

Edward Y Y Ng

BA(Hons) Nott, BArch(Distinction) Manc, MBA(Distinction) Warwick, PhD Cantab Architect (UK and HK), RIBA, HKIA, IESNA, MSLL, FHKMetS, FRMetS, FRSA

EDUCATION

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- 1983 **BA (1st Class Hons), in Architecture an Environmental Design**, Department of Architecture and Environmental Design, Nottingham University, UK.
- 1986 **BArch (Distinction in Design, Distinction in Dissertation)**, School of Architectural Studies, Manchester University, UK.
- 1991 **PhD in Architecture**, Department of Architecture, Trinity College - Cambridge University, UK.
- 2002 **MBA (Distinction)**, Warwick Business School, Warwick University, UK.

EXPERIENCES

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- 1988 - 1991 **Design Architect**, Yakeley Associate Architects, Cambridge
- 1991 - 1994 **Lecturer**, School of Architectural Studies, Sheffield University
- 1994 - 1995 **Visiting Scholar**, Department of Architecture, MIT.
- 1995 - 1999 **Lecturer & Senior Lecturer**, School of Architecture, National University of Singapore
- 1999 - 2002 **Associate Professor**, School of Architecture, CUHK
- 1999 - 2011 **Professor**, Department of Architecture, CUHK
- 2011- 2014 **Professor of Architecture**, School of Architecture, CUHK
- 2014- **Yao Ling Sun Endowed Chair Professor of Architecture**, School of Architecture, CUHK

Selected PROFESSIONAL MEMBERSHIPS

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- 2009- **Fellow**, Royal Meteorological Society (FRMetS), UK
- 2003- **Fellow**, Royal Society of Arts (FRSA), UK
- 2005- **Member**, Hong Kong Institute of Architects (HKIA), Hong Kong
- 2003- **Fellow**, Royal Society of Arts (FRSA), UK
- 1999- **Member**, Illuminating Engineering Society of North America (IESNA), USA
- 1988- **Chartered Architect**, Royal Institute of British Architects (RIBA), UK

Selected AWARDS

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- 2011 Jury Commendation for Innovation, **Asia Pacific Heritage Awards**, UNESCO
- 2009 **RIBA International Awards**, Royal Institute of British Architects (RIBA), UK.
- 2008 Jury Special Award in **Architect Regional Council of Asia (ARCASIA Awards)**
- 2007 Runner up, Royal Institute of British Architects (**RIBA Research Awards 2007**)
- 2006 **RIBA International Awards**, Royal Institute of British Architects (RIBA), UK

Selected honorary academic APPOINTMENTS

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- Adjunct Professor**, Xi'an Jiaotong University, Xi'an, China
- Visiting Professor**, Xi'an University of Architecture and Technology, Xi'an, China
- Editorial Board Member**, International Journal of Architectural Science Review, Australia
- Editorial Board Member**, Journal of Tropical Architecture, SCUT, China.
- Editorial Board Member**, International Journal of Lighting Research and Technology, UK

Selected Professional APPOINTMENTS

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- 2014-17 **Board Director**, International Association of Urban Climate
- 2012-18 **Board Director**, Passive Low Energy Architecture Association
- 2010- **BEAM Faculty**, Hong Kong Green Building Council
- 2010- **Member**, Joint Project Advisory Committee, Lawrence Berkeley National Laboratory
- 2008 - **Honorary Scientific Advisor**, Hong Kong Observatory.
- 2005 - **Executive Committee Member**, Hong Kong Meteorological Society, HK.

Design projects EXHIBITED

Around the world including Hong Kong; Beijing and Shanghai, China, New York, USA; Frankfurt, Germany; London, UK; Milan and Torino, Italy; Melbourne, Australia; Seoul, Korea; Singapore; Copenhagen, Denmark; Paris, France; Venice Biennale, Italy; and so on.

Examples of RESEARCH PROJECTS

Parametric studies of urban morphologies of high density cities and their air ventilation performance under neutral and unstable atmospheric conditions using advanced LES

A Study of Impact of Building Envelope on Urban Outdoor Thermal Environment

A Pilot Study using Geo-stationary Satellite Images to Predict Ground Global Illuminance under Sub-tropical Sky Conditions for Better Daylight Design of Buildings

Turbulence Structure in the Urban Toughness Layer - LES Reference Studies and Comparison with Wind Tunnel, Scale Model and Field Measurements

Macau Urban Climatic Map Study – The 2nd Stage Study

Recent PUBLICATIONS

Ho, J.C.K., Ng, E. and Chan P.W. (2014). Predicting hourly Hong Kong Representative Sky from Typical Meteorological Year data for dynamic daylighting simulation. *Lighting Research and Technology*. 0: 1–10. doi: 10.1177/1477153514545905

Yuan, C; Ren C and Ng E. (2014) "GIS-based surface roughness evaluation in the urban planning system to improve the wind environment - A study in Wuhan, China". *Urban Climate* 10, 585-593. doi: 10.1016/j.uclim.2014.06.005.

Yim, S. Fung, J and Ng, E. (2014). An assessment indicator for air ventilation and pollutant dispersion potential in an urban canopy with complex natural terrain and significant wind variations. *Atmospheric Environment* vol.94 pp.297-306. 2014.05.15.

Yuan, C. and Ng, E. (2014). Improving air quality in high-density cities by understanding the relationship between traffic air pollutant dispersion and urban morphologies, *Building and Environment*, 71, 245–258.

Lau KL, Ng E, (2013). An Investigation of Urbanization Effect on Urban and Rural Hong Kong using a 40-year Extended Temperature Record, *Landscape and Urban Planning* Volume 114, June 2013, Pages 42–52.

Goggins, W.B., Ren, C., Ng, E., Yang, C., & Chan, E.Y.Y. (2013). Effect modification of the association between meteorological variables and mortality by urban climatic conditions in a tropical city: Kaohsiung, Taiwan. *Environmental Health Perspectives*. [P136446] doi:10.1186/1476-069X-12-59. 2013.07.

Nichol J, To PH and Ng E, (2013). Temperature projection in a tropical city using remote sensing and dynamic modelling, *Climate Dynamics*, April 2013, 9 pgs, doi:10.1007/s00382-013-1748-2

Letzel, M.O., Helmke C., Ng, E., An, X., Raasch, S., Lai, A., (2013). LES Case Study on Pedestrian Level Ventilation in Two Neighborhoods in Hong Kong, *Meteorologische Zeitschrift* Vol. 21, No. 6, 575–589 (December 2012) doi: 10.1127/0941-2948/2012/0356

Ren, C., Lau, K.-I., Yiu, K.-p., & Ng, E. (2013) The Application of Urban Climatic Mapping to the Urban Planning of High-Density Cities: The Case of Kaohsiung, Taiwan, *Cities* Vol 31, April 2013, Pages 1–16 doi:10.1016/j.cities.2012.12.005

Lau, K., Ng, E. and He, J., (2013) Preferred Solar Access in High-density Living Environment. *Lighting Research and Technology*, 45:3, 317-330. doi:10.1177/1477153512464218

Recent CONSULTANCY projects

AVA Consultant, Air Ventilation Assessment Submission –Air Ventilation Assessment Submission – Cat A. Expert Evaluation (PLNQ 37/2007), (PLNQ 35/2009) & (PLNQ 56/2012)

Consultant, Consultancy for Lighting Study of 1/F Main Block APB Centre (Quotation No.: ADG03/2012), Architectural Services Department HKSAR Govt

Expert Reviewer, Building Technologies Program Peer Reviews – Cool Roof Reviewer (PPM 5.10.01.05), Department of Energy, USA Govt. (via. Leonardo Technologies, Inc.)

Air Ventilation Assessment Advisor, CE 35/2006 (CE) Kai Tak Development Engineering Study cum Design and Construction of Advance Works – Investigation, Design and Construction, Maunsell Environmental Management Consultants Ltd. Study fir Civil Engineering and Development Department HKSAR.