

MEIYUN LIN

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EDUCATION

- Ph.D., 2007, University of Tokyo, Tokyo, Japan
Study focus: Regional atmospheric chemistry in Asia
- M.E., 2004, Dalian University of Technology, Dalian, China
Study focus: Environmental impact assessment using a life-cycle perspective
- B.E., 2001, Sichuan University, Chengdu, China
Study focus: Environmental science and engineering

RESEARCH ACTIVITIES

- **Princeton University, Atmospheric & Oceanic Sciences** (Jan 2011-present)
Associate Research Scholar: Linkages of air quality, climate, and public policy
Member of Atmospheric Physics and Chemistry group at NOAA GFDL
- **Princeton University, Atmospheric & Oceanic Sciences** (June 2010-Dec 2010)
Postdoctoral research associate
Member of Atmospheric Physics and Chemistry group at NOAA GFDL
- **University of Wisconsin-Madison, Center for Sustainability and the Global Environment** (Mar.2008-May 2010)
Postdoctoral Scientist: Global-to-urban scale air pollution transport and chemical transformation processes
- **University of Tokyo, Center for Climate System Research** (Sep. 2007-Feb.2008)
Postdoctoral researcher: Study the direct and indirect effects of aerosols on radiative forcing and the hydrological cycle over East Asia
- **University of Tokyo, Institute of Industrial Science** (Aug.2004-Sep.2007)
Graduate Student, affiliated with Department of Civil Engineering
Japan International Cooperation Agency (JICA) long-term trainee

PROFESSIONAL EXPERIENCE

Co-Investigator, NASA Air Quality Applied Science Team, May 2011-present

Section Chair, Impacts of baseline ozone and particulate matter on surface air quality, AGU Fall Meeting 2011

Contributing Author, Global and regional modeling chapter, UN Task Force on Hemispheric Transport of Air Pollution (TF HTAP) 2010 Report, 2009-2010

Participant in the Model Intercomparison Study for Asia (MICS-Asia), 2008-2010

Reviewer for Atmospheric Chemistry and Physics, Journal of Geophysical Research-Atmospheres, Atmospheric Environment, Science of the Total Environment, Journal of Atmospheric Research, Water, Air, & Soil Pollution, Atmospheric Research, 2008-present

MANUSCRIPTS TO BE SUBMITTED:

Lin M. et al.: Role of model resolution on simulated stratospheric influence on surface ozone air quality, to be submitted to ***Geophysical Research Letter***, Feb 2012

Lin M. et al.: Springtime high surface ozone events over the western United States: Quantifying the role of stratosphere-to-troposphere transport, to be submitted to ***Journal of Geophysical Research***, Feb 2012

PUBLICATIONS

Lin, M., A. Fiore, L. W. Horowitz, O. R. R. Cooper, V. Naik, J. S. Holloway, B. J. J. Johnson, A. M. Middlebrook, S. J. J. Oltmans, I. B. Pollack, T. B. Ryerson, J. Warner, C. Wiedinmyer, J. Wilson, and B. Wyman (2012), Transport of Asian ozone pollution into surface air over the western United States in spring, ***J. Geophys. Res.***, doi:10.1029/2011JD016961, in press.

Lin M., T. Holloway, G. R. Carmichael and A. M. Fiore: Quantifying pollution inflow and outflow over East Asia in spring with regional and global models. ***Atmospheric Chemistry and Physics***, 10, 4221-4239, 2010, doi:10.5194/acp-10-4221-2010.

Lin M., T. Holloway, T. Oki, D.G. Streets, A. Richter: Multiscale model analysis of boundary layer ozone over East Asia. ***Atmospheric Chemistry and Physics*** 9, 3277-3301, 2009.

Lin M., T. Oki, T. Holloway, D.G. Streets, M. Bengtsson, S. Kanae. Long-range transport of acidifying substances in East Asia – Part I: Model evaluation and sensitivity Studies. ***Atmospheric Environment*** 42 (24), 5939-5955, 2008.

Lin M., T. Oki, M. Bengtsson, S. Kanae, T. Holloway, D.G. Streets: Long-range transport of acidifying substances in East Asia – Part II: Source-receptor Relationships. ***Atmospheric Environment*** 42 (24), 5956-5967, 2008.

Lin M., T. Oki, and M. Bengtsson. Long-range transport and transformations of acidifying substances over East Asia in springtime. ***Annual Journal of Hydraulic Engineering***, JSCE, Vol.51, 91-96, 2007

Lin M., S. Zhang, and Y. Chen. Distance-to-target weighting in life cycle impact assessment based on Chinese environmental policy for the period 1995-2005. ***International Journal of Life Cycle Assessment*** 10 (6), 393-398, 2005

Lin M., S. Zhang, and Y. Chen. Life Cycle Assessment of Environmental Impact of Air Conditioning Cold and Heat Source. ***Heating, Ventilating & Air Conditioning***. Vol.34 No.7, 93-96, 2004 (In Chinese with English abstract)

PRESENTATIONS & INVITED TALKS

- **TF HTAP meeting on 2011-2015 work plans**, Pasadena, CA (Feb. 2012)
Talk title: "Transport of Asian ozone pollution into surface air over the western United States in spring"
- **AGU Fall Meeting 2011**, San Francisco, CA (Dec. 2011)
Talk title: "Variability and changes in tropospheric ozone over the western United States (1980-2010): Exploring the roles of stratosphere-to-troposphere transport and El Nino-Southern Oscillation"

- **NASA Air Quality Applied Sciences Team (AQAST) Meeting**, EPA Research Triangle Park, NC (Nov. 2011)
Investigator Project: “Estimating background ozone and its specific components over the United States to support NAAQS-setting, implementation, and attainment planning”
Tiger Team Project: “Model Intercomparison of background ozone to inform NAAQS setting and implementation”
- **NOAA GFDL Science Symposium**, Princeton, NJ (Oct. 2011)
Talk title: “Stratospheric impacts on ground-level ozone air quality over the western United States”
- **NOAA Senior Research Council**, Princeton, NJ (Jul. 2011)
Talk title: “Stratospheric and Asian impacts on tropospheric ozone over western North America: mean, extremes and the role of ENSO”
- **2nd Tropospheric Ozone Changes Workshop, Toulouse, France (Apr. 2011)**
Talk title: “Trends and variability of tropospheric ozone at northern mid-latitudes in 1980- 2010: Exploring the role of emissions, ENSO and STE”
- **AGU Fall Meeting 2010**, San Francisco, CA (Dec. 2010)
Talk title: “Impacts of Asian emissions on ozone air quality over the western United States”
- **NOAA Geophysical Fluid Dynamics Laboratory** (Nov. 2009)
Talk title: “Multi-scale mechanisms affecting hemispheric transport and chemistry”
- **Institute of Industrial Science, University of Tokyo**, Japan (Oct. 2009)
Talk title: “Connections between air pollution and the hydrological cycle”
- **Hong Kong Polytechnic University**, Hong Kong, China (Oct. 2009)
Hosted by Professor Tao Wang’s research group
Talk title: “Multi-scale model analysis of air pollution in Asia”
- **Regional Scientific Workshop on Acid Deposition 2009**, Japan (Oct. 2009)
Hosted by the Acid Deposition Monitoring Network in East Asia (EANET)
Talk title: “Multi-scale model analysis of EANET Data”
- **Take Force on Hemispheric Transport of Air Pollution**, Paris, France (June 2009)
Workshop on Linkages between Regional and Global Modeling, Air Quality and Climate Change
Talk title: “Quantifying pollution inflow and outflow over East Asia through coupling regional and global models”
- **International Institute for Applied Systems Analysis**, Laxenburg, Austria (Feb.2009)
11th workshop for Model Inter-comparison Study for Asia
Talk title: “Inter-comparison of two regional atmospheric chemistry models (WRF-Chem and CMAQ) for East Asia”
- **International Institute for Applied Systems Analysis**, Austria (Feb. 2008)
10th workshop for Model Inter-comparison Study for Asia
Talk title: “Evaluating gaseous pollutants and source-receptor relationships for reactive nitrogen deposition in East Asia”
- **University of Wisconsin-Madison** (Nov. 2008)
Climate, People, and Environment Program Seminar, Center for Climate Research
Talk title: “What controls the seasonality of boundary layer ozone in Asia?”
- **Task Force on Hemispheric Transport of Air Pollution**, Hanoi, Vietnam (Oct. 2008)
Talk title: “Regional impacts of hemispheric air pollution transport”

CONFERENCE PRESENTATIONS & WORKSHOPS

- **AGU Fall Meeting 2011**, San Francisco, CA (Dec 2011)
Poster presentation: Springtime high surface ozone events over the western United States: Quantifying the role of stratospheric intrusions
- **IGAC 2010**, Halifax, Canada (July 2010)
Poster presentation: Improving process understanding of trans-Pacific pollution transport: Insights from high-resolution models and observations
- **Institute of Atmospheric Physics, Chinese Academy of Sciences**, Beijing, China (Oct. 2009)
Hosted by Professor Zifa Wang's research group
Talk title: "Multi-scale model analysis of air pollution in Asia"
- **National Center for Atmospheric Research**, Boulder, Colorado (July 2009)
2009 NCAR Workshop on Climate and Health
Talk title: "Challenges in evaluating health impacts from large-scale climate and air pollution in Asia"
- **National Center for Atmospheric Research**, Boulder, Colorado (July 2009)
2009 NCAR Workshop on Climate and Health
Talk title: "Challenges in evaluating health impacts from large-scale climate and air pollution in Asia"
- **University of Wisconsin-Madison** (Apr. 2009)
Sustainability and the Global Environment Seminar
Talk title: "East China Plains: A plain of air pollution"
- **American Geophysical Union**, Fall Meeting, San Francisco, California (Dec. 2008)
Poster presentation: "Why do models overpredict summertime ground-level ozone over Central Eastern China?"
- **University of Wisconsin-Madison** (Oct. 2008)
Sustainability and the Global Environment Seminar
Talk title: "Air quality in Asia".
- **University of Toronto**, Toronto, Canada (Sep. 2008)
Dr. Dylan Jones Research Group, Department of Atmospheric Physics
Talk title: "Regional atmospheric chemistry in Asia"
- **National Center for Atmospheric Research**, Boulder, Colorado (Jul. 2008)
Talk title: "Connecting CAM-Chem with WRF-Chem: Learning from CMAQ & MOZART analysis for East Asia"
- **Workshop of Atmospheric Chemistry, Climate, and Trans-boundary Air Pollution**, Washington DC (June 2008)
Poster presentation: "Impacts of hemispheric transport of air pollution on Asia"
- **University of Tokyo**, Center for Climate System Research, Japan (Dec. 2007)
Talk title: "Long-range transport and source-receptor relationships of acidifying substances in East Asia"
- **University of Tokyo**, Kondo Lab, Research Center for Advanced Science and Technology Japan (Feb. 2007)
Talk title: "Long-range transport of acidifying substances in East Asia: A simulation of source-receptor relationships"
- **Japan Society of Civil Engineering**, Tokyo, Japan (Mar. 2007)

51st Conference on Hydraulic Engineering

Talk title: “Long-range transport of acidifying substances over East Asia in springtime”

- **Society of Environmental Toxicology and Chemistry, SETAC-Europe 16th Annual Meeting, the Hague, Netherlands (May 2006)**

Talk title: “Site-dependent characterization modeling of acidification in life cycle impact assessment in Asia”

TEACHING & MENTORING EXPERIENCE

- Guest Lecture, University of Wisconsin-Madison (4/10)
AOS 535, Atmospheric Dispersion & Air Pollution
- Work with five graduate students, University of Wisconsin-Madison (3/08-5/10)
Help with technical modeling and analysis issues, and discussing recent literature
- Mentor to an undergraduate student, University of Wisconsin-Madison (7/08-9/08)
Taught visualizing and interpreting model output data using graphic tools
- Mentor to a graduate student, Dalian University of Technology (9/03-7/04)
Advised Life Cycle Assessment methodology and database design
- Mentor to an undergraduate student, Dalian University of Technology (9/02-7/03)
Advised data collecting and reviewed bachelor thesis entitled “Environmental Life Cycle Assessment of Green Hotels”

HONORS & AWARDS

- **Travel Grant from United States Environmental Protection Agency (6/09)**
Presenting at the task force workshop on hemispheric transport of air pollution held in Paris, France
- **Travel Grant from Acid Deposition and Oxidant Research Center (ADORC), Japan (2/09, 2/08)**
Presenting at 10th and 11th workshop on Model Inter-comparison Study for Asia held in Laxenburg, Austria
- **Travel Grant from European Commission (10/08)**
Presenting at the Task Force Workshop on Hemispheric Transport of Air Pollution held in Hanoi, Vietnam
- **Travel Grant from National Science Foundation (7/08)**
Participating the Cutting Edge Workshop – Preparing for an Academic Career in the Geosciences, Oklahoma, USA
- **Doctoral Scholarship from Japan International Cooperation Agency (8/04-9/07)**
Nominated by Ministry of Science and Technology of China
- **Award for Excellent Master’s Dissertation, Dalian University of Technology, China (7/04)**
- **The Procter & Gamble Scholarship, Sichuan University, China (9/99-7/00)**
- **Student Academic Performance Scholarship, Third Prize, Sichuan University, China (9/98-7/99)**

- **Student Academic Performance Scholarship**, Third Prize, Sichuan University, China (9/97-7/98)

PROFESSIONAL SKILLS

- Integrated analysis of observational data from satellite remote sensing, aircraft measurements and surface networks with models to inform public policy
- Global and regional-scale modeling of atmospheric chemistry, weather and climate (GFDL AM3, WRF-Chem, CMAQ, MM5)
- Graphic tools: NCL (NCAR command language), IDL, GMT (General Mapping Tool), and GrADs (The Grid Analysis and Display System), RIP, PAVE
- Computer: UNIX/Linux, advanced FORTRAN 77/90 programming, and scripting (shell, awk, perl, python)

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Geophysical Union, 2008-present
- Earth Science Women's Network, 2009-present