Curriculum Vitae

Personal Information

Name: Xiaopu LYU (呂效譜), PhD

Gender: Male

Address: Room 1227, Academic and Administration Building, HKBU, 224 Waterloo Rd, Kowloon Tong, Hong Kong

Telephone: +852 34117208

Email: xiaopu_lyu@hkbu.edu.hk

Google Scholar: https://scholar.google.com.hk/citations?user=porzF74AAAAJ&hl=en&oi=sra

Academic Qualifications

07/2014 – 09/2018: Doctor of Philosophy (Environmental Engineering), Hong Kong Polytechnic University (PolyU)

09/2012 – 06/2014: Master of Philosophy (Environmental Engineering), Wuhan University

09/2008 – 06/2012: Bachelor of Environmental Engineering, Zhejiang University of Technology

Professional Appointments

02/2023 – present: Assistant Professor, Department of Geography, Hong Kong Baptist University

02/2020 – 01/2023: Research Assistant Professor, Department of Civil and Environmental Engineering (Dept. CEE), PolyU

07/2019 – 02/2020: Research Fellow, Dept. CEE, PolyU

05/2018 – 06/2019: Postdoc Fellow, Dept. CEE, PolyU

09/2017 – 05/2018: Research Associate, Dept. CEE, PolyU

Research Grants

Year	Project title	Funding Source	Capacity
2023 – 2025	華中地區高海拔背景大氣中過氧乙酰硝酸酯的化學過程及對臭氧生成的影響	NSFC (RMB 300,000)	PI
2022 – 2024	Is the Usual Social Distance Sufficient to Avoid Airborne Infection of Expiratory Droplets in Indoor Environments?	RGC/CRF (HK$ 4,703,090)	Co-PI
2022 – 2024	Rise in summertime ozone levels in South China: Impacts of long-range transport of Southeast Asia emissions	RGC/GRF (HK$ 911,317)	PI
2021 – 2023	Formation mechanisms of particle-bound hydroxyl dicarboxylic acids in subtropical Hong Kong: field observation and aging experiment	PolyU/Start-up Fund for RAPs under the Strategic Hiring Scheme (HK$ 250,000)	PI
2022 – 2024	Deciphering the formation and accumulation of photochemical ozone in the three bays of China through field	RGC/GRF	Co-I

	observations and model simulations: relevance and uniqueness		
2021 – 2024	Organic Aerosols in Offshore Marine Atmosphere of Eastern and Southern China: Sources, Chemical Ageing, and Climate Consequence	NSFC – RGC Joint Research Scheme	Co-I
2018 – 2019	Clear up Toxic Smog and Improve Air Quality in Hong Kong	Central Policy Unit/Public Policy Research Scheme	Co-I
2016 – 2019	Thermal Desorption Aerosol Gas Chromatograph and Time of Flight Aerosol Mass Spectrometer for research on airborne particles and their impact on health and the environment	RGC/CRF	Key member
2017 – 2020	Regional observation and source identification of toxic and harmful air pollutants in China	Ministry of Science and Technology of PRC/National Key R&D Program of China	Key member
2017 – 2020	Impact of catalytic converter replacement in LPG-fueled vehicles on VOC/NOx chemistry and ozone formation in the atmosphere of Hong Kong	RGC/GRF	Key member
2017 – 2022	Photochemical air pollution in highly urbanized subtropical regions: from micro environments to urban-terrestrial-oceanic interactions	RGC/Theme-based Research Scheme	Key member

Publications

60+ SCI journal papers (21 first & corresponding authors). Web of Science: citation of 1779, h-index of 23; Google Scholar: citation of 2307, h index of 25.

1. **Lyu X**, Guo H, Yao D, et al., 2020. In Situ Measurements of Molecular Markers Facilitate Understanding of Dynamic Sources of Atmospheric Organic Aerosols. Environmental Science & Technology. 54(18):11058-11069. (IF: 9.028)
2. **Lyu XP**, Guo H, Wang N, et al., 2017. Modeling C_1–C_4 alkyl nitrate photochemistry and their impacts on O_3 production in urban and suburban environments of Hong Kong. Journal of Geophysical Research: Atmospheres. 122(19): 10,539–10,556. (IF: 4.261)
3. Zeren Y, Guo H*, **Lyu X***, et al., 2019. An ozone "pool" in South China: Investigations on atmospheric dynamics and photochemical processes over the Pearl River Estuary. Journal of Geophysical Research: Atmospheres. 124(22):12340-12355. (IF: 4.261)
4. **Lyu, X.P.**, Guo, H., Simpson, I.J., et al., 2016. Effectiveness of replacing catalytic converters in LPG-fueled vehicles in Hong Kong. Atmospheric Chemistry and Physics, 16(10), 6609-6626. (IF: 6.133)
5. **Lyu, X.P.**, Chen, N., Guo, H., et al., 2016. Chemical characteristics and causes of airborne particulate pollution in warm seasons in Wuhan, central China. Atmospheric Chemistry and Physics, 16(16): 10671-10687. (IF: 6.133)

6. **Lyu, X.P.**, Wang, N., Guo, H., et al., 2018. Causes of a continuous summertime O_3 pollution event in Ji'nan, a central city in the North China Plain. Atmospheric Chemistry and Physics, 19(5):3025-3042. (IF: 6.133)
7. Wang, H. #, **Lyu, X.P. #**, Guo, H., et al., 2018. Ozone pollution around a coastal region of South China Sea: Interaction between marine and continental air. Atmospheric Chemistry and Physics. 18, 4277–4295. (IF: 6.133)
8. Liu, X.#, **Lyu, X.#**, Wang, Y., et al., 2019. Inter-comparison of O_3 formation and radical chemistry in the past decade at a suburban site in Hong Kong. Atmospheric Chemistry and Physics, 19(7):5127-5145. (IF: 6.133)
9. **Lyu, X.P.**, Chen, N., Guo, H., et al., 2016. Ambient volatile organic compounds and their effect on ozone production in Wuhan, central China. Science of The Total Environment, 541, 200-209. (IF: 7.963)
10. **Lyu, X.P.**, Ling, Z.H., Guo, H., et al., 2015. Re-examination of C_1–C_5 alkyl nitrates in Hong Kong using an observation-based model. Atmospheric Environment, 120, 28-37. (IF: 4.798)
11. **Lyu, X.P.**, Liu, M., Guo, H., et al., 2016. Spatiotemporal variation of ozone precursors and ozone formation in Hong Kong: Grid field measurement and modelling study. Science of The Total Environment. 569: 1341-1349. (IF: 7.963)
12. **Lyu, X.P.**, Zeng, L.W., Guo, H., et al., 2016. Evaluation of the effectiveness of air pollution control measures in Hong Kong. Environmental Pollution, 220: 87-94. (IF: 8.071)
13. **Lyu, X.P.**, Guo, H., Yao, D.W., et al., 2017. Observation of SOA tracers at a mountainous site in Hong Kong: chemical characteristics, potential origins and implication on particle growth. Science of the Total Environment. 605, 180-189. (IF: 7.963)
14. **Lyu, X.P.**, Guo, H., Cheng, H.R., et al., 2017. New particle formation and growth at a suburban site and a background site in Hong Kong. Chemosphere. 193, 664-674. (IF: 7.086)
15. **Lyu, X.**, Guo, H., Wang, Y., et al., 2019. Hazardous volatile organic compounds in ambient air of China. Chemosphere, doi.org/10.1016/j.chemosphere.2019.125731. (IF: 7.086)
16. **Lyu, X.P.**, Wang, Z.W., Cheng, H.R., et al., 2015. Chemical characteristics of submicron particulates ($PM_{1.0}$) in Wuhan, Central China. Atmospheric Research, 161, 169-178. (IF: 5.369)
17. **Lyu, X.P.**, Huo, Y.X., Yang, J., et al., 2021. Real-time and molecular characterizations of air pollutants in a Hong Kong residence: implications on indoor source emissions and heterogeneous chemistry. Indoor Air. doi.org/10.1111/ina.12826. (IF: 5.770)
18. **Lyu, X.**, Guo, H., Zhang, W., et al., 2021. Ozone and its precursors in a high-elevation and highly forested region in central China: origins, in-situ photochemistry and implications of regional transport. Atmospheric Environment. doi.org/10.1016/j.atmosenv.2021.118540. (IF: 4.798)
19. Shek KY, Zeren Y, Guo H, Li M, Liu M, Huang B, **Lyu X***, 2022. Insights on In-Situ Photochemistry Associated with Ozone Reduction in Guangzhou during the COVID-19 Lockdown. Atmosphere. 13(2): doi.org/10.3390/atmos13020212. (IF: 2.686)
20. Huo, Y., Guo, H.*, **Lyu, X.***, Yao, D., 2022. Emission characteristics, sources and airborne fate of speciated organics in particulate matters in a Hong Kong residence. Indoor Air. doi:10.1111/ina.13017. Just accepted paper. (IF: 5.770)

21. **Lyu X**, Guo H, Zou Q, et al., 2022. Evidence for Reducing Volatile Organic Compounds to Improve Air Quality from Concurrent Observations and In Situ Simulations at 10 Stations in Eastern China. Environmental Science & Technology. 56(22), 15356-15364. (IF: 11.357)

Honors & Awards

1. Gold Medal & Special Merit Award at the 71st International Trade Fair for Ideas, Inventions & New Products (iENA) held in Nuremberg, Germany (**3rd ranking**), 2019.
2. Champion of 2019 Environmental Paper Award (**1st ranking**), The Hong Kong Institution of Engineers (HKIE), 2019.
3. National Scholarship for Postgraduates, Ministry of Education, PRC, 2013.
4. Outstanding Individual, Wuhan University, 2013.

Services & Memberships

1. **Reviewer** for journals: Environmental Science & Technology, Atmospheric Chemistry and Physics, Journal of Geophysical Research: Atmospheres, Journal of Hazardous Materials, Science of the Total Environment, Atmospheric Environment, Environmental Pollution and etc.
2. **Reviewer** for funds: Austrian Science Fund, Qatar National Research Fund, and Open Fund of the State Environmental Protection Key Laboratory of Formation and Prevention of Urban Air Pollution Complex.
3. Session **co-convener** in the 16th Annual Meeting of Asia Oceania Geosciences Society (AOGS), Singapore.
4. **Member** of Australia-China Centre for Air Quality Science and Management (ACC-AQSM).
5. **Member** of Tropospheric Ozone Assessment Report, Phase II (TOAR-II, 2020-2024), International Global Atmospheric Chemistry (IGAC).