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EDUCATIONAL BACKGROUND

2002 Ph.D. and M.S., Environmental Engineering, Tsinghua University
1998 B.S., Water and Wastewater Engineering, Tsinghua University

PROFESSIONAL EXPERIENCE

2006-now Assistant Fuel & Vehicle Analyst, Center for Transportation Research,
Energy Systems Division, Argonne National Laboratory
2002-2005 Postdoctoral Researcher, Center for Transportation Research
Energy Systems Division, Argonne National Laboratory

PUBLICATIONS: JOURNAL ARTICLES AND BOOK CONTRIBUTIONS

- 1) **Ye Wu**, Michael Q. Wang, Phillip Sharer, Aymeric Rousseau. *Well-to-Wheels Results of Energy Use, Greenhouse Gas Emissions and Criteria Air Pollutant Emissions of Selected Vehicle/Fuel Systems*. SAE 2006 Transactions, Journal of Engines, SAE#2006-01-0377, March 2007.
- 2) **Ye Wu**, Michael Q. Wang, Anant D. Vyas, David C. Wade, Temitope A. Taiwo. *Well-to-Wheels Analysis of Energy Use and Greenhouse Gas Emissions of Hydrogen Produced with Nuclear Energy*, Nuclear Technology, 2006, 155, 192-207
- 3) **Ye Wu**, Shuxiao Wang, David G. Streets, Jiming Hao, Melissa Chan. *Trends in Anthropogenic Mercury Emissions in China from 1995 to 2003*. Environmental Science & Technology, 2006, 40: 5312-5318
- 4) May Wu, **Ye Wu**, Michael Q. Wang. *Energy and Emission Benefits of Alternative Transportation Liquid Fuels Derived from Switchgrass: A Fuel Life Cycle Assessment*. Biotechnology Progress, 2006, 22: 1012-1024
- 5) David G. Streets, **Ye Wu**, Mian Chin. *Two-decadal Aerosol Trends as a Likely Explanation of the Global Dimming/Brightening Transition*. Geophysical Research Letters, 2006, 33, L15806, doi: 10.1029/2006GL026471
- 6) David G. Streets, Qiang Zhang, Litao Wang, Kebin He, Jiming Hao, **Ye Wu**, Youhua Tang, Gregory R. Carmichael. *Revisiting China's CO Emissions after TRACE-P: Synthesis of Inventories, Atmospheric Modeling, and Observations*. Journal of Geophysical Research, 2006, 111, D14306, doi: 10.1029/2006JD007118
- 7) Shuxiao Wang, Min Liu, Jingkun Jiang, Jiming Hao, **Ye Wu**, David G. Streets. *Estimate the Mercury Emissions from Non-coal Sources in China*. Environmental Science, 2006, 27(12): 2401-2406. (In Chinese with abstract in English)
- 8) Robert Larsen, Michael Wang, **Ye Wu**, Anant Vyas, Danilo Santini, and Marianne Mintz. *Might Canadian Oil Sands Promote Hydrogen Production for Transportation? Greenhouse Gas Emission Implications of Oil Sands Recovery and Upgrading*. World Resource Review, 2005, 17(2): 220-242
- 9) David G. Streets, Jiming Hao, **Ye Wu**, Jingkun Jiang, Melissa Chan, Hezhong Tian, Xinbin Feng. *Anthropogenic Mercury Emissions in China*. Atmospheric Environment, 2005, 39: 7789-7806
- 10) Jingkun Jiang, Jiming Hao, **Ye Wu**, David Streets, Lei Duan, Hezhong Tian. *Development of Mercury Emission Inventory from Coal Combustion in China*. Environmental Science, 2005, 26(2): 34-39. (In Chinese with abstract in English)

- 11) Jingnan Hu, Jiming Hao, Lixin Fu, **Ye Wu**, Zhishi Wang, Uwa Tang. *Study On-board Measurement and Modeling of Vehicular Emissions*. Environmental Science, 2004, 25(3): 19-25. (In Chinese with abstract in English)
- 12) **Ye Wu**, Jiming Hao, Lixin Fu, Jingnan Hu, Zhishi Wang, Uwa Tang. *Chemical characteristics of airborne particulate matter near major roads in Macao, China*. The Science of the Total Environment, 2003, 317(1-3): 159-172
- 13) Guihua Wang, Lixin Fu, Zhongping Zhou, **Ye Wu**, Yu Zhou. *Technical and Economic Analysis on Emission Control of Newly Produced Motor Vehicle in China Automotive Industry*. Automotive Engineering, 2003, 25(5): 451-454. (In Chinese with abstract in English)
- 14) **Ye Wu**, Jiming Hao, Lixin Fu, Zhishi Wang, Uwa Tang. *Vertical and horizontal profile of airborne particulate matter near major roads in Macao, China*. Atmospheric Environment, 2002, 36(31): 4907-4918
- 15) **Ye Wu**, Jiming Hao, Lixin Fu, Jingnan Hu, Zhishi Wang, Uwa Tang. *Development of the emissions inventory for mobile source for Macao, China*. Journal of Tsinghua Science and Technology, 2002, 42(12):1601-1604 (In Chinese with abstract in English)
- 16) **Ye Wu**, Jiming Hao, Wei Li, Lixin Fu. *Calculating emissions of exhaust particulate matter from motor vehicles with PART5 model*. Environmental Science, 2002, 23(1): 7-12. (In Chinese with abstract in English)
- 17) **Ye Wu**, Jiming Hao, Lixin Fu. *Study on spatial distribution of air pollutants concentrations from mobile source in the urban area of Macao*. Journal of Shanghai Environmental Science, 2002, 21(6): 338-341. (In Chinese with abstract in English)
- 18) Jiming Hao, **Ye Wu**, Lixin Fu, Kebin He, Dongquan He. *Study on urban vehicular emission control program system in China*. Journal of Applied Meteorology, 2002, 13(Suppl): 195-203. (In Chinese with abstract in English)
- 19) Jiming Hao, Lixin Fu, Kebin He, **Ye Wu**. *Urban vehicular pollution control--international experience and Chinese practice*. China Environmental Science Press, Beijing, China, 2001. (in Chinese)
- 20) Jiming Hao, **Ye Wu**, Lixin Fu, Dongquan He, Kebin He. *Source contributions to ambient concentrations of CO and NO_x in the urban area of Beijing*. Journal of Environmental Science and Health, 2001, A36(2): 215-228.
- 21) Jiming Hao, **Ye Wu**, Lixin Fu, Kebin He, Dongquan He. *Motor vehicle source contributions to air pollutants in Beijing*. Environmental Science, 2001, 22(5): 1-6. (In Chinese with abstract in English)
- 22) Jiming Hao, Dongquan He, **Ye Wu**, Lixin Fu, Kebin He. *A study of the emission and concentration distribution of vehicular pollutants in the urban area of Beijing*. Atmospheric Environment, 2000, 34(3): 453-465.
- 23) Jiaping Tang, Lixin Fu, Jiming Hao, **Ye Wu**, Kebin, He. *Development and application of database for Beijing vehicular emissions based on GIS*. Environmental Science, 2000, 21(6): 95-97. (In Chinese with abstract in English)
- 24) Lixin Fu, Jiming Hao, Kebin, He, Dongquan He, **Ye Wu**. *New light-duty vehicle emission standard for Beijing, China*. Chinese Environmental Science, 1999, 19(6): 552-555. (In Chinese with abstract in English)

PUBLICATIONS: REPORTS AND CONFERENCE PAPERS

- 1) Andrew Burnham, Michael Q. Wang, **Ye Wu**. *Development and Application of GREET2.7-the Transportation Vehicle-Cycle Model*. Center for Transportation Research, Argonne National Laboratory, ANL/ESD/06-5, Nov., 2006

- 2) **Ye Wu**, Michael Q. Wang, Phillip Sharer, Aymeric Rousseau. *Well-to-Wheels Results of Energy Use, Greenhouse Gas Emissions and Criteria Air Pollutant Emissions of Selected Vehicle/Fuel Systems*. SAE 2006 World Congress, 2006-01-0377, Detroit, MI, Apr., 2006
- 3) Michael Q. Wang, **Ye Wu**, Amgad Algowainy. *Operating Manual of GREET: Version 1.7*, Center for Transportation Research, Argonne National Laboratory, ANL/ESD/05-3, Nov., 2005
- 4) May Wu, **Ye Wu**, Michael Q. Wang. *Mobility Chains Analysis of Technologies for Passenger Cars and Light-duty Vehicles Fueled with Biofuels: Application of the GREET model to the Project of the Role of Biomass in the American's Energy Future*, ANL, 2005
- 5) David G. Streets, **Ye Wu**, Shuxiao Wang, Jiming Hao. *Trends in Emissions of Mercury from Coal Combustion in China: 1995 through 2003*. China Workshop on Mercury Control from Coal Combustion, Dec. 31-Nov. 2, 2005
- 6) David G. Streets, Jiming Hao, **Ye Wu**, Jingkun Jiang, Hezhong Tian, Shuxiao Wang. *Anthropogenic Mercury Emission inventory in China, 1999*. China Workshop on Mercury Control from Coal Combustion, Dec. 31-Nov. 2, 2005
- 7) Phillip Sharer, Aymeric Rousseau, Sylvia Pagerit, **Ye Wu**. *Impact of FreedomCAR Goals on Well-to-Wheel Analysis*. 2005 SAE International Conference, 2005-01-0004, Detroit, MI, 2005.
- 8) Michael Q. Wang, **Ye Wu**, Amgad Algowainy. *User Manual and Technical Issues of GREET for MOVES Integration*, Prepared for Office of Transportation and Air Quality, US EPA, 2004
- 9) **Ye Wu**, Michael Q. Wang, Anant D. Vyas, David C. Wade, Temitope A. Taiwo. *Well-to-Wheels Analysis of Energy Use and Greenhouse Gas Emissions of Hydrogen Produced with Nuclear Energy*, in Proceedings of 2004 International Congress on Advances in Nuclear Power Plants (ICAPP'04), Pittsburgh, PA, Jun., 2004: 2179-2194.
- 10) Jiming Hao, **Ye Wu**, Lixin Fu. *Size distribution and chemical characteristics of particulate matter near major road in Beijing, China*. 2002 annual conference of the American Association for Aerosol Research, Charlotte, North Carolina, USA, 2002
- 11) Jiming Hao, **Ye Wu**, Fumo Yang, Kebin He, Lixin Fu, Yongliang Ma. *Study on air pollution of particulate matter in urban area of Beijing, China*. 2001 annual conference of the American Association for Aerosol Research, Portland, Oregon, USA, 2001
- 12) Jiming Hao, Dongquan He, **Ye Wu**, Lixin Fu. Estimating traffic originated pollutants concentration distribution and contributions by using ISCST3 model. In: *Air Quality and Atmospheric Science*, Edited by Chen F, et al. eds. Proceedings of the 6th International Conference on Atmospheric Science and Applications to Air Quality. Beijing: China Ocean Press, 1999, 545-550