

# The Australasian Wind Engineer

www.awes.org

Welcome Wind Engineers to the first (though somewhat belated!) AWES Newsletter of the year.

We lead with all the details of the recent committee elections which have seen some new faces at the AWES helm. On behalf of the new committee I wish to thank the former committee members (John, Katrina and Graeme) for all their hard work.

We also have news from the AWES working group on Pedestrian Wind Criteria and Harry Fricke provides the latest update.

Most recently the inaugural AWES Winter Lecture was held, and we have all the details on this from several of our members.

Finally, we also report on the recent passing of Professor Hans Joachim Gerhardt, and John Holmes has provided a tribute to Hans.

Editor: Leighton Aurelius BMT Fluid Mechanics

Email: newsletter@awes.org



Dr. Matthew Mason, Prof. Chris Letchford and Dr. Bruce Harper at the AWES Winter Lecture sporting the "unofficial" AWES uniform



## **AWES Committee Elections**

In late 2013 the AWES held its biennial election to determine the make-up of the National Committee for the 2014-2015 terms.

Early in 2014 the newly elected committee held their first meeting to elect, amongst itself, members to the Executive Committee (Chair, Treasurer, Secretary) and allocate responsibilities to the other members of the committee.

The roles allocated during this meeting are summarised below for your information:

Chair: Dr Matthew Mason

Secretary: Dr David Henderson

Treasurer: Mr Harry Fricke

**New Zealand Representative:** Prof Richard Flay

**Newsletter Editor:** Mr Leighton Aurelius

Website Manager: Dr Leighton Cochran

**AWES Workshop Chair (Co-opted):** Dr Richard Turner

As Chair of the forthcoming AWES Workshop, Richard Turner has been co-opted to join the six elected members of the National Committee to facilitate the smooth running of this event.

Please feel free to contact any member of the National Committee if you have any queries, comments or recommendations regarding AWES and how it may best serve its membership.

You can find short bios of all National Committee members as well as contact email addresses through the AWES website. <a href="http://www.awes.org/about/">http://www.awes.org/about/</a>.

Finally, the National Committee would like to gratefully thank the outgoing Chair (A/Prof. John Ginger), Secretary (Dr. Katrina Swalwell) and Treasurer (Dr. Graeme Wood), who all served the AWES with great dedication and enthusiasm in their roles for the last few years. We wish you all the best in your future endeavours.

## 17th Australasian Wind Engineering Society Workshop

The 17th Australasian Wind Engineering Society Workshop will be held at the Copthorne Hotel in Wellington (NZ) on February 11 - 13, 2015.

The title of the workshop will be "Wind Extremes, Vulnerability & Resilience: putting research into practice."

As always the workshop will provide a forum for practicing engineers and academics to openly present and discuss their latest work in the field of wind engineering.

#### **KEY DATES FOR AWES16**

Abstract submissions: NOW OPEN
Abstract submission deadline: 15<sup>th</sup> Dec, 2015
Registration open: NOW OPEN
Early bird registration close: 18<sup>th</sup> Dec, 2013

More details can be found at:

www.awes2015.co.nz

### **AWES Winter Lecture**

#### **Contributors: Matthew Mason, Leighton Cochran**

In early 2014 the National Committee decided to initiate a new biannual series of public lectures to offer AWES members some additional semi-scheduled events for their calendar and provide additional opportunities for the AWES to engage with practitioners and researchers from outside the society. One goal of this effort is to make wind engineering more easily accessible to engineering and architecture practitioners.

The inaugural lecture, the 2014 AWES Winter Lecture, was held on July 2 at the Queensland University of Technology in Brisbane.

Life Member Prof. Chris Letchford kindly agreed to take leave from his holiday back in Australia to present a thought provoking and, as always, engaging lecture on recent work he and colleagues had undertaken looking at "Wind Effects on Tall Buildings: Challenges for an urbanising world".

Chris gave a fascinating talk about tall-buildings, their dynamic crosswind response, and the urbanization of our cities leading to the need for further high aspect-ratio buildings. Additionally



he discussed some fluidic dynamic control work his engineering and architecture students are doing at RPI on this topic.

The inaugural event set a high standard with nearly 100 attendees from both industry and academia. For those members unable to attend the lecture, a recording has been uploaded to the AWES website and can be viewed at <a href="http://www.awes.org/archives/awes-lecture-series-archive/">http://www.awes.org/archives/awes-lecture-series-archive/</a>

It is anticipated that the next AWES Lecture will be held in the latter part of this year, but the location is still undecided. Any members who are interested in nominating potential speakers or hosting the event should contact Matthew Mason at <a href="mailto:chair@awes.org">chair@awes.org</a>.



Prof. Chris Letchford at the AWES Winter Lecture



AWES Winter Lecture, Queensland University of Technology

# Pedestrian Wind Criteria Working Group Update

**Contributor: Harry Fricke** 

Some of you will be aware I've been advocating for guidelines on pedestrian wind effects criteria. The idea is to achieve a more consistent approach to pedestrian wind effects assessments for proposed developments. At the last AWES Workshop there was general agreement this was a good idea.

At the suggestion of some of the membership, I drafted a set of guidelines as a starting point for discussion. The draft Pedestrian Wind Effects Criteria Guidelines contain some background outlining the need for guidance and a recommendation to use the Melbourne (1978) criterion for safety as a minimum for all public areas adjacent to new developments. There is some guidance on the selection of comfort criteria and the assessment of adjacent private property as well as some guidance on the use of trees and other planting as wind-breaks.

An online forum open to all members was held to provide feedback on the draft guidelines document I prepared. Discussion was open from early October 2013 and continued into November.

I think the discussion was a great success for a number of reasons; we had twelve AWES members contributing comments (a good number by my reckoning) and discussion of the draft guidelines and related topics flowed back and forth. I feel we have developed a good understanding of what we can agree on and where changes are required.

The discussion has been helpful in making many of us, me included, aware of some of the gaps in the available research. There was a healthy discussion and a bit of debate on some points. I think it is fair to say the general feedback on the document has been quite positive, reflecting the support amongst members for a document of this type.

Having a debate is also a good time to make sure your logic is sound and it seems a few of my ideas needed a bit of adjustment. But that is good - I've learnt something! So I am very grateful to everyone who participated, firstly for showing interest in the idea of the guidelines document and secondly for spending some time to help each other develop a better understanding of the field.



Comments were received on a wide range of aspects of the draft document and some really constructive edits were suggested. A small number of areas received proportionately higher feedback. Many comments were received on the gust duration I proposed and it seems I will need to relinquish my 0.5 second gust duration idea. Oh well! Other points that received a lot of discussion included how to assess adjacent property (edits will be required to my original text) and the need to clarify the frequency of occurrence of the gust wind speed criterion.

The guidelines are, by nature, a compromise. Many of us may wish the guidelines "went further" in some areas or feel they are technically lacking in other areas. It's important to note that the guidelines produced following the feedback will not be "set in stone". They will be reviewed as more research comes to hand or as experience shows the weaknesses of some aspects. If problems arise with the guidelines, then we'll debate the issue. Soon I hope we may at least have a firmer starting point for a debate – the guidelines.

What next? Comments have been collated and edits to the guidelines have been completed. The final version is now available on the AWES website. At this stage I plan to present a summary of the results of the discussions and resulting edits at the next AWES Workshop.

Many thanks to all those who took the time to read the draft guidelines and participated in the discussion group. I look forward to future discussions and editing of the document until we have something all members will be at least reasonably content with.

### In Memoriam: Hans Gerhardt

**Contributor: John Holms** 

Professor Dr.-Ing. Hans Joachim Gerhardt the cofounder and long-time head of I.F.I. Institut für Industrieaerodynamik GmbH, Institute at the Aachen University of Applied Sciences, passed away unexpectedly on August 4, 2013.

For more than 30 years Professor Gerhardt lectured on Fluid Mechanics at the Aachen University of Applied Sciences. He was an internationally recognised expert and scientist.

We owe him fundamental insights in many fields such as wind engineering – and in particular wind

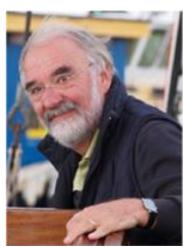


Newsletter Vol 27. Issue 1

actions on buildings and building envelopes – smoke extraction or control and fire protection.

His scientific findings became part of numerous standards and guidelines and he also found ways of implementing his insights into practical use. In addition to his lectures he organised many seminars, colloquia, workshops and training courses for professionals.

In mid-June 2014 he returned to his second home in the South of England, to his little cottage on the Cornish coast. From there he kept communicating with the I.F.I. staff, except when he was sailing his beloved historic sailing boat. He died after a short, serious disease aged only 69. Until recently he could be found working at his desk every day on several projects - cheerful, open-minded and friendly as always. He passed away peacefully in his Cornish home by the sea surrounded by his family.



**Prof. Hans Gerhardt** 

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>