CURRICULUM VITAE

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Education

2010–2015 Ph.D. in Atmosphere Science Thesis title: Ambient Characteristics of Elemental Carbon and Black Carbon in the Pearl River Delta and the Application of Elemental Carbon as a Combustion Aerosol Tracer	The Hong Kong University of Science and Technology, Kowloon, Hong Kong Supervisor: Prof. Jian Zhen Yu
2006–2007 M.S. in Environmental Engineering	The Hong Kong University of Science and Technology, Kowloon, Hong Kong
2002–2006 B.S. in Mechanical Engineering	Beijing Institute of Technology, Beijing, China

Employment

Mar 2015 – present	Post-doc Fellow	The Hong Kong University of Science and Technology,
		Division of Environment, Kowloon, Hong Kong

- > OC/EC instrument operation and protocol investigation
- > OC/EC measurement data analysis

Aug 2007 – Jan 2010 Research Asst.

The Hong Kong University of Science and Technology, Division of Environment, Kowloon, Hong Kong

- ➤ Worked on the filter-based PM_{2.5} speciation sampling network (4 sites) in the Pearl River Delta (PRD) region, China
- ➤ Installed and operated Hi-vol and SASS samplers and analyzed samples

Publications

<u>Wu, C.</u>, Ng, W. M., Huang, J., Wu, D., and Yu, J. Z.: Determination of Elemental and Organic Carbon in PM_{2.5} in the Pearl River Delta Region: Inter-Instrument (Sunset vs. DRI Model 2001 Thermal/Optical Carbon Analyzer) and Inter-Protocol Comparisons (IMPROVE vs. ACE-Asia Protocol), <u>Aerosol Sci Tech, 46, 610-621, 10.1080/02786826.2011.649313, 2012</u>.

Wu, D., <u>Wu, C.</u>, Liao, B., Chen, H., Wu, M., Li, F., Tan, H., Deng, T., Li, H., Jiang, D., and Yu, J. Z.: Black carbon over the South China Sea and in various continental locations in South China, <u>Atmos Chem Phys</u>, <u>13</u>, 12257-12270, DOI 10.5194/acp-13-12257-2013, 2013.

Yu, H., <u>Wu, C.</u>, Wu, D., and Yu, J. Z.: Size distributions of elemental carbon and its contribution to light extinction in urban and rural locations in the pearl river delta region, China, <u>Atmos Chem Phys</u>, <u>10</u>, <u>5107-5119</u>, DOI 10.5194/acp-10-5107-2010, 2010.

Deng, X., Wu, D., Yu, J., Lau, A. K., Li, F., Tan, H., Yuan, Z., Ng, W. M., Deng, T., and <u>Wu, C</u>.: Characterization of secondary aerosol and its extinction effects on visibility over the Pearl River Delta Region, China, J Air Waste Manage, 63, 1012-1021, 2013.

Working Papers

- <u>Wu, C</u>, and Yu, J. Z.: Determination of Primary combustion source OC/EC ratio using ambient OC and EC measurements: Secondary OC-EC correlation minimization method," (<u>ACPD under review</u>)
- <u>Wu, C</u>, Huang, J., Wu, D., and Yu, J. Z.: Characterization of carbonaceous aerosols in Pearl River Delta region from one year time-resolved measurement (*to be submitted*)
- <u>Wu, C</u>, Huang, J., Wu, D., and Yu, J. Z.: Optical properties of black carbon aerosols in the Pearl River Delta (PRD) region: implications for light absorption enhancement (*to be submitted*)
- <u>Wu, C</u>, and Yu, J. Z.: Evaluation of linear regression techniques for atmospheric application: the importance of appropriate weighting (*to be submitted*)
- <u>Wu, C</u>, Yu, J. Z., Ng, W. M., Huang, X. H., Wu, D., and Lau, A. K.: Temporal and Spatial Patterns of PM_{2.5} at Three Sites in the Pearl River Delta, China: One-Year Observations (*to be submitted*)

Presentations

Oral: Primary combustion source OC/EC ratio determination: Evaluation of Minimum R Squared (MRS) method. 2 Sep 2014, International Aerosol Conference, Busan, Korea.

Oral: Determination of primary organic carbon-to-elemental carbon (OC/EC) ratio in the EC tracer method. 14 Jan 2014, Regional Air Quality Management (RAQM) Conference, Hong Kong

Skills

- ➤ Online instrument experience: Aethalometer, RT-ECOC analyzer, SMPS
- Filter sampling: SASS, RAAS, Hi-vol, MOUDI
- Filter analysis: Gravimetric, IC, OC/EC
- Programing skills: Igor Pro, FORTRAN and Matlab for measurement data processing and visualization

Contact Information for References

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Relationship: Supervisor

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Relationship: Thesis committee member and examiner

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