DENISE L. MAUZERALL
PRINCETON UNIVERSITY
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CIVIL AND ENVIRONMENTAL ENGINEERING DEPARTMENT
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PROFESSIONAL EXPERIENCE

Princeton University
William S. Tod Professor of Environmental Engineering and Intern'l Affairs (2023-present)
Professor of Environmental Engineering and International Affairs (2011- 2023)
School of Public and International Affairs and Civil and Environmental Engineering Department
Associate Professor of Environmental Engineering and International Affairs (2009-2011)
Associate Professor of Public and International Affairs (with tenure),
Woodrow Wilson School of Public and International Affairs (2006 - 2009)
Assistant Professor of Public and International Affairs, Woodrow Wilson School (1999- 2006)
Affiliate faculty, Geosciences Department (1999 - present)
Affiliate faculty, Atmospheric and Ocean Science program (2003 - present)
Affiliate faculty, High Meadows Environmental Institute (formerly PEI) (1999 - present)
Affiliate faculty, Civil and Environmental Engineering Department (2003 - 2009)
Affiliate faculty, Andlinger Center for Energy and Environment (2008 - present)
Affiliate faculty, Center for Contemporary China (2019-present)

Stanford University, Visiting Scholar (January – March 2016)

National Center for Atmospheric Research, Boulder, CO
Visiting Scientist, Atmospheric Chemistry Division (Summer 1999)
Post-doctoral Fellow, Advanced Study Program (1996-1998)

United States Environmental Protection Agency, Washington D.C.
Program Manager, Global Change Division, Office of Air and Radiation (1989-1990)

Environmental Consulting
Chief Environmental Engineer, Bruce Company, Washington D.C. (1988-1989)
Chemist, ICF Technology Inc., Washington D.C. (1985-1987)

EDUCATION

Harvard University
Ph.D., Atmospheric Chemistry, Earth and Planetary Science Department, 1996
Dissertation: Influence of fossil fuel combustion and biomass burning on tropospheric ozone.
Advisor: Daniel J. Jacob
M.A., Atmospheric Chemistry, Earth and Planetary Science Department, 1992

Stanford University
M.S., Environmental Engineering, 1988

Brown University
Sc.B., with honors, Chemistry, 1985

University of Sussex, exchange student, 1984

HONORS & PROFESSIONAL SERVICE

Elected Fellow of the American Geophysical Union	(2023)
William S. Tod endowed chair at Princeton University	(2023)
Founding Co-Editor in Chief, *Sustainable Horizons* journal	2021-present
Editorial Board, *Advances in Applied Energy* journal	2020-present
Editorial Board, Atmospheric Environment	(2008-present)

Highly cited paper (top 1% of citations for given field in January 2023; November 2024)

- Acting rapidly to deploy readily available methane mitigation measures by sector can immediately slow global warming, *Environmental Research Letters*, 2021
- Air quality, nitrogen use efficiency and food security in China are improved by cost-effective agricultural nitrogen management, *Nature Food*, 2020.
- Air pollutant emissions from Chinese households: A major and underappreciated ambient pollution source, *PNAS*, 2016.
- Managing Nitrogen for Sustainable Development, *Nature*, 2015

Highly cited paper (top 1% of citations for given field in July/August 2021) noted for:

- Air pollutant emissions from Chinese households: A major and underappreciated ambient pollution source, *PNAS*, 2016 (for Geosciences).
- Managing Nitrogen for Sustainable Development, *Nature*, 2015, (for Environment/Ecology)
- Global crop yield reductions due to surface ozone exposure: 1. Year 2000 crop production losses and economic damage, *Atmospheric Environment*, 2011, (for Geosciences)

Highly cited paper (top 1% of citations for given field in December 2020) noted for:

- Air pollutant emissions from Chinese households: A major and underappreciated ambient pollution source, *PNAS*, 2016 (for core collection).
- Managing Nitrogen for Sustainable Development, *Nature*, 2015, (for core collection)
- Global crop yield reductions due to surface ozone exposure: 1. Year 2000 crop production losses and economic damage, *Atmospheric Environment*, 2011, (for core collection)

Highly cited paper (top 1% of citations for given field in July/August 2019) noted for:

- Air pollutant emissions from Chinese households: A major and underappreciated ambient pollution source, *PNAS*, 2016 (for Geosciences).
- Managing Nitrogen for Sustainable Development, *Nature*, 2015, (for Environment/Ecology).
- Energy and Human Health, *Annual Review of Public Health*, 2013 (for Social Sciences).

- Global crop yield reductions due to surface ozone exposure: 1. Year 2000 crop production losses and economic damage, *Atmospheric Environment*, 2011, (for Geosciences).

Highly cited paper (top 1% of citations for given field in Sept/Oct 2018) noted for:

- Air pollutant emissions from Chinese households: A major and underappreciated ambient pollution source, *PNAS*, 2016 (for Geosciences).
- Vehicle Emissions as an Important Urban Ammonia Source in the United States and China, *Env Sci and Tech*, 2017 (for Environment/Ecology)
- Managing Nitrogen for Sustainable Development, *Nature*, 2015, (for Environment/Ecology).
- Global crop yield reductions due to surface ozone exposure: 1. Year 2000 crop production losses and economic damage, *Atmospheric Environment*, 2011, (for Geosciences).
- Energy and Human Health, *Annual Review of Public Health*, 2013 (for Social Sciences).

Executive Advisory Board, Institute for Advanced Sustainability Studies, Potsdam, Germany (2017-2022)

Science Advisory Board, U.S. Environmental Protection Agency, chartered member (2014-2017)

Executive Committee, Andlinger Center for Energy and Environment, Princeton University, (2018-present)

Executive Committee, Program in Technology & Society: Energy Track (2017 – present)

Executive Committee, Chadha Center for Global India, Princeton University (2019 – present)

IMPACT award, Princeton Office of Sustainability, Princeton University (2016)

Advisory Board, PANDA, Partnership with chiNa on space DAta, European Commission project (2013-2016)

Science Advisory Board, U.S. Environmental Protection Agency, Advisory Council on Clean Air Compliance (2010-2013)

Executive Committee, Princeton Institute for International and Regional Studies (2011-2015)

Advisory Board, ECLAIRE, Effects of climate change on air pollution impacts and response strategies for European ecosystems, European Commission project (2011-2015)

Assistant Editor, New Directions, *Atmospheric Environment* (2011-2012)

Executive Committee, Cooperative Institute for Climate Science, Princeton University and NOAA Geophysical Fluid Dynamics Laboratory (2006 - 2017)

Science Steering Committee, International Geosphere Biosphere Program (IGBP), Analysis, Integration and Modeling of the Earth System (including human impacts) (2005 - 2010)

Intergovernmental Panel on Climate Change (IPCC) contributing author.
The IPCC shared the Nobel Peace Prize with Vice President Al Gore (2007)

National Research Council / National Academy of Science, Committee on Air Quality Management in the United States. (2/2001- 4/2004)

NASA New Investigators Program grant (2002-2006)

Advanced Study Program Postdoctoral Fellowship, NCAR. (1996-1998)
Provided 2 years of unconstrained research funding.

AAAS Congressional Science Fellowship (declined) (1996)

NASA Graduate Student Fellowship in Global Change Research (1993 - 1996)
Provided stipend, research and travel funds for 3 years of doctoral research.

Invited participant, Atmospheric Chemistry Conference for Emerging Senior Scientists (ACCESS) and Gordon Conference in Atmospheric Chemistry (June 1995)

Harvard University Certificate of Distinction in Teaching (1992 - 1993)

Harvard University Levinson Teaching Award nomination (1993)

Graduate Student Fellowship, U.S. Dept. of Education, tuition and stipend (1991 - 1993)

Stanford University School of Engineering Fellowship, tuition. (1987 - 1988)

Elected to Sigma Xi (1985)

Sc.B. awarded with departmental honors, Brown University (1985)

TEACHING

Princeton University

WWS594s *Climate Change: Science, Policy and Mitigation*
(S2014, 2015, 2018, 2020, S2021, F2021, S2023, S2024, F2024, S2026)

CEE/ ENV334 /WWS475 *Global Environmental Issues*
(S2010, S2011, F2012, F2013, F2014,F2016, F2017, F2018, F2020, F2021, S2024, S2026)

WWS402-S04 *Policy Task Force: Sustainability at Princeton University: Lessons for Campus and the World* (Spring 2017)

WWS591e *Policy Workshop: State Policies on Hydraulic Fracturing* (Fall 2014)

WWS591g *Policy Workshop: Climate Change: Methane Mitigation Strategies* (Fall 2012)

WWS591e *Policy Workshop: Post Copenhagen Climate Change Initiatives: Fast Action Mitigation Strategies* (Fall 2010)

WWS350 *The Environment: Science and Policy* (Spring 2013)

WWS594S *Introduction to Science, Technology and Environmental Policy: Energy and climate policy analysis* (with Frank von Hippel) (Spring 2011)

FRS136*Science and Policy of Global Environmental Issues* (Spring 2010)

WWS/ENV334 *Global Environmental Issues* (Spring 2009)

FRS136*Living in a Polluted Greenhouse* (Spring 2009)

WWS591e *Policy Workshop: Integrating Clean Air and Greenhouse Gas Mitigation Strategies in Future Environmental Policy: A Focus on Black Carbon* (Fall 2008)

WWS 402d *Development of Policy Initiatives for the Sustainable Use of Energy at Princeton University* (Spring 2007)

WWS 591a *Policy Workshop: Climate Change, State Initiatives, and Coastal Hazards: Mitigation and Adaptation Strategies for New Jersey* (Fall 2006)

WWS 402e *Sustainable Development – Can We Do It?* (Spring 2003)

WWS402e *Air Pollution, Climate Change and Energy: How China Matters* (Spring 2001)

WWS402f *Air Pollution in India and China: Thinking Globally, Acting Locally* (Spring 2000)

WWS475 *Global Environmental Issues* (Spring 2003, Spring 2005, Fall 2005)

WWS584 *The Use of Science in Environmental Policy* (Fall 2004, Spring 2006, 2010)

WWS586e *Global Environmental Issues: Science and Policy* (Spring 2005)

WWS588 *Issues in Science, Technology and Environmental Policy* (Spring 1999)

WWS589 *Methods in Science, Technology and Environmental Policy* (Fall 1999, 2000 & 2002)
WWS591d *Environmental Diplomacy* (with Daniel Reifsnyder) (Fall 1999)

Harvard University, Harvard College, Teaching Fellow
Environmental Science and Public Policy, Profs. M.B. McElroy and W. Clark (Fall and Spring 1993)
Atmospheric Chemistry, Department of Earth and Planetary Science, Prof. D.J. Jacob (Spring 1992)
The Atmosphere, Undergraduate core program, Professor M.B. McElroy (Fall 1991)

Brown University, Department of Chemistry, Teaching Assistant
Honors Chemistry. First year honors course, Professor P. Rieger (Fall 1983)

Princeton Doctoral Students (primary adviser)
Xiaoping Wang (Ph.D. WWS 2004), Senior Energy Specialist, World Bank.
Junfeng Liu, (Ph.D. WWS 2006), Research Professor with tenure, College of Urban and Environmental Sciences, Peking University, China
Eri Saikawa, (Ph.D., WWS, September 2010), now Professor, Emory University
Shiri Avnery, (Ph.D., WWS, 2012), founder Thistle Co.
David Kanter, (Ph.D., WWS, 2014), now Associate Professor, New York University;
Wei Peng, WWS, PhD 2016, now Assistant Professor, Princeton University University
Yue Qin, WWS, PhD 2017, now Associate Professor, Peking University, Beijing, China
Xiaoyuan (Charles) Li, CEE, PhD 2018, now senior managing consultant, Energy and Environmental Economics Inc., San Francisco, CO
Junnan Yang, (PhD WWS 2019), now Boston Consulting Group, China
Yixin Guo, WWS, (PhD WWS 2019), now assistant professor, Hong Kong University of Science and Technology, Guangzhou, China.
Xu Chen, (PhD SPIA 2020), now Uber, San Francisco, CA
Zhongshu (Josh) Li, (PhD SPIA 2020), now Boston Consulting Group, China
Liqun Peng, (PhD SPIA, 2022), now post-doc LBNL, Berkeley CA
Shangwei Liu, (PhD SPIA, 2023), now post-doc Harvard Kennedy School
Xiangwen Fu, (PhD SPIA, 2024), now post-doc, Center for Global Sustainability, Univ of Maryland School of Public Policy.
Rohit Gupta, (PhD SPIA, 2024). now Indian Administrative Services, Commissioner of Industries, Jaipur, Rajasthan, India
Malini Nambiar, SPIA, G7
Yujie Wu, SPIA, G6
Ned Downie, SPIA, G5
Jieyi Lu, SPIA, G5
Beichen Lyu, SPIA, G3
Gargee Goswami, SPIA, G2
Yinyin Xu, SPIA, G1

Princeton Doctoral Students (committee member and/or PEI-STEP adviser)
Shardul Agrawala (PhD, WWS, 1999), now climate change administrator, Environment Directorate, OECD, Paris, France.

Shangping, Xu (PhD, CEE 2004, PEI-STEP certificate student), now Associate Professor of Geosciences, University of Wisconsin – Milwaukee.
Yan Zhang, (PhD, CEE, September 2010, PEI-STEP certificate student), now engineering technology entrepreneur.
Brian Ellis (STEP-PEI fellow 2010-2012) Associate Professor, University of Michigan
David Miller, (PhD CEE, 2013), now Environmental Defense Fund postdoctoral fellow
Megan Konar, (PhD CEE, 2012). Now tenured Associate Prof., Dept of Civil and Environmental Engineering, University of Illinois
Carole Dalin, (PhD, CEE, 2014, PEI-STEP certificate student), now tenured Associate Professor, Institute of Sustainable Resources, University College London
Matt Reid, (PhD, CEE, 2014, PEI-STEP certificate student), now Assistant Prof, Cornell Univ.
Mary Kang, (PhD, CEE, 2014, PEI-STEP certificate student), now Assistant Prof, McGill Univ
Xinwo Huang, (PhD, CEE, 2016, PEI-STEP certificate student)
David Pal, (PhD, CEE, 2016, PEI-STEP certificate student)
Cynthia Gerlein, (PhD, CEE, 2017; PEI-STEP certificate student), now Project Scientist, Lawrence Berkeley National Lab
Ryan Edwards, (PhD CEE, 2018; PEI-STEP certificate student), now AAAS Fellow, US Congress
Da Pan, (PhD CEE, 2020 PEI-STEP certificate student), now post-doc Colorado Univ – Fort Collins
Yiheng Tao, (PhD CEE, 2022) PEI-STEP certificate student
Glen Chua, (PhD, AOS program, 2024) HMEI-STEP certificate student
Anna Jacobson, (PhD, EEB, 2025) HMEI-STEP certificate student
Matthew Sima, (PhD, CEE, 2025) HMEI-STEP certificate student
Yun Choi, G4, CEE
Xinjie Huang, G4, CEE, HMEI-STEP certificate student.

Postdoctoral Fellows

Vaishali Naik (post-doc 2003-2006, associate research scholar 2006-2007). Now: Project Scientist, Geophysical Fluid Dynamics Laboratory, Princeton, NJ
Daniel Tong (post-doc 2005-2007) Now: Associate Professor, Atmospheric Chemistry, George Mason Univ.
Jason West (research associate, 2004-2006), Professor, Environmental Science and Engineering Department, School of Public Health, University of North Carolina, Chapel Hill, NC.
Monika Kopacz, (post-doc 2009-1010) Now: Program Manager, Climate Program Office, NOAA.
Yuanyuan Fang (post-doc 2010-2012), statistician, Bay Area Air Quality Management District, San Francisco, CA
Dan Westervelt, (post-doc 2013-2015), Now: Lamont Associate Research Professor, Lamont-Doherty Earth Observatory, Columbia University
Xin Zhang, (post-doc 2012-2015), Now: Professor, University of Maryland Center for Environmental Science
Hongxun Liu, (research associate 2018-2020), Now: Associate Professor, School of Economics and Finance, Xi'an Jiaotong University, Xi'an China
Disha Sharma, post-doc 2019-2021
Mingwei Li, post-doc 2019-2022, Assistant Professor, Institute of Energy, Environment and Economy, Tsinghua University, China

Yang Guo, research associate, 2020-2023, now Professor, School of Environment, Beijing Normal University, Beijing, China
Jing Liang, post-doc 2021-2022
Mi Zhou, post-doc 2021-present
Yuanyu Xie, research associate 2021-present

Senior Thesis Advisees:

Maha Qasim (CEE/WWS, 2007)

Susan Lyons (WWS, 2008)

Lyra Hass, (Politics, 2008)

Robert Weiss, (WWS, 2009). **Peter W. Stroh '51 Prize for best environmental thesis, as nominated by any department and the Richard H. Ullman Prize for best Woodrow Wilson School thesis on US foreign policy at Princeton**.

Virginia Maloney, (WWS, 2010).

Brooks Barron, (WWS, 2011). American Public Perception of Climate Change. **Peter W. Stroh '51 Environmental Thesis Prize**. The Princeton Environmental Institute (PEI) awards the Stroh Prize annually to a senior from any department who has written the best thesis on an environmental topic.

Lily Fu (WWS, 2011) Clearing the Air: Reducing air pollution from the electric power sector in China.

Kayley McGrath (WWS, 2012) Integrating renewable energy into the United States' electric grid: Identifying and removing the barriers to sustainable generation

Caroline Jo (WWS, 2013), **T.A. Barron Environmental Leadership Prize**. Leveraging private interests for the public good: Foreign actors and non-institutionalized citizen activism in China's environmental governance

Andrew Calof (CBE, 2014), A feasibility analysis of Princeton University investing in a waste-to-energy facility.

Bianca DiGiovanni (CEE, 2015) Spatial variations in New Jersey air quality: Implications for environmental justice.

Samuel (Ren) Scott (WWS, 2015) The German example: How the United States can learn from the rapid expansion of the German solar energy program.

Alex Bi (CEE, 2017), Spatial optimization of concentrating solar power productivity in China: A statistical and modeling approach

Emily Chen (CEE, 2017), Modeling the effect of air pollution on hospitalizations in Sao Paulo City (2000-2010).

Olivia Davis (WWS, 2018), Shedding a Light on U.S. Federal Solar Energy Policy: Contrasting the Obama and Trump Administration' Initiatives, Impacts and Motives in the Search for a Bipartisan Solution.

Mark Goldstein (WWS, 2018), **Woodrow Wilson Senior Thesis Prize** for a thesis of unusual merit, and the **Princeton Environmental Institute book prize in Social Sciences** for "Climate Change in American National Parks: Impacts, Management, Communication, and Public Perception."

Charles Kalvaria (CEE, 2018), Storm Surge, Zoning Law, and Environmental Policy: Protecting New Orleans and Houston

Stuart Pomeroy (WWS, 2018), Winds of Change: Opportunities for Offshore Wind-Energy Integration and Development in the Northeast United States.

Cadee Qiu (WWS, 2018), An Inconsistent Truth: China's Domestic and Export Policies on Renewable and Coal Energy Technologies

Naomi Cohen-Shields (CEE, 2020), Mapping Air Pollution Across China: An Analysis of Fine Particulate Matter (PM2.5) and Surface Ozone Pollution (2014 – 2019) with Correlating Provincial Socioeconomic Levels (2018). Environmental Studies Book Prize, W. Taylor Thomas Jr. Prize, https://environment.princeton.edu/news/naomi-cohen-shields-senior-thesis-explores-who-benefits-as-china-cleans-its-air/

Emilio Cano Renteria, CEE, 2023

Riti Bhandarkar, CEE, 2023

Morgan Weise, CEE, Evaluating the technical potential and policy implications of alternative solar siting options in New Jersey, 2023

Cristina Maldacena, CEE, Technology Assessment of Agrivoltaics: Engineering, Economics, and Regulation of Dual-Use Solar Energy Arrangements, 2024

CC Song, CEE, 2025

Katherine Khramtsov, CEE, 2026

Katherine Holden, SPIA, 2026

Junior Paper Advisees:

Advised as part of the Spring 2017 WWS junior task force:
Sustainability at Princeton University: Lessons for Campus and the World.
Cecilia Shang
Olivia Davis
Colton Hess
Pleasant Garner
Stephen Bork
Anthony Sgro
Adam Bradley
Stuart Pomeroy

ADMINISTRATIVE RESPONSIBILITIES AT PRINCETON

Faculty graduate school policy committee Fall 2025-Spring 2026
Princeton University Research Board Fall 2020 – Spring 2024
Faculty Chair, Presidential CO_2 Emission Reduction Criteria Committee Fall 2015
Director / Acting Director, WWS Science, Technology and Environmental Policy (STEP) program (1999–2000; Spring 2010, 2013-2014; 2017-2018)
Director of Graduate Studies, WWS/SPIA Doctoral Program (2012-2015; 2016-2024)
Chair, STEP Doctoral Program (1999 – 2001; 2008-2024)
STEP seminar series convener (1999-2001; 2002-2003; 2004-2007; 2008-2011; 2012-2015; 2016-present)
High Meadows Environmental Institute – postdoc selection committee (2023-2024)
Andlinger Center faculty search committee – Energy policy (2021-2023)
PIIRS faculty search committee – China environment (2020-2021)
Princeton Resources Committee (2014-2017)
WWS Faculty Council, ex officio (2012-present)
Princeton Committee on Sustainability (2008 – present)
Princeton Sustainability Steering Council (2013-present)
Executive Committee, Andlinger Center for Energy and Environment (2018-present)
Executive Committee, Chadha Center for Global India (2019-present)
Executive Committee, Program in Technology & Society: Energy Track (2017 – present)
Andlinger Center for Energy and Environment, Corporate Affiliates Advisory Council (2012-)
Executive Committee, Princeton Institute for International and Regional Studies (2011-2015)
Chair, WWS Scholars in the Nations Service, program review committee (2012-2014)
Woodrow Wilson School Faculty Council (Fall 2009–Spring 2010)
Woodrow Wilson School Senior Thesis Prize Committee (1999, 2000)
Masters of Public Policy, Admissions Committee, WWS (1999, 2000, 2010, 2011)
Masters of Public Affairs Admissions Committee, WWS (2002, 2003, 2005, 2006)
University Committee on Libraries and Computing (2002 - 2005)
University Committee on Course of Study (2008 – 2011)
Woodrow Wilson School undergraduate committee (2006, 2007, 2010, 2011)
Scholars in the Nations Service – selection committee (2006, 2008, 2010, 2011)
Faculty fellow, Mathey College (2003 - present)
WWS/CEE faculty search committee (2007-2008)
Andlinger Center Director search committee (2007-2009)
Co-chair, WWS/SEAS joint graduate degree exploratory committee (2009)

PROFESSIONAL ACTIVITIES

Friends of International Institute for Advanced System Analysis Board, Austria, 2025-present.

Co-Editor in Chief
Sustainable Horizons

Editorial Board
Atmospheric Environment
Advances in Applied Energy

Journal Referee
Science; Nature; Nature – Climate Change; Nature- Sustainability; Proceedings of the National Academy of Science; Journal of Geophysical Research - Atmospheres; Geophysical Research Letters; Environmental Research Letters; Atmospheric Environment; Environmental Science and Technology; Annual Review of Energy and the Environment; Environmental Management; Science of the Total Environment; Global Environmental Change; Journal of Atmospheric Science; Journal of Atmospheric Chemistry; Atmospheric Chemistry and Physics; The Royal Society, Proceedings B., PLOS One

Grant Reviewer
National Aeronautics and Space Association (NASA); National Oceanographic and Atmospheric Administration (NOAA); National Science Foundation (NSF); U.S. Environmental Protection Agency; Research Grants Council of Hong Kong.

Book Reviewer
National Academy of Sciences/ National Research Council; Prentice-Hall; Princeton University Press., The Royal Society, London, U.K.

Conference Session Chairperson / Convener

Scientific Steering Committee, AGU-JING conference, American Geophysical Union and Chinese Academy of Sciences, Xi'an, China, October 2018

Convener: Coordinating Air Pollutant and Greenhouse Gas Mitigation Strategies: Co-benefits for Air Quality, Health and Climate, American Geophysical Union, San Francisco, CA. December 2016

Chair: Hydraulic Fracturing – Potential Implications for Climate Change and America's Energy Future, Moderator. Synergize 2012, Andlinger Center Corporate Affiliates Program, November 12, 2012.

Convener: Black carbons role in global to local air quality and climate change, American Geophysical Union, San Francisco, CA. December 2010

Chair: Measurement and Modeling of Atmospheric Aerosols for Climate and Air Quality Applications, Asia Oceania Geosciences Society, Hyderabad, India. July 2010

Convener: Interconnections between air pollution, climate change, energy and human impacts – science, technology and policy. International Geosphere Biosphere Program (IGBP), Cape Town, South Africa. May 2008

Chair: Megacities, Air Pollution over Asia, International Association of Meteorology and Atmospheric Sciences, Beijing, China. August 2005

Convener: Controlling Emissions of Non-CO2 Greenhouse Gases: Scientific and Policy Challenges, Joint Assembly meeting, New Orleans, LA. May 2005

Chair: Atmospheric Modeling and Dynamics session, Spring American Geophysical Union meeting, Boston, MA. May 2001

Chair: Aspen Global Change Institute, Working Group on Air Quality and Climate Change, Aspen, CO. August 2000

PUBLICATIONS (Peer Reviewed)

H-index Google Scholar: 70; i10-index: 115; citations 20,830
H-index Web of Science: 57.
*** or # indicates student or post-doc working in my group**
+ indicates corresponding author

Gupta^, Rohit, Denise L. Mauzerall, Sara Constantino, Gregg Sparkman, Malini Nambiar^, and Elke Weber. 2025. "**Overcoming Barriers and Seizing Opportunities for Smart Meters in Developing Countries: Insights from a Large-Scale Field Study in India**". *Energy Research & Social Science*.

Mi Zhou, Denise L. Mauzerall, Viswanath Velamuri, Sri Harsha Kota, Malini Nambiar, and Yuanyu Xie. **Surface $PM_{2.5}$ Air Pollution in 2022 India: Emission Updates, WRF-Chem Model Evaluation, and Source Attribution**. EGUsphere, https://doi.org/10.5194/egusphere-2025-4947 [preprint], 2025

Liu^, Shangwei, Yang Guo, Fabian Wagner, Hongxun Liu, Ryna Yiyun Cui, and **Denise L. Mauzerall**+. 2024. "**Diversifying Heat Sources in China's Urban District Heating Systems Will Reduce Risk of Carbon Lock-in**". *Nature Energy*.

Xie+, Yuanyu, Mi Zhou#, Kieran M. R. Hunt#, and **Denise L. Mauzerall**+. 2024. "**Recent PM2.5 Air Quality Improvements in India Benefited from Meteorological Variation**". *Nature Sustainability*.

Fu, X., J. Cheng, L. Peng, M. Zhou, D. Tong, and **DL Mauzerall**+. 2024. "**Co-Benefits of Transport Demand Reductions from Compact Urban Development in Chinese Cities**". *Nature Sustainability*

Zhou+, Mi, Yuanyu Xie, Chenggong Wang, Lu Shen, and **Denise L. Mauzerall**+. 2024. "**Impacts of Current and Climate Induced Changes in Atmospheric Stagnation on Indian Surface PM2.5 Pollution**". *Nature Communications*.

Pan, Da, **Denise L. Mauzerall**, Rui Wang, Xuehui Guo, Melissa Puchalski, Yixin Guo, Shaojie Song, et al. 2024. "**Regime Shift in Secondary Inorganic Aerosol Formation and Nitrogen Deposition in the Rural United States**". *Nature Geoscience*.

Guo+, Yang, Jieyi Lu, Qi Zhang, Lyujun Chen, and **Denise L. Mauzerall**+. 2024. "**Co-Production of Steel and Chemicals to Mitigate Hard-to-Abate Carbon Emissions**". *Nature Chemical Engineering*.

Jacobson, Anna F., **Denise L. Mauzerall**, and Jesse D. Jenkins. 2024. "**Quantifying the Impact of Energy System Model Resolution on Siting, Cost, Reliability, and Emissions for Electricity Generation**". *Environmental Research: Energy*.

Peng, Liqun, Yang Guo, Shangwei Liu, Gang He, and **Denise L. Mauzerall**+. 2024. "**Subsidizing Grid-Based Electrolytic Hydrogen Will Increase Greenhouse Gas Emissions in Coal Dominated Power Systems**". *Environmental Science & Technology*.
Runner up for Best Paper Award in 'Policy Analysis' category for 2024.

Govindjee, G., O. Canaani, R.A. Cellarius, B. Diner…**D.L Mauzerall**, M. Seibert, A. Stirbet. Contributions of David Mauzerall to photosynthesis research – celebrating his 95th birthday. *Photosynthetica*, 62 (3) 271-288, 2024.

#Guo, Yang, Liqun Peng*, Jinping Tian, and **Denise L. Mauzerall+**. 2023. "**Deploying Green Hydrogen to Decarbonize China's Coal Chemical Sector**". *Nature Communications* 14.

*Peng, Liqun, **Denise L. Mauzerall+**, Yaofeng D. Zhong, and Gang He. 2023. "**Heterogeneous Effects of Battery Storage Deployment Strategies on Decarbonization of Provincial Power Systems in China**". *Nature Communications*.

#Liang, J, YL Qiu, P Liu, P He, and **DL Mauzerall**. 2023. "**Effects of Expanding Electric Vehicle Charging Stations in California on the Housing Market**". *Nature Sustainability*.

*Fu, Xiangwen, **Denise L Mauzerall+**, and Anu Ramaswami+. 2023. "**Public and Private Transportation in Chinese Cities: Impacts of Population Size, City Wealth, Urban Typology, the Built Environment, and Fuel Price**". *Environmental Research: Infrastructure and Sustainability*.

#Guo, Yang, Mi Zhou#, Liqun Peng*, Juhua Yang, Mingwei Li#, Jinping Tian, Lyujun Chen+, and **Denise L. Mauzerall+**. 2023. "**Carbon Mitigation and Environmental Co-Benefits of a Clean Energy Transition in Chinas Industrial Parks**". *Environmental Science & Technology*.

Riddick, Stuart N., and **Denise L. Mauzerall**. 2023. "**Likely Substantial Underestimation of Reported Methane Emissions from United Kingdom Upstream Oil and Gas Activities**". *Energy and Environmental Science*.

*Peng, L, Y Guo#, S Liu#, G He, **DL Mauzerall+**. 2023 in press. Subsidizing grid-based electrolytic hydrogen could increase greenhouse gas emissions in coal dominated power systems. *Environmental Science and Technology*.

*Fu, X, J Cheng, *L Peng, #M Zhou, D Tong, **DL Mauzerall+**. 2023 in press. Co-benefits of transport demand reductions from compact urban development in Chinese cities. *Nature Sustainability*.

Guo^, Yang, **Denise L. Mauzerall+**, Yizheng Lyu, Wanqiu Hu, Jinping Tian, and Lyujun Chen. "**Benefits of infrastructure symbiosis between coal power and wastewater treatment**." ***Nature Sustainability***, (2022)

SN Riddick and **DL Mauzerall**. Likely substantial underestimation of reported methane emissions from United Kingdom upstream oil and gas activities. ***Energy and Environmental Science***. (2022) DOI: 10.1039/D2EE03072A

S Liu, H Liu, and **DL Mauzerall+**. Improving Building Envelope Efficiency Lowers Costs and Emissions from Rural Residential Heating in China, ***Environmental Science & Technology***, 2022.

Guo^, Yixin, Pan He, Tim D. Searchinger, ..., Xin Zhang, Lin Zhang, and **Denise L. Mauzerall**+. "Environmental and human health trade-offs in potential Chinese dietary shifts." ***One Earth*** 5 (2022).

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INVITED SEMINARS AND CONFERENCE PRESENTATIONS

U.S. 2025

2/12/2025 Synergies and co-benefits of a clean energy transition in China**. California Institute of Technology,** CEE department, Pasadena, CA.

2/11/2025 **University of Southern California,** CEE department, Los Angeles, CA.

9/12/2025 **Harvard University**, School of Engineering and Applied Sciences, Cambridge, MA.

10/6/2025 **Princeton University**, Paul and Marcia Wythes Center on Contemporary China.

12/11/2025 Air Quality, Health and Energy Research on India. **Princeton University**, M.S. Chadha Center for Global India.

Europe 2025

4/16/2025 Synergies and co-benefits of a clean energy transition in China**. ETH-Zurich**. Institute of Science, Technology and Policy. Zurich, Switzerland.

4/22/2025 **Cambridge University. Judge Business School,** Energy Policy Research Group**.**

4/23/2025 **University College London.** Bartlett School of Sustainable Construction.

4/29/2025 **European Geological Union meeting,** Vienna, Austria.

- Implementing pollution controls in India's power plants and utilizing renewable energy.
- Prioritizing demand-side applications for clean hydrogen to maximize environmental and economic benefits.

China 2024

5/23/2024, Synergies and co-benefits of a clean energy transition in China, **Nature Conference – Air Pollution and Climate Change, Beijing, China**

5/25/2024, Synergies and co-benefits of a clean energy transition in China, **Peking University,** Beijing, China

5/26/2024, Synergies and co-benefits of a clean energy transition in China, **Tsinghua University,** Beijing, China

5/30/2024, Synergies and co-benefits of a clean energy transition in China, **7th regional air quality and climate conference, Guangzhou, China**

10/17/2024, Comments on Combined Heat and Power plants and Steel Decarbonization, CCNI, **Tsinghua University, Beijing, China, (virtual).**

India 2024:

9/24/2024, Current and Future PM2.5 trends in India: Influence of Emissions, Meteorology and Climate Change, **Center for Atmospheric Science, IIT-Delhi, Delhi, India**

9/25/2024, Air Quality and Health Co-benefits of decarbonizing India's power sector: ongoing research, **School of Public Policy, IIT-Delhi, Delhi, India**

9/26/2024, Air pollution trends and long-term approaches to Delhi's air pollution with co-benefits for decarbonization, Colloquium on Long-term strategies for air pollution control in Delhi, **Delhi Secretariat, Delhi, India.**

U.S. 2024

9/13/2024, Climate Futures- Science and Mitigation, C-PREE workshop, **Princeton University**

10/21/2024, Synergies and co-benefits of a clean energy transition in China, Bradford Seminar, **Princeton University.**

10/22/2024, Climate Futures **-** Synergies and co-benefits of Greenhouse Gas Mitigation, Social Science Prize Fellowship dinner talk, **Princeton University.**

11/26/2024, Air pollution, climate and the clean energy transition in India, Strategic Planning Meeting, **Chadha Center for Global India, Princeton University**

2023

1/20/2023 Air Pollution Trends in India – Disentangling the Role of Meteorology and Changing Emissions, **Indian Institute of Technology – Madras (virtual)**

2/9/2023 Co-benefits of simultaneously addressing air pollution and climate change. **China Clean Air Policy Partnership and Energy Foundation International Symposium (virtual)**

6/5/2023 Maximizing the co-benefits of a clean energy transition in China. **Lawrence Berkeley National Lab**, Berkeley, CA.

10/4/2023 Maximizing the co-benefits of a clean energy transition in China. Weston Roundtable, **University of Wisconsin**, Madison, WI.

12/14/2023 Maximizing the co-benefits of a clean energy transition in China. American Geophysical Union, Fall Meeting, December 2023, San Francisco, CA.

7/8/2022 Maximizing the co-benefits of a clean energy transition **IASSA**, **Laxenburg, Austria**

8/30/2022 Evaluating opportunities to simultaneously address air pollution and greenhouse gas mitigation. Atmospheric chemistry group, **Harvard University**

4/29/2021 *Win-win opportunities to improve air quality, decrease GHG emissions, and increase solar PV generation*, ***Nature Conferences*****: Sustainable solutions for pollution control. (virtual)**

8/2/2021 *Climate Change and Our Future: What We Must Do*. **Racing Beach Association**, Woods Hole MA.

11/14/2021 *Evaluating opportunities to simultaneously address air pollution and greenhouse gas mitigation in China*, **Fung Global Fellows forum, Princeton University** (virtual)

12/6/2020 *Evaluating Opportunities to Simultaneously Address Air Pollution and Greenhouse Gas Mitigation in China*. **Keynote Talk. International Conference on Applied Energy, (Bangkok, Thailand - Virtual)**

11/4/2020 Evaluating Opportunities to Simultaneously Address Air Pollution and Greenhouse Gas Mitigation in China. Stanford Natural Gas Initiative (**Stanford University - Virtual**)

8/31/2020 Evaluating Opportunities to Simultaneously Address Air Pollution and Climate Change, 2020 **Pujiang Innovation Forum**, (**Shanghai, China – Virtual**)

3/27/2020 Policy Relevant Science: Linking Strategies to Address Air Pollution, Health and Greenhouse Gas Mitigation, **Chadha Center for Global India, Princeton University**, (Virtual)

12/18/2019 Climate Change: Science and Policy Princeton Journeys, **National Geographic Endeavor, Antarctica**.

12/14/2019 The World's Most Successful Environmental Treaty: The Montreal Protocol to Protect the Stratospheric Ozone Layer. Princeton Journeys, **National Geographic Endeavor, Antarctica**.

12/12/2019 Antarctic Ozone Hole: Causes and Solutions. Princeton Journeys, **National Geographic Endeavor, Antarctica**.

High level forum on air quality, climate change and human health, **Energy Foundation, Beijing, China**, November 20, 2019.

Faculty Panel. What does global India mean to me and to the world? **M.S. Chadha Center for Global India, Princeton University**, November 13, 2019.

Policy Relevant Science: Linking Strategies for Air Pollution and Greenhouse Gas Mitigation. U.S.-China Environment and Sustainability Forum, **University of Michigan**, October 3, 2019.

Policy Relevant Science: Air quality, Greenhouse Gas and human Health Benefits of Replacement Options for Coal Heating Stoves in China, **Civil and Environmental Engineering department, Princeton University**, September 27, 2019

Replacement options for coal heating stoves in the residential sector: Air quality, greenhouse gas and human health benefits, plus costs of substitution, **College of Environmental Sciences and Engineering, Peking University**, June 27, 2019

Replacement options for coal heating stoves in the residential sector: Air quality, greenhouse gas and human health benefits, plus costs of substitution, Co-benefits of a Sustainable Energy Transition workshop, **Tsinghua University, Beijing, China**, June 2, 2019.

Potential Potential Air Pollution, Health and Climate Implications of China's Energy Future, **ETH-Zurich**, March 12, 2019.

A Planet in Danger: Pulling the Planet back from the Brink. Academic and Administrative Managers Group Meeting, **Princeton University**, February 6, 2019.

Potential Air Pollution, Health and Climate Implications of China's Energy Future, American Geophysical Union, **Chinese Academy of Sciences Joint Meeting, Xi'an, China**, Oct. 18, 2018.

A Planet in Danger: Climate Change and Opportunities to Address It, Young Global Leaders, World Economic Forum, Princeton University, July 14, 2018.

Potential Air Pollution, Health and Climate Implications of China's Energy Future, Princeton Environmental Institute, **Princeton University**, May 1, 2018.

Potential Air Pollution, Health and Climate Implications of China's Energy Future, OGCI Climate Investments, Andlinger Center for Energy and Environment, **Princeton University**, May 10, 2018.

Potential Air Pollution, Health and Climate Implications of China's Energy Future, Global Development Policy Center, **Boston University**, April 25, 2018.

Potential Air Pollution, Health and Climate Implications of China's Energy Future, **Harvard Kennedy School of Government**, April 23, 2018.

A Planet in Danger: Climate Change and Its Consequences for Global Society, Griswold Symposium, Center for Economic Policy Studies, Princeton University, February 10, 2018.

Co-benefits of Air Quality Improvements for Solar PV Electricity Generation, Peking University, Beijing, China, January 26, 2018.

Potential air pollution, health and climate implications of China's energy future, china Energy Modeling Forum, Tsinghua University, January 24, 2018

Potential Air Pollution, Health, Water and Climate Implications of China's Energy Future. Civil and Environmental Engineering Department, Princeton University, September 29, 2017.

Keynote Speaker. Philadelphia Science Rally, Philadelphia, PA, April 22, 2017.

Potential Air Pollution, Health and Climate Implications of China's Energy Future. Carnegie Mellon University, Pittsburgh, PA, April 6, 2017.

Potential Air Pollution, Health and Climate Implications of China's Energy Future. Brown University, Providence, RI, March 3, 2017.

Ask about air pollution. World Economic Forum, Davos, Switzerland, January 20, 2017.

Ideas forum: Climate change mitigation and adaptation panel, World Economic Forum, Davos, Switzerland, January 19, 2017.

Air Pollution and Climate Implications of China's Energy and Agricultural Future, Tsinghua University, Beijing, China, November 4, 2016.

Air Pollution and Climate Implications of China's Energy and Agricultural Future, Peking University, Beijing, China, November 3, 2016.

Nitrogen, Ozone and Water: Key Factors Impacting Sustainable Intensification of Crop Production, Chinese University of Hong Kong, Hong Kong, October 31, 2016

Air Pollution and Climate Implications of China's Energy Future, Chinese University of Hong Kong, Hong Kong, October 31, 2016.

Potential Air Pollution, Health and Climate Implications of China's Energy Future, STEP seminar, Princeton University, November 28, 2016

Environmental Implications of China's Energy and Agricultural Future, Faculty Forum, Woodrow Wilson School of Public and International Affairs, Princeton University, September 20, 2016.

Climate, Air Quality and Health Implications of China's Energy Future, IIASA, Vienna, Austria, August 30, 2016.

Managing Nitrogen for Sustainable Development, Nitrogen 2016, EMBO conference, Montpellier, France, August 24, 2016.

Climate, Air Quality and Health Implications of China's Energy Future, Research Experience for Undergraduates summer program, Princeton University, July 27, 2016.

Using TEMPO to Evaluate the Impact of Ozone on Agriculture, TEMPO Satellite Applications Workshop, Shelby Center for Science and Technology, Huntsville, AL, July 12, 2016.

Climate Modeling and Impact Assessments: Air Pollution and Agriculture, Ron Stauffer symposium, Geophysical Fluid Dynamics Laboratory, Princeton, NJ June 6, 2016.

Climate, Air Quality and Health Implications of China's Energy Future, China Environmental Scholar's Forum, Princeton University, June 4, 2016.

Climate, Air Quality and Health Implications of China's Energy Future, Lawrence Berkeley National Laboratory, Berkley, CA, March 22, 2016.

Climate, Air Quality and Health Implications of China's Energy Future, Carnegie Institute of Science, Stanford, CA, March 21, 2016.

Climate, Air Quality and Health Implications of China's Energy Future, Energy Resource Group, University of California – Berkeley, CA, February 24, 2016.

Nitrogen, Ozone and Water: Key Factors Impacting Sustainable Intensification of Crop Production, Food Security Group, Stanford University, Stanford, CA, February 22, 2016.

Field Measurements of Methane leakage from Abandoned Oil and Gas Wells, Methane Research Group, Stanford University, Stanford, CA, February 3, 2016.

Climate, Air Quality and Health Implications of China's Energy Future. Atmosphere Energy Program, Stanford University, Stanford, CA, January 19, 2016.

Climate, Air Quality, Health and Agricultural Implications of China's Energy Future, Climate and Health seminar series, Columbia University, October 29, 2015

Climate, Air Quality, Health and Agricultural Implications of China's Energy Future, Atmospheric Chemistry program and Harvard China Project, Harvard University, October 22, 2015.

Climate, Air Quality, Health and Agricultural Implications of China's Energy, Systems Engineering Department, Cornell University, September 11, 2015.

Ozone Impacts on Crop Yields: Regional and Global Assessments and Mitigation Potential, (with R van Dingenen, S Avnery, LW Horowitz, AM Fiore, J Liu and F Dentener, Hemispheric Transboundary Air Pollution meeting, Beijing, China, May 21, 2014.

Ozone Impacts on Crop Yields: Regional and Global Assessments and Mitigation Potential, (with R van Dingenen, S Avnery, LW Horowitz, AM Fiore, J Liu and F Dentener, International Conference on Ozone and Plants, Beijing, China, May 17, 2014.

Population Growth, Climate Change and the Future of the Planet, Energy Policy Institute, University of Chicago, April 8, 2014

Climate Change: A Planet in Peril, Nassau Club, Princeton, NJ, April 2, 2014

Air Pollution in China - Impacts on Climate, Health and Food Security, Princeton University, March 14, 2014

China and the Environment, Office of the Chief Economist, U.S. Department of State, Washington D.C., November 8, 2013

Air Pollution Mitigation in China, Potential Implications for Climate Change, China FAQs webinar, World Resources Institute, November 1, 2013

Impacts of Surface Ozone Pollution on Global Agriculture: Present, Future Projections, and Strategies to Reduce Damages, AgMIP Global Workshop, Columbia University, October 28, 2013

World Resources Institute, press conference on China's air quality, July 2, 2013.

Mauzerall, DL, Zhu, T., Keohane, R., moderator: T. Christiansen. Panel Discussion, Interconnections between air pollution and climate change in China. PIIRS and Princeton-Harvard China and the World program, Princeton University, February 27, 2013

Air Pollution in the Future City, Princeton-Fung Global Forum, Shanghai China, February 1, 2013.

A post-Kyoto partner: Considering the stratospheric ozone regime as a tool to manage nitrous oxide, Peking University, Beijing, China, January 28, 2013

A post-Kyoto partner: Considering the stratospheric ozone regime as a tool to manage nitrous oxide, New Zealand Climate Change Research Institute, University of Victoria, Wellington, New Zealand, December 17, 2012.

Climate Change and Interconnections with Air Pollution, Research Experiences for Undergraduates program, Engineering School, Princeton University, June 27, 2012.

A Planet in Peril: Climate Change and its Consequences for Global Society, Junior Summer Institute, Woodrow Wilson School, July 11, 2012.

Methane Mitigation: Benefits for air quality, health, crop yields and climate. Air Pollution and Climate Symposium: Creating a science-policy dialogue in Asia, Taipei, Taiwan, November 7, 2011.

Complements to Carbon: Opportunities for near-term action on non-CO2 climate forcers, Woods Hole Research Center, Woods Hole, MA, August 4, 2011.

Long-range Transport of Air Pollution, Health Effects Institute Annual Meeting, Boston, MA. May 3, 2011.

Making Energy Choices that have Co-Benefits for Air Quality, Health and Climate, Rutgers Energy Institute, New Brunswick, NJ, October 8, 2010.

Assessing the Climatic Benefits of Black Carbon Mitigation, The Energy and Resources Insititute (TERI), Delhi, India, July 14, 2010.

Assessing the Climatic Benefits of Black Carbon Mitigation, Asia Oceania Geosciences Society, Hyderabad, India, July 9, 2010.

Assessing Climate Benefits of Carbonaceous Aerosol Emission Reductions**.** Addressing black carbon and ozone as short-lived climate forcers. EPA workshop, Chapel Hill, NC March 3-4, 2010.

Energy Choices and Air Pollution: Present and potential future impacts of aerosol emissions from China on global air quality, premature mortality and radiative forcing, Harvard China Project, Harvard University, January 21, 2010.

Interconnections between air pollution, radiative forcing, and adverse impacts on health and agriculture: an examination of black carbon, sulfate aerosols and ozone. Atmospheric Chemistry seminar series, Harvard University, January 22, 2010.

Regional Cooperation on Energy and the Environment panel, Five University Collaboration on East Asian Security Cooperation and Regional Governance, Princeton University, December 11, 2009.

Interconnections between air pollution, radiative forcing, and adverse impacts on health and agriculture: an examination of black carbon, sulfate aerosols and ozone. Goddard Institute of Space Studies and Columbia University, December 4, 2009.

A Planet in Danger: Climate Change and Its Consequences for Global Society**.** Junior Statesmen of America, New Jersey, November 21, 2009.

Interconnections between Air Pollution and Climate Change: Co-benefits of mitigation for health, agriculture and climate. Mathey College, Princeton University, October 14, 2009.

Estimating the Health Impacts of Intercontinental Transport of Aerosols and their Effect on Radiative Forcing, Institute for Environment and Sustainability, Joint Research Center, European Commission, Ispra, Italy, June 2009.

Interconnections Between Air Pollution, Climate Change and Health: Promoting Sino - U.S. Cooperation, Woodrow Wilson International Center, Washington D.C. May 2009.

Interconnections Between Air Pollution, Climate Change and Health: Promoting Co-Benefits, Congressional briefing, B-338 Rayburn House Offices, Washington D.C., May 2009.

Present and potential future adverse impacts of surface ozone on food production in Asia, Better Air Quality 2008 conference, Bangkok, Thailand, November 2008.

Estimating the Health Impacts of Intercontinental Transport of Aerosols, National Research Council / National Academy of Science panel on The Significance of International Transport of Air Pollutants, Harvard University, Cambridge, MA, October 20, 2008.

Present and potential future contributions of sulfate, black and organic carbon aerosols from China to global air quality, premature mortality and radiative forcing, Meeting on Technologies and policies to mitigate climate change: Chinese challenges in addressing climate change, Tsinghua University, Beijing, China. October 2008.

Summertime State-Level Source-Receptor Relationships between Nitrogen Oxides Emissions and Surface Ozone Concentrations over the Continental United States, Ozone Transport Commission, Annual Meeting, New Jersey, June 2008.

Health and Agricultural Impacts of Air Pollution, Hemispheric Transport of Air Pollution Workshop, Washington D.C., June 2008.

Interconnections between Air Pollution and Climate Change: Opportunities for Co-Benefits, International Geosphere Biosphere Program (IGBP), Cape Town, South Africa, May 2008.

Global Change and Air Quality, NARSTO Executive Assembly, Mexico City, Mexico, April 2008

Interconnections between Air Pollution, Climate Change, Health and Agriculture: Opportunities for Co-Benefits, Frontier Research Center for Global Change, Yokohama, Japan, March 2008.

Interconnections between Air Pollution, Climate Change and Health: Opportunities for Co-Benefits, National Academy of Engineering, Princeton University, February, 2008. Available at: http://uc.princeton.edu/main/images/stories/podcast/vodcast/20080304EnergyClimatePU2.mp4

Air Quality and Climate Change: Opportunities for "Co-benefits" for Health, National Academies, Institute of Medicine, San Francisco, September 2007.

Air Quality and Climate Change: Opportunities for "Co-benefits", Gordon Research Conference, Atmospheric Chemistry, Big Sky, MT., August 2007.

Potential Contributions of Emerging Mid-Infrared Detection Technologies to Air Quality Modeling and Policy, Center for Mid-Infrared Technologies for Health and the Environment (MIRTHE), Princeton University, August 2007.

Air Quality and Climate Change: Options for "Co-benefits", World Bank, Washington D.C., (May 2007)

Surface Ozone Distributions and Their Impact on Grain Production in China, Japan and South Korea: 1990 and 2020, University of Tokyo, Tokyo, Japan. (March 2007)

Surface Ozone and its Impact on Grain Yields, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China (March 2007)

It's Not Just about Climate Change: How Reducing Methane Emissions Can Improve Air Quality and Global Public Health, Congressional briefing, Rayburn building, Washington D.C. (May 2006)

Health Implications of Regional and Long-Range Transport of Air Pollutants, Health Effects Institute annual meeting, San Francisco, CA (April 2006)

Evaluating the Impact of Air Pollution on Agriculture and Human Health in China, Project Asian Brown Cloud (ABC): The First Workshop on the Impact Assessment Program, Bangkok, Thailand (December 2005)

Local and regional air pollution and its impacts on human health and crops – and its linkages to GHG abatement, Mitigation of air pollution and climate change in China: A policy workshop on co-benefits and co-control, Beijing, China (November 2005)

Air Pollution: Science, Impacts and Policy, Department of Atmospheric and Oceanic Science, University of Maryland, College Park, MD (October 2005)

Air Pollution: Science, Impacts and Policy, Bradford Seminars in Science, Technology and Environmental Policy, Princeton University, Princeton, NJ (September 2005)

Evaluating Impacts of Air Pollution in China on Public Health: Implications for Future Air Pollution and Energy Policies, International Association of Meteorology and Atmospheric Sciences, Beijing, China (August 2005)

Assessing Global Radiative Forcing due to Regional Emissions of Tropospheric Ozone Precursors: A Step Towards Climate Credit for Ozone Precursor Emissions, International Association of Meteorology and Atmospheric Sciences, Beijing, China (August 2005c)

Air Pollution and International Climate Change Policy – To Credit or Not to Credit? Joint Assembly conference, New Orleans, LA. (May 2005)

Regional Attribution of Ozone Production and Associated Radiative Forcing: A Step towards climate credit for reductions in emissions of ozone precursors, Joint Assembly conference, New Orleans, LA. (May 2005c)

*An Integrated Assessment of the Impacts of Air Pollution on Health in Eastern China: A valuation with implications for future air pollution and energy policies***,** Air Pollution as a Climate Forcing workshop, East-West Center, Honolulu, Hawaii. (April 2005)

*An Integrated Assessment of the Impacts of Air Pollution on Health in Eastern China: Implications for future air pollution and energy policies***,** Asian Brown Cloud science team meeting, Shanghai, China (declined due to prior commitment) (April 2005)

*Charging NO_x Emitters for Health Damages: An Exploratory Analysis***,** National Bureau of Economic Research, Environmental Economics working group, Cambridge, MA. (April 2005)

NO_x Emissions: Variability in Ozone Production, Resulting Health Damages and Economic Costs, American Geophysical Union Fall Meeting, San Francisco, CA. (December 2004)

Regional Attribution of Ozone Production and Associated Radiative Forcing: A Step Towards Climate Credits for Ozone Reductions, Intercontinental and Climatic Effects of Air Pollutants Workshop, Chapel Hill, NC. (October 2004)

Air Pollution in Asia: From local impacts on agriculture and health to inter-annual variability in trans-Pacific transport, Atmospheric Chemistry Division, National Center for Atmospheric Research, Boulder, CO. (June 2004)

Air Pollution Impacts: From Effects on Agriculture and Health in China to a New Proposal for U.S. NO_x Emission Control, Environmental and Societal Impacts Group, National Center for Atmospheric Research, Boulder, CO. (June 2004)

U.S. Air Quality: A New Proposal for Domestic NO_x Emission Control and an Examination of Inter-Annual Variability in Trans-Pacific Transport, National Oceanic and Atmospheric Administration Aeronomy Lab, Boulder CO. (June 2004)

Analysis of Seasonal and Inter-Annual Variability in Trans-Pacific Transport, Vertical and long-range transport of trace gases and aerosols session, European Geosciences Union 1st General Assembly, Nice, France. (April 2004)

The Cost of Dirty Air: Using Atmospheric Models to Quantify the Impact of Air Pollution on Agriculture and Human Health in China, Harvard University Center for Environment: China project, Harvard University, Cambridge, MA. (April 2004)

From regional to global: Using science to develop sound air quality policy, Princeton Environmental Institute Associated Faculty Forum, Princeton, NJ. (April 2004)

Linking Air Pollution to Health and Agricultural Damages: U.S. and China, Sustainability Seminar Series, New Jersey Department of Environmental Protection, Trenton, NJ (April 2004)

Nitrogen Oxide Emissions from Power Plants – How Damage Varies in Space and Time: Should Emission Charges Vary with Damage?, Woodrow Wilson School Washington Seminar Series, Washington D.C. (March 2004)

Air Pollution in Asia: Assessing Impacts on Agricultural and Forest Productivity, Bangkok, Thailand. (declined due to prior commitment) (November 2003)

MOZART-2 Applications, GEOS-CHEM meeting, Harvard University, Cambridge, MA (June 2003)

Factors Regulating the Seasonal Cycle of Intercontinental Air Pollution Transport between Asia, the United States and Europe, Hemispheric Air Pollution conference, Bad Breisig, Germany. (October 2002)

Factors Regulating the Seasonal Cycle of Inter-Continental Pollution Transport, Telluride Atmospheric Chemistry workshop, Telluride, Colorado. (August 2002)

The Adverse Impact of Surface Ozone on Agricultural Crops, Air Pollution as a Climate Forcing workshop, Honolulu, Hawaii. (April 2002)

Transport of Ozone and Related Air Pollutants in the Boundary Layer over East Asia: A global modeling analysis, Center for Environmental Sciences, Beijing University, Beijing, China (October 2001)

Transport of Ozone and Related Air Pollutants in the Boundary Layer over East Asia: A global modeling analysis, Workshop on local and regional contribution to air pollution and local radiative balance in Asian developing countries, Guangzhou, China (September 2001)

Transport of Ozone and Related Air Pollutants in the Boundary Layer over East Asia: A global modeling analysis, Joint Sino-US workshop on China-MAP, Hong Kong (September 2001)

Intercontinental Transport of CO, NOx, and PAN from Fossil Fuel and Biomass Burning Emissions, Photooxidants, Particles, and Haze across the Arctic and North Atlantic: Transport Observations and Models Workshop, Columbia University Lamont-Doherty Earth Observatory, Palisades, New York. (June 2001)

Escalating Interconnections between Regional and Global Air Pollution: Science and International Policy, Energy and Resources Group Colloquium, University of California, Berkeley, CA. (April 2001)

Linkages Between Regional and Global Air Pollution: Reconciling Science and Policy, Princeton Environmental Institute Associated Faculty Seminar Series, Princeton University, Princeton, NJ. (April 2001)

Photochemical Budgets and Fluxes of O_3, CO, HNO_3 and PAN over East Asia, International Institute for Applied System Analysis, Laxemburg, Austria. (September 2000)

Comparison of Boundary Layer Regional Photochemical Budgets: East Asia, United States and Europe, Aspen Global Change Institute, Aspen, CO. (August 2000)

The *Interconnections between Local, Regional and Global Air Pollution*, Center for Energy and Environmental Studies, Princeton University, Princeton, NJ. (April 1999)

The Potential Impact of Asian Development on Global Air Quality, Woodrow Wilson School, Princeton University, Princeton, NJ. (March 1999)

Preliminary Analysis of Regional Tropospheric Ozone Budgets using MOZART-2, a global photochemical tracer model, International Symposium on Tropospheric Ozone in East Asia and its Potential Impacts on Vegetation, Tokyo, Japan, 1998. (December 1998)

Influence of Fossil Fuel Combustion and Biomass Burning on Tropospheric Ozone - Data Analysis and Modeling, Atmospheric Chemistry Division / National Center for Atmospheric Research, Boulder, CO. (March 1997)

Protecting Stratospheric Ozone: the EPA's Domestic and International Role, School of Engineering, University of Colorado, Boulder, CO. (February 1997)

Origin of Tropospheric Ozone at Remote Northern Latitudes in Summer, Atmospheric Chemistry Conference for Emerging Senior Scientists (ACCESS) (June 1995)

Panel member, Education, Training and Environmental Careers, Harvard University Committee on Environment, Cambridge, MA (December 1993)

Plenary talk, The Science of Stratospheric Ozone Depletion, International Conference on Halon Alternatives, Hongzhou, China (September 1990)

PUBLICATIONS (Book chapters, conference abstracts and other Selected Un-refereed)

DL Mauzerall, Methane mitigation – Benefits for air quality, health, crop yields and climate, *IGAC Newsletter*, pp. 17-18, October 2011.

Jacob, DJ, **DL Mauzerall**, JM Fernandez, WT Pennell. Global Change and Air Quality, In: Technical challenges of multipollutant air quality management, Editor(s): Hidy GM; Brook JR; Demerjian KL; et al. Pages: 395-432 DOI: 10.1007/978-94-007-0304-9_11, Springer, 2011.

West**,** J. J., L. Emberson, E. Ainsworth, S. C. Anenberg, S. Arnold, M. Ashmore, R. Atkinson, N. Bellouin, A. Cohen, B. Collins, P. Delmelle, R. Doherty, N. Farah, J. Fuhrer, K. Hicks, T. Holloway, K. Kobayashi, J. Liu, **D.L. Mauzerall**, L. Mercado, G. Mills, M. Sanderson, D. Shindell, S. Sitch, D. Stevenson, J-P Tuovinen, R. van Dingenen, J. Wang, H. Yu, C. Zdanowicz (2010) Impacts on Health, Ecosystems, and Climate, Chapter 5 in *Hemispheric Transport of Air Pollution: Part A: Ozone and Particulate Matter*, F. Dentener, T. Keating and H. Akimoto (Eds.), Air Pollution Studies No. 17, Economic Commission for Europe, Geneva. (link: look under "Assessment Reports/HTAP 2010")

Mauzerall, DL, Sultan, B., Kim, N., Bradford, D.F., "*Charging NO_x Emitters for Health Damages: An Exploratory Analysis"*, Center for Economic Studies ifo Working Paper 1442, Munich, Germany, April 2005.

Mauzerall, DL, Sultan, B., Kim, N., Bradford, D.F., "*Charging NO_x Emitters for Health Damages: An Exploratory Analysis"*, NBER working paper series, Working paper #10824, http://www.nber.org/papers/w10824, Cambridge, MA, 2004.

Wei Peng, **Denise L. Mauzerall**, Jiahai Yuan, Yu Zhao, Meiyun Lin, Qiang Zhang. Potential benefits of long-distance electricity transmission in China for air quality and climate. Abstract A51B-0036. American Geophysical Union Fall Meeting, San Francisco, Dec 2015.

Wei Peng, **Denise L. Mauzerall**, Jiahai Yuan, Yu Zhao, Meiyun Lin, Qiang Zhang. Potential benefits of long-distance electricity transmission in China for air quality and climate. 33rd USAEE/IAEE North American Conference, Pittsburgh, Oct 2015.

Yixin Guo, Junfeng Liu, **Denise L. Mauzerall**, Louisa K. Emmons, Larry W. Horowitz, Songmiao Fan, Xiaoyuan Li, and Shu Tao. "Estimating Intercontinental Transport of Ozone Using Fully-tagged, Tagged-N and Sensitivity Methods". HTAP2 Global and Regional Model Evaluation Workshop, Boulder, CO, May 11-13, 2015.

Xiaoyuan Li, Junfeng Liu, **Denise L. Mauzerall**, Louisa K. Emmons, Larry W. Horowitz, Yixin Guo and Shu Tao. "Effects of trans-Eurasian transport of air pollutants on surface ozone concentrations over Western China". Abstract A51B-0034. AGU Fall meeting, San Francisco, CA, Dec 14-18, 2015.

Zhongshu Li, Junfeng Liu, **Denise L. Mauzerall**, Songmiao Fan, Larry W. Horowitz, Cenlin He, Kan Yi, and Shu Tao. "Inference of Spatiotemporal Distribution of Black Carbon Aerosols over Northern Pacific from Satellite Observations (2005-2012)". Abstract A33D-0206. AGU Fall meeting, San Francisco, Dec 14-18, 2015.

Shanna Christian, Mary Kang, Michael Celia, Adam Maloof, **Denise Mauzerall**. Estimating Depth and Producing Formations of Abandoned Oil and Gas Wells Using Geospatial Analysis. Abstract H11B-1335. AGU Fall meeting, San Francisco, Dec 14-18, 2015.

Junfeng Liu, Xiaoyuan Li, **Denise Mauzerall**, Louisa Emmons, Larry Horowitz, Yixin Guo, Shu Tao. Effects of trans-Eurasian transport of anthropogenic pollutants on surface ozone concentrations over China. Abstract A51B-0034. AGU Fall meeting, San Francisco, Dec 14-18, 2015.

Westervelt, D.M., Horowitz, L.W., Naik, V., Fiore, A.M., and Mauzerall, D.L. "The effect of climate change on PM2.5 in GFDL CM3". American Association for Aerosol Research (AAAR) 34th annual meeting, Minneapolis, MN.

Wei Peng, **Denise L. Mauzerall**. Declaring War Against Air Pollution in China: Is Long-distance Electricity Transmission a Cost-effective Weapon? Princeton E-ffiliates Partnership Third Annual Meeting, Princeton University. Nov 2014.

Junnan Yang and **Denise L. Mauzerall**. Distributed solar PV generation in China: air quality benefits, existing barriers and future development. Princeton E-ffiliates Partnership Third Annual Meeting, Princeton University. Nov 2014.

Abstracts of papers delivered at the annual American Geophysical Union (AGU) meeting, December 2014:

H41-L04 Projections of Virtual Water Trade Under Agricultural Policy Scenarios in China, Dalin, C, N Hanasaki, H Qiu, **DL Mauzerall** and I Rodriguez-Iturbe, AGU Fall Meeting, 2014.

A51Q-08 Future Projections of Aerosol Optical Depth, Radiative Forcing, and Climate Response Due to Declining Aerosol Emissions in the Representative Concentration Pathways, Westervelt, D, **DL Mauzerall**, LW Horowitz, V Naik, AGU Fall Meeting, 2014.

B21F-0101 Projecting Future Nitrous Oxide Emissions From Agriculture: Importance of Ecological Feedbacks and the Environmental Benefits of Improved Nitrogen Use Efficiency, D Kanter, X Zhang, E Shevliakova, S Malyshev, **DL Mauzerall**, AGU Fall Meeting, 2014.

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A53H-3307 Conceptually Characterizing the Radiative Effects of Black Carbon Internal Mixing, X Li, Y Ming, **DL Mauzerall,** AGU Fall Meeting, 2014.

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