Albert A. Presto
Department of Mechanical Engineering and Center for Atmospheric Particle Studies
Carnegie Mellon University, Pittsburgh, PA 15213
Phone: (412) 721-5203 *e-mail:* apresto@andrew.cmu.edu

Professional Preparation

2001 Cornell University, Ithaca, NY. Bachelor of Science, Chemical Engineering

2005 Carnegie Mellon University, Pittsburgh, PA. Ph.D., Chemical Engineering

Appointments

2012 – present Assistant Research Professor, Department of Mechanical Engineering and Center for Atmospheric Particle Studies, Carnegie Mellon University

2007 – 2012 Laboratory Research Manager, Center for Atmospheric Particle Studies, Carnegie Mellon University

2006 – 2007 Post Doctoral Fellow, U.S. Department of Energy, National Energy Technology Laboratory

Publications (N = 42, *h* = 23)

1. Omara, M.; Sullivan, M.R.; Li, X.; Subramanian, R.; Robinson, A.L.; Presto, A.A. Methane emissions from conventional and unconventional natural gas production sites in the Marcellus Shale basin. *Environ. Sci. Technol.*, **2016**, *50*, 2099-2107, DOI: 10.1021/acs.est.5b05503
2. Tan, Y.; Dallmann, T.R.; Robinson, A.L.; Presto, A.A. Application of Plume Analysis to Build Land Use Regression Models from Mobile Sampling to Improve Model Transferability. *Atmos. Environ.*, **2016**, *134*, 51-60, DOI: 10.1016/j.atmosenv.2016.03.032
3. Tan, Y.; Lipsky, E.M.; Saleh, R.; Robinson, A.L.; Presto, A.A. Characterizing the spatial variation of air pollutants and the contributions of high emitting vehicles in Pittsburgh, PA. *Environ. Sci. Technol.* **2014,** *48*, 14186-14194, DOI: 10.1021/es5034074
4. Tan, Y.; Robinson, A.L.; Presto, A.A. Quantifying uncertainties in pollutant mapping studies using the Monte Carlo method. *Atmos. Environ.* **2014**, *99*, 333-340, DOI: 10.1016/j.atmosenv.2014.10.003
5. Presto, A.A.; Dallmann, T.R.; Gu, P.; Rao, U. BTEX exposures in an area impacted by industrial and mobile sources: source attribution and impact of averaging time. *J. Air & Waste Manage. Assoc.*, **2016**, *66*, 387-401, DOI: 10.1080/10962247.2016.1139517
6. Saleh, R.; Robinson, E. S.; Tkacik, D. S.; Ahern, A. T.; Liu, S.; Aiken, A. C.; Sullivan, R. C.; Presto, A. A.; Dubey, M. K.; Yokelson, R. J.; Donahue, N. M.; Robinson, A. L. Light absorption by biomass-burning aerosols: Brownness of organics scales with black carbon content. *Nat. Geosci.* **2014**, *7*, 647-650. DOI: 10.1038/ngeo2220
7. Gordon, T.D.; Tkacik, D.T.; Presto, A.A.; Zhang, M; Jathar, S.H.; Nguyen, N.T.; Massetti, J.; Truong, T.; Cicero-Fernandez, P.; Maddox, C.; Rieger, P.; Chattopadhyay, S.; Maldonado, H.; Maricq, M.; Robinson, A.L. Primary gas- and particle-phase emissions and secondary organic aerosol production from gasoline and diesel off-road engines. *Environ. Sci. Technol.*, **2013**, 47, 14137-14146.
8. Presto, A.A.; Hennigan, C.J.; Nguyen, N.T.; Robinson, A.L. Determination of volatility distributions of primary organic aerosol emissions from internal combustion engines using thermal desorption gas chromatography mass spectrometry, *Aerosol Sci. Technol.,* **2012**, *46,* 1129-1139.
9. Presto, A.A. and Granite, E.J. Impact of sulfur oxides on mercury capture by activated carbon, *Environ. Sci. Technol.,* **2007,** *41,* 6579-6584

10. Presto, A.A.; Huff Hartz, K.E.; Donahue, N.M. Secondary organic aerosol formation from terpene ozonolysis: 2. Effect of NO_x concentration, *Environ. Sci. Technol.*, **2005,** *39*, 7046-7054.

Synergistic Activities

- Professional Society Memberships: American Association for Aerosol Research (AAAR), International Society for Exposure Science (ISES)
- Allegheny County Health Department Criteria Pollutant and Monitoring Committee (May 2015 – present)
- Development Committee (2015-present), American Association for Aerosol Research
- Peer reviewer for *Aerosol Science & Technology*, *Atmospheric Chemistry and Physics*, *Atmospheric Environment*, *Environmental Science & Technology*, and *Journal of Geophysical Research*
- Proposal reviewer for ACS Petroleum Research Fund, National Science Foundation, National Oceanic and Atmospheric Administration, National Environment Research Council (UK)

Collaborators and Other Affiliations

Peter Adams (Carnegie Mellon University), Allison Aiken (Los Alamos National Lab), Joshua Apte (UT-Austin), Adam Boies (U. Minnesota), Oliver Chang (CARB), Sulekha Chattopadhyay (CARB), Edwin Corporan (Air Force Research Lab), Phillip Croteau (Aerodyne Research), Neil Donahue (Carnegie Mellon University), Greg Drozd (UC Berkeley), Manvendra Dubey (Los Alamos National Lab), Tim Gordon (NOAA), Christopher Hennigan (UMBC), Shantanu Jathar (Colorado State), John Jayne (Aerodyne Research), Andrew Lambe (Aerodyne Research), Eric Lipsky (Carnegie Mellon University), Christine Maddox (CARB), Hector Maldonado (CARB), Matti Maricq (Ford), Julian Marshall (U. Minnesota), Andrew May (Ohio State), Dylan Millet (U. Minnesota), Kwangsam Na (CARB), Spyros Pandis (Carnegie Mellon University), Paul Rieger (CARB), Daniel Riemer (U. Miami), William Robertson (CARB), Allen Robinson (Carnegie Mellon University), Ellis Robinson (NOAA), Keshav Sahay (CARB), Rawad Saleh (Carnegie Mellon University), Satbir Singh (Carnegie Mellon University), Ryan Sullivan (Carnegie Mellon University), Daniel Tkacik(Carnegie Mellon University), Douglas Worsnop (Aerodyne Research), Robert Yokelson (U. Montana), Yunliang Zhao (Carnegie Mellon University)

Graduate Advisors and Postdoctoral Sponsors (2)

Ph.D.: Neil Donahue, CMU. Postdoc: Evan Granite, NETL

Thesis Advisor (5; CMU)

Peishi Gu (expected December 2018), Andrew Hix (expected May 2017), Xiang Li (expected May 2017), Zhongju Li (expected May 2018), Rishabh U. Shah (expected May 2020)

Postgraduate-Scholar Sponsor (4)

Timothy Dallmann (International Council on Clean Transit), Andrew May (Ohio State University), Mark Omara (Carnegie Mellon University), Yi Tan (CA Air Resources Board)