

MEIYUN LIN

Center for Sustainability and the Global Environment (SAGE)
University of Wisconsin-Madison
1710 University Ave., Madison, WI 53726
<http://www.sage.wisc.edu/people/lin/lin.html>
Email: mli26@wisc.edu; Tel: (608) 890 2516

RESEARCH INTERESTS

- Interactions between climate and air quality
- Trends and variability of atmospheric constituents
- Modeling of global-to-urban scale air pollution transport and chemical transformations

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

- **University of Wisconsin-Madison, Center for Sustainability and the Global Environment** (3/08~present)
Postdoctoral Scientist: Research activities addressing global-to-urban scale air pollution transport and chemical transformation processes, and the interactions of atmospheric chemistry and climate through a NASA-funded research project
- **University of Tokyo, Center for Climate System Research** (9/07~2/08)
Postdoctoral researcher: Research on the direct and indirect effects of aerosols on radiative forcing and the hydrological cycle over East Asia
- **University of Tokyo, Institute of Industrial Science** (8/04~9/07) (*affiliated with Department of Civil Engineering*)
Graduate Student, Japan International Cooperation Agency (JICA) Long-term Trainee

TEACHING & MENTORING EXPERIENCES

- Work with five graduate students, University of Wisconsin-Madison (3/08~present)
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, 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 (9/08)**
Presenting at 10th International Conference on Global Atmospheric Chemistry, Annecy, France
- **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)
- Integrated analysis of observational data from satellite remote sensing, aircraft measurements and ground-based network with models
- Graphic tools: NCL (NCAR command language), GMT (General Mapping Tool), and GrADS (The Grid Analysis and Display System), IDL (beginning level), PAVE
- Computer: UNIX/Linux, advanced FORTRAN 77/90 programming, and scripting (shell, awk, perl, python)

PROFESSIONAL SERVICE

Reviewer for Atmospheric Chemistry and Physics (3), Journal of Geophysical Research-Atmospheres (1), Science of the Total Environment (1), Journal of Atmospheric Research (1), Water, Air, & Soil Pollution (1), Atmospheric Research (1)

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Geophysical Union
- Earth Science Women's Network

PUBLICATIONS***In preparation:***

Lin M. et al.: Nested simulation of Asian pollution import to the western United States using the WRF-Chem model. Manuscript in preparation for *Atmospheric Chemistry and Physics*, 2009

Lin M. et al: Development of an emission processing model for regional air quality modeling. Manuscript in preparation for *Environmental Research Letters*, 2009

Lin M. et al.: Intercomparison of two regional atmospheric chemistry models (WRF-Chem and CMAQ) over East Asia. To be submitted to *Journal of Geophysical Research*, 2009

Published:

Lin M., T. Holloway, G. R. Carmichael and A. M. Fiore: Quantifying pollution inflow and outflow over East Asia through coupling regional and global models. *Atmospheric Chemistry and Physics Discussions*, 10, 109-152, 2010, <http://www.atmos-chem-phys-discuss.net/10/109/2010/>

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)

SELECTED PRESENTATIONS & WORKSHOPS

- **NOAA Geophysical Fluid Dynamics Laboratory & Princeton University** (11/09)
Talk title: “Multi-scale mechanisms affecting hemispheric transport and chemistry”
- **Institute of Industrial Science, University of Tokyo, Japan** (10/09)
Talk title: “Connections between air pollution and the hydrological cycle”
- **Hong Kong Polytechnic University, Hong Kong, China** (10/09)
Invited speaker, hosted by Professor Tao Wang’s research group
Talk title: “Multi-scale model analysis of air pollution in Asia”
- **Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China** (10/09)
Hosted by Professor Zifa Wang’s research group
Talk title: “Multi-scale model analysis of air pollution in Asia”

- **Regional Scientific Workshop on Acid Deposition 2009**, Tsukuba, Japan (10/09)
Invited speaker, hosted by the Acid Deposition Monitoring Network in East Asia (EANET)
Talk title: “Multi-scale model analysis of EANET Data”
- **National Center for Atmospheric Research**, Boulder, Colorado (7/09)
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 (7/09)
2009 NCAR Workshop on Climate and Health
Talk title: “Challenges in evaluating health impacts from large-scale climate and air pollution in Asia”
- **Take Force on Hemispheric Transport of Air Pollution**, Paris, France (6/09)
Invited speaker, 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”
- **University of Wisconsin-Madison** (4/09)
Sustainability and the Global Environment Seminar
Talk title: “East China Plains: A plain of air pollution”
- **International Institute for Applied Systems Analysis**, Laxenburg, Austria (2/09)
Invited speaker, 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”
- **American Geophysical Union**, Fall Meeting, San Francisco, California (12/08)
Poster presentation: “Why do models overpredict summertime ground-level ozone over Central Eastern China?”
- **University of Wisconsin-Madison** (11/08)
Invited speaker, 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 (10/08)
Invited speaker, Talk title: “Regional impacts of hemispheric air pollution transport”
- **University of Wisconsin-Madison** (10/08)
Sustainability and the Global Environment Seminar
Talk title: “Air quality in Asia”.
- **University of Toronto**, Toronto, Canada (9/08)
Dr. Dylan Jones Research Group, Department of Atmospheric Physics
Talk title: “Regional atmospheric chemistry in Asia”
- **National Center for Atmospheric Research**, Boulder, Colorado (7/08)
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 (6/08)
Poster presentation: “Impacts of hemispheric transport of air pollution on Asia”
- **International Institute for Applied Systems Analysis**, Austria (2/08)
Invited speaker, 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 Tokyo**, Japan (12/07)
Center for Climate System Research
Talk title: “Long-range transport and source-receptor relationships of acidifying substances in East Asia”
 - **University of Tokyo**, Japan (2/07)
Joint seminar at Kondo Lab, Research Center for Advanced Science and Technology
Talk title: “Long-range transport of acidifying substances in East Asia: A simulation of source-receptor relationships”
 - **Japan Society of Civil Engineering**, Tokyo, Japan (3/07)
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 (5/06)
Talk title: “Site-dependent characterization modeling of acidification in life cycle impact assessment in Asia”