TAMI C. BOND

CURRICULUM VITAE

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PERSONAL STATEMENT

Tami Bond's research has centered on aerosol emissions and their atmospheric impacts. Her work includes global and regional emission inventories of particulate matter for the present, past, and future, including explicit representations of the combustion and control processes that govern emissions. Her group has expanded testing capabilities for cooking stoves and small industrial sources, including novel field measurements and installations at non-profit laboratories. Her research group also conducts laboratory characterization of optical and chemical properties of particulate matter and global modeling of their climate impacts.

EDUCATION

Ph.D., Interdisciplinary (Atmospheric Sciences, Civil Engineering, and Mechanical Engineering), University of Washington, Seattle, Washington, 2000.

M. S., Mechanical Engineering (Combustion), University of California at Berkeley, 1995.

B. S., Mechanical Engineering (summa cum laude), University of Washington, Seattle, 1993.

ACADEMIC & PROFESSIONAL APPOINTMENTS

2009-present Associate Professor, Civil & Environmental Engineering, University of Illinois at Urbana-Champaign, USA
 2007-present Affiliate Professor, Atmospheric Sciences, University of Illinois

2007-present Affiliate Professor, Atmospheric Sciences, University of Illinois 2011-2012 Senior Visiting Scholar, Tsinghua University, Beijing, China

2003-2009 Assistant Professor, Civil & Environmental Engineering, University of Illinois

2002-2003 Visiting Scientist, National Center for Atmospheric Research, 2002-2003.

2000-2002 NOAA Climate and Global Change Postdoctoral Fellow, NOAA/Pacific Marine Environmental Laboratories

SYNERGISTIC ACTIVITIES AND SERVICE

Global Alliance for Clean Cookstoves, Co-Chair, Standards & Testing Working Group, 2010-2011

Aerosol Science and Technology (Journal), Associate Editor, April 2009-present.

Atmospheric Chemistry and Physics (Journal), Associate Editor, March 2008-April 2009.

NAS/NRC Committee on Significance of the International Transport of Air Pollutants, June 2008-Sept 2009

Commission on Atmospheric Chemistry and Global Pollution, Member, 2006-2010 Engineers in Technical and Humanitarian Opportunities of Service (ETHOS), Board of Directors, 2004-2006; Technical Committee on Cookstove Performance Testing, Chair, 2007-2010.

SELECTED PUBLICATIONS

- Bond, T.C., and 30 co-authors (2013), Bounding the role of black carbon in the climate system: a scientific assessment, in press at *Journal of Geophysical Research*, 10.1002/jgrd.50171.
- Chen, Y., C. A. Roden and T. C. Bond (2012), Characterizing biofuel combustion with Patterns of Real-Time Emission Data (PaRTED), *Env. Sci. Tech*, 46, 6110-6117.
- Yan, F., E. Winijkul, S. Jung, T. C. Bond and D. G. Streets (2011), Global emission projections of particulate matter (PM): I. Exhaust emissions from on-road vehicles, *Atmos. Env.*, **45**, 4830-4844.
- Bond, T.C., C. M. Zarzycki, M. G. Flanner, and D. M. Koch (2011), Quantifying immediate radiative forcing by black carbon and organic matter with the Specific Forcing Pulse, *Atmos. Chem. Phys.*, 11, 1505-1525.
- Zarzycki, C. M. and T. C. Bond (2010), How much can the vertical distribution of black carbon affect its global direct radiative forcing? *Geophys. Res. Let.*, doi: 10.1029/2010GL044555.
- Chen, Y. and T. C. Bond (2010), Light absorption by organic carbon from wood combustion, *Atmospheric Chemistry and Physics*, 10, 1773-1787.
- Unger, N., T. C. Bond, J. S. Wang, D. M. Koch, S. Menon, D. T. Shindell, and S. Bauer (2010), Attribution of climate forcing to economic sectors, *Proc. Nat. Acad. Sci.*, doi:10.1073/pnas.0906548107.
- Subramanian, R., T.C. Bond, W. Thiansathit, N.T.K. Oanh, K.G. Duleep, I. Paw-armart, and E. Winijkul (2009), Source characterization to support quantification of co-benefits: a piggyback study in Bangkok, Thailand, *Env. Sci. Tech.*, 43, 4213-4218.
- Roden, C. A., T. C. Bond, S. Conway, A. B. Osorto, N. MacCarty, and D. Still (2009), Laboratory and field investigations of particulate and carbon monoxide emissions from traditional and improved cookstoves, *Atmos. Env.*, **43** (1170-1181).
- Boparai, P., J. Lee, and T. C. Bond (2008), Revisiting thermal-optical analysis of carbonaceous aerosol using a physical model, *Aer. Sci. Tech.*, **42**, 930-938.
- Sun, H., L. Biedermann, and T. C. Bond (2007), The color of brown carbon: a model for ultraviolet and visible light absorption by organic carbon aerosol, *Geophys. Res. Let.* (34), L17813, doi: 10.1029/2007GL029797.
- Bond, T. C., E. Bhardwaj, R. Dong, R. Jogani, S. Jung, C. Roden, D.G. Streets, S. Fernandes, and N. Trautmann, Historical emissions of black and organic carbon aerosol from energy-related combustion, 1850-2000 (2007), *Global Biogeochem. Cycles* **21**: GB2018, doi:10.1029/2006GB002840.
- Bond, T.C. and R. W. Bergstrom (2006). Light absorption by carbonaceous particles: an investigative review, *Aer. Sci. Tech*, **40** (1), 27-67.
- Bond, T.C. and H. Sun, Can reducing black carbon emissions counteract global warming? (2005), *Env. Sci. Tech* **39**, 5921-5926.
- Bond, T.C., D. G. Streets, K. F. Yarber, S. M. Nelson, J.-H. Woo, and Z. Klimont (2004), A technology-based global inventory of black and organic carbon emissions from combustion, *J. Geophys. Res.* **109**, D14203, doi:10.1029/2003JD003697.

Honors

U of Illinois University Scholar, 2012-2015; Center for Advanced Study Fellow, U of Illinois, 2008; Xerox Award for Faculty Research, 2007; Arthur and Virginia Naumann Endowed Faculty Scholar, 2006-2010; National Science Foundation CAREER award, 2004-2010