XINJIE HUANG (he/him/his)

Personal website: https://xinjiematthuang.github.io/
Tel.: +852 5423 0933 | Email: xjmhuang@connect.hku.hk
Office: COBLG 111, the University of Hong Kong, Pokfulam Road, Hong Kong

EDUCATION BACKGROUND

M.Phil. (master by research) in Mechanical Engineering   2020-2022
The University of Hong Kong, Hong Kong (supported with full scholarships)
Supervisors: Dr. Jiyun Song and Prof. Yuguo Li
Research areas: urban climate, urban canopy model, thermal comfort, building energy
model, land-atmosphere interactions, urban green infrastructure, urban biometeorology

B.Eng. in Building Environment and Energy Engineering   2016-2020
Southeast University, Nanjing, China (GPA: 3.6 / 4.0, Grade: 88 / 100)
Supervisor: Prof. Cong Liu
Research areas: indoor air quality, indoor-outdoor air exchanges, ventilation

ACADEMIC POSITIONS

Research Assistant in School of the Environment   2021
Yale University, New Haven, CT, USA
Advisor: Prof. Xuhui Lee
Research project: Biking for science and health (https://biking-for-science.yale.edu/)

Research Assistant in Department of Building Science   2019
Tsinghua University, Beijing, China
Advisor: Prof. Jinhan Mo
Research project: An electrostatic assisted air filter for removing indoor bioaerosols

PUBLICATIONS (*: Corresponding author; †: Equal contribution)

First Master's Year (2020-2021):

1. **Huang X.**, Song J.*, Wang C., Chui TFM., Chan PW. (2021) The synergistic effect of urban heat and moisture islands in a compact high-rise city, *Building and Environment* (IF: 6.456), DOI: 10.1016/j.buildenv.2021.108274.

2. Song J.* (supervisor), **Huang X.**, Shi D., Lin WE., Fan S., Linden PF. (2021) Natural ventilation in London: towards energy-efficient and healthy buildings, *Building and Environment* (IF: 6.456), DOI: 10.1016/j.buildenv.2021.107722.

3. Du R., Song J.*, **Huang X.**, Wang Q., Zhang C., Brousse O., Chan PW. (2021) High-resolution regional modeling of urban moisture island: mechanism and implications on thermal comfort, *Building and Environment* (IF: 6.456), under review.

4. **Huang X.**, Song J.*, Shi D., Wang C., Chan PW. (Ongoing) Urban climate-human coupling system: model development and case study, manuscript in preparation. (This work will soon be presented at 102nd American Meteorological Society Annual Meeting, Jan. 2022)

<u>Undergraduate Period (2016-2020):</u>

5. Liu C.[*][†] (supervisor), **Huang X.** [†] **(co-first author)**, Li J. (2020) Outdoor benzene highly impacts indoor concentrations globally, *Science of the Total Environment* (IF: 7.963), DOI: 10.1016/j.scitotenv.2020.137640.

6. Liu C.[*] (supervisor), **Huang X.**, Zhao Y., Qian H. (2021) A new $PM_{2.5}$-based P-up method to measure building ventilation rate, *Building and Environment* (IF: 6.456), under review.

7. Xia F., **Huang X.**, Tian E., Mo J.[*] (2019) An electrostatically assisted air filter for removing indoor bioaerosols. Paper 609. The 11th International Symposium on Heating, Ventilation and Air Conditioning (ISHVAC 2019), July 12-15, 2019, Harbin, China. 2016YFE0102300-03, 51722807, 51521005.

HONORS, AWARDS, AND FUNDING

Postgraduate Scholarship, the University of Hong Kong, Hong Kong	2020-2022
National First Prize as the team leader in the National University Student Competition on Energy Saving & Emission Reduction, Ministry of Education, China	2019
Student Research Funding (~$3200) as the student PI in the National Research Training Program for University Students, Ministry of Education, China	2018
First Prize of Zhongnan Group Enterprise Scholarship, Southeast University, China (Top 10 out of ~16000 students)	2018

TEACHING EXPERIENCE

Teaching assistant at the University of Hong Kong Courses: mechanics of fluids; thermofluids; air and noise pollution control and management	2020-2022

SKILLS

Software: MATLAB, Origin, SketchUp, C++, QGIS, ArcGIS, CAD, EnergyPlus, Fluent
Language: Chinese (native), English (TOEFL: 109, reading: 28, listening: 28, speaking: 25, writing: 28)