Hongliang Zhang, Ph.D., PE

Assistant professor

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Education

- ✓ **Ph.D.** Environmental Engineering, Texas A&M University, 2012.05
- ✓ **M.S.** Thermal Engineering, Tsinghua University, 2008.07
- ✓ **B.S.** Environmental Engineering, Tsinghua University, 2006.07

Research interests

- ✓ Interactions of aerosols with weather/climate
- ✓ Regional/global air quality/climate modeling
- ✓ Source apportionment of ozone and particulate matter
- ✓ Air pollution epidemiological analysis based on chemical models
- ✓ Urban aerosol measurement/characterization.

Professional experience

- ✓ Postdoc, University of California, Davis, 2012.6-2014.7
- ✓ Research assistant, Texas A&M University, 2008.8-2012.5
- ✓ Research assistant, Tsinghua University, 2006.9-2008.7

Certificates and awards

- ✓ Registered Professional Engineer (P.E.), Louisiana, License Number: 40306.
- ✓ Oak Ridge Associated Universities (ORAU), Ralph E. Powe Junior Faculty Enhancement Award. 2016.
- ✓ Travel grant to American Chemistry Society (ACS) Fall 2016 National Meeting, Philadelphia, August 2016.
- ✓ Travel grant to the 2011 International Year of Chemistry Symposium on Stratospheric Ozone and Climate Change. Washington DC, November 2011.

Graduate Committees

- ✓ Committee chair of
  - Hao Guo, PhD candidate, Fall 2015 to present (CEE, LSU)
  - Fenglin Han, PhD candidate, Spring 2016 to present (CEE, LSU)
  - Pengfei Wang, PhD candidate, Spring 2017 to present (CEE, LSU)
  - Kaiyu Chen, PhD candidate, Fall 2017 to present (CEE, LSU)
- ✓ Committee member of
  - Manohar Karki, PhD candidate, 2017 (DCE, LSU)
  - Sui Chen, PhD candidate, 2017 (DECE, LSU)
  - Shima Chenar, PhD candidate, 2017 (CEE, LSU)
  - Wenjia Cao, MS, 2017 (DGA, LSU)
  - Richard LeBlanc, Non-Thesis Project, 2017 (CEE, LSU)
  - Sima Hannani, MS, 2015 (CEE, LSU)

Professional activities

- ✓ **Reviewer of Journals and Conferences**

  -Nature Communications, National Science Review, Atmospheric Environment, Atmospheric Pollution Research, Environmental Science & Technology, Journal of Geophysical Research, Atmospheric Chemistry and Physics, Scientific Reports, PLoS ONE, Environmental Chemistry, Environmental Pollution, Energy for Sustainable Development, Advances in Atmospheric Sciences, Science of the Total Environment, International Journal of Energy Research, and CITIES, The international Journal of Urban Policy and Planning, and Environmental Research.
- ✓ **Reviewer of Proposals**

  -National Science Foundation, Czech Science Foundation.
- ✓ **Section Editor**

  - Current Pollution Reports, 2016- (Springer, a new review journal)
- ✓ **Guest Editor**

  -Special Issue **China's clean power** on *Resource, conversion and recycling*. (Elsevier, 2015 Impact Factor 3.208).

  -Special Issue **Source apportionment of air pollutants** on *Environmental Pollution*. (Elsevier, 2015 Impact Factor 4.839).

  -Special Issue **Utilization of Data from Air Quality Monitoring Networks** on *Environmental Research*. (Elsevier, 2015 Impact Factor 3.088).
- ✓ **Membership of Academic Associations**

  -American Association for Aerosol Research (AAAR): 2009-2017.

  -American Geophysical Union (AGU): 2015-2017.

  - American Air & Waste Management Association (AWMA): 2016.

  - American Chemical Society (ACS): 2016.

  - Asia Oceania Geosciences Society (AOGS): 2017.

✓ **Other**

-(Primary) Convener for following meetings:

- Source apportionment of air pollutants in Asia, AGU 2016 fall meeting. Dec. 2016, San Francisco, CA.
- Contributions of local and long-range transport to air pollutants in mega-cities, JpGU-AGU Joint Meeting 2017, May 2017, Japan.
- Atmospheric Chemistry in Highly Polluted Environments, Annual Meeting Asia Oceania Geosciences Society (AOGS), Aug. 2017, Singapore.
- Progress in Modeling and Observation of Atmospheric Chemistry During High Ozone and Particulate Pollution Events, AGU 2017 fall meeting. Dec. 2017, New Orleans, LA.
- Atmospheric Chemistry in Highly Polluted Environments: Emissions, Fate, and Impacts, 15th Annual Meeting Asia Oceania Geosciences Society (AOGS), Jun. 2018, Honolulu, HI.

-Session Chair,

- Annual AAAR conference, Oct. 2017, Raleigh, NC.
- Annual AOGS conference, Aug. 2017, Singapore.
- JpGU-AGU Joint Meeting, May 2017, Chiba, Japan.
- Annual AGU conference, Dec. 2016, San Francisco, CA
- Annual AAAR conference, Oct. 2016, Portland, OR
- Annual AAAR conference, Oct. 2014, Orlando, FL.

-Scientific Committee,

- Chinese Environmental Scholars Forum, June 2017, Berkeley, CA
- Chinese Environmental Scholars Forum, June 2016, Princeton, NJ
- Chinese Environmental Scholars Forum, May 2015, New Haven, CT.

Peer-reviewed publications (#corresponding author; underscore students advised)

2018

(52) Sri Harsha Kota, *Hao Guo*, Lauri Myllyvirta, Jianlin Hu, Shovan Kumar Sahu, Rajyalakshmi Garaga, Qi Ying, Aifang Gao, Sunil Dahiya, Yuan Wang, **Hongliang Zhang**#. 2018. Year-long simulation of gaseous and particulate air pollutants in India. Atmospheric Environment, accepted for publication.

(51) Dongsheng Ji#, Yang Cui, Liang Li, Jun He, Lili Wang, **Hongliang Zhang**, Wan Wang, Luxi Zhou, Willy Maenhaut, Tianxue Wen, Yuesi Wang. 2018. Characterization and source identification of fine particulate matter in urban Beijing during the 2015 Spring Festival. Science of the Total Environment, 628-629, 430-440.

(50) **Hongliang Zhang**#, *Kaiyu Chen*, *Fenglin Han*. 2018. An Increasing Threat of Wildfire to Human Health. Current Pollution Reports. https://doi.org/10.1007/s40726-018-0077-9.

(49) Qi Ying#, Miao Feng, Dalin Song, Li Wu, Jianlin Hu, **Hongliang Zhang**, Michael Kleeman, Xinghua Li. A Hybrid Source-Receptor Oriented Method for Regional Source Apportionment of Chemical Components in Primary Airborne Particulate Matter. Science of the Total Environment, 624, 355-365.

(48) Peng Wang, Qi Ying#, **Hongliang Zhang**, Jianlin Hu, Yingchao Lin, Hongjun Mao. Source Apportionment of Secondary Organic Aerosol in China using a Regional Chemical Transport

Model and Two Emission Inventories. Environmental Pollution, in press, https://doi.org/10.1016/j.envpol.2017.10.122.

(47) Junjun Deng#, Yanru Zhang, Yuqing Qiu, **Hongliang Zhang**, Wenjiao Du, Lingling Xu, Youwei Hong, Yanting Chen, Jinsheng Chen#. 2018. Source apportionment of PM2.5 at the Lin'an regional background site in China with three receptor models. Atmospheric Research, 202, 23-32.

(46) Xue Qiao, Qi Ying#, Xinghua Li, **Hongliang Zhang**, Jianlin Hu, Ya Tang, Xue Chen. 2018. Source apportionment of $PM_{2.5}$ in 25 Chinese cities using a source-oriented Community Multiscale Air Quality model. Science of the Total Environment, 612, 462-471.

2017

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(45) Yong Xu, Qi Ying, Jianlin Hu, Yuan Gao, Yang Yang, Dexiang Wang#, and **Hongliang Zhang#**. 2017. Spatial and temporal variations in criteria air pollutants in three typical terrain regions in Shaanxi, China, during 2015. Air Quality, Atmosphere & Health, https://doi.org/10.1007/s11869-017-0523-7.

(44) Yanru Zhang, **Hongliang Zhang**, Junjun Deng#, Wenjiao Du, Youwei Hong, Lingling Xu, Yuqing Qiu, Zhenyu Hong, Xin Wu, Qianli Ma, Jie Yao, Jinsheng Chen#. 2017. Source regions and transport pathways of $PM_{2.5}$ at a regional background site in East China. Atmospheric Environment, 167, 202-211.

(43) Jianlin Hu, Lin Huang, Mindong Chen, **Hongliang Zhang**, Shuxiao Wang, Qi Ying#. Premature Mortality Attributable to Particulate Matter in China: Source Contributions and Responses to Reductions. Environmental Science & Technology, 51 (17), 9950-9959.

(42) *Hao Guo*, Sri Kota, Shovan Sahu, Jianlin Hu, Qi Ying, Aifang Gao, **Hongliang Zhang#**. 2017. Source apportionment of PM2.5 in North India using source-oriented air quality models. Environmental Pollution, 231, 426-436.

(41) Zhihao Shi, Jingyi Li, Lin Huang, Peng Wang, Li Wu, Qi Ying#, **Hongliang Zhang#**, Li Lu, Xuejun Liu, Hong Liao, Jianlin Hu#. 2017. Source Apportionment of Fine Particulate Matter in China in 2013 Using a Source-oriented Air Quality Model. Science of the Total Environment, 601-602, 1479-1487.

(40) Jianlin Hu, Xun Li, Lin Huang, Qi Ying, Qiang Zhang, Bin Zhao, Shuxiao Wang, **Hongliang Zhang#**. Ensemble Predictions of Air Pollutants in China in 2013 for Health Effects Studies Using WRF/CMAQ Modeling System with Four Emission Inventories. Atmos. Chem. Phys., 17, 13103-13118, 2017.

(39) Yaqun Zu, Lin Huang, Jianlin Hu#, Zhan Zhao, Hang Liu, **Hongliang Zhang**, Qi Ying, Mindong Chen. 2017. Long-term Analysis of PM_{10} Pollution in a Mega-city in the Western Yangtze River Delta, China. Air Quality, Atmosphere & Health, 1-12. doi:10.1007/s11869-017-0472-1.

(38) Yong Xu, Jianlin Hu, Qi Ying, Hongke Hao, Dexiang Wang#, **Hongliang Zhang#**. Current and future emissions of primary pollutants from coal-fired power plants in Shaanxi, China. Science of the Total Environment. 595, 505-514.

(37) *Fenglin Han*, Sri Kota, Yungang Wang, **Hongliang Zhang#.** 2017. Source Apportionment of PM2.5 in Baton Rouge, Louisiana during 2009-2014. Science of the Total Environment. 586, 115-126.

(36) *Hao Guo*, Yungang Wang, **Hongliang Zhang#**. 2017. Characterization of criteria air pollutants in Beijing during 2014-2015. Environmental Research 154, 334-344.

(35) Dongsheng Ji[#], Liang Li, Bo Pang, Peng Xue, Lili Wang, Yunfei Wu, **Hongliang Zhang**[#], Yuesi Wang. 2017. Characterization of black carbon in urban-rural fringe area of Beijing. Environmental Pollution. 223, 524-534.

(34) Jianlin Hu, Peng Wang, Qi Ying[#], **Hongliang Zhang**, Jianjun Chen, Xinlei Ge, Xinghua Li, Jingkun Jiang, Shuxiao Wang, Jie Zhang, Yu Zhao, Yingyi Zhang. 2017. Modeling Biogenic and Anthropogenic Secondary Organic Aerosol in China, Atmospheric Chemistry and Physics 17 (1), 77-92.

(33) Jianlin Hu, Shantanu Jathar, **Hongliang Zhang**, Qi Ying, Shu-Hua Chen, Christopher Cappa, and Michael Kleeman. 2017. Long-term Particulate Matter Modeling for Health Effects Studies in California – Part II: Concentrations and Sources of Ultrafine Organic Aerosols. Atmos. Chem. Phys. 17, 5379-5391.

(32) Gang He[#], **Hongliang Zhang**[#], Yuan Xu[#], Xi Lu[#]. 2017. China's clean power transition: current status and future prospect. Resources, Conservation & Recycling. 121, 3-10.

(31) Jianlin Hu, Lin Huang, Mindong Chen, Gang He[#], **Hongliang Zhang**[#]. 2017. Impacts of Power Generation on Air Quality in China - Part II: Future Scenarios. Resources, Conservation & Recycling, 121, 115-127.

(30) Lin Huang, Jianlin Hu, Mindong Chen, **Hongliang Zhang**[#]. 2017. Impacts of Power Generation on Air Quality in China - Part I: An Overview. Resources, Conservation & Recycling, 121, 103-114.

2016

(29) Jianlin Hu, Jianjun Chen, Qi Ying[#], **Hongliang Zhang**[#]. 2016. One-Year Simulation of Ozone and Particulate Matter in China Using WRF/CMAQ Modeling System. Atmospheric Chemistry & Physics, 16, 10333-10350.

(28) Hsiang-He Lee, Shu-Hua Chen[#], Michael J. Kleeman, **Hongliang Zhang**, Steve P. DeNero, David K. Joe. 2016. Implementation of warm-cloud processes in a source-oriented WRF/Chem model to study the effect of aerosol mixing state on fog formation in the Central Valley of California. Atmospheric Chemistry & Physics, 16, 8353-8374.

2015

(27) Jianlin Hu, Li Wu, Bo Zheng, Qiang Zhang, Kebin He, Qing Chang, Xinghua Li, Fumo Yang, Qi Ying, **Hongliang Zhang**[#]. 2015. Source contributions and regional transport of primary particulate matter in China. Environmental Pollution, 207, 31-42.

(26) **Hongliang Zhang**, Kento T. Magara-Gomez, Michael R. Olson, Tomoaki Okuda, Kenneth A. Walz, James J. Schauer, Michael J. Kleeman[#]. 2015. Atmospheric Impacts of Black Carbon Emissions Reductions through the Strategic Use of Biodiesel. Science of the Total Environment, 538, 412-422.

(25) Jianlin Hu, Qi Ying, Yungang Wang, **Hongliang Zhang**[#]. 2015. Characterizing Multi-Pollutant Air Pollution in China: Comparison of Three Air Quality Indices. Environment International, 84, 17-25.

(24) Xue Qiao, Sri Harsha Kota, Jingyi Li, Li Wu, Jianlin Hu, **Hongliang Zhang**, Ya Tang[#], Qi Ying[#]. 2015. Modeling Dry and Wet Deposition of Sulfate, Nitrate, and Ammonium Ions in Jiuzhaigou National Nature Reserve, China using a Source-Oriented CMAQ Model: Part II. Emission Sector and Source Region Contributions. 2015. Science of the Total Environment, 532, 840-848.

(23) Xue Qiao, Ya Yang[#], Jianlin Hu, Shuai Zhang, Sri Harsha Kota, Jingyi Li, Li Wu, Huilin Gao,

Hongliang Zhang, Qi Ying[#]. Modeling Dry and Wet Deposition of Sulfate, Nitrate, and Ammonium Ions in Jiuzhaigou National Nature Reserve, China using a Source-Oriented CMAQ Model: Part I. Base Case Model Results. 2015. Science of the Total Environment, 532, 831-839.

(22) **Hongliang Zhang**, Yungang Wang[#], Jianlin Hu, Qi Ying, Xiao-Ming Hu. 2015. Relationships between meteorological parameters and criteria air pollutants in three megacities in China. Environmental Research, 140, 242-254.

2014

(21) Jianlin Hu, **Hongliang Zhang**, Qi Ying, Shu-Hua Chen, Francois Vandenberghe, Michael Kleeman[#]. 2014. Long-term Particulate Matter Modeling for Health Effects Studies in California – Part 1: Model Performance on Temporal and Spatial Variations. Atmospheric Chemistry and Physics, 15, 3445-3461.

(20) Yungang Wang, Qi Ying, Jianlin Hu[#], **Hongliang Zhang[#]**. Spatial and Temporal Variation of Six Criteria Air Pollutants in 31 Provincial Capital Cities in China during 2013-2014. Environment International, 73, 413-422.

Before Joining LSU at August 2014

(19) Xiaoming Hu, Zhiqiang Ma[#], Weili Lin, **Hongliang Zhang**, Jianlin Hu, Ying Wang, Xiaobin Xu, Jose D. Fuentes, Ming Xue. 2014. Impact of the Loess Plateau on the Atmospheric Boundary Layer Structure and Air Quality in the North China Plain: A Case Study. Science of the Total Environment, 499, 228-237.

(18) Dexiang Wang, Jianlin Hu, Yong Xu, Di Lv, Xiaoyang Xie, Michael Kleeman, Jia Xing, **Hongliang Zhang[#]**, Qi Ying[#]. 2014. Source Contributions to Primary and Secondary Inorganic Particulate Matter during a Severe Wintertime $PM_{2.5}$ Pollution Episode in Xi'an, China. Atmospheric Environment, 97, 182-194.

(17) Jianlin Hu, Yungang Wang, Qi Ying, **Hongliang Zhang**[#]. 2014. Spatial and Temporal Variability of $PM_{2.5}$ and PM_{10} over the North China Plain and the Yangtze River Delta, China. Atmospheric Environment, 95, 598-609.

(16) Qi Ying[#], Li Wu, **Hongliang Zhang**. 2014. Local and Inter-regional Contributions to $PM_{2.5}$ Nitrate and Sulfate in China. Atmospheric Environment, 94, 582–592.

(15) Qi Ying[#], Iris V. Cureño, Gang Chen, Sajjad Ali, **Hongliang Zhang**, Meagan Malloy, Humberto A. Bravo, Rodolfo Sosa. 2014. Impacts of Stabilized Criegee Intermediates, Surface Uptake Processes and Higher Aromatic Secondary Organic Aerosol Yields on Predicted $PM_{2.5}$ Concentrations in the Mexico City Metropolitan Zone. Atmospheric Environment, 94, 438–447.

(14) **Hongliang Zhang**, Jianlin Hu, Michael Kleeman, Qi Ying[#]. 2014. Source Apportionment of Sulfate and Nitrate Particulate Matter in the Eastern United States and Effectiveness of Emission Control Programs. Science of the Total Environment, 490, 171-181.

(13) Jianlin Hu, **Hongliang Zhang**, Shu-Hua Chen, Christine Wiedinmyer, Francois Vandenberghe, Qi Ying, and Michael Kleeman[#]. 2014. Predicting primary $PM_{2.5}$ and $PM_{0.1}$ trace composition for epidemiological studies in California. Environmental Science and Technology, 48, 4971-4979.

(12) Jianlin Hu, **Hongliang Zhang**, Shu-Hua Chen, Qi Ying, Christine Wiedinmyer, Francois Vandenberghe, and Michael Kleeman[#]. 2014. Identifying $PM_{2.5}$ and $PM_{0.1}$ sources for epidemiological studies in California. Environmental Science and Technology, 48, 4980-4990.

(11) **Hongliang Zhang**, Gang Chen, Jianlin Hu, Shu-Hua Chen, Christine Wiedinmyer, Michael

Kleeman, Qi Ying#. 2014. Evaluation of a seven-year (2000-2006) high resolution WRF/CMAQ simulation for epidemiology studies in the eastern United States. Science of the Total Environment, 473, 275-285.

(10) **Hongliang Zhang**, Steve P. DeNero, David K. Joe, Hsiang-He Lee, Shu-Hua Chen, John Michalakes, and Michael J. Kleeman#. 2014. Development of a Source Oriented version of the WRF/Chem Model and its Application to the California Regional PM_{10}/$PM_{2.5}$ Air Quality Study. Atmospheric Chemistry and Physics, 14, 485-503.

(9) Sri Harsha Kota, **Hongliang Zhang**, Gang Chen, Gunnar W. Schade, and Qi Ying#. 2014 Evaluation of On-road Vehicle CO and NOx Emission Inventories Using a Source-oriented Air Quality Model. Atmospheric Environment, 85, 99-108.

(8) David K. Joe, **Hongliang Zhang**, Steve P. DeNero, Hsiang-He Lee, Shu-Hua Chen, Brian McDonald, Robert A. Harley, and Michael J. Kleeman#. 2014. Implementation of a High-Resolution Source-Oriented WRF/Chem Model at the Port of Oakland. Atmospheric Environment, 82, 351-363.

(7) **Hongliang Zhang**, Jingyi Li, Qi Ying#, Birnur Buzcu Guven, Eduardo Olaguer. 2013. Source Apportionment of Formaldehyde during TexAQS 2006 using a Source-Oriented Chemical Transport Model. Journal of Geophysical Research, 118, 1525-1535.

(6) **Hongliang Zhang**, Jingyi Li, Qi Ying#, Jian Zhen Yu, Dui Wu, Yuan Cheng, Kebin He, Jingkun Jiang. 2012. Source Apportionment of $PM_{2.5}$ Nitrate and Sulfate in China using a Source-Oriented Chemical Transport Model. Atmospheric Environment, 62, 228-242.

(5) **Hongliang Zhang**, Qi Ying#. 2012. Secondary Organic Aerosol from Polycyclic Aromatic Hydrocarbons in Southeast Texas. Atmospheric Environment, 55, 279-287.

(4) Jingyi Li, **Hongliang Zhang**, Qi Ying#. 2012. Comparison of the SAPRC07 and SAPRC99 Photochemical Mechanisms during a High Ozone Episode in Texas: Differences in Concentrations, OH Budget and Relative Response Factors. Atmospheric Environment, 54, 25-35.

(3) **Hongliang Zhang**, Qi Ying#. 2011. Secondary Organic Aerosol Formation and Source Apportionment in Southeast Texas. Atmospheric Environment, 45(19), 3217-3227.

(2) **Hongliang Zhang**, Qi Ying#. 2011. Contributions of Local and Regional Sources of NOx to Ozone Concentrations in Southeast Texas. Atmospheric Environment, 45(17), 2877-2887.

(1) **Hongliang Zhang**, Qi Ying#. 2010. Source Apportionment of Airborne Particulate Matter in Southeast Texas using a Source-Oriented 3D Air Quality Model. Atmospheric Environment, 44(29), 3547-3557.

Other journal publications

(1) Gang He, **Hongliang Zhang**, Yuan Xu, Xi Lu. 2016. Editorial: Clean power transition in China. Resources, Conservation and Recycling, 121, 1-2.

Conference papers, presentations, and posters

(65) Mingjie Kang, Hongliang Zhang, Pingqing Fu. Characteristics and Source Apportionment of Marine Aerosols over East China Sea Using a Source-oriented Chemical Transport Model. 2017 AGU annual meeting. New Orleans, LA, December 2017.

(64) Meng Gao, Shaojie Song, Gufran Beig, Hongliang Zhang, Jianlin Hu, Qi Ying, Michael McElroy. Seasonal Characteristics of Widespread Ozone Pollution in China and India: Current

Model Capabilities and Source Attributions. 2017 AGU annual meeting. New Orleans, LA, December 2017.

(63) Pengfei Wang, Sri Kota, Jianlin Hu, Qi Ying, Hongliang Zhang. Roles of Meteorology in Changes of Air Pollutants Concentrations in China from 2010 to 2015. 2017 AGU annual meeting. New Orleans, LA, December 2017.

(62) Hao Guo, Hongliang Zhang. Simulation of summer ozone episodes in Southeast Louisiana during 2006-2015. 2017 AGU annual meeting. New Orleans, LA, December 2017.

(61) Fenglin Han, Hongliang Zhang. Source apportionment of polycyclic aromatic hydrocarbons in Louisiana. 2017 AGU annual meeting. New Orleans, LA, December 2017.

(60) Jianlin Hu, Yanhong Zhu, Lin Huang, Hongliang Zhang, Qi Ying. Unintentional Ozone Increase Due to Particulate Matter Controls in China. AAAR 36th Annual Conference. Raleigh, NC, October 2017.

(59) Hao Guo, Sri Kota, Shovan Sahu, Jianlin Hu, Qi Ying, Hongliang Zhang. Source Contributions to Premature Mortality Attributable to Particulate Matter in India. AAAR 36th Annual Conference. Raleigh, NC, October 2017.

(58) Qi Ying, Jianlin Hu, Xue Qiao, Hongliang Zhang. Evaluation of a Low-Cost Monitor for PM2.5 in Two Chinese Cities. AAAR 36th Annual Conference. Raleigh, NC, October 2017.

(57) Pengfei Wang, Sri Kota, Jianlin Hu, Qi Ying, Hongliang Zhang. Effects of Meteorology Changes on Reduction of Air Pollutants Concentrations. AAAR 36th Annual Conference. Raleigh, NC, October 2017.

(56) Junjun Deng, Yanru Zhang, Jinsheng Chen, Hongliang Zhang, Youwei Hong, Lingling Xu. Chemical Characteristics and Potential Sources of PM2.5 at a Regional Background Site in East China. AAAR 36th Annual Conference. Raleigh, NC, October 2017.

(55) Jianlin Hu, Qi Ying, **Hongliang Zhang**. Unintentional Ozone Increase Due to Particulate Matter Controls in China. Asia Oceania Geosciences Society (AOGS) Annual Meeting 2017, Singapore, August 2017.

(54) **Hongliang Zhang**, Anikender Kumar, Jianlin Hu, Qi Ying, Michael Kleeman. Effects of Black Carbon Mixing State on Aerosol-Climate Interaction in China. Asia Oceania Geosciences Society (AOGS) Annual Meeting 2017, Singapore, August 2017.

(53) Hao Guo, Jianlin Hu, Qi Ying, Junjun Deng, **Hongliang Zhang**. Characteristics and Sources of Summertime Ozone in China. Asia Oceania Geosciences Society (AOGS) Annual Meeting 2017, Singapore, August 2017.

(52) Sri Kota, Hao Guo, Jianlin Hu, Shovan Sahu, Qi Ying, Hongliang Zhang, Yearlong Simulation of Gaseous and Particulate Air Pollutants in India During 2015. Asia Oceania Geosciences Society (AOGS) Annual Meeting 2017, Singapore, August 2017.

(51) Jianlin Hu, Lin Huang, Mindong Chen, Gang He, **Hongliang Zhang**. 2017. Impacts of Power Generation on Air Quality in China: Future Scenarios. International Energy Workshop 2017, College Park, Maryland, July 2017.

(50) Qi Ying, Peng Wang, **Hongliang Zhang**, Jianlin Hu. Source Contributions to Secondary Organic Aerosol in China: Comparison of MEIC and REAS2. The JpGU-AGU Joint Meeting 2017, Chiba, Japan, May 2017.

(49) Jinjin Sun, Jianlin Hu, Qi Ying, **Hongliang Zhang**. A review on the local and inter-regional contributions to primary and secondary PM2.5 pollution in key regions of China. The JpGU-AGU Joint Meeting 2017, Chiba, Japan, May 2017.

(48) Jianlin Hu, Yanhong Zhu, Qi Ying, **Hongliang Zhang**. Unintentional Regional Ozone Increase in the Western Pacific Due to Particulate Matter Controls in China. The JpGU-AGU Joint Meeting 2017, Chiba, Japan, May 2017.

(47) Sri Harsha Kota, Shovan Kumar Sahu, **Hongliang Zhang**. Characterization and regional transport of PM2.5 in different Indian metropolises. The JpGU-AGU Joint Meeting 2017, Chiba, Japan, May 2017.

(46) Hao Guo, **Hongliang Zhang**. Regional transport of ozone and its precursors to Southeast Louisiana. The JpGU-AGU Joint Meeting 2017, Chiba, Japan, May 2017.

(45) Sri Harsha Kota, Hao Guo, Jianlin Hu, Qi Ying, **Hongliang Zhang**. Regional contributions to primary and secondary inorganic components of particulate matter in India. The JpGU-AGU Joint Meeting 2017, Chiba, Japan, May 2017.

(44) Fenglin Han, **Hongliang Zhang**. Deposition of polycyclic aromatic hydrocarbons (PAHs) to Louisiana water bodies. The 11th Annual Louisiana Groundwater, Surface Water, and Water Resources Symposium, Louisiana State University, Baton Rouge, LA, April 2017.

(43) Pengfei Wang, Zuo Xue, **Hongliang Zhang**. Understanding air-sea carbon dioxide exchange in the Gulf Coast. The 11th Annual Louisiana Groundwater, Surface Water, and Water Resources Symposium, Louisiana State University, Baton Rouge, LA, April 2017.

(42) Hao Guo. Jianlin Hu, Qi Ying, **Hongliang Zhang**. Simulation of photochemical pollutants in summer 2013 in China. American Geophysical Union (AGU) 2016 Fall Meeting. San Francisco, CA, December 2016.

(41) Jianlin Hu, Qi Ying, **Hongliang Zhang**. Seasonal Source Apportionment of Primary and Secondary Fine Particulate Matter in China Using a Source-oriented Air Quality Model. AAAR 35th Annual Conference. Portland, OR, October 2016.

(40) Hao Guo, Yungang Wang, **Hongliang Zhang**. Characterization of Criteria Air Pollutants in Beijing during 2014-2015. AAAR 35th Annual Conference. Portland, OR, October 2016.

(39) Fenglin Han, **Hongliang Zhang**. Source Apportionment of $PM_{2.5}$ in Baton Rouge, Louisiana. AAAR 35th Annual Conference. Portland, OR, October 2016.

(38) Jianlin Hu **Hongliang Zhang**, Qi Ying. Premature Mortality in China Due to Exposure of Outdoor Fine Airborne Particulate Matter: Source Contributions and Responses to Concentration Reductions. AAAR 35th Annual Conference. Portland, OR, October 2016.

(37) Jianlin Hu, Lin Huang, Mindong Chen, Gang He, Hongliang Zhang.Impacts of Power Generation on Air Quality in China. AAAR 35th Annual Conference. Portland, OR, October 2016.

(36) Jianlin Hu, Zhan Zhao, Qi Ying, Hongliang Zhang, **Hongliang Zhang**. Impact of Climate Change on Summertime Ozone and Fine Particulate Matter in China. AAAR 35th Annual Conference. Portland, OR, October 2016.

(35) Qi Ying, Jianlin Hu, Hongliang Zhang, A Hybrid Source-receptor Modeling Approach for Estimating Source Contributions to Trace Metals in Airborne Particulate Matter. AAAR 35th Annual Conference. Portland, OR, October 2016.

(34) **Hongliang Zhang**. Effects of black carbon mixing state on aerosol-climate interaction in China using a source oriented WR/Chem model. 2016 A&WMA Visibility Conference. Jackson Hole, WY, September 2016.

(33) **Hongliang Zhang**, Fenglin Han. Effects of atmospheric aerosols on climate and air quality in Eastern US using a source-oriented WRF/Chem model. The 252nd American Chemical Society

(ACS) National Meeting & Exposition, Philadelphia, PA, August 2016.

(32) Jianlin Hu, Jianjun Chen, **Hongliang Zhang**, Qi Ying. The Impact of Climate Change on Summertime Ozone and Fine Particulate Matter in China, Asia Oceania Geosciences Society (AOGS) 13th Annual Meeting, Beijing, China, August 2016.

(31) Jianlin Hu, Zhan Zhao, Qi Ying, **Hongliang Zhang**. Evaluation of the Performance of Five Chemical Transport Models in Predicting the Haze Pollution in China, Asia Oceania Geosciences Society (AOGS) 13th Annual Meeting, Beijing, China, August 2016.

(30) Hongliang Zhang, Impacts of power generation on air quality in China, Chinese Environmental Scholars Forum, Princeton, NJ, June 2016.

(29) Hao Guo, Fenglin Han, and **Hongliang Zhang**. Deposition of Nitrogen and Sulfur to Louisiana Water Bodies, 10th Annual Louisiana Groundwater, Surface Water and Water Resources Symposium, Louisiana State University, Baton Rouge, LA, March 2016.

(28) **Hongliang Zhang**, Hao Guo. Atmospheric deposition of nitrogen and sulfur in Louisiana. American Geophysical Union Fall Meeting. San Francisco, CA, 2015.12.

(27) **Hongliang Zhang**, Qi Ying, Jianlin Hu. Uncertainties in Air Quality Simulation in China Using Publicly AvailableEmission Inventories. 17th Global Emissions InitiAtive (GEIA) Conference. Beijing, China, 2015.11.

(26) Christina Zapata, Hongliang Zhang, Sonia Yeh, Christopher Yang, Michael Kleeman. Air Quality Co-Benefits of Climate Mitigation Strategies in California. AAAR 34th Annual Conference. Minnesota, USA, 2015.10.

(25) **Hongliang Zhang**, Jianlin Hu, Qi Ying. Yearlong Air Quality Simulation and Population Exposure Estimation in China. AAAR 34th Annual Conference. Minnesota, USA, 2015.10.

(24) Peng Wang, **Hongliang Zhang**, Jianlin Hu, Qi Ying. A Modeling Study of Secondary Organic Aerosol in China: Spatial and Temporal Variations and Precursor Contributions. AAAR 34th Annual Conference. Minnesota, USA, 2015.10.

(23) Characteristics and source apportionment of air pollution in China. Chinese Environmental Scholars Forum, May 2015, New Haven, CT.

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(2) **Hongliang Zhang**, Fang Liu, Shujuan Wang, Changhe Chen, Xuchang Xu. Simulation of Integration of Ammonia Based Carbon Dioxide Capture System with Steam Cycle in Power Plant using Aspen Plus. The 33rd International Technical Conference on Coal Utilization & Fuel Systems. Florida, USA, 2008.6.

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Invited talks and webinars

(6) Simulation, sources and health effects of air pollution in China in 2013, Institute of Atmospheric Physics, Chinese Academy of Sciences; Xidian University, June 2017.

(5) Black carbon mixing state and its role in aerosol-climate interactions, Tsinghua University; Nanjing University; Sichuan University, June 2017.

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(3) Effects of black carbon mixing state on climate using a source-oriented WRF/Chem model. NASA Jet Propulsion Laboratory, June 2016.

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