Wenjun Meng

PhD student
College of Urban and Environmental Sciences
Peking University

Phone: (+86) 13020042704
(+49) 15257018879
Email: wjmeng@pku.edu.cn

Education

Ph. D. in *Environmental Geography*, Peking University. 2017.9-2022.7 (expected)

B. Sc. in *Environmental Science*, Peking University. 2013.9-2017.7

Academic Experience

Research Assistant, Laboratory for Earth Surface Processes, Peking University 2017.11-2020.7
Advisor: *Prof. Shu Tao*
Project: **Energy-environment-health Benefits of Rural Residential Coal-substitution in Northern China**

Research Assistant, Laboratory for Earth Surface Processes, Peking University 2016.9-2017.6
Advisor: *Prof. Shu Tao*
Project: **Stove Improvement and Effects on Environment and Health in Rural China** (Undergraduate Thesis)

Visiting Scholar, School of Civil and Environmental Engineering, Georgia Institute of Technology 2016.8-2017.1
Advisor: *Prof. Armistead G. Russell*
Project: **Air Quality Modeling in China Using CMAQ**

Research Assistant, Laboratory for Earth Surface Processes, Peking University 2015.1-2017.1
Advisor: *Prof. Shu Tao*
Project: **High-resolution Global Ammonia Emission Inventory**

Teaching Assistant, College of Urban and Environmental Science, Peking University 2019.9-2020.1
Course: **Methodology in Environmental Science**
Instructor: *Prof. Shu Tao*

Teaching Assistant, College of Urban and Environmental Science, Peking University 2018.9-2019.1
Course: **Applied Statistics**
Instructor: *Prof. Shu Tao*

Oral Presentation, The 5th International Conference on Environmental Pollution and Health (ICEPH)
Harbin, China. 2019.8

Poster Presentation, European Geosciences Union (EGU) General Assembly 2020
Vienna, Austria (Online). 2020.5

Oral Presentation, The 8th Air Benefit and Cost and Attainment Assessment Conference (ABaCAS)
Guangzhou, China. 2020.11

Skills

Programming: Python, C, HTML.

Tools: MATLAB, WRF-Chem, ArcGIS, SPSS, Linux.

Languages: English (professional), Mandarin Chinese (native), German (beginner)

Awards and Honors

National Scholarship, Peking University, 2019.

Merit Student, Peking University, 2019.

Best Oral Award (3rd Rank), The 5th International Conference on Environmental Pollution and Health (ICEPH), 2019

Principal Scholarship, Peking University, 2019.

Tiehan Scholarship, CUES, Peking University, 2018.

Excellent Research Award, Peking University, 2018.

Principal Scholarship, Peking University, 2017.

Selected Publications

Meng, W.; Shen, H.; Yun, X.; Chen, Y.; Zhong, Q.; Zhang, W.; Yu, X.; Xu, H.; Ren, Y. a.; Shen, G.; Ma, J.; Liu, J.; Cheng, H.; Wang, X.; Zhu, D.; Tao, S., Differentiated-Rate Clean Heating Strategy with Superior Environmental and Health Benefits in Northern China. *Environmental Science & Technology* 2020, 54 (21), 13458-13466.

Meng, W.; Zhong, Q.; Chen, Y.; Shen, H.; Yun, X.; Smith, K. R.; Li, B.; Liu, J.; Wang, X.; Ma, J.; Cheng, H.; Zeng, E. Y.; Guan, D.; Russell, A. G.; Tao, S., Energy and air pollution benefits of household fuel policies in northern China. *Proceedings of the National Academy of Sciences* 2019, 116 (34), 16773-16780.

Meng, W.; Zhong, Q.; Yun, X.; Zhu, X.; Huang, T.; Shen, H.; Chen, Y.; Chen, H.; Zhou, F.; Liu, J.; Wang, X.; Tao, S., Improvement of a global high-resolution ammonia emission inventory for combustion and industrial sources with new data from the residential and transportation sectors. *Environmental Science & Technology* 2017, 51(5), pp.2821-2829.

Yun, X.; **Meng, W.**; Xu, H.; Zhang, W.; Yu, X.; Shen, H.; Chen, Y.; Shen, G.; Ma, J.; Li, B.; Cheng, H.; Hu, J.; Tao, S., Coal Is Dirty, but Where It Is Burned Especially Matters. *Environmental Science & Technology* 2021.

Yun, X.; Shen, G.; Shen, H.; **Meng, W.**; Chen, Y.; Xu, H.; Ren, Y.; Zhong, Q.; Du, W.; Ma, J.; Cheng, H.; Wang, X.; Liu, J.; Wang, X.; Li, B.; Hu, J.; Wan, Y.; Tao, S., Residential solid fuel emissions contribute significantly to air pollution and associated health impacts in China. *Science Advances* 2020, 6 (44), eaba7621.

Lu, C.; Xu, H.; **Meng, W.**; Hou, W.; Zhang, W.; Shen, G.; Cheng, H.; Wang, X.; Wang, X.; Tao, S., A novel model for regional indoor PM2.5 quantification with both external and internal contributions included. *Environment International* 2020, 145, 106124.

Shen, G.; Ru, M.; Du, W.; Zhu, X.; Zhong, Q.; Chen, Y.; Shen, H.; Yun, X.; **Meng, W.**; Liu, J.; Cheng, H.; Hu, J.; Guan, D.; Tao, S., Impacts of air pollutants from rural Chinese households under the rapid residential energy transition. *Nature Communications* 2019, 10 (1), 8.

Zhu, X.; Yun, X.; **Meng, W.**; Xu, H.; Du, W.; Shen, G.; Cheng, H.; Ma, J.; Tao, S., Stacked Use and Transition Trends of Rural Household Energy in Mainland China. *Environmental Science & Technology* 2019, 53 (1), 521-529.

Tao, S.; Ru, M. Y.; Du, W.; Zhu, X.; Zhong, Q. R.; Li, B. G.; Shen, G. F.; Pan, X. L.; **Meng, W.**; Chen, Y. L.; Shen, H. Z.; Lin, N.; Su, S.; Zhuo, S. J.; Huang, T. B.; Xu, Y.; Yun, X.; Liu, J. F.; Wang, X. L.; Liu, W. X.; Cheng, H. F.; Zhu, D. Q., Quantifying the rural residential energy transition in China from 1992 to 2012 through a representative national survey. *Nature Energy* 2018, 3 (7), 567-573.