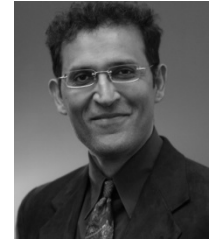


Dr Nirmal Kishnani

Appointment: Senior Lecturer
Chief Editor of Future Arc Journal
Affiliation: Department of Architecture,
National University of Singapore
Contact: +61 6516 3527, akintk@nus.edu.sg



A. RESEARCH AREAS

- Environmental Psychology – Perception and Behaviour in the Built Environment
- Climate, Comfort and Consumption
- Sustainable Buildings: Process and Outcomes

B. TEACHING AREAS

- Sustainability in the Tropical Context
- Climate-Responsive Design (passive and low-energy systems)
- Human Comfort and Energy Demand

C. EDUCATIONAL QUALIFICATIONS

- 2001: Doctor of Philosophy, Curtin University of Technology (Australia)
- 1992: Master of Science (Environmental Psychology), University of Surrey (United Kingdom)
- 1988: Bachelor of Architecture (with Honours), National University of Singapore

D. PROFESSIONAL EXPERIENCE: ACADEMIC

- 2007-ongoing: Senior Lecturer, Department of Architecture, National University of Singapore
- 1998-2007: Guest lecturer and part-time design tutor: National University of Singapore, Curtin University of Technology (Perth, Australia), the Singapore Polytechnic and the National Institute of Education (Singapore).

E. PROFESSIONAL EXPERIENCE: INDUSTRIAL

- 2008-2009: Member of BCA's International Panel of Experts on Sustainability,
- 2008-2009: Member of Singapore Institute of Architects Green Committee,
- 2008-2009: Technical Advisor: Vietnam Green Building Council on LOTUS rating tool,
- 2008-2009: Member of BCA Green Mark Committee,
- 2008-2010: Jury Chair for BCI Green Award
- 2007-2008: Advisor: Eco-City in Tianjin, China, under Keppel Corporation, Singapore,
- 2008-2009: Jury Chair for FuturArc Prize (Green Design Competition),
- 2006-2007: Member of BCA's Energy Modeling Technical Committee,
- 2006: Member of Technical Evaluation Committee for the International Masterplan Design Competition for Gardens by the Bay, Singapore
- 2005: Chairman of Design and Delivery of Green Buildings, 2005, Strategic Thinking for Asia. Regional seminar held in Singapore at the Holiday Inn Park View, 7-8 April,
- 2003-2004: Member of NUS -ThyssenKrupp Solar Research Advisory Circle,
- 2002-2007: Established and managed CPGreen, a Green design unit within CPG Consultants Pte Ltd that operationalised Green principles at the drawing board using simulation tools and virtual models to assess resource consumption, climate response and occupant comfort. CPGreen operated Asia-wide, engaged by architects, engineers, contractors and developers for a wide range of projects which included Gardens by the Bay (Singapore), Asian Development Bank (Manila, the Philippines) and the Van Giang Commercial Masterplan (Hanoi, Vietnam)
- 1988-1998: architect, based in Singapore; portfolio includes Changi Airport, the Institute of Public Administration and Management (Civil Service College) and public schools.

F. SELECTED PUBLICATIONS MOST CLOSELY RELATED TO THE CURRENT RESEARCH PROJECT

- 2008: Paper at the XXIII World Congress of Architecture – *Green Building Market Survey* – in Turin, Italy (July 2, 2008)
- 2005: Speaker at Regional Seminar on Design and Delivery of Green Buildings, 2005, Strategic Thinking for Asia, Singapore: “*The Making of Green Buildings*” (April 7-8, 2005)
- 2005: Invited lecture at ECADI, Shanghai, China: “*What is a Green Building – Principles of Greening*” (March 3, 2005)

G. SELECTED OTHER PUBLICATIONS

- 2007-ongoing: Appointed Chief Editor of FuturArc Journal
- 2002-2007: Free lance writer. Primary focus on Green buildings, articles in the Singapore Straits Times, Singapore Architect and D+A magazine
- 1992-1998: Specialist writer on design for the Singapore Business Times. Interviewed prominent designers: Sir Norman Foster, Christian Portzamparc and Tay Kheng Soon, covering topics ranging from tropical architecture in Southeast Asia to the new airports in Asia.
- 2005-2009: Conceptualized and authored ‘*Hyderabad Airport: Making of an Indian Aviation Icon*’, published by GHIAL Pte Ltd, accounting the design and commissioning of Rajiv Gandhi International Airport in Hyderabad, India
- 2000-2002: Conceptualized and authored *Changi by Design* for Page One Publishing, accounting the design and development of Singapore’s Changi Airport

H. PREVIOUS AND CURRENT RESEARCH GRANTS IN RELATED AREAS

- Benchmarked energy and water consumption of campus buildings generating performance indices for buildings within the National University of Singapore
- Assessed energy demand of large-volume cooled spaces in hot-humid conditions with implications on atrium spaces in parts of Asia
- Surveyed workplace comfort, focusing on occupant nationality as a variable affecting comfort expectations
- Post-occupancy evaluation of Green Mark-rated buildings in Singapore (ongoing) – a large scale survey of Green building performance.

I. RECENT COLLABORATORS

- Presented papers at key Green building congresses in Manila, Hyderabad, Bangalore, Taipei, Kaohsiung and Shanghai.
- Attended key Green building gatherings: Sustainable Building (SB) conferences – Vancouver (1998), Oslo (2002), Tokyo (2005), Melbourne (2008) – and Greenbuild, Denver (2006).
- Invited speaker at two World Green Building Council round table discussions (Hyderabad, 2004 and Taipei, 2006)
- Organised seminar in 2005 on Green Design for Asia with speakers from Australia, Hong Kong, India and Malaysia.

J. GRADUATE ADVISORS

Neville D’Cruz – Curtin University of Technology
Elizabeth Karol – Curtin University of Technology
Ken Yeang – Malaysia and UK-based architect

K: OTHERS

Sustainable Developments

- 2007: HortPark Prototype Glasshouses Design, Singapore. Design of several glasshouses at the Singapore Horticultural Park, intended as research prototypes for larger cool conservatories to come within Gardens by the Bay. The project was awarded a Gold Plus under the Singapore Green Mark rating

- 2006: Van Giang Tourism and Commercial Development, Hanoi, Vietnam. Extensive study of solar exposure and wind flow across three precincts within the masterplan. Findings were used to make urban design proposal climate-sensitive.
- 2006: Asian Development Bank Building, Manila, Philippines. Retrofit of two existing atria deemed to have poor natural light levels, resulting in the design and construction of large mirror system for daylight access, one of first of its kind and scale in Asia.
- 2005: Singapore History Museum Extension, Singapore. Focus on the new atria of the Museum, seeking a balance between daylight access and solar load, energy consumption and occupant comfort

Design Competition Awards

- Alexandra Hospital @ Yishun (Singapore)
- NUS High School (Singapore)
- Yong Loo Lin School of Medicine (Singapore)
- Wuhan Airport (Wuhan, China)