

# CURRICULUM VITAE

## ANDREA POLIDORI

### Research Assistant Professor

(Advisor: **Dr. Constantinos Sioutas**)

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**PLACE AND DATE OF BIRTH:** Urbino (PU, Italy); March 30, 1974

### EDUCATION

- 2005 Rutgers University, Graduate School-New Brunswick, NJ  
PhD in Environmental Sciences (3.9 GPA)  
Academic Focus: Atmospheric Sciences/Climate Change/Human Exposure to Indoor and Outdoor Aerosols  
Research Focus: Aerosol Characterization/Secondary Organic Aerosol Formation/Composition of and Exposure to Indoor and Outdoor Fine Particulate Matter  
Doctoral Thesis: *Characterizing the Origins and Polarity of Organic Aerosol*  
Academic Advisor: **Dr. Barbara J. Turpin**  
Thesis Advisor: **Dr. Cliff I. Davidson**
- 2000 Graduated *Summa Cum Laude* at Urbino University, Italy  
B.S. Environmental Sciences (3.9 GPA)  
Academic Focus: Environmental and Analytical Chemistry  
Research Focus: Aerosol Characterization  
Academic Advisor: **Dr. Filippo Mangani**

## **HONORS AND AWARDS**

*Summa Cum Laude* – Urbino University, Italy

Winner of a “Study Abroad” scholarship. Awarded through the “Exchange Program Department”, Urbino University, Italy, 1999

Winner of a “Study Abroad” scholarship. Awarded through the “Department of Environmental Sciences”, Urbino University, Italy. 2000

## **CERTIFICATES**

APTI (Air Pollution Training Institute) Course in “Atmospheric Sampling”

APTI Course in “Analytical Methods for Air Quality Standards”

## **PROFESSIONAL AFFILIATIONS/SERVICE**

Member of the American Association for Aerosol Research (AAAR), 2002-present

Member of the Center for Environmental Prediction (CEP), 2002-present

Member of the American Chemical Society, 2002-present

Session Chair, AAAR; 2004 (Annual Conference); 2006 (International Aerosol Conference) and 2007 (Annual Conference)

Member of the American Geophysical Union, 2006-present

EPA/STAR Grant Program - Environmental and Biology Fate, Transport, and Transformation - Peer Review Panel, 2007

Member of the USC Energy Institute, 2007-present

Reviewer for the following scientific journals: *Aerosol Science & Technology*, *Environmental Science & Technology*, *Atmospheric Environment*, *Science of the Total Environment* and *Journal of the Air & Waste Management Association*

## RESEARCH EXPERIENCE

- 1999-2000 Internship, Department of Environmental Sciences, Rutgers University, New Brunswick, NJ
- Developed an analytical methodology for characterizing the organic fraction of atmospheric fine particulate matter (PM<sub>2.5</sub>)
  - Performed Fourier Transformed Infrared Spectroscopy (FTIR) on extracts/fractions obtained from time-integrated samples of atmospheric PM<sub>2.5</sub>
  - Optimized the standard analytical protocol for organic and elemental carbon analysis (OC and EC, respectively) of PM samples
  - Performed OC and EC analyses of indoor and outdoor PM<sub>2.5</sub> samples collected during a large air pollution/exposure study called Relationship of Indoor, Outdoor and Personal Air (RIOPA)
- 2001-2005 Research Associate, Department of Environmental Sciences, Rutgers University, New Brunswick, NJ
- Participated in the Pittsburgh Air Quality Study (PAQS), a comprehensive multidisciplinary set of projects conducted in the Pittsburgh region. Worked in close collaboration with **Dr. Spyros Pandis**, **Dr. Cliff Davidson** and **Dr. Allen Robinson** (Carnegie Mellon University)
  - During the PAQS field campaign used and maintained a semi-continuous carbon analyzer for the determination of outdoor OC and EC, operated a Low Pressure Impactor (LPI) for the collection of size-segregated ambient PM samples, and collected time-integrated samples of atmospheric PM<sub>2.5</sub>
  - Estimated the contribution of secondary OC (SOA) to measured outdoor OC in the Pittsburgh area
  - Developed a novel analytical methodology for characterizing the polarity of integrated PM<sub>2.5</sub> samples and the organic molecular weight per carbon weight ratio of the organic fraction of atmospheric PM<sub>2.5</sub>
  - Performed FTIR analysis on size-resolved PAQS samples
  - Participated in a source characterization study led by Carnegie Mellon University and conducted in the Pittsburgh area. Performed semi-continuous OC and EC analyses to measure the amount of carbonaceous material emitted 1) by a large coke production facility in Clariton, PA, and 2) inside the Squirrel Hill Tunnel in Pittsburgh, PA
  - Within RIOPA, studied the effect of sampling artifacts on indoor and outdoor measured OC. Estimated the contribution of indoor-generated OC to indoor measured OC. Used emission inventory data (supplied by EPA), the Geographic Information System (GIS) and multiple linear regression analysis (performed by the Statistical Analysis Software; SAS) to evaluate how proximity to mobile, point and area sources affects the residential

outdoor mass concentrations of PM<sub>2.5</sub>, OC, EC, and polycyclic aromatic hydrocarbons (PAHs)

- Mentored and tutored several undergraduate students in learning how to operate and maintain an OC/EC analyzer and other laboratory instruments (e.g. IC and HPLC)

2005-2007 Post-doctoral research Associate, Department of Civil and Environmental Engineering, University of Southern California, Los Angeles, CA

- Within the Cardiovascular Health and Air Pollution Study (CHAPS; an ongoing multi-disciplinary project aimed to investigate the effects of micro-environmental exposures to PM on cardiovascular outcomes in elderly retirees affected by coronary heart disease) supervised the field measurements and the analysis of different physical and chemical characteristics of indoor and outdoor PM<sub>2.5</sub> at several retirement communities in the Los Angeles basin
- Participated in a recent field campaign at one major freeway in the Los-Angeles area to determine the chemical and physical characteristics of ambient PM<sub>2.5</sub> and to collect samples for toxicological assays
- Evaluated the performance of a newly commercialized Nanoparticle Surface Area Monitor (NSAM; TSI, Inc.) and analyzed the NSAM measurements at different indoor and outdoor locations (i.e. a retirement community, the immediate proximity to a freeway with a high content of heavy-duty diesel trucks, a background freeway site, and a typical urban site)
- Operated and maintained fine particle concentration systems for use in ambient sampling and in vitro/in vivo health exposure studies
- Provided support for health effects investigators by collecting ambient particulate matter samples for subsequent toxicity assays
- Worked on a team effort to develop a scaled-down version of a PM<sub>2.5</sub> concentration system
- Supervised doctoral students on different research projects and in the preparation of several scientific manuscripts
- Organized and managed a recent (May 2007) field campaign around the Los Angeles port area to characterize the main sources of particle-bound PAHs and to identify differences in the chemical composition of PM

2007-present Research Assistant Professor, Department of Civil and Environmental Engineering, University of Southern California, Los Angeles, CA

- Preparation of Research Proposals
- Supervised multi-study campaigns at two major freeway locations to determine particulate matter and gaseous co-pollutant characteristics,

- calculate emission factors, and collect samples for toxicological assays
- Mentored graduate students in the preparation of manuscripts presenting the data from various field works
  - Designed and managed the site set-up, sample collection, data analysis and manuscript preparation for a study aimed to characterize the particle-bound polycyclic aromatic hydrocarbon (p-PAH) content, and the physical/chemical characteristics of aerosols emitted in the Los Angeles port area, and from diesel trucks with and without catalytic converters.
  - Coordination and supervision of an ongoing multi-disciplinary investigation led by USC on the composition, sources and toxicological properties of “coarse” particulate matter collected in the greater Los Angeles basin

## **OTHER RESEARCH INTERESTS**

### Chemical Analyses of Organic PM:

- Functional group characterization and quantification by FTIR
- Molecular level analyses by GC-MS / HPLC-MS / IC-UV
- Development of analytical techniques for characterizing organic compounds

### Outdoor, Indoor and Personal Exposure to PM<sub>2.5</sub> and its Carbonaceous Components

### Computer Programs and Statistical Software:

- SAS, SPSS, S-PLUS, MATLAB, MedCalc and LabVIEW; familiar with FORTRAN

## **TEACHING EXPERIENCE**

### Rutgers University:

- Tutored Italian Language at the “Italian House”, Cook/Douglas College. Helped students in improving their Italian conversation skills and assisted Doctor Rita Galliano during her “Italian culture” class
- Taught classes in a senior-level engineering course entitled “Source Control of Atmospheric Pollution”

### University of Southern California:

- Taught classes in two environmental engineering courses entitled “Environmental Pollutants: Monitoring and Risk Assessment” and “Applied Air Quality Management”

## EXTRA-CURRICULUM ACTIVITIES

- Played Volleyball Professionally in the B1 Italian National Division (1996-1998)

## INVITED TALKS

University of Florida (Gainesville, FL). Department of Environmental Engineering.  
Title: Indoor/Outdoor Relationships, Trends and Carbonaceous Content of Fine Particulate Matter in Retirement Homes of the Los Angeles Basin (March 2007)

Rice University (Houston, TX). Department of Civil and Environmental Engineering.  
Title: Indoor/Outdoor Relationships, Trends and Carbonaceous Content of Fine Particulate Matter in Retirement Homes of the Los Angeles Basin (January 2008)

## JOURNAL PUBLICATIONS (\* corresponding author)

1. **Polidori, A.**, Kwon, J.M., Turpin, B.J.\*, Zhang, J., Korn, L.R., Weisel, C., Morandi, M. “Effect of Source Proximity on Residential Outdoor Concentrations of PM<sub>2.5</sub> and its Carbonaceous Components”. *Journal of Exposure Analysis and Environmental Epidemiology*, In preparation
2. Arhami, M., **Polidori, A.**, Delfino, R., Tjoa, T., and Sioutas, C.\* “Associations Between Personal, Indoor, and Residential Outdoor Pollutant Concentrations: Implications for Exposure Assessment to Size Fractionated PM”. Submitted for publication to *Environmental Health Perspectives*, July 2008
3. Maimone, F., Turpin\*, B.J., Robinson, A., Subramanian, R., **Polidori, A.** “The Regression Method of Organic Artifact Correction: A Quantitative Assessment of Assumptions and Method Performance”. Submitted for publication to *Journal of Air and Waste Management Association*, June 2008
4. Hu, S., **Polidori, A.**, Arhami, M., Schauer, J.J., Cho, A., and Sioutas, C\*. “Redox Activity and Chemical Speciation of Size Fractionated PM in the Communities of the Los Angeles - Long Beach Harbor”. Submitted for publication to *Atmospheric Chemistry and Physics*, April 2008
5. Verma, V., **Polidori, A.**, Cassee, F.R., Schaffer, M., Schauer, J.J. and Sioutas C\*. “Physicochemical and toxicological properties of Particulate Matter from October 2007 Southern California wildfires”. Submitted for publication to *Environmental Science and Technology*, April 2008
6. Delfino\*, R.J., Staimer, N., Tjoa, T., **Polidori, A.**, Arhami, M., Gillen, D., Kleinman, M.T., Vaziri, N., Longhurst, J., Zaldivar, F., and Sioutas, C. (2007) “Circulating

biomarkers of inflammation, antioxidant activity, and platelet activation are associated with ultrafine particles and primary combustion aerosols in elderly subjects with a history of coronary artery disease”. *Environmental Health Perspectives*, 116 (7): 898-906

7. Heald\*, C.L., Goldstein, A.H., Allan, J., Aiken, A., Apel, E., Atlas, E., Baker, A., Bates, T., Beyersdorf, A., Blake, D., Campos, T., Coe, H., Crouse, J.D., DeCarlo, P.F., De Gouw, J., Dunlea, E., Flocke, F., Fried, A., Goldan, P., Griffin, R.J., Herndon, S., Holloway, J., Holzinger, R., Jimenez, J.J., Junkermann, W., Lerner, B., Lewis, A., Meinardi, S., Millet, D., Mills, J., Onasch, T., **Polidori, A.**, Quinn, P., Riemer, D., Roberts, J., Salcedo, D., Sive, B., Swanson, A., Talbot, R., Walega, J., Warneke, C., Weber, R., Weibring, P., Wennberg, P.O., Wittig, A., Zhang, R., Zheng, J., Zheng, W. “Total Observed Organic Carbon (TOOC): A Synthesis of North American Observations”. *Atmospheric Chemistry and Physics Discussions*, 8, 2007-2025, 2008
8. **Polidori, A.**, Hu, S., Biswas, S. and Sioutas, C\*. “Real-time Characterization of Particle-bound Polycyclic Aromatic Hydrocarbons in Ambient Aerosols and from Motor-Vehicle Exhaust”. *Atmospheric Chemistry and Physics*, 8, 1277–1291, 2008
9. **Polidori, A.**, Turpin\*, B., Lim H.J., Totten, L., Davidson, C. “Polarity and Molecular Weight per Carbon Weight Ratio of the Pittsburgh Organic Aerosol”. *Aerosol Science & Technology*, In press, 2008
10. Zhi, N., **Polidori, A.**, Schauer, J.J. and Sioutas, C. (2008) “Light- and Heavy-duty Vehicle Emission Factors of PM Species Based on Freeway Measurements and Comparison with Tunnel and Dynamometer Studies”. *Atmospheric Environment*, 42: 3099–3114
11. Meng, Q.Y., Turpin\*, B.J., Lee, J.H., **Polidori, A.**, Weisel, C.P., Morandi, M., Colome, S., Zhang, J., Stock, T., Winer, A. (2007). “How Does Infiltration Behavior Modify the Composition of Ambient PM<sub>2.5</sub> in Indoor Spaces? An Analysis of RIOPA Data”. *Environmental Science and Technology*, 10.1021/es070037k S0013-936X(07)00037-5
12. Ntziachristos, L., **Polidori, A.**, Phuleria, H., Geller, M.D., and Sioutas, C\*. (2007) "Application of a Diffusion Charger for the Measurement of Particle Characteristics in Different Environments". *Aerosol Science and Technology*, 41:571–580
13. **Polidori A.**, Arhami M., Delfino R.J. and Sioutas C\*. (2007) “Indoor-Outdoor Relationships, Trends and Carbonaceous Content of Fine Particulate Matter in Retirement Homes of the Los Angeles Basin”. *Journal of Air and Waste Management Association*, 57:366–379
14. Zhi N., Moore, K.F., **Polidori, A.**, and Sioutas\*, C.” Field Validation of the new miniature Versatile Aerosol Concentration Enrichment System (mVACES)”. *Aerosol Science and Technology*, 40:1098–1110, 2006

15. **Polidori, A.**, Turpin\*, B.J., Lim, H.J., Cabada, J.C., Subramanian, R., Robinson, A., and Pandis, S. (2006) “Local and Regional Secondary Organic Aerosol: Insights from a Year of Semi-Continuous Carbon Measurements at Pittsburgh”. *Aerosol Sci. and Technol.* 40 (10): 861-872
16. **Polidori, A.**, Turpin\*, B.J., Meng, Q.Y., Lee, J.H., Weisel, C., Morandi, M., Colome, S., Stock, T., Winer, A., Zhang, J., Kwon, J.M., Alimokhtari, S., Shendell, D., Jones, J., Farrar, C., Maberti, S. (2006). “Fine Organic Particulate Matter Dominates Indoor-Generated PM<sub>2.5</sub> in RIOPA Homes”. *Journal of Exposure Analysis and Environmental Epidemiology* 16 (4): 321-331
17. Dachs\*, J., Calleja, M.L., Duarte, C.M, Del Vento, S., Turpin, B.J., **Polidori, A.**, Herndl, G.J. and Agusti, S. (2005) “High Atmospheric-ocean Exchanges of Organic Carbon in the NE Subtropical Atlantic”. *Geophysical Research Letters*, 32 (21): Art. No. L21807
18. Meng, Q.Y., Turpin, B.J.\*, **Polidori, A.**, Lee, J.H., Weisel, C., Morandi, M., Colome, S., Stock, T., Winer, A., Zhang, J.J. (2005) “PM<sub>2.5</sub> of Ambient Origin: Estimates and Exposure Errors Relevant to PM Epidemiology”. *Environ. Sci. Technol.*, 39 (14): 5105-5112
19. Millet, D.B., Donahue, N.M, Pandis, S.N., **Polidori, A.**, Stanier, C.O., Turpin, B.J., and Goldstein\*, A.H. (2005) “Atmospheric Volatile Organic Compound Measurements during the Pittsburgh Air Quality Study: Results, interpretation, and quantification of primary and secondary contributions”. *Journal of Geophysical Research* 110 (D7): Art. No. D07S07
20. Weitkamp, E.A., Lipsky, E.M., Pancras, P., Ondov, J., **Polidori, A.**, Turpin, B.J., Robinson\*, A.L. (2005) “Fine Particle Emission Profile for a Large Coke Production Facility Based on Highly Time Resolved Fence Line Measurements”. *Atmospheric Environment*, 39 (36): 6719-6733
21. Cabada, J. C., Pandis\*, S. N., Subramanian, R., Robinson, A. L., **Polidori, A.** and Turpin, B. J. (2004) “Estimating the Secondary Organic Aerosol Contribution to PM<sub>2.5</sub> Using the EC Tracer Method”. *Aerosol Sci. Technol.* 38: 140-155 Suppl. 1
22. Naumova, Y.Y., Offenbergl, J. H., Eisenreich\*, S. J., **Polidori, A.**, Meng, Q.Y., Turpin, B. J., Weisel, C. P., Morandi, M. T., Colome, S. D., Stock, T. H., Winer, A. M., Alimokhtari, S., Kwon, J., Maberti, S., Shendell, D., and Jones, J., Farrar, C. (2003). “Gas-Particle Distribution of Polycyclic Aromatic Hydrocarbons in Coupled Outdoor/Indoor Atmospheres”. *Atmospheric Environment* 37 (5): 703-719

## BOOK CHAPTERS

Wittig, B., Robinson, A., **Polidori, A.**, Lim, H. J., Turpin, B. J., and Harrison, D., “Sunset Labs In-situ Instrument for the Semi-continuous Measurement of Particulate Organic Carbon and Elemental Carbon,” In Compendium of *Methods of Air Sampling and Analysis* (in press)

#### **CONFERENCE AND SEMINAR PRESENTATIONS (2000-2008)**

**Polidori, A.**, Hu, S., Biswas, S., Delfino, R. and Sioutas, C.\* “Real-Time Characterization of Particle-Bound Polycyclic Aromatic Hydrocarbons in Ambient Aerosols and from Motor-Vehicle Exhaust”, Platform presentation at the 101<sup>st</sup> Air and Waste Management Association Annual Conference & Exhibition, Portland, OR, June 24-26, 2008

Arhami, M., Sillanpää, M., Hu, S., **Polidori, A.**, Olson, M.R., Schauer, J.J. and Sioutas, C.\* “Size-Segregated Inorganic and Organic Components of PM in the Communities of the Los Angeles Harbor”, Platform presentation at the 101<sup>st</sup> Air and Waste Management Association Annual Conference & Exhibition, Portland, OR, June 24-26, 2008

**Ning, Z.**, **Polidori, A.**, Schauer, J.J. and Sioutas, C. “Light- and Heavy-Duty Vehicle Emission Factors of PM Species Based on Freeway Measurements and Comparison with Tunnel and Dynamometer Studies”, Platform presentation at the 101<sup>st</sup> Air and Waste Management Association Annual Conference & Exhibition, Portland, OR, June 24-26, 2008

**Arhami, M.**, **Polidori, A.**, Delfino, R.J., and Sioutas, C.\* “Properties and Composition of Size Fractionated Indoor, Outdoor, and Personal Particulate Matter in Retirement Homes of the Los Angeles Basin”. Platform presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 10-14, 2007

Ning, Z., **Polidori, A.**, Schauer, J.J., and Sioutas, C.\* “Light and Heavy Duty Vehicle Emission Factors of PM Species Based on Freeway Measurements and Comparison With Tunnel and Dynamometer Studies”. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 10-14, 2007

**Polidori, A.**, Hu, S., Biswas, S., and Sioutas, C.\* “Real-time Characterization of Particle bound Polycyclic Aromatic Hydrocarbons (pPAHs) in Ambient Aerosols and From Motor-Vehicles Exhausts”. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 10-14, 2007

Arhami, M., **Polidori, A.**, Geller, M.D., and Sioutas, C.\* “Spatial Variation and Source Characterization of Size Fractionated Particulate Matter in Long Beach”. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 10-14, 2007

Heald\*, C.L., Goldstein, A.H., Allan, J., Apel, E., Atlas, E., Bates, T., Blake, D., Campos, T., Coe, H., De Gouw, J., Goldan, P., Griffin, R., Herndon, S., Holloway, J., Holzinger, R., Jimenez, J., Lerner, B., Lewis, A., Millet, D., Mills, G., **Polidori, A.**, Quinn, P., Riemer, D., Sive, B., Talbot, B., Warneke, C., Weber, R., Weibring, P., Wennberg, P., Wittig A. “Total Observed Organic Carbon (TOOC) in the Atmosphere”. Poster presentation at the Gordon Research Conference (Atmospheric chemistry), Big Sky, MY

**Polidori, A.**, Allen, R., Arhami, A., Reff, A., Delfino, R. and Sioutas, C. “Relationships between Indoor and Outdoor Particulate and Gaseous Species in Two Retirement Homes: Implications for Particulate Matter Exposure Assessment”, Poster presentation at the 26th Annual Aerosol Conference of the American Association for Aerosol Research, Reno, NV, Sept. 24-28, 2007

Ntziachristos, L., **Polidori, A.**, Phuleria, H., Geller, M. and Sioutas, C. “Application of a Diffusion Charger for the Measurement of Particle Surface Concentration in Different Environments”, Platform presentation at the 26th Annual Aerosol Conference of the American Association for Aerosol Research, Reno, NV, Sep 24-28, 2007

**Polidori, A.**, Hu, S., Biswas, S. and Sioutas, C. “Real-time characterization of particle-bound PAHs in ambient aerosols and from motor-vehicles exhausts”, Platform presentation at the 26th Annual Aerosol Conference of the American Association for Aerosol Research, Reno, NV, Sep 24-28, 2007

Delfino RJ, Staimer N, Tjoa T, **Polidori A**, Arhami M, Kleinman MT, Vaziri N, Sioutas C. Circulating biomarkers of oxidative stress, inflammation, and thrombosis are associated with urban air pollution in elderly subjects with a history of coronary artery disease. Presented to: American Thoracic Society, International Conference, May 18-23, 2007, San Francisco, CA. *Proceedings of the American Thoracic Society*, 2007a; 175:A959.

Delfino RJ, Staimer N, Tjoa T, **Polidori A**, Arhami M, Gillen D, Sioutas C. Exhaled NO in elderly subjects with a history of coronary artery disease and urban air pollution. Presented to: American Thoracic Society, International Conference, May 18-23, 2007, San Francisco, CA. *Proceedings of the American Thoracic Society*, 2007b; 175:A960.

**Polidori, A.**, Arhami, M., Delfino, R.J., Allen, R. and Sioutas C. “Indoor/Outdoor Relationships, Trends and Carbonaceous Content of Fine Particulate Matter in Retirement Homes of the Los Angeles Basin” Seminar presentation at the Department of Environmental Engineering, University of Florida, Gainesville, February 23, 2007.

**Polidori, A.**, Arhami, M., Delfino, R.J. and Sioutas C. “Indoor/outdoor relationships, trends and carbonaceous content of fine particulate matter during the CHAPS study,” Platform presentation at the 7th International Aerosol Conference of the

American Association for Aerosol Research, St. Paul, Minnesota, Sep 10-15, 2006

**Polidori, A.**, Turpin, B., Kwon, J., Weisel, C., Meng, Q.Y., Naumova, Y., Eisenreich, S., Cui, W., Giovanetti, R. “Effects of Source Proximity on Residential Outdoor Concentrations of PM<sub>2.5</sub> and its Carbonaceous Components,” Platform presentation at the 7th International Aerosol Conference of the American Association for Aerosol Research, St. Paul, Minnesota, Sep 10-15, 2006

**Polidori, A.**, Arhami, M., Singh, M. and Sioutas, C. “Indoor and Outdoor Measurements of the Surface Area of Particles Deposited in the Human Lungs Using the TSI Model 3550 Nanoparticles Surface Area Monitor,” Poster presentation at the 7th International Aerosol Conference of the American Association for Aerosol Research, St. Paul, Minnesota, Sep 10-15, 2006

**Moore, K.**, Ning, Z., Sardar, S.B., Fine, P.M., Geller, M.D., **Polidori, A.** and Sioutas, C. “Physical and Chemical Field Validation of the Performance of the Miniature Versatile Aerosol Concentration Enhancement System (MVACES),” Poster presentation at the 7th International Aerosol Conference of the American Association for Aerosol Research, St. Paul, Minnesota, Sep 10-15, 2006

**Polidori, A.**, Turpin, B., Lim, H.J., Subramanian, R., Robinson, A., Pandis, S., Cabada, J.C., “Local and Regional Secondary Organic Aerosol Formation: Insights from a Year at Pittsburgh and Comparisons with Los Angeles and Atlanta,” Platform Presentation at the American Association for Aerosol Research “Supersite” Conference, Atlanta, GA, February 2005

Weitkamp, E., Lipsky, E., Robinson, A., **Polidori, A.**, Turpin, B., Pancras, P., Ondov, J., Bernado-Bricker, A., Vasquez, O., Rogge, W., “Fine Particle Emission Profile for a Large Coke Production,” Poster presentation at the American Association for Aerosol Research “Supersite” Conference, Atlanta, GA, February 2005

**Polidori, A.**, Turpin, B.J., Lim, H.J., Totten L., Davidson, C, “Characterization of the Organic Fraction of Atmospheric Aerosols” Platform Presentation at the American Association for Aerosol Research Annual Conference, Atlanta, GA, October 2004

**Robinson, A.L.**, Subramanian, R., Gaydos, T., Pandis, S.N., Bernardo-Bricker, A., Rogge, W.F., **Polidori, A.**, Turpin, B.J., Clarke, L., Hernandez, M., “Synthesis of Source Apportionment Estimates of Organic Aerosol in the Pittsburgh Region” Platform Presentation at the American Association for Aerosol Research Annual Conference, Atlanta, GA, October 2004

**Polidori, A.**, **Turpin B.**, Meng., Q.Y., Naumova, Y., Reff, A., Eisenreich, S., Weisel, C., Zhang, J., Morandi, M., Stock, T., Colome, S., Winer, A., Spektor, D., Lee, J.H., “Organics Dominate Indoor-Generated PM<sub>2.5</sub> in RIOPA Homes” Platform

Presentation at the International Society of Exposure Assessment, Philadelphia, PA, October 2004

Reff, A., Turpin, B.J., Meng, Q.Y., **Polidori, A.**, Lee, J.H., Weisel, C.P., Morandi, M., Colome, S., “Predicting the Outdoor Contribution to Indoor PM<sub>2.5</sub> Mass and OC Using FTIR Spectra of RIOPA Particle Samples”, Poster presented at International Society for Exposure Assessment, Philadelphia, PA, October 2004

**Polidori, A.**, Meng, Q.Y., Lee, J.H., Turpin, B.J., Lake, S., Giovannetti, R., Weisel, C., Morandi, M., Colome, S., Stock, T., Winer, A., Kwon, J.M., Alimokhtari, S., Shendell, D., Jones, J., Farrar, C., Maberti, S., “Indoor and Outdoor Organic PM<sub>2.5</sub>: Analysis of RIOPA data,” Invited Seminar Presented at the Center for Environmental Indicators’ Seminar, New Brunswick, NJ, May 2004

**Polidori, A.**, Turpin, B., Lim, H.J., Cabada, J.C., Subramanian, R., Robinson, A., “Secondary Organic Aerosol Formation During the Pittsburgh Air Quality Study (PAQS)”, Presented at the Environmental Sciences Graduate Student Association (ESGSA), New Brunswick, NJ, June 2004

Turpin, B.J., Meng, Q.Y., Lau, G., **Polidori, A.**, Reff, A., Porcja, R., Naumova, Y., Offenber, J., Eisenreich, S., Weisel, C., Suh, H., Morandi, M., Stock, T., Colome, S., Winer, A., “Speciated PM<sub>2.5</sub> exposures provide insights into PM epidemiology and public health protection,” Presented at the American Association for Aerosol Research Annual Conference, Anaheim, CA, October 2003

Millet, D.B., Donahue, N.M., **Polidori, A.**, Stanier, C.O., Turpin, B.J., Goldstein, A.H., “VOC-Aerosol Relationships at the Pittsburgh Air Quality Study”, Presented at the Berkeley Atmospheric Science Center symposium, Berkeley, CA, September 2003

Turpin, B.J., Meng, Q.Y., Naumova, Y., Reff, A., **Polidori, A.**, Porcja, R.J., Lee, J.H., Weisel, C.P., Korn, L., Eisenreich, S., Buckley, B., Morandi, M.T., Stock, T.H., Colome, S., Winer, A., Spektor, D.M., “Composition and origin of fine particulate matter exposures: Insights from the RIOPA study,” Poster presentation at the Health Effects Institute Annual Conference, Boulder, CO, May 2003

Cabada, J.C., Pandis, S.N., Wittig, B., Robinson, A.L., Subramanian, R., **Polidori, A.**, Turpin, B.J., “Secondary organic aerosol contribution to carbonaceous PM<sub>2.5</sub> concentrations in Pittsburgh,” Poster presentation at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003

**Polidori, A.**, Turpin, B.J., Lake, S., Giovannetti, R., Weisel, C., Morandi, M., Colome, S., Stock, T., Winer, A., Kwon, J.M., Alimokhtari, S., Shendell, D., Jones, J., Farrar, C., Maberti, S., “Indoor and outdoor organic PM<sub>2.5</sub>: Analysis of RIOPA

data,” Poster presentation at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003

Meng, Q.Y., Turpin, B.J., **Polidori, A.**, Buckley, B., Weisel, C., Morandi, M., Colome, S., Stock, T., Winer, A., Lee, J.H., Giovanetti, R., Cui, W., Kwon, J.M., Alimokhtari, S., Shendell, D., Jones, J., Farrar, C., Maberti, S., “Analysis of indoor, outdoor and personal PM<sub>2.5</sub> species to assess the sources of exposure: Results from RIOPA,” Poster presentation at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003

Weitkamp, E.A., Lipsky, E., Robinson, A., Anderson, N., Leifeste, H., Subramanian, R., Cabada, J., Khlystov, A., Stanier, C., Lucas, L., Takahama, S., Wittig, B., Davidson, C., Pandis, S., **Polidori, A.**, Lim, H.J., Turpin, B.J., Pancras, P., Ondov, J., “Fenceline sampling adjacent to a large coke production facility in Pittsburgh, PA,” Poster presentation at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003

Lipsky, E.M., Robinson, A., Anderson, N., Leifeste, H., Subramanian, R., Cabada, J., Rees, S., Khlystov, A., Stanier, C., Lucas, L., Takahama, S., Wittig, B., Davidson, C., Pandis, S., **Polidori, A.**, Lim, H.J., Turpin, B.J., “In-use vehicle emissions source characterization study: Squirrel Hill Tunnel, Pittsburgh PA,” Poster presentation at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003

Cabada, J.C., Pandis, S.N., Robinson, A.L., Davidson, C.I., **Polidori, A.**, Turpin, B.J., and Subramanian, R., “The contribution of Secondary Organic Aerosol to PM<sub>2.5</sub> in Pittsburgh,” Presented at the AGU Fall Meeting, San Francisco, CA, December 2002

Cabada, J.C., Pandis, S.N., Robinson, A.L., Davidson, C.I., **Polidori, A.**, Turpin, B.J., and Subramanian, R., “The contribution of Secondary Organic Aerosol to PM<sub>2.5</sub> in Pittsburgh,” Platform Presentation at the Annual Meeting of the American Institute of Chemical Engineers, Indianapolis, IN, November 2002

Cabada, J.C., Pandis, S.N., Robinson, A.L., Davidson, C.I., **Polidori, A.**, Turpin, B.J., and Subramanian, R., “The contribution of Secondary Organic Aerosol to PM<sub>2.5</sub> in Pittsburgh,” Presented at the American Association for Aerosol Research Annual Conference, Charlotte, NC, October 2002

Offenberg, J.H., **Polidori, A.**, Porcja, R., Turpin, B.J., “Functional group composition by size and polarity in Pittsburgh, PA and insights into aerosol processing,” Presented at the American Association for Aerosol Research Annual Conference, Charlotte, NC, October 2002

**Polidori, A.**, Turpin, B.J., Lim, H.J., Robinson, A., Subramanian, R., Cabada, J.C.,  
“Semi-continuous organic particulate matter measurements during Pittsburgh Air  
Quality Study (PAQS),” Poster presentation at the American Association for  
Aerosol Research Annual Conference, Charlotte, NC, October 2002

**Subramanian, R.**, Robinson, A.L., Cabada, J.C., Pandis, S.N., Wittig, B., **Polidori, A.**,  
Turpin, B.J., Hering, S.V., Modey, W.K., Eatough, D.J., “Intercomparison of  
ambient carbonaceous aerosol samplers used during the Pittsburgh Air Quality  
Study,” Poster presentation at the American Association for Aerosol Research  
Annual Conference, Charlotte, NC, October 2002

**Turpin, B.J.**, Meng, Q.Y., Naumova, Y., Reff, A., Porcja, R.J., Giovenetti, R., **Polidori,**  
**A.**, Stiles, R., Cui, W., Alimokhtari, S., Kwon, J., Weisel, C.P., Korn, L.,  
Eisenreich, S., Buckley, B., Maberti, S., Morandi, M.T., Stock, T.H., Colome, S.,  
Jones, J., Shendell, D., Winer, A., Spektor, D.M., “Characterizing the  
Composition and Origin of Indoor Concentrations and Personal Exposures to Fine  
Particulate Matter: Insights from the RIOPA Study”, Poster presentation at  
Health Effects Institute Conference, Washington D.C., May 2001

**Turpin, B.J.**, Cui, W., Alimokhtari, S., Kwon, J., Naumova, Y., Reff, A., Porcja, R.J.,  
**Polidori, A.**, Weisel, C.P., Eisenreich, S., Maberti, S., Morandi, M.T., Shendell,  
D., Guilleband, C., Yamamoto, N., Sabin, L., “Indoor, Outdoor, and Personal Fine  
Particulate Matter during RIOPA”, Poster presentation at International Society of  
Exposure Assessment Conference, Monterey, CA, October 2000

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