

Journal Articles

- Eisinger D., Craig K., Landsberg K., Mukherjee A., DeWinter J., McCarthy M., and Brown S. (2021) Near-road air quality insights from a U.S. DOT five-year transportation pooled fund study. *TR News*, (332), 20-27, March-April. Available at <http://www.trb.org/Publications/Blurbs/182193.aspx>.
- Mukherjee A., McCarthy M.C., Brown S.G., Huang S., Landsberg K., and Eisinger D.S. (2020) Influence of roadway emissions on near-road PM_{2.5}: monitoring data analysis and implications. *Transportation Research Part D: Transport and Environment*, 86(102442), (STI-7166). Available at <https://www.sciencedirect.com/science/article/pii/S1361920920306295>.
- McCarthy M.C., Mukherjee A.D., Ogletree M., Furst J., Gosselin M.I., Tigges M., Thomas G., and Brown S.G. (2020) Assessment of mobile source air toxics in an Environmental Justice Denver community adjacent to a freeway. *J. Air Waste Manage.*, (STI-7176), February. Available at <https://www.tandfonline.com/doi/abs/10.1080/10962247.2020.1734113>.
- Brown S.G., Snyder J.L., McCarthy M.C., Pavlovic N., D'Andrea S., Hanson J., Sullivan A.P., and Hafner H.R. (2020) Assessment of ambient air toxics and wood smoke pollution among communities in Sacramento County. *International Journal of Environmental Research and Public Health*, 17(3), doi: 10.3390/ijerph17031080 (STI-7183). Available at <https://www.mdpi.com/1660-4601/17/3/1080>.
- Ryder O.S., DeWinter J.L., Brown S.G., Hoffman K., Frey B., and Mirzakhilili A. (2020) Assessment of particulate toxic metals at an Environmental Justice community. *Atmospheric Environment: X*, 6, 100070 (STI-7173), April. Available at <https://doi.org/10.1016/j.aeaoa.2020.100070>.
- Mukherjee A.D., Brown S.G., McCarthy M.C., Pavlovic N.R., Stanton L.G., Snyder J.L., Andrea S.D., and Hafner H.R. (2019) Measuring spatial and temporal PM_{2.5} variations in Sacramento, California, communities using a network of low-cost sensors. *Sensors*, 19(21), 4701, doi: 10.3390/s19214701 (STI-7092). Available at <https://www.mdpi.com/1424-8220/19/21/4701>.
- Brown S.G., Penfold B.M., Mukherjee A., Landsberg K., and Eisinger D. (2019) Conditions leading to elevated PM_{2.5} at near-road monitoring sites: case studies in Denver and Indianapolis. *International Journal of Environmental Research and Public Health*, 16(9), 1634, doi: 10.3390/ijerph16091634 (STI-7047), May 10.
- Brown S., Minor H., O'Brien T., Hameed Y., Feenstra B., Kuebler D., Wetherell W., Day R., Tun R., Landis E., and Rice J. (2019) Review of sunset OC/EC instrument measurements during the EPA's Sunset Carbon Evaluation project. *Atmosphere*, 10(5), doi: 10.3390/atmos10050287 (STI-7048), May 22. Available at <https://www.mdpi.com/2073-4433/10/5/287>.
- Seagram A.F., Brown S.G., Huang S., Landsberg K., and Eisinger D.S. (2019) National assessment of near-road air quality in 2016: multi-year pollutant trends and estimation of near-road PM_{2.5} increment. *Transportation Research Record*, doi: 10.1177/0361198119825538 (STI-6963), January 30. Available at <https://journals.sagepub.com/doi/10.1177/0361198119825538>.
- DeWinter J.L., Brown S.G., Seagram A.F., Landsberg K., and Eisinger D.S. (2018) A national-scale review of air pollutant concentrations measured in the U.S. near-road monitoring network during 2014 and 2015. *Atmos. Environ.*, 183, 94-105, doi: 10.1016/j.atmosenv.2018.04.003 (STI-6777), June.

- Brown S.G., Vaughn D.L., and Roberts P.T. (2017) Particle count and black carbon measurements at schools in Las Vegas, NV, and in the greater Salt Lake City, UT, area. *J. Air Waste Manage.*, 67(11), 1192-1204, doi: 10.1080/10962247.2016.1270236 (STI-6523), November 11.
- Brown S.G., Lee T., Roberts P.T., and Collett J.L., Jr. (2016) Wintertime residential biomass burning in Las Vegas, Nevada; marker components and apportionment methods. *Atmosphere*, 7(58), doi: 10.3390/atmos7040058 (STI-6311), April 19.
- Brown S.G., Eberly S., Paatero P., and Norris G.A. (2015) Methods for estimating uncertainty in PMF solutions: examples with ambient air and water quality data and guidance on reporting PMF results. *Science of the Total Environment*, 518-519, 626-635, doi: 10.1016/j.scitotenv.2015.01.022 (STI-5560), June 15.
- Paatero P., Eberly S.I., Brown S.G., and Norris G.A. (2014) Methods for estimating uncertainty in factor analytic solutions. *Atmospheric Measurement Techniques*, 7, 781-797, doi: 10.5194/amt-7-781-2014. Available at <http://www.atmos-meas-tech.net/7/781/2014/amt-7-781-2014.html>.
- Brown S.G., McCarthy M.C., DeWinter J.L., Vaughn D.L., and Roberts P.T. (2014) Changes in air quality at near-roadway schools after a major freeway expansion in Las Vegas, Nevada. *J. Air Waste Manage.*, 64(9), 1002-1012, doi: 10.1080/10962247.2014.907217 (STI-3889).
- Brown S.G., Lee T., Roberts P.T., and Collett J.L., Jr. (2013) Variations in the OM/OC ratio of urban organic aerosol next to a major roadway. *J. Air Waste Manage.*, 63(12), 1422-1433 (STI-5421), December. Available at <http://www.ncbi.nlm.nih.gov/pubmed/24558705>.
- McCarthy M.C., Aklilu Y.-a., Brown S.G., and Lyder D.A. (2013) Source apportionment of volatile organic compounds measured in Edmonton, Alberta. *Atmos. Environ.*, 81, 504-516 (STI-5652), December. Available at <http://www.sciencedirect.com/science/article/pii/S1352231013007048>.
- Penfold B.M., Hafner H.R., and Brown S.G. (2013) Predicting areas of high diesel particulate matter emissions in Phoenix, Arizona, using spatial analysis techniques. *Journal of Environmental Engineering and Science*, 8(4), 493-504, doi: 10.1680/jees.2013.0050 (STI-3088), November. Available at <http://www.icevirtuallibrary.com/content/article/10.1680/jees.2013.0050;jsessionid=1bh0fwopoonsj.x-telford-live-01>.
- Lurmann F., Brown S., McCarthy M., Eisinger D., and Roberts P. (2013) Processes influencing ambient concentrations near roadways. *Air & Waste Manag. Assoc.'s EM*, 18-23, July.
- McCarthy M.C., Ludwig J.F., Brown S.G., Vaughn D.L., and Roberts P.T. (2013) Filtration effectiveness of HVAC systems at near-roadway schools. *Indoor Air*, doi: 10.1111/ina.12015 (STI-906034-3629), January 25. Available at <http://onlinelibrary.wiley.com/doi/10.1111/ina.12015/abstract>.
- Olson D.A., Vedantham R., Norris G.A., Brown S.G., and Roberts P. (2012) Determining source impacts near roadways using wind regression and organic source markers. *Atmos Environ.*, 47, 261-268 (STI-5423), doi: 10.1016/j.atmosenv.2011.11.003.
- Brown, S.G., Lee, T., Norris, G. A., Roberts, P.T., Collett, J.L. Jr., Paatero, P., and Worsnop, D.R. (2012) Receptor modeling of near-roadway aerosol mass spectrometer data in Las Vegas, Nevada, with EPA PMF. *Atmos. Chem. Phys.* 12, 309-325 (STI-3873), doi:10.5194/acp-12-309-2012.

- Vedantham R., Norris G., Brown S.G., and Roberts P. (2012) Combining continuous near-road monitoring and inverse modeling to isolate the effect of highway expansion on a school in Las Vegas. *Atmospheric Pollution Research*, 3(1), 105-111 (STI-5928).
- Brown S.G., Frankel A., Raffuse S.M., Roberts P.T., Hafner H.R., and Anderson D.J. (2007) Source apportionment of fine particulate matter in Phoenix, AZ, using positive matrix factorization. *J. Air and Waste Manag. Assoc.* 57, 741-752 (STI-2675).
- Buzcu-Guven B., Brown S.G., Frankel A., Hafner H.R., and Roberts P.T. (2007) Analysis and apportionment of organic carbon and fine particulate matter sources at multiple sites in the midwestern United States. *J. Air and Waste Manag. Assoc.* 57, 606-619 (STI-2876).
- Brown S.G., Frankel A., and Hafner H.R. (2007) Source apportionment of VOCs in the Los Angeles area using positive matrix factorization. *Atmos. Environ.* 41, 227-237 (STI-2725).
- Lurmann F.W., Brown S.G., McCarthy M.C., and Roberts P.T. (2006) Processes influencing secondary aerosol formation in the San Joaquin Valley during winter. *J. Air & Waste Manag. Assoc.* 56, 1679-1693 (STI-902331-2661).
- Brown S.G., Roberts P.T., McCarthy M.C., Lurmann F.W., and Hyslop N.P. (2006) Wintertime vertical variations in particulate matter (PM) and precursor concentrations in the San Joaquin Valley during the California Regional Coarse PM/Fine PM Air Quality Study. *J. Air & Waste Manag. Assoc.* 56 (9), 1267-1277 (STI-902326-2659).
- Kim E., Brown S.G., Hafner H.R., and Hopke P.K. (2005) Characterization of non-methane volatile organic compounds sources in Houston during 2001 using positive matrix factorization. *Atmos. Environ.* 39, 5934-5946.
- Brown S., Herckes P., Ashbaugh L., Hannigan M.P., Kreidenweis S.M., and Collett J.L., Jr. (2002) Characterization of organic aerosol in Big Bend National Park, Texas. *Atmos. Environ.* 36 (38), 5807-5818.

Meeting Presentations, Webinars, and Conference Proceedings

- Wang N., Gostic C., McClure C., Scarborough C., and Brown S. (2022) PAMS Dashboard: an R Shiny webapp for PAMS data visualization. Presentation given at the *2022 National Ambient Air Monitoring Conference, Pittsburgh, PA, August 22*, by Sonoma Technology, Petaluma, CA. STI-7705.
- DeWinter J., Pavlovic N., Mukherjee A., Churchman L., Cavallaro A., Brown S., and Lurmann F. (2022) Evaluation of high-spatial-resolution air pollutant concentration and AQI estimates across the U.S. by fusing low-cost and reference monitor observations with chemical transport model forecasts. Presentation given at the *Air Sensors International Conference, May 13, 2022, Pasadena, CA*, by Sonoma Technology, Petaluma, CA. STI-7627.
- Wang N., Cummings M., and Brown S. (2022) Evaluation of on-campus tree planting impact on community air quality using low-cost sensor measurements. Poster presented at the *Air Sensors International Conference, May 11-13, 2022, in Pasadena, CA* by Sonoma Technology, Petaluma, CA. STI-7625.

- Ryder O., Brown S., Lavezzo T., McCoy W., Duvall R., Clements A., Smoak R., Freed R., Batka S., and Young I. (2022) Air Sensors for Education & Community Engagement. Presented at the *Air & Waste Management Association, Air Quality Measurement Methods and Technology Conference, San Diego, CA, March 8-9*, by Sonoma Technology, Petaluma, CA. STI-600600-7681.
- Ryder O.S., McCarthy M.C., Eisinger D.S., and Brown S.G. (2022) Recent trends in near road mobile source air toxics concentrations in the United States. Presentation given at the *10th CRC Mobile Source Air Toxics (MSAT) Workshop, February 8-10*, by Sonoma Technology, Petaluma, CA. STI-9200600-7666.
- DeWinter J., and Brown S. (2021) Data Analysis and Reporting Tool (DART); DART for PAMS data validation. Webinar presented for The Lake Michigan Air Directors Consortium (LADCO), presented on May 18-19, May 25-26, June 1-2, and June 8-9, by Sonoma Technology, Inc., Petaluma, CA. STI-921030-7532.
- Brown S. (2021) Introduction to source apportionment modeling. Webinar presented for The Lake Michigan Air Directors Consortium (LADCO), presented on May 18-19, May 25-26, June 1-2, and June 8-9, by Sonoma Technology, Inc., Petaluma, CA. STI-921030-7532.
- Brown S.G., Ryder O.S., DeWinter J.L., and Hafner H.R. (2020) Apportionment of metals and particulate matter at an environmental justice community in California. Poster presented at the *2020 American Association for Aerosol Research Meeting, Virtual, October 5-9*, Sonoma Technology, Petaluma, CA. STI-7288.
- Pavlovic N., McClure C., Brown S., Lurmann F., McDonald-Buller E., Kimura Y., and Wiedinmyer C. (2020) Performance assessment of fire inventory from the National Center for Atmospheric Research (FINN v2.2) wildfire emissions estimates using satellite aerosol observations. Presentation given at the *3rd International Smoke Symposium, April 21*, by Sonoma Technology, Petaluma, CA. STI-7233.
- McClure C., McCarthy M., and Brown S. (2020) Data validation overview. Training course presented to the Hong Kong Environmental Protection Department, Hong Kong, China, February 27, by Sonoma Technology, Inc., Petaluma, CA. STI-919060-7610.
- Brown S., Eisinger D., Landsberg K., Ryder O., Mukherjee A., DeWinter J., and McCarthy M. (2020) National assessment of measured near-road (NR) air quality work: sponsored by the Near-Road Air Quality Transportation Pooled Fund (TPF). Presentation given at the *U.S. Transportation Research Board 99th Annual Meeting, Washington, D.C., January 16*, by Sonoma Technology, Petaluma, CA. STI-7230.
- Ryder O., McCarthy M., Mukherjee A., Brown S., and Eisinger D. (2020) Near-Road Mobile Source Air Toxics (MSATs): 2016-2018 monitoring data, analysis, and implications. Presented at the *U.S. Transportation Research Board, 99th Annual Meeting, Subcommittee on Regional and Project-Level Air Quality Innovations and Resources, Washington, D.C., January 13*, by Sonoma Technology, Inc., Petaluma, CA. STI-7224.
- Ryder O.S., DeWinter J.L., Brown S.G., Hoffman K., Frey B., and Mirzakhali A. (2019) Assessment of particulate toxic metals at an Environmental Justice community. Poster presented at the *2019 American Geophysical Union Fall Meeting, San Francisco, CA, December 9-13*, by Sonoma Technology, Inc., Petaluma, CA, and the Delaware Department of Natural Resources and Environmental Control, Dover, DE. A21G-2644, STI-7151.
- Stanton L., Brown S., and Lavezzo T. (2019) Leveraging the capabilities of small sensors to support community groups, low- and middle-income countries, and education. Poster presented at the *2019*

American Geophysical Union Fall Meeting, San Francisco, CA, December 9-13, by Sonoma Technology, Inc., Petaluma, CA. STI-7156.

McClure C.D., Pavlovic N., Brown S., Lurmann F., Kimura Y., McDonald-Buller E., and Wiedinmyer C. (2019) Evaluation of the Fire Inventory from the National Center for Atmospheric Research (FINNv2.2) wildfire emissions using satellite observations. Poster presented at the *2019 American Geophysical Union Fall Meeting, San Francisco, CA, December 9-13*, by Sonoma Technology, Inc., Petaluma, CA; the University of Texas at Austin, Austin, TX; and the University of Colorado, Boulder, CO. A23L-2960, STI-7152.

Hafner H., Brown S., and Ryder O. (2019) Air toxics and heavy metals: evaluating air quality at a Maywood, California, elementary school. Presented at the *A&WMA West Coast Section Annual Conference, Diamond Bar, CA, October 17*, by Sonoma Technology, Inc., Petaluma, CA. STI-7180.

Brown S.G., Ryder O.S., DeWinter J.L., Hoffman K., and Frey E. (2019) Assessment of airborne toxic metals at an Environmental Justice community in Wilmington, Delaware. Presented at the *American Association for Aerosol Research Conference, Portland, OR, October 15*, by Sonoma Technology, Inc., Petaluma, CA, and the Delaware Department of Natural Resources and Environmental Control, Dover, DE. STI-7188.

Brown S., Craig K., Eisinger D., Landsberg K., Mukherjee A., Baringer L., Chang S.Y., DeWinter J., McCarthy M., and Huang S. (2019) National assessment of near-road (NR) air quality: requirements, trends, and analysis insights. Presented for the U.S. Transportation Research Board webinar series, September 30, by Sonoma Technology, Inc., and the Washington State Department of Transportation.

McDonald-Buller E., Kimura Y., Wiedinmyer C., Joseph M., Pavlovic N., McClure C., Brown S., and Lurmann F. (2019) Development and evaluation of the FINNv2.2 global model application and fire emissions estimates for the expanded Texas air quality modeling domain. Presented at the Texas Air Quality Research Program Workshop, Austin, TX, August 22, by the University of Texas at Austin, Austin, TX, the University of Colorado Boulder, Boulder, CO, and Sonoma Technology, Inc., Petaluma, CA. AQR Project 18-022, STI-918062-7168.

Brown S., Craig K., Eisinger D., Landsberg K., Mukherjee A., Baringer L., Chang S.Y., DeWinter J., McCarthy M., and Huang S. (2019) National assessment of near-road (NR) air quality: requirements, trends, and analysis insights. Presented to the AASHTO Committee on Environment and Sustainability, 2019 Annual Meeting, Minneapolis, MN, August 7, by Sonoma Technology, Inc., Petaluma, CA, and the Washington State Department of Transportation, Olympia, WA. STI-7154.

Pavlovic N., McClure C., Brown S., Lurmann F., McDonald-Buller E., Kimura Y., and Wiedinmyer C. (2019) Performance assessment of fire inventory from the National Center for Atmospheric Research (FINN v2.2) wildfire emissions estimates using satellite aerosol observations. Presented at the *U.S. EPA International Emissions Inventory Conference, Dallas, Texas, August 2*, by Sonoma Technology, Inc., Petaluma, CA, the University of Texas at Austin, TX, and the University of Colorado at Boulder, CO. STI-7113.

DeWinter J.L., Haderman M.D., Hafner H.R., and Brown S.G. (2019) Mining big data from low-cost air sensors in California. Presentation given at the *Air & Waste Management Association's Air Quality Measurements Conference, Durham, NC, April 2*, by Sonoma Technology Inc., Petaluma, CA. STI-7090.

- Seagram A., Huang S., Brown S., Landsberg K., DeWinter J., and Eisinger D. (2019) National assessment of near-road air quality: trends and estimation of near-road PM_{2.5} increment. Presented at the Transportation Research Board 2019 Annual Meeting, Analysis Subcommittee, Transportation and Air Quality Committee, Washington, DC, January 14, by Sonoma Technology, Inc., Petaluma, CA. STI-7034.
- Pavlovic N., McCarthy M., and Brown S. (2018) Using machine learning to identify anomalies in hourly continuous emissions data from 2010 to 2016. Presented to the U.S. Environmental Protection Agency's Clean Air Markets Division, Emissions Modeling Branch, Washington, DC, December 11, by Sonoma Technology, Inc., Petaluma, CA. STI-915409-7038.
- Craig K., Baringer L., Eisinger D., Brown S., and McCarthy M. (2018) Near-Road Air Quality Transportation Pooled Fund (TPF): TO 2 Indianapolis case study results. Webinar presented to the Arizona, California, Colorado, Ohio, Texas, Virginia, and Washington State Departments of Transportation and the U.S. Federal Highway Administration, November 5, by Sonoma Technology, Inc., Petaluma, CA. STI-914202-7020.
- Pavlovic N.R., Dickerson P.G., White J.E., Appoh E., Terry S., Hagler G., Kaufman A., Chan A., DeWinter J.L., Stanton L., and Brown S.G. (2018) U.S. EPA's AirNow international air sensor applications and initiatives in Accra, Ghana. Presented at the American Geophysical Union, Fall Meeting by Sonoma Technology, Inc., Petaluma, CA.
- Mukherjee A., Brown S.G., McCarthy M.C., Craig K.J., Snyder J.L., D'Andrea S., and Kennard A. (2018) Sensor variations in wintertime PM among communities in Sacramento measured with a combination of traditional and low-cost sensor methods use for real-world applications. Poster presented at the *17th Annual CMAS Conference, October 22-24, Chapel Hill, NC* by Sonoma Technology, Inc., Petaluma, CA. STI-6907.
- Brown S.G., Landis E., Minor H.A., O'Brien T.E., and Rice J. (2018) Long-term assessment of Sunset OC/EC with Chemical Speciation Network measurements applications. Poster presented at the 2018 International Aerosol Conference, St. Louis, MO, September 3, by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Environmental Protection Agency, Research Triangle Park, NC. STI-6870.
- Brown S., Minor H., O'Brien T., Rice J., and Landis B. (2018) Sunset OC/EC instrument evaluation project summary. Presentation given at the *National Ambient Air Monitoring Conference, Portland, OR, August 16*, by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Environmental Protection Agency Office of Air Quality Planning and Standards, Research Triangle Park, NC. STI-6916.
- Pavlovic N., Brown S., O'Brien T., Huang S., Craig K., Zahn P., Penfold B., and Jaffe D. (2018) Wildland fire smoke from long-range transport enhances ozone in the Southeastern U.S. Presentation given at the *National Ambient Air Monitoring Conference, Portland, OR, August 16*, by Sonoma Technology, Inc., Petaluma, CA, and the University of Washington, Bothell, WA. STI-6934.
- Pavlovic N., Hafner H., Brown S., and McCarthy M. (2018) Using the R statistical language for air quality data analysis and visualization. Presentation given at the *National Ambient Air Monitoring Conference, Portland, OR, August 16*, by Sonoma Technology, Inc., Petaluma, CA. STI-6918.
- Hafner H., Lavezzo T., and Chan A. (2018) Kids Making Sense. Presented at the *National Air Quality Conference, Austin, TX, January 25*, by Sonoma Technology, Inc., Petaluma, CA. STI-6767.

- Seagram A., Huang S., Brown S., DeWinter J., Landsberg K., and Eisinger D. (2018) National-scale near-road monitoring findings in 2016. Presented at the *Transportation Research Board 2018 Annual Meeting, Analysis Subcommittee, Transportation and Air Quality Committee, January 9*, by Sonoma Technology, Inc., Petaluma, CA, and the Washington State Department of Transportation, Olympia, WA. STI-6842.
- Craig K., Seagram A., Du Y., Bai S., Eisinger D., Baringer L., Erdakos G., and Brown S. (2017) TPF TO 2 phase III, case study 1 – Providence, RI: work update. Webinar presented to the Transportation Pooled Fund participants, December 11, by Sonoma Technology, Inc., Petaluma, CA. STI-914202-6838.
- Mukherjee A., Brown S.G., McCarthy M.C., Kennard A., Snyder J.L., and D'Andrea S. (2017) Combining traditional and low-cost sensor methods to measure variations in wintertime PM among communities in Sacramento. Presented at the *2017 American Association for Aerosol Research Conference, Raleigh, NC, October 20*, by Sonoma Technology, Inc., Petaluma, CA. STI-6725.
- Seagram A., Brown S., DeWinter J., and Eisinger D. (2017) TPF TO3 Phase III 2016 National Data Assessment: preliminary results. Webinar presented to Transportation Pooled Fund participants, Petaluma, CA, September 15. STI-914203-6791.
- Stanton L., Brown S., Dye T., and MacDonald C. (2017) Sensor use for real-world applications. Poster presented at the *SCAQMD Making Sense of Sensors Conference, Diamond Bar, CA, September 27-28*. STI-6783.
- Mukherjee A.D., Brown S.G., McCarthy M.C., Kennard A., Snyder J.L., and D'Andrea S. (2017) Measuring PM in Sacramento communities with a combination of traditional and low-cost sensor methods. Extended abstract for the *AWMA Air Quality Measurement Methods and Technology, Long Beach, CA, November 7-9*. STI-6753.
- Brown S.G. and Pavlovic N.R. (2017) Next-generation air quality data analysis. Training course given for the Lake Michigan Air Directors Consortium, Chicago, IL, June 21-22. STI-917006-6742.
- Brown S. (2017) Community sensor deployment in Sacramento, CA. Presented to the U.S. Environmental Protection Agency, Research Triangle Park, NC, May 31. STI-6743.
- Brown S., Pavlovic N., and Lavezzo T. (2017) Tool to streamline exceptional event analysis for wildfires. Webinar presented on January 26. STI-6659.
- Brown S., DeWinter J., Graham A., Seagram A., Landsberg K., and Eisinger D. (2017) National-scale near-road air quality data assessment: 2014-2015 findings from the near-road air monitoring program. Presented at the *Transportation Research Board 2017 Annual Meeting, Transportation and Air Quality Committee, January 10*, by Sonoma Technology, Inc., and the Washington State Department of Transportation. STI-6635.
- Graham A. and Brown S. (2016) Exceptional event analysis findings. Webinar presented to the Electric Power Research Institute, December 1, by Sonoma Technology, Inc., Petaluma, CA. STI-916029-6614.
- Brown S., Pavlovic N., Graham A., and Huang S. (2016) Understanding the impacts of wildfires on ozone concentrations. Presented at the *IAWF's 2nd International Smoke Symposium, Long Beach, CA, November 17*, by Sonoma Technology, Inc., Petaluma, CA. STI-6514.

- McCarthy M., O'Brien T., and Brown S. (2016) Advanced topics in R for air quality data analysis. Webinar presented to the Delaware Department of Natural Resources and Environmental Control, New Castle, DE, October 26, by Sonoma Technology, Inc., Petaluma, CA. STI-916030-6624.
- Brown S., Seagram A., Baringer L., and Eisinger D. (2016) TPF TO 2 phase III: Site selection for case studies and model evaluations. Webinar presented to the Transportation Pooled Fund participants, October 24, by Sonoma Technology, Inc., Petaluma, CA. STI-914202-6600.
- Brown S.G., Vaughn D.L., and Roberts P.T. (2016) Ultrafine particle and black carbon measurements at schools in Las Vegas, NV, and near Salt Lake City, UT. Poster presented at the *American Association for Aerosol Research 35th Annual Conference, October 17-21, Portland, OR*. STI-6506.
- Brown S. and Dumas J. (2016) Sacramento toxics from wood smoke study. Presented at the Sacramento Metropolitan Air Quality Management District's Study Participant Information Workshop, Sacramento, CA, September 22, Sonoma Technology, Inc., Petaluma, CA. STI-916004-6581.
- McCarthy M., O'Brien T., and Brown S. (2016) Intro to using R for air quality data processing and analysis. Webinar presented to the Delaware Department of Natural Resources and Environmental Control, New Castle, DE, September 21, by Sonoma Technology, Inc., Petaluma, CA. STI-916030-6623.
- DeWinter J.L., Brown S.G., Graham A.R., Landsberg K., and Eisinger D.S. (2016) National-scale air quality data assessment: initial findings from the near-road NO₂ monitoring program. Poster presented at the *National Ambient Air Monitoring Conference, St. Louis, MO, August 8-11*. STI-6503.
- DeWinter J., Brown S., and Hafner H. (2016) DART for CSN (Data Analysis and Reporting Tool for Chemical Speciation Network Data). Presented at the *National Ambient Air Monitoring Conference, St. Louis, MO, August 8-11*. STI-6563.
- Brown S., Hafner H., and DeWinter J. (2016) DART for PAMS. Presented at the *National Ambient Air Monitoring Conference, St. Louis, MO, August 8*, by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Environmental Protection Agency, Research Triangle Park, NC. STI-6552.
- DeWinter J., Brown S., Hafner H., Landis B., and Cavender K. (2016) DART training for PAMS and CSN. Presented at the *National Ambient Air Monitoring Conference, St. Louis, MO, August 8*, by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Environmental Protection Agency, Research Triangle Park, NC. STI-6561.
- Reid S. and Du Y. (2016) Introduction to travel activity data and DataBridge. Webinar presented to the California Department of Transportation, Sacramento, CA, June 8, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6528.
- Brown S., Pavlovic N., Graham A., McCarthy M., and MacDonald C. (2016) Sacramento ozone wildfire briefing. Presented to the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, May 25. STI-916022-6521.
- DeWinter J., Brown S., and Landis B. (2016) Chemical speciation network data review process in DART. Webinar presented to CSN agencies, March 31, by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Environmental Protection Agency, Research Triangle Park, NC. STI-915208-6485.

- Hafner H.R., Brown S.G., Roberts P.T., DeWinter J.L., and Vaughn D.L. (2016) Ultrafine particle measurements at schools next to freeways in Las Vegas and Salt Lake City. Presented at the *AWMA Measurements Conference, Research Triangle Park, NC, March 16*. STI-6357.
- Brown S. (2016) Detroit near roadway air toxics: data analysis overview. Presented at the Michigan Near-Roadway Stakeholders' meeting, Lansing, MI, March 10, Sonoma Technology, Inc., Petaluma, CA. STI-916002-6467.
- Hafner H., Brown S., Bai S., Du Y., and Reid S. (2016) Introduction to source apportionment modeling and emission inventory development. Presented at the Jiangsu Final Workshop and U.S. Air Pollution Control Technology Exhibition, Nanjing, China, March 4, by Sonoma Technology, Inc., Petaluma, CA. STI-914021-6478.
- Dye T., Brown S., and DeWinter J. (2016) Petaluma community air monitoring experiment. Presented to the U.S. Environmental Protection Agency, February 9, by Sonoma Technology, Inc., Petaluma, CA. STI-815007-6451.
- DeWinter J., Brown S., Graham A., Landsberg K., and Eisinger D. (2016) National-scale near-road air quality data assessment: findings from the near-road NO₂ monitoring program. Presentation given at the *2016 Transportation Research Board Annual Meeting, Washington, DC, January 13*, by Sonoma Technology, Inc., Petaluma, CA. STI-914203-6418.
- Roberts P.T., Brown S.G., Vaughn D.L., and DeWinter J.L. (2015) Mitigating and tracking black carbon exposure at schools near the Mountain View Corridor in Greater Salt Lake City, Utah. Presented at the *AGU Fall Meeting, San Francisco, CA, December 14-18*. STI-6336.
- DeWinter J.L., Brown S.G., Graham A.R., Landsberg K., and Eisinger D.S. (2015) National-scale air quality data assessment: initial findings from the near-road NO₂ monitoring program. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 14-18*. STI-6332.
- Brown S.G., Chinkin L.R., Bai S., Roberts P.T., McCarthy M.C., and Vaughn D.L. (2015) Changes in black carbon outdoors and indoors at near-roadway schools in Las Vegas: 2008 to 2013. Presented at the *34th Annual AAAR Conference, Minneapolis, MN, October 12-16*, by Sonoma Technology, Inc., Petaluma, CA. STI-6256.
- Brown S.G., Vaughn D.L., Ekstrand A.L., Du Y., and Roberts P.T. (2015) Black carbon trends at a landfill on the edge of Los Angeles: local and regional impacts. Poster presented at the *11th International Conference on Carbonaceous Particles in the Atmosphere, August 10-13, Berkeley, CA*. STI-6309.
- Roberts P.T., Vaughn D.L., DeWinter J.L., and Brown S.G. (2015) Black carbon and PM_{2.5} filtration in classroom ventilation systems near Salt Lake City, Utah, and in Las Vegas, Nevada. Poster presented at the *Healthy Buildings 2015 America Conference, Boulder, CO, July 19-22*. STI-6180.
- Bai S., Brown S., DeWinter J., Du Y., Eisinger D., Erdakos G., Graham A., and Reid S. (2015) Transportation Pooled Fund (TPF): overall progress webinar. Presented to Transportation Pooled Fund participants, May 14, by Sonoma Technology, Inc., Petaluma, CA. STI-914201-6273.
- DeWinter J.L., Raffuse S.M., Brown S.G., and Craig K.J. (2015) Reducing the potential for black carbon to impact the Arctic. Presented at the *Transportation for Sustainability: Sustainable Transportation for Climate Change, Washington, DC, May 7*. STI-6260.

- DeWinter J.L. and Brown S.G. (2015) EPA's Data Analysis and Reporting Tool (DART): current and upcoming features. Presented on behalf of the U.S. Environmental Protection Agency Office of Air Quality and Planning and Standards, May, by Sonoma Technology, Inc., Petaluma, CA. STI-915108-6275.
- DeWinter J.L., Raffuse S.M., Craig K.J., Brown S.G., and Roberts P.T. (2015) Global modeling and analysis system for 30-year assessment of long-range transport. Poster presented at the *San Joaquin Valley Air Pollution Control District's Transboundary Ozone Pollution Conference in Yosemite, CA, March 31-April 2*. STI-6225.
- Roberts P.T., DeWinter J.L., Vaughn D.L., Brown S.G., and Ludwig J. (2015) Assessing air pollution outdoors and indoors at schools in Salt Lake City. Presented at the U.S. Environmental Protection Agency Headquarters, Research Triangle Park, NC, March 10, by Steve Brown, Sonoma Technology, Inc., Petaluma, CA. STI-6200.
- Roberts P.T., Vaughn D.L., Brown S.G., and Ludwig J. (2015) Near-road air quality and mitigation in schools: examples from Mountain View Corridor and Las Vegas. Presented to the Department of Atmospheric Sciences, University of Utah, Salt Lake City, UT, February 3. STI-6442.
- Eisinger D., Sexton T., Graham A., Reid S., Brown S., and Bai S. (2015) Near-road air quality transportation pooled fund. Presented at the *Transportation Research Board 94th Annual Meeting, Project-Level Analysis Subcommittee Meeting, Washington, D.C., January 12*, by Sonoma Technology, Inc., Petaluma, CA. STI-6155.
- McCarthy M., Brown S., Bai S., DeWinter J., O'Brien T., Vaughn D., Peltier R., Soltis J., Field R., Murphy S., and Roberts P. (2014) Characterizing air toxics from oil field operations in Los Angeles, CA. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 16*, by Sonoma Technology, Inc., Petaluma, CA. STI-6039.
- Brown S., Xiao P., Graham A., and Balzano L. (2014) Determination of trends in ozone in the Mid-Atlantic using non-negative matrix factorization. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 16*, by Sonoma Technology, Inc., Petaluma, CA. STI-6040.
- Brown S.G., Lee T., Olson D., Roberts P.T., Norris G.A., and Collett J.L., Jr. (2014) Comparison of near-roadway PAH measurements. Presented at the *AAAR 33rd Annual Conference, Orlando, FL, October 23*. STI-5939.
- Duvall R. and Brown S.G. (2014) Introduction to source apportionment modeling. Presented at the *International Society of Exposure Science 24th Annual Meeting, Cincinnati, OH, October 12-14*. STI-6749.
- Brown S.G., Ekstrand A., Zahn P.H., and Hafner H.R. (2014) Wintertime 2013-2014 ozone levels in Uintah Basin. Presented at the Ute Tribal Offices, Fort Duchesne, UT, October 1. STI-910505-6072.
- Brown S. and DeWinter J. (2014) NEWDat tool for PAMS data validation and analysis. Presented at the *National Ambient Air Monitoring Conference, Atlanta, GA, August 11-14*, by Sonoma Technology, Inc., Petaluma, CA. STI-910514-6034.

- Turner J., Brown S., Roberts P., and Rice J. (2014) Characterization of coarse aerosol in St. Louis and Phoenix: results from EPA's 2010-2011 pilot study. *National Ambient Air Monitoring Conference, Atlanta, GA, August 11-14*. STI-6404.
- McCarthy M., Brown S., Bai S., DeWinter J., O'Brien T., Vaughn D., and Roberts P. (2014) Baldwin Hills air quality study. Presented at the *National Ambient Air Monitoring Conference, Atlanta, GA, August 13*, by Sonoma Technology, Inc., Petaluma, CA. STI-6034.
- Russell A., Eisinger D., Brown S., Chazan D., Baldauf R., Thomas J., Bailey C., and Stewart K. (2014) Reducing traffic-related air pollution exposure in smart growth development. Presented at "Developing Healthy and Livable Communities," *2014 Transportation/Land Use Planning/Air Quality (TLUPAQ) Workshop, Charlotte, NC, March 3*, by Sonoma Technology, Inc., Petaluma, CA. STI-5919.
- Brown S., Turner J., Minor H., Roberts P., Rice J., Flanagan J.B., and Nichol J. (2013) Characterization of coarse aerosol in St. Louis and Phoenix: Results from EPA's pilot study. Poster presented at the *AAAR 32nd Annual Conference, Portland, OR, Sept. 30-Oct. 4*, by Sonoma Technology, Inc., Petaluma, CA. STI-5615.
- McCarthy M.C., Brown S.G., Aklilu Y.-a., and Lyder D.A. (2012) Source apportionment of VOCs in Edmonton, Alberta. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 3-7* (STI-5438).
- Turner J., Brown S., Minor H., Roberts P., and Rice J. (2012) The U.S. EPA coarse PM pilot speciation study. Poster presented at the *AAAR 31st Annual Conference, Minneapolis, MN, October 8-12* (STI-910311-5511).
- McCarthy M.C., O'Brien T.E., Brown S.G., and Roberts P.T. (2012) Near-road Las Vegas data analysis updates. Webinar presented to the U.S. Federal Highway Administration by Sonoma Technology, Inc., Petaluma, CA, STI-911062-5381, May 23.
- Roberts P.T., McCarthy M.C., Ludwig J.F., Brown S.G., and Vaughn D.L. (2012) Mitigation of black carbon particles inside school classrooms / Disminucion de las particulas de negro de carbon en aulas escaroles. Poster presented at the *Health Impacts of Border Crossings Conference, San Ysidro, CA, May 4* (STI-5360).
- McCarthy M.C., O'Brien T.E., Brown S.G., and Roberts P.T. (2012) Initial analysis of Las Vegas near-roadway data. Webinar presented to the U.S. Federal Highway Administration by Sonoma Technology, Inc., Petaluma, CA, STI-911062-5347, April 4.
- Brown S.G., Lee T., Olson D.A., Norris G.A., Roberts P.T., and Collett J.L., Jr. (2011) Assessment of residential biomass burning during winter in Las Vegas, Nevada. Presentation given at the *AGU Fall Meeting, San Francisco, CA, December 9*, by Sonoma Technology, Inc., Petaluma, CA; Colorado State University, Fort Collins, CO; and the U.S. Environmental Protection Agency, Research Triangle Park, NC (STI-4180).
- DeWinter J.L., Larkin N.K., Strand T.T., Raffuse S.M., Brown S.G., Craig K.J., and Roberts P.T. (2011) Synoptic scale patterns and variability in long-range transport from the CONUS to the Arctic Circle: informing controlled burn strategy and regulation. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 7* (STI-4184).

- DeWinter J.L., Larkin N.K., Strand T.T., Raffuse S.M., Brown S.G., Craig K.J., and Roberts P.T. (2011) Mitigating the impact of prescribed burning in the continental United States using trends in synoptic scale transport to the Arctic region. Presented at the *Air & Waste Management Association, Greenhouse Gas Strategies in a Changing Climate, San Francisco, CA, November 17*, by Sonoma Technology, Petaluma, CA, and the USDA Forest Service Pacific Northwest Research Station, Seattle, WA (STI-4148).
- Hafner H.R. and Brown S.G. (2011) Data validation workshop. Prepared for Lake Michigan Air Directors Consortium; presented in Rockford, IL, and Toledo, OH, October 25-28 (STI-911051-4242).
- Roberts P.T., Brown S.G., DeWinter J.L., and McCarthy M.C. (2011) Changes in MSATs at near-roadway schools after the expansion of US 95 in Las Vegas, Nevada. Presented for the U.S. Environmental Protection Agency Region 9's Children's Health Month, San Francisco, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-4216, October 13.
- Brown S.G., Turner J.R., Rice J., Flanagan J.B., Nichol J., Pasch A.N., and Roberts P.T. (2011) Initial results from the U.S. EPA coarse PM speciation study in Phoenix, Arizona, and St. Louis, Missouri. Presented at the *30th Annual AAAR Meeting, Orlando, FL, October 6* (STI-4221).
- Brown S.G., Roberts P.T., Lee T., and Collett J. (2011) Progression of carbonaceous aerosol concentrations next to a major freeway in Las Vegas, Nevada. Presented at the *10th International Conference on Carbonaceous Particles in the Atmosphere, Vienna, Austria, June 26-29*, by Sonoma Technology, Inc., Petaluma, CA (STI-4051).
- Nichol J.S., Flanagan J.B., Rice J., Turner J.R., Brown S.G., and Roberts P.T. (2011) Chemical speciation of PM_{10-2.5} pilot monitoring study overview. Presented at the *Air & Waste Management Association 104th Annual Conference, Orlando, FL, June 21-24*, by RTI International, Research Triangle Park, NC; U.S. Environmental Protection Agency, Research Triangle Park, NC; Washington University in St. Louis, St. Louis, MO; and Sonoma Technology, Inc., Petaluma, CA. 2011-A-728-AWMA; STI-6545.
- Reid S.B., Roberts P.T., Eisinger D.S., Vaughn D.L., Pollard E.K., DeWinter J.L., Du Y., Ray A.E., Brown S.G., and Chenausky B.T. (2011) Construction activity, emissions, and air quality impacts: real-world observations from an Arizona road-widening case study. Poster presented at the *21st CRC Real World Emissions Workshop, San Diego, CA, March 20-23*, by Sonoma Technology, Inc., Petaluma, CA (STI-4105).
- DeWinter J.L., Larkin N.K., Strand T.T., Raffuse S.M., Brown S.G., Craig K.J., Roberts P.T., and Draxler R.R. (2010) Climatology of air mass transport to the Arctic from locations of prescribed burning in the United States. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 13-17*, by Sonoma Technology, Inc., Petaluma, CA (STI-3996).
- Roberts P.T., Brown S., DeWinter J., and McCarthy M. (2010) Changes in MSATs at near-roadway schools after the expansion of US 95 in Las Vegas, Nevada. Presented at the *CRC Mobile Source Air Toxics Conference, Sacramento, CA, November 30-December 2* (STI-4045).
- Brown S., Roberts P., DeWinter J., Lee T., and Collett J. (2010) Patterns of wintertime carbonaceous aerosol next to a freeway in Las Vegas, Nevada. Paper presented at the *29th Annual AAAR Conference, Portland, OR, October 25-29*, by Sonoma Technology, Inc., Petaluma, CA, and Colorado State University, Fort Collins, CO (STI-3872).

- DeWinter J.L., Raffuse S.M., Brown S.G., Craig K.J., Roberts P.T., Larkin N.K., and Strand T.T. (2010) Climatology of air mass transport to the Arctic from locations of prescribed burning in the United States. Poster presented at the *29th Annual AAAR Conference, Portland, OR, October 25-29*, by Sonoma Technology, Inc., Petaluma, CA (STI-4001).
- DeWinter J.L., Brown S.G., McCarthy M.C., Vaughn D.L., and Roberts P.T. (2010) Influence of US 95 traffic on outdoor black carbon concentrations at three near-road schools in Las Vegas, NV. Poster presented at the *29th Annual AAAR Conference, Portland, OR, October 25-29*, by Sonoma Technology, Inc., Petaluma, CA (STI-4006).
- Raffuse S.M., Larkin N.K., Strand T.T., DeWinter J.L., Brown S.G., Craig K.J., and Roberts P.T. (2010) Identifying conditions necessary for CONUS fires to impact the Arctic. Poster presented at the *3rd Fire Behavior and Fuels Conference, Spokane, WA, October 25-28*, by Sonoma Technology, Inc., Petaluma, CA (STI-910020-4005).
- Reid S.B., Eisinger D.S., Roberts P.T., Vaughn D.L., Pollard E.K., DeWinter J.L., Du Y., Ray A.E., Brown S.G., and Chenausky B.T. (2010) Field study of PM_{2.5} emissions from a road-widening project. Paper presented at the *19th International Emissions Inventory Conference, September 29*, San Antonio, TX (STI-3959).
- Brown S.G., McCarthy M.C., DeWinter J.L., Roberts P.T., Lee T., and Jeffrey L. Collett J. (2010) Characterization of aerosol at several near-roadway schools in Las Vegas, NV. Presented at the *2010 International Aerosol Conference, Helsinki, Finland, September 3, 2010*, by Sonoma Technology, Inc., Petaluma, CA and Colorado State University, Fort Collins, CO (STI-3947).
- Roberts P.T., Brown S.G., DeWinter J.L., and McCarthy M.C. (2010) Changes in MSATs at near-roadway schools after the expansion of US 95 in Las Vegas, Nevada. Presented at the *Northern Transportation & Air Quality Summit 2010, Cambridge, MA, August 24-26*, by Sonoma Technology, Inc., Petaluma, CA (STI-906034-3930).
- Hafner H., O'Brien T.E., Brown S.G., and DeWinter J.L. (2010) Systat: Statistical visualization software. Presented to the Wyoming Department of Environmental Quality, Cheyenne, WY, by Sonoma Technology, Inc., Petaluma, CA, STI-910019-3946, August.
- Brown S.G., Roberts P.T., Lee T., and Collett J. (2010) Analysis of near-roadway carbonaceous aerosol in Las Vegas, Nevada. Presented to Washington University, St. Louis, MO, July 2, by Sonoma Technology, Inc., Petaluma, CA, and Colorado State University, Fort Collins, CO. STI-3904.
- Roberts P.T., DeWinter J.L., and Brown S.G. (2010) Characterization of a year of near-road NO₂ measurements in Las Vegas, Nevada. Presented at the *National Air Quality Conferences, Raleigh, NC, March 15-18* (STI-3814).
- DeWinter J.L., Brown S.G., O'Brien T.E., and Hafner H.R. (2010) Systat: statistical visualization software. *Lansing, MI, March 31-April 1* (STI-908015-3834).
- Roberts P.T., Brown S., DeWinter J., and McCarthy M. (2009) Near-roadway mobile-source air toxics (MSATs) exposures along U.S. 95 in Las Vegas, Nevada. Presented at the ORNL National Transportation Research Center, Oak Ridge, TN, Nov. 3 (STI-906034-3766).
- Brown S.G., Lee T., Roberts P.T., and Collette J.L., Jr. (2009) Initial observations of near-road aerosol with an aerodyne high resolution time of flight aerosol mass spectrometer. Poster presented at the *28th*

Annual AAAR Conference, Minneapolis, MN, October 26-30, by Sonoma Technology, Inc., Petaluma, CA, and Colorado State University, Fort Collins, CO (STI-3614).

Hafner H., O'Brien T.E., McCarthy M.C., and Brown S.G. (2009) Prescribed analyses of PAMS data collected from 1994 to 2006. Presented to the San Diego Air Pollution Control District, San Diego, CA, (STI-908050-3634), June.

Brown S.G., Roberts P.T., DeWinter J.L., Vaughn D.L., and McCarthy M.C. (2009) Characteristics of aerosol and MSATs at schools near U.S. 95 in Las Vegas, Nevada. Presented at the *Air and Waste Management Association's 102nd Annual Conference and Exhibition, Detroit, MI, June 16-19* (STI-3520).

Roberts P.T., Brown S.G., McCarthy M.C., DeWinter J.L., Landreneau J.V., and Vaughn D.L. (2009) Near-roadway pollutant exposures along U.S. 95 in Las Vegas, Nevada. Paper presented at the *US-Korea Conference (UKC2009) on science, technology and entrepreneurship, Raleigh, North Carolina, July 16-19*, by Sonoma Technology, Inc., Petaluma, CA (STI-3625).

Roberts P.T., McCarthy M.C., and Brown S.G. (2009) Near-roadway mobile-source air toxics (MSATs) exposures along U.S. 95 in Las Vegas, Nevada. Webinar prepared for the U.S. Environmental Protection Agency, Research Triangle Park, NC, April, by Sonoma Technology, Inc., Petaluma, CA. STI-906034-3615. Available at <http://www.epa.gov/ttnamti1/files/ambient/airtox/Roberts4EPAWebinar043009v2.ppt>.

Brown S.G., Roberts P.T., Vaughn D.L., McCarthy M.C., Lee T., and Collett J.L., Jr. (2008) Characteristics of aerosol at schools near U.S. 95 in Las Vegas, Nevada. Presented at the *AAAR 27th Annual Conference, Orlando, FL, October 23*, by Sonoma Technology, Inc., Petaluma, CA, and Colorado State University, Boulder, CO (STI-3355).

Wade K.S., Zahn P.H., and Brown S.G. (2008) Application of rotational tools to improve receptor modeling results. Presented at the *AAAR 27th Annual Conference, Orlando, FL, October 23*, by Sonoma Technology, Inc., Petaluma, CA (STI-3353).

Brown S.G., Roberts P.T., Vaughn D.L., Lee T., and Collett J.L., Jr. (2008) Comparison of near-roadway carbon measurements in winter in Las Vegas, NV. Poster presented at the *9th International Conference on Carbonaceous Particles in the Atmosphere, Berkeley, CA, August 12-14* (STI-3425).

Wade K.S., Brown S.G., Turner J.R., and Garlock J.L. (2008) Concentration value uncertainty estimates for source apportionment modeling of chemical speciation network data. Presented at the *Air & Waste Management Association's 101st Annual Conference & Exhibition, Portland, OR, June 24-26* (STI3272).

Roberts P.T., McCarthy M.C., and Brown S.G. (2008) Characteristics of mobile-source air toxics (MSATs) across filtration systems at three schools next to U.S. 95 in Las Vegas, Nevada. Presented at the *Air & Waste Management Association's 101st Annual Conference & Exhibition, Portland, OR, June 25* (STI-906034-3273).

Roberts P.T., McCarthy M.C., and Brown S.G. (2008) Characteristics of mobile-source air toxics (MSATs) at three schools next to U.S. 95 in Las Vegas, Nevada. Presented at the *Air & Waste Management Association's 101st Annual Conference & Exhibition, Portland, OR, June 25* (STI-906034-3272).

- Roberts P.T., McCarthy M.C., and Brown S.G. (2008) Lessons learned about mobile source air toxics (MSATs) at three schools next to U.S. 95 in Las Vegas, NV. Presented at the *2008 National Air Quality Conferences, Portland, OR, April 6-9* (STI-3305).
- Wade K.S., Brown S.G., and Hafner H.R. (2007) Combined air toxics and PM_{2.5} component source apportionment for Baltimore. Presented at the *Symposium on Air Quality Measurement Methods and Technology, Air and Waste Management Association, San Francisco, CA, April 30-May 2*, by Sonoma Technology, Inc., Petaluma, CA (STI-3123).
- Brown S.G., Buzcu-Guven B., Frankel A., and Hafner H.R. (2006) Analysis and apportionment of PM_{2.5} and organic carbon in the Upper Midwest. Presented at the *Air & Waste Management Association's 99th Annual Conference & Exhibition, New Orleans, LA, June 20-23*, by Sonoma Technology, Inc., Petaluma, CA (STI-2809).
- Reid S.B., Brown S.G., McCarthy M.C., and Chinkin L.R. (2006) Comparison of ambient measurements to emissions representations for modeling in California's San Joaquin Valley. Presented to the *U.S. Environmental Protection Agency's 15th Annual Emission Inventory Conference, New Orleans, LA, May 18*, by Sonoma Technology, Inc., Petaluma, CA (STI-2944).
- Hafner H.R., O'Brien T.E., Frankel A.P., McCarthy M.C., and Brown S.G. (2006) 2005 JATAP monitoring project gaseous air toxics data validation and analysis. Presented at the *JATAP Workshop Meeting, Phoenix, AZ, March 6*, by Sonoma Technology, Inc., Petaluma, CA (STI-905039-2921).
- Hafner H.R., Penfold B.M., and Brown S.G. (2005) Using GIS tools to select suitable DPM monitoring locations: Phoenix, Arizona. Presented at the *2005 Air Toxics Summit, Seeking Solutions for our Rural and Urban Communities, Portland, OR, October 18-19*, by Sonoma Technology, Inc., Petaluma, CA (STI-904234-2755).
- Brown S.G., Frankel A., Raffuse S.M., Hafner H.R., Roberts P.T., and Anderson B. (2005) Source apportionment of PM_{2.5} at Hercules-Glade, Missouri, using positive matrix factorization. Poster prepared for the *24th Annual American Association for Aerosol Research Conference, Austin, TX, October 17-21*, by Sonoma Technology, Inc., Petaluma, CA, and U.S. Environmental Protection Agency, Region 7 (STI-2739).
- Brown S.G., Penfold B.M., and Hafner H.R. (2005) Selecting monitoring locations using GIS-based spatial analysis techniques. Presented at *Air & Waste Management Association Environmental Data Analysis: Assessing Health and Environmental Impacts, Oak Brook, IL, October 4*, by Sonoma Technology, Inc., Petaluma, CA (STI-2711).
- Raffuse S.M., Brown S.G., Sullivan D.C., and Chinkin L.R. (2005) Estimating regional contributions to atmospheric haze. Presented at the *2005 ESRI International User Conference, San Diego, CA, July 26* (STI-2649).
- Brown S.G. and Hafner H.R. (2005) Source apportionment using positive matrix factorization of VOCs at a heavily industrialized site in Houston, Texas. Presentation at the *AWMA Annual Conference, Minneapolis, MN, June 23* (STI-900700-2609).
- Brown S.G. and Hafner H.R. (2005) Using VOCdat to validate and process air toxics data. Presentation to the *U.S. Environmental Protection Agency's 15th Annual National Air Quality Systems Conference, San Diego, CA, June 13-17* (STI-905102-2752).

- Hafner H.R. and Brown S.G. (2005) Receptor modeling overview. Presentation at the *AWMA Symposium on Air Quality Measurement Methods and Technology, San Francisco, CA, April 19-21* (STI-2734).
- Brown S.G., McCarthy M.C., Raffuse S.M., and Hafner H.R. (2005) Assessment of ozone and PM_{2.5} exceedances on a national scale. Presentation at the *U.S. Environmental Protection Agency's 2005 National Air Quality Conference: Quality of Air Means Quality of Life, San Francisco, CA, February 12-13* (STI-2647).
- Hafner H.R., Penfold B.M., and Brown S.G. (2005) Using spatial analysis techniques to select monitoring locations. Presentation at the *U.S. Environmental Protection Agency's 2005 National Air Quality Conference: Quality of Air Means Quality of Life, San Francisco, CA, February 12-13* (STI-2645).
- Brown S.G., Reid S.B., Sullivan D.C., and Hafner H.R. (2005) Development of GIS emissions analysis tools to estimate the probability of regional source contributions. Presented at the *2005 Particulate Matter Supersites Program and Related Studies: An AAAR International Specialty Conference, Atlanta, GA, February 7-11* (STI-2694).
- Brown S.G., Frankel A., Hafner H.R., Roberts P.T., and Anderson D.A. (2005) Source apportionment of PM_{2.5} in Phoenix, Arizona, with Positive Matrix Factorization. Poster prepared for the *2005 Particulate Matter Supersites Program and Related Studies: An AAAR International Specialty Conference, February 7-11, Atlanta, GA* (STI-2687).
- Brown S.G., Roberts P.T., and Hyslop N.P. (2004) Wintertime vertical variations in particulate matter and precursor concentrations in the San Joaquin Valley during the California Regional PM₁₀/PM_{2.5} Air Quality Study. Presented at *Regional and Global Perspectives on Haze: Causes, Consequences and Controversies - Visibility Specialty Conference, Asheville, NC, October 25-29*, by Sonoma Technology, Inc., Petaluma, CA (STI-2513).
- Hafner H.R., Brown S.G., and Anderson D. (2004) Source apportionment of PM_{2.5} in Phoenix, Arizona using positive matrix factorization. Presented at *Regional and Global Perspectives on Haze: Causes, Consequences and Controversies - Visibility Specialty Conference, Asheville, NC, October 25-29*, by Sonoma Technology, Inc., Petaluma, CA (STI-2512).
- Brown S.G. and Hafner H.R. (2004) Source apportionment of VOCs in the Houston, Texas, area using Positive Matrix Factorization. Paper no. 353 presented at the *Air and Waste Management Association's 97th Annual Conference and Exhibition, Indianapolis, IN, June 22-25* (STI-2415).
- Hafner H.R., Brown S.G., McCarthy M.C., Arkinson H.L., and Sullivan D.C. (2004) Validation and Preliminary Analysis of JATAP Air Toxics Data. Presentation to the Arizona Department of Environmental Quality, Phoenix, AZ, June 11, by Sonoma Technology, Inc., Petaluma, CA, (STI-903774-2564).
- Reid S.B., Funk T.H., Sullivan D.C., Stiefer P.S., Arkinson H.L., Brown S.G., and Chinkin L.R. (2004) Research and development of emission inventories for planned burning activities for the Central States Regional Air Planning Association. Paper for the *13th International Emission Inventory Conference, Clearwater, FL, June 8-10* (STI-2515).
- Brown S.G., Reid S.B., Roberts P.T., Buhr M.P., Funk T.H., Kim E., and Hopke P.K. (2004) Reconciliation of the VOC and NO_x emission inventory with ambient data in the Houston, Texas region. Paper presented at the *U.S. Environmental Protection Agency's 13th Annual Emission Inventory Conference, Clearwater, FL, June 9* (STI-2525).

- Hafner H.R., McCarthy M.C., Brown S.G., Raffuse S.M., Shields E., Stiefer P.S., and Wheeler N.J. (2004) Workshop on air toxics data analysis. Prepared for Lake Michigan Air Directors Consortium; presented in Rosemont, IL, June 2-3 (STI-903555).
- Brown S.G., Hafner H.R., and Shields E. (2004) Source apportionment of Detroit air toxics data with positive matrix factorization. Paper no. 41 presented at the *Air and Waste Management Association Symposium on Air Quality Measurement Methods and Technology, Research Triangle Park, NC, April 19-22* (STI-2450).
- Hafner H.R., Brown S.G., and McCarthy M.C. (2004) An approach to data validation of air toxics data. Paper No. 34 presented at the *Air and Waste Management Association Symposium on Air Quality Measurement Methods and Technology, Research Triangle Park, NC, April 19-22* (STI-2443).
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