

# JASON D. SURRATT

## Professor

Department of Environmental Sciences & Engineering (ESE)  
Department of Chemistry  
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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

**2020 - Present**, *Professor*, UNC-CH, Department of Chemistry, Chapel Hill, NC  
**2018 - Present**, *Professor*, UNC-CH, Department of ESE, Chapel Hill, NC  
**2018 - 2021**, *Program Director of the N.C. Per- and Polyfluoroalkyl Substance Testing (PFAST) Network*, UNC-CH, Department of ESE, Chapel Hill, NC  
**2017 - 2021**, *Co-Director for Undergraduate Studies*, UNC-CH, ESE Chapel Hill, NC  
**2015 - 2018**, *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

**2021** Kenneth T. Whitby Award for “outstanding technical contributions to aerosol science and technology by a young scientist,” American Association for Aerosol Research (AAAR)  
**2020** Newton Underwood Award for Excellence in Teaching, UNC-CH, Gillings School of Global Public Health  
**2019** *Environmental Science & Technology (ES&T) Letters* 2019 Reviewer Award  
**2019** *Environmental Science & Technology (ES&T) Letters* 2018 Best Paper Award for Zhang et al., “Effect of Aerosol-Phase State on Secondary Organic Aerosol Formation from the Reactive Uptake of Isoprene-Derived Epoxydiols (IEPOX)”  
**2018** Teaching Innovation Award, UNC-CH, Gillings School of Global Public Health  
**2017** *ES&T Letters* Selected Highly Prolific Authors  
**2017** Newton Underwood Award for Excellence in Teaching, UNC-CH, Gillings School of Global Public Health  
**2016** James J. Morgan Early Career Award for “leading the field in new directions through creative ideas,” *ES&T*, American Chemical Society  
**2015** Ruth and Philip Hettleman Prize for Artistic and Scholarly Achievement, UNC-CH  
**2015** Editors’ Citation for Excellence in Refereeing, *Journal of Geophysical Research (JGR) – Atmospheres*

Last Updated: June 20, 2022

- 2013** Sheldon K. Friedlander Award for “outstanding dissertation by an individual who has earned a doctoral degree,” American Association for Aerosol Research (AAAR)
- 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

## PROFESSIONAL MEMBERSHIPS

American Association for Aerosol Research  
American Geophysical Union  
American Chemical Society

## BIBLIOGRAPHY

*Refereed Articles - Published Status (159 Total; 20,108 total citations, h-index of 71 and i10-index of 131 based on Google Scholar)*

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

1. Tsiligiannis, E.; Wu, R.; Lee, B. H.; Salvador, C. M. G.; Priestely, M.; Carlsson, P. T. M.; Kang, S.; Novelli, A.; Vereecken, L.; Fuchs, H.; Mayhew, A. W.; Hamilton, J. F.; Edwards, P. M.; Fry, J. L.; Brownwood, B.; Brown, S. S.; Wild, R. J.; Bannan, T. J.; Coe, H.; Allan, J.; **Surratt, J. D.**; Bacak, A.; Artaxo, P.; Percival, C.; Guo, S.; Hu, M.; Wang, T.; Mentel, T. F.; Thornton, J. A.; Hallquist, M. (2022) A Four Carbon Organonitrate as a Significant Product of Secondary Isoprene Chemistry. *Geophysical Research Letters*, 49 (11), e2021GL097366.
2. Lei, Z.; Olson, N. E.; Zhang, Y.<sup>P</sup>; Chen, Y.<sup>S</sup>; Lambe, A. T.; Zhang, J.; White, N. J.; Atkin, J. M.; Banaszak Holl, M. M.; Zhang, Z.; Gold, A.; **Surratt, J. D.\***; Ault, A. P.\* (2022) Morphology and Viscosity Changes after Reactive Uptake of Isoprene Epoxydiols in Submicrometer Phase Separated Particles with Secondary Organic Aerosol Formed from Different Volatile Organic Compounds, *ACS Earth and Space Chemistry*, 6 (4), 871–882.
3. Khan, F.<sup>S</sup>; Jaoui, M.; Rudziński, K.; Kwapiszewska, K.; Martinez-Romero, A.; Gil-Casanova, D.; Lewandowski, M.; Kleindienst, T. E.; Offenber, J. H.; Krug, J. D.; **Surratt, J. D.**; Szmigielski, R.\* (2022) Cytotoxicity and Oxidative Stress Induced by Atmospheric Mono-Nitrophenols in Human Lung Cells. *Environmental Pollution*, 301, 119010.

4. Zhou, J.<sup>P</sup>; Baumann, K.; Chang, N.; Morrison, G.; Bodnar, W.; Zhang, Z.; Atkin, J. M.; **Surratt, J.D.\***; Turpin, B. J.\* (2022) Per- and Polyfluoroalkyl Substances (PFASs) in Airborne Particulate Matter (PM<sub>2.0</sub>) Emitted During Floor Waxing: A Pilot Study. *Atmospheric Environment*, 268, 118845.
5. Octaviani, M.; Shrivastava, M.\*; Zaveri, R. A.; Zelenyuk, A.; Zhang, Y.<sup>P</sup>; Rasool, Q. Z.; Bell, D. M.; Riva, M.<sup>P</sup>; Glasius, M.; **Surratt, J. D.** (2021) Modeling the Size Distribution and Chemical Composition of Secondary Organic Aerosols during the Reactive Uptake of Isoprene-Derived Epoxydiols Under Low-Humidity Condition. *ACS Earth and Space Chemistry*, 5 (11), 3247–3257.
6. Chen, Y.<sup>S</sup>; Dombek, T.; Hand, J.; Zhang, Z.; Gold, A.; Levine, K. E.\*; **Surratt, J. D.\*** (2021) Seasonal Contribution of Isoprene-Derived Organosulfates to Total Water-Soluble Fine Particulate Sulfur in the United States, *ACS Earth and Space Chemistry*, 5 (9), 2419–2432.
7. Wolf, M. J.; Zhang, Y.<sup>P</sup>; Zhou, J.<sup>P</sup>; **Surratt, J. D.**; Turpin, B. J.; Cziczo, D. J. (2021) Enhanced Ice Nucleation of Simulated Sea Salt Particles with the Addition of Anthropogenic Per- and Polyfluoroalkyl Substances (PFASs). *ACS Earth and Space Chemistry*, 5 (8), 2074–2085.
8. Shimizu, M. S.; Mott, R.; Potter, A.; Zhou, J.<sup>P</sup>; Baumann, K.; **Surratt, J. D.**; Turpin, B. J.; Avery, G. B.; Harfmann, J.; Kieber, R. J.; Mead, R. N.; Skrabal, S. A.; Willey, J. D. (2021) Atmospheric Deposition and Annual Flux of Legacy Perfluoroalkyl Substances and Replacement Perfluoroalkyl Ether Carboxylic Acids in Wilmington NC, USA. *Environmental Science & Technology Letters*, 8 (5), 366–372.
9. Yttri, K. E.; Canonaco, F.; Eckhardt, S.; Evangeliou, N.; Fiebig, M.; Gundersen, H.; Hjellbrekke, A-G.; Myhre, C. L.; Platt, S. M.; Prévôt, A. S. H.; Simpson, D.; Solberg, S.; **Surratt, J. D.**; Tørseth, K.; Uggerud, H.; Vadset, M.; Wan, X.; Aas, W. (2021) Trends, Composition, and Sources of Carbonaceous Aerosol at the Birkenes Observatory, Northern Europe, 2001-2018. *Atmospheric Chemistry & Physics*, 21 (9), 7149–7170.
10. Escobar, Y-N. H.; Morrison, C. B.; Chen, Y.<sup>S</sup>; Hickman, E.; Love, C. L.; Rebuli, M. E.; **Surratt, J. D.**; Ehre, C.; Jaspers, I. (2021) Differential Responses to E-Cig Generated Aerosols from Humectants and Different Forms of Nicotine in Epithelial Cells from Non-Smokers and Smokers. *American Journal of Physiology – Lung Cellular and Molecular Physiology*, doi: 10.1152/ajplung.00525.2020 (30 pages).
11. Khan, F.<sup>S</sup>; Kwapiszewska, K.; Zhang, Y.<sup>P</sup>; Chen, Y.<sup>S</sup>; Lambe, A. T.; Kolodziejczyk, A.; Jalal, N.; Rudzinski, K.; Martinez-Romero, A.; Fry, R. C.; **Surratt, J. D.\***; Szmigielski, R.\* (2021) Toxicological Responses of  $\alpha$ -Pinene-Derived Secondary Organic Aerosol and its Molecular Tracers in Human Lung Cell Lines. *Chemical Research in Toxicology*, 34 (3), 817–832.
12. Zhou, J.<sup>P</sup>; Baumann, K.; Mead, R. N.; Skrabal, S. A.; Kieber, R. J.; Avery, G. B.; Shimizu, M.; DeWitt, J. C.; Sun, M.; Vance, S. A.; Bodnar, W.; Zhang, Z.; Collins, L. B.; **Surratt, J. D.\***; Turpin, B. J. (2021) PFOS Dominates PFAS Composition in Ambient Fine Particulate Matter (PM<sub>2.5</sub>) Collected Across North Carolina Nearly 20

- Years After the End of Its US Production. *Environmental Science: Processes and Impacts*, 23 (4), 580–587.
13. Dubois, C.; Cholleton, D.; Gemayel, R.; Chen, Y.<sup>S</sup>; **Surratt, J. D.**; George, C.; Rairoux, P.; Miffre, A.; Riva, M.\* (2021) Decrease in Sulfate Aerosol Light Backscattering by Reactive Uptake of Isoprene Epoxydiols. *Physical Chemistry Chemical Physics*, 23 (10), 5927–5935.
  14. Petters, S. S.<sup>P\*</sup>; Cui, T.<sup>S</sup>; Zhang, Z.; Gold, A.; McNeill, V. F.; **Surratt, J. D.**; Turpin, B. J. (2021) Organosulfates from Dark Aqueous Reactions of Isoprene-Derived Epoxydiols Under Cloud and Fog Conditions: Kinetics, Mechanism, and Effect of Reaction Environment on Regioselectivity of Sulfate Addition, *ACS Earth and Space Chemistry*, 5 (3), 474–486.
  15. Newland, M. J.; Bryant, D. J.; Dunmore, R. E.; Bannan, T. J.; Acton, W. J. F.; Langford, B.; Hopkins, J. R.; Squires, F.; Dixon, W. J.; Drysdale, W. S.; Ivatt, P. D.; Evans, M. J.; Edwards, P. M.; Whalley, L. K.; Heard, D. E.; Slater, E. J.; Woodward-Massey, R.; Ye, C.; Mehra, A.; Worall, S. D.; Bacak, A.; Coe, H.; Percival, C. J.; Hewitt, C. N.; Lee, J. D.; Cui, T.<sup>S</sup>; **Surratt, J. D.**; Wang, X.; Lewis, A. C.; Rickard, A. R.; Hamilton, J. F. (2021) Low-NO Atmospheric Oxidation Pathways in a Polluted Megacity. *Atmospheric Chemistry and Physics*, 21 (3), 1613 – 1625.
  16. Ye, J.; Batista, C. E.; Guimaraes, P. C.; Ribeiro, I. O.; Vidoudez, C.; Barbosa, R. G.; Oliveira, R. L.; Ma, Y.; Jardine, K. J.; **Surratt, J. D.**; Guenther, A. B.; Souza, R. A. F.; Martin, S. T. (2021) Near-Canopy Horizontal Concentration Heterogeneity of Semivolatile Oxygenated Organic Compounds and Implications for 2-Methyltetrols Primary Emissions. *Environmental Science: Atmospheres*, 1 (1), 8-20.
  17. Hamilton, J. F.; Bryant, D. J.; Edwards, P. M.; Ouyang, B.; Bannan, T. J.; Mehra, A.; Mayhew, A. W.; Hopkins, J. R.; Dunmore, R. E.; Squires, F. A.; Lee, J. D.; Newland, M. J.; Worrall, S. D.; Bacak, A.; Coe, H.; Percival, C.; Whalley, L. K.; Heard, D. E.; Slater, E. J.; Jones, R. L.; Cui, T.<sup>S</sup>; **Surratt, J. D.**; Reeves, C. E.; Mills, G. P.; Grimmond, S.; Sun, Y.; Xu, W.; Shi, Z.; Rickard, A. R. (2021) Key Role of NO<sub>3</sub> Radicals in the Production of Isoprene Nitrates and Nitrooxyorganosulfates in Beijing, *Environmental Science & Technology*, 55 (2), 842–853.
  18. Wolf, M. J.; Zhang, Y.<sup>P</sup>; Zawadowicz, M. A.; Goodell, M.; Froyd, K.; Sellegri, K.; Rosch, M.; Cui, T.<sup>S</sup>; Winter, M.; Lacher, L.; Axisa, D.; DeMott, P. J.; Levin, E. J. T.; Gute, E.; Abbatt, J.; Koss, A.; Kroll, J. H.; **Surratt, J. D.**; Cziczo, D. J. (2020) A Biogenic Secondary Organic Aerosol Source of Cirrus Ice Nucleating Particles. *Nature Communications*, 11, 4834.
  19. Smith, D. M.; Cui, T.<sup>S</sup>; Fiddler, M. N.; Pokhrel, R.; **Surratt, J. D.**; Bililign, S. (2020) Laboratory Studies of Fresh and Aged Biomass Burning Aerosol Emitted from East African Biomass Fuels – Part 2 – Chemical Properties and Characterization. *Atmospheric Chemistry & Physics*, 20 (17), 10169–10191.
  20. Schmedding, R.; Rasool, Q. Z.; Zhang, Y.<sup>P</sup>; Pye, H. O. T.; Zhang, H.; Chen, Y.<sup>S</sup>; **Surratt, J. D.**; Lee, B. H.; Mohr, C.; Lopez-Hilfiker, F. D.; Thornton, J. A.; Goldstein, A. H.; Vizuete, W. (2020) Predicting Secondary Organic Aerosol Phase State and

- Viscosity and its Effect on Multiphase Chemistry in a Regional Scale Air Quality Model. *Atmospheric Chemistry & Physics*, 20 (13), 8201–8225.
21. Chen, Y.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Lambe, A. T.; Rongshuang, X.; Lei, Z.; Olson, N. E.; Zhang, Z.; Szalkowski, T.<sup>U</sup>; Cui, T.<sup>S</sup>; Vizuete, W.; Gold, A.; Turpin, B. J.; Ault, A. P.; Chan, M.N.; **Surratt, J.D.\*** (2020) Heterogeneous Hydroxyl Radical Oxidation of Isoprene Epoxydiol-Derived Methyltetrol Sulfates: Plausible Formation Mechanisms of Previously Unexplained Organosulfates in Ambient Fine Aerosols. *Environmental Science & Technology Letters*, 7 (7), 460–468.
  22. Bryant, D. J.; Dixon, W. J.; Hopkins, J. R.; Dunmore, R. E.; Pereira, K. L.; Shaw, M.; Squires, F. A.; Bannan, T. J.; Mehra, A.; Worrall, S. D.; Bacak, A.; Coe, H.; Percival, C. J.; Whalley, L. K.; Heard, D. E.; Slater, E. J.; Ouyang, B., Cui, T.<sup>S</sup>, **Surratt, J. D.**; Liu, D.; Shi, Z.; Harrison, R.; Sun, Y.; Xu, W.; Lewis, A. C.; Lee, J. D.; Rickard, A. R.; Hamilton, J. F. (2020) Strong Anthropogenic Control of Secondary Organic Aerosol Formation from Isoprene in Beijing. *Atmospheric Chemistry & Physics*, 20 (12), 7531–7552.
  23. Corteselli, E. M.; Gold, A.; **Surratt, J.**; Cui, T.<sup>S</sup>; Bromberg, P.; Dailey, L.; Samet, J. M. (2020) Supplementation with Omega-3 Fatty Acids Potentiates Oxidative Stress in Human Airway Epithelial Cells Exposed to Ozone. *Environmental Research*, 187, 109627, 1-10.
  24. Yee, L. D.; Isaacman-VanWertz, G.; Wernis, R. A.; Kreisberg, N. M.; Glasius, M.; Riva, M.<sup>P</sup>; **Surratt, J. D.**; de Sa, S. S.; Martin, S. T.; Alexander, M. L.; Palm, B. B.; Hu, W.; Campuzano-Jost, P.; Day, D. A.; Jimenez, J. L.; Liu, Y.; Misztal, P. K.; Artaxo, P.; Viegas, J.; Manzi, A.; de Souza, R.; Edgerton, E. S.; Baumann, K.; Goldstein, A. H. (2020) Natural and Anthropogenically-Influenced Isoprene Oxidation in the Southeastern U.S.A. and Central Amazon. *Environmental Science & Technology*, 54 (10), 5980–5991.
  25. Escobar, Y.-N.; Nipp, G. E.<sup>U</sup>; Cui, T.<sup>S</sup>; Petters, S. S.<sup>P</sup>; **Surratt, J. D.**; Jaspers, I. (2020) In Vitro Toxicity and Chemical Characterization of Aerosol Derived from Electronic Cigarette Humectants Using a Newly Developed Exposure System. *Chemical Research in Toxicology*, 33 (7), 1677–1688.
  26. Ribeiro, I. O; do Santos, E. O.; Batista, C. E.; Fernandes, K. S.; Ye, J.; Medeiros, A. S.; e Oliveira, R. L.; de Sá, S. S.; de Sousa, T. R.; Kayano, M. T.; Andreoli, R. V.; Machado, C. M. D.; **Surratt, J. D.**; Junior, S. D.; Martin, S. T.; de Souza, R. A. F. (2020) Impact of Biomass Burning Impacts on a Metropolitan Area in the Amazon during the 2015 El Niño: The Enhancement of Carbon Monoxide and Levoglucosan Concentrations. *Environmental Pollution*, 260, 114029.
  27. Wach, P.; Spolnik, G.; **Surratt, J. D.**; Blaziak, K.; Rudzinski, K.; Lin, Y.-H.<sup>S</sup>; Maenhaut, W.; Danikiewicz, W.; Claeys, M.; Szmigielski, R. (2020) Structural Characterization of Lactone-Containing MW 212 Organosulfates Originating from Isoprene Oxidation in Ambient Fine Aerosol. *Environmental Science & Technology*, 54 (3), 1415–1424.

28. Eaves, L. A.; Smeester, L.; Hartwell, H. J.; Lin, Y.-H.<sup>P</sup>; Arashiro, M.<sup>S</sup>; Zhang, Z.; Gold, A.; **Surratt, J. D.**; Fry, R. C. (2020) Isoprene-derived Secondary Organic Aerosol Induces the Expression of micro RNAs (miRNAs) Associated with Inflammatory/Oxidative Stress Response in Lung Cells. *Chemical Research in Toxicology*, 33 (2), 381–387.
29. Zhang, Y.<sup>P</sup>; Chen, Y.<sup>S</sup>; Lei, Z.; Olson, N. E.; Riva, M.; Koss, A. R.; Zhang, Z.; Gold, A.; Jayne, J. T.; Worsnop, D. R.; Onasch, T. B.; Kroll, J. H.; Turpin, B. J.; Ault, A. P.\*; **Surratt, J. D.\*** (2019) Joint Impacts of Acidity and Viscosity on the Formation of Secondary Organic Aerosol from Isoprene Epoxydiols (IEPOX) in Phase Separated Particles. *ACS Earth and Space Chemistry*, 3 (12), 2646–2658.
30. D'Ambro, E. L.; Schobesberger, S.; Gaston, C. J.; Lopez-Hilfiker, F. D.; Lee, B. H.; Liu, J.; Zelenyuk, A.; Bell, D.; Cappa, C. D.; Helgestad, T.; Li, Z.; Guenther, A.; Wang, J.; Wise, M.; Caylor, R.; **Surratt, J. D.**; Riedel, T.<sup>P</sup>; Hyttinen, N.; Salo, V.-T.; Hasan, G.; Kurten, T.; Shilling, J. E.; Thornton, J. A. (2019) Chamber-Based Insights into the Factors Controlling IEPOX SOA Yield, Composition, and Volatility. *Atmospheric Chemistry & Physics*, 19 (17), 11253–11265.
31. Zhang, Y.<sup>P</sup>; Nichman, L.; Spencer, P.; Jung, J. I.; Lee, A.; Heffernan, B. K.; Gold, A.; Zhang, Z.; Chen, Y.<sup>S</sup>; Canagaratna, M. R.; Jayne, J. T.; Worsnop, D. R.; Onasch, T. B.; **Surratt, J. D.**; Chandler, D.; Davidovits, P.; Kolb, C. E. (2019) The Cooling Rate and Volatility Dependent Glass Forming Properties of Organic Aerosols Measured by Broadband Dielectric Spectroscopy. *Environmental Science & Technology*, 53 (21) 12366–12378.
32. De Haan, D. O.; Pajunoja, A.; Hawkins, L. N.; Welsh, H. G.; Jimenez, N. G.; De Loera, A.; Zauscher, M.; Andretta, A. D.; Joyce, B. W.; De Haan, A. C.; Riva, M.<sup>P</sup>; Cui, T.<sup>S</sup>; **Surratt, J. D.**; Cazaunau, M.; Formenti, P.; Gratien, A.; Pangui, E.; Doussin, J.-F. (2019) Methylamine's Effects on Methylglyoxal-Containing Aerosol: Chemical, Physical, and Optical Changes. *ACS Earth and Space Chemistry*, 3 (9), 1706–1716.
33. Olson, N. E.; Lei, Z.; Craig, R. L.; Zhang, Y.<sup>P</sup>; Chen, Y.<sup>S</sup>; Lambe, A. T.; Zhang, Z.; Gold, A.; **Surratt, J. D.\***; Ault, A. P.\* (2019) Reactive Uptake of Isoprene Epoxydiols Increases the Viscosity of the Core of Phase-Separated Aerosol Particles. *ACS Earth and Space Chemistry*, 3 (8), 1402–1414.
34. Schmedding, R.; Ma, M.; Zhang, Y.<sup>P</sup>; Farrell, S.; Pye, H. O. T.; Chen, Y.<sup>S</sup>; Wang, C.; Rascool, Q. Z.; Budisulistiorini, S. H.; Ault, A. P.; **Surratt, J. D.**; Vizuete, W. G. (2019)  $\alpha$ -Pinene-Derived Organic Coatings on Acidic Sulfate Aerosol Impacts Secondary Organic Aerosol Formation from Isoprene in a Box Model. *Atmospheric Environment*, 213, 456–462.
35. Riva, M.<sup>P</sup>; Chen, Y.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Lei, Z.; Olson, N. E.; Boyer, H. C.; Narayan, S.; Yee, L. D.; Green, H. S.<sup>U</sup>; Cui, T.<sup>S</sup>; Zhang, Z.; Baumann, K. D.; Fort, M.; Edgerton E. S.; Budisulistiorini, S. H.<sup>S</sup>; Rose, C. A.<sup>S</sup>; Ribeiro, I. O.; e Oliveira, R. L.; dos Santos, E. O.; Szopa, S.; Machado, C. M. D.; Zhao, Y.; Alves, E. G.; de Sá, S.S.; Hu, W.; Knipping, E. M.; Shaw, S. L.; Duvoisin Junior, S.; de Souza, R. A. F.; Palm, B. B.; Jimenez, J. L.; Glasius, M.; Goldstein, A. H.; Pye, H. O. T.; Gold, A.; Turpin, B. J.; Vizuete, W.;

- Martin, S. T.; Thornton, J. A.; Dutcher, C. S.; Ault, A. P.\*; **Surratt, J. D.\*** (2019). Increasing Isoprene Epoxydiol-to-Inorganic Sulfate Aerosol Ratio Results in Extensive Conversion of Inorganic Sulfate to Organosulfur Forms: Implications for Aerosol Physicochemical Properties. *Environmental Science & Technology*, 53 (15), 8682–8694.
36. Cui, T.<sup>S</sup>; Green, H. S.<sup>U</sup>; Selleck, P. W.; Zhang, Z.; O'Brien R. E.; Gold, A.; Keywood M.; Kroll, J. H.; **Surratt, J. D.\*** (2019) Chemical Characterization of Isoprene- and Monoterpene-Derived Secondary Organic Aerosol (SOA) Tracers in Remote Marine Aerosols over a Quarter Century. *ACS Earth and Space Chemistry*, 3 (6), 935–946.
37. **Surratt, J. D.**; Lin, Y.-H.<sup>P</sup>; Arashiro, M.<sup>S</sup>; Vizuete, W. G.; Zhang, Z.; Gold, A.; Jaspers, I.; Fry, R. C. (2019) Understanding the Early Biological Effects of Isoprene-Derived Particulate Matter Enhanced by Anthropogenic Pollutants. Research Report 198. Boston, MA: Health Effects Institute.
38. Lam, H. K.; Kwong, K. C.; Poon, H. Y.; Davies, J. F.; Wilson, K. R.; Zhang, Z.; Gold, A.; **Surratt, J. D.**; Chan, M. N. (2019) Heterogeneous OH Oxidation of Isoprene Epoxydiol-Derived Organosulfates: Kinetics, Chemistry, and Formation of Inorganic Sulfate. *Atmospheric Chemistry & Physics*, 19 (4), 2433–2440.
39. O'Brien, R. E.; Ridley, K. J.; Canagaratna, M.; Jayne, J. T.; Croteau, P. L.; Worsnop, D. R.; Budisulistiorini, S.-H.<sup>S</sup>; **Surratt, J. D.**; Follett, C. L.; Repeta, D. J.; Kroll, J. H. (2019) Ultrasonic Nebulizer for the Elemental Analysis of Microgram-Level Samples with Offline Aerosol Mass Spectrometry. *Atmospheric Measurement Techniques*, 12 (3), 1659-1671.
40. Duncan, S. M.; Tomaz, S.<sup>P</sup>; Morrison, G.; Webb, M.<sup>S</sup>; Atkin, J.; **Surratt, J.D.**; Turpin, B. J. (2019) Dynamics of Residential Water-Soluble Organic Gases: Insights into Sources and Sinks. *Environmental Science & Technology*, 53 (4), 1812-1821.
41. Budisulistiorini, S.-H.; Riva, M.; Williams, M.<sup>S</sup>; Miyakawa, T.; Chen, J.; Itoh, M.; **Surratt, J. D.**; Kuwata, M. (2018) Dominant Contribution of Oxygenated Organic Aerosol to Haze Particles from Real-Time Observation in Singapore During an Indonesian Wildfire Event in 2015. *Atmospheric Chemistry & Physics*, 18 (22), 16481–16498.
42. Cui, T.<sup>S</sup>; Zheng, Z.<sup>S</sup>; dos Santos, E. O.<sup>V</sup>; Zhang, Z.; Chen, Y.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Rose, C. A.<sup>S</sup>; Budisulistiorini, S. H.<sup>S</sup>; Collins, L. B.; Bodnar, W. M.; de Souza, R. A. F.; Martin, S. T.; Machado, C. M. D.; Turpin, B. J.; Gold, A.; Ault, A. P.; **Surratt, J. D.\*** (2018) Development of a Hydrophilic Interaction Liquid Chromatography (HILIC) Method for the Chemical Characterization of Water-Soluble Isoprene Epoxydiol (IEPOX)-Derived Secondary Organic Aerosol. *Environmental Science: Processes & Impacts*, 20 (11), 1524–1536.
43. Tomaz, S.<sup>P</sup>; Cui, T.<sup>S</sup>; Chen, Y.<sup>S</sup>; Sexton, K. G.; Roberts, J. M.; Warneke, C.; Yokelson, R. J.; **Surratt, J.D.\***; Turpin, B. J. (2018) Photochemical Cloud Processing of Primary Wildfire Emissions as a Potential Source of Secondary Organic Aerosol. *Environmental Science & Technology*, 52 (19), 11027–11037.

44. Liu, J.; Russell, L. M.; Ruggeri, G.; Takahama, S.; Clafin, M. S.; Ziemann, P. J.; Pye, H. O. T.; Murphy, B. N.; Xu, L.; Ng, N. L.; McKinney, K. A.; Budisulistiorini, S. H.<sup>S</sup>; Bertram, T. H.; Nenes, A.; **Surratt, J. D.** (2018) Regional Similarities and NO<sub>x</sub>-related Increases in Biogenic Secondary Organic Aerosol in Summertime Southeastern United States. *Journal of Geophysical Research – Atmospheres*, 123, 10620–10636.
45. Xu, J. Cui, T.<sup>S</sup>; Fowler, B.; Frankhauser, A.; **Surratt, J. D.**; McNeill, V. F. (2018) Aerosol Brown Carbon from Dark Reactions of Syringol in Aqueous Aerosol Mimics. *ACS Earth and Space Chemistry*, 2 (6), 608–617.
46. DeHaan, D. O.; Tapavicza, E.; Riva, M.<sup>P</sup>; Cui, T.<sup>S</sup>; **Surratt, J. D.**; Smith, A. C.; Jordan, M-C.; Nilakantan, S.; Almodovar, M.; Stewart, T. N.; de Loera, A.; De Haan, A. C.; Cazaunau, M.; Gratien, A.; Pangu, E.; Doussin, J.-F. (2018) Nitrogen-Containing, Light-Absorbing Oligomers Produced in Aerosol Particles Exposed to Methylglyoxal, Photolysis, and Cloud Cycling. *Environmental Science & Technology*, 52 (7), 4061–4071.
47. Zhang, Y.<sup>P</sup>; Chen, Y.<sup>S</sup>; 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.; Thornton, J. A.; Vizuet, W.; Ault, A. P.; **Surratt, J. D.\*** (2018) Effect of Aerosol-Phase State on Secondary Organic Aerosol Formation from the Reactive Uptake of Isoprene-Derived Epoxydiols (IEPOX). *Environmental Science & Technology Letters*, 5 (3), 167–174.
48. Bondy, A. L.; Craig, R. L.; Zhang, Z.; Gold, A.; **Surratt, J. D.**; Ault, A. P. (2018) Isoprene-Derived Organosulfates: Vibrational Mode Analysis by Raman Spectroscopy, Acid-Dependent Spectral Modes, and Observation in Individual Atmospheric Particles. *Journal of Physical Chemistry A*, 122 (1), 303–315.
49. Arashiro, M.<sup>S</sup>; Lin, Y.-H.<sup>P</sup>; Zhang, Z.; Sexton, K. G.; Gold, A.; Jaspers, I.; Fry, R. C.; **Surratt, J. D.\*** (2018) Effect of Secondary Organic Aerosol from Isoprene-Derived Hydroxyhydroperoxides on the Expression of Oxidative Stress Response Genes in Human Bronchial Epithelial Cells. *Environmental Science: Processes & Impacts*, 20 (2), 332–339.
50. 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. (2018) Synthesis of the Southeast Atmosphere Studies: Investigating Fundamental Atmospheric Chemistry Questions. *Bulletin of the American Meteorological Society*, 99 (3), 547–567.
51. Rattanavaraha, W.<sup>S</sup>; Canagaratna, M. R.; Budisulistiorini, S. H.<sup>P</sup>; 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.
52. 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 (15), 8056–8064.
  53. 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 <sup>14</sup>C Methods During CalNex-Bakersfield. *Atmospheric Environment*, 166, 204–214.
  54. Lin, Y-H.<sup>P</sup>; Arashiro, M.<sup>S</sup>; Clapp, P. W.; Cui, T.<sup>S</sup>; Sexton, K. G.; Vizueté, 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.
  55. 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.
  56. 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  $\alpha$ -Pinene Secondary Organic Aerosol. *Environmental Science & Technology*, 51 (11), 5932–5940.
  57. Barbosa, T. S.<sup>V</sup>; Riva, M.<sup>P</sup>; Chen, Y.<sup>S</sup>; 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.
  58. Budisulistiorini, S. H.<sup>P</sup>; 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.
  59. Budisulistiorini, S. H.; Riva, M.<sup>P</sup>; M. Williams<sup>S</sup>; 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.
  60. 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.
61. Riva, M.<sup>P</sup>; Budisulistiorini, S. H.<sup>P,S</sup>; 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.
62. 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.<sup>P,S</sup>; **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.
63. 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<sub>x</sub> Conditions. *Atmospheric Chemistry & Physics*, 17 (1), 159–174.
64. 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.
65. Arashiro, M.<sup>S</sup>; Lin, Y.-H.<sup>P</sup>; 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.
66. 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.<sup>P</sup>; **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.
67. Riva, M.<sup>P</sup>; Budisulistiorini, S. H.<sup>P</sup>; Chen, Y.<sup>S</sup>; 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.
68. Meade, L. E.; Riva, M.<sup>P</sup>; 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.
69. 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.
70. Lin, Y.-H.<sup>P</sup>; Arashiro, M.<sup>S</sup>; Martin, E.; Chen, Y.<sup>S</sup>; 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.
71. Riva, M.<sup>P</sup>; 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.
72. 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.<sup>S,P</sup>; Budisulistiorini, S. H.<sup>S,P</sup>; Zhang, H.<sup>S</sup>; **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.
73. **Surratt, J. D.\***; Szmigielski, R.; McNeill, V.F. (2016) Preface Special Issue: Chemical Characterization of Secondary Organic Aerosol - Dedication to Professor Magda Claeys. *Atmospheric Environment*, 130, 1–4.
74. Riva, M.<sup>P</sup>; Budisulistiorini, S. H.<sup>P</sup>; 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.
75. Kramer, A. J.<sup>U</sup>; Rattanavaraha, W.<sup>S</sup>; Zhang, Z.; Gold, A.; **Surratt, J. D.\***; Lin, Y.-H.<sup>P</sup> (2016) Assessing the Oxidative Potential of Isoprene-Derived Epoxides and Secondary Organic Aerosol. *Atmospheric Environment*, 130, 211–218.
76. Riedel, T. P.<sup>P</sup>; Lin, Y.-H.<sup>P</sup>; Zhang, Z.; Chu, K.<sup>S</sup>; 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.
77. Lopez-Hilfiker, F. D.; Mohr, C.; D'Ambro, E. L.; Lutz, A.; Riedel, T. P.<sup>P</sup>; 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.
78. Riva, M.<sup>P</sup>; Da Silva Barbosa, T.V.; Lin, Y.-H.<sup>P,S</sup>; Stone, E. A.; Gold, A.; **Surratt, J. D.\*** (2016) Chemical Characterization of Organosulfates in Secondary Organic Aerosol

Derived from the Photooxidation of Alkanes. *Atmospheric Chemistry & Physics*, 16 (17), 11001–11018.

79. Rattanavaraha, W.<sup>S</sup>; Chu, K.<sup>S</sup>; Budisulistiorini, S. H.<sup>P</sup>; Riva, M.<sup>P</sup>; Lin, Y.-H.<sup>P</sup>; 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<sub>2.5</sub> Collected from the Birmingham, Alabama Ground Site During the 2013 Southern Oxidant and Aerosol Study. *Atmospheric Chemistry & Physics*, 16 (8), 4897–4914.
80. Budisulistiorini, S. H.<sup>S,P</sup>; 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.
81. 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 Methacryloyl Peroxynitrate (MPAN) and its Pathway Toward Secondary Organic Aerosol Formation in the Atmosphere. *Physical Chemistry Chemical Physics*, 17, 17914–17926.
82. Riva, M.<sup>P</sup>; Tomaz, S.<sup>V</sup>; Cui, T.<sup>S</sup>; Lin, Y.-H.<sup>P</sup>; 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.
83. 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.<sup>S</sup>; Riva, M.<sup>P</sup>; **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.
84. Budisulistiorini, S. H.<sup>S</sup>; Li, X.<sup>S</sup>; 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.

85. Riedel, T. P.<sup>P</sup>; Lin, Y.-H.<sup>P</sup>; Budisulistiorini, S. H.<sup>S</sup>; 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.
86. Chen, Y.; Sexton, K. G.; Jerry, R. E.<sup>S</sup>; **Surratt, J. D.**; Vizuete, W. (2015) Assessment of SAPRC07 with Updated Isoprene Chemistry against Outdoor Chamber Experiments. *Atmospheric Environment*, 105, 109–120.
87. 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.
88. 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.<sup>S</sup>; Rubitschun, C. L.<sup>S</sup>; **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.
89. 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.
90. 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.
91. Lin, Y.-H.<sup>P,S</sup>; 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.
92. Lin, Y.-H.<sup>P,S</sup>; Budisulistiorini, S. H.<sup>S</sup>; Chu, K.<sup>U</sup>; Siejack, R. A.; Zhang, H.<sup>S</sup>; Riva, M.<sup>P</sup>; 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.
93. O’Brien, R. E.; Laskin, A.; Laskin, J.; Rubitschun, C. L.<sup>S</sup>; **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.

94. Gaston, C. J.; Riedel, T. P.<sup>P</sup>; 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.
95. Nallathamby, P. D.; Lewandowski, M.; Jaoui, M.; Offenberg, J. H.; Kleindienst, T. E.; Rubitschun, C. L.<sup>S</sup>; **Surratt, J. D.**; Usenko, S.; Sheesley, R. J. (2014) Qualitative and Quantitative assessment of unresolved complex mixture in PM<sub>2.5</sub> of Bakersfield, CA. *Atmospheric Environment*, 98, 368–375.
96. Karambelas, A.; Pye, H. O. T.; Budisulistiorini, S. H.<sup>S</sup>; **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.
97. Budisulistiorini, S. H.<sup>S</sup>; 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.
98. Staudt, S.; Kundu, S.; Lehmler, H.-J.; He, X.; Cui, T.<sup>S</sup>; Lin, Y.-H.<sup>S</sup>; Kristensen, K.<sup>V</sup>; Glasius, 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.
99. Zotter, P.; El-Haddad, I.; Zhang, Y.; Hayes, P. L.; Zhang, X.; Lin, Y.-H.<sup>S</sup>; 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.
100. Zhang, H.<sup>S</sup>; Zhang, Z.; Cui, T.<sup>S</sup>; Lin, Y.-H.<sup>S</sup>; Bhatela, N. A.<sup>U</sup>; 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.
101. Kristensen, K.<sup>V</sup>; Cui, T.<sup>S</sup>; Zhang, H.<sup>S</sup>; Gold, A.; Glasius, M.; **Surratt, J. D.\*** (2014) Dimers in  $\alpha$ -Pinene Secondary Organic Aerosol: Effect of Hydroxyl Radical, Ozone, Relative Humidity and Aerosol Acidity. *Atmospheric Chemistry & Physics*, 14 (8), 4201–4218.
102. Alier, M.; Osto, M. D.; Lin, Y.-H.<sup>S</sup>; **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.
103. **Surratt, J. D.\*** (2013) Atmospheric Chemistry: Radical Regeneration from Isoprene. *Nature Geoscience*, 6 (12), 995–996.

104. Lin, Y.-H.<sup>S</sup>; Zhang, H.<sup>S</sup>; Pye, H. O. T.; Marth, W. J.<sup>S</sup>; Zhang, Z.; Park, S.<sup>U</sup>; Arashiro, M.<sup>S</sup>; Cui, T.<sup>S</sup>; Budisulistiorini, S. H.<sup>S</sup>; 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.
105. Pye, H. O. T.; Pinder, R. W.; Piletic, I. R.; Xie, Y.; Capps, S. L.; Lin, Y.-H.<sup>S</sup>; **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.
106. 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.; Crouse, 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.
107. Hayes, P. L.; Ortega, A. M.; Cubison, M. J.; Hu, W.; Toohey, D. W.; Flynn, J. H.; Lefer, B. 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.<sup>S</sup>; **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.
108. Zhang, X.; Lin, Y.-H.<sup>S</sup>; **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.
109. 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.<sup>S</sup>; Rubitschun, C. L.<sup>S</sup>; **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.
110. 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.

111. Budisulistiorini, S. H.<sup>S</sup>; Canagaratna, M. R.; Croteau, P. L.; Marth, W. J.<sup>S</sup>; 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.
112. Zhang, H.<sup>S</sup>; Parikh, H. M.; Bapat, J.; Lin, Y.-H.<sup>S</sup>; **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.
113. Lund, A. K.; Doyle-Eisele, M.; Lin, Y.-H.<sup>S</sup>; Arashiro, M.<sup>S</sup>; **Surratt, J. D.**; Holmes, T.; Schilling, K. A.; Seinfeld, J. H.; Rohr, A. C.; Knipping, E. M.; McDonald, J. D. (2013) The Effects of  $\alpha$ -Pinene Versus Toluene-Derived Secondary Organic Aerosol Exposure on the Expression of Markers Associated with Vascular Disease. *Inhalation Toxicology*, 25 (6), 309–324.
114. 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.
115. 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.<sup>S</sup>; **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.
116. Lin, Y.-H.<sup>S</sup>; Knipping, E. M.; Edgerton, E. S.; Shaw, S. L.; **Surratt, J. D.\*** (2013) Investigating the Influences of SO<sub>2</sub> and NH<sub>3</sub> Levels on Isoprene-Derived Secondary Organic Aerosol Formation Using Conditional Sampling Approaches. *Atmospheric Chemistry & Physics*, 13 (16), 8457–8470.
117. 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.
118. 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.<sup>S</sup>; **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.



119. Zhang, H.<sup>S</sup>; Worton, D. R.; Lewandowski, M.; Ortega, J.; Rubitschun, C. L.<sup>S</sup>; 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.
120. Zhang, Z.; Lin, Y.-H.<sup>S</sup>; Zhang, H.<sup>S</sup>; **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.
121. 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.
122. Zhang, H.<sup>S</sup>; Lin, Y.-H.<sup>S</sup>; 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<sub>x</sub> Level, Relative Humidity, and Aerosol Acidity. *Environmental Chemistry*, 9 (3), 247–262.
123. Lin, Y.-H.<sup>S</sup>; Zhang, Z.; Docherty, K. S.; Zhang, H.<sup>S</sup>; Budisulistiorini, S. H.<sup>S</sup>; Rubitschun, C. L.<sup>S</sup>; 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.
124. Zhang, X.; Lin, Y.-H.<sup>S</sup>; **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.
125. Zhang, H.<sup>S</sup>; **Surratt, J. D.\***; Lin, Y.-H.<sup>S</sup>; 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.
126. 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.
127. 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.
128. 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.
129. 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  $\alpha$ -Pinene,  $\beta$ -Pinene, d-Limonene, and  $\Delta^3$ -Carene. *Journal of Mass Spectrometry*, 46 (4), 425–442.
130. 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  $\beta$ -caryophyllene. *Atmospheric Chemistry & Physics*, 11(4), 1735–1751.
131. 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  $\text{NO}_x$  Concentrations in Secondary Organic Aerosol Formation. *Atmospheric Chemistry & Physics*, 10 (15), 7169–7188.
132. 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.
133. 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.
134. **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.
135. 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.

136. 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.
137. 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.
138. 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.
139. 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  $\alpha$ -Pinene: Implications for New Particle Formation and Growth Above Forests. *Environmental Science & Technology*, 43 (18), 6976–6982.
140. 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.
141. 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.
142. 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.
143. Chan, A. W. H.; Kautzman, K. E.; Chhabra, P. S.; **Surratt, J. D.**; Chan, M. N.; Crouse, J. D.; Kürten, A.; Wennberg, P. O.; Flagan, R. C.; Seinfeld, J. H. (2009) Secondary Organic Aerosol Formation from Photooxidation of Naphthalene and Alkyl naphthalenes: Implications for Oxidation of Intermediate Volatility Organic Compounds (IVOCs). *Atmospheric Chemistry & Physics*, 9 (9), 3049–3060.
144. **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.

145. 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  $\alpha$ -Pinene/Toluene/ $\text{NO}_x$  Mixtures and the Effect of Isoprene and Sulfur Dioxide. *Journal of Geophysical Research - Atmospheres*, 113 (D9), doi:10.1029/2007JD009426.
146. Ng, N. L.; Kwan, A. J.; **Surratt, J. D.**; Chan, A. W. H.; Chhabra, P. S.; Sorooshian, A.; Pye, H. O. T.; Crouse, J. D.; Wennberg, P. O.; Flagan, R. C.; Seinfeld, J. H. (2008) Secondary Organic Aerosol (SOA) Formation from Reaction of Isoprene with Nitrate Radicals ( $\text{NO}_3$ ). *Atmospheric Chemistry & Physics*, 8 (14), 4117–4140.
147. 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.
148. 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.
149. 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  $\text{NO}_x$  Level on Secondary Organic Aerosol (SOA) Formation from the Photooxidation of Terpenes. *Atmospheric Chemistry & Physics*, 7 (19), 5159–5174.
150. **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.
151. 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.
152. 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.
153. 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.
154. **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.
  155. **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.
  156. 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.
  157. 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  $\alpha$ -Pinene. *Journal of Physical Chemistry A*, 108 (46), 10147–10164.
  158. 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.
  159. 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 (13 Total)**

1. Lei, Z.; Chen, Y.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Cooke, M. E.; Ledsy, I. R.; Armstrong, N. C.<sup>S</sup>; Olson, N. E.; Zhang, Z.; Gold, A.; **Surratt, J. D.\***; Ault, A. P.\* (2022) Initial pH Governs Secondary Organic Aerosol Viscosity and Morphology after Uptake of Isoprene Epoxydiols (IEPOX). *Environmental Science and Technology*, under review (29 pages).
2. Armstrong, N. C.<sup>S</sup>; Chen, Y.<sup>S</sup>; Cui, T.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Zhang, Z.; Turpin, B. J.; Chan, M. N.; Gold, A.; Ault, A. P.\*; **Surratt, J. D.\*** (2022) Isoprene Epoxydiol-Derived Sulfate and Non-Sulfated Oligomers Suppress Particulate Mass Loss During Oxidative Aging of Secondary Organic Aerosol, *Environmental Science and Technology*, under review (25 pages).
3. Karlsson, E. E.; Hu, J.-H.; Davern, M. J.<sup>S</sup>; Cong, Y.; Jin, Y.<sup>S</sup>; **Surratt, J. D.**; Zhukhovitskiy, A. V. (2022) Development of Bio-Derived Alternatives to N95 Facemasks in A Remote Course-Based Undergraduate Research Experience, *Journal of Chemical Education*, under review (12 pages).
4. Khan, F.<sup>S</sup>; Chen, Y.<sup>S</sup>; Hartwell, H. J.; Yan, J.<sup>S</sup>; Lin, Y.-H.; Freedman, A.; Zhang, Z.; Zhang, Y.; Lambe, A. T.; Gold, A.; Ault, A. P.; Szmigielski, R.; Fry, R. C.; **Surratt, J. D.\*** (2022) Heterogeneous Oxidation Products of Fine Particulate Isoprene

- Epoxydiol-Derived Methyltetrol Sulfates Increase Oxidative Stress and Inflammatory Gene Responses in Human Lung Cells. *Environmental Science and Technology*, under review (27 pages).
5. Cooke, M. E.; Lei, Z.; Chen, Y.<sup>S</sup>; Armstrong, N. C.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Buchenau, N. A.<sup>S</sup>; Ledsky, I. R.; Szalkowski, T.; Lee, J. Y.; Zhang, Z.; Vizuete, W.; Gold, A.; **Surratt, J. D.\***; Ault, A. P.\* (2022) Organosulfate Formation in Proxies of Aged Sea Spray Aerosol: Reactive Uptake of Isoprene Epoxydiols to Acidic Sodium Sulfate, *ACS Earth and Space Chemistry*, under review (21 pages).
  6. Yan, J.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Chen, Y.<sup>S</sup>; Armstrong, N. C.<sup>S</sup>; Buchenau, N. A.<sup>S</sup>; Lei, Z.; Zhang, Z.; Lambe, A. T.; Chan, M. N.; Turpin, B. J.; Gold, A.; Ault, A. P.\*; **Surratt, J. D.\*** (2022) Kinetics and Product of Heterogeneous Hydroxyl Radical Oxidation of Isoprene Epoxydiol-Derived Secondary Organic Aerosol, *Environment Science and Technology Letters*, to be submitted (28 pages)
  7. Zhou, J.<sup>P</sup>; Baumann, K.; **Surratt, J. D.\***; Turpin, B. J.\* (2022) Legacy and Emerging Per- and Polyfluoroalkyl Substances (PFASs) in Airborne Fine Particles Collected in Close Proximity to a Fluoropolymer Manufacturing Facility, *Environmental Science and Technology*, to be submitted (32 pages).
  8. Zhang, Y.<sup>P</sup>; Petters, S. S.<sup>P</sup>; Yan, J.<sup>S</sup>; Bucheanu, N. A.<sup>S</sup>; Nichols, C. N.<sup>S</sup>; McCombs, M.; Fennell, T.; Mishina, E. V.; Peters, K. O.; Thornburg, J.\*; **Surratt, J. D.\*** (2021) Real-Time Aerosol Mass Spectral Characterization of E-Cigarette Aerosols and its Surrogates as a Function of E-Liquid Composition and Heating Power. *Frontiers in Chemistry*, to be submitted (21 pages).
  9. Harrill, A. J.<sup>S</sup>; Chen, Y.<sup>S</sup>; Zhang, Z.; Gold, A.; Chan, M. N.; Ault, A. P.; Turpin, B. J.; **Surratt, J. D.\*** (2022) Measurement Report: Aqueous-Phase Processing of 2-Methyltetrol Sulfates by Hydroxyl Radical Oxidation in Fog and Cloud Water Mimics - Implications for the Fate of Isoprene-Derived Secondary Organic Aerosol, *Atmospheric Chemistry and Physics*, to be submitted (31 pages).
  10. Rattanavaraha, W.<sup>S</sup>; Canagaratna, M. R.; Budisulistiorini, S. H.<sup>P</sup>; Croteau, P. L.; Baumann, K.; Edgerton, E. S.; Zhang, Z.; Jayne, J. T.; Worsnop, D. R.; Gold, A.; Shaw, S. L.; **Surratt, J. D.\*** (2022) 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).
  11. Szalkowski, T.<sup>U</sup>; Cui, T.<sup>S</sup>; Baumann, K.; Schmedding, R.; Zhang, Z.; **Surratt, J. D.**; Seymore, J.; Vizuete, W. (2022) Chemical Characterization of Isoprene- and Monoterpene-Derived SOA Tracers in Marine Aerosols from the Galapagos Islands. *ACS Earth and Space Chemistry*, to be submitted (24 pages).
  12. Tomaz, S.<sup>P</sup>; Petters, S. S.<sup>P</sup>; **Surratt, J. D.\***; Turpin, B. J.\* (2022) Furan-like Molecules Emitted by Biomass Burns: A Potential Source of Aqueous Secondary Organic Aerosol, *Environmental Science & Technology*, to be submitted (22 pages).
  13. Cui, T.<sup>S</sup>; Tomaz, S.<sup>P</sup>; Tarun-Chenna, S.; Zhenyu, T.; Li, H.; Selimovic, V.; Chen, Y.<sup>S</sup>; Sexton, K. G.; May, A. A.; Cappa, C. D.; Kroll, J. H.; Roberts, J. M.; Warneke, C.; de

Gouw, J.; Yokelson, R. J.; Jathar, S.; Turpin, B. J.\*; **Surratt, J. D.\*** (2022) Chemical Composition of Brown Carbon Aerosol from Primary and Photochemically-Aged Laboratory-Simulated Western U.S. Wildfire Emissions, *ACS Earth and Space Chemistry*, to be submitted (39 pages).

**Invited Oral Presentations (45 Total, \* = presenter)**

1. **Surratt, J. D.\*** (2022) *Heterogeneous Oxidation of Isoprene Epoxydiol-Derived Secondary Organic Aerosol: Products, Kinetics, Role of Oligomers and Potential Implications*. Keynote Speaker in Aerosol Chemistry at the Asian Aerosol Conference (AAC). June 14.
2. **Surratt, J. D.\*** (2022) *Heterogeneous Oxidation of Isoprene Epoxydiol-Derived Secondary Organic Aerosol: Products, Kinetics, Role of Oligomers and Potential Implications*. Molecular Understanding of Atmospheric Aerosols (MUOAA). May 18.
3. **Surratt, J. D.\*** (2021) *Characterizing the Effects of Aerosol Sulfate, Phase State and Aging on Secondary Organic Aerosol Formation from the Multiphase Chemistry of Isoprene Epoxydiols (IEPOX)*. Polish Academy of Sciences, Institute of Physical Chemistry. March 11.
4. **Surratt, J. D.\*** (2020) *Characterizing the Effects of Sulfate, Aerosol Phase State and Aging on Secondary Organic Aerosol Formation from the Multiphase Chemistry of Isoprene Epoxydiols (IEPOX)*. University of California – San Diego, Department of Chemistry. January 7.
5. **Surratt, J. D.\*** (2018) *Extensive Isoprene Epoxydiol (IEPOX) Conversion of Inorganic to Organic Sulfur Alters Aerosol Properties*. American Geophysical Union (AGU). Invited Speaker at Laboratory Studies in Atmospheric Sciences II. Washington, D.C. December 13.
6. **Surratt, J. D.\*** (2018) *Effects of Sulfate and Aerosol Phase State on the Acid-Catalyzed Multiphase Chemistry of Isoprene Epoxydiols Leading to Secondary Organic Aerosol Formation*. US EPA. Research Triangle Park, NC. October 31.
7. **Surratt, J. D.\*** (2018) *Acid-Catalyzed Multiphase Chemistry of Isoprene Epoxydiols*. Telluride Science Research Center (TSRC) Meeting entitled, "Organic Particles in the Atmosphere: Formation, Properties, Processing, and Impact." Telluride, CO USA. July 25.
8. **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.
9. **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.
10. **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.

11. **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. USA. August 22.
12. **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.
13. **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.
14. **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. Berkeley, CA USA. December 7.
15. **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.
16. **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.
17. **Surratt, J. D.\*** (2016) *Aerosol Characterization Tutorial: Organic Aerosols*. Nordic Society for Aerosol Research (NOSA) Symposium. Aarhus University, Aarhus, Denmark. April 3.
18. **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.
19. **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.
20. **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.



21. **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.
22. **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.
23. **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.
24. **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.
25. **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. February 25.
26. **Surratt, J. D.\*** (2014) *Secondary Organic Aerosol from the Heterogeneous Chemistry of Isoprene-Derived Epoxides*. 13<sup>th</sup> International Global Atmospheric Chemistry (IGAC) Science Conference: Changing Chemistry in a Changing World. Invited Speaker for Atmospheric Chemistry Fundamentals Session. Natal, Brazil. September 23.
27. **Surratt, J. D.\*** (2014) *Secondary Organic Aerosol Production from Heterogeneous Chemistry of Isoprene-Derived Epoxides: Implications for Air Quality, Climate and Public Health*. Department of Chemical Engineering, Columbia University. New York, NY USA. September 8.
28. **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.
29. **Surratt, J. D.\*** (2014) *SOA Formation from Isoprene-Derived Epoxides: Smog Chamber, Flow Tube, and Field Studies*. Telluride Science Research Center (TSRC) Meeting entitled, "Organic Particles in the Atmosphere: Formation, Properties, Processing, and Impact." Telluride, CO USA. August 1.
30. **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.
31. **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.
32. **Surratt, J. D.\*** (2013) *Secondary Organic Aerosol Formation from Photochemical Oxidation of Isoprene: Role of Epoxides*. Department of Chemistry, University of North Carolina at Wilmington (UNCW). Wilmington, NC USA. April 26.
  33. **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.
  34. **Surratt, J. D.\*** (2012) *Secondary Organic Aerosol Formation from Isoprene Oxidation: Role of Epoxides*. Atmospheric Chemical Mechanisms (ACM) Meeting. University of California, Davis. Davis, CA USA. December 10.
  35. **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.
  36. **Surratt, J. D.\*** (2012) *Secondary Organic Aerosol Formation from Isoprene Oxidation: Role of Epoxides*. Department of Chemistry, Colorado State University. Fort Collins, CO USA. September 26.
  37. **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.
  38. **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.
  39. **Surratt, J. D.\***; Lin, Y.-H.<sup>S</sup>; Zhang, Z.; Docherty, K. S.; Zhang, H.<sup>S</sup>; Budisulistiorini, S. H.<sup>S</sup>; Rubitschun, C. L.<sup>S</sup>; 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.
  40. **Surratt, J. D.\*** (2011) *SOA Formation from the Photooxidation of Isoprene: Effects of NO<sub>x</sub>, Aerosol Acidity, and Relative Humidity*. Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS). Brookhaven National Laboratory. Upton, NY USA. July 23.
  41. **Surratt, J. D.\*** (2011) *Effect of NO<sub>x</sub> and Aerosol Acidity on Biogenic SOA Formation*. Southern Oxidant and Aerosol Study (SOAS) Planning Workshop. Rutgers University. New Brunswick, NJ USA. May 26.

42. **Surratt, J. D.\*** (2011) *Secondary Organic Aerosol (SOA) Formation from the Photooxidation of Isoprene: Effect of NO<sub>x</sub>, Aerosol Acidity, and RH*. Environmental Protection Agency. Research Triangle Park, NC USA. March 30.
43. **Surratt, J. D.\***; Chan, A. W. H.; Kautzman, K. E.; Chhabra, P. S.; Galloway, M. M.; Chan, M. N.; Crouse, 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.
44. **Surratt, J. D.\*** (2009) *Chemical Characterization of Organic Aerosol: Sources and Formation Mechanisms*. University of California, San Diego. San Diego, CA USA. February 9.
45. **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 (41 Total, S = graduate student, U= undergraduate student, P = postdoctoral scholar, \* = speaker)**

1. Ault, A. P.\*; Lei, Z.; Olson, N.; Zhang, Y.<sup>P</sup>; Chen, Y.<sup>S</sup>; Lambe, A.; Zhang, J.; White, N.; Atkin, J.; Holl, M. B.; Zhang, Z.; Gold, A.; **Surratt, J. D.** (2021) *Morphology and Viscosity Changes after Reactive Uptake of Isoprene Epoxydiols in Submicrometer Phase Separated Particles with Secondary Organic Aerosol Formed from Different Volatile Organic Compounds*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
2. Chen, Y.<sup>S\*</sup>; Dombek, T.; Hand, J.; Zhang, Z.; Gold, A.; Ault, A.; Levine, K.; **Surratt, J. D.** (2021) *Seasonal Contribution of Isoprene-Derived Organosulfates to Total Water-Soluble Fine Particulate Organic Sulfur in the United States*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
3. Yan, J.<sup>S\*</sup>; Zhang, Y.<sup>P</sup>; Chen, Y.<sup>S</sup>; Armstrong, N. C.<sup>S</sup>; Zhang, Z.; Gold, A.; Lambe, A.; Turpin, B. J.; Ault, A. P.; **Surratt, J. D.** (2021) *Kinetics and Products of Heterogeneous Hydroxyl Radical Oxidation of Isoprene-Derived SOA*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
4. Lei, Z.\*; Chen, Y.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Cooke, M.; Ledsky, I.; Armstrong, N. C.<sup>S</sup>; Olson, N.; Zhang, Z.; Gold, A.; **Surratt, J. D.**; Ault, A. P. (2021) *Initial pH Governs Secondary Organic Aerosol Viscosity and Morphology after Uptake of Isoprene Epoxydiols (IEPOX)*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
5. Petters, S. S.<sup>P\*</sup>; Cui, T.<sup>S</sup>; Zhang, Z.; Gold, A.; McNeill, V. F.; **Surratt J. D.**; Turpin, B. J. (2021) *Effect of Solution Activity on Regioselectivity of Sulfate Addition in Acid-*

- Catalyzed Aqueous Reactions of IEPOX*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
6. Eichler, C.<sup>S\*</sup>; Chang, N.<sup>S</sup>; Zhou, J.<sup>P</sup>; Morrison, G.; **Surratt, J. D.**; Turpin, B. J. (2021) *Sampling of Per- and Polyfluoroalkyl Substances (PFAS) with Residential Air Filters*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
  7. Webb, M.<sup>S</sup>; Cui, L.<sup>S</sup>; Baumann, K.; **Surratt, J. D.**; Morrison, G.; Atkin, J.; Turpin, B. J. (2021) *Humidity and the Uptake of a Model Organic Peroxide on Naturally Soiled Indoor Window Surfaces*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
  8. Zhou, J.<sup>P</sup>; Baumann, K.; Mead, R.; Skrabal, S.; Kieber, R.; Avery, G.; Shimizu, M.; Sun, M.; Vance, S.; Bodnar, W.; Zhang, Z.; Collins, L.; **Surratt, J. D.**; Turpin, B. J. (2021) *Regional and Nearfield Per- and Polyfluoroalkyl Substances (PFASs) in Ambient Fine Aerosol (PM<sub>2.5</sub>) in North Carolina, USA*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
  9. Fankhauser, A.; Lei, Z.; Daley, K.; Xiao, Y.; Zhang, Z.; Gold, A.; Ault, B.; **Surratt, J. D.**; Ault, A. P. (2021) *Organosulfates are Primarily Deprotonated at Atmospheric Aerosol Acidities: pH-Dependent Protonation State via Raman and Infrared Spectroscopy*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
  10. Zhang, Y.<sup>P\*</sup>; Yan, J.<sup>S</sup>; Chen, Y.<sup>S</sup>; Armstrong, N. C.<sup>S</sup>; Zhang, Z.; Gold, A.; Turpin, B. J.; **Surratt, J. D.** (2021) *Synergistic Multiphase Chemistry of Isoprene Hydroxy Hydroperoxides (ISOPOOH) with Sulfur Dioxide in Acidic Sulfate Aerosols Leading to Secondary Inorganic and Organic Aerosol Formation*. Presented at: 39th Annual Conference of the American Association for Aerosol Research, October 18-22.
  11. Armstrong, N. C.<sup>S\*</sup>; Chen, Y.<sup>S</sup>; Cui, T.<sup>S</sup>; Zhang, Y.<sup>P</sup>; Yan, J.<sup>S</sup>; Zhang, Z.; Turpin, B.; Chan, M.N.; Ault, A.; Gold, A.; **Surratt, J. D.** (2020) *Heterogeneous Hydroxyl Radical Oxidation of Isoprene Epoxydiol (IEPOX)-Derived Secondary Organic Aerosol: Identification of Highly Oxygenated Products by HILIC/ESI-HR-QTOFMS*. Presented at: 38th Annual Conference of the American Association for Aerosol Research, October 5-9.
  12. Zhou, J.<sup>P\*</sup>; Baumann, K.; **Surratt, J. D.**; DeWitt, J. C.; Sun, M.; Mead, R.; Skrabal, S.; Kieber, R. J.; Avery, G. B.; Shimizu, M. S.; Bodnar, W.; Zhang, Z.; Collins, L. B.; Turpin, B. J. (2020) *Per- and Polyfluoroalkyl Substances (PFASs) in Fine Aerosols (PM<sub>2.5</sub>) in North Carolina*. Presented at the American Association for Aerosol Research (AAAR) 38th Annual Conference, October 5-9.
  13. Zhou, J.<sup>P\*</sup>; Baumann, K.; Chang, N.; **Surratt, J. D.**; Bodnar, W.; Zhang, Z.; Morrison, G.C.; Atkin, J.M.; Turpin, B.J. (2020) *Per- and Polyfluoroalkyl Substances (PFASs) in Fine aerosols (PM<sub>2.5</sub>) During Floor Waxing*. Presented at the American Association for Aerosol Research 38th Annual Conference, October 5-9.

14. Zhang, Y.<sup>P\*</sup>; Chen, Y.<sup>S</sup>; Lambe, A. T.; Olson, N. E.; Lei, Z.; Zhang, Z.; Gold, A.; Jayne, J. Y.; Worsnop, D. R.; Onasch, T. B.; Ault, A. P.; Surratt J. D. (2020) *The Interconnection of Aerosol-Phase State and Chemical Composition Impact the Formation and Climate-Altering Properties of Isoprene-Derived Secondary Organic Aerosols*. American Association for Aerosol Research (AAAR) Annual Meeting, Online due to COVID, USA, October 5.
15. Zhang, Y.<sup>P\*</sup>; Petters, S. S.<sup>P</sup>; Yan, J.<sup>S</sup>; Buchenau, N. A.<sup>S</sup>; Armstrong, N. C.<sup>S</sup>; McCombs M.; Fennell, T.; Mishina, E. V.; Peters, K. O.; Thornburg, J.; **Surratt J. D.** (2020) *Changing of Chemical Composition and Potential Exposure Risks of Aerosols from Electronic Nicotine Delivery Systems as a Function of E-Liquid Composition and Heating Power*. American Association for Aerosol Research (AAAR) Annual Meeting, Online due to COVID, USA, October 6.
16. Zhang, Y.<sup>P\*</sup>, Yan, J.<sup>S</sup>, Chen, Y.<sup>S</sup>, Armstrong, N. C.<sup>S</sup>, Zhang, Z.; Gold, A.; Turpin, B. J.; **Surratt J. D.** (2020) *Rapid Formation of Sulfate Aerosols Through Aqueous Aerosol Oxidation by Isoprene Hydroxy Hydroperoxides (ISOPOOH)*. American Association for Aerosol Research (AAAR) Annual Meeting, Online due to COVID, USA, October 7.
17. Zhou, J.<sup>P\*</sup>; Baumann, K.; Chang, N.; **Surratt, J. D.**; Bodnar, W.; Zhang, Z.; Morrison, G. C.; Atkin, J. M.; Turpin, B. J. (2020) *Per- and Polyfluoroalkyl Substances (PFASs) in Fine Particulate Matter (PM<sub>2.5</sub>) During Floor Waxing*. Presented at the International Society of Exposure Science 30th Annual Virtual Meeting, September 20-24.
18. Zhou, J.<sup>P\*</sup>; Baumann, K.; **Surratt, J. D.**; DeWitt, J. C.; Sun, M.; Mead, R.; Skrabal, S.; Kieber, R. J.; Avery, G. B.; Shimizu, M. S.; Bodnar, W.; Zhang, Z.; Collins, L. B.; Turpin, B. J. (2020) *Per- and Polyfluoroalkyl Substances (PFASs) in fine particular matters (PM<sub>2.5</sub>) in North Carolina*. Presented at the International Society of Exposure Science 30th Annual Virtual Meeting, September 20-24.
19. Zhou, J.<sup>P\*</sup>; Baumann, K.; **Surratt, J. D.**; DeWitt, J. C.; Sun, M.; Mead, R.; Skrabal, S.; Kieber, R. J.; Avery, G. B.; Shimizu, M. S.; Bodnar, W.; Zhang, Z.; Collins, L. B.; Turpin, B. J. (2020) *Air Concentrations of Per- and Polyfluoroalkyl Substances (PFASs) in North Carolina*. Presented at the PFAS Stakeholders Advisory Committee Meeting, July 1.
20. Chen, Y.<sup>S\*</sup>; Zhang, Y.<sup>P</sup>; Lambe, A. T.; Xu, R.; Zhang, Z.; Gold, A.; Turpin, B. J.; Ault, A. P.; **Surratt, J. D.** (2019) *Heterogeneous OH Oxidation of Methyltetrol Sulfates Leads to Formation of Multifunctional Organosulfates Previously Measured in Ambient Fine Aerosols*. American Geophysical Union (AGU) Annual Meeting. San Francisco, CA USA. December 13.
21. Cui, T.<sup>S\*</sup>; Selleck, P.; Lin, Y.-H.<sup>P</sup>; 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.

22. Budisulistiorini, S. H.<sup>P</sup>; 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.
23. Rattanavaraha, W.<sup>S\*</sup>; Budisulistiorini, S. H.<sup>P</sup>; 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.
24. Riva, M.<sup>P\*</sup>; Cui, T.<sup>S</sup>; 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.
25. Riedel, T. P.<sup>P</sup>; Chu, K.<sup>S</sup>; Cui, T.<sup>S</sup>; Lin, Y.-H.<sup>P</sup>; Budisulistiorini, S. H.<sup>P</sup>; 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.
26. Lin, Y.-H.<sup>P</sup>; Kramer, A.<sup>U</sup>; Arashiro, M.<sup>S</sup>; Rattanavaraha, W.<sup>S</sup>; 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.
27. Budisulistiorini, S. H.<sup>S\*</sup>; Li, X.<sup>S</sup>; 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.
28. Riedel, T. P.<sup>P\*</sup>; Gaston, C.; Budisulistiorini, S. H.<sup>S</sup>; Lin, Y.-H.<sup>P,S</sup>; 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.
29. Riva, M.<sup>P\*</sup>; Yee, L.; Budisulistiorini, S. H.<sup>S</sup>; Edgerton, E.; Goldstein, A. H.; Zhang, Z.; Gold, A.; **Surratt, J. D.** (2014) *Chemical Characterization of Isoprene- and Monoterpene-Derived SOA Tracers in PM<sub>2.5</sub> Collected from Centerville, AL, during SOAS 2013*. American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 22.

30. Lin, Y.-H. <sup>P\*</sup>; Arashiro, M.<sup>S</sup>; 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.
31. Budisulistiorini, S. H.<sup>S</sup>; 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.
32. Arashiro, M.<sup>S\*</sup>; Lin, Y.-H. <sup>P</sup>; 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.
33. Budisulistiorini, S. H.<sup>S\*</sup>; Li, X.<sup>S</sup>; Rattanavaraha, W.<sup>S</sup>; 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.
34. Budisulistiorini, S. H.<sup>S\*</sup>; Li, X.<sup>S</sup>; 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.
35. Budisulistiorini, S. H.<sup>S\*</sup>; 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.
36. Budisulistiorini, S. H.<sup>S\*</sup>; Canagaratna, M. R.; Croteau, P. L.; Marth, W. J.<sup>S</sup>; 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.

37. Lin, Y.-H.<sup>S\*</sup>; Knipping, E. M.; Edgerton, E. S.; Shaw, S. L.; **Surratt, J. D.** (2012) *Influences of SO<sub>2</sub> and NH<sub>3</sub> 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.
38. Zhang, H.<sup>S\*</sup>; **Surratt, J. D.**; Lin, Y.-H.<sup>S</sup>; 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.
39. **Surratt, J. D.\***; Lin, Y.-H.<sup>S</sup>; Rubitschun, C. L.<sup>S</sup>; 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<sub>2.5</sub> Collected During the CalNex 2010 Campaign.* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 7.
40. Zhang, X.\*; Lin, Y.-H.<sup>S</sup>; **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.
41. **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.<sup>S\*</sup>; 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.<sup>P\*</sup>; Budisulistiorini, S. H.<sup>P</sup>; 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.<sup>S\*</sup>; Chu, K.<sup>S</sup>; Budisulistiorini, S. H.<sup>P</sup>; Riva, M.<sup>P</sup>; Lin, Y.-H.<sup>P</sup>; Riedel, T. P.<sup>P</sup>; 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<sub>2.5</sub> Collected at Birmingham, 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.<sup>P\*</sup>; Budisulistiorini, S. H.<sup>S\*</sup>; 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.<sup>S\*</sup>; Budisulistiorini, S. H.<sup>S</sup>; 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.<sup>P\*</sup>; Yee, L. D.; Budisulistiorini, S. H.<sup>S</sup>; Edgerton, E. S.; Knipping, E. M.; Goldstein, A. H.; **Surratt, J. D.** (2014) *Chemical Characterization of Isoprene- and Monoterpene-Derived SOA Tracers in PM<sub>2.5</sub> Collected from Centerville, AL, During SOAS 2013.* Southeast Atmosphere Study (SAS) Data Meeting. Boulder, CO USA. March 31.
  7. Li, X.<sup>S\*</sup>; Budisulistiorini, S. H.<sup>S</sup>; Rattanavaraha, W.<sup>S</sup>; 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<sub>2.5</sub> Collected at the Look Rock Site During SOAS.* Southeast Atmosphere Study (SAS) Data Meeting. Boulder, CO USA. March 31.
  8. Zhang, H.<sup>S\*</sup>; Parikh, H. M.; Bapat, J.; Lin, Y.-H.<sup>S</sup>; **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.<sup>S\*</sup>; Worton, D. R.; Lewandowski, M.; Ortega, J.; Rubitschun, C. L.<sup>S</sup>; 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.<sup>S\*</sup>; **Surratt, J. D.**; Knipping, E. M.; Edgerton, E. S.; Shaw, S. L. (2011) *Chemical Characterization of PM<sub>2.5</sub> Collected with Conditional Sampling Strategies from the Southeastern United States: Influences of SO<sub>2</sub> and NH<sub>3</sub> on Ambient Biogenic SOA Formation.* American Association for Aerosol Research (AAAR) Annual Meeting. Orlando, FL USA. October 4.
  11. Lin, Y.-H.<sup>S\*</sup>; Zhang, Z.; Docherty, K. S.; Zhang, H.<sup>S</sup>; Budisulistiorini, S. H.<sup>S</sup>; Rubitschun, C. L.<sup>S</sup>; 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.<sup>S\*</sup>; 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 PM<sub>2.5</sub> Collected from the CalNex-Pasadena Ground Site*. CalNex Data Analysis Workshop. Cal EPA Building. Sacramento, CA USA. May 18.
13. Rubitschun, C. L.<sup>S\*</sup>; Offenberg, J. H.; Kleindienst, T. E.; **Surratt, J. D.** (2011) *Isoprene- and Monoterpene-Derived Organosulfates in PM<sub>2.5</sub> 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<sub>2</sub>, 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	Aerosol Physics &	4	Instructor	3

	416	Chemistry			
	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
Spring 2018	ENVR 403	Environmental Chemistry	3	Instructor	13
Fall 2018	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	5
Fall 2018	ENVR 500	Environmental Processes, Exposure and Risk Assessment	3	Co- Instructor	12
Spring 2019	ENVR 403	Environmental Chemistry	3	Instructor	13
Fall 2019	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	11
Fall 2019	ENVR 500	Environmental Processes, Exposure and Risk Assessment	3	Co- Instructor	15
Spring 2020	ENVR 403	Environmental Chemistry	3	Instructor	21
Fall 2020	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	11
Fall 2020	ENVR 500	Environmental Processes, Exposure & Risk Assessment	3	Co- Instructor	19

Spring 2021	ENVR 403	Environmental Chemistry	3	Instructor	22
Fall 2021	ENVR 416	Aerosol Physics & Chemistry	4	Instructor	6
Fall 2021	ENVR 500	Environmental Processes, Exposure & Risk Assessment	3	Co- Instructor	25
Spring 2022	ENVR 403	Environmental Chemistry	3	Instructor	27

## ADVISING RECORD

### *Current Graduate Student Supervision – Primary Advisor (5 Ph.D.)*

1. Gabrielle West (Ph.D., UNC Chemistry), began Fall 2021.
2. Cade Christensen (Ph.D., UNC Chemistry), began Fall 2021.
3. Michael Davern (Ph.D., UNC Chemistry), began Fall 2021.
4. Nicolas Buchenau (Ph.D., UNC ESE), began Summer 2020.
5. Caz Nichols (Ph.D., UNC ESE), began Summer 2020.
6. Jin Yan (Ph.D., UNC ESE), began Summer 2019.

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

1. Marc Webb (Ph.D., UNC ESE), began Fall 2016, co-advised with Prof. Barbara Turpin (UNC)

### *Current Postdoctoral Scholar Supervision – Primary Advisor (0 Total)*

None currently.

### *Current Postdoctoral Scholar Supervision – Co-Advisor (1 Total)*

1. Jiaqi Zhou (Postdoctoral Scholar, UNC ESE), began Fall 2018.

### *Research Advisor to Visiting Scholars (5 total)*

1. Faria Khan (Ph.D., Polish Academy of Sciences, Chemistry), December 2019 – November 2020.
2. Erickson Oliveira dos Santos (Ph.D., Universidade Federal do Amazonas, Chemistry), June 2017 – June 2018.
3. Thais Da Silva Barbosa (Ph.D., Universidade Federal Rural do Rio de Janeiro, Chemistry), May 2015 – April 2016.
4. Sophie Tomaz (Ph.D., University of Bordeaux, Chemistry) – September 2014 – November 2014.
5. Kasper Kristensen (Ph.D., Aarhus University, Chemistry) – July 2012 – December 2012.

**Completed Graduate and Undergraduate Student Supervision – Primary Advisor (26)  
(8 Ph.D., 8 M.S., 3 M.S.P.H., 1 M.S.E.E., 5 B.S.P.H. Honors Thesis, 1 B.S. Honors Thesis)**

1. Aashna Shukla (B.S.P.H., Honors Thesis, UNC ESE), *“Aerosol Formation Potential Assess from the Atmospheric Hydroxyl Radical Oxidation of 6:2 Fluorotelomer Alcohol (FTOH),”* May 2022.
2. Faria Khan (Ph.D., Polish Academy of Sciences – Chemistry), *“Chemical Profiling and Toxicological Assessment of Atmospheric Aerosol Using Human Lung Cells,”* January 2022.
3. Yuzhi Chen (Ph.D., UNC ESE), *“Characterizing the Effects of Aerosol Sulfate, Phase State, and Aging on Secondary Organic Aerosol Formation from Isoprene Epoxydiols,”* December 2020.
4. Ashley Harrill (M.S., UNC ESE), *“Aqueous-Phase Processing of 2-Methyltetrol Sulfates by Hydroxyl Radical Oxidation in Fog and Cloud Water Mimics: Implications for Isoprene-Derived Secondary Organic Aerosol,”* August 2020.
5. Caz Nichols (M.S., UNC ESE), *“Highly Oxidized Compounds from Heterogeneous Oxidation of Isoprene Epoxydiol (IEPOX)-Derived Secondary Organic Aerosol (SOA) Identified using Hydrophilic Interaction Liquid Chromatography Interfaced to Electrospray Ionization High-Resolution Quadrupole Time-of-Flight Mass Spectrometry,”* May 2020.
6. Tianqu Cui (Ph.D., UNC ESE), *“Chemical Characterization of Source-Specific Atmospheric Organic Aerosol via Mass Spectrometry,”* May 2019.
7. Grace Nipp (B.S.P.H., Honors Thesis, UNC ESE), *“Developing a Versatile Exposure System for the Analysis of the Effects of Electronic Cigarettes,”* April 2019.
8. Caitlin Rose (M.S., UNC ESE), *“The Effect of Isomeric Isoprene Epoxydiol Structure on the Sulfur Mass Balance of Fine Particulate Matter,”* January 2019.
9. Zhexi Zeng (M.S., UNC ESE), *“Development of a Hydrophilic Interaction Liquid Chromatography (HILIC) Method for the Chemical Characterization of Water-Soluble Isoprene Epoxydiol (IEPOX)-Derived Secondary Organic Aerosol,”* May 2018.
10. 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.
11. Michael M. Williams (M.S., UNC ESE), *“Chemical Characterization and Reactive Oxidant Potential of Indonesian Biomass Burning Emissions,”* April 2017.
12. 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.
13. Maiko Arashiro (Ph.D., UNC ESE), *“Understanding the Biological Effects of Isoprene-Derived Secondary Organic Aerosol,”* January 2017.

14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. Tianqu Cui (M.S., UNC ESE), *“Secondary Organic Aerosol Formation from  $\alpha$ -Pinene and Toluene: Laboratory Studies Examining the Role of Pre-existing Particles, Relative Humidity and Oxidant Type,”* December 2013.
22. Roger Jerry (M.S.P.H., UNC ESE), *“Model Intercomparison Study of Methacrolein and Methyl Vinyl Ketone from Isoprene Photooxidation,”* December 2013.
23. Ying-Hsuan Lin (Ph.D., UNC ESE), *“Chemical Characterization of Secondary Organic Aerosol Constituents and Critical Intermediates from Isoprene Photooxidation,”* May 2013.
24. 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.
25. Haofer Zhang (Ph.D., UNC ESE), *“Characterization and Simulation of Isoprene Photooxidation from Smog Chamber Studies,”* May 2012.
26. 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 (7)**

1. Yue Zhang (Postdoctoral Scholar, UNC ESE), August 2016 – December 2020. Now at Texas A&M University as an Assistant Professor.
2. Dr. Sarah Petters (Postdoctoral Scholar, UNC ESE), May 2019 – June 2020.

3. Dr. Sophie Tomaz (Postdoctoral Scholar, UNC ESE), August 2016 – September 2018. Now a Research Scientist at CNRS-Lyon in France studying atmospheric chemistry.
4. 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.
5. Dr. Matthieu Riva (Postdoctoral Scholar, UNC ESE), February 2014 – January 2016. Now a permanent Research Scientist at CNRS-Lyon in France studying atmospheric chemistry.
6. 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.
7. 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.

***Current Graduate Student Supervision – Committee Member (11 Total)***

1. Guillermo Colon (Ph.D., UNC Chemistry), began Fall 2021
2. Rebecca Rice (Ph.D., UNC ESE), began Fall 2020
3. Molly Frauenheim (Ph.D., UNC ESE), began Fall 2020
4. Clara Eichler (Ph.D., UNC ESE), began Spring 2020
5. Naomi Chang (Ph.D., UNC ESE), began Fall 2019
6. Syed Masood (Ph.D., UNC Toxicology), began Fall 2019
7. Sara Farrell (M.S., UNC ESE), began Fall 2019
8. Cameron Worthington (Ph.D., UNC Chemistry), began Fall 2019, passed prospectus October 2020.
9. Haley Plaas (Ph.D., UNC ESE), began Fall 2019, passed written exam Spring 2021.
10. Christopher Bowers (Ph.D., UNC ESE), began 2018, passed oral exam Spring 2020.
11. Nathaniel Park (Ph.D., Chemistry), began Fall 2018, passed prospectus April 2019.

***Completed Graduate Student Supervision – Committee Member (27 Total)***

1. Ziyang Lei (Ph.D., University of Michigan), "Single Particle Physical and Chemical Characterization of Atmospheric Aerosol Particles," July 2021.
2. Tessa Szalkowski (M.S., UNC ESE), "Chemical Characterization of Isoprene- and Monoterpene-Derived SOA Tracers in Marine Aerosols from the Galápagos Islands," April 2021.

3. Megan Miller (M.S., UNC ESE), *Comparison of PCR Methodologies for the Detection and Quantification of SARS-COV-2 in North Carolina Community Wastewaters,* April 2021.
4. Yael-Natalie H. Escobar (Ph.D., UNC Toxicology), *Propylene Glycol and Glycerol, the Unlikely Culprits: A Study of the Biological Effects of Electronic Cigarette Generated Aerosols on Airway Epithelial Cells,* September 2020.
5. Damon M. Smith (Ph.D., NC A&T University), *Measuring the Optical, Physical, and Chemical Properties of Aging Biomass Burning Aerosols Native to sub-Saharan Africa,* March 2020.
6. Chi-Tsan Wang (Ph.D., UNC ESE), *Emissions from the Cultivation of Cannabis and their Impact on Regional Air Quality,* December 2019.
7. Elizabeth Corteselli (Ph.D., UNC ESE), *Polyunsaturated Fatty Acids as Determinants of Redox Changes and Inflammatory Responses in Human Airway Epithelial Cells Exposed to Ozone,* August 2019.
8. Yuchen Wang (Ph.D., HKUST Chemistry), *Organosulfates in Atmospheric Aerosols: Synthesis, Quantification, Ambient Abundance and Insights into Formation Mechanism,* July 2019.
9. Kara Kocheck (M.S., UNC ESE), *Microbial Source Tracking Following Extreme Flooding in Areas of Dense Swine Production,* May 2019.
10. Ryan Schmedding (M.S., UNC ESE), *The Effect of Secondary Organic Aerosol Phase Separation and Viscosity in a Regional Scale Air Quality Model,* May 2019.
11. Kenneth D. Swanson (Ph.D., UNC Chemistry), *Improvements to Real Time Aerosol Analysis Using Ambient Sampling/Ionization Mass Spectrometry,* July 2018.
12. Mutian Ma (M.S., UNC ESE), *The Predicted Impact of Organic Coatings on Isoprene-Derived Secondary Organic Aerosol Formation,* December 2017.
13. Zhenyu Tian (Ph.D., UNC ESE), *Non-Target Analysis of Bioremediated Soil,* December 2017.
14. Yuqiang Zhang (Ph.D., UNC ESE), *Application of Chemical Transport Models to Study Global and Regional Air Quality and Human Health,* January 2016.
15. 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.
16. Geoffroy Duporte (Ph.D., University of Bordeaux, Chemistry), *Secondary Organic Aerosol Formation: Experimental Study of Organosulfate Formation at the Gas-Particle Interface,* December 2014.
17. 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.



18. Matthew Woody (Ph.D., UNC ESE), *"On Enhancing Air Quality Model Predictions of Particulate Matter from Aircraft Emissions,"* October 2014.
19. Yuzhi Chen (M.S.E.E., UNC ESE), *"Assessment of SAPRC07 with Updated Isoprene Oxidation Chemistry Against Outdoor Chamber Experiments,"* August 2014.
20. 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.
21. Meridith Fry (Ph.D., UNC ESE), *"The Impacts of Short-Lived Ozone Precursors on Climate and Air Quality,"* March 2013.
22. 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.
23. Maiko Arashiro (M.S.E.E., UNC ESE), *"Precision of Measurements with the UNC Passive Aerosol Sampler,"* May 2012.
24. Seth Erbersviller (Ph.D., UNC ESE), *"PM Biological Effect Modification by Gases in Urban Air,"* January 2012.
25. Pamela Birak (Ph.D., ESE), *"Remediation of Multicomponent Dense Nonaqueous Phase Liquids in Porous Media,"* May 2011.
26. 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.
27. Jyoti Bapat (M.S., UNC ESE), *"The Generation of an Experimental Database for Testing Predictive Models for  $\alpha$ -Pinene Gas- and Particle-Phase Reactions in the Atmosphere,"* May 2011.

#### **Graduate Student Supervision - Advisee Honors (12 Total)**

1. Yuzhi Chen (Ph.D., UNC ESE): Gillings School of Global Public Health's *"Bernard G. Greenberg Award for Excellence in Doctoral Research,"* 2022.
2. Caz Nichols (Ph.D., UNC ESE): UNC Roysters Graduate Fellowship, awarded Fall 2020.
3. Maiko Arashiro (Ph.D., UNC ESE): Graduate Education Advancement Board Impact Award, awarded April 2015.
4. 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.
5. Maiko Arashiro (Ph.D., UNC ESE): Student Travel Award to Annual Meeting of the American Association for Aerosol Research (AAAR), awarded October 2014.

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

#### ***Undergraduate Research Students Supervised (15 Total)***

1. Adrienne Lambert (UNC, B.S. Biology and Chemistry) – Summer 2021- Present
2. Aashna Shukla (UNC, B.S.P.H ENVR) – Summer 2021 – May 2022
3. Lena Gerritz (UNC, B.S. Chemistry) – Fall 2019 – May 2021
4. Tessa Szalkowski (UNC, B.S. Chemistry) – Spring 2018 – Spring 2020
5. Grace Nipp (UNC, B.S.P.H. ENVR) – Fall 2017 – Spring 2019
6. Caitlin Rose (UNC, B.S.P.H. ENVR) – Fall 2016 – Spring 2017
7. Hilary Green (UNC, B. S. Chemistry) – Spring 2015 – Spring 2017
8. Tashana Detwiler (UNC, B.A. Chemistry) – NSF IDEA Program, Summer 2014 – Spring 2015
9. Vineet Gopinathan (UNC, B.S.P.H. ENVR) – Summer 2014 – Spring 2016
10. Amanda Kramer (UNC, B.S.P.H. ENVR) – Fall 2013 – Spring 2015
11. Gabby Agostini (UNC, B.S. Chemistry) – Summer 2012 – Fall 2012
12. Kevin Chu (UNC, B.S.P.H. ENVR) – Spring 2012 – Spring 2014
13. Caroline Coulter (UNC, B.S. Chemistry) - Fall 2011 – Spring 2012
14. Sarah Park (UNC) – Fall 2011
15. Dominique Moore (UNC) – NSF SMART Program, Summer 2011

**GRANTS (Total ~ \$27,845,266; To UNC - \$13,721,464)****Current Support (Total - \$18,531,795, To UNC - \$4,407,993)**

U.S. Environmental Protection Agency Surratt (Lead PI) 5/1/2022-4/30/2025  
\$799,833 (total) → \$400,028 to UNC

“Development of High-Resolution Chemical Ionization Mass Spectrometry Methods for Real-Time Measurement of Emerging Airborne Per- and Polyfluoroalkyl Substances (PFASs)”

NC Collaboratory Surratt (Co-Lead PI) 5/1/2022-4/30/2024  
\$750,000 (total and to UNC)

“Chemical Characterization and Variability of Per- and Polyfluoroalkyl Substances (PFAS) in Indoor and Outdoor Air Environments in North Carolina”

National Science Foundation (NSF) Surratt (Co-PI) 11/1/2021-10/31/2024  
Atmospheric Chemistry (AGS) \$12,136,232 (total) → \$302,515 to UNC

“Mid-Scale RI-1 (M1:IP): ASCENT: Atmospheric Science and Chemistry mEasurement of NeTwork”

National Science Foundation (NSF) Surratt (Co-PI) 8/1/2021-7/31/2024  
Atmospheric Chemistry (AGS) \$898,983 (total) → \$195,299 to UNC

“Collaborative Research: Characterizing the Cloud Formation Properties of Secondary Organic Aerosol (SOA) Formed from Aqueous Multiphase Chemical Processes”

National Science Foundation (NSF) Surratt (Co-PI) 7/6/2021-6/30/2024  
Atmospheric Chemistry (AGS) \$869,910 (total) → \$258,328 to UNC

“Excellence in Research: Biomass Burning Aerosol – Molecular Level Characterization of Aging Conditions on Optical and Chemical Properties”

National Science Foundation (NSF) Surratt (Co-Lead PI) 3/1/2021-2/28/2024  
Atmospheric Chemistry (AGS) \$899,401 (total) → \$474,387 to UNC

“Collaborative Research: Organosulfate Multiphase Chemistry and Physicochemical Properties: Oxidation and Sulfate Recycling in Aerosols and Cloud Droplets “

National Science Foundation (NSF) Surratt (Co-PI) 3/1/2021-2/28/2024  
Atmospheric Chemistry (AGS) \$559,933 (total) → \$409,933 to UNC

“Collaborative Research: Reframing Modeling Approaches for Multiphase Chemistry: Isoprene and Beyond”

National Science Foundation (NSF) Surratt (Co-I) 8/1/2020 – 7/31/2022  
Atmospheric Chemistry (AGS) \$199,997 (total)

“RAPID: Airborne CoV-2 Viability and Oxidation”

Alfred P. Sloan Foundation Chemistry of Indoor Environments "Probing the Behavior of Emerging Water-Soluble Organic Compounds in Indoor Air"	Surratt (Co-I)	7/1/2020-6/30/2023 \$500,000 (total)
National Science Foundation (NSF) Atmospheric Chemistry (AGS) "Comparison of Thermal and Non-Thermal Protocols for Analysis of Isoprene Secondary Organic Aerosol (SOA) Generated Under Conditions of Low Nitrogen Oxides (NO <sub>x</sub> )"	Surratt (Co-PI)	2/15/2020-1/31/2023 \$596,470 (total)
Food and Drug Administration (FDA) Subcontract from Research Triangle Institute "Identification and Validation of a Biomarker of Electronic Cigarette Exposure"	Surratt (Co-Lead PI)	11/1/2018-10/31/2022 \$321,036 (to UNC)

**Completed Research Support (Total - \$9,313,471)**

Sloan Foundation Chemistry of Indoor Environments "Investigating the Impacts of Water-Soluble Organic Gases and Surface Chemistry on Air Composition in Damp Homes"	Surratt (Co-PI)	7/1/2017-6/30/2021 \$750,000 (total)
NC Policy Collaboratory N.C. Per- and Polyfluoroalkyl Substance Testing Network	Surratt (Director)	7/1/2018-4/15/2021 \$5,013,000 (total)
National Science Foundation (NSF) Atmospheric Chemistry (AGS) "Collaborative Research: Impact of Aerosol Viscosity, Phase Separation, and Internal Structure on Isoprene-Derived SOA Formation"	Surratt (Co-Lead PI)	7/1/2017-12/31/2020 \$290,000 (total)
National Oceanic & Atmospheric Administration (NOAA) "Characterizing Oxidized North American Fire Emissions and Their Aqueous/Multiphase Transformations through the FIREX Campaign"	Surratt (Co-Lead PI)	7/1/2016-6/30/2020 \$592,448 (total)
National Science Foundation (NSF) Environmental Chemical Sciences (ECS) "Collaborative Research: Quantifying Secondary Organic Aerosol Formation from the Reactive Uptake of Isoprene-derived Epoxides to Submicron Aerosol Particles"	Surratt (Lead PI)	11/15/2014-11/14/2018 \$300,000 (total)
UNC School of Medicine TCORS Pilot Grant Program "Chemical Characterization of Submicron Particulate Matter and Vapors Derived from E-Cigarette Usage"	Surratt (Lead-PI)	9/1/2016-8/31/2017 \$50,040 (total)

University of North Carolina CEHS Pilot Projects Program "Using CRISPR/Cas9 Technology to Establish the Role of NRF2 as a Driver of Isoprene SOA-Induced Genomic Stress Response"	Surratt (Co-PI)	9/1/2016-8/31/2017 \$30,000 (direct)
University of Texas at Austin Air Quality Research Program (AQRP) "Condensed Chemical Mechanisms for Ozone and Particulate Matter Incorporating the Latest in Isoprene Chemistry"	Surratt (Co-PI)	9/1/2016-8/30/2017 \$225,000 (total)
National Oceanic & Atmospheric Administration (NOAA) "Organic Nitrogen in Atmospheric Aerosols: Concentrations, Chemical Composition, and Properties"	Surratt (Lead PI)	8/1/2013-7/31/2017 \$262,500 (total)
U.S. Environmental Protection Agency Early Career Award "Impacts of Anthropogenic Emissions in the Southeastern U.S. on Heterogeneous Chemistry of Isoprene-Derived Epoxides Leading to Secondary Organic Aerosol Formation"	Surratt (Lead PI)	3/1/2013-2/28/2017 \$300,000 (total)
Health Effects Institute (HEI) Walter A. Rosenblith New Investigator Award "Understanding the Health Effects of Isoprene-Derived Particulate Matter Enhanced by Anthropogenic Pollutants"	Surratt (Lead PI)	5/1/2013-10/31/2016 \$450,000 (total)
Electric Power Research Institute (EPRI) Subcontract "Field Deployment of the Aerodyne Aerosol Chemical Speciation Monitor (ACSM) within the SEARCH Network"	Surratt (Lead PI)	10/1/2010-12/31/2016 \$449,979 (total)
Camille & Henry Dreyfus Foundation Postdoctoral Program in Environmental Chemistry "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"	Surratt (Lead PI)	2/1/2014-1/31/2016 \$120,000 (total)
University of Texas at Austin Air Quality Research Program (AQRP) "Update and Evaluation of Model Algorithms Needed to Predict Particulate Matter from Isoprene"	Surratt (Co-PI)	6/1/2014-6/30/2015 \$200,000 (total)

University of Texas – Austin Sub-Contract “Generation of Exposed Lung Cells Tissues to Various Environmental Conditions”	Surratt (Lead PI)	4/1/2013-8/31/2013 \$14,752 (total)
University of North Carolina CEHS Pilot Projects Program “Understanding the Health Effects of Isoprene-Derived Particulate Matter Enhanced by Anthropogenic Pollutants”	Surratt (Lead PI)	4/1/2012-3/31/2013 \$25,000 (total)
Electric Power Research Institute (EPRI) Subcontract “Chemical Characterization of Toluene and $\alpha$ -Pinene: Influence of $\text{NH}_3$ on Aerosol Composition”	Surratt (Lead PI)	1/1/2012-3/31/2012 \$23,516 (total)
URC Grant Small Grant “Analysis of $\text{PM}_{2.5}$ collected from Beijing, China during the 17 <sup>th</sup> Annual Asian Games”	Surratt (Lead PI)	6/1/2011-5/31/2012 \$2,500 (total)
RJ Reynolds Fund Award: JR Faculty Award Grant “Chemical Characterization of $\text{PM}_{2.5}$ Collected from the CalNex 2010 Campaign”	Surratt (Lead PI)	1/1/2011-12/31/2011 \$7,500 (total)
Electric Power Research Institute (EPRI) Subcontract “ $\text{PM}_{2.5}$ Conditional Sampling”	Surratt (Lead PI)	10/1/2010-3/31/2012 \$74,295 (total)
Electric Power Research Institute (EPRI) Subcontract “Field Deployment of a Scanning Mobility Particle Sizer (SMPS) System in the SEARCH Network”	Surratt (Lead PI)	10/1/2010-6/30/2011 \$99,955 (total)
Alion Science & Technology/U.S. EPA Cooperative Agreement “Chemical Characterization of the Organic Fraction in $\text{PM}_{2.5}$ Collected During the CalNex-Los Angeles and CalNex-Bakersfield Campaigns during Summer 2010”	Surratt (Lead PI)	5/10/2010-8/10/2010 \$32,986 (total)

## PROFESSIONAL SERVICE

### International Level

#### *Associate Editor/Editorial Board Member for Scientific Journals*

ACS Earth and Space Chemistry (2017-Present)

PeerJ (2017-Present)

AIMS Environmental Science (2017-Present)

Atmospheric Chemistry & Physics (2016-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***

***Organizer for the Telluride Science Research Center Workshop on "Organic Particles in the Atmosphere: Formation, Properties, Processing, and Impact" - July 2018***

***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 (6 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***

Director of the NC PFAS Testing Network - June 2018 - June 2021

Co-Director of Undergraduate Studies - Fall 2017 - Summer 2021

Undergraduate Core Public Health Curriculum Workgroup - Fall 2017 - Present

Served on curriculum committee for Curriculum for the Environment and Ecology (CEE)

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.