



## IBPSA Australasia 2018 Simulation Seminar Series

### THERMAL COMFORT AND ENERGY EFFICIENCY

Exploring all aspects of comfort with respect to indoor environment

*Are all artificially created indoor environments the same from comfort perspective?*  
*Are there combinations of natural and artificial means to attain a good indoor environment specifically to minimise energy and impact on climate change?*  
*Are Energy Efficiency and Indoor Comfort Mutually Exclusive?*

These and associated discussion on indoor comfort will be addressed by:



Ashak



Mahsan



Dennis

- Ashak Nathwani AM – Honorary Associate - School of Architecture University of Sydney,
- Mahsan Sadeghi, PhD (Ventilation & Thermal Comfort)– Architect Advisor Sydney - Renson – Creating healthy spaces, and
- Dennis Lee – Head of Technical Standards at NABERS.

Please join IBPSA Australasia for the next seminar in our 2018 series at NDY Sydney.

Date: Thursday, 9 August 2018

Time: Doors open at 5:30 PM, presentations will commence at 6:00 PM

Location: Norman Disney & Young, Level 1, 60 Miller Street, North Sydney

Tickets: \$10, Register via [Eventbrite](https://www.eventbrite.com)

Light refreshments will be provided, courtesy of NDY.

Further details:

<http://ibpsa-australasia.org>

## Further Details:

### LAURA'S COMFORTABLE EXPERIENCE

Ashak Nathwani AM and Mahsan Sadeghi, PHD

Exploring all aspects of comfort with respect to indoor environment. Are all artificially created indoor environments the same from comfort perspective? What if there were natural means to create indoor comfort conditions? Are there combinations of natural and artificial means to attain a good indoor environment specifically to minimise energy and impact on climate change?



Ashak has been an Honorary Associate for 7 years and is presently an Adjunct Senior Lecturer in Facilities Management, Mechanical Services and Asset Management at the School of Architecture, Design & Planning at the University of Sydney. He designed and project managed the building services of the unique Indoor Environment Quality (IEQ) Laboratory and contributed to establishment and launch of the new Degree – Masters of Architectural Science - High Performance Buildings. Prior to joining the University in 2011, Ashak was in the Property Industry for 39 years of which he was with Norman Disney & Young (NDY) for 33 years - where he was a Director for 16 years. He was involved with several iconic projects and, as NDY Environment Director, contributed in the field of sustainability. Ashak is a Director of ARBS Foundation and has been a PCA OFM Committee Member since 1995. He was awarded Member of Order of Australia (AM) in the Queen's Honours List 2017 for significant services to the Ismaili Community in Australia, to tertiary education in areas of sustainable design, and to engineering.



Mahsan Sadeghi is Architect Advisor at Renson Ventilation NV (HQ Belgium). She holds PhD degree from University of Sydney's School of Architecture, Design, and Planning in natural ventilation and thermal comfort. Her research investigated the impact of increased indoor air movement on human thermal comfort in a naturally ventilated apartment building in Australian residential context; the associated energy savings and carbon footprint reduction out of the application of a new natural ventilation system was also addressed in her studies. Mahsan holds a master degree in Architecture and has been working in architectural practice and teaching architectural courses for over 7 years.

### Are Energy Efficiency and Indoor Comfort Mutually Exclusive?

*Dennis Lee, NABERS*



One of the myths of energy efficiency in buildings is that it compromises the comfort of the occupant, such as turning down ventilation rates or changing the air conditioning to save energy. This presentation explores the basic principles of energy efficiency and how it relates to indoor comfort through analysis of NABERS Energy and NABERS Indoor Environment (IE) ratings. NABERS ratings are a proven metric for measuring both energy efficiency and indoor environment and results will be presented for buildings that have both an Energy and IE rating.

Dennis Lee is Head of Technical Standards at NABERS, and been leading the technical team for over 4 years. A chemical engineer by training and having worked in sustainability in the built environment for over 12 years delivering water and energy efficiency programs, Dennis has an in-depth understand of the mechanical services within buildings, energy efficiency of these services and how they deliver thermal comfort. Dennis has most recently been involved in the development of the carbon neutral standard for buildings and the NABERS for Apartment Buildings rating.