

## WORKSHOP: Ventilation for Indoor Air Quality and Cooling

<b>Date</b>	Friday, 23 March 2018
<b>Time</b>	9am – 5pm
<b>Venue</b>	UNSW CBD Campus, Level 7, 1 O'Connell Street Sydney
<b>Aim</b>	To inform Australian researchers and engineers about recent developments in the field of ventilation technologies. The workshop will give international experts visiting Australia the opportunity to present global research to their local counterparts. The workshop will showcase research that determines optimum ventilation levels and the development of advanced ventilation technologies to promote comfort, energy conservation and better indoor environmental quality in buildings.
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Discuss the optimum use of natural, mechanical and hybrid ventilation technologies to promote health, productivity, IAQ, energy conservation and thermal comfort</li> <li>• Present recent achievements in Australia in terms of ventilation technologies</li> <li>• Provide a forum for international and local experts to discuss the future of ventilation technologies for the building sector</li> </ul>

### PROGRAM

<b>8.30</b>	<b>Tea and coffee provided on arrival</b>	
<b>9.00</b>	Welcome and acknowledgement of country – <b>Scientia Professor Deo Prasad AO</b> , CEO CRCLCL	
	<b>SESSION 1: VENTILATION FOR INDOOR AIR QUALITY</b> <b>Chair: Peter Wouters, Manager, International Network for Information on Ventilation and Energy Performance and Operating Agent – AIVC (Belgium)</b>	
<b>9.10</b>	Interactive voting	Peter Wouters, Operating Agent – AIVC (Belgium)
<b>9.25</b>	International Energy Agency Technology Collaboration Programme on energy in buildings and communities	Stanford Harrison, Director – Commercial Buildings, Department of the Environment and Energy
<b>9.35</b>	What do NABERS ratings tell us about ventilation and IAQ in Australian buildings?	Carlos Flores – National Program Manager, NABERS
<b>9.45</b>	ASHRAE activities on ventilation for indoor air quality	Bjarne Olesen – ASHRAE President (Denmark)
<b>10.05</b>	Specific AIVC activities on ventilation and indoor air quality	Peter Wouters –

		Operating Agent AIVC (Belgium)
10.25	Evaluation and Future Direction of Next Generation Automated Fault Detection Tools in Australia	Josh Wall – CSIRO Research Project Leader, Intelligent Building Controls
10.45	<b>Morning Tea</b>	

	<b>SESSION 2: VENTILATION FOR INDOOR AIR QUALITY AND HEALTH</b> <b>Chair: Melanie Pill - Senior Policy Officer, Commercial Buildings Appliance and Building Energy Efficiency Branch, Department of the Environment and Energy</b>	
11.05	Why do we care about IAQ Metrics?	Max Sherman – Senior Scientist, Lawrence Berkeley National Laboratory (USA)
11.25	Heat stress resistance in the Nationwide House Energy Rating Scheme	Gertrud Hatvani-Kovacs – PhD Candidate, CRC for Low Carbon Living
11.45	Methodology to assess exposure to cooking emissions in combination with the efficiency of range hoods	Wouter Borsboom, TNO – Delft University (Netherlands)
12.05	Ventilation and Airborne Infection Control	Jianlei Niu – Professor of Building, Environment and Energy, University of Sydney
12.25	Video Presentation: Renson Ventilation - Creating Healthy Spaces	Mahsan Sadeghi – Architect Advisor, Renson
12.35	<b>DISCUSSION</b> <b>Moderator, Carlos Flores, National Program Manager, NABERS</b>	
1.00	<b>LUNCH</b>	
	<b>SESSION 3: VENTILATION FOR COOLING</b> <b>Chair: Willem de Gids, VentGuide Consultant (Netherlands)</b>	
1.45	Comfort Performance of Residential Wind Catchers in Sydney	Professor Richard de Dear – University of Sydney and Mahsan Sadeghi – Architect Advisor, Renson
2.05	Recommended criteria for thermal comfort and indoor air quality in international standards (ASHRAE-ISO-CEN)	Bjarne Olesen – ASHRAE President (Denmark)
2.25	Managing Summer Cooling Loads in Code Compliant Australian Housing: A Cost Benefit Analysis for Mass Market Implementation of Purge Ventilation Technologies	Jesse Clarke – Chairman of AIRAH Special Technical Group for Building

		Envelope Physics
2.45	Video presentation: BRINK climate systems	Vince Russo – Plus Energy Living
2.50	<b>DISCUSSION</b> Moderator, Carlos Flores, National Program Manager, NABERS	
3.05	<b>AFTERNOON TEA</b>	
	<b>SESSION 4: GLOBAL PERFORMANCE OF BUILDINGS AND THE ROLE OF VENTILATION</b> Chair: Max Sherman, Senior Scientist, Lawrence Berkeley National Laboratory, USA	
3.25	Cooling Our Future	Mat Santamouris – Professor of High Performance Architecture, UNSW
3.45	Measuring airtightness of dwelling with a domestic ventilation system	Willem de Gids – VentGuide Consultant, (Netherlands)
4.05	Ventilation and airtightness: European experiences of on-site performances and approaches for improvement	Peter Wouters, Operating Agent – AIVC (Belgium)
4.25	Interactive Voting	Peter Wouters, Operating Agent – AIVC (Belgium)
4.50	CLOSING REMARKS	Sean Maxwell – Technical Manager, Pro Clima
5.00	<b>CLOSE</b>	



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