

杨旭东

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长江学者特聘教授 博士生导师1966年4月出生。

联系地址：北京 清华大学 建筑学院 建筑技术科学系
(清华大学二校门东北侧旧土木工程馆)

邮政编码：100084

办公电话：+86 (10) 6278 8845 图文传真：+86 (10) 6277 3461

E-mail: xyang@mail.tsinghua.edu.cn



大学以上学历

1996-1999 美国麻省理工学院(MIT)建筑学院 建筑技术科学博士

1990-1993 清华大学热能工程系空气调节工程专业 工学硕士

1983-1988 清华大学热能工程系空气调节工程专业 工学学士

工作经历

2005.7-今 清华大学建筑学院建筑技术科学系, 清华大学百人计划引进教授、教育部长江学者特聘教授

1999-2005.7 美国University of Miami土木、建筑与环境工程系, 助理教授及副教授 (Tenured, 终身教职)

2001-2005 清华大学建筑学院, 高级访问学者

1994-1995 北京清华人工环境工程研究所 副所长

1993-1995 清华大学热能工程系 助教, 讲师

1988-1990 中国建筑科学研究院空气调节研究所 助理工程师

主要学术任职及专业服务

2005: 第十届室内空气品质和气候国际会议 Indoor Air 2005 (中国北京) 组委会委员

2005: 第十届国际建筑模拟会议 (the 10th International Building Performance Simulation Association Conference, Beijing, 2007) 组委会副主席

2005: Atmospheric Environment 和Building and Environment特邀编辑

1996-现在: 美国供热、通风和空调工程师协会 (ASHRAE) 会员

TC 4.10 室内环境模拟技术委员会, 投票成员; TC 5.12 通风要求和渗透技术委员会, 投票成员和秘书

2001-2004: ASHRAE 医院通风标准制定委员会(SPC170P), 投票成员; 下属气流组织委员会主席

2001-现在: 国际建筑模拟协会(IBPSA)会员, IBPSA-China (筹)华北地区负责人

2002-现在: 加拿大政府项目—建材VOC挥发和室内空气品质模拟(阶段2)技术咨询委员

主要研究方向

杨旭东博士近年来一直从事建筑环境与能源领域特别是室内空气品质 (IAQ) 及污染控制的研究工作。系统建立了基于物理传质过程预测挥发性有机物 (VOC) 从各种建筑材料散发的理论框架, 在污染源、汇及室内空气污染控制方面进行了创新性研究。首次建立了预测湿建材VOC散发速率的通用数学模型—分层对流扩散耦合模型, 该模型也同时适用于预测干建材VOC散发。建立了基于传质过程的建材吸附/二次散发VOC的“壁函数”模型。主持开发详细描述室内污染物散发、吸收、传播及暴露规律的软件: ACCESS-IAQ, 能综合考虑室内各种物理化学过程与气流组织的耦合作用。已发表期刊及国际会议论文50余篇, 其中30余篇发表在本行业国际一流杂志上。论文被SCI引用115次, 其中他引98次。目前是Journal of the Institute of Environmental Science and Technology编委, 多个国际著名期刊审稿人, 应邀在国内外著名大学和科研机构发表学术报告或讲座30多次。获国家教委科技进步二等奖(排名第三), 美国CDC青年研究科学家奖, ASHRAE研究新人奖等多项奖励。目前的主要研究方向:

1. 建筑材料挥发性有机物(VOC)散发的物理化学机理、模型和居室空气污染控制
2. 传染性疾病的空气传播规律和控制
3. 飞机机舱空气质量和环境控制
4. 建筑环境中各种空气净化技术
5. 特殊空间如医院, 学校及交通工具内的空气品质和通风系统设计
6. 室内空气品质和污染物暴露模拟分析软件及工具
7. 供热系统动态特性、控制及节能研究

8. 农村地区社区和城镇能源综合生态利用及建筑节能

教学工作

流体网络分析（秋季学期），防疫建筑技术（春季学期）

论文和论著

专著

1. *Environmental Engineering*, 5th Edition, J. A. Salvato, N. L. Nemerow, F. J. Agardy (eds), John Wiley & Sons, 2003, pp1291-1392., Author for “Chapter 10: Residential and Institutional Environment”, pp1291-1392.
2. 聂梅生、秦佑国、江亿等 著，《中国生态住宅技术评估手册》，中国建筑工业出版社，2003年，ISBN 7-112-01666-5（参著）

学位论文

- 杨旭东，建筑材料有害物散发及市内空气品质研究，美国麻省理工学院(MIT)博士学位论文，1999年9月
- 杨旭东，集中供热计算机控制系统研究和应用，清华大学工学硕士学位论文，1993年6月
- 杨旭东，地铁热环境模拟控制软件包，清华大学工学学士学位论文，1988年7月

国外杂志论文(部分)

1. Li, Y., Leung, G.M., Tang, J., Yang, X., Chao, C., Lin, J.Z., Lu, J. etc. The role of ventilation in the airborne transmission of infectious agents in built environment - a multi-disciplinary systematic review, *Indoor Air* (in press)
1. Srebric, J., Vukovic, V., He, G., Yang, X. CFD boundary conditions for contaminant dispersion simulations around human occupants in indoor environments, *Building and Environment* (in press)
1. Yan, D., Song, F., Yang, X., Jiang, Y. et al. An integrated modeling tool for simultaneous analysis of thermal performance and indoor air quality in buildings, *Building and Environment* (in press)
1. FT Song, B Zhao, X Yang, Y Jiang, VP Gopal, G Dobbs.. A new approach on zonal modeling of indoor environment with mechanical ventilation. *Building and Environment* (in press)
1. Yang, X. and Wang, Y. Photocatalytic effect on plasmid DNA damage under different UV irradiation time. *Building and Environment* (in press)
1. James, J. and Yang, X. 2005. Emission measurement of green and non-green materials used in buildings, *Indoor and Built Environment*, 14(1), 69-74
1. He, G. and Yang, X. 2005. On regression method to obtain emission parameters of building materials, *Building and Environment* 40, 1282-1287.
1. He, G., Yang, X., Srebric, J. 2005. Removal of contaminants released from room surfaces by displacement and mixing ventilation: modeling and validation, *Indoor*

1. Wang, Y., Yang, X., Wang, Y., Wang, YB., Han, ZY. 2005. Disinfection and bactericidal effect using photocatalytic oxidation, *HKIE Transactions – Special Edition*. 39-43.

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1. Zhao, B., Wu, P., Song, F., Yan, D., Yang, X., Li, X., Jiang, Y. 2004. Numerical simulation of indoor PM distribution in the whole year by zonal model, *Indoor and Built Environment* 13(6), 453-462.

1. Yang, X., Srebric, J. Li, X., He G. 2004. Performance of three air distribution systems in VOC removal from an area source, *Building and Environment* 39(11), 1289-1299.

1. Zhao, B., Li, X., Zhang, Y., Yang, X., Huang, D. 2004. Comparison of indoor aerosol particle concentration and deposition in different ventilated rooms by numerical method, *Building and Environment* 39(1), 1-8.

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1. Yang, X. and Chen, Q. 2001. A coupled airflow and source/sink model for simulating indoor VOC exposures, *Indoor Air*, 11, 257-269.

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[英文简介](#)