Ying-Hsuan Lin (Ph.D., UNC ESE), "*Chemical Characterization of Secondary Organic Aerosol Constituents and Critical Intermediates from Isoprene Photooxidation*," May 2013.
15. Wendy Marth (M.S., UNC ESE), "*Utilizing and Characterizing Chemical Ionization Mass Spectrometry (CIMS) as a Method to Estimate Secondary Organic Aerosol Yields from Isoprene-Derived Epoxides,*" May 2013.
16. Haofei Zhang (Ph.D., UNC ESE), "*Characterization and Simulation of Isoprene Photooxidation from Smog Chamber Studies*," May 2012.
17. Caitlin L. Rubitschun (M.S.E.E., UNC ESE), "*Chemical Characterization of Organosulfates in Fine Aerosols in Bakersfield, California During the 2010 CalNex Field Campaign*," May 2012.

Completed Postdoctoral Scholar Supervision – Primary Advisor (4)

1. Dr. Theran Riedel (Postdoctoral Scholar, UNC ESE), September 2013 – October 2015. Now at the U.S. Environmental Protection Agency (EPA) in the Research Triangle Park, NC.
2. Dr. Yin-Hsuan Lin (Postdoctoral Scholar, UNC ESE), May 2013 – August 2015. Now at University of California-Riverside as an Assistant Professor in the Department of Environmental Sciences.
3. Dr. Sri Hapsari Budisulistiorini (Postdoctoral Scholar, UNC ESE), January 2015 – August 2015. Now at Nanyang Technological University in Singapore as a Postdoctoral Scholar in Professor Mikinori Kuwata's group.
4. Dr. Matthieu Riva (Postdoctoral Scholar, UNC ESE), February 2014 – January 2016. Now at the University of Helsinki as a Postdoctoral Fellow in the Physics Department in Dr. Mikael Ehn's group.

Current Graduate Student Supervision – Committee Member (3 Total)

1. Kenneth D. Swanson (Ph.D., UNC Chemistry), began Fall 2015.
2. Zhenyu Tian (Ph.D., UNC ESE), began Fall 2014.
3. Chitsan Wang (Ph.D., UNC ESE), began Fall 2014.

Completed Graduate Student Supervision – Committee Member (14 Total)

1. Yuqiang Zhang (Ph.D., UNC ESE), "*Application of Chemical Transport Models to Study Global and Regional Air Quality and Human Health,*" January 2016.
2. Mohammad Safi Shalamzari (Ph.D., University of Antwerp, Pharmaceutical Sciences), "*Molecular Characterization of Polar Organosulfates in Secondary Organic Aerosol from Isoprene and Unsaturated Aldehydes using Liquid Chromatography/(–) Electrospray Ionization Mass Spectrometry,*" December 2015.
3. Sandra E. Spencer (Ph.D., UNC Chemistry), "*Development of an Aerosol Mass Spectrometry System for the Analysis of the Composition of Aerosol Particles in Real Time,*" November 2014.

4. Geoffroy Duporte (Ph.D., University of Bordeaux, Chemistry), "*Secondary Organic Aerosol Formation: Experimental Study of Organosulfate Formation at the Gas-Particle Interface,*" December 2014.
5. Matthew Woody (Ph.D., UNC ESE), "*On Enhancing Air Quality Model Predictions of Particulate Matter from Aircraft Emissions,*" October 2014.
6. Yuzhi Chen (M.S.E.E., UNC ESE), "*Assessment of SAPRC07 with Updated Isoprene Oxidation Chemistry Against Outdoor Chamber Experiments,*" August 2014.
7. Evan Couzo (Ph.D., UNC ESE), "*Air Quality Models and Unusually Large Ozone Increases: Identifying Model Failures, Understanding Environmental Causes, and Improving Modeled Chemistry,*" August 2013.
8. Meridith Fry (Ph.D., UNC ESE), "*The Impacts of Short-Lived Ozone Precursors on Climate and Air Quality,*" March 2013.
9. Xiaolu Zhang (Ph.D., Georgia Institute of Technology – Earth and Atmospheric Sciences) "*Sources, Formation and Properties of Soluble Organic Aerosols: Results from Ambient Measurements in the Southeastern United States and the Los Angeles Basin,*" August 2012.
10. Maiko Arashiro (M.S.E.E., UNC ESE), "*Precision of Measurements with the UNC Passive Aerosol Sampler*," May 2012.
11. Seth Erbersviller (Ph.D., UNC ESE), "*PM Biological Effect Modification by Gases in Urban Air,*" January 2012.
12. Pamela Birak (Ph.D., ESE), "*Remediation of Multicomponent Dense Nonaqueous Phase Liquids in Porous Media*," May 2011.
13. Adeola (Adey) Olatosi (M.S., UNC ESE), "*Assessment of Air Quality Model Predictions of Ozone Concentrations Characterized by Large Hourly Changes in Houston, Texas*," May 2011.
14. Jyoti Bapat (M.S., UNC ESE), "*The Generation of an Experimental Database for Testing Predictive Models for α-Pinene Gas- and Particle-Phase Reactions in the Atmosphere,*" May 2011.

Graduate Student Supervision – Advisee Honors (10 Total)

1. Maiko Arashiro (Ph.D., UNC ESE): Graduate Education Advancement Board Impact Award, to be awarded April 2015.
2. Sri Hapsari Budisulistiorini (Ph.D., UNC ESE): Student Poster Competition Award Winner at the annual meeting of the American Association for Aerosol Research (AAAR), awarded October 2014.
3. Maiko Arashiro (Ph.D., UNC ESE): Student Travel Award to Annual Meeting of the American Association for Aerosol Research (AAAR), awarded October 2014.
4. Ying-Hsuan Lin (Ph.D., UNC ESE): U.S. EPA Blue Ribbon Paper Award – "For outstanding collaborative efforts to improve the characterization of organic aerosols," awarded Spring 2014.

5. Sri Hapsari Budisulistiorini (Ph.D., UNC ESE): UNC Off-Campus Dissertation Completion Fellowship, Spring 2014.
6. Sri Hapsari Budisulistiorini (Ph.D., UNC ESE): Student Travel Award to Annual Meeting of the American Association for Aerosol Research (AAAR), awarded 2013.
7. Ying-Hsuan Lin (Ph.D., UNC ESE): UNC Dissertation Completion Fellowship, awarded 2012-2013.
8. Sri Hapsari Budisulistiorini (Ph.D., UNC ESE): Fulbright Presidential Fellowship, awarded 2010-2013.
9. Caitlin Rubitschun (M.S.E.E., UNC ESE): Weiss Urban Livability Senior Fellow Award, awarded 2011-2012.
10. Caitlin Rubitschun (M.S.E.E., UNC ESE): Weiss Urban Livability Fellowship, awarded 2010-2011.

Undergraduate Research Students Supervised (9 Total)

1. Caitlin Rose (UNC, B.S.P.H. ENVR) – Fall 2016 – Present
2. Hilary Green (UNC, B. S. Chemistry) – Spring 2015 – Spring 2017
3. Tashana Detwiler (UNC, B.A. Chemistry) – NSF IDEA Program, Summer 2014 – Spring 2015
4. Vineet Gopinathan (UNC, B.S.P.H. ENVR) – Summer 2014 – Spring 2016
5. Amanda Kramer (UNC, B.S.P.H. ENVR) – Fall 2013 – Spring 2015
6. Gabby Agostini (UNC, B.S. Chemistry) – Summer 2012 – Fall 2012
7. Kevin Chu (UNC, B.S.P.H. ENVR) – Spring 2012 – Spring 2014
8. Caroline Coulter (UNC, B.S. Chemistry) - Fall 2011 – Spring 2012
9. Sarah Park (UNC) – Fall 2011
10. Dominique Moore (UNC) – NSF SMART Program, Summer 2011

GRANTS (Total ~ $4,300,471)

Current Support (Total - $1,932,448)

Sloan Foundation — Surratt (Co-PI) — 7/1/2017-6/30/2020 — $750,000 (total)
"Investigating the Impacts of Water-Soluble Organic Gases and Surface Chemistry on Air Composition in Damp Homes"

National Science Foundation (NSF) Atmospheric Chemistry (AGS) — Surratt (Lead PI) — 7/1/2017-6/30/2020 — $290,000 (total)
"Collaborative Research: Impact of Aerosol Viscosity, Phase Separation, and Internal Structure on Isoprene-Derived SOA Formation"

National Oceanic & Atmospheric Administration (NOAA) — Surratt (Co-PI) — 7/1/2016-6/30/2019 — $592,448 (total)
"Characterizing Oxidized North American Fire Emissions and Their Aqueous/Multiphase Transformations through the FIREX Campaign"

National Science Foundation (NSF) Environmental Chemical Sciences (ECS) — Surratt (Lead PI) — 11/15/2014-11/14/2017 — $300,000 (total)
"Collaborative Research: Quantifying Secondary Organic Aerosol Formation from the Reactive Uptake of Isoprene-derived Epoxides to Submicron Aerosol Particles"

Completed Research Support (Total - $2,368,023)

UNC School of Medicine TCORS Pilot Grant Program — Surratt (Lead-PI) — 9/1/2016-8/31/2017 — $50,040 (total)
"Chemical Characterization of Submicron Particulate Matter and Vapors Derived from E-Cigarette Usage"

University of North Carolina CEHS Pilot Projects Program — Surratt (Co-PI) — 9/1/2016-8/31/2017 — $30,000 (direct)
"Using CRISPR/Cas9 Technology to Establish the Role of NRF2 as a Driver of Isoprene SOA-Induced Genomic Stress Response"

University of Texas at Austin Air Quality Research Program (AQRP) — Surratt (Co-PI) — 9/1/2016-8/30/2017 — $225,000 (total)
"Condensed Chemical Mechanisms for Ozone and Particulate Matter Incorporating the Latest in Isoprene Chemistry"

National Oceanic & Atmospheric Administration (NOAA) — Surratt (Lead PI) — 8/1/2013-7/31/2017 — $262,500 (total)
"Organic Nitrogen in Atmospheric Aerosols: Concentrations, Chemical Composition, and Properties"

U.S. Environmental Protection Agency Early Career Award — Surratt (Lead PI) — 3/1/2013-2/28/2017 — $300,000 (total)
"Impacts of Anthropogenic Emissions in the Southeastern U.S. on Heterogeneous Chemistry of Isoprene-Derived Epoxides Leading to Secondary Organic Aerosol Formation"

Health Effects Institute (HEI) Walter A. Rosenblith New Investigator Award — Surratt (Lead PI) — 5/1/2013-10/31/2016 — $450,000 (total)
"Understanding the Health Effects of Isoprene-Derived Particulate Matter Enhanced by Anthropogenic Pollutants"

Electric Power Research Institute (EPRI) Surratt (Lead PI) 10/1/2010-12/31/2016
Subcontract $449,979 (total)
"Field Deployment of the Aerodyne Aerosol Chemical Speciation Monitor (ACSM) within the SEARCH Network"

Camille & Henry Dreyfus Foundation Surratt (Lead PI) 2/1/2014-1/31/2016
Postdoctoral Program in Environmental Chemistry $120,000 (total)
"Heterogeneous Chemistry of Isoprene-Derived Epoxides Leads to Secondary Organic Aerosol Formation: Implications for Air Quality, Climate, and Public Health in the Southeastern United States"

University of Texas at Austin Surratt (Co-PI) 6/1/2014-6/30/2015
Air Quality Research Program (AQRP) $200,000 (total)
"Update and Evaluation of Model Algorithms Needed to Predict Particulate Matter from Isoprene"

University of Texas – Austin Surratt (Lead PI) 4/1/2013-8/31/2013
Sub-Contract $14,752 (total)
"Generation of Exposed Lung Cells Tissues to Various Environmental Conditions"

University of North Carolina Surratt (Lead PI) 4/1/2012-3/31/2013
CEHS Pilot Projects Program $25,000 (total)
"Understanding the Health Effects of Isoprene-Derived Particulate Matter Enhanced by Anthropogenic Pollutants"

Electric Power Research Institute (EPRI) Surratt (Lead PI) 1/1/2012-3/31/2012
Subcontract $23,516 (total)
"Chemical Characterization of Toluene and α-Pinene: Influence of NH_3 on Aerosol Composition"

URC Grant Surratt (Lead PI) 6/1/2011-5/31/2012
Small Grant $2,500 (total)
"Analysis of $PM_{2.5}$ collected from Beijing, China during the 17th Annual Asian Games"

RJ Reynolds Fund Award: Surratt (Lead PI) 1/1/2011-12/31/2011
JR Faculty Award Grant $7,500 (total)
"Chemical Characterization of $PM_{2.5}$ Collected from the CalNex 2010 Campaign"

Electric Power Research Institute (EPRI) Surratt (Lead PI) 10/1/2010-3/31/2012
Subcontract $74,295 (total)
"$PM_{2.5}$ Conditional Sampling"

Electric Power Research Institute (EPRI) Surratt (Lead PI) 10/1/2010-6/30/2011
Subcontract $99,955 (total)
"Field Deployment of a Scanning Mobility Particle Sizer (SMPS) System in the SEARCH Network"

Alion Science &Technology/U.S. EPA Surratt (Lead PI) 5/10/2010-8/10/2010
Cooperative Agreement $32,986 (total)
"Chemical Characterization of the Organic Fraction in $PM_{2.5}$ Collected During the CalNex-Los Angeles and CalNex-Bakersfield Campaigns during Summer 2010"

Pending Research Support ($600,000)
National Oceanic & Atmospheric Administration (NOAA) Surratt (Co-Lead PI) 7/1/2018-7/31/2021
$600,000 (total)
"Measurements and Modeling of Secondary Organic Aerosols from Multiphase Chemistry of Isoprene- and Monoterpene-Derived Organic Nitrates and their Predicted Impacts on Regional Air Quality"

PROFESSIONAL SERVICE

International Level

Associate Editor/Editorial Board Member for Scientific Journals

Atmospheric Chemistry & Physics (2016-Present)
AIMS Environmental Science (2017-Present)
ACS Earth and Space Chemistry (2017-Present)

Reviewer for Scientific Journals (average 3 reviews per month)

Nature Geoscience
Proceedings of the National Academy of Sciences of the United States of America
Environmental Science and Technology
Atmospheric Chemistry and Physics
Analytical Chemistry
Journal of Physical Chemistry A
Journal of American Chemical Society
Atmospheric Environment
Journal of Geophysical Research-Atmospheres
Geophysical Research Letters
Air Quality, Atmosphere and Health
Aerosol and Air Quality Research
Journal of Environmental Monitoring
Physical Chemistry Chemical Physics
Environmental Monitoring
RSC Advances
Journal of Atmospheric Chemistry
Journal of Synchrotron Radiation

Elected to the Board of Directors for the American Association for Aerosol Research (AAAR) – Fall 2017 – Fall 2020

Elected Chair for Aerosol Chemistry Working Group at AAAR - Fall 2015-Fall 2016

Elected Vice-Chair for Aerosol Chemistry Working Group at AAAR - Fall 2014-Fall 2015

Conference Session Co-Chair (5 total)

2012 American Association for Aerosol Research (AAAR) Annual Meeting (Minneapolis, MN): Platform Session on "Instrumentation and Methods III"

2012 American Association for Aerosol Research (AAAR) Annual Meeting (Minneapolis, MN): Platform Session on "Source Apportionment IV"

2012 American Association for Aerosol Research (AAAR) Annual Meeting (Minneapolis, MN): Platform Session on "Remote and Regional Atmospheric Aerosols IV"

2011 American Association for Aerosol Research (AAAR) Annual Meeting (Orlando, FL): Platform Session on "Organic Aerosol Chemistry II"

2011 American Association for Aerosol Research (AAAR) Annual Meeting (Orlando, FL): Platform Session on "Urban Aerosols VIII"

2007 American Association for Aerosol Research (AAAR) Annual Meeting (Reno, NV): Platform Session on *"Hygroscopicity & Other Physical Properties of Organic Aerosol"*

Peer Review for Grant Proposals

National Science Foundation (NSF) – Atmospheric Chemistry
Department of Energy (DOE) – Research Review Panelist
National Oceanic and Atmospheric Administration (NOAA)
Swiss National Science Foundation (SNSF)

National Level

Invited as an Expert Panelist to Attend the "Workshop to Discuss Policy-Relevant Science to Inform EPA's Review of the Primary and Secondary National Ambient Air Quality Standards (NAAQS) for the Effect of Particulate Matter (PM)" [Research Triangle Park, NC, at US EPA - February 2015]

State and University Level

Service and Outreach to UNC and NC

Served on curriculum committee for Curriculum for the Environment and Ecology
Served on MSEE Faculty Committee

Presented a talk titled "Trees, Volatile Organic Compounds, and Fine Organic Aerosol Formation: Implications for Air Quality, Climate, and Public Health in the Southeastern U.S." at the Workshop titled "Air Quality Concerns in a Changing

Climate: Engaging Students with Atmospheric Science Research (At UNC-Chapel Hill on September 13, 2014)." This teacher workshop was made possible by a NASA Innovations in Climate Education (NICE) Award. There were 28 high school science teachers present at the workshop from across the state of NC.