

# The Australasian Wind Engineer

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Welcome Wind Engineers to the August 2012 edition of the AWES Newsletter.

Inside this edition we have all the details on the launch of the new AWES Wind Loading Handbook, and of course how to purchase this.

Also inside are details on the AWES undergraduate wind engineering prize, for which submissions close shortly (October 15<sup>th</sup>).

A review of the recent 15<sup>th</sup> AWES workshop is also inside, with highlights on the key note speeches and technical sessions.

Finally, the AWES has joined the ranks of social media in the form of LinkedIn and Twitter, and the details on this are inside.

Happy Reading!

Editor: Leighton Aurelius BMT Fluid Mechanics

Email: <a href="mailto:newsletter@awes.org">newsletter@awes.org</a>







Presenters Kenny Kwok, John Ginger and John Holmes at the AWES Wind Loading Handbook Launch

#### **AWES Wind Loading Handbook**

Contributor: Mick Chay, Matthew Mason

AWES' latest publication, "Wind Loading Handbook for Australia & New Zealand – Background to AS/NZS 1170.2 Wind Actions" has recently been completed.

The Handbook was prepared by AWES to provide background information into wind and its actions, but also into the derivation of the Standard and its contents, covering such topics as:

- Nature of wind loading
- Wind speeds and multipliers
- Shape factors for structures
- Dynamic response

To launch the new publication, a day of lectures covering the contents of the book was held on February 22 at the University of Sydney in conjunction with the 15<sup>th</sup> AWES Workshop.

Lectures were provided by John Holmes, John Ginger and the always effervescent Kenny Kwok, who were primary authors of the Handbook, and by Graeme Wood, Nick Truong and Tony Rofail, all of whom made contributions to the book.

The lectures were attended by practicing engineers from a variety of backgrounds, and attendees were treated to a comprehensive series of presentations regarding the use and background of our current wind loading standard. The day concluded with a Q&A forum between the audience and presenters, which provided a rare opportunity for attendees to clarify their understanding of the standard.

The organising committee would like to extend their gratitude to the presenters, all of whom volunteered their time so enthusiastically.

Copies of the Handbook can be purchased from AWES for \$95AUD. For more information, please contact AWES at the email address <a href="mailto:membership@awes.org">membership@awes.org</a>

#### **Undergraduate Wind Engineering Prize**

Final-year Engineering or Architecture students in Australasia are invited to submit a three page summary of their undergraduate thesis/project to be judged for the AWES Wind Engineering prize of AU\$500.

Wind Engineering topics covering Meteorology, Wind loading and Structural response (of buildings, bridges and towers) Aerodynamics, Ventilation, Wind Energy, Wind Hazards and Vulnerability etc. will be accepted. Projects may include computation fluid mechanics, wind tunnel testing, or full scale measurements broadly related to wind engineering.

The three-page document including full contact details of student(s) and supervisor(s) (in pdf form) should be submitted to:

#### Secretary@awes.org

#### by October 15, 2012

Judging will be completed by November 30, 2012 and winners being notified by email. The decision of the AWES is Final.

Further details about the AWES and this prize and may be found at <a href="https://www.awes.org">www.awes.org</a>.

## 15<sup>th</sup> AWES Workshop

#### Contributors: Mick Chay, Matthew Mason

The 15<sup>th</sup> Australasian Wind Engineering Workshop was held on February 23 and 24 at the University of Sydney.

Approximately 55 engineers and atmospheric scientists from across Australia, New Zealand and Europe, from both academia and industry participated in the workshop.

Thirty-four presentations including two excellent keynotes were made. The first keynote was by Professor Jan Carmeliet from ETH Zurich who spoke of the numerical and experimental work his team are undertaking on the impact of wind on urban comfort and building physics.

Some high-resolution examples of how carefully developed CFD simulations can be used to faithfully replicate – and improve - wind and rain flow patterns through complex environments were impressive to all.

The second keynote was delivered by Associate Professor John Schroeder. John is the current Director of the Wind Science and Engineering Research Center at Texas Tech University, a centre at which several of our members have spent considerable time studying and working.



John spoke of the exciting work he and his collaborators throughout the United States have been performing measuring the fine detail of hurricane and severe thunderstorm wind fields through surface anemometry and mobile Doppler radar.

The workshop also included a special session on the impacts and lessons learnt a year on from Cyclone Yasi.

Summaries of both the Cyclone Testing Station and Geoscience Australia led damage investigations were presented along with an informative presentation on the surge aspects of the storm by George Walker.

Peter Mullins outlined the performance of refuge buildings people sheltered in during Yasi and discussed the improvements to these buildings currently being undertaken.

The session was also fortunate to have the Queensland Regional Director Jim Davidson speak on the Bureau of Meteorology's forecast and analysis of the storm.

Concluding the first day all participants made the quick trip from the University to the beautiful Sydney Harbour and enjoyed a short stroll through the botanical gardens to the workshop dinner at the tranquil Botanical Gardens Restaurant.

Over dinner Kenny Kwok amazed everyone with his ability to recall minute details from conferences many decades ago, and AWES as a society officially congratulated John Holmes on his award of the Davenport Medal at the International Conference on Wind Engineering in Amsterdam last year. The workshop was concluded with an interactive research forum where a set of research priorities for the Society and its members, along the lines of those produced by the AAWE, were put forward and debated. A summary of these priorities will be finalised and made available shortly on the website.

The next AWES workshop will be held in June/July 2013 and will be held in either Brisbane of Townsville.

### <u>AWES now online at LinkedIn and</u> Twitter:

AWES has now established a LinkedIn discussion group and an AWES twitter account as platforms for distributing news and information from the Society, and for promoting discussion and collaboration in the field of Wind Engineering.

The LinkedIn group is open to anyone with a professional interest in Wind Engineering, for discussion of topics relevant to the field.

Both members and non-members of the society are welcome to join and participate in discussions.

There is also a separate section for advertising relevant job vacancies. The title of the group is "Australasian Wind Engineering Society", and should be easily found with a job search.

The twitter account is "AusWindEngineer". At the moment the accounts are in a developmental stage but members are encouraged to participate/follow both, and can expect further progression of both channels soon.

Well, that's it for this edition of the AWES Newsletter. Many thanks must go to our contributors.

As always, a newsletter cannot exist without news, so any stories, photos or information on upcoming events will always be appreciated.

Cheers,

Leighton Aurelius AWES Newsletter Editor.

**Disclaimer**: The articles appearing in The Australasian Wind Engineer are obtained from many sources and do not necessarily represent the views of the Editor, Committee or Members of the AWES.

The Australasian Wind Engineering Society Email: <a href="mailto:newsletter@awes.org">newsletter@awes.org</a>

