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June 2026



*Department of Architecture*  
*College of Design and Engineering*  
*National University of Singapore*

*SDE1-03-01, 4 Architecture Drive, Singapore 117566*

*(t) (+65)65168736 (e) [akilkp@nus.edu.sg](mailto:akilkp@nus.edu.sg)*

*(w) [cde.nus.edu.sg/arch/staffs/lam-khee-poh-dr/](http://cde.nus.edu.sg/arch/staffs/lam-khee-poh-dr/)*

**Professor Khee Poh LAM** *Ph.D., FRIBA, FIBPSA*



*Academic and Professional Qualifications*

Ph.D. (Architecture) Carnegie Mellon University, USA. 1994.  
Bachelor of Architecture (Hons) University of Nottingham, UK. 1982.  
Bachelor of Arts (Architecture & Environmental Design)(Hons),  
University of Nottingham, UK. 1979.  
Registered Architect, Architects Registration Board, UK. 1984.  
Chartered Member, Royal Institute of British Architects, UK. 1984.  
Fellow, Royal Institute of British Architects, UK. 2016.  
Fellow, International Building Performance Simulation Association. 2019.

*Appointments*

2025-2027 Professor of Architecture and the Built Environment.  
2016-2025 Provost's Chair Professor of Architecture and the Built Environment.  
Aug, 2018 Professor Emeritus  
College of Fine Arts, Carnegie Mellon University.  
2003-2018 Professor (Tenured)  
School of Architecture, Carnegie Mellon University.  
1998-2003 Associate Professor (joint appointment in the Department of Architecture and Department of Building, NUS since 2000).  
1984-1998 Lecturer/Senior Lecturer School of Architecture, NUS.  
1982-1984 Architect, Nottinghamshire County Council Architects Department, County Hall, West Bridgford, Nottingham, NG2 7QP, UK.  
2024-2026 Global Fellow, Ewha Womans University, Seoul, Korea.  
2015 Visiting Professor  
School of Design & Environment, National University of Singapore.  
2009-2015 Adjunct Professor  
School of Architecture, Chinese University of Hong Kong.  
2011-2014 Visiting Professor, Tsinghua University, Beijing, P R China.  
2007-2010 Adjunct Professor, Xian Jiaotong University, P R China.

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## NATIONAL UNIVERSITY OF SINGAPORE

### ADMINISTRATIVE RESPONSIBILITIES

2023-2025	Director, NUS Cities Advisory
2016-2021	Dean, School of Design and Environment
2000-2002	Head, Department of Building, School of Design and Environment
1998-2000	Acting Dean, Faculty of Architecture, Building & Real Estate
1998-1999	Director, Graduate School of the Built Environment

### APPOINTMENTS AND SERVICES

2017-2027	<b>National University of Singapore</b>  Member of the University Sustainability and Climate Action Council. (June 2021 – June 2025). Member of the Management Board, Institute of Real Estate Studies, NUS (Jan 2017 – 31 May 2023). Member of the Board, Institute of Systems Science (formerly Interactive and Digital Media Institute, NUS (Jan 2017 - )). Member of the College of Design and Engineering, Promotion and Tenure Committee (1 Jul 2023 – 30 Jun 2027).
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#### School of Architecture

1996-1998	Director of B.Arch/M.Arch Degree Programme. Member of School Management. Committee Member of School Corporate Planning Committee. Chairman of Dissertation Committee. Year 5 Design Course Leader. Chairman of B.Arch/M.Arch. Admission Committee. Chairman of Academic Review Committee. Chairman of RIBA 2000 Visitation Committee. Member of Career Guidance Committee. Member of Editorial Board for the international refereed Journal of Southeast Asian Architecture.
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#### Faculty of Architecture, Building and Real Estate

Vice-Dean, Faculty of Architecture and Building.  
Member of Faculty Strategic Planning Team.  
Member of Research and Postgraduate Committee.  
Member of Board of Selection for the Faculty of Architecture and Building.

Designed and procured the construction of the Faculty booth at the NUS Exhibition – University of the 21<sup>st</sup> Century held on Alumni Day. Also conceptualized and coordinated the fabrication of a sculpture mad of scrap material contributed by various departments in the University. (September 1996).

#### National University of Singapore

Member of the Building & Technical Planning Committee, Tropical Marine Science Institute, NUS (April - December 1998).

1995-97	Represent Faculty in the following University Committees: Alumni UEF Committee. Committee for Seminar on teaching Methodology. PS21 Committee. University Foundation Module Committee. University Modular Committee. Member of Senate sub-committee on Entrance Examination for
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	<p>Special Candidates.          Member of the panel of assessors for the NUS Centre for the Arts logo design competition organised by the School of Architecture and CFA.</p>
1995-96	<p><b>School of Architecture</b></p> <p>Director of Bachelor of Architecture Degree Programme.          Member of School Management.          Chairman of Dissertation Committee.          Year 5 Design Course Leader.          Chairman of B.Arch Admission Committee.          Chairman of Academic Review Committee.          Chairman of RIBA 2000 Visitation Committee.          Practical Training Advisor.          School Handbook Editor.          Member of Career Guidance Committee.          Member of Aptitude Test Committee.          Member of Editorial Board for the international refereed Journal of Southeast Asian Architecture.          Member of the panel of assessors for the Harley Davidson Bike Centre design competition organised by the School of Architecture and Harley Davidson, Singapore (November 1995).</p> <p><b>Faculty of Architecture, Building and Real Estate</b></p> <p>Vice-Dean, Faculty of Architecture and Building.          Member of Board of Selection for the Faculty of Architecture and Building.</p>
1994-95	<p><b>School of Architecture</b></p> <p>Building Construction Course Leader.          Building Technology Course Leader.          Building Services Course Leader.          Member of School Management Committee.          Coordinator of BA(AS) Construction Courses.          Chairman of Academic Review Committee, School of Architecture.          Member of Editorial Board for the international refereed Journal of Southeast Asian Architecture.          Chairman of Eco-Architecture Design Competition Committee.</p>
1988-89	<p><b>School of Architecture</b></p> <p>Coordinator for BA(AS) Building Construction and Building Structure Courses.          Member of School Management Committee.          Member of the Working Committee for the RIBA Visit in Sept. 1990.</p>
1987-88	<p><b>School of Architecture</b></p> <p>Coordinator of BA(AS) Building Construction and Building Structure Courses.          Member of School Management Committee.          Member of organising Committee for the Inter-Faculty Conference on "Towards Excellence in the Built Environment".</p>
1986-87	<p><b>School of Architecture</b></p> <p>Coordinator of BA(AS) Building Construction and Structure Courses.          Member of School Management Committee.</p>

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1985-86      **School of Architecture**  
Editor, School of Architecture Newsletter.

### **CARNEGIE MELLON UNIVERSITY**

#### **ADMINISTRATIVE RESPONSIBILITIES**

2012-2015      Chair, PhD (Building Performance & Diagnostics) Program.

2008-2012      Chair, MS (Architecture) Program.

2003-2007      Director, Graduate Programs.

#### **APPOINTMENTS AND SERVICES**

2014-2017      University Research Review Committee.

2011-2014      College of Fine Arts Council / College Review Committee.

2008              University International Strategic Planning Committee.  
S08-48405: 4th Year Architecture Design Studio Coordinator.

2007              School of Architecture Promotion & Tenure Review Committee  
Chair.  
Carnegie Mellon University Presidential Review Committee.

2007-2008      Carnegie Mellon Fulbright Scholars Program Committee.

2005-2007      University Committee on Tenure Appointments.

2004-2005      Presidential Appointee, Faculty Senate.

### **SINGAPORE**

#### **APPOINTMENTS AND SERVICES**

##### ***Industry***

Fellow, Centre for Liveable Cities, Ministry of National Development, Singapore (1 Apr 2026 – 31 Mar 2028).

Member of the National Arts Council Singapore Industry Advisory Panel for a Distinctive City (1 Oct 2024 – 30 Sep 2026).

Member of the Centre for Liveable Cities Advisory Panel, Ministry of National Development, Singapore (1 May 2022 – 31 Mar 2024, 1 Apr 2024 – 31 Mar 2026).

Executive Committee Member of the Urban Land Institute (ULI) Singapore (1 Jul 2022 – 30 Jun 2025).

Director, Centre for Liveable Cities Limited (1 Jan 2021 – 30 Apr 2022).

Expert panel member for The Study on Future Workplaces - commissioned by the Monetary Authority of Singapore (MAS) and the Association of Banks in Singapore's (ABS) Return to Onsite Operations Taskforce (Sep 2020 – Mar 2021).

Member of the judging panel for the Singapore Facilities Management Awards 2018 (27 August 2018).

Member of judging panel, CDL-E Generation Challenge 2017, 30 September 2017.

Member of the judging panel for the Singapore Facilities Management Awards 2017 (18 September 2017).

Member of the Centre for Liveable Cities Advisory Board, Ministry of National Development, Singapore (1 Jul 2017 – 30 Jun 2020).

Member of judging panel, Energy Innovation Challenge 2017, National Engineers

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Day, July 2017.

Member of the Advisory Board, Singapore Sustainability Academy, City Developments Limited, Singapore (May 2017 - ).

Member of the Jurong Town Corporation Design Review Committee (2000-2002).

Member, Housing and Urban Design Committee, Singapore Institute of Architects. 1995/96, 1996/97, 1997/8, 1998/99.

Appointed by the Council of the Singapore Institute of Architects as a member of the Panel of Jury for the inaugural "SIA GOLD MEDAL AWARD for Lifetime Contribution to Architecture", to be awarded to an architect in Singapore. (From January 1998 for two terms)

Member of the Committee for the Outstanding Architectural/Engineering Firms Awards 1999, Society of Project Managers, Singapore. (October 1998)

Member of the Panel of Judges for the 1998 Singapore Institute of Landscape Architects Professional Award Competition. (November 1998)

Member of the panel of assessors for the Eco-Building Architectural Design Competition organised by the Singapore Institute of Architects, Estate Developers' Association of Singapore and the Faculty of Architecture and Building, NUS. (October 1995)

Member of the multi-disciplinary study team from Jurong Town Corporation to visit industrial developments in Japan (28 May - 8 June 1995).

#### *Academic*

Ministry of Community Development - The Institute of Policy Studies. Conference on "Ageing in Singapore: Facing Challenges, Seizing Opportunities, Orchard Hotel, Singapore Chairman, Parallel Workgroup on Housing and Land Use Policies. (24-25 September 1999).

URA - The Institute of Policy Studies.  
World Conference on Model Cities, Westin Stamford, Singapore. Moderator, Sectorial Session on "Identity and the City". (19-21 April 1999).

Appointed as a member of the Validation Panel for the Diploma in Architectural Technology Course at Singapore Polytechnic (December 1997)

### **USA and INTERNATIONAL**

#### **APPOINTMENTS AND SERVICES**

#### *Industry*

Member, International Well Building Institute Global Commission on Healthy Indoor Air. (Sep 2025 - ).

Jury Member, Alt Urban Housing Challenge 2025, Development Alternatives, B-32, Tara Crescent, Qutub Industrial Area  
New Delhi 110016, India. June 2025. ISBN 978-93-95152-35-8.

World Health Organization South East Asia Region Expert Panel Member on Urban Health and Healthy City Network. (Nov 2022 – Oct 2025).

Co-Chair, International Well Building Institute WELL City Advisory, a global network to advance human health and equity in cities. (20 Apr 2022 – 13 Nov 2024).

Member of the World Economic Forum Global Future Council on Clean Electrification, (Oct 2020 – Sep 2021).

Co-Chair, International Well Building Institute Task Force on COVID-19 and other Respiratory Infections: Prevention and Preparedness, Resilience and Recovery. (6 Apr 2020 – Aug 2021).

Member of the World Economic Forum Special Policy Study Expert Panel for the China Council for International Cooperation on Environment and Development

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(CCICED) on Major Green Technology Innovation and Realization Mechanisms in the context of green urbanization. (Feb – May 2020).

Member of the World Economic Forum Global Future Council on Energy Technologies, (Oct 2019- Sep 2020).

Juror, Hong Kong Green Building Award 2019, Hong Kong Green Building Council (7 – 8 Sep 2019).

Co-Chair for the Well Living Lab China, Delos China. (01 Jul 2019 – 30 Jun 2023, 01 Oct 2025 – 30 Jun 2027).

Member of the judging panel for the 2018 World Green Building Council Asia Pacific Leadership in Green Building Awards (February 2018).

Member of the Advisory Board, Delos LLC, USA (Sep 2017 - )

Advisory Board of the Asia-Pacific Economic Cooperation Sustainable Energy Centre (APSEC), (Sep 2017 – Sep 2023).

International Energy Agency (IEA) Annex 66: Definition and Simulation of Occupant Behavior in Buildings. Co-Leader of Subtask E: Applications in building design and operations (2013 – 2017).

Invited to participate in the USA President's Council of Advisors on Science and Technology (PCAST) Workshop on Technology and the Future of Cities. 12 Feb 2015, Palo Alto, CA. Final report presented to President Obama on 23 Feb 2016.

Reviewer for the Natural Sciences and Engineering Research Council of Canada (NSERC) – Discovery Grant proposal (Nov 2014).

Reviewer for the National Science Foundation Environmental Sustainability Program (Sustainable Buildings) – research proposals, at the NSF (June 24-25, 2014).

Reviewer for the U.S. Department of Energy's Building Technologies Office (BTO) – Program Peer Review, Double Tree Crystal City Hotel, Arlington, VA. (April 22 – 25, 2014).

Member of the Board of Directors, Global Buildings Performance Network (2012 – 2015).

Member of the Board of Directors, The Energy Foundation (2008 – 2017).

Consultant to The Energy Foundation – China Sustainable Energy Program (2008 – 2017)

Member, Protocol Committee of the International Performance Measurement and Verification Protocol (IPMVP), USA. (2002 – 2004)

Member of the Dupont (Asia) Advisory Council (2001)

### *Academic*

Member, Scientific Committee, The 5th Asia Conference of the International Building Performance Simulation Association 2024, Osaka, Japan, 8-10 Dec 2024. <https://asim2024.org/committee/>

Honorary Editorial Board Member, Journal of Building Performance Simulation, Taylor and Francis, UK, (2024 - ).

Member, Scientific Committee, Simulation for Architecture and Urban Design 2015 (SimAUD), Washington DC, USA (12-15 April 2015).

Member, Editorial Board, Buildings, MPDI AG, Basel, Switzerland, (2013-2024).

International Referee, iNTA-SEGA 2009: Bridging Innovation, Technology and Tradition. Bangkok, Thailand (2-4 December 2009).

Member, inaugural Editorial Board, Journal of Building Performance Simulation, Taylor and Francis, UK, (2008 – 2017).

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Member, inaugural Editorial Board, Building Simulation: An International Journal, Springer and Tsinghua University Press, (2007 - )

International Reviewer, 24<sup>th</sup> international conference on Passive and Low Energy Architecture (PLEA), 22 – 24 November 2007, Singapore.

External Examiner for a PhD thesis, Department of Civil & Environmental Engineering, University College Cork, Ireland. (September 2006)

Member, EuropIA.10 International Advisory Board, 10<sup>th</sup> International Conference on Design Sciences and Technology, Damascus, Syria (13-15 September 2005).

Member, International Advisory Board, International Journal of Lighting Research and Technology, published by Edward Arnold (Publishers) Ltd, London, UK. (June 2000-June 2003)

Appointed by the President of Carnegie Mellon University as Co-Chairman of the Advisory Board to the School of Architecture at CMU (May 2001)

External Examiner for a PhD thesis, Faculty of Architecture, Delft University of Technology (June 2001)

Member of the International Scientific Committee for the CIB World Building Congress 2001, Wellington, New Zealand. (September 2000)

Member, International Program Committee, 17<sup>th</sup> International Symposium on Automation and Robotics in Construction, 18-20 September 2000, Taipei, Taiwan

External Examiner for the Architecture Program at the Faculty of Architecture, University Teknologi Mara, Shah Alam, Malaysia (2000 – 2002)

Member, Editorial Board, The Real Estate Times. (International Refereed Journal by Pidemco Land Research, Singapore). (November 1998 – 2003)

Member of the Scientific Committee, Building Simulation '99 International Conference, organized by the International Building Performance Simulation Association, to be held in Kyoto, Japan. Also provided service as a reviewer. (13-15 September 1999).

Member, Editorial Board, Journal of Southeast Asian Architecture. (International Refereed Journal published by the School of Architecture, NUS). (1997 – 1999)

Founding member of the Board of Editors, The International Journal of Corporate Real Estate. (International Refereed Journal of the Institute of Corporate Real Estate, NACORE, USA, published by Henry Stewart Publications, UK). (November 1997 – 2003). Also provided service as reviewer.

## **ACADEMIC and INDUSTRY AWARDS**

International Well Building Institute 2025. Global Educator Award. 10 Feb 2026.  
<https://www.wellcertified.com/iwbi-individual-award-winners-2025>.

Best Paper Awards of Energy and Buildings published in the period from 2018 to 2022. One of the ten best research papers. 28 Aug 2023.  
<https://www.sciencedirect.com/journal/energy-and-buildings/about/awards/best-paper-awards-of-energy-and-buildings-published-in-the-period-from-2018-to-2022>

Zhang Z., Chong A., Pan Y., Zhang C., Lam K.P. Whole building energy model for HVAC optimal control: A practical framework based on deep reinforcement learning. 2019.  
<https://www.sciencedirect.com/science/article/abs/pii/S0378778818330858?via%3Dihub>

Education 2.0 Outstanding Leadership Award, Dubai, UAE, 19 Jun 2023.  
<https://www.education2conf.com/past-awardees-dubai-spring-2023>

Singapore Ministry of National Development (MND) Medallion, in recognition of service as Board member of the Centre for Liveable Cities Ltd (1 Nov 2022).

International Well Building Institute Community Award 2020. 17 Dec 2020.  
<https://resources.wellcertified.com/press-releases/iwbi-recognizes-outstanding-leaders-in-advancing-health-and-wellness-in-buildings-communities-and-organizations-across-the-globe/>

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Singapore Ministry of National Development (MND) Medallion, in recognition of service as Board member of the Centre for Liveable Cities (24 Nov 2020).

Conferred as an inaugural iBuildSG LEAD Distinguished Fellow by the Building and Construction Authority for contribution to the Built Environment Sector in Singapore (19 June 2020).

International Well Building Institute Leadership Award 2019 - to Asia-based leaders who have demonstrated outstanding achievement in advancing health and well-being for people through WELL projects. (22 Oct 2019).

<https://resources.wellcertified.com/press-releases/iwbi-recognizes-outstanding-leaders-in-asia/>

Outstanding Paper Award:

Zhang, Z, C L Zhang and K P Lam, A Deep Reinforcement Learning Method for Model-based Optimal Control of HVAC Systems, 7<sup>th</sup> International Building Physics Conference, Syracuse, NY, USA. (23-26 September 2018).

Best Innovative Workflow Award, ASHRAE LowDown Showdown Modeling Challenge sponsored by the Department of Energy (DOE) and the National Renewable Energy Laboratory (NREL). (1 October 2015).

<https://designbuilder.co.uk/lowdown-showdown-competition-at-ashrae-energy-modelling-conference-2015>

Phipps Conservatory & Botanical Gardens Center for Sustainable Landscapes:

- (a) 2014 Innovative Star Award from the Alliance to Save Energy, for exceeding four of the highest green construction standards - a feat that has never been achieved before - and achieving net-zero annual energy usage through its energy-efficiency Center for Sustainable Landscapes.
- (b) 2014 Engineering News-Record's Best Global Green Project Award.

2013 Alexander Schwarzkopf Prize for Technological Innovation from the National Science Foundation "for exemplary research contribution to technology innovation and positive impact on technology, industry and the society as a whole".

2010 IBM Faculty Award

Autodesk APPHACK 2.0 International Competition, Dec. 2013- 3<sup>rd</sup> Place Winner: Urban Energy Modeling.

National Library Building, Singapore – awarded the ASEAN Energy Efficiency Award (1<sup>st</sup> Prize) in 2007.

Urban Redevelopment Authority Building, Singapore – awarded ASEAN Energy Efficiency Award (2<sup>nd</sup> Prize) in 2002.

## PATENTS

### **METHODS AND SYSTEMS FOR DIGITAL INFORMATION MODELING FOR CODES AND STANDARDS COMPLIANCE**

**Application number:** 20140372859

**Abstract:** This invention describes methods and systems to efficiently map and extract information from digital representations of buildings for use for a variety of purposes, including but not limited to the performance of dynamic simulations of building performance, and for codes and standards compliance.

**Type:** Application

**Filed:** June 13, 2014

**Issued:** December 18, 2014

**Assignee:** CARNEGIE MELLON UNIVERSITY, a Pennsylvania Non-Profit Corporation

**Inventors:** Khee Poh Lam, Jie Zhao, Rongpeng Zhang, Omer T. Karaguzel

### **OPTIMAL SELECTION OF BUILDING COMPONENTS USING SEQUENTIAL DESIGN VIA STATISTICAL BASED SURROGATE MODELS**

**Application number:** 20140365180

**Abstract:** A surrogate model to a building simulation model is built and used for

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finding a combination of building components that optimize energy use in a building. The surrogate model may be built iteratively using design points comprising a different combination of building product properties that maximize a predefined expected improvement function.

**Type:** Application

**Filed:** June 5, 2013

**Issued:** December 11, 2014

**Assignees:** Carnegie Mellon University, International Business Machines Corporation

**Inventors:** Khee Poh Lam, Young Min Lee, Fei Liu, Jane L. Snowdon, Jeaha Yang, Rui Zhang.

## DESIGN PROJECT CITATIONS

National Library Board, Singapore Building Project

Visions of the National Library. The Straits Times, 2 October 1999

A Quiet Revolution. Cover story in Experience Singapore, Issue 13, April 2002. (A newsletter of the Singapore Cooperation Program)

National Library bid to save power rewarded. News published in all 4 major language newspaper in Singapore: The Straits Times, Lianhe Zaobao, Berita Harian, Tamil Murasu, (12 May 2005)

The Urban Redevelopment Authority (URA) Centre, Singapore citation in:

Distinctively modern... The URA Centre. Skyline, Nov/Dec 1999

U R an A. The Straits Times, 27 November 1999.

Shanghai Jiahui International Hospital

Urban Oasis – Shanghai Jiahui International Hospital. Healthcare Design, Vol. 18, No. 4, April 2018. HCDMAGAZINE.COM.

<http://www.nxtbook.com/nxtbooks/healthcaredesign/201804/index.php#/12>

Shanghai Jia Hui International Hospital: Award Winning Project from China. First LEED Gold Hospital in China, (19 Mar 2018)

<https://healthcaredesignmagazine.com/projects/acute-care/photo-tour-shanghai-jiahui-international-hospital/#slide-2>

## INTERNATIONAL BIBLIOGRAPHIC CITATION

Marquis Who's Who in Science and Engineering, since 7th Edition, 2003-2004

Marquis Who's Who in America, since 59th Edition, 2005

Marquis Who's Who in the World, since 22nd Edition, 2004

Marquis Who's Who in American Education, since 2007-2008

## RECOGNITION OF SERVICE

Certificate of appreciation from the International Performance Measurement & verification Protocol Inc., for valuable contributions to the development of International Performance Measurement and Verification Protocol (11 Dec 2003)

Certificates of Appreciation from the Singapore Institute of Architects (SIA) for contribution and services rendered as:

SIA Gold Medal Award Jury Panel (2002 - 2003)

SIA Gold Medal Award Jury Panel (1999 - 2000)

SIA Housing & Urban Design Committee (1995 - 1998)

## LIST OF RESEARCH PROJECTS UNDERTAKEN

### CARNEGIE MELLON UNIVERSITY

#### As Principal Investigator

1. Computational Method for the Calibration of a Whole Building Energy Model – A Japanese Case Study. Toshiba Corporation, Japan. \$460,000.00 (17 Aug 2015 – 16 Aug 2017).

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2. The DOE Energy-Efficient Building Systems Design Hub: Greater Philadelphia Innovation Cluster for Energy Efficient Buildings. US Department of Energy. \$4.96 million (Oct 2010 - Apr 2016).
  3. Dynamic Life-cycle Digital Information Modeling of Building Industry Products and Processes for Codes and Standards Compliance. Carnegie Mellon University Gap Funding \$25,000.00 and Innovation Works \$39,975.00. (Apr 2013 – Mar 2014).
  4. Development of a decision support tool for the selection of optimum glazing systems applicable to high-performance and energy efficient commercial office buildings in different climatic conditions. PPG Industries, Pittsburgh, PA, USA. \$35,000.00. (Mar 2012 - Jan 2013).
  5. Simulation-based Performance Assessment of the Pingry School Headmaster's Residence, NJ. The Stone House Group. \$10,000.00 (Apr- Aug 2010)
  6. Development of a Web-based Information Technology Infrastructures and Regulatory Repository Frameworks for Green Buildings in China. The Energy Foundation. \$190,000.00 (Sep 2009 - Aug 2011).
  7. Impact of Shading Control Strategies on Heating and Cooling Loads of a "Typical" Office Building in Different Climatic Contexts in the USA. Somfy SAS, France. \$24,000.00. (Feb - Aug 2007).
  8. Assessment of Physical and Computational Airflow Analysis and Evaluation Tools for Building Design. Konstrukt (on behalf of Northwest Alliance for Energy Efficiency. \$10,100. (Nov - Dec 2005).
  9. Guidelines and Goals for Green and Healthy Hospital Operations. Children's Hospital of Pittsburgh Foundation, with support from Heinz Foundation. \$25,000 (Sep 2004 - Feb 2005)
  10. Energy Modeling Tools Assessment for Early Design Phase. Northwest Alliance for Energy Efficiency. \$27,000 (Mar. - Dec. 2004)
  11. Integrated Concurrent Design of High Efficiency Commercial Buildings. United Technologies Research Center. NIST ATP Program. \$431,078.00. (Oct 2004 - Nov 2007)

#### **As Co-Principal Investigator**

1. Integrated Web-based Platform for Lifecycle Building Energy Modelling. Ng Teng Fong Charitable Foundation Research Funding. SGD\$395,036.00. (Jun 2018 – Dec 2020).
2. NSF RCN-SEES: Predictive Modeling Network for Sustainable Human-Building Ecosystems (SHBE). \$62,500.00 (out of \$652846.00). (Sep 2013 – Aug 2018).  
[https://nsf.gov/awardsearch/showAward?AWD\\_ID=1664881&HistoricalAwards=false](https://nsf.gov/awardsearch/showAward?AWD_ID=1664881&HistoricalAwards=false)
3. BUILD- Barriers, Understanding, and Integration - Life Cycle Development. NSF EFRI SEED. \$430,229.00 (out of \$2 million). (Oct 2010- Oct 2014).
4. Modeling the Performance of Energy Recovery Technology for Packaged, Rooftop HVAC Equipment. United Technologies Research Center. \$70,000. (Jan - Oct 2004)

#### **Research Gifts/Fellowships**

1. The Future of Building Energy Management Systems. Autodesk. \$30,000.00 (Sep 2015 – Dec 2015).
2. Whole Building Energy Modeling and Calibration – A Carnegie Mellon

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University Building Case Study. Toshiba Corporation, Japan. \$92,871.00 (May 2014 – Mar 2015).

3. Multiple Environmental Sensing Strategies for Determining Occupancy in Building. Robert Bosch Corporation. \$99,290.00 (Dec 2006 - Jun 2008).
4. Information Technology Enabled Sustainable Testbed (ITEST). Siemens Corporation. \$75,880.00 (Dec 2006 – Jun 2008).
5. Residential Building Energy Modeling. IBACOS, Pittsburgh, PA. \$23,000.00. (Sep 2005 – Aug 2006).

## **NATIONAL UNIVERSITY OF SINGAPORE**

### **As Co-Principal Investigator**

1. Aerosol Infection Control in Buildings: Temperature, Humidity, Airflow and Ventilation. NUS COVID-19 Research Seed Grant. S\$95,000.00. (Apr 2020- Mar 2021).
2. Integrated Web-based Platform for Lifecycle Building Energy Modelling. Ng Teng Fong Charitable Foundation Research Funding. S\$395,036.00. (Jun 2018 – Dec 2020).
3. BCA RID 94.17.2.6. Lifecycle BIM Integration with Energy MM&V for Net Zero Energy Building. S\$963,800.00. (01 Jan 2016 – 30 Jun 2018).

### **As Principal Investigator**

1. Contract for Services - To support the Abu Dhabi Department of Municipalities and Transport (DMT) with site visit, exploratory and co-creation workshop, and assessment study. SGD1,626,300.00. (16 Jan 2025 – 15 Jan 2028).
2. Provision of Research Consultancy Services to Conduct Ventilation Study for Healthcare Facilities. Contract No. MOH ITT B31/22. Ministry of Health, Singapore. S\$1,096,000.00. 2 May 2023 – 1 Aug 2024.
3. R-296-000-068-112 *Integration of CAD and Thermal Simulations Through Industry Foundation Class (IFC) Product Model*, in collaboration with NovaCITYNETS, Singapore, and Temasek Polytechnic. (NUS funded S\$52,000.00). (1 Mar 2003 -29 Feb 2004)
4. R-296-000-052-112 *Mapping of Industry Building Product Model for Detailed Thermal Simulation and Analysis*. (NUS funded S\$29,350.00), in collaboration with NovaCITYNETS, Singapore. (1 Jan - 30 Jun 2002)
5. RP3982110 *SEMPER II - Digital Building Models for Intranet Collaborative Design Computing*. The project was awarded a research grant of S\$1,105,600.00, to be co-funded by NSTB (50%) and NUS & TP (50%). This arose from a Memorandum of Understanding for collaborative research between NUS, Carnegie Mellon University, USA and Temasek Polytechnic, under the SingAREN - vBNS high-speed network link between USA and Singapore. (13 May 1999 -13 May 2002).
6. RP950050 *The Establishment of Architectural and Technical Standards and Guidelines for the Design and Maintenance of Marine Mammal Facilities*. (NUS funded S\$152,400.00). (23 Feb 1996 - 23 Feb 1998)
7. RP950015 *Mapping of the Sky Luminance Distribution and Computational Prediction of Daylighting Performance in Singapore*. (NUS funded S\$125,700.00). (26 August 1995 - 25 August 1997).

### **As Collaborator**

1. RP 991020 *To Plan and Design an Innovative Housing Project (32 Acre) at Dondra, Sri Lanka, Integrating Relevant Development Potentials Within and Around the Site*. (NUS funded S\$ 30,000.00). (16 June 1999 - 16 June 2001).
2. *A Pilot Study into the Feasibility of Applying an Integrated and Total Building Performance Method to the Evaluation of School Buildings in Hong Kong*.

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(Funded by the Chinese University of Hong Kong). (Oct. 1999 - Oct. 2000).

3. RP982073 *A study of the Use of Performance Based Simulation Tools for Building Design and Evaluation in Singapore*. (NUS funded S\$8,200.00). (7 Dec 1998 - 31 Jul 1999).
4. This research produced an important IRJ paper that documented for the first time the status of the use of computer simulation tools for building performance evaluation in the Singapore building industry. This work also provided an important foundation for subsequent research activities in this field.
5. RP3981040 *Study of Daylight Attenuation Through Windows in Urban Environments*, in collaboration with Prof. Peter Tregenza, School of Architectural Studies, University of Sheffield, UK (NUS funded \$169,600.00). (1 Oct 1998 - 1 Oct 2000)
6. Established a Memorandum of Understanding between the Faculty of Architecture & Building and Pidemco Land Limited for research collaboration in the field of *Total Building Performance and Building Services/Automation Systems*. (Funding from Pidemco Land Limited - \$118,000.00). (February 1998 - February 2000)
7. RP972051 *An Integrated Building Assessment Method Using the Total Building Performance Approach*. (NUS funded \$177,300.00). (February 1998 - January 2000)
8. RP960019 *Applying Advanced Lighting Visualization Techniques to Architectural Design in the Local Context*. (NUS funded S\$62,780.00). (15 August 1996 - 1 June 1998).

#### **PUBLICATION JOURNAL PAPERS**

1. Lam, K P, Urban Study and conservation in Tiong Bahru, Singapore. SIAJ: Singapore Institute of Architects Journal, 136 (June 1986): 44-47. (Singapore).
2. Lam, K P and R A Hyde, Wrestling with the productivity curve - CAD in architecture. SIAJ : Singapore Institute of Architects Journal, 144 (October 1987): 41-43. (Singapore).
3. Lam, K P and J D Harrison, Towards a defects - free built environment. Building Technology and Management, Annual Journal of the Building Technology Society, Tunku Abdul Rahman College, 15 (1989): 17-22. (Malaysia).
4. Mahdavi, A and K P Lam, Dynamic Analysis and Visualization of Water Vapor Diffusion Through Building Components. ASHRAE Transactions, Part No. 1, 99 (1993): 288-296. (United States).
5. Lam, K P, Design for Eco-Architecture: A Competition for Year 4 Architecture Students. SIAJ : Singapore Institute of Architects Journal, 187 (November / December 1994): 38-41. (Singapore).
6. Mahdavi, A and K P Lam, Multiple strategies toward complex representation in building simulation. Building Research Journal, 3, no. 1 (1994): 43-55. (United States).
7. Tham, K W, K P Lam and S E Lee, Eco-Building: A Systemic Phenomenon. SIAJ : Singapore Institute of Architects Journal, 187 (November /December 1994): 53-60. (Singapore).
8. Powell, R and K P Lam, Low-income housing in India. Singapore Architect: Journal of the Singapore Institute of Architects, No. 195, 1997, 88-95. (Singapore).
9. Lam, K P, A Mahdavi and R Ries, Environmental Implications of Alternative Settlement. Planews, 16 (1 February 1998): 65-71. (Singapore).
10. Lam, K P, A Mahdavi, M B Ullah, E Y Y Ng, and V. Pal, Evaluation of six sky luminance prediction models using measured data from Singapore. International Journal of Lighting Research and Technology, 31, no.1 (1999 January): 13-17. (United Kingdom).
11. Chin, L K H and K P Lam, Implementing quality in property management. Property Management, 17, no.4 (1999): 310-320. (United Kingdom).

- 
12. Lam, K P, A Mahdavi and V Pal, Empirical Evaluation of Solar Radiation, Sky Luminance and Daylight Prediction Models. *Journal of the Illuminating Engineering Society*, Vol. 28, No.1 (Winter 1999):30-36. (United States).
  13. Wong, N H, K P Lam and H. Feriadi, The use of performance-based simulation tools for building design and evaluation-a Singapore perspective. *Building and Environment*, 35, 8 (2000): 709-736.
  14. Ng, E Y Y, K P Lam, W Wu and T Nakagura, Advanced lighting simulation in architectural design in the tropics. *Automation in Construction*, Vol. 10, No 3 (2000): 365-379. (The Netherlands).
  15. Lam, K P, A Mahdavi, S Gupta, N H Wong, R Brahme and Z Kang, Integrated and distributed computational support for building performance evaluation. *Advances in Engineering Software*, 33 (2002):199-206.
  16. Wong, N H, A Mahdavi, J Boonyakiat and K P Lam, Detailed multi-zone air flow analysis in the early building design phase. *Building and Environment*, 38 (15 March 2003): 1-10. (United Kingdom).
  17. Ullah, M.B., K P Lam, K W Tham, P. Tregenza and J.T. Kurniawan, Attenuation of diffuse daylight due to dust deposition on glazing in a tropical urban environment. *Lighting Research and Technology*, 35, 1 (2003): 19-29. (United Kingdom).
  18. Wong, N H, K P Lam and H. Feriadi, Computer-based performance simulation for building design and evaluation - The Singapore perspective. *Simulation & Gaming - An International Journal of Theory, Practice and Research*, Vol. 34, Issue 03 (September 2003). (United Kingdom).
  19. Lam, K P, Building performance simulation in the Singapore construction industry IT network. *Journal of Architectural and Planning Research*, Vol. 21, No. 4, (Winter 2004): 312-320, Locke Science Publishing Co. Inc. (United States).
  20. Loftness, V, K P Lam and V Hartkopf, Education and environmental performance-based design: a Carnegie Mellon perspective. *Building Research & Information*, Vol. 33, No. 2 / March-April 2005, pp. 196 - 203. (Routledge, United Kingdom).
  21. Lam, K P and K Yeang, Computational building performance modelling and ecodesign. *Architectural Design*, Vol. 79, No. 5 (Sep/Oct 2009): 126-129, John Wiley & Sons (United Kingdom).
  22. Dong, B, A Burton, K P Lam, M Höynck, R Zhang, Y S Chiou and D Benitez, An information technology enabled sustainability test-bed (ITEST) for occupancy detection through an environmental sensing network. *Energy and Buildings* Volume 42, Issue 7, July 2010, pp. 1038-1046. John Wiley & Sons, United Kingdom.
  23. Zhang, R, Y J Zhang, K P Lam and D H. Archer, A prototype mesh generation tool for CFD simulations in architecture domain. *Building and Environment* Volume 45, Issue 10, October 2010, pp. 2253-2262. Elsevier, United Kingdom.
  24. Dong, B, and K P Lam, Occupant behavior pattern detection based on a large scale environmental sensor network. *Eco-City and Green Buildings* No. 5, 2011. pp. 50-55. 建筑能源和舒适度管理-基于大尺度环境传感器网络用户行为模式识别的研究. 生态城市与绿色建筑. No.05, 2011 主编:袁滨 出版:中国出版期刊中心. ISSN: 1672-9269.
  25. Zhang R and K P Lam, Comparison of building load performance between first principle based and implementable shading control algorithm. *Building Simulation: An International Journal*, Vol. 4, No. 2, June 2011, pp. 135-148. Springer and Tsinghua University Press.
  26. Dong, B and K P Lam, Building energy and comfort management through occupant behavior pattern detection based on a large-scale environmental sensor network. *Journal of Building Performance Simulation*, Vol. 4, No. 4, 2011, pp. 359-369, Taylor and Francis, UK.
  27. Zhang, R, K P Lam, Y S Chiou, B Dong. Information-theoretic environment

- 
- features selection for occupancy detection in open office spaces. *Building Simulation: An International Journal*, Vol. 5, No. 2, Jun 2012, pp. 179-188. Springer and Tsinghua University Press.
28. Zhao, J and K P Lam, Influential factors analysis on LEED building markets in U.S. East Coast cities by using Support Vector Regression. *Sustainable Cities and Society*, 5, 37-43. June 2012.
  29. Lam, K P, R P Zhang, H P Wang, B Dong, and R Zhang, Development of web-based information technology infrastructures and regulatory repositories for green building codes in China (iCodes). *Building Simulation: An International Journal*, Vol. 6, No. 2, June 2013, pp. 195-205. Springer and Tsinghua University Press.
  30. Dong, B and K P Lam. A Real-Time Model Predictive Control for Building Heating and Cooling Systems based on the Occupancy Behavior Pattern Detection and Local Weather Forecasting. *Building Simulation: An International Journal*, Vol. 7, No. 1, Feb 2014, pp. 89-106. Springer and Tsinghua University Press.
  31. Karaguzel, O T , R P Zhang, K P Lam. Coupling of Whole-Building Energy Simulation and Multi-Dimensional Numerical Optimization for Minimizing the Life Cycle Costs of Office Buildings. *Building Simulation: An International Journal*, Vol. 7, No. 2, Apr 2014, pp. 111-121. Springer and Tsinghua University Press.
  32. Zhao, J, K P Lam, B. E Ydstie & O T. Karaguzel. EnergyPlus model-based predictive control within design-build-operate energy information modelling infrastructure, *Journal of Building Performance Simulation*, DOI: 10.1080/19401493.2014.891656, 2014, Taylor and Francis, UK.
  33. Zhao, J, B Lasternas, K P Lam, R Yun, V Loftness . Occupant behavior and schedule modeling for building energy simulation through office appliance power consumption data mining, *Energy and Buildings*, 82(2014), pp. 341-355, Elsevier, United Kingdom.
  34. Zhao, J., K P Lam, T Biswas, H Wang. An online platform to automate LEED energy performance evaluation and submission process. *Construction Innovation: Information, Process, Management*. J Goulding and M Alshawi (eds), Vol. 15 Iss: 3, pp.313 – 332, Emerald Publishing Group, UK, 2015
  35. Zhao, J., K P Lam, B E Ydstie, V Loftness. Occupant-oriented mixed-mode EnergyPlus predictive control simulation. *Energy and Buildings*, Special Issue: Advances in BEM and Sim, Vol. 117, April 2015, pp. 362-371, Elsevier. <http://dx.doi.org/10.1016/j.enbuild.2015.09.027>.
  36. Xu, W L, A Chong., O T Karaguzel, K P Lam. Improving evolutionary algorithm performance for integer type multi-objective building system design optimization. *Energy and Buildings*, Vol. 127, pp.714-729, Elsevier 2016. <http://dx.doi.org/10.1016/j.enbuild.2016.06.043>
  37. Chao, D., K P Lam, N H Wong. Coupled natural ventilation modeling for contextual parametric design decision support. *Procedia Engineering*, Vol. 169, pp. 264-271, Elsevier, 2016. <https://doi.org/10.1016/j.proeng.2016.10.032>
  38. Luo, X., K P Lam, Y Chem, T Hong, Performance evaluation of an agent-based occupancy simulation model. *Building and Environment*, Vol. 115, April 2017, pp. 42-53, Elsevier. <http://dx.doi.org/10.1016/j.buildenv.2017.01.015>.
  39. Chong, A., K P Lam, M Pozzi, J J Yang. Bayesian calibration of building energy models with large datasets. *Energy and Buildings*, Vol. 154, November 2017, pp.343-355, Elsevier. <https://doi.org/10.1016/j.enbuild.2017.08.069>
  40. Talele, S, C Traylor, L Arpan, C Curley, C F Chen, J Day, R Feiock, M Hadzikadic, W J Tolone, S Ingman, D Yeatts, O T Karaguzel, K P Lam, C Menassa, S Pevnitskaya, T Spiegelhalter, W Yan, Y M Zhu, Y X Tao (2018). Energy modeling and data structure framework for sustainable human-building ecosystems (SHBE) – a review. *Frontiers in Energy*, January 2018, pp 1-19, Higher Education Press and Springer-Verlag GmbH, Germany, part of

---

Springer Nature 2018. <https://doi.org/10.1007/s11708-017-0530-2>.

41. Zhang, Z, A Chong, Y Pan, C L Zhang, K P Lam. Whole building energy model for HVAC optimal control: A practical framework based on deep reinforcement learning. *Energy and Buildings*, Volume 199, 15 September 2019, Pages 472-490. <https://doi.org/10.1016/j.enbuild.2019.07.029>.
42. Chao, D and K P Lam. Data-driven model for cross ventilation potential in high-density cities based on coupled CFD simulation and machine learning. *Building and Environment*, Vol. 165, November 2019, 14 pages, Elsevier. <https://doi.org/10.1016/j.buildenv.2019.106394>
43. Li, W., Chong, A., T Hasama, L Xu, B Lasternas, K W Tham, K P Lam. Effects of ceiling fans on airborne transmission in an air-conditioned space. *Building and Environment*, Volume 198 (July 2021), 107887, Elsevier. <https://doi.org/10.1016/j.buildenv.2021.107887>
44. Lam, K P and G Cossu. Sustainable Development in Singapore: From Theory to Action. *Chinese & Overseas Architecture (Monthly Journal)* 2021 Number 8, Vol. 244, pp. 2-10. *中外建筑*, (月刊), 2021年第8期 总第244期.
45. Ono, E., K Mihara, K P Lam, A Chong, The effects of a mismatch between thermal comfort modeling and HVAC controls from an occupancy perspective. *Building and Environment*, Volume 220, 15 July 2022, 109255, Elsevier. <https://doi.org/10.1016/j.buildenv.2022.109255>
46. Li, Wenxin, Takamasa Hasama, Adrian Chong, Joo Guan Hang, Bertrand Lasternas, Khee Poh Lam, Kwok Wai Tham. Transient transmission of droplets and aerosols in a ventilation system with ceiling fans. *Building and Environment*, Volume 230, 15 Feb 2023, 109988, Elsevier, <https://doi.org/10.1016/j.buildenv.2023.109988>.
47. Ono, Eikichi, Zeynep Duygu Tekler, Khee Poh Lam, Yuan Jin, Da Yan, Adrian Chong. Evaluating the sensitivity and robustness of occupancy models for building energy simulation during design. *Building and Environment*, Volume 261, 1 Aug 2024, 111739, Elsevier. <https://doi.org/10.1016/j.buildenv.2024.111739>
48. Ono, Eikichi, Adrian Chong, Khee Poh Lam, Occupant-centric zoning design framework for flexible workplaces: Impact of occupancy modeling and building operation. *Building and Environment*, Volume 267, Part C, 1 Jan 2025, 112294, Elsevier. <https://doi.org/10.1016/j.buildenv.2024.112294>

## CONFERENCE PAPERS

1. Lam, K P, High-rise public housing development in Singapore. Paper presented at 3rd International Conference on Tall Buildings, 6-10 January 1986, Chicago, United States.
2. Lam, K P and R A Hyde, Wrestling with the productivity curve - CAD in Architecture. Paper presented at AUSGRAPH 87 International Conference, 4-8 May 1987, Perth, Australia.
3. Lam, K P, The neighborhood concept in high-rise public housing in Singapore. Paper presented at 16th Congress of the Union International des Architectes, Spontaneous Sessions, 13-17 July 1987, Brighton, United Kingdom.
4. Mahdavi, A and K P Lam, Performance simulation as a front-end tool for 'integrative' conceptual design evaluation. In *Building Simulation '91 Conference Proceedings*, edited by J A Clarke, J W Mitchell and R C Van De Perre, pp. 439-444. Nice: The International Building Performance Simulation Association, August 1991. (Paper presented at IBPSA Building Simulation '91: 2nd World Congress on Technology Improving the Energy Use, Comfort and Economic of Buildings Worldwide, 20-22 August 1991, Sophia-Antipolis, Nice, France).
5. Lam, K P and A Mahdavi, Dynamic Analysis and Visualization of Water Vapor Diffusion Through Building Components. Paper presented at ASHRAE Winter

---

Meeting, 23-27 January 1993, Chicago, United States.

6. Mahdavi, A, V Hartkopf, V Loftness and K P Lam, Simulation-based Performance Evaluation as a Design Decision Support Strategy : Experiences with the "Intelligent Workplace". In Building Simulation '93 Conference Proceedings, 16-18 August 1993, Adelaide, Australia, edited by A.E. Delsante, J W Mitchell, R C Van de Perre, pp. 185-192. Adelaide: The International Building Performance Simulation Association, August 1993.
7. Mahdavi, A, V Hartkopf and K P Lam, Meta-4 : A Model for the Hygro-Thermal Evaluation of Building Enclosure Design. In Clima 2000 International Conference: Engineering the Built Environment Proceedings, November 1993, London, United Kingdom, edited by D Arnold, compiled by C.I.B.S.E. London: C.I.B.S.E., November 1993.
8. Mahdavi, A, L Berberidou, K P Lam and Li ZH, Computational support for the concurrent design of natural and electric lighting systems in buildings. In Illuminating Engineering Society of North America, Annual Conference Proceedings, pp. 721-730. United States: IESNA, August 1994. (Paper presented at IESNA Annual Conference, 7-11 August 1994, Miami, Florida).
9. Lam, K P and A Mahdavi, Computational evaluation of the hygro-thermal performance of building envelope design. In International Conference on Building Envelope Systems and Technology Proceedings, 7-8 December 1994, Marina Mandarin Hotel, Singapore, edited by E Choi, pp. 411-418. Singapore: Centre for Continuing Education, Nanyang Technological University, December 1994.
10. Powell, R M and K P Lam, Developing low income housing in India : A learning experience. In Planning in a Fast-Growing Economy, compiled by School of Building and Estate Management, NUS, pp. 10/1-10/29. Singapore: School of Building and Estate Management, NUS, 24 September 1995. (Paper presented at Third International Congress of the Asian Planning Schools Association, 22-24 September 1995, Faculty of Architecture and Building, National University of Singapore, Singapore).
11. Lam, K P and A Mahdavi, Representation and performance: Interface design for building performance modelling. In CAAD Futures 1995 : International Conference on Computer Aided Architectural Design, 24-26 September 1995, Shangri-La Hotel, Singapore, edited by Dr. Milton Tan and Mr Robert Teh, pp. 141-152. Singapore: Centre for Advanced Studies in Architecture, December 1995.
12. Lam, K P and A Mahdavi, User interface design for interactive hygrothermal performance simulation of building envelopes (Abstract). In Thermal Performance of the Exterior Envelopes of Buildings VI, 4-8 December 1995, Sheraton Sand Key Hotel, Florida, United States, edited by Mildred Geshwiler, pp. 455-456. Atlanta: ASHRAE, December 1995.
13. Lee, S E, K P Lam and K W Tham, A building assessment method for design-and-build projects. vol. 2, pp. 181-188. Paris: Centre Scientifique Et Technique Du Batiment, May 1997. (Paper presented at 2nd International Conference on Building and the Environment, 9-12 June 1997, SOFIL-TEL Hotel, Paris, France).
14. Mahdavi, A, P Matthew and K P Lam, Aggregate space-time performance indicators for simulation-based building evaluation procedures. Vol. 2, Building Simulation '97, edited by J.D. Spitler and J.L.M. Hensen, pp. 293-298. Prague: International Building Performance Simulation Association., 8 September 1997. (Paper presented at Building Simulation '97, 8-10 September 1997, CVUT-Czech

---

Technical University, Prague, Czechoslovakia).

15. Lam, K P, A Mahdavi and V Pal, The implications of sky model selection for the prediction of daylight distribution in architectural spaces. Vol. 1, Building Simulation '97, edited by J.D. Spilter and J.L.M. Hensen, pp. 159-162. Prague: International Building Performance Simulation Association., 8 September 1997. (Paper presented at Building Simulation '97, 8-10 September 1997, CVUT-Czech Technical University, Prague, Czechoslovakia).
16. Lam, K P, A Mahdavi, M B Ullah, E Y Y Ng and V Pal, Comparative study of sky luminance models in the tropical context. Vol. 1, Building Simulation '97, edited by J.D. Spilter and J.L.M. Hensen, pp. 339-345. Prague: International Building Performance Simulation Association., 8 September 1997. (Paper presented at Building Simulation '97, 8-10 September 1997, CVUT-Czech Technical University, Prague, Czechoslovakia).
17. Lam, K P, Concepts of Rainwater Collection and Use In Buildings. In Ecological Design in the Tropics'97: Water as a Sustainable Resource, 20 September 1997, National University of Singapore, Singapore, edited by Ong Boon Lay & Lim Guan Tiong, pp. 49-62. Singapore: School of Architecture, NUS, 1997.
18. Mahdavi, A, R Ries and K P Lam, Environmental Implications of Alternative Settlement Patterns. In Cities for the 21st Century, pp. 299-306. Singapore: Centre for Advanced Studies in Architecture, NUS, 22 September 1997. (Paper presented at The Third International Convention on Urban Planning, Housing & Design, 22-24 September 1997, Shangri-La Hotel, Singapore, Singapore).
19. Douaze, L, K P Lam, E A Taylor and E A Douaze, Cetacean Captive Environment : a worldwide survey of facilities (Abstract). United States, 1997. (Paper presented at 25th IMATA Annual Conference, 26-31 October 1997, Baltimore, United States).
20. Lam, K P, A Mahdavi and V Pal, Algorithm and Context: A Case Study of Reliability in Computational Daylight Modeling. In CAAD Futures '97, edited by R.Junge, pp. 331-344. Muenchen, 1997. (Paper presented at 7th International Conference on Computer Aided Architectural Design Futures, Muenchen, Germany).
21. Douaze, L, E A Douaze, K P Lam and E A Taylor, Architectural design challenges and potential solutions for captive cetaceans facilities (Abstract). France, 1998. (Paper presented at World Marine Mammal Science Conference, 20-24 January 1998, Monaco, France).
22. Douaze, L, E A Douaze, K P Lam and E A Taylor, Behavioural Impact of Captive Environment on Cetaceans (Abstract). France, 1998. (Paper presented at World Marine Mammal Science Conference, 20-24 January 1998, Monaco, France). (Workshop : "Methods for assessing behavioural impacts on marine mammals from human activities").
23. Tham, K W, S E Lee and K P Lam, Application of total building performance in Singapore. In Construction 21: The Third International Congress on Construction, pp. 76-81. International Congress on Construction, edited by SBRE. Singapore: SBRE and SIBL, May 1998. (21-22 May 1998, The Mandarin, Singapore).
24. Lam, K P, A Human Ecological Approach to Computational Modelling in Design. In Ecological Design in the Tropic'98: Architecture and the Sustainable City, 6 August 1998, Revenue House, Singapore. Singapore: School of Architecture, NUS, 1998.
25. Lam, K P, Computational Performance Simulation for Architectural Design Evaluation (Abstract). In Symposium on Ecological Design, 25-26 November

---

1998, Century Hotel, Kuala Lumpur, Malaysia. Kuala Lumpur: Asia Design Forum, 1998.

26. Mahdavi, A, V Pal and K P Lam, Empirical Evaluation of Solar Radiation, Sky Luminance and Daylight Prediction Models. In The 1998 Conference Proceedings of the Illuminating Engineering Society of North America, pp. 341-348. USA: Illuminating Engineering Society of North America, 1998.
27. Lam, K P and N H Wong, Computational performance simulation for design evaluation of environmental quality of tall buildings- a Singapore perspective. In Proceedings of International Conference on "The State of the Art for the Millennium", 1999. (Paper presented at International Conference on "The State of the Art for the Millennium", 3-4 May 1999, Kuala Lumpur, Malaysia).
28. Ng, E Y Y, K P Lam, W Wu and T Nagakura, Advanced lighting simulation in architectural design in the tropics. In Proceedings of the 4th Conference on Computer Aided Architectural Design Research in Asia, edited by Jing-Wen Gu & Zhao-Ji Wei. Shanghai, May 1999. (5-7 May 1999, Tongji University, Shanghai, China).
29. Ng, E Y Y, K P Lam, W Wu and T Nagakura, Applying lighting simulation techniques to the design of a national monument in the tropics. In Proceedings of the 1999 IESNA Annual Conference. New York, August 1999. (Paper presented at Illumination Engineers Society of North America Annual Conference, 9-11 August 1999, Sheraton New Orleans Hotel, New Orleans, Louisiana, United States).
30. Lam, K P, N H Wong and H Feriadi, The use of performance-based simulation tools for building design and evaluation in Singapore. pp. 675-682. Japan, September 1999. In Proceedings of International Conference on Building Simulation '99, 13-15 September 1999, Kyoto, September 1999. (13-15 September 1999, Kyoto Research Park, Kyoto, Japan).
31. Ng, E Y Y, K P Lam, W Wu and T Nagakura, The application of computer simulation techniques to the design and preservation of a national monument. In Proceedings of International Conference on Building Simulation '99, Kyoto, September 1999. (13-15 September 1999, Kyoto Research Park, Kyoto, Japan).
32. Ng, E Y Y, K P Lam, W Wu and T Nagakura, A contextual approach to lighting simulation techniques. In Proceedings of the 1999 Chartered Institute of Building Services Engineers National Conference. London, October 1999. (3-5 October 1999, Harrogate International Centre, Harrogate, United Kingdom).
33. Lam, K P, Library Building Design in the Tropics: Integration and Experiences. 24 April 2000. (Paper presented at CDNLAO 2000 - 8th Conference of Directors of National Libraries (Asia-Oceania), 24-25 April 2000, Singapore).
34. Mahdavi, A., K P Lam, M. E. Ilal and N H Wong, A multi-institutional initiative for distributed collaborative performance based building design. In Proceedings of InterSymp-2000, edited by Jens Pohl & Thomas Fowler, pp. 215-223. California, August 2000. (Paper presented at 12th International Conference on Systems Research, Informatics and Cybernetics, 1-2 August 2000, Baden-Baden, Germany).
35. Lam, K P and N H Wong, Moisture and mildew problem in a residential air-conditioned apartment building in Singapore. August 2000. (Paper presented at Healthy Buildings, 6-10 August 2000, Espoo, Finland).
36. Brahme, R, A Mahdavi, K P Lam and S Gupta, Complex building performance analysis in early stages of design: a solution based on differential modeling, homology-based mapping, and generative design agents. Volume 2, Seventh International IBPSA Conference, edited by Lamberts R, Negrao C, Hensen J, Rio

---

De Janerio, pp. 661-668, 2001. (13-15 August 2001, Rio De Janerio, Brazil).

37. Lam, K P, A Mahdavi, R Brahme, Z Kang, M E Ilal and N H Wong, Distributed web-based building performance computing: a Singapore-US collaborative effort. Volume 2, Seventh International IBPSA Conference, edited by Lamberts R, Negrao C, Hensen J, Rio De Janerio, pp. 807-814, 2001. (13-15 August 2001, Rio De Janerio, Brazil).
38. Lam, K P, N H Wong and S C Sekhar, The use of multiple building performance simulation tools during the design process - a case study in Singapore. Volume 2, Seventh International IBPSA Conference, edited by Lamberts R, Negrao C, Hensen J, pp. 815-822. Rio De Janerio: IBPSA Brazil, 2001. (13-15 August 2001, Rio De Janerio, Brazil).
39. Wong N H, F Tan and K P Lam, Designing for tropical hot-and humid outdoors. In Proceeding of the 20th Conference on Passive and Low Energy Architecture, Santiago, Chile, 9 - 12 November 2003.
40. Lam, K P and Y C Huang, Lighting simulation for architectural design. Paper presented at the Improving Energy Efficiency in Commercial Building (IEECB) Conference 2004, Frankfurt am Main, Germany, 19-22 April 2004.
41. Lam, K P, S Lee, G Dobbs, C Q Zhai and Y C Huang, Simulation of the effect of energy recovery ventilation on indoor thermal condition and system performance. Ninth International IBPSA Conference, edited by I Beausoleil-Morrison and M Bernier, pp. 587-594, 2005. (15-18 August 2005, Ecole Polytechnique de Montreal, Canada).
42. Lam, K P, D Sams, J Breshears, R Bolin, C Berlow, Early stage simulation tools – views from all sides. Panel presentation at GreenBuild 2005, Atlanta, GA, 9-11 Nov 2005.
43. Lam, K P, V Srivastava, Living in the Intelligent Workplace - structuring and managing building operation information. Paper presented at the ICEBO 2005 International Conference for Enhanced Building Operations, Pittsburgh, PA 15213, October 11-12, 2005
44. Lam, K P, S H Kim, P Satwiko, J Jennings, J Cole, Assessment of the effects of environmental factors on air flow in and around buildings. 23rd International Conference on Passive and Low Energy Architecture, Geneva, Switzerland, 6-8 September 2006.
45. Chiou, Y S, M Johnson, K P Lam, C Davidson, Identifying Decision Opportunities in Building Design through Value-Focused Thinking. INFORMS Annual Meeting 2006, David Lawrence Convention Center, Pittsburgh, PA, USA, 4-8 November 2006.
46. Singhvi, V, J Garrett, S Matthews, C Guestrin, K P Lam, Utility based decision-making in building infrastructure. 11th International Conference on Computing and Decision Making in Civil and Building Engineering, pp. 2125-2134, 14-16 June 2006, Montreal, Canada.
47. Dong, B, K P Lam, Y C Huang and G M Dobbs, A comparative study of the IFC and gbXML informational infrastructure for data exchange in computational design support environments. Tenth International IBPSA Conference, edited by Yi J, Zhu YX, Yang X D and Li X T, pp. 1530-1537. Beijing: IBPSA China, 2007. (3-6 September 2007, Beijing, China).
48. Chiou, Y S and K P Lam, Sensor-based information modeling for life-cycle commissioning of residential buildings. Tenth International IBPSA Conference, edited by Yi J, Zhu YX, Yang X D and Li X T, pp. 1572-1579. Beijing: IBPSA China, 2007. (3-6 September 2007, Beijing, China).

- 
49. Huang, Y C, C Q Zhai and K P Lam, Heuristic use of energy simulations in building design. Tenth International IBPSA Conference, edited by Yi J, Zhu YX, Yang X D and Li X T, pp. 1103-1108. Beijing: IBPSA China, 2007. (3-6 September 2007, Beijing, China).
  50. Lam, K P, Y C Huang and G M Dobbs, Development of a lighting simulation tool for integrated building design. First International Conference on Building Energy and Environment, July 13-16, 2008, Dalian, China.
  51. Huang, Y C and K P Lam, Automated calculation of lighting regulations. First International Conference on Building Energy and Environment, July 13-16, 2008 Dalian, China.
  52. Huang, Y C, K P Lam and G Dobbs, A scalable lighting simulation tool for integrated building design. SimBuild 2008: 3rd national conference on building simulation, July 30 - Aug 1, 2008, University of California Berkeley, IBPSA-USA.
  53. Zhang, R, Y J Zhang, K P Lam and D H Archer, A prototype mesh generation tool development for CFD simulations in architecture domain. Eleventh International IBPSA Conference, edited by P A Strachan, N J Kelly and M Kummert, pp. 466-473. Glasgow: IBPSA Scotland, 2009. (27-30 July 2009, Glasgow, Scotland).
  54. Lam, K P, M Hoynck, B Dong, B Andrews, Y S Chiou, R Zhang, D Benitez and J H Choi, Occupancy detection through an extensive environmental sensor network in an open-plan office building. Eleventh International IBPSA Conference, edited by P A Strachan, N J Kelly and M Kummert, pp. 1452-1459. Glasgow: IBPSA Scotland, 2009. (27-30 July 2009, Glasgow, Scotland).
  55. Lam, K P, M Hoynck, R Zhang, B Andrews, Y S Chiou, B Dong and D Benitez, Information-theoretic environmental features selection for occupancy detection in open offices. Eleventh International IBPSA Conference, edited by P A Strachan, N J Kelly and M Kummert, pp. 1460-1467. Glasgow: IBPSA Scotland, 2009. (27-30 July 2009, Glasgow, Scotland).
  56. Zhang, R and K P Lam, Comparison of building load performance between first principle based shading algorithm and implementable shading control algorithm. SIMBuild 2010, 4th National Conference of IBPSA-USA, New York City, NY, USA, Aug. 11-13, 2010.
  57. Dong, B, K P Lam and C Neuman, Integrated building control based on occupant behavior pattern detection and local weather forecasting. Twelfth International IBPSA Conference. Sydney: IBPSA Australia, 2011. (14-17 November 2011, Sydney, Australia).
  58. Karaguzel, O and K P Lam, Whole building performance simulation of a low energy residence with an unconventional HVAC system. Twelfth International IBPSA Conference. Sydney: IBPSA Australia, 2011. (14-17 November 2011, Sydney, Australia).
  59. Zhang, R, K P Lam and Y J Zhang, Conformal adaptive hexahedral dominant mesh generation for CFD simulation in architectural design applications. Proceedings of the 2011 Winter Simulation Conference, S. Jain, R. R. Creasey, J. Himmelspach, K. P. White, and M. Fu, eds., Phoenix, AZ, Dec 2011.
  60. Karaguzel, O and K P Lam, Development of whole building energy performance models as benchmarks for retrofit projects. Proceedings of the 2011 Winter Simulation Conference, S. Jain, R. R. Creasey, J. Himmelspach, K. P. White, and M. Fu, eds., Phoenix, AZ, Dec 2011.
  61. Zhang, R, K P Lam, S C Yao, Y J Zhang, Annual coupled EnergyPlus and

- 
- computational fluid dynamics simulation of natural ventilation. SIMBuild 2012, August 1-3, Madison, Wisconsin.
62. Zhao, J, K P Lam, O T Karaguzel, S Ahmadi. Design-Build-Operate energy information modeling (DBO-EIM) for green buildings: Case study of a net zero Energy building. Proceedings of ASIM 2012, IBPSA Asia Conference, 25-27 November, Shanghai, China.
  63. Karaguzel, O T, R P Zhang, K P Lam. Integrated simulation-based design optimization of office building envelopes for the minimization of life cycle costs. Proceedings of the Second International Conference on Building Energy and Environment (COBEE2012). August 2012, Boulder, CO, USA. ISBN 978-0-9816881-9.
  64. Zhang, R P., Y Nie, K P Lam, Dynamic Optimization of Integrated Operation Strategies for the Building VAV System and Night Ventilation using the Simultaneous Collocation Method: a Case Study. Proceedings of the 2012 Building Simulation and Optimization Conference (BSO12). September 2012, Loughborough, United Kingdom. ISBN 978-1-897911-42-6.
  65. Zhao, J., K P Lam, B E Ydstie. EnergyPlus Model-Based Predictive Control (EPMPC) by Using Matlab/Simulink and MLE+. Proceedings of 13th International Conference of the International Building Performance Simulation Association (IBPSA), 2465-2472, August 2013, Chambéry, France.
  66. Ramesh, S., K P Lam, N Baird, H Johnstone, Urban Energy Information Modeling: An Interactive platform to communicate simulation based high fidelity building energy analysis using Geographical Information Systems (GIS). Proceedings of 13th International Conference of the International Building Performance Simulation Association (IBPSA), 1136-1143, August 2013, Chambéry, France.
  67. Zhao, J., R Yun, B Lasternas, H Wang, K P Lam, A Aziz, V Loftness, Occupant behaviour and schedule prediction based on office appliance energy consumption data mining. Proceedings of CISBAT 2013 Conference - Clean Technology for Smart Cities and Buildings, 549-554, September, 2013, Lausanne, Switzerland.
  68. Lam, K.P., Zhao, J., Ydstie, E.B., Wirick, J., Qi, M., Park, J. An EnergyPlus whole building energy model calibration method for office buildings using occupant behavior data mining and empirical data. Proceedings of 2014 ASHRAE/IBPSA-USA Building Simulation Conference, pp. 160-167, 10-12 September, 2014, Atlanta, GA.
  69. Lasternas, B., Zhao, J., Yun, R., Zhang, C., Wang, H., Aziz, A., Lam, K.P., Loftness, V. (2014). Behavior oriented metrics for plug load energy savings in office environment. Proceedings of 2014 American Council for an Energy-Efficient Economy (ACEEE) Summer Study on Energy Efficiency in Buildings, Panel 7, pp. 160-172, 17-22 August 2014, Pacific Grove, CA.
  70. Lam, K P, Application of occupant behaviour modeling in building design and operation. EDRA46 (“brainSTORM: Dynamic Interactions of Environment-Behavior and Neuroscience”), The Environmental Design Research Association, 27-30 May 2015, Los Angeles, CA.
  71. Zhao, J., K P, Lam, V. Loftness and B. E. Ydstie – Occupant individual thermal comfort data analysis in an office”. The 1st International Symposium on Sustainable Human-Building Ecosystems (ISSHBE), Carnegie Mellon University, Pittsburgh, PA, USA, 5-6 October 2015.
  72. Ramesh, S and K P Lam, Urban Energy Information Modeling – A framework for coupling macro-micro factors affecting building energy consumption. 14th International IBPSA Conference, edited by J. Mathur and V Garg, pp. 601-608,
-

---

Hyderabad: IBPSA India, 2015. 7-9 December 2015, Hyderabad, India.

73. Chong, A. and K P Lam, Uncertainty analysis and parameter estimation of HVAC systems in building energy models. 14th International IBPSA Conference, edited by J. Mathur and V Garg, pp. 2788-2795, Hyderabad: IBPSA India, 2015. 7-9 December 2015, Hyderabad, India.
74. Chong, A., W L Xu and K P Lam, Uncertainty analysis in building energy simulation- a practical approach. 14th International IBPSA Conference, edited by J. Mathur and V Garg, pp. 2796-2803, Hyderabad: IBPSA India, 2015. 7-9 December 2015, Hyderabad, India.
75. Xu, W L, K P Lam, A Chong, O T Karaguzel, Multi-objective optimization of building envelope, lighting and HVAC systems designs. ASHRAE and IBPSA-USA SimBuild 2016: Building Performance Modeling Conference, pp. 110-117. August 10-12, 2016, Salt Lake City, Utah, USA.
76. Chong, A., K P Lam, W L Xu, O T Karaguzel, and Y J Mo, Imputation of missing values in building sensor data. ASHRAE and IBPSA-USA SimBuild 2016: Building Performance Modeling Conference, pp. 407-414. August 10-12, 2016, Salt Lake City, Utah, USA.
77. Ding, C and K P Lam, Pollution transport through openings based on coupled indoor and outdoor interactions. ASHRAE and IBPSA-USA SimBuild 2016: Building Performance Modeling Conference, pp. 72-78. August 10-12, 2016, Salt Lake City, Utah, USA.
78. Lam, K P, A Chong, W L Xu, Evidence-based approach to calibration of whole building energy model. World Sustainable Built Environment Conference 2017, Hong Kong, 5-7 June 2017.
79. Zhang, Z. and K P Lam, An implementation framework of model predictive control for HVAC systems: A Case Study of Energyplus Model-Based Predictive Control. 2017 ASHRAE Annual Conference. June 24-28, 2017, Long Beach, CA, USA.
80. Chong, Adrian and K P Lam, A comparison of MCMC algorithms for the Bayesian calibration of building energy models. 15th International IBPSA Conference. 7-9 August 2017, San Francisco, U.S.A.
81. Xu, W L, K P Lam, and O T Karaguzel, Using an adaptive meta-model evolutionary algorithm for mixed-integer type building design optimization. 15th International IBPSA Conference. 7-9 August 2017, San Francisco, U.S.A.
82. Ding, C, and K P Lam, An evaluation index for cross ventilation based on CFD simulations and ventilation prediction model using machine learning algorithms. 10th International Symposium on Heating, Ventilating and Air Conditioning (ISHVAC2017), 19-22 October 2017, Jinan, China.
83. Zhang, Z and K P Lam, 2018, A deep reinforcement learning approach to using whole building energy model for energy efficient and thermal comfort control of a radiant heating system. Poster presented at CMU Machine Learning in Science and Engineering Conference, 6-8 June 2018, Pittsburgh, PA, USA.
84. Zhang, Z, C L Zhang and K P Lam, A deep reinforcement learning method for model-based optimal control of HVAC systems, 7<sup>th</sup> International Building Physics Conference, 23-26 September 2018, Syracuse, NY, USA.
85. Zhang, Z, A Chong, Y Q Pan, C L Zhang, S L Lu, and K P Lam, A Deep Reinforcement Learning Approach to Using Whole Building Energy Model for HVAC Optimal Control, ASHRAE/IBPSA Building Performance Analysis Conference and SimBuild, 26-28 September 2018, Chicago, IL, USA
86. Zhang, Z and K P Lam, Practical Implementation and Evaluation of Deep Reinforcement Learning Control for a Radiant Heating System, in 2018 ACM International Conference on Systems for Energy-Efficient Built Environments, 7-8 November 2018, Shenzhen, China. <https://doi.org/10.1145/3276774.3276775>.
87. Xu, W L and K P Lam, Implement energy modeling cycles in design process: a high-performance hospital case study in China. 4<sup>th</sup> Asia Conference of

---

International Building Performance Simulation Association, Hong Kong, 3-5 Dec 2018.

88. Xu, W L, A Chong, K P Lam, H P Wang, A New BIM To BEM Framework: The Development And Verification Of An Open-source gbXML To EnergyPlus Translator For Supporting Building Life Cycle Performance Analysis. 16th International IBPSA Conference, 2-4 September 2019, Rome, Italy.
89. Ono, E, A Chong, and K P Lam, Variations in operational performance of an occupant-centric design due to uncertainties in occupants and building operation. 18th International IBPSA Conference. 24-27 August 2025, Brisbane, Australia. [https://publications.ibpsa.org/conference/paper/?id=bs2025\\_1828](https://publications.ibpsa.org/conference/paper/?id=bs2025_1828). DOI:10.26868/25222708.2025.1828.

**KEYNOTE/PLENARY/ INVITED  
PRESENTATION**

1. Lam, K P, A Total building performance and diagnostics approach to designing healthy and holistic healthcare environments, Healthcare Facilities Planning & Design Conference, 16-18 December 2003, Raffles City Convention Centre, Singapore.
2. Lam K P, Intelligent Building - Interfacing the “virtual” and the “real”, 2006 Symposium on Digital Life Technologies-Building a Safe, Secured and Sound (3S) Living Environment, 1-2 June 2006, National Cheng Kung University, Tainan, Taiwan.
3. Loftness V L, V H Hartkopf, K P Lam, Sustainability and health are integral goals for the built environment, Healthy Buildings 2006, 4-8 June 2006, Lisboa, Portugal.
4. Lam K P, Enhancing health, productivity and energy management through BIM, Federal Environmental Symposium, 4- - 6 June 2007, National Institute of Health, Washington, D.C.
5. Lam K P, The National Library Building, Singapore, Living Architecture Seminar, Somfy SAS, 19 - 21 September 2007, Frankfurt, Germany.
6. Lam K P, Design of high performance green buildings, International Mayors’ Forum on Sustainable Urban Development, 15-16 November 2007, Tianjin, P R China.
7. Lam K P, Zen and the art of building information modeling: BIM@CMU. Ecobuild Fall - Sustainable, Green and High Performance Solutions for the Built Environment, 13 December 2007, Washington Convention Center, Washington, D.C.
8. Lam, K P, Energy modeling tools for early design phase. An overview and discussion panel. Cascadia Region Green Building Council and Betterbricks, Seattle, WA, March 13, 2008 and Portland, OR, March 14, 2008.
9. Lam, K P, Building as Power Plant: Integrating renewable energy technologies in green building design, Chinese and International Conference on the Use of Renewable Energy Sources in Urban Areas Architecture, Shenzhen, China, May 15 - 16, 2008.
10. Lam, K P, Critical path to delivering successful intelligent and environmentally responsive buildings. Presented at the Construction Innovation Center Networking Breakfast Seminar, Duke Energy Center, Cincinnati, 22 May 2008.
11. Lam, K P, China Sustainable Energy Program: An overview of recent activities and future outlook, The Energy Foundation Board of Directors Meeting, Washington DC, 6 November 2008.
12. Lam, K P, "In Design: Sustainability Redefined" Forum, AIA Columbus, Ohio, 13 November 2008.

- 
13. Lam, K P, "The human dimension in product and process modeling of green building design". The Jerusalem Seminar in Architecture: Green Design - From Theory to Practice, Jerusalem, Israel, 25-27 January 2009.
  14. Lam, K P, iCODES – A web-based repository of Green Building Standards and Codes in China. 6th International Conference on Intelligent, Green and Energy-Efficient Building and New Technologies and Products Expo, Beijing, China, 29 – 31 March 2010.
  15. Lam, K P, Teaching old buildings new tricks: A regenerative paradigm for green retrofit. Keynote lecture at the 3rd Israel Green Build Convention in Tel Aviv on 26 Jan 2011.
  16. Lam, K P, Buildings That Learn: A Model for Integrated Building Design and Operation Processes. 7th International Conference on Intelligent, Green and Energy-Efficient Building and New Technologies and Products Expo, Beijing, China, 28 – 29 March 2011.
  17. Lam, K P, Through the looking glass and what we may find there. Featured Presentation at the PPG International Certified Fabricator Program Conference at the Marina Bay Sands – Singapore on January 9-11, 2012.
  18. Lam, K P, Greater Philadelphia Innovation Cluster (GPIC) for Energy Efficient Buildings. Presentation at the Building & Construction Authority Building Energy Efficiency Seminar, MND Building, Singapore on January 12, 2012.
  19. Lam, K P, Development of whole building energy performance as benchmarks for retrofit projects. 8th International Conference on Intelligent, Green and Energy-Efficient Building and New Technologies and Products Expo Beijing, China, 29 – 31 March 2012.
  20. Lam, K P, Dynamic life-cycle information modeling of building industry products and processes for codes and standards compliance. Department of Architecture, Zhejiang University, Hangzhou, China. 15 March 2013.
  21. Lam, K P, Dynamic life-cycle information modeling of building industry products and processes for codes and standards compliance. World Summit on Building Simulation Research, Philadelphia, PA, USA, 28 March 2013.
  22. Lam, K P, Integrated simulation-based design optimization of office building envelopes for the minimization of life cycle costs. 9th International Conference on Intelligent, Green and Energy-Efficient Building and New Technologies and Products Expo, Beijing, China, 1 – 3 April 2013.
  23. Lam, K P, An integrated design approach for high performance buildings. 8<sup>th</sup> Energy Forum, Sopot, Poland, 16-18 December 2013.
  24. Lam, K P, Urban Energy Information Modeling. Urban Land Institute Seminar, Beijing, China, 7 March 2014.
  25. Lam, K P, Phipps Center for Sustainable Landscapes: Harmonizing the natural and the built environment. Surface Conversations 1.5, College of Design, Architecture, Art and Planning, University of Cincinnati, OH, 3 October, 2014.
  26. Lam, K P, International Energy Agency Energy in Buildings & Communities Programme Annex 66: Definition and simulation of occupant behavior in buildings. 9th Energy Forum, Karpacz, Poland, 22-24 January 2015.
  27. Lam, K P, Smart cities – investment for the future generations. 4th CMU Summit on US-China Innovation and Entrepreneurship, Carnegie Mellon University, Pittsburgh, PA, USA, 26 April 2015.
  28. Lam, K P, Dynamic life-cycle energy information modeling. Inaugural Zero Carbon Building Conference (Decarbonising High-rise Buildings in Sub-tropical and High-density Cities), Hong Kong, 15 Oct 2015.
  29. Lam, K P, Interfacing the "virtual" and the "real" in product and process modeling

- 
- of whole building energy performance. Workshop Series of Hong Kong Zero Carbon Partnership (Public and Stakeholder Engagement for Building Towards Zero Carbon), Hong Kong University, Hong Kong, China, 16 Oct 2015.
30. Lam, K P, Sustainable habitats and circular economy – the final frontier? International Green Building Conference 2016, Marina Bay Sands, Singapore, 8 Sep 2016.
  31. Lam, K P, Walk the talk in a sustainable university campus. 13th International Conference on Intelligent, Green and Energy-Efficient Building and New Technologies and Products Expo, Beijing, China, 21 – 22 March 2017.
  32. Lam, K P, High performance and sustainable building design and construction- a systems integration approach. Macao International Environmental Co-operation Forum and Exhibition 2017 (MIECF), Macao, China, 30 March – 1 April 2017.
  33. Lam, K P, A Tale of Two Cities - Towards a Common Destiny of Sustainability and Resilience Through People-Centric Green Architecture. Centre for Liveable Cities Singapore Lecture, JEM MND Level 6 Auditorium, 15 Aug 2017.
  34. Lam, K P, Future challenges of cities in hot and humid climates. International Energy Agency (IEA) Future Buildings Forum (FBF) “Transforming Cities in Hot and Humid Climates towards more Efficient and Sustainable Energy Use”, Building and Construction Authority Academy, Singapore, 24 Oct 2017.
  35. Lam, K P, J Keung, S Selkowitz, Net zero energy building design in high density urban cities. GreenBuild ABX 2017 International Conference and Expo, Boston, MA, USA, 8 Nov 2017.
  36. Lam, K P, J Keung, S Selkowitz, Achieving net zero energy building goals in high density urban cities. Getting To Zero National Forum, Pittsburgh, PA, USA, 17 – 19 April 2018.
  37. Lam, K P, The “Well and Green” path to future intelligent workplaces. Lendlease Insights Seminar, The Westin Singapore, 22 June 2018.
  38. Lam, K P, Smart design of smart cities. International Conference on Smart City Innovation, Bandung, Indonesia, 25-26 Oct 2018.
  39. Lam, K P, Well and green concept in the School of Design and Environment, National University of Singapore building projects. WELL International Symposium, Beijing, China, 5 Nov 2018.
  40. Lam, K P, Designing resilience in Asia. International Seminar on Tropical Eco Settlements, Bali, Indonesia, 14-15 Nov 2018.
  41. Lam, K P, Well and green development in the School of Design and Environment, National University of Singapore. Nikken Sekkei International Seminar, URA Centre, Singapore, 29 Nov 2018.
  42. Lam, K P, Walk the talk: Transforming sustainability education in a modern living campus. Passive Low Energy Architecture (PLEA) Conference, Chinese University of Hong Kong, 10-12 Dec 2018
  43. Lam, K P, Net zero energy buildings for sustainability and well-being. Ideas Lab World Economic Forum, Davos, 24 Jan 2019.
  44. Lam, K P, Well and Green Urban Development. China- Singapore Future Communities Round Table, Hangzhou, China, 16 July 2019.  
中新未来社区圆桌论坛及浙江省未来社区试点项目研讨会
  45. Lam, K P, A living lab for well and green experiences. Breakfast Meeting, Hong Kong Green Building Council, Hong Kong, 9 Sep 2019.
  46. Lam, KP, BIM to BEM (Building Energy Modeling) Application Case Study. Integrated Digital Delivery Symposium, Real Estate Developers Association (REDAS), Singapore, 3 Oct 2019.
  47. Well and Green: Environment and Human Health. 2nd Xiong'An International Health Forum. 17-18 October 2019, Langfang, China.
  48. Lam, K P, A well and green approach to building and community development. 1st International Conference on Environment, Sustainability Issues, and
-

---

Community Development (INCRID), Semarang, Indonesia, 23-24 October 2019.

49. Lam, K P, Well and Green Future. World Economic Forum Annual Meeting of the Global Future Councils. GFC on Energy Technologies, Dubai, UAE, 3 - 4 Nov 2019.
50. Lam, K P, A well and green building. EduTECH Asia 2019 – EduBUILD, Singapore, 5 November 2019.
51. Lam, K P, The Singapore Energy Story, Forum on China's Energy Revolution, Part I: Transport, Buildings, and Cities, Energy Foundation China 20<sup>th</sup> Anniversary, Beijing, China, 20 Nov 2019.
52. Lam, K P and W C Loke, Beyond Good Healthcare: Designing Healthy Cities. Centre for Liveable Cities Webinar Series, 21 May 2020. <https://www.clc.gov.sg/events/webinars/view/beyond-good-healthcare-designing-healthy-cities>.
53. Novoselov, K. Moderator – K P Lam, The Architecture of Science – Experiencing the Precise. The NUS Stayhome Series Webinar, 26 May 2020. <https://mediaweb.ap.panopto.com/Panopto/Pages/Viewer.aspx?id=370cff27-0372-473c-abff-abc8000fa789>
54. Lam, K P, S Anderson, and L Y Hsu. Moderator - Y Y Teo, Adjusting to the "new normal": are you ready?. The NUS Stayhome Series Webinar, 29 May 2020. <https://mediaweb.ap.panopto.com/Panopto/Pages/Viewer.aspx?id=57367856-eaec-4e17-acb6-abca00faa292>.
55. Lam, K P, Lessons Learned on Indoor Air Safety. International Well Building Institute Townhall #3 Webcast, 2 July 2020. <https://resources.wellcertified.com/webcasts/lessons-learned-on-indoor-air-safety-perspectives-from-task-force-co-chairs-insight-from-industry-experts/>
56. Lam, K P, Designing healthy cities beyond epidemiological response. Healthy City in COVID-19: cities response to the pandemic and innovative approaches leaving no one behind. World Health Organization South East Asia Regional Office, Webinar, 9 July 2020. [https://www.who.int/docs/default-source/searo/ncd/brief-of-panelists-healthy-cities-9-july-2020.pdf?sfvrsn=3081b021\\_2](https://www.who.int/docs/default-source/searo/ncd/brief-of-panelists-healthy-cities-9-july-2020.pdf?sfvrsn=3081b021_2)
57. Lam, K P, A well and green approach to building and community development. United Architects of the Philippines Area B Assembly 2020, 25 July 2020, Singapore. <https://www.facebook.com/UAPAreaB/photos/a.387034931840821/724777291399915>
58. Lam, K P, The concept of total building performance and diagnostics revisited. United Architects of the Philippines, Singapore Chapter, 9<sup>th</sup> UAP Webcast Series v2.0, Green Architecture – Impact on the Living Environment, 5 Sep 2020. <https://www.facebook.com/uap.sg.chapter/photos/a.285017698370144/1418765728328663/>
59. Lam, K P, 'Catch the Experts' Webinar Series: Future Cities: A Post-Pandemic Reawakening. Moderated by Charmaine Chan, 11 Sep 2020. <https://www.catchonco.com/six-takeaways-from-cities-in-a-post-pandemic-world/>
60. Lam, K P, The concept of total building performance and diagnostics revisited. 9<sup>th</sup> Philippine Professional Summit, The Philippine Association of the Professional Regulatory Board Members, Inc., 24 Oct 2020. <https://www.paprb.org/pps9-day-2-talks>
61. Lam, K P, Designing Resilience in Asia Programme. From ocean to zip code in a changing climate. An online symposium on an integrated innovative approach for sustainable climate adaptation in a metropolis, 26 Oct 2020. <https://vimeo.com/474663579/0c14a6fcfa>
62. Lam, K P, Battle tested, pandemic proof - People and Cities. National University of Singapore geNiUSchannel, 25 Nov 2020. <https://www.youtube.com/watch?v=kmQzoFiwV3Q&list=PLquEhHpcmtHyddM>

63. Lam, K P, Redevelopment of SDE micro-campus and SDE4. Urban Land Institute, Singapore Annual Conference 2021, 3 Mar 2021. <https://singaporeconference.uli.org/speakers/>
64. Lam, K P, Urban Sustainability R&D e-Symposium, Opening Webinar Moderator, 26 Mar 2021. <https://www.mnd.gov.sg/urbansustainability/webinars/opening-webinar>
65. Lam, K P, Sustainable Innovation District: Scaling Urban Systems Solutions - Redevelopment of SDE Micro-Campus and SDE4 Case Study. 18th Executive Development & Growth Exchange (EDGE) Programme, Centre for Liveable Cities, 25 Mar - 9 Apr 2021.
66. Lam, K P, Revisiting Architectural Leadership. 46<sup>th</sup> National Convention, United Architects of the Philippines, 24 Apr 2021. <https://www.united-architects.org/events/1051/the-46th-edition-of-the-united-architects-of-the-philippines-national-convention/>.
67. Lam, K P, “Walking the talk” in educational facilities. American Institute of Architects, New York State, Webinar on Reimagining School Design, 30 Apr 2021. <http://www.event.com/events/re-imagining-school-design/speakers-b94afeaf992d4693bdd70c8cbdef451e.aspx>
68. Lam, K P, S Das, L Wong, GeoInnovation in the built environment. Virtual Fireside Chat series with Geoworks, 6 May 2021. <https://www.geoworks.sg/settings/archives/april-2021/virtual-fireside-chat-series-with-geoworks-geoinnovation-in-the-built-environment>
69. Lam, K P, The concept of total building performance. Symposium on Resource Conservation and Management, School of Design and Environment NUS - MOH Holdings, 14 May 2021.
70. Lam, K P, Human comfort. Symposium on Health and Well-being, School of Design and Environment NUS - MOH Holdings, 20 May 2021.
71. Lam, K P, The application of new technologies and concepts to achieve net zero for new buildings. Urban Land Institute Asia Pacific Summit 2021, ESG Forum, 21 May 2021. <https://apacsummit.uli.org/session/esg-forum/>
72. Lam, K P, Enabling positive changer through sustainability leadership. Singapore Green Building Council Webinar: Understanding the living building challenge and Well Certification, 13 July 2021. <https://web.sgbc.online/public/event/rsvp/218>
73. N H Seek (Chair), H Y Cheng, K H Cheong, T K Liu, Planning for resilient and sustainable cities after COVID-19. Plenary session 1, Joint International Real Estate Conference (AREUEA/AsRES/GCREC), NUS, National University of Singapore, 19 July 2021. <https://ireus.nus.edu.sg/articles-papers/2021-virtual-joint-real-estate-conference/>
74. Lam, K P, Urbanization and industrialization. Harvard Innovation Challenge Southeast Asia III, Harvard Global Education Movement, 23 Jul 2021. <https://www.hgem.org/conference-speakers-hic-sea>. <https://www.instagram.com/p/CRqkTyJL-ii/>
75. Lam, K P, Social determinants of health. Experts meeting to advance social determinants of health in South-East Asia, World Health Organization South-East Asia Region, 14-15 Sep 2021.
76. Lam, K P, Forging new frontiers in future-proof education. Deans Forum – Global Strategic Partner - Architecture, Urban Planning and Landscape Architecture, College of Architecture and Urban Planning, Tongji University, Shanghai, PR China. 17 Sep 2021.
77. Lam, K P, Hope You’re Well: Building Healthy and Happy Cities. Webinar, World Cities Summit 2021, 21 Oct 2021. <https://www.worldcitysummit.com.sg/editors-picks/hope-you-re-well-building-healthy-and-happy-cities>
78. Lam, K P, Sustainability Leadership: Development of the National University of

---

Singapore's (NUS) Campus. Advancing Net Zero International Conference, Hong Kong Green Building Council, 25 Nov 2021. <https://www.hkgbc.org.hk/eng/global-movement/International-Conference-on-ANZ/day3.jsp>.

79. Lam, K P, A “Well & Green” approach to a sustainable and resilient educational campus. Harvard University Center for Green Buildings and Cities, 2 Dec 2021. <https://harvardcgbc.org/cgbc-fall-lecture-khee-poh-lam-on-a-well-green-approach-to-a-sustainable-and-resilient-educational-campus/>
80. Lam, K P, The science behind the tech in retro-commissioning. APEC Workshop cum Training on retro-Commissioning (RCx) (EWG 09 2020A), Hong Kong Green Building Council, 20 Jan 2022. <https://aimp2.apec.org/sites/PDB/Lists/Proposals/DispForm.aspx?ID=2802>
81. Lam, K P, R Singh, C Nesler, M R Reinbold, A Badreddine (moderator), Achieving net-zero: Roadmap towards decarbonization. Johnson Controls OpenBlue APAC Sustainability Summit 2022, 24 Feb 2022. [https://www.johnsoncontrols.com/en\\_sg/apac-summit-2022](https://www.johnsoncontrols.com/en_sg/apac-summit-2022)
82. Lam, K P, A “Well & Green” approach to human habitat and environmental sustainability. Singapore Land Transport Authority Town Hall Meeting, 24 Mar 2022. (online).
83. Lam, K P, Net positive energy buildings – an NUS SDE case study. Positive energy districts in Asia: decarbonization policies and case-studies. IEA EBC Annex 83: Positive Energy Districts, 29 Apr 2022. [https://annex83.iea-ebc.org/data/energymeetings/calendar/Annex%2083\\_Speakers%20data.pdf](https://annex83.iea-ebc.org/data/energymeetings/calendar/Annex%2083_Speakers%20data.pdf)
84. Lam, K P, Beyond Net-Zero Imperative: Towards net-positive Energy Developments. Urban Land Institute Greater Bay Area Webinar: Introduction of ULI Net Zero Imperative Initiative - Shenzhen Edition - How to Incentivise Building Owners to Integrate Technology in their Journey to Net Zero, 12 May 2022. <https://asia.uli.org/events/detail/7C12CD88-E69A-4F77-97FD-421D7D1DC078/>
85. Lam, K P, The science behind the technology in “Well and Green” developments - Rethinking building design and operations. Global Energy Seminar Series, Lawrence Berkeley National Laboratory, Berkeley, CA, USA, 24 May 2022. (online).
86. Lam, K P and M Phalatsé, Cities in Transformation - How net zero cities and urban design can help transform cities and accelerate the transition to cleaner energy and equity. Our World In Transformation, World Economic Forum. 8 Jun 2022. <https://toplink.weforum.org/event-mode/a0P68000000YANuEAO/sessions/a0W68000000IvdZEAS/cities-in-transformation.9.May.2022.>
87. Lam, K P, Symbiosis – the ultimate challenge in a tech enhanced habitat. Huawei Tech4City Community Event, Theme: The crucial role of technology in environmental protection. 23 June 2022. Huawei AI Lab, Changi Business Park, Singapore. <https://www.agorize.com/en/challenges/huaweitech4city/pages/community-events?lang=en>
88. Lam, K P, A “Well & Green” approach to human habitat and environmental sustainability, Precourt Institute of Energy, Stanford University, 28 Jun 2022.
89. Lam, K P, Forging new frontiers beyond net zero energy. Global ESG Forum. Seoul, South Korea, 29-31 Aug 2022. [https://www.globalesgforum.org/en/esg\\_guest\\_09.asp](https://www.globalesgforum.org/en/esg_guest_09.asp)
90. Lam, K P, Forging new frontiers beyond net zero energy. Digital Future Challenge – Envisioning Singapore 2060. Institute of Systems Science, National University of Singapore, 25 Heng Mui Keng Terrace, Singapore 119615, 29 Aug 2022. <https://www.iss.nus.edu.sg/digital-futurist-challenge/expert-panel>
91. Lam, K P, Forging new frontiers beyond net zero energy. Opening address, 9th Annex 79 Meeting and OB-22 Symposium, SDE4, National University of Singapore, 22 Sep 2022. <https://annex79-2022->



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[https://arch.seu.edu.cn/jz\\_en/2023/0329/c41158a440017/page.htm](https://arch.seu.edu.cn/jz_en/2023/0329/c41158a440017/page.htm)

103. WHO-SEARO Regional Workshop to develop city health profiles and healthy city plan, Kathmandu, Nepal, 25-27 April 2023. <https://ughw.org/elementor-22284/>
104. Lam, K P, David Ardley, Michael L Simpson, Patricia Fierro-Hernandez, Sakhaa Alsaedi, Anthony H Fernandes (Moderator), STEAM Education - Conditioning the new generation with innovative teaching. Dubai, UAE, 19 Jun 2023. <https://www.youtube.com/watch?v=65pr59Q3HWY>
105. Lam, K P, Sustainability and the healthcare sector. Singapore Healthcare Management 2023, Marina Bay Sands Convention Centre, Singapore, 17 Aug 2023. <https://www.singaporehealthcaremanagement.sg/Speakers/Pages/Speakers2023.aspx>.
106. Lam, K P, Contemplating the challenges and opportunities in Building Performance Simulation in a post COVID and climate crisis era. The 18th IBPSA International Conference and Exhibition, Building Simulation 2023, Shanghai, China, 4-6 September 2023. <https://www.conftool.pro/bs2023/sessions.php>
107. Lam, K P, Digital Twin and AI as enabling technologies for net-zero energy and healthy buildings. Digital Twin Conference, World Smart City Expo 2023, Kintex, Korea, 6 Sep 2023. <https://smartcity.go.kr/en/wsce-main/wsce-2023/>
108. Lam, K P, NUS campus as a Living Lab with net-zero vision. RothoSchool x SkyTimber - Mass Timber Architecture in the Tropics International Seminar, College of Design and Engineering, National University of Singapore, 20-21 Oct 2023. <https://cde.nus.edu.sg/event-detail/rothoschool-x-skytimber-mass-timber-architecture-in-the-tropics-intl-seminar-2023/>
109. Lam, K P, Designing healthy buildings – The role of architects, engineers and behavioural scientists. Society of Behavioural Health Singapore Scientific Meeting, National University of Singapore Shaw Foundation Alumni House, 28 Oct 2023. <https://www.sgbehaviouralhealth.com/programme-scientific-meeting-2023>
110. Lam, K P, A “Well and Green” approach to designing and operating a sustainable and healthy building. Session: Building Towards Human Health and Sustainable Society. World Health City Forum, Songdo Convensia, Korea, 20 Nov 2023. <https://www.worldhealthcityforum.org/opening-ceremony>
111. Lam, K P, The Masterbuilder... Then and Now: Architecture in an IT Age. Global Deans Forum 2023, Qinhuangdao, China, 2 Dec 2023. <https://s.weibo.com/weibo?q=%232023全球院长论坛%23>
112. Lam, K P, Application of the concept of total building performance and diagnostics in healthcare facilities. Inaugural Symposium on Climate Change and Sustainability in Healthcare Settings, K K Women’s and Children’s Hospital, Singapore, 1 Dec 2023. <https://www.linkedin.com/feed/update/urn:li:activity:7138205579734413312/>
113. Lam, K P, “If it ain’t broke, don’t fix it”: Contemplating an old adage in an IT Age. Facilities Management Expert Summit, SIFMA, Grand Copthorne Waterfront, Singapore, 4 Dec 2023. [https://sifma.org.sg/index.php?route=information/event&event\\_id=31](https://sifma.org.sg/index.php?route=information/event&event_id=31)
114. Lam, K P, The imperative quest for net zero. The 8<sup>th</sup> International Conference on Energy and Environmental Science (ICEES 2024), Chongqing, China, 22 Mar 2024. <https://www.icees.org>
115. Lam, K P, A lifecycle approach to Design-Build-Operate net zero energy buildings. Design Operation and Maintenance of Green and Smart Building Seminar, Fakultas Teknik, Universitas Gadjah Mada, Indonesia, 19 Apr 2024. <https://ft.ugm.ac.id/ahli-bangunan-dunia-bahas-praktik-dan-perkembangan-gedung-hijau-dan-cerdas/>
116. Lam, K P, The Singapore green building journey. Singapore Heritage Fest, National Library Building, Singapore. 16 May 2024. <https://www.sgheritagefest.gov.sg/programmes/the-singapore-green-building->

---

[journey](#)

117. Lam, K P, Back to the future – what would you do differently? Climate Change Forum, Hong Kong Institute of Architects, BEAM Society Ltd., and Professional Green Building Council Hong Kong. 25 May 2024. (Online).  
<https://www.hkia.net/en/whats-on.html?id=10374>
118. Lam, K P, SMART: God or devil is in the data. Smart and Low Carbon City, Asian University Alliance (AUA) Seminar, Hong Kong University of Science and Technology, Hong Kong, 1 Jun 2024.
119. Lam, K P, Transforming construction industry for net-zero building. Young Presidents' Organization SEA Lestari Integrated and NUS Cities, College of Design and Engineering, National University of Singapore, 5 June 2024.
120. Lam, K P, To boldly go beyond net zero. World Workplace Asia Pacific Conference, Orchard Hotel, Singapore. 23 July 2024.  
<https://web.event.com/event/9ca93b52-f5fc-4b33-abc0-97ce0485768d/websitePage:fd71700d-2fe6-4a02-b43c-d5098b47a6f0?RefId=Agenda>
121. Lam, K P, Human-centric design and adaptation for climate resilient built environment. Chinachem Group 5<sup>th</sup> Sustainability Conference, co-organised by the Business Environment Council and Hong Kong Green Building Council, 7 Nov 2024.  
<https://www.chinachemgroup.com/en/sustainability/sustainability-conference/sustainability-conference-2024/>
122. Lam, K P, Transformation to the smart city embracing health: A people-centric approach. 2<sup>nd</sup> World Health City Forum, Songdo Convensia, Incheon, Korea, 13 Nov 2024.  
<https://www.worldhealthcityforum.org>
123. Lam, K P, future-proofing architecture education in a capricious world. The United Architects of the Philippines National Convention 2025, SMX Convention Centre, Manila, Philippines, 8 Apr 2025.  
<https://natcon.unitedarchitects.ph/program/>
124. Lam, K P, Human Centric Habitats. Keynote presentation, WellTalk, Songyang, Lishui, Zhejiang, China. China, Delos Well Living Lab (China), 30 Oct – 1 Nov 2025. Well人居 [论道] 天人合一 松阳慧聚.
125. Lam, K P, RE.Search in an age of complexity. Keynote presentation, Graduate Research Symposium, Department of Architecture, College of Design and Engineering, National University of Singapore, 14 Nov 2025.  
<https://cde.nus.edu.sg/arch/graduate-research-symposium-2025/>
126. Lam, K P, A Tri-partite Collaborative Framework for Planetary Health. Keynote presentation, Planetary Health Forum, Ehwa Womans University, Seoul, Korea, 15 May 2026. <https://www.youtube.com/live/GxaRXbqZ65E>

## PANEL DISCUSSION

1. Lam, K P, Accelerating greener communities: planning, building and marketing green. Panel discussion. BusinessWeek Global Green Business Summit, Renaissance Tianjin TEDA Hotel and Convention Center, China, 7-8 June 2009.
2. Lam, K P, Panel Chair, Human Building Interactions. University of Texas San Antonio and US National Science Foundation sponsored International Workshop on Implications of Occupant Behavior for Building Operation and Design: Now and the Future. TU Wien, Austria, 2 April, 2016.
3. Lam, K P, Z Xiong, G F Deng, H Chen, P Lopes, Promoting a peak in the carbon emissions of the building sector. Panel discussion, Asia-Pacific Forum on Green and Low-carbon Development Co- organized by The Government of Hunan Province, Peoples Republic of China and the Asian Development Bank, Changsha, Hunan, PRC, 20-22 October 2021.  
<https://www.adb.org/news/events/asia-pacific-forum-green-low-carbon-development-aplc-forum>.
4. Lam, K P, Cities: Possibilities 2021 – Net Zero Cities. Panelist, Eco-Business, St. Regis Hotel, Singapore, 3 Nov 2021.

---

<https://events.eco-business.com/events/cities-possibilities-2021>.

5. Lam, K P, Achieving a circular economy. Panelist, SDG Symposium: One Curtin – The Sustainable Development Goals in Action. Curtin University, Australia, 11 Nov 2021. <https://curtindubai.ac.ae/wp-content/uploads/2021/11/Programme-for-the-SDG-Symposium-Final-26-10-2021.pdf>
6. Lam, K P, R Mathew, Nor Aminah Kostor (moderator), Building the post-Covid adaptive workplace in higher education. Panel discussion. Higher Education Leadership Summit 2022, AKEPT Higher Education Leadership Academy, Ministry of Higher Education, Malaysia. 16 Feb 2022. <https://www.youtube.com/watch?v=p1BnueuOZ-U>
7. Lam, K P, E Seah, A Stark, What makes a building smarter than the rest? Panel discussion, Urban Land Institute Singapore, WiredScore, 24 Jun 2022, JLL-Singapore, 88 Market St, Singapore 048948. <https://singapore.uli.org/what-makes-a-building-smarter-than-the-rest/>
8. Lam, K P, Chintan Raveshia, Teo Sherman, King Wang Poon, Panel Discussion on Sustainable Cities and Communities, Hitachi Young Leaders Initiative, 18 July 2022, Marina Bay Sands, Singapore. <https://www.hitachi.com.sg/about/hitachi/activities/hyli/2022/index.html>
9. Grace Fu, Minister of Sustainability and Environment, Chia Ngiang Hong, President, Real Estate Developers Association of Singapore, Prof. Lam Khee Poh, REDAS Mid-Autumn Lunch, In-Conversation with Minister Fu. Panel Moderator, Prof. Annie Koh, The Regent Hotel, Singapore, 7 Sep 2022. <https://redas.com/wp-content/uploads/2022/12/THANK-YOU-for-a-Successful-REDAS-Mid-Autumn-Celebration-2022.pdf>
10. Lam, K P. Adapting to climate change: operationalizing health system resilience. Panel discussion, Global Learning Collaborative for Health Systems Resilience. 2<sup>nd</sup> Annual Conclave, Orchard Hotel, Singapore, 11 Mar 2024. <https://accessh.org/glc4hrs-set-to-hold-its-2nd-annual-conclave-in-singapore/>
11. Lam, K P, The year ahead | What’s next for healthy buildings. Panel 2 Discussion, International Well Building Institute WELL Regional Summit, Singapore, The GEAR: Kajima Lab for Global Engineering, Architecture & Real Estate, Singapore, 12 Mar 2024. [https://www.linkedin.com/posts/iwbi\\_2024-well-regional-summit-singapore-activity-7166220049626697728- Cib/](https://www.linkedin.com/posts/iwbi_2024-well-regional-summit-singapore-activity-7166220049626697728- Cib/)
12. Lam, K P, Is Singapore ready for a net zero future? Panel discussion, Siemens Symposium, The Siemens Centre, 60 MacPherson Road, Singapore 348615, 3 Apr 2024. <https://www.siemens.com/sg/en/company/fairs-events/symposium.html>
13. Lam, K P, Panel Moderator, Panelists: Ms Idoia Postigo, General Director, Bilbao Metropoli 30 (BM30) - Bilbao, Laureate 2010, Mr Tom Wright, President and Chief Executive Officer, Regional Plan Association (RPA) - New York City, Laureate 2012, Dr Kim Inhee, Head of 100 Years Urban Research Center, Seoul Institute (SI) - Seoul, Laureate 2018, Mr Johannes Lutter, Head, Urban Development & Mobility, Urban Innovation Vienna (UIV) - Vienna, Laureate 2020, Mr Miao Yang Bing, Director of Suzhou Planning Think Tank Platform - Suzhou, Laureate 2014, Mr Eduardo Clark, Head, Digital Agency for Public Innovation - Mexico City, Laureate 2024. City Network for Lee Kuan Yew World City Prize (LKYWCP Network). Suntec Convention Centre, Singapore, 3 June 2024. <https://knowledgehub.clc.gov.sg/publications/launch-of-the-city-network-for-the-lee-kuan-yew-world-city-prize>.
14. Lam, K P, Farizan d’Avezac De Moran, Genki Unno. Panel Moderator, Ryusuke Kojio. Carbon Neutrality + Sustainable Built Environment. COT-Lab Takenaka, National Gallery Singapore, 28 Nov, 2024. [https://www.linkedin.com/posts/takenaka-europe\\_designbuild-circular-timber-activity-7272876637564678146-mjY-/](https://www.linkedin.com/posts/takenaka-europe_designbuild-circular-timber-activity-7272876637564678146-mjY-/)
15. Lam, K P, Panel Moderator, Panelists: Mr Loh Yi Huang, Senior Project Manager, Wing Tai Property Management, Ms Zhong Lin, Senior BIM Manager, China Construction, Nassar Zain, Project Manager, Far East Organisation. Achieving Project Excellence Through Better Use of Digital Technologies. Best

---

Practices in Digital Transformation Overcoming Barriers to Digital Adoption. REDAS Digital Future Symposium 2025, ParkRoyal Collection, Marina Bay, Singapore, 2 Apr 2025.

[https://aces.org.sg/wp-content/pdf/2025/030\\_2025-REDAS%20Digital%20Future%20Symposium%20on%20%20Apr%202025.pdf](https://aces.org.sg/wp-content/pdf/2025/030_2025-REDAS%20Digital%20Future%20Symposium%20on%20%20Apr%202025.pdf)

16. Lam, K P, Panel Moderator, Panelists: Mr. Chew Peet Mun, Managing Director, Investment & Development, CapitaLand Development Singapore, Ms. Jeong Yoonmee, Managing Director & Head of Sustainability Office, Global Wholesale Banking, OCBC, Ar. Tan Shao Yen, President & Group Chief Executive Officer CPG Corporation, Mr. Raymond Tong, Mergers & Acquisitions Rajah & Tann Singapore. In Perspective: Business Sustainability and Regenerative Growth in the New Geopolitical Environment (Commercial and Industrial Markets). REDAS Real Estate Market Outlook Seminar, Pan Pacific Orchard, 24 Jul 2025. <https://events.redas.com/e/REMO2025>.
17. Lam, K P, Panellist, with Dr. Teo Ho Pin, SIFMA Patron; Ms. Dora Yim, Immediate Past President, IFMA Hong Kong Chapter; Panel Moderator: Frank Ngoh. Sustainability in facilities management. Facilities Management Experts Summit (FMES) 2025. The Future Workplace: Technology x Sustainability. The Ritz-Carlton Millenia, Singapore. 15 August 2025. <https://www.gevme.com/site/sifma-2025>
18. Lam, K P, Panellist, with Teo Junrong, Vice President, Business Development, The Ascott Limited; Keith Koh, Segment Director for Office, Production and Public Admin, ISS Facility Services Private Limited; Calvin Yeo, Managing Director, Occupier Strategy and Solutions, Knight Frank Singapore; Panel Moderator: Kabi Subramaniam, Associate Principal, Arup. Smart Real Estate: Repositioning Assets for a long- term performance. RICS - REDAS Conference 2025, Blueprints of the future: Navigating change in the built environment. Marriot Tang Plaza Hotel, Singapore, 16 Oct 2025. [https://redas.com/past\\_event/rics-redas-singapore-conference-2025-blueprints-of-the-future/](https://redas.com/past_event/rics-redas-singapore-conference-2025-blueprints-of-the-future/)
19. Lam, K P, Panel Moderator, Panelists: A/Prof Ling Moi Lin, Director of Infection Prevention & Epidemiology, SingHealth; A/Prof Renzo Guinto, Associate Professor and Lead, Planetary Health Initiative, SingHealth, Duke-NUS Global Health Institute, Duke-NUS Medical School; Dr Agnes Henson, Research Fellow, Centre for Sustainable Medicine. Rethinking Hospital Waste: Overcoming Challenges in the Hospital Environment. Singapore Healthcare Sustainability Symposium 2025. The Ngee Ann Kongsi Auditorium, 20 College Road, Singapore 169856. 23 Oct 2025. <https://www.facebook.com/singhealth/posts/at-the-singapore-healthcare-sustainability-symposium-on-thursday-we-learnt-from-/1222101086621418/>
20. Lam, K P, Panel Moderator, Panelists: Sharon Baptist, Vice President, Development Capabilities & Initiatives, Group Development Management. Mapletree; Jennifer Berthelot-Jelovic, Associate Principal, BranchPattern; Tony Tan, Chief Corporate Officer, Capitaland Development. Social Sustainability in Real Estate & Urban Development – Designing for Community and Cultural Heritage. International Well Building Institute Social Sustainability Summit. The Temasek Shophouse, 28 Orchard Road, Singapore 238832. 15 Apr 2026. [https://www.linkedin.com/posts/well2026-ugcPost-7451042979810762752-Fyn?utm\\_source=share&utm\\_medium=member\\_desktop&rcm=ACoAAASf2goBZWar3-34CcFRw9SL1SMuri6KNwk](https://www.linkedin.com/posts/well2026-ugcPost-7451042979810762752-Fyn?utm_source=share&utm_medium=member_desktop&rcm=ACoAAASf2goBZWar3-34CcFRw9SL1SMuri6KNwk)
21. Lam, K P, Panellist, with Ben Banerjee, Co-founder and Managing Partner, Impact Investing Solutions; Hui Mien Lee, Head, Group Environmental Sustainability, Singtel; Alfred Fox, Chief Executive, Integrated Solutions, SJ Group; Matthew Schofield, Acting Chief Executive, Programme Management, SJ Group; Elaine Tan, Research Director, Centre for Liveable Cities; Panel Moderator: Farah Naz, Director, Global Climate Advisory, SJ Group. From Innovation to Impact: What's Blocking Real Climate Outcomes and How Cities and Corporates Can Unlock Them. Ecosperity 2026 SJ Group Roundtable partner event, SJ Campus, 38 Cleantech Loop, Singapore 636741, 20 May 2026. <https://www.linkedin.com/feed/update/urn:li:activity:7461973864705781760/>

---

**PAPERS FOR SEMINAR,  
PUBLIC TALK AND  
LECTURE**

1. Tham, K W, K P Lam and S E Lee, Eco-Building: A systemic phenomenon. In Design for Eco- Architecture, edited by S E Lee and K W Tham, pp. 1-20. Singapore: Faculty of Architecture and Building, November 1994. (Paper presented at Design for Eco-Architecture Clean and Green Week Seminar 1994, 8 November 1994, Harbour View Dai-Ichi Hotel, Singapore).
2. Lam, K P, M B Ullah, E Y Y Ng and V Pal, Modeling sky luminance distribution for Singapore. In Seminar on Daylight Measurement and Application in the Asia Pacific Region, 10 January 1997, National University of Singapore, Singapore. Singapore, 10 January 1997.
3. Lam, K P, Creative Thinking. Paper presented at Seminar: Creative Thinking, 17 May 1997, Centre for Development of Teaching & Learning, NUS, Singapore, Singapore.
4. Lam, K P, Digital Building Models for Intranet Collaboration Design Computing. Paper presented at CIB Australasia and Pacific Rim Regional Building Research Leaders' Meeting, 16-18 October 1998, Chiefly Hotel, Brisbane, Australia.
5. Lam, K P, Architectural education in the new millennium. Paper presented at A National Seminar on Architectural Education Policy and Professional Competence in Indonesia, 6-7 October 2000, Institut Teknologi Bandung, Bandung, Indonesia.
6. Lam, K P, A total building performance approach to designing schools. Paper presented at Designing Better Schools Environmentally, 16 September 2000, Department of Architecture, Chinese Univ of Hong Kong, Hong Kong.
7. Lam, K P, Intelligent Building – Interfacing the Virtual and the Real. Presented at School of Architecture, Xian Jiaotong University, 21 June 2006.
8. Lam, K P, Enhancing Health, Productivity and Energy Management through Building Information Modeling. Presented at the Federal Environmental Symposium, Washington DC, USA, 5 June 2007.
9. Lam, K P, Building Information Modeling. Presented at School of Architecture Xian Jiaotong University, 23 June 2007.
10. Lam, K P, Research & Development at the Center for Building Performance and Diagnostics, Carnegie Mellon University. Presented at School of Environmental Science and Engineering, Tianjin University, 7 September 2007.
11. Lam, K P, Building information modeling for sustainable design: BIM@CMU. Presented at the Shenzhen Institute of Building Research (SiBR), Shenzhen, China, 14 May 2008.
12. Lam, K P, Critical path to delivering successful intelligent and environmentally responsive buildings. Presented at the Zhejiang University City College, Hangzhou, China, 27 June 2008.
13. Lam, K P, Knowledge based design of a green knowledge icon. Presented at the Shenzhen Institute of Building Research (SiBR), Shenzhen, China, 2 July 2008.
14. Lam, K P, Design of Intelligent High Performance Green Buildings, Southwest University of Science and Technology, Mianyang City, Sichuan Province, China, 13 October 2008.
15. Lam, K P, “The human dimension in product and process modeling of green building design”. Green Building and Energy Efficiency International Conference 2009, Shanghai, China, 18-20 August 2009. (McGraw Hill Construction).
16. Lam, K P, The art and science of eco-design: lessons from the Suzhou Industrial Park and Tianjin Eco-City, 3rd US-China Green Energy Council Conference 22-23 June 2010, Suzhou, China.
17. Lam, K P, Aggressively Passive: Employing Passive Systems for Load Reduction, The AIA+2030 Professional Series, Pittsburgh, PA., 10 Oct 2013.

- 
18. Zhao, J., K P Lam, B E Ydstie, EnergyPlus Model-Based Predictive Control (EPMPC) by Using Matlab/Simulink and MLE+. 13th American Institute of Chemical Engineers Conference. Presented on 4 Nov 2013.  
<http://www3.aiche.org/proceedings/Abstract.aspx?PaperID=346348>
  19. Lam, K P, Urban energy information modeling. Urban Land Institute Seminar, Haworth, Beijing, 7 March 2014.
  20. Lam, K P and J Zhao, Learning occupant behavior for better energy efficiency. Phipps Conservatory Center for Sustainable Landscape Staff Seminar, 16 Dec 2014.
  21. Zhao, J., B Lasternas, R Yun, K P Lam, V Loftness, Occupancy schedule modeling for energy simulation through office appliance power consumption data mining. ASHRAE Winter Conference, 24-28 January, 2015, Chicago, IL.

#### BOOKS/CHAPTERS IN BOOKS

1. Lam, K P, High-rise public housing development in Singapore. In *The Second Century of the Skyscraper*, edited by L S Beedle, pp.443-463. United States: Van Nostrand Reinhold Co., 1988.
2. Lam, K P and J D Harrison, Design for the disabled and the elderly in Singapore. In *Building Design for Handicapped and Aged Persons*, edited by G M Haber, T O Blank, pp.101-122. New York: McGraw-Hill, Inc, 1992.
3. Mahdavi, A and K P Lam, A dialectic of process and tool: knowledge transfer and decision-making strategies in the building delivery process. In *Management of information technology for construction*, edited by Krishan Mathur, Martin Betts, Tham Kwok Wai, pp.345-356. Singapore: World Scientific and Global Publication Services, 1993.
4. Mahdavi, A and K P Lam, Intelligent building enclosures as energy and information mediator. In *Intelligent Environments*, edited by Peter Droege, pp.599-622. The Netherlands: Elsevier Science B.V., 1997.
5. Netto, A M, K P Lam and K K Choy, *Singapore Building Control Handbook*. Singapore: Butterworth/Lexis-Nexis, 2003 Edition, 255 pages. ISBN 9812363114.
6. Akin, O, R Krishnamurti and K P Lam (eds), *Generative CAD Systems. Proceedings of GCAD '04 International Symposium on Generative CAD Systems*. United States: Carnegie Mellon University, 520 pages. 2004. ISBN 0-9762941-0-9.
7. Lam, K P and V Srivastava, Living in the Intelligent Workplace - Structuring and Managing Building Operation Information, CAAD Talks 05: Insights of Smart Environments, (Maolin Chui, ed.), Garden City Publishing Ltd. Taipei, Taiwan, 2005, pp. 297-314.
8. Lam, K P, The Future of CAD:2005 and on - Building Performance Modeling. In *CAD and GIS Integration*, edited by Hassan A Karim and Burcu Akinci, pp. 17-18, Auerback Publications, Taylor & Francis Group, LLC, 2010.
9. Lam, K P, The human dimension in product and process modelling for green building design. *Green Design – From Theory to Practice*, edited by Ken Yeang and Arthur Spector, pp. 79-88. Black Dog Publishing Ltd., London, UK, 2011.
10. Lam, K P, Sustainability Performance Simulation Tools for Building Design. *Sustainable Built Environments*. V Loftness and D Haas (Eds), Chp. 478, pp. 10192-10260, Springer Science + Business Media, New York, 2013.  
**DOI:** [https://doi.org/10.1007/978-1-4614-5828-9\\_349](https://doi.org/10.1007/978-1-4614-5828-9_349).
11. Lam K P, J Zhao, R P Zhang, O T Karaguzel. System Integration for Interoperable Data Models of Building Scale Ecosystem, in, *Analytics for Building-Scale Sustainable Ecosystems (BSSE)*. Edited by Yong X. Tao & Yi Jiang. Begell House, New York, 2013. ISBN: 978-56700-279-9.
12. Baird N, S Ramesh, H Johnstone, K P Lam. Building Information Modeling: BIM in Current and Future Practice. Chapter 10: Urban Energy Information Modeling: High – Fidelity Aggregated Building Simulation for District Energy

---

Systems, pp. 129-141. Karen Kensek and Douglas Noble (Eds), Wiley, 2014. ISBN: 978 – 1118766309.

13. Hartkopf, V, V Loftness, A Aziz, K P Lam, S Lee, E Cochran, and B Lasternas. The Robert L Preger Intelligent Workplace- the Living Laboratory at Carnegie Mellon University. Chapter 13: Creating the Productive Workplace: Places to Work Creatively (Third Edition), pp.192-221. Derek Clements-Croome (Ed.), Routledge, 2018. ISBN: 978-1-138-96334-4 (hbk).
14. Lam, K P, Sustainability Performance Simulation Tools for Building Design. Sustainable Built Environments. Encyclopedia of Sustainability Science and Technology, R A Meyers, (Editor-in-Chief), Springer, New York, 4 Jun 2018. DOI: [https://doi.org/10.1007/978-1-4939-2493-6\\_349-4](https://doi.org/10.1007/978-1-4939-2493-6_349-4)
15. Lam, K P and T C Khoo (2021) Cities in Nature. In: Brears R. (eds) The Palgrave Encyclopedia of Urban and Regional Futures. Palgrave Macmillan, Cham. 21 Dec 2021. [https://doi.org/10.1007/978-3-030-51812-7\\_182-1](https://doi.org/10.1007/978-3-030-51812-7_182-1)
16. Lam, K.P, Epilogue, Renovating Carbon. E L'Heureux and G Cossu (eds.) Oro Editions, Gordon Goff (Publisher), 2022. ISBN: 978-1-954081-44-4.

#### THESES/DISSERTATIONS

1. Lam, K P, A Computational Design Support System for Interactive Hygro-Thermal Analysis of Building Enclosures. Doctor of Philosophy thesis, Carnegie Mellon University, Pittsburgh, PA. 1994, 137 pp.
2. Lam, K P, Structural Steelwork and Architecture. B Arch diss, University of Nottingham, Nottingham. 1982, 286 pp.

#### PUBLISHED REPORTS

1. Mahdavi, A and K P Lam, A Computer Application for the Consideration of Solar Radiation in Architectural Design Process. Pittsburgh, PA: Center for Building Performance & Diagnostics, Department of Architecture, Carnegie Mellon University, January 1994. 8 pp.
2. Lam, K P, A Mahdavi, M B Ullah, E Y Y Ng and V Pal, Mapping of the Sky Luminance Distribution and Computational Prediction of Daylighting Performance in Singapore. Research Report. Singapore: School of Architecture, National University of Singapore, 1997. 112 pp.
3. Lam, K P, E A Taylor, S C Kong and L Douaze, The establishment of architectural and technical standards and guidelines for the design and maintenance of marine mammal facilities. Research Report. NUS, March 1998. 150 pp.
4. Foo, A F, C K Heng, K S TAY and K P Lam, Development at Dondra, Kandegodella and Gandara in South Sri Lanka. Singapore, August 1999.
5. Wong N H and K P Lam, A study of the use of performance based simulation tools for building design and evaluation in Singapore. Research report, National University of Singapore. Singapore, 1999, 69 pp.
6. Ullah, M B, K P Lam, K W Tham, P R Tregenza and J T Kurniawan, Study of daylight attenuation through windows in urban environments. Research Report, National University of Singapore. Singapore, 7 March 2001, 123 pp.
7. Lam, K P, N H Wong, A Mahdavi and K K Chan, SEMPER II: Digital building models for intranet collaborative design computing. Research report, National University of Singapore. Singapore, 1 September 2002, 117 pp.
8. Lam, K P, N H Wong, E Leong and K S Au, Mapping of industry building product model for detailed thermal simulation and analysis. Research report, National University of Singapore. Singapore, 1 September 2002, 27 pp.
9. Lam, K P, N H Wong, S Wittkopf, E Leong, W Solihin, K K Chan and Z J Kang, Integration of CAD and thermal simulation through industry foundation classes (IFC) product model. Research report, National University of Singapore. Singapore, 30 April 2004, 70 pp.
10. Lee, S R, K P Lam, C Q Zhai and Y C Huang, Building simulation models for evaluating the performance of energy recovery technology in packaged rooftop

---

HVAC equipment. Research report submitted to the United Technologies Research Center, Hartford, CT., 13 pages, 18 November 2004 Center for Building Performance and Diagnostics, Carnegie Mellon University, Pittsburgh, PA 15213

11. Lam, K P, Y C Huang and C Q Zhai, Energy modeling tools assessment for early design phase. Research report prepared for Northwest Energy Efficiency Alliance, Portland, OR 97204. 77 pages, 31 Dec. 2004. Center for Building Performance and Diagnostics, Carnegie Mellon University, Pittsburgh, PA 15213.
12. Loftness, V, K P Lam, Y Gu, and M Snyder, Greening the operation and maintenance of the Children's Hospital of Pittsburgh: Benchmarks and opportunities for innovation of material and utility flows. Research report, sponsored by The Heinz Endowments, 76 pages, May 2005. Center for Building Performance and Diagnostics, Carnegie Mellon University, Pittsburgh, PA 15213.
13. Lam, K P, V Loftness, V Hartkopf, B Dong, Y Hua, Y C Huang and C Q Zhai, Integrated concurrent design of high efficiency commercial buildings. Research report (Work Scope #1) prepared for United Technologies Research Center, Hartford, CT 06108, 30 Nov. 2005. Center for Building Performance and Diagnostics, Carnegie Mellon University, Pittsburgh, PA 15213.
14. Lam, K P, S H Kim and P Satwiko, Assessment of Physical and Computational Airflow Analysis and Evaluation Tools for Building Design. Research report prepared for Konstrukt, acting on behalf of Northwest Energy Efficiency Alliance, Portland, OR 97204. 119 pages, 31 Dec. 2005. Center for Building Performance and Diagnostics, Carnegie Mellon University, Pittsburgh, PA 15213.
15. Lam, K P, R Zhang, Y C Huang, C Q Zhai, Impact of Shading Control Strategies on Heating and Cooling Loads of a "Typical" Office Building in Different Climatic Contexts in the USA. Research report prepared for Somfy SAS, France, 37 pages, 4 September 2007. Center for Building Performance and Diagnostics, Carnegie Mellon University, Pittsburgh, PA 15213
16. Lam K P, B Dong, R P Zhang, R Zhang. Development of a Web-Based Information Technology Infrastructures and Regulatory Repositories for Green Building Codes in China. Project Report to Energy Foundation, Nov. 2010, Grant No. G-0909-11472. Carnegie Mellon University, Pittsburgh, PA 15213.
17. Lam K P, R P Zhang, H P Wang, B Dong, R Zhang. Development of online Green Building Project Management and Analysis systems. Project Report to Energy Foundation, Feb. 2012, Grant No. G-1103-13851. Carnegie Mellon University, Pittsburgh, PA 15213.
18. China Council for International Cooperation on Environment and Development (CCICED) Special Policy Study Report. Major Green Technology Innovation and Implementation Mechanisms. Sep. 2020.  
中国环境与发展国际合作委员会. 专题政策研究报告. 重大绿色技术创新及其实施机制.

#### **UNPUBLISHED REPORTS**

1. Tan, M, S E Lee, S Rajendran, K Tharmaratnam, E Y Y Ng, K P Lam, S P Rao, K W Tham, S C Sekhar and K J Teh, Design Performance Evaluation for Jurong Town Corporation 'Model A' Prototype Multi-level Factory Complex. Singapore, 21 January 1997, 112 pp. (Technical Report prepared for Jurong Town Corporation).
2. Lee, S E, K W Tham, K P Lam, M Y L Chew and P Teo, Design and Construction of New Proposed URA Building With Regards to Total Building Performance Specification. Technical Report, Singapore

#### **BOOK REVIEW**

1. Lam, K P. Review of BAMBUS - BAMBOO (Institute for Lightweight Structure (IL), University of Stuttgart, West Germany), MIMAR, 28 (June 1988): 83-84. (Singapore)
2. Lam, K P. Review of Ken Yeang - The Skyscraper Bioclimatically Considered: A Design Primer, Singapore Architect, 196/97 (December 1997): 84-86.

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**ARTICLES IN  
NEWSPAPERS AND  
MAGAZINES/ WEB / TV**

1. Lam, K P, Assessing total building performance, INNOVATION - The Magazine of Research & Technology, National University of Singapore, Vol. 3 No. 2, 2002, pp. 14-15.
2. Huang, Y C, K P Lam and G Dobbs, A scalable lighting simulation tool for integrated building design. IBPSA News, Vol. 18, No. 2, October 2008, pp. 26 -33.
3. Harmonizing buildings with nature. Voice of Building Science, Shenzhen Institute of Building Research, China, No. 90, 11/2008, pp. 8-15.
4. Hospitals that seek to heal with nature. Straits Times 2 Jan 2018.  
<https://www.straitstimes.com/singapore/health/hospitals-that-seek-to-heal-with-nature>
5. Jenie, Asih, A new metric- the emergence of the WELL Building Standard in the region and its potential to help shape a healthier, more people-centric working culture. Cubes Issue 90, February - April 2018, Indesign Media Asia, MCI(P)063/01/2018, pp. 48-59.  
<https://www.indesignlive.sg/happenings/cubes-issue-90-get-work>
6. Urban Oasis - Shanghai Jiahui International Hospital. Healthcare Design, Vol. 18, No. 4, April 2018. HCDMAGAZINE.COM.  
<http://www.nxtbook.com/nxtbooks/healthcaredesign/201804/index.php#/12>
7. NUS launches Singapore's first net-zero energy building to be built from scratch. Straits Times, 30 Jan 2019.  
<https://www.straitstimes.com/singapore/environment/nus-launches-singapores-first-net-zero-energy-building-to-be-built-from>
8. Cool, comfortable homes for all. NUS School of Design and Environment launches Net-Zero Energy Building, a testbed for smart, green offices and homes. Straits Times, 30 Jan 2019.  
<https://www.straitstimes.com/singapore/education/cool-comfortable-homes-for-all>
9. Singapore gets its first 'zero energy' new building. Michelle Toh, CNN Business. 2 Apr 2019.  
<https://edition.cnn.com/2019/04/02/business/zero-energy-building-innovate-singapore/index.html>
10. CCTV: World Environment Day, featuring Finland, Switzerland and Singapore (SDE 4), 5 Jun 2019.  
<http://tv.cctv.com/v/v1/VIDE48Enn4n3RTtL1gPJm4D2190605.html?spm=C22284.P5Ttlwv9L2md.0.0>
11. Singapore's Net-Zero Energy Building - A roadmap for the future. CGTN, 25 Jun 2019.  
<https://news.cgtn.com/news/2019-06-25/Singapore-s-Net-Zero-Energy-Building-A-roadmap-for-the-future--HOsBd1P2BG/index.html>.
12. Green & Sustainable Buildings: Singapore zero-energy building: A prototype of sustainable design. CGTN TV broadcast, 26 Jun 2019.  
<https://news.cgtn.com/news/3349444e774d44464776c6d636a4e6e62684a4856/index.html>.
13. How do we design for Singapore's future? Straits Times, 9 Jul 2019.  
<https://www.straitstimes.com/singapore/education/how-do-we-design-for-singapores-future>.
14. Ensuring a greener built environment in Singapore: An interview with Professor Lam Khee Poh, Dean, School of Design and Environment, National University of Singapore. Singapore International Energy Week (SIEW) 2019, 16 October 2019.  
<https://www.siew.gov.sg/media/5qs-interviews/detail/ensuring-a-greener-built-environment-in-singapore-an-interview-with-professor-lam-khee-poh-dean-school-of-design-and-environment-national-university-of-singapore>.
15. Designing healthy cities – more than just good healthcare delivery. Channel News Asia, 21 May 2020.  
<https://www.youtube.com/watch?v=NvSdQZ2s8Vc&feature=youtu.be>.

- 
16. Sen, Kankon. Can cities be designed for better healthcare? Three ways Singapore's urban planners and architects are building a healthier city. Govinsider, 15 Jun 2020. <https://govinsider.asia/inclusive-gov/cities-designed-better-healthcare-lam-khee-poh/>.
  17. OpenBlue Innovation Center eyes APAC for smart building goals. FutureIoT, 25 Sep 2020. <https://futureiot.tech/openblue-innovation-center-eyes-apac-for-smart-building-goals/>
  18. Johnson Controls officially opens its S\$50 million Innovation Center in NUS. Eco Business, 28 Sep 2020. <https://www.eco-business.com/press-releases/johnson-controls-officially-opens-its-s50-million-innovation-center-in-nus/>
  19. Debunking a myth behind secure, affordable, sustainable energy. Business Times, Singapore, 22 Oct 2020. <https://www.businesstimes.com.sg/opinion/debunking-a-myth-behind-secure-affordable-sustainable-energy>
  20. Six Leaders from the Built Environment Sector recognised as Inaugural iBuildSG Distinguished Fellows. 14 Oct 2020. <https://www1.bca.gov.sg/about-us/news-and-publications/media-releases/2020/10/14/six-leaders-from-the-built-environment-sector-recognised-as-inaugural-ibuildsg-distinguished-fellows>
  21. 新加坡国立大学林棋波教授荣获 iBuildSG 杰出院士称号. 30 Oct 2020. [https://mp.weixin.qq.com/s/j\\_E-Cd01NARSVeddTCpE9Q](https://mp.weixin.qq.com/s/j_E-Cd01NARSVeddTCpE9Q)
  22. New common curriculum for incoming NUS engineering, design, and environment students. Straits Times, 22 Feb 2021. <https://www.straitstimes.com/singapore/parenting-education/nus-introduces-common-curriculum-for-incoming-design-and-environment>
  23. NUS SDE is first in Singapore to achieve the IWBI WELL™ Health-Safety Rating, and first worldwide in the educational sector. 10 Mar 2021. <https://news.nus.edu.sg/nus-sde-is-first-in-singapore-to-achieve-the-iwbi-well-health-safety-rating-and-first-worldwide-in-the-educational-sector/>
  24. NUS and Johnson Controls embark on S\$5 million research to co-create people-centric smart building systems. 16 Mar 2021. <https://sciencenewsnet.in/nus-and-johnson-controls-embark-on-s5-million-research-to-co-create-people-centric-smart-building-systems/>
  25. Financial institutions need to focus more on staff well-being, adopt new tech in post-Covid-19 world: Study. Straits Times, 23 Mar 2021. <https://www.straitstimes.com/singapore/financial-institutions-need-to-focus-more-on-staff-well-being-adopt-new-tech-in-post-covid>
  26. Tech Talk – Singapore's first net zero energy building. CNA 938 Life & Style with Daniel Martin, 12 Apr 2021. <https://www.facebook.com/CNA938/videos/464501744767875>
  27. Financing a sustainable future: Lessons learnt from the NUS issuance of green bonds. <https://news.nus.edu.sg/financing-a-sustainable-future-lessons-learnt-from-the-nus-issuance-of-green-bonds/>. 27 May 2021.
  28. Climate For Change: Closing The Loop. Channel News Asia Video on Demand, 26 Jul 2021. <https://www.channelnewsasia.com/watch/climate-change-closing-loop/circular-city-2066786>
  29. Nesler, C, K P Lam and B Lasternas, How to build smart, zero carbon buildings - and why it matters. Cities and Urbanization, World Economic Forum. 8 Sep 2021. <https://www.weforum.org/agenda/2021/09/how-to-build-zero-carbon-buildings/>
  30. Lam, K P and S K Lum, 为可持续发展的未来投资：从新加坡国立立大大大学发行行绿色色债券的经验谈起. International Well Building Institute, 11 Nov 2021. [https://mp.weixin.qq.com/s/nlMDaZqZxqBPBsit4Pr\\_Rg](https://mp.weixin.qq.com/s/nlMDaZqZxqBPBsit4Pr_Rg)
  31. Blundell, Lynne, The rise of buildings and places that help me thrive. How the WELL Building Standard sparked a movement. Chapter 3: National University of Singapore's commitment to positive impact on human health. The Fifth Estate (Tina Perinotto, Managing Editor) in collaboration with the International WELL Building Institute, 20 Dec 2021. <https://thefifthestate.com.au/library/ebooks/the->

[rise-of-buildings-and-places-that-help-me-thrive-ebook/?mc\\_cid=6924a25d89&mc\\_eid=0d9b759942](https://www.weforum.org/agenda/2022/03/singapore-methodical-approach-net-zero/)

32. Lam, K P, G Cossu and L Hee, Singapore's methodical approach to becoming a net-zero city. Cities and Urbanization, World Economic Forum. 7 Mar 2022. <https://www.weforum.org/agenda/2022/03/singapore-methodical-approach-net-zero/>

**TEACHING**

**PH.D. THESES  
ADVISING**

**CARNEGIE MELLON UNIVERSITY**

Primary Ph.D. advisor of the following students

Year	PhD Student	Project
2016-2019	Zhiang Zhang	A Reinforcement Learning Approach for Whole Building Energy Model Assisted HVAC Supervisory Control
2012-2017	Weili Xu	An Energy and Cost Performance Optimization Platform for Commercial Building System Design
2012-2017	Chao Ding	CFD Based Coupled Indoor and Outdoor Interactions (CIOI) for Building Natural Ventilation in Urban Environment
2012-2017	Adrian Zhun Min Chong	Bayesian Calibration of Building Energy Models for Large Datasets
2012-2017	Shalini Ramesh	Urban Energy Information Modeling: A framework to quantify the thermodynamic interactions between the natural and the built environment that affect building energy consumption
2010-2015	Jie Zhao	Design-build-operate Energy Information Modeling For Occupant-oriented Predictive Building Control
2009-2014	Rongpeng Zhang	Dynamic Optimization of Integrated Active-Passive Strategies for Building Enthalpy Control
2008-2013	Omer Karaguzel	Simulation-Based Parametric Analysis of Building Systems Integrative Solar Photovoltaics (SIPV)
2006-2012	Rui Zhang	Advanced Building Thermal Simulation Coupling of Finite Volume Method and Nodal System
2005-2011	Bing Dong	Integrated Building Heating, Cooling and ventilation Control
2004-2009	Yun Shang Chiou	An Occupant-Driven Integrative Household System for Residential Building Energy Simulation
2003-2011	Yi Chun Huang	An Integrated Scalable Lighting Simulation Tool

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2003-2008	Chaoqin Zhai	Performance Modeling of Desiccant Wheel Design and Operation
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Ph.D. Advisory Committee Member for the following students

Year	Ph.D. Student	Project
2010-2012	Xuesong Liu	Applying A Self-Managing Approach to Improve the Energy Efficiency in Operating and Maintaining HVAC Systems
2009-2014	Erica Cochran	Sustainable Schools and Neighborhoods: Impact of School Building Physical Characteristics and Neighborhood Attributes on Student Performance and Health
2005-2006	Vipul Sighvi	Machine Learning based Building Control Strategy (Lighting)
2003-2008	Ming Qu	Model-based Design and Operation of Advanced Solar Cooling and Heating System

**MASTER THESES ADVISING**

Primary Master Thesis advisor of the following students

Year	Master Student	Project
2013-2015	Xuan Luo	Performance Evaluation and Enhancement of a Probabilistic Occupancy Simulation Model
2013-2015	Liming Zhang	Urban Microclimate Modeling Integrating ENVI-met and GIS Platform
2011-2013	Boyuan Li	Building Ventilation Control system Design and simulation

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**PH.D. THESES ADVISING**

Primary Ph.D. advisor of the following student

Year	Ph.D. Student	Project
2020-2025	Eikichi Ono	Occupant-Centric Design for Functional and Thermal Zoning at Activity-Based Workspaces

**DESIGN THESES SUPERVISED**

Primary Design Thesis advisor

Year	Student	Project
2025-26	Andre Lim Jiang Fan	Care Without Walls: Care Threaded Through Daily Life
AR5805/AR5806/AR5807	Sze Zo Ey	Restoration within Movement: Reimagining Intersection of Mobility as Landscape of Nourishment

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2024-25 AR5805/AR5806/ AR5807	Joyann Ong Si Ya	FIKA: Lost Treasures: Co-Production Waste
	Tan Wen Xuan	EDEN – Mental Refuge in a Digitalised Urban Society
	Tan Yue Ren	Human - Nature Symbiosis: Breathing Life into Industrial Zone
2023-24 AR5806/AR5807	Hou Xinyao	Possibility of Urban Farming in Future HDB
	Ling Wei	The Soundscape of Queenstown - Addressing Hearing Loss and Acoustic Comfort
	Wang Zheng	Food Factory – From Farm to Table
2022-23 AR5806/AR5807	Jermaine Ho Jia Hui	A New Typology of Neighbourhood in Nature
	Lyu Meng Jie	Community Renewal Strategies for Ageing-in-Place in the Context of an Ageing Society
1997/98	Cho Wee Bin, Jeffrey	Project Delphinus
	Leong Mei Mei	Recycling and the Urban Built Environment
	Ong Tso Sheng	Neighbourhood Tele-commuting Centre
	Seow Lee Koon	Experimental Arts Station
	Siah Yeow Kia, Desmond	Re-examining the Neighbourhood Kindergarten-Space for the Child's Imagination
	Wong Kien Meng	MTV Factory
	Yeo Lee Pin	A Primary School for the Year 2000
1996/97	Chan Hwang Ling, Fanny	Day-care Centre for the Elderly
	Kam Leong Heng	Architecture for Information Accessibility - A Library Network
	Loo Chee Choon	Redefining the Community Centre - A Place for the Elderly
	Sian Chong Ping	Bridge-hotel
	Soh Kee Swee, Maureen	Marine Science Interpretive Centre
1995/96	Chum Tun Jang	Senai Regional Airport (Growth Triangle Singapore, Johor and Riau)
	Lee Chiow Hon	Proposed Headquarters for the Singapore Coast Guard
	Lew Kok Wai	Kuala Lumpur Heritage Centre
	Loh Hai Yew	Marine Ecology Research Centre

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	Tan Mui Jee, Eleanor	Botanical Centre in the Park
1994/95	Chan Beng Kiat	An Interpretive Centre on Ecology
	Koh Chin Chye	The Information and Auction Centre for the Arts
	Ooi Sean Yin	The City Gate - Ferry Terminal Penang
	Sam Shyan Yee	Infotech Park

**DISSERTATIONS SUPERVISED**

Supervised the following Master of Architecture and Bachelor of Architecture dissertations

**Master of Architecture dissertations**

Year	Author	M. Arch. Dissertation Title
2001/02	Low Soon Meng	Being comfortable in flats - Use of CFD in the analysis of comfort in flats
2001/02	Tham Ban Fatt	Impact of computer technology on architectural representation
2000/01	Foo Wan Ching	Assessment and prediction of daylight efficiency in side-lit space in Singapore.
2000/01	Lim Tian Ping	Morphology of skyscrapers - Balanced environment of the interior and exterior - A concept of total building
2000/01	Low Lee Onn, Mark	Thermal comfort in office spaces - Investigation into the parameters of design for thermal comfort in office spaces

**Bachelor of Architecture dissertations**

Year	Author	B. Arch. Dissertation Title
1998/99	Low Sok Hwee	Spatial determinism of social interaction patterns in public housing blocks design.
1998/99	Tse Pek Mun	Empirical study: Design intentions and experiential reality in Atria.
1997/98	Leong Mei Mei	(Media) Representation of place: An extensions and limitations of place in private condominiums in Singapore.
1997/98	Lim Chiong Lew Bernice	Commodification and consumption of the past in the built heritage and heritage tourism.
1997/98	Ong Tso Sheng	An alternative to the office tower.
1996/97	Chua Ter Yui Dawn	Evolution of the building envelope: its impact on the environment and on the quality of the interiors.
1996/97	Fatimah Akhtar	Inquiry into the role of specifications for total building performance.
1996/97	Kam Leong Heng	Architecture for the pre-school children.

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1996/97	Lee Sze Kai	River cities and their relationship to the rivers - a comparative study of Singapore and Perth.
1996/97	Liam Wai Tak	Changing office physical environment in response to the impact of office automation.
1996/97	Sim Choon Heok	Photo-graphically speaking on architecture and its represented image.
1996/97	Soh Ken Swee Maureen	Role of the structural frame in the architecture of the Barcelona Pavilion & Villa Savoye.
1996/97	Yeo Kwang Teck	Technology, the green issue, and architecture.
1995/96	Chia Teck Giap	Nature: The lifeblood of a sustainable built environment.
1995/96	Lee Chiow Hon	Architecture and the art of war.
1995/96	Loh Hai Yew	Seaquest: Concept of sea-based development as an alternative to land-based development.
1995/96	Lee Kok Wai	Kuala Lumpur: a study of a post-colonial city.
1995/96	Lim Li Kiang	Image of technology in Nicholas Grimshaw's British Pavilion Expo 1992.

**Bachelor of Science (Building) dissertations supervised**

Year	Candidate	B. Sc. Dissertation Title
2025/26	Lionel Tiong Jun Mian	Integrating Renewable Energy Strategies into Healthcare Facility Design: A Framework for Sustainable and Resilient Hospital Infrastructure
2025/26	Chin Hong Yi	Risk Management in Public Sector Projects in Singapore
2024/25	Audris Poon Li Yi	Application of digital twin in the conservation of heritage buildings in Singapore
2024/25	Giselle Toh Yu Xin	Evaluating energy efficiency of control systems within building management systems (BMS)
2023/24	Ang Jin En	Waste management process of Asian airports
2022/23	Cheok Jun Hao, Brendan Ian	The effects of radiant temperature affecting thermal comfort in commercial buildings
2022/23	Chong Yu Quan, Ryan	Facility management in Nursing Homes for Dementia Patients
2002/03	Koh Yaik Meng	The value of architectural design competitions in Singapore

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2002/03	Lee Sze Yong	Foreign workers and main-year entitlement
2002/03	Lee Tse Choon, Paul	Effect of HDB upgrading on its occupants
2002/03	Leong Chan Tong	Performance-based codes for fire safety in Singapore
2002/03	Tan Shin Hui, Denise	Urban heat island - a comparison of ambient temperatures

**THESES EXAMINED**

Examined the following graduate research theses

**Master of Science (Building Science) theses examined**

Year	Candidate	Master Thesis Title
2001	Liaw Wee Lin	Daylight distribution in Housing and Development Board residential blocks
1998	Lim Kok Hee	Lighting conditions and lighting power budget of offices in Singapore

**Master of Arts (Architecture) theses examined**

Year	Candidate	Master Thesis Title
2007	Soon Lay Kuan	Daylighting of Atria in Singapore

**Ph.D. theses examined**

Year	Candidate	Ph.D. Thesis Title
2014 (TU Wien)	Sokol Dervishi	Habilitation Commission- Architectural Lighting: Boundary Conditions and Computational Applications.
2006 (UC Cork)	Monjur Mourshed	Interoperability-based Optimization of Architectural Design
2001 (TU Delft)	Bay Joo Hwa, Philip	Cognitive biases in design: the case of tropical architecture
1999 (NUS)	Ling Yean Yng, Florence	Multi-attribute decision making model for evaluation and selection of consultants for Design-and-Build projects in Singapore
1999 (NUS)	Tan Chin Chong	Solar induced ventilation
1999 (NUS)	Zhong Qi	Building process modelling using product modelling methodology and its application to scheduling

**COURSES TAUGHT**

**CARNEGIE MELLON UNIVERSITY**

Fall 2015	48722 Building Performance Modeling 48116 Building Physics
Fall 2014	48722 Building Performance Modeling 48116 Building Physics
Spring 2015	48721 Building Controls and Diagnostics 48744 Computational Fluid Dynamics in Building Design

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Fall 2013	48722 Building Performance Modeling 48116 Building Physics
Spring 2014	48721 Building Controls and Diagnostics
Fall 2012	48722 Building Performance Modeling 48116 Building Physics
Spring 2013	48721 Building Controls and Diagnostics
Fall 2011	48722 Building Performance Modeling 48116 Building Physics
Spring 2012	48721 Building Controls and Diagnostics
Fall 2010	48722 Building Performance Modeling 48410 Environment II-Lighting 48413 Building Acoustics
Spring 2011	48410 Environment II-Lighting 48116 Building Physics 48599 Undergraduate Independent Study
Fall 2009	48722 Building Performance Modeling 48410 Environment II-Lighting 48413 Building Acoustics
Spring 2010	48405 Architecture Design Studio: Systems Integration
Fall 2008	48722 Building Performance Modeling
Spring 2009	48413 Building Acoustics 48721 Building Controls and Diagnostics 48405 Architecture Design Studio: Systems Integration
Fall 2007	48722 Building Performance Modeling
Spring 2008	48410 Acoustics and Lighting 48721 Building Controls and Diagnostics 48405 Architecture Design Studio: Systems Integration
Fall 2006	48722 Building Performance Modeling 48410 Acoustics and Lighting
Spring 2007	48721 Building Controls and Diagnostics
Summer 2007	48505 Summer Study Abroad – Design Studio in Hong Kong, China
Fall 2005	48722 Building Performance Modeling 48410 Acoustics and Lighting
Spring 2006	48721 Building Controls and Diagnostics
Summer 2006	48505 Summer Study Abroad – Design Studio in Hong Kong, China
Fall 2004	48722 Building Performance Modeling 48410 Acoustics and Lighting
Spring 2005	48721 Building Controls and Diagnostics 48405 Architectural Design Studio (Gates Center, Carnegie Mellon University)
Fall 2003	48722 Building Performance Modeling
Spring 2004	48721 Building Controls and Diagnostics

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2025/2026	PF4502 Green Development PF4101 Dissertation AR5805 Advanced Architecture Design (Thesis Part 1) AR5806 Architectural Design Research Report (Thesis Part 1) AR5807 Architectural Design Thesis (Thesis Part 2) AR5323 Well and Green Built Environment
2024/2025	PF4502 Green Development PF4101 Dissertation AR5805 Advanced Architecture Design (Thesis Part 1) AR5806 Architectural Design Research Report (Thesis Part 1) AR5807 Architectural Design Thesis (Thesis Part 2) AR5323/AR5953E Well and Green Built Environment
2023/2024	PF4502 Green Development PF4101 Dissertation AR5805 Advanced Architecture Design (Thesis Part 1) AR5806 Architectural Design Research Report (Thesis Part 1) AR5807 Architectural Design Thesis (Thesis Part 2) AR5953C Net Zero Carbon Building AR5323 Well and Green Built Environment
2022/2023	PF4502 Green Development PF4101 Dissertation AR5806 Architectural Design Research Report AR5807 Architectural Design Thesis
2002/2003	BS5203 Computational Design Support Tools BS5216 Lighting Design and Technology BU4102 Integrated Construction Technology AR3102 Architectural Design (studio consultation) AR6102 Architectural Design Thesis (studio consultation)
2001/2002	AR6141 M. Arch. Dissertation BS5203A Computational Design Support Tools
2000/2001	AR6141 M. Arch. Dissertation BS5216 Lighting Design and Technology BS5203A Computational Design Support Tools
1999/2000	AR5318 Intelligent Buildings AR4203 Research Methodology AR5513 Computational Design Support Tools
1998/99	AR4203 Research Methodology MBS206 Lighting and Technology
1997/98	AR501 Architecture and Urban Design 2 AR503 Dissertation AR4203 Research Methodology
1996/97	AR501 Architecture and Urban Design 2 AR503 Dissertation MBS206 Lighting and Technology
1995/96	AR401 Architecture and Urban Design 1 AR501 Architecture and Urban Design 2 AR402 Building Technology AR503 Dissertation

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AR305 Building Construction

1994/95	AR401 Architecture and Urban Design 1 AR501 Architecture and Urban Design 2 AR402 Building Technology
1988/89	AR105 Building Structures 1 AR305 Building Structures 3 AR304 Building Construction 3 AR201 Architecture Design 2
1987/88	AR105 Building Structures 1 AR305 Building Structures 3 AR304 Building Construction 3 AR301 Architecture Design 3
1986/87	AR105 Building Structures 1 AR304 Building Construction 3 AR301 Architecture Design 3
1985/86	AR105 Building Structures 1 AR304 Building Construction 3 AR201 Architecture Design 2
1984/85	AR105 Building Structures 1

**OTHER TEACHING  
AND ADVISORY  
APPOINTMENTS**

Senior Fellowship in Public Service (SFPS) Programme, Technology and Innovation Module, Lee Kuan Yew School of Public Policy, NUS. “Urban Science”. 18 Nov 2021.

MND-NUS Professional Certificate in Sustainability for the Built Environment. Module 3: Operational Carbon And Smart Facilities Management. “The Concept of Total Building Performance and Diagnostics”, 08 May 2023; 16 May 2024; 17 Nov 2025.

World Business Council for Sustainable Development (WBCSD) LEAP Programme, School of Continuing and Lifelong Education, NUS. “NUS As A Living Lab”. 23 Oct 2024; 28 Oct 2025

Inaugural Distinguished Senior Fellowship Programme, NUS. “Greener and Healthier Futures by Design: The Human-Centric Built Environment”. 03 Sep 2025.

**CONSULTANCY  
SERVICES**

**NBBJ, New York, NY 10006**

Jiahui International Hospital, Shanghai, China (October 2013 – October 2014).

**Syska Hennessy Group, New York 10036**

Jiahui International Hospital, Shanghai, China. (April – October 2014).

<https://healthcaredesignmagazine.com/projects/acute-care/photo-tour-shanghai-jiahui-international-hospital/>

**Tiong Seng Properties Pte. Ltd., Singapore**

Tianjin Eco-City Residential Development – Plot 12a – Park Tower, Jingshan Yuan. (September 2009 - July 2010).

<https://www.propertyguru.com.sg/property-management-news/2010/5/39778/tiong-seng-signs-4-5b-yuan-contract-for-tianjin-eco-city-development>  
<https://mr.ke.com/3dmvp/#/562279/305851?source=RESBLOCK>

**NBBJ, Columbus, OH 43204**

Koo Foundation Dr. Sun Yat-Sun Cancer Center, Taipei, Taiwan. (January – December 2009).

[https://www.cchsu.com.tw/c13\\_en.html](https://www.cchsu.com.tw/c13_en.html).

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**Phipps Conservatory, Pittsburgh, PA 15213**

Review of building performance modeling of the Center for Sustainable Landscape (CSL) project. (September 2007).

<https://www.phipps.conservatory.org/green-innovation/at-hippys/center-for-sustainable-landscapes-greenest-building-museum-garden-in-the-world>

**Imbue Technology Solutions Inc., Pittsburgh, PA 15108**

Building Energy Modeling of McDonald's Restaurant, Kennywood, Pittsburgh, PA. (July - August 2005).

**Corning Inc., Corning, NY.**

Design charrette team - W C Decker Engineering Building, Corning, New York. (July 2005).

**National Library Board, Singapore**

Won the international design competition with T R Hamzah & Yeang/Swan and Maclaren Architects team to design and building the new National Library Board (NLB) Building. (May 1999 - January 2000).

Appointed Consultant by the National Library Board on Total Building Performance evaluation of the design of the NLB Building as well as Coordinator of the technical evaluation team comprising 5 other consultant firms appointed by NLB in the tender evaluation process. (February 2000 -July 2003).

**Singapore Cricket Club**

Assessment of Proposed Remedial Works to the Premises of the Singapore Cricket Club. February 2001.

**Pidemco Land Ltd., Singapore**

A Total Building Performance Study of the CAPITAL TOWER (POSBank Tower). November 1998 - May 1999.

**Allegro Investments Pte Ltd, Singapore**

Investigation of Moisture and Mildew Problems at a Private Condominium Development. 18 September - 18 October 1998.

**C&S Construction Pte Ltd, Singapore**

Consultant on External Floor Finishes for Pierce Villa Project. 24 June - 21 July 1997.

**May Oh and Wee Advocates and Solicitors, Singapore**

Consultant and Expert Witness on DC Suit - Water Leakage Through Skylights at a Private Residential Property. 14 January - 7 February 1997.

**Cathay Organisation Pte Ltd., Singapore**

Collaborator on the "Cathay Building Redevelopment" Project. 24 May - 24 October 1996.

**Jurong Town Corporation, Singapore**

Consultant on the "Design Evaluation of the 'Model A' Prototype Multi-level Factory Complex". 9 September 1996 - 15 January 1997.

**Urban Redevelopment Authority, Singapore**

Consultant on the proposed URA Headquarters Building Project: (a) Specification of the concept of Total Building Performance in the Design & Build tender documentation. 15 August - 30 September 1995. (b) Tender evaluation, with specific reference to the implementation of Total Building. 18 January - 30 April 1996.

<https://www.nas.gov.sg/archivesonline/data/pdfdoc/1999112001.htm>

[https://eservice.nlb.gov.sg/flipviewer/data/booksg\\_publish/e/ed74dd3b-cc34-470a-9e3c-](https://eservice.nlb.gov.sg/flipviewer/data/booksg_publish/e/ed74dd3b-cc34-470a-9e3c-43fd2ec942c6/web/html5/index.html?opf=tablet/BOOKSG.xml&launchlogo=tablet/BOOKSG_BrandingLogo.png&pn=9)

[43fd2ec942c6/web/html5/index.html?opf=tablet/BOOKSG.xml&launchlogo=tablet/BOOKSG\\_BrandingLogo.png&pn=9](https://eservice.nlb.gov.sg/flipviewer/data/booksg_publish/e/ed74dd3b-cc34-470a-9e3c-43fd2ec942c6/web/html5/index.html?opf=tablet/BOOKSG.xml&launchlogo=tablet/BOOKSG_BrandingLogo.png&pn=9)

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**RSP Architects Planners and Engineers, Singapore**

Preparation of Technical Manual on Good Architectural Detailing Practice. 1 March - 30 April 1989.

Analysis of the Performance of Existing Architectural Details in the Office and preparation of a Technical Manual of Good Detailing Practice. 15 June - 30 June October 1988.

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