

## MEIYUN LIN

GFDL, 201 Forrestal Rd.  
Princeton, NJ 08542-0308  
(609) 452-6551

meiyunl@princeton.edu  
<http://www.gfdl.noaa.gov/meiyun-lin-homepage>

### 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** (June 2010-present)  
*Research Associate: Multi-scale interactions between climate and air quality*  
*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

**Contributing Author**, Global and regional modeling chapter, 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-present

**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

### PUBLICATIONS

Lin M., et al.: Improving process understanding of transpacific transport with high-resolution models and observations. To be submitted to **Journal of Geophysical Research**, 2010

- Lin M. et al: Development of an emission-processing model for regional air quality modeling (WRF-Chem and CMAQ). Manuscript in preparation for ***Environmental Research Letters***, 2010
- 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)

### **INVITED TALKS**

- **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**

- **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**

- Regional-scale climate and atmospheric chemistry modeling (WRF-Chem, CMAQ, MM5)
- Integrated analysis of observational data from satellite remote sensing (MOPITT CO, GOME and OMI HCHO & NO<sub>2</sub>), aircraft measurements (TRACE-P and INTEX-B) and surface networks (EANET, AQS, CASTNet)
- Graphic tools: IDL, NCL (NCAR command language), 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