

## LEE SIEW EANG (Dr)

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*PhD, Heriot-Watt University; MSc, Heriot-Watt University; BSc (Building) (Hons.), Heriot-Watt University, UK.*



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### EDUCATIONAL QUALIFICATIONS:

- BSc (Building)(Hons), 1977, Heriot-Watt University, UK
- MSc, 1979, Heriot-Watt University, UK
- PhD 1985, Heriot-Watt University, UK

### EMPLOYMENT RECORD:

- Research Associate, Science and Engineering Research Council Grant, UK; and Heriot-Watt University, UK (1981-1984)
- Lecturer, MSc (Acoustics), Heriot-Watt University, UK (1984-1985)
- Lecturer, Department of Building, NUS (1985-1989)
- Senior Lecturer, Department of Building, NUS (1989-1998)
- Associate Professor, Department of Building, NUS (1988 to present)

### ADMINISTRATIVE LEADERSHIP:

- Deputy Head (Research & Laboratory Coordination), Department of Building (1986-1992)
- Founding Director, Centre for Building Performance and Construction (1991-1992)
- Vice Dean (Research), School of Design and Environment (1992-2000)
- Founding Director, Centre for Total Building Performance (1999-2013)
- Deputy Head (Research), Department of Building (2010-2013)
- Co-Director, Building Energy Efficiency Hub@NUS, Department of Building (2013-2016)
- Member, Board of Directors, National Environment Agency, Ministry of the Environment and Water Resources (2006-2008)
- Member, Board of Directors, Singapore Green Building Council (Founding) (2009-2013)

#### **PROFESSIONAL/CONSULTING ACTIVITIES:**

- Chairman, Advisory Committee, Singapore Environment Institute, National Environment Agency (2006-2008)
- Chairman, HDB Committee for Environmental Sustainability (2008-2011)
- Chairman, R&D Work Group, Inter-Ministerial Committee for Climate Change, Ministry of the Environment and Water Resources (2004-2006)
- Chairman, Board of Judges, ASEAN Energy Efficient Building Best Practices Awards, ASEAN Energy Ministers' Meeting (Annual Awards) (2001-2003)
- Chairman, Technical Coordination Committee, Singapore Green Building Council (2009-2013)
- Member, Expert Member for Project Selection Committee, EU-ASEAN Energy Facility Programme (2004-2006)
- Member, Green Mark Advisory Committee, Building and Construction Authority (2005-2016)
- Member, Technical Evaluation Panel, L2NIC Programme, Ministry of National Development (2015-2016)
- Chairman, Technical Sub-Committee on Acoustics, Green Mark Version 2015 Technical Committee, Building and Construction Authority (2015-2016)
- Member, Building Energy Benchmarking Report (Annual) Technical Committee, Building and Construction Authority (2013-2016)
- Member, Energy & Emissions Modelling and Technology Assessment Group, National Research Foundation, PMO (2013-2016)
- Member, Technical Committee for Review of Boundary Noise Limits Regulations, National Environment Agency (2016)
- Member, Energy Services Company (ESCO) Accreditation Committee, jointly hosted by the National Environment Agency and the Building and Construction Authority (2007-2016)
- Consultant to the World Bank, Green and Energy Efficiency Consultant for the Chongqing Urban Renewal and Integration Programme (9 hospital developments) (2011-2013)
- Consultant, ECO City Expert Group Keppel Corp for Tianjin Eco-City, China (2005-2007)
- Lead Consultant, Total Building Performance Consultants for the National Library Building Development Project, Ministry of Information and the Arts (1999-2005)
- Lead Consultant, Total Building Performance Consultants for the Khoo Teck Puat Hospital Project, Ministry of Health (2006-2010)

#### **UNDERGRADUATE TEACHING:**

- PF1104 Environmental Science for Building
- PF3302 Energy Management
- PF4101 Dissertation studies

#### **GRADUATE TEACHING:**

- BPS 5111 Integrated Building Design
- BPS 5222 Indoor Environmental Quality
- BPS 5225 Building Energy Audit and Performance Measurement and Verification

## **RESEARCH INTERESTS:**

- Building energy efficiency performance measurement, evaluation and benchmarking
- Building and district levels energy dashboard development
- Development of automated energy auditing system
- Green building assessment method development
- Green building products assessment and evaluation
- Building acoustics and noise control for tropical cities
- Environmental and transportation noise studies

## **SELECTED PUBLICATIONS:**

- Lee, S.E., Alam, S.M., Alan, T. and Tiong, S.T. An investigation of community noise in high-rise residential environment. *Journal of the Acoustical Society of America*. 127(6), 3511-3518, 2010, USA
- Alam, S.M., Kua, H.W. and Lee, S.E. A total building performance approach to evaluate building acoustics performance. *Journal of Architectural Science Review*, 53(2), 213-223. 2010, USA
- Chirag Deb, Siew Eang Lee, Junjing Yang, Mattheos Santamouris: Forecasting diurnal cooling energy load for institutional buildings using Artificial Neural Networks. (In Press); *Energy and Buildings*; Elsevier, 2015
- Dong\*, B, S E Lee and H S Majid, "A Holistic Utility Bill Analysis Method for Baselineing Whole Commercial Building Energy Consumption in Singapore". *Energy and Buildings*, 37, no. 2 (2005): 167-174. (Switzerland)
- Dong\*, B, C Cao and S E Lee, "Applying support vector machines to predict building energy consumption in the tropical region". *Energy and Buildings*, 37, no. 5: 545-553, 2005, (Switzerland).

## **AWARDS:**

- Scottish Universities Research Scholarship (1977 – 1980)
- William Watson Travel Fellowship (1979)
- Science and Engineering Research Council Grant, U.K (1980-1984)
- British Council Fellowship (Imperial College) (1996)
- ASEAN Energy Ministers' Award for Excellence in Energy Management (2006)
- Singapore President Awards for Excellence in Design: Khoo Teck Puat Hospital Project (2011)
- Ministerial Inaugural R&D Award (Principal Investigator for Zero Energy Building @BCA Academy) (2011)