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The Australasian Association for Engineering  
Education

## NEWSLETTER

August 2012

*Matthew Joordens, Editor*

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### President's Report, 2012

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You will recall that initiatives and strategies in 2012 aimed at continuously improving AAEE value to Engineers Australia, ACED and the engineering education community nationally and internationally. These include increased AAEE identity and communication both within our membership and within our member institutions; increase our relationships and exposure in South East Asia; and strategies to increase the impact and recognition of engineering education scholarship and scholarly publication.

There has been progress in each of these areas with more detail on each covered later in this newsletter but to summarise:-

- The AAEE Postgraduate Winter School was run July 2 to 6 and is covered later in this newsletter.
- Closing the Loop (good practice to good research to good practice) workshops (a special ACED sponsored project) completed at USQ and UTS. This series of workshops was set up to make practitioners more aware of what research already exists in engineering education, how to present their own work as research that will be recognised by DIISR metrics and finally how to apply the results of research to their teaching.
- AAEE also contributed to ACED's submission to the Senate Inquiry on Engineering Skills Shortages and has developed closer links with Australian Council of Deans (ICT) through support of Discipline Networks.

I would like to reflect on the unique position that AAEE is in, and the relationships that it has, as envied by engineering education communities around the world. Our relationships with EA, IPENZ, ACED and NZCED benefit our members and the engineering education community through financial support, input to decision making, collaboration in special projects and providing an avenue to publish in an ERA ranked journal (Australasian Journal of Engineering Education). This is truly a unique and highly valued position and relationship, and one which we should value, nurture and promote.

As we are now well and truly into our second semester, may I remind you to promote the AAEE Excellence Awards with the call for nominations announced recently; the 23rd Annual Conference of the Australasian Association for Engineering Education at Swinburne; more Universities with AAEE Champions, increasing engagement with these Champions; a resolved email mechanism; thinking around activities for next year (and opportunities with EA and ACED); and a strengthening relationship with the New Zealand Council of Engineering Deans (NZCED) and Institution of Professional Engineers New Zealand (IPENZ) and internationally.

In 2012, we will welcome Lyn Brodie from USQ as incoming President. We can expect to see continued strength in working with ACED and EA, increasing engagement within Australia/NZ, continuing to grow membership and seeking greater engagement internationally. I firmly believe that, driven by

the passion of this Executive, we will set a very solid platform for the future of engineering education in Australasia.

Kind regards  
*Les Dawes*  
*President*



Les Dawes  
2012 President

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## 2012 International CDIO Conference

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The 8th International CDIO Conference was held in Brisbane at QUT during the week of 1 July. Brisbane turned on some great, albeit chilly, weather. We had 170 delegates from 22 countries in attendance including around 20 students competing in the CDIO Academy. We should see a number of papers flow through to submission to AJEE. It was pleasing to see a number of attendees from our own AAE community. We congratulate the student team from Aarlborg University for their winning of the CDIO Cup in the design build competition. The numbers were down given the normal Northern hemisphere patronage of this conference, however it was gratifying to see such a large number of delegates see it through to the closing session of the conference. The conference theme was New Generations which

celebrated and explored the opportunities and challenges of the generational diversity, shifting cultures and needs of today's students and academics. With an opening presentation by Professor Johan Malmqvist (Chalmers University, Sweden), the Keynote Speech from Emeritus Professor Robin King, a plenary speech by EA President David Hood and a New Generations themed forum chaired by Dr Cheryl Desha, the scene was well set for the variety of activities on each day. The feedback for the conference was very positive although, and ironically, the chilly Brisbane weather drew comment mostly from our Icelandic and Scandinavian colleagues.

*Duncan Campbell*  
*Conference Chair*

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## 2012 AAEE Conference

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### 23<sup>rd</sup> Annual AAEE Conference 3<sup>rd</sup> – 5<sup>th</sup> December 2012

<http://www.aaee.com.au/conferences/2012/>

#### UPDATE

The 23<sup>rd</sup> Annual Conference of the Australasian Association for Engineering Education is now only 3 months away and preparations are well in hand. We are in the process of finalising the reviews on papers and authors should be notified in the next week or so. Thanks to all our reviewers for the efforts you've gone to in getting the reviews done on time.

#### Keynote Speakers

This year we have two international keynote speakers confirmed, Associate Professor Ruth Streveler from Purdue University and Associate Professor Mary Besterfield-Sacre from the University of Pittsburgh. Ruth will be challenging participants to think about high quality research in engineering education, while Mary will explore issues around teaching and scholarship in engineering.

#### Program

This year we have an extremely full program, with 2 keynotes, over 140 full papers and 16 workshops & symposia. New to this year's conference are a series of Master Classes (targeted professional development activities) and Work in Progress sessions where you can hear about work currently underway in engineering education. The Awards Ball on Tuesday night will be at the MCG and on Monday afternoon there will be an Industry Expo.

On Sunday before the Welcome Reception there will be a Sustainable Engineering Education

Leadership Symposium, while the Post-Conference Workshop on Thursday "Conducting High Quality Research in Engineering Education" will be facilitated by Ruth Streveler and Jo Walther from the University of Georgia.

Finally, the Engineers Without Borders Showcase and Challenge Finals will be running in conjunction with the conference on Tuesday with participants able to go along to see the student team's final presentations.

#### Registration

Registration is now open! Early-Bird registration closes on the 15<sup>th</sup> October so please register soon.

More information on registration details can be found at <http://www.aaee.com.au/conferences/2012/?page=registration>

Further information about the conference program and activities, including details of a post-conference day workshop are available on the conference website (<http://www.aaee.com.au/conferences/2012/>).

I look forward to seeing you in Melbourne in December.

*Dr Llew Mann*  
AAEE 2012 Conference Chair  
[lmann@swin.edu.au](mailto:lmann@swin.edu.au)



## Australasian Association for Engineering Education

### 2012 Annual Awards

**APPLY NOW!!!**

**New online submission process  
Applications close 1 October**

AAEE offers three awards to recognise excellence in the engineering education and research community. Members of AAEE are encouraged to apply. **Submissions link and full criteria are available on the AAEE web site.**

<http://www.aeee.com.au/> (Awards tab)



**Australian Council of Engineering Deans National Award for Engineering Education Excellence** – Awarded for excellence in learning outcomes via degree programs, discipline majors or other significant initiatives that have produced outstanding and enduring outcomes.

**Prize** - \$10000 plus framed certificate

**Award for Engineering Education Research Design** – Award for rigorous, innovative and transferable research design in the field of Engineering Education.

**Prize** - \$5000 plus framed certificate

**Award for Engineering Education Engagement** – Award for fostering an excellent standard of engagement with colleagues or students recognising a collegiate approach to learning and teaching, research and a sharing of expertise.

**Prize** - \$5000 plus framed certificate

### Eligibility for all awards

- Previously unsuccessful applicants are eligible to apply.
- The same body of work cannot be submitted as an application in two categories even if seemingly appropriate for both categories.
- It is not necessary to meet all selection criteria of an Award to be eligible to apply for an award.
- All nominees **MUST** be current AAEE members (membership application is free - see <http://www.aeee.com.au/membership.htm>).
- The work must have been mostly conducted in Australia or New Zealand.
- Winner or Highly Commended recipients from the last two years are only eligible to apply if work completed is significantly different from previous applications or the application is in a different category.
- Winners or a winning team member **MUST** be present at the AAEE Annual Conference dinner

### Submissions and timelines

Online submissions to Engineers

Australia:

<https://engineersaustralia.wufoo.com/forms/aeee-annual-awards-2012/>

Submissions close 1 October

Judges recommendations by 17 October

Winners notified by 31 October 2012.



## 2012 Australasian Association for Engineering Education (AAEE) Annual Conference 3rd - 5th December 2012

The Awards Ball will be held in the Olympic Room at the **Melbourne Cricket Ground**. This year's theme, **The Profession of Engineering Education: Advancing Teaching, Research and Careers** will explore opportunities for improving teaching and scholarship, rigorous research in engineering education and career advancement as an engineering educator

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### Expression of Interest to Host 2015 AAEE Conference

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The Australasian Association for Engineering Education (AAEE) conducts annual conferences throughout Australia and New Zealand aimed at promoting scholarship in engineering education and facilitating the dissemination of research and best practice throughout the engineering education community. Great emphasis is placed on the importance of the conferences in achieving this goal, hence the association has a responsibility to ensure that each hosting institution is aware of the high expectations which go with the granting of host status. Decisions on where to hold the Annual Conference will be made at a meeting of the AAEE Executive. Universities interested in hosting the conference in 2015 should prepare an Expression of Interest (EOI) as per the following guidelines and forward it to the AAEE Executive Officer. The AAEE executive will then invite universities with successful EOIs to submit a formal bid.

For enquiries and submissions, please contact:

David McCarthy  
Executive Officer, Learned Society

Groups

Engineers Australia  
Tel: (02) 6270 6530  
Fax: (02) 6273 2358  
Mobile: 0409 383 620  
E-mail:

[DMcCarthy@engineersaustralia.org.au](mailto:DMcCarthy@engineersaustralia.org.au)

Guidelines for an Expression of Interest to Host an AAEE Conference

**Institutional Support:** The AAEE executive needs to ensure that there is sufficient institutional support for the successful planning, conduct and management of the annual AAEE conference.

The institutional support that will be provided if successful should be described in the EOI. The EOI should also contain the written support of the Dean of Engineering (or equivalent).

**Proposed Organising Committee:** Details of the proposed General Chair for the conference and

other members of the organising committee should be included (a minimum of 3 people in addition to the chair are required at this stage).

The General Chair and other proposed committee members should be members of AAEE. Any previous experience in organising conferences among the proposed committee members should also be included.

**Venue Details:** An outline of the proposed venue, including the benefits of hosting the conference at that venue is required.

**Proposed Theme:** The proposed theme for the conference should be included at this stage. This may change in the full bid if the EOI is successful.

**Agreement of Conditions for Hosting an AAEE Conference:** A statement of agreement to each of the conditions outlined below is required.

**Conditions for Hosting an AAEE Conference**  
The Organising Committee will follow the AAEE paper handling process, including the double-blind review of papers, the use of the AAEE paper review criteria and ensure the quality of the review process.

The Organising Committee will ensure that an appropriate publication of conference proceedings will take place with an ISBN. The conference will be held in early December of the proposed year.

The successful hosts will provide a business plan for the conference to the AAEE Executive, including a sufficiently detailed budget in the lead up to the conference.

Details of who will underwrite the conference must be provided. AAEE will not underwrite the conference.

The conference website will be located at <http://www.aaee.com.au/conferences/2015/> AAEE will be paid a capitation fee per delegate of \$60.

An agreement that Copyright ownership of all published material remains with the authors. The Awards dinner will be part of the conference and included in the full registration.

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## AAEE Winter School 2012 for Research in Engineering Education

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This year's Winter School took place between Monday 2 July and Friday 6 July 2012 at Noosa North Shore Resort (agenda attached).

The event was planned and facilitated by Dr Lesley Jolly, Dr Llew Mann, Dr Lyn Brodie and Dr Matt Eliot and 19 participants from 3 countries (Australia, NZ and the USA) took part.

This year the participants included postgraduate students at various stages of their projects and academics with a range of experience and commitment to engineering education research. Responses were positive from everyone, with many participants telling us that they gained an overview of the research process that they had never had before and a new appreciation of research design and methodology. They also praised the sense of community and support from everyone in attendance. In part this can be attributed to the nature of the venue which is relatively remote from outside distractions, such as opportunities for leisure pursuits and email. George Tangey and Llew Mann deserve praise for their sterling efforts in providing excellent meals each night. The opportunity to share good food with fellow participants surely contributed to the development of community and the success of the Winter School.

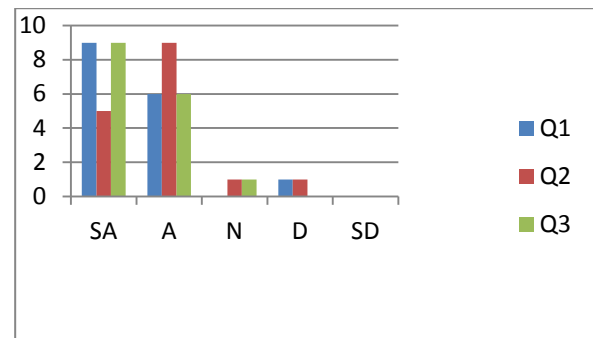
The first three questions on our evaluation instrument were:

Q1: Winter School has prompted me to think in new ways about teaching and research into teaching in my discipline.

Q2: The format allowed enough time for me to consider the material presented.

Q3: The Winter School helped identify new directions/strategies.

As the table below indicates, there was generally agreement that the Winter School had attained its objectives on these questions.



### Future Directions

The facilitation team have already tentatively started planning for next year's School in response to this year's experience and participant comments. We recommend that it remain a residential School and that it be open to both academics and postgraduates as this year. 20 participants seems like a good number to aim for. More than that may lose the sense of camaraderie and support that participants valued so much.

To date, the Winter School has been heavily subsidised by ACED, AAEE and the facilitators themselves. In order to make the Winter School more sustainable, fees might have to go up next year but even at \$%00.00 for the week (all accommodation, food and transport from Brisbane included) I'm sure you'll agree it's still a bargain. Just ask any of this year's participants!

One new agenda item we're thinking of including next year is a workshop on grant writing. If there are any topics of particular interest to you, please get in touch and we'll do our best to accommodate them next year.

Finally, look for our posters, flyers and discussion sessions at the conference in December and consider widening your experience with a week at Noosa with like-minded folks.

*Lesley Jolly  
Chair, ERM Group  
On behalf of 2012 Facilitators.*

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## REV2013 Conference call for papers

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### REV2013 Sydney, Australia 6 - 8 February 2013



Photo: Andrew Gregory. Courtesy Destination New South Wales

### REV2013: 10th International Conference on Remote Engineering and Virtual Instrumentation “Moving from design to innovation and impact”

REV2013 is being held in Sydney, Australia. Sydney is the largest and most dynamic city in Australia. Attending REV2013 will give you an opportunity to experience Sydney's stunning harbour, wonderful climate, friendly people, and numerous other attractions, whilst participating in an exciting conference program.

#### IMPORTANT DATES:

- \* Sunday 21st October 2012\* - Deadline for paper submissions (absolutely no extensions!)
- \* Sunday 11th November 2012\* - Deadline for submission of paper reviews (3 weeks for reviewing)
- \* Friday 23rd November 2012\* - Notification of acceptance
- \* Friday 14th December 2012\* - Deadline for Author registration (3 weeks for authors to confirm attendance and register)
- \* Sunday 6th January 2013\* - Revised paper deadline (6 weeks from notification to final version)
- \* February 6-8, 2013\* - Conference

You are invited to submit papers and workshop and tutorial proposals for consideration. REV2013 is the tenth in the series of annual conferences of the International Association of Online Engineering (IAOE) (<http://www.online-engineering.org>). REV2013 will be organised in Sydney, Australia and hosted by the University of Technology, Sydney. REV2013 aims to have a specific focus that moves our community from a consideration of the mechanics of remote engineering, to the impacts that these systems can have, and how we can innovate in new and novel ways. Papers that address these areas are particularly encouraged.

For more information, please visit ...

<http://www.rev-conference.org/REV2013/>

*Prof Lindsay*

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## REV2013 Conference

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The 10th Remote Engineering and Virtual Instrumentation Conference is being held in Sydney in February next year. The REV conferences are the annual conferences of the International Association of Online Engineering (IAOE) and this will mark the first time the conference has been held outside of Europe or the USA. The general objective is to demonstrate and discuss fundamentals, applications and experiences in the field of remote engineering and virtual instrumentation. With the globalization

of education, the interest in and need for teleworking, remote services and collaborative working environments are expected to increase rapidly.

Another objective of the symposium is to discuss guidelines for education in university level courses for these topics. REV 2013 offers an exciting technical program as well as academic networking opportunities during the social events.

If you're interested, or you know of a colleague who might be, please see <http://www.rev-conference.org/REV2013/>

*Prof Lindsay*

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## **Contributions for the AAEE Newsletter**

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Do you have something of interest to the Engineering Education community? We welcome contributions from members! If you have something to share, please email the newsletter editor Matthew Joordens at [matthew.joordens@deakin.edu.au](mailto:matthew.joordens@deakin.edu.au)

*Matthew Joordens*

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