

CURRICULUM VITAE

Personal Information

Richard H. Moore, Ph.D. Candidate

Georgia Institute of Technology
School of Chemical and Biomolecular Engineering
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Educational Background

in progress Ph.D., Chemical Engineering
with a Certificate in Public Policy and
completion of the Tech to Teaching Level A Program
Georgia Institute of Technology, Atlanta, GA
Advisor: Dr. Athanasios Nenes

2004-2006 M.S., Chemical Engineering
Bucknell University, Lewisburg, PA
Advisor: Dr. Timothy M. Raymond

2000-2004 B.S., Chemical Engineering
Bucknell University, Lewisburg, PA

Awards & Honors

Graduate Research Environmental Fellowship, 2007-2010,
U.S. Department of Energy: Global Change Education Program
President's Fellowship, 2006-2010, Georgia Institute of Technology
Funded Member of the United States Delegation to the 60th Meeting of the
Nobel Laureates in Lindau, Germany, June 22 – July 2, 2010.
NSF-Funded Participant, American Meteorological Society Summer Policy
Colloquium, Washington D.C., June 1-10, 2008.
Award for Exemplary Academic Achievement, 2006-2007, School of
Chemical & Biomolecular Engineering, Georgia Institute of Technology
Co-Recipient, Best Oral Presentation, 2009 Earth and Atmospheric
Sciences Symposium, Georgia Institute of Technology
3rd Place Winner, 2009 Chemical & Biomolecular Engineering Symposium,
Georgia Institute of Technology
3rd Place Winner, 2003 AIChE Student Poster Competition, Separations

Research Field Campaigns:

CIRPAS MASE-II (2007), NOAA ARCPAC (2008), AMIGAS (2008),
NCCN (2009), CALNEX (2010)

- Professional Affiliations** American Meteorological Society (2007 – present)
Member, Sigma Xi Scientific Research Society (2006 – present)
American Geophysical Union (2009 – present)
American Institute of Chemical Engineers (AIChE) (2000 – present)
American Society for Engineering Education (ASEE) (2006 – 2008)
- Service Affiliations:** Graduate Student Senator, Georgia Institute of Technology (2007 – present)
Internal Affairs Chair, Georgia Tech Graduate Senate (2009 – present)
Graduate Curriculum Committee, Georgia Tech (2009 – present)
Honor Committee, Georgia Institute of Technology (2007 – present)
Stipend Committee, Georgia Institute of Technology (2009 – present)
Student Voting Member, Bucknell Graduate Council (2005-2006)
Member, Engineers Without Borders – USA, Bucknell Chapter (2006)

Patents

U.S. Provisional Patent No. 61/242,601, “Scanning Flow CCN Analysis (SFCA)”, 15 Sept 2009

Peer-Reviewed Publications

Moore, R. H., Nenes, A. “Scanning Flow CCN Analysis: A Method for Fast Measurements of CCN Spectra.”, *Aerosol Sci. Technol.*, 43, 1-16, doi:10.1080/02786820903289780, 2009.

Moore, R. H., Ingall, E. D., Sorooshian, A., Nenes, A. “Molar Mass, Surface Tension, and Droplet Growth Kinetics of Marine Organics from Measurements of CCN Activity.” *Geophys. Res. Lett.*, 35, L07801, doi:10.1029/2008GL033350, 2008.

Moore, R. H., Raymond, T. M. “HTDMA Analysis of Multicomponent Dicarboxylic Acid Aerosols with Comparison to UNIFAC and ZSR.” *J. Geophys. Res.*, 113, D04206, doi:10.1029/2007JD008660, 2008.

Vigeant, M. A., **Moore, R. H.** “Sneakers as a First-Step in Chemical Engineering.” *Proceedings of the American Society for Engineering Education Annual Conference & Exposition*. Chicago, IL. 2006.

Weible, C. M., **Moore, R. H.** “Analytics and Values: Competing Explanations for Defining Problems and in Choosing Allies and Opponents in Collaborative Environmental Management.” *Public Administration Review*, in press.

Nenes, A., **Moore, R.H.**, Medina, J. “Scanning Mobility CCN Analysis - A method for fast measurements of size resolved CCN distributions and activation kinetics.” *Aerosol Sci. Technol.*, *in review*

Asa-Awuku, A., **Moore, R.**, Brock, C., Bahreini, R., Middlebrook, A., Ryerson, T. B., Jimenez, J. L., DeCarlo, P.F., Hecobian, A., Weber, R.J., Stickel, R., Tanner, D.J., Huey, L.G., Nenes, A. “Tracking Cloud Condensation Nuclei Concentration in Urban Plumes: A CCN Closure Study During the Texas Air Quality Study of 2006.”, in preparation.

Selected Presentations

- Moore, R.H.**, Bahreini, R., Middlebrook, A.M., Cozic, J., Brock, C.A., Nenes, A. “CCN Activity and Droplet Growth Kinetics of Alaskan Arctic Haze Aerosol During April 2008.” American Association for Aerosol Research Annual Conference. Minneapolis, MN, October 29, 2009.
- Moore, R.H.**, Nenes, A. “Size-Resolved Scanning Flow CCN Analysis: A Method for Fast Measurement of CCN Spectra.” American Association for Aerosol Research Annual Conference. Minneapolis, MN, October 28, 2009.
- Moore, R.H.** “Using Measurements of CCN Activity to Characterize the Mixing State, Chemical Composition, and Droplet Growth Kinetics of Atmospheric Aerosols to Constrain the Aerosol Indirect Effect.” Department of Energy, Atmospheric Science Division Seminar, Brookhaven National Laboratory, Upton, NY, September 8, 2009.
- Moore, R. H.**, Kok, G., Nenes, A. “Scanning Flow CCN Analysis for Fast Measurements of CCN Spectra.” American Association for Aerosol Research Annual Conference. Orlando, FL, October 23, 2008. Also presented at DOE ARM Aerial Vehicle Program Workshop, University of Illinois, Champaign, IL, October 14, 2008.
- Moore, R. H.**, Ingall, E. D., Sorooshian, A., Nenes, A. “The Impact of Surface Ocean Organics on the Surface Tension, CCN Activity, and Droplet Growth Kinetics of Marine Aerosol.” American Association for Aerosol Research Annual Conference. Reno, NV, September 26, 2007.
- Moore, R. H.**, Raymond, T. M. “The influence of increasing chemical complexity on the hygroscopic properties of multicomponent dicarboxylic acid aerosols.” American Institute of Chemical Engineers Annual Conference. San Francisco, CA, November 16, 2006.
- Raymond, T. M., **Moore, R. H.**, Richardson, M. “Interactions of Chemical Components in Complex Aerosols and the Effects on Water Uptake.” 7th International Aerosol Conference. St. Paul, MN, September 10-15, 2006.
- Moore, R. H.**, Raymond, T. M. “Hygroscopicity of Multi-Component Organic Aerosols Using an Environmental Scanning Electron Microscope.” American Institute of Chemical Engineers Annual Conference. Cincinnati, OH, October 30 – November 4, 2005.
- Raymond, T. M., **Moore, R. H.** “Hygroscopicity of Multi-Component Organic Aerosols Using an Environmental Scanning Electron Microscope.” American Association for Aerosol Research Annual Conference. Austin, TX, October 17-21, 2005.
- McEwan, M. E., **Moore, R. H.**, Vigeant, M. A. “Solving the Armpit Stain Problem: Adhesion Mechanisms Between Al-Zr-Glycine and Fabric.” American Institute of Chemical Engineers Annual Conference. San Francisco, CA, November 16-21, 2003.
(Poster Presentation - 3rd Place Winner, Separations Division)