



19th AWES Workshop & WIND LOADING DAY

EVENT PROGRAMME (as at 23-3-18)



DAY 1	WIND LOADING DAY
0815- 0900	Registration
0900 - 0910	Welcome & Introduction -
0910 – 1000	Session 1 - Local standards & guides I (AS/NZS 1170.2, AS 4055) <i>Presenter: John Ginger</i>
1000 - 1030	Session 2 – Local standards & guides II (AS/NZS 1170.0, AS3995, AS/NZS 7000, AWES HB-001) <i>Presenter: John Holmes</i>
1030 - 1050	Morning Tea
1050 - 1130	Session 3 – International standards and guides <i>Presenter: Graeme Wood</i>
1130 - 1210	Session 4 – Boundary-layer wind tunnel tests & the AWES QA Manual <i>Presenter: Matthew Glanville</i>
1210 - 1240	Session 5 – Large-scale and full-scale wind-tunnel testing <i>Presenter: David Burton</i>
1240 - 1340	Lunch & networking
1340 - 1420	Session 6 – Structure and cladding testing <i>Presenter: David Henderson</i>
1420 - 1500	Session 7 - Wind effects on pedestrians <i>Presenter: Harry Fricke</i>
1500 - 1530	Afternoon Tea
1530 - 1610	Session 8 – Human response to building vibrations <i>Presenter: Kenny Kwok</i>
1610 - 1640	Session 9 – Application of computational fluid dynamics to wind engineering <i>Presenter: Seifu Bekele</i>
1640 - 1720	Session 10 - Discussion (Questions and Answers) <i>All Presenters</i>
1720	Close
1800 - 1930	Welcome Function for AWES19 - <i>Peppers Resort</i>



DAY 2	
0800 - 0850	Registration
0850 - 0900	Welcome - Matthew Mason
0900 - 1055	Chair – John Holmes co-Chair – Harry Fricke
0900 - 0940	Session 1 – Invited – Severe local windstorms – a meteorologist’s perspective <i>Presenter: Harald Richter(Bureau of Meteorology)</i>
0940 - 0955	Session 2 - Design considerations and implication of stack effect in high-rise developments in hot and arid climates <i>Presenter: Kevin Peddie</i>
0955 - 1010	Session 3 - Effects of density and source location of pollutant particles on pollution dispersion around high-rise buildings <i>Presenter: Erfan Keshavarzian</i>
1010 - 1025	Session 4 - Numerical simulation of wind-driven rain in the Australasian built environment using an Eulerian multiphase model <i>Presenter: Richard Jones</i>
1025 - 1040	Session 5 - Numerical analysis of heat effects on fire wind enhancement <i>Presenter: Robert Ong</i>
1040 - 1055	Session 6 - LES modelling of unsteady wind flow and wind-blown flames around the Silsoe cube <i>Presenter: Esmael Eftekharian</i>
1055 - 1115	Morning Tea/coffee
1115 - 1245	Chair – David Burton co-Chair – Richard Flay
1115 - 1130	Session 7 - Station keeping of multi-rotor UAVs in windy conditions <i>Presenter: Peter Richards</i>
1130 - 1145	Session 8 - A wind-tunnel study of power output variability in scaled wind turbine farms <i>Presenter: Kapil Chauhan</i>
1145 - 1200	Session 9 - Surrogate-based aerodynamic shape optimization to enhance wind-induced vibrations of bluff bodies for energy harvesting <i>Presenter: Gang Hu</i>
1200 - 1215	Session 10 - Using flying anemometers to measure the ABL <i>Presenter: David Tennent</i>
1215 - 1230	Session 11 - The vertical structure of convective outflows measured at the Boulder Atmospheric Observatory <i>Presenter: Matt Mason</i>
1230 - 1245	Session 12 - Response characteristics of anemometers used in New Zealand <i>Presenter: Amir Pirooz</i>
1245 - 1345	Lunch (& drone display by RMIT)
1345 - 1540	Chair – Graeme Wood co-Chair – Joe Paetzold
1345 - 1425	Session 13 - Invited - Wind loading of racked solar panels <i>Presenter: David Banks (Cermak Peterka Petersen)</i>
1425 - 1440	Session 14 - Antenna shielding on monopole structures – Part 1 Experimental <i>Presenter: Neil Mackenzie</i>
1440 - 1455	Session 15 - Antenna shielding on monopole structures – Part 2 CFD <i>Presenter: Tom Moyle</i>
1455 - 1510	Session 16 - Aeroelastic wind tunnel tests for a Memorial Park sculpture <i>Presenter: Joe Paetzold</i>



1510 - 1525	Session 17 - Wind-induced fatigue analysis of the Lotus Tower mast <i>Presenter: Priyan Mendis</i>
1525 - 1540	Session 18 - A comparison of total design wind force estimates between traditional methods and CFD for open-framed mining structures <i>Presenter: Robert Reis</i>
1540 - 1600	Afternoon Tea/coffee
1600 - 1730	Chair – Michael Drayton co-Chair – Martin Wehner
1600 - 1615	Session 19 - Effects of site relocation and instrument type on recorded wind data characteristics <i>Presenter: Amir Pirooz</i>
1615 - 1630	Session 20 - Estimating tropical cyclone wind-induced losses using very high resolution numerical weather prediction <i>Presenter: Stuart Moore</i>
1630 - 1645	Session 21 - Modelling residential mitigation effectiveness for severe wind <i>Presenter: Martin Wehner</i>
1645 - 1700	Session 22 - A methodology to estimate typhoon wind vulnerability for insurance loss estimation <i>Presenter: Navin Peiris</i>
1700 – 1715	Session 23 - Wind fragility assessment for metal roof damage in non-cyclonic regions of Australia <i>Presenter: Hao Qin</i>
1715 – 1730	Session 24 - Parallels in tropical cyclone mitigation research for Australia and the U.S. <i>Presenter: Daniel Smith</i>
1745 - 1845	AWES Annual General Meeting
1900 - 2200	Dinner
	<i>Peppers, The Sands, Resort</i>



DAY 3	
0830 - 0900	Registration
0900 - 1055	Chair – Priyan Mendis co-Chair – Neil Mackenzie
0900 - 0940	Session 1 - Invited – Wind engineering for super-tall buildings <i>Presenter: Andy Mak (Aurecon Group)</i>
0940 - 0955	Session 2 - Multi-sector directional probability integration for facade cladding pressures <i>Presenter: Nick Truong</i>
0955- 1010	Session 3 - Predicting wind-induced pressure on slender tall structures using unsteady CFD analysis <i>Presenter: Damith Mohotti</i>
1010 - 1025	Session 4 - Monitoring of building modal frequencies, damping and accelerations during the construction phase of a tall rectangular tower <i>Presenter: Jim Kostas</i>
1025 - 1040	Session 5 - Development of liquid tuned mass dampers for tall buildings in Australia <i>Presenter: Bill Melbourne</i>
1040 - 1055	Session 6 - Wind-induced noise and vibration design Issues of mega-tall buildings <i>Presenter: Neil Mackenzie</i>
1055 - 1115	Morning Tea/coffee
1115 - 1245	Chair – David Henderson co-Chair – Paul Carpenter
1115 - 1130	Session 7 - Wind loads on the roof of the North Queensland Stadium <i>Presenter: John Ginger</i>
1130 - 1145	Session 8 - Wind loads on Queensland cyclone shelter buildings <i>Presenter: Peter Mullins</i>
1145 - 1200	Session 9 - Correlation of internal and external pressures in porous buildings <i>Presenter: Geeth Bodhinayake</i>
1200 - 1215	Session 10 - Effect of external pressure fluctuations and opening geometry on loss coefficients <i>Presenter: Mitchell Humphreys</i>
1215 - 1230	Session 11 - Codification of wind loading on arch roofs <i>Presenter: Graeme Wood</i>
1230 - 1245	Session 12 - Design of potential dominant openings to resist cyclonic winds <i>Presenter: David Henderson</i>
1245 - 1345	Lunch
1345 - 1530	Chair – Bill Melbourne co-Chair – Seifu Bekele
1345 - 1400	Session 13 – What is the return period of Cyclone Tracy's gust wind speed in Darwin? <i>Presenter: Michael Drayton</i>
1400 - 1415	Session 14 – The equivalence of the Generalised Extreme Value Distribution and Generalised Pareto Distribution for wind gust analysis <i>Presenter: Chi-Hsiang Wang</i>
1415 - 1430	Session 15 – Extreme wind speeds for six South Australian locations <i>Presenter: John Holmes</i>
1430 - 1445	Session 16 – Extreme wind speed analysis in NSW based on historic BoM data <i>Presenter: Alex Smith</i>
1445 - 1500	Session 17 – Cyclone resistant glazing in Florida USA - saving homes and businesses <i>Presenter: Phillip Davies</i>
1500 - 1515	Session 18 – Cost effectiveness of window shutters to reduce roof sheeting wind damage <i>Presenter: Mark Stewart</i>



1515 - 1530	Afternoon Tea/coffee
1530 - 1645	Chair – co-Chair –
1530 - 1545	Session 19 - An approach for estimating wind speeds to benchmark pedestrian wind effects assessments <i>Presenter: Harry Fricke</i>
1545 - 1600	Session 20 - Guidelines for practical application of CFD to pedestrian wind environment in Australasia <i>Presenter: Richard Jones</i>
1600 - 1615	Session 21 - Shading and cooling: impacts of solar control and windows on indoor airflow <i>Presenter: Noy Hildebrand</i>
1615 - 1630	Session 22 - Reproducing AS/NZS terrain-type wind profiles in a shorter-fetch wind tunnel <i>Presenter: Kevin Kevin</i>
1630 - 1645	Session 23 - Wind load using AS/NZS 1170.2 and the shielding parameter <i>Presenter: Seifu Bekele</i>
1645 - 1715	Closing of AWES19