

Young structural engineer wins public speaking award

Graduate member Tim McMinn, a structural engineer with Wood & Grieve Engineers, won the O. F. Blakey Public Presentation Competition at the Engineers Australia Annual Dinner on December 3.

His presentation titled 'Designing Sustainable Structures' was awarded the top honour by the judging panel ahead of those given by other young engineers Jarvis Anderson of Aurecon and Jared Fitzclarence from Arenko.

Tim was required to make a 15 minute presentation followed by five minutes of questions from the 100 strong audience.

"It was a daunting but rewarding experience to speak to such a large group at an event like the Annual Dinner.

"The quality of all the presentations was very high, and made the event a real challenge," he commented.

Tim receives a \$2,000 cash prize as well as the O. F. Blakey medal for winning the competition.

Also on the night, Jared Fitzclarence was awarded the Audience's Popular Vote for his presentation on Sustainable Concrete Asset Disposal Optimisation.

The O. F. Blakey Award perpetuates the memory of Professor O. F. Blakey, the first Professor of Civil Engineering at the University of Western Australia, who was a Councillor of the Institution of Engineers, Australia from 1936 to 1951, Chairman of the former Perth Division in 1936 and 1942 and President of the Institution of Engineers, Australia in 1945.

This Award have been made in most years since 1954.



Incoming WA Division President and O. F. Blakey judge Professor Tony Lucey FIEAust presents Tim McMinn GradIEAust with the O. F. Blakey Award and a \$2,000 cheque.

You can view slides from Tim's winning presentation online at www.slideshare.net/engineersaustralia

Professor announced as new President of WA Division

Professor Tony Lucey FIEAust was announced incoming President of Engineers Australia WA Division at the Annual General Meeting on December 3.

Tony is Professor of Mechanical Engineering and currently Head of the School of Civil and Mechanical Engineering at Curtin University.

He gained his Bachelors degree from the University of Cambridge, after which he worked in Industry as an aircraft designer at British Aerospace PLC in the UK. He later returned to Academe to take a PhD from

the University of Exeter, and then held positions at the Universities of Exeter and Warwick and the Asian University of Science and Technology in Thailand. Additionally, his career has been punctuated by, mostly voluntary, work in and for developing countries.

He is well-known for his fundamental research in fluid-structure interaction and its applications in new technologies, biomechanics and industry.

In 2001 he moved to Australia to take up the headship of the Department of

Mechanical Engineering at Curtin and was then Dean of Engineering from 2005 to 2007.

In 2007 he was listed by Engineers Australia as one of 'Australia's top 100 most influential Engineers'.

In accepting the role of President, Tony outlined some key focus areas for his term.

"Through its strategic planning, Engineers Australia has recently undergone a process of regeneration that heralds an increasingly outward focus, moving Engineering to take

Continued page 2

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In this issue

Young structural engineer wins public speaking award	1
News	2
From the President	3
News	4
News	5
Special Notices.....	6
Events.....	7
Dates for your Diary.....	8

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 Engineers Australia WA Division
 712 Murray Street, West Perth WA 6005
 Phone: (08) 9321 3340
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tdavies@engineersaustralia.org.au

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Members recognised for outstanding service to the profession

Three Engineers Australia medals were presented to members at the recent Annual Dinner in recognition of outstanding service to the profession. They were:

- Don Young FIEAust CPEng
- Dr John Wager HonFIEAust CPEng
- Brian Truman ComplEAust

The award was initially established in 1989 and its purpose is to recognize meritorious service at the divisional level by an individual or group in the pursuit of Engineers Australia's goals in the interests of the profession.



Brian Truman (L) receives the Engineers Australia Medal from Chris Fitzhardinge (R) 2009 WA Division President.

Don Young was recognised for his past and continuing work with the Engineering Heritage group in WA.

He is the current Heritage panel chair, worked extensively on the Goldfields Pipeline submission for an International Historic Civil Engineering Landmark and on the arrangements for the ceremonies at Mundaring Weir and Kalgoorlie.

Dr John Wager, Honorary Fellow and long time supporter of Engineers Australia received his award for his work with the WA Engineering Excellence Awards.

John has participated on judging panels over past years and was the Chief Judge in 2000, 2001 and again this year.

Brian Truman was acknowledged for his broad support of Engineers Australia and work in the Risk Engineering Society.

Brian has been the force behind the resurrection of the Risk Engineering Society, which now has successful chapters in most Divisions. He works tirelessly as the Chairman of the Society, traveling around Australia to help out wherever he can.

Also at the Annual Dinner Chris Fitzhardinge gave his retiring address. You can view the slides from Chris' interesting presentation about 100 years of engineering in WA at www.slideshare.net/engineersaustralia

New WA Division President (cont)

Continued from page 1

a more central place in Society and meeting the challenges that it faces regionally, nationally and globally.

"As an engineering educator I will seek to continue the excellent work underway in disseminating what contemporary Engineering really means and the manifold opportunities that it holds for young people who will be the engineers and leaders of tomorrow," he added.

Tony also acknowledged that 2010 has been declared the Year of Engineering Leadership by Engineers Australia.

"I would wish to highlight the many forms and levels of engineering leadership that range from those of prominent engineering CEOs and Directors through to the 'service leadership' of the many.

"This spectrum of leadership combines to produce the engineering teams and organisations that are the backbone of profession," he said.

Tony counts reading literature and literary criticism, creative writing, music, vehicle mechanics and sports as some of his keen interests. He is married with three children.



A new decade for Engineering

Professor Tony Lucey FIEAust

The future is built upon the past – the achievements made, the experiences gained and the lessons learned. In 2009 the Western Australia Division celebrated its one-hundredth birthday and reflected upon the pivotal contributions that Engineering made in the creation of our modern State. At the same time, the organisation looked forwards, laying out its direction and plans for a new decade in which our profession and Engineers Australia will assume a more central role in guiding and shaping Society and securing its very future.

I begin by acknowledging the Division's very recent past; the year 2009 in which platform for the next decade was built. In particular, I congratulate the 2009 president, Mr Chris Fitzhardinge, for his exemplary leadership, together with Divisional team, led by Janice Lake, whose dedication and unstinting efforts promoted, supported and enriched the profession of Engineering. At the AGM and Christmas dinner, Chris, cut the cake marking the Division's 100th birthday and then delivered a fascinating lecture that captured the engineering developments that defined our State and the personalities who both led these and grew the community represented by Engineers Australia.

While engineering heritage featured prominently in 2009, what was perhaps less obvious was the work done to set in place the new structures preparing us for the next decade. A smaller and more focused Divisional Board was introduced and the Divisional Advisory Board of Western Australia (DABWA), led by Bob Broadway, was inaugurated. DABWA brings together the many constituents of our organisation and is, in effect, the prime mover of the Division. Of particular importance were its contributions to the development of the national Engineers Australia Strategic Plan 2010-2015.

What then are to be our foci in 2010? Through its strategic planning, Engineers Australia has undergone a process of regeneration that heralds an increasingly outward focus to engage directly with the community, as encapsulated by the 'Make-it-so' campaign, and Society's leaders. This is essential for Engineering to take up a more complete role – one that goes far beyond the technically responsive – in meeting the challenges that Society faces regionally, nationally and globally. There are many opportunities herein not least to throw off old engineering stereotypes. The attributes, skills and knowledge that contemporary engineers must possess, and the range of activities in which these can be deployed can, I believe, excite and attract many bright and idealistic young people who might have written off a career

in Engineering as being too prosaic.

Our Division will also identify, highlight, and celebrate Engineering Leadership as the adopted theme for 2010. We need to recognise, nurture and learn from the many forms and levels of engineering leadership that range from those of engineering CEOs and Directors through to the 'service leadership' of the many. It is this spectrum of leadership combines to produce the engineering teams and organisations that are the backbone of the profession. Equally, the theme signals the increased leadership that the profession of Engineering itself will take in Society over the next decade.

In January, the Division will commence its journey through 2010 when we formulate the operational plan to fulfil our Organisation's new strategic goals. We can do this with confidence because the WA Division is strong and diverse, a condition for which I am grateful to all of my predecessors and the many volunteers who make and sustain the community of Engineers Australia.

2010 Division Committee – Engineers Australia WA Division

Professor Tony Lucey FIEAust
Division President and Congress Representative

Chris Fitzhardinge FIEAust CPEng
Past President and Congress Representative

Barry Tonkin FIEAust CPEng
Deputy President

Lorie Jones FIEAust CPEng
Committee Member and Congress Representative

Bob Broadway FIEAust CPEng
Advisory Board Chairperson

Melissa Marinelli MIEAust
Women in Engineering Representative

Will Neethling TMIEAust CEngT
Engineering Techs/Assocs Representative

TBC
Young Engineers Representative

Professor Mark Bush FIEAust CPEng
Committee Member

Helen Pedersen FIEAust
Committee Member

Matthew Taylor MIEAust CPEng
Committee Member

David Mofflin FIEAust CPEng
Committee Member

Les West FIEAust CPEng
Committee Member

The 2010 Division Committee was announced at the Annual General Meeting of Engineers Australia WA Division on Thursday 3rd December 2009.

iNexus Australia 2009 National Robotics Competition



The competition crew with the grid where the robot 'ants' must locate the 'sugar cube' blocks, formulate a plan for the division of labour, and then set about the task of collection and storage.

After months of preparation, a robot designed by students from the University of Adelaide has taken out the title of top 'bot' at the highly anticipated iNexus Australia National Robotics competition.

Hosted at Curtin University of Technology through collaboration between Curtin Business School, Curtin's Faculty of Science and Engineering and ITT Bombay, the competition was the Australian qualifying round for the Techfest 2010 ANTZ Challenge in Mumbai.

Based on the emerging field of swarm robotics, the ANTZ Challenge requires teams to build two autonomous robot 'ants' which must work together to locate, collect and store 'sugar cubes.'

Once placed on the competition grid, robots must locate the 'sugar cube' blocks, formulate a plan for the division of labour and then set about the task of collection and storage.

The robots must do all this without input from their creators and while avoiding the stiff penalties incurred for any breach of the rules – including collisions.

A panel of judges adjudicated the day's proceedings using a formula to calculate each team's overall score. Two of the three judges were sourced through Engineers Australia WA Division.

Out of a field of seven teams, the University of Adelaide team comprising Phillipp Allgeuer and Najmal Karuppam took home the top honours, before a packed lecture theatre of curious robot fans. Coming in

equal second were teams from Swinburne and Curtin Universities.

Mr Allgeuer said they had a shaky start, but came back strong. "We are really happy that we won, especially after our first run where the robot fell off the grid on its first attempt.

"Fortunately, it still managed to deposit the cube fine – it was just that when it reverses it can lose direction, but other than that it was a good run."

The score for the run was calculated as $(300-T) + (50 \times N) - P$; with T= the number of time in seconds, N= the number of blocks moved and P= the summation of penalties for breaking the rules.

One member from each of the three top teams will travel to Mumbai to compete in the finals to be held in January 2010.

All the teams put in an exhausting amount of preparation for the competition. The advantage for the three winning teams is they can put in more work before the global challenge in India.

The Curtin iNexus organising team also put in an amazing amount of work to plan and carry out the event. The teams and the audience praised the organising team for a great day.

Look out for news of this exciting event next year!

This story originally appeared on www.sciencewa.net.au

Retired Engineers Group Panel Report



Retired Engineers Group morning visit to the CETO Wave Energy Project at Fremantle.

We must apologise for leaving the Retired Engineers Group Panel Report out of the 2009 Year in Review Newsletter to members. We can assure you the Group has been very active in 2009 and a summary of their events is detailed below. Once again we apologise!

During 2009 the Retired Engineers Group has continued to hold functions that keep our members and their partners in touch with one another, with Engineers Australia and with developments within the community.

In the past twelve months eight separate events have been held with an average registration of fifty. The visits and presentations covered a wide range of engineering and other interests. Among the functions were site visits to the Royal Perth Hospital Medical Engineering and Physics Department, the Australian Marine Complex floating dock, the ship steering simulator at Fremantle TAFE, the new Perth to Bunbury highway construction, the East Perth Traffic Operations Centre and presentations at Main Roads WA headquarters.

The functions normally include lunch and, where appropriate, coach travel between venues. Partners are welcome at all of our functions and members who have retired or are in semi retirement are encouraged to join the Group.

Submitted by Mike Corboy FIEAust CPEng

2010 – Year of Engineering Leadership

Engineers Australia's National Council has accepted the Centre for Engineering Leadership and Management's (CELM) proposal that in 2010 we will be celebrating the Year of Engineering Leadership.

Engineers Australia values our Engineers vital contribution to society – join us in recognising our engineering leaders. The Year of Engineering Leadership will demonstrate how the engineering team are ambassadors in shaping the future. Let's make it so that we're recognising their achievements.

During the Year of Engineering Leadership – the aim is to promote the following key messages:

1. Members of the engineering team are identified as leaders in providing sustainable and innovative solutions to society's challenges.
2. The community identifies engineering as the desired profession for those who want to become leaders of the future
3. Engineers Australia is an organisation that fosters and develops engineering leaders throughout all stages of their careers.

4. Members of the engineering team value and are proud to be part of the engineering profession.

The Year of Engineering Leadership supports the work of the 'Make it So' national marketing campaign released this year and will ensure the messages communicated are consistent with the campaign.



Engineers Australia WA Division welcomes Decmil Australia & Technip as Sponsors

Engineers Australia WA Division would like to extend a warm welcome to Decmil Australia and Technip who have come on board as Sponsors for 2010-11. Their contribution will enable us to provide members with a range of services and promote the engineering profession to the wider community. A brief profile on each is contained below:

Decmil Australia (Decmil) is an emerging leader in engineering, construction, maintenance and industrial services to Australia's resources, energy and infrastructure sectors.

Our extensive project capabilities and experienced workforce has seen us expand our capacity and we can now deliver projects, with values in excess of \$200 million.

Over the past 12 months, we have secured contracts with many of the resource industry's leading players, including Woodside, BHP Billiton, Rio Tinto and Fortescue Metals Group.



Technip is one of the five world leaders in engineering, technology and project management services companies for the oil and gas sector. Technip operates in three segments of the world oil and gas market: Subsea, Offshore and Onshore; delivering projects with the highest safety and quality standards. On behalf of its clients, Technip executes infrastructure projects that are increasingly ambitious, complex and demanding in ultra-deep waters or extreme climates, including mega-sized projects, non-conventional resources and optimization of environmental performance.

In doing so, we believe in creating value for our clients while generating opportunities for local industries and employment wherever Technip is present.



Technical Presentations online with Slideshare.net



We often receive requests from those who were unable to make a presentation or those that were present and found the content useful to make them available online. We do this using the website www.slideshare.net/engineersaustralia

SlideShare is a business media site for sharing presentations, documents and pdfs. SlideShare features a vibrant professional community that regularly comments, favorites and downloads content. Content also spreads virally through blogs and social networks such as LinkedIn, Facebook and twitter. Anyone can view presentations & documents on topics that interest them. The site is growing rapidly with over 17 million monthly visitors.

You can also find the Slideshare page via Resources section of the WA Division website. If you have previously presented at the WA Division and would like to make your presentation available please email tdavies@engineersaustralia.org.au for instructions on how to do this.

2010 WA Engineering Excellence Awards Breakfast Launch

Wednesday 10th March has been set for the Breakfast Launch of the 2010 WA Engineering Excellence Awards.

If you have a project you are considering entering, please contact Sharleen Mantle for more information about the Launch as well as entry guidelines.

Sharleen Mantle
Technical Program Coordinator
Engineers Australia WA Division
P: (08) 9321 3340 E: smantle@engineersaustralia.org.au



Angel Project – WA and National Engineering Excellence Awards Winner in 2009.

Face to Face Expo

This event brings the next crop of graduating engineers and those seeking vacation work face to face with prospective employers.

9:00 AM – 1:00 AM, Saturday 27th March 2010
Robinson Pavilion, Claremont Showgrounds

Last year over 910 student engineers were introduced to some 73 organisations involved in a diversity of engineering activities undertaken within and outside this state, including; mining, oil and gas, the military, construction, electronics, information technology, the environment and both the state and federal sectors.

For exhibitors:
In order to secure the position of your choice, we urge you to book immediately to avoid disappointment. Phone BPA on Ph: (08) 9409 5143



City to Cape – 2100 Sea-Level Rise Seminar

An ATSE/Engineers Australia/Curtin University of Technology all-day seminar on coping with the likely impacts of sea-level rise on Australia's Southwest Coast – from Perth to Cape Naturaliste – by 2100.

Curtin University of Technology, Perth – Thursday 22nd July 2010

This seminar will be of interest to most engineers because it will address a challenge of great importance to Western Australia in a holistic way that covers and integrates such aspects as: coastal geological regimes, expected sea level rise by the 2100 and its variability (due to tides and extreme weather events), engineering options for adapting, social issues, issues facing state and local governments, potential legal issues, and coping with uncertainties.

Call for Abstracts

Ground Improvement Workshop

The AGS committee invites local practitioners and contractors to submit a technical paper or local case study on a ground improvement project for the Ground Improvement Workshop on Friday 11th and Saturday 12th June 2010. Prospective authors are therefore invited to submit abstracts of not more than 500 words by Wednesday 10th February 2010 for consideration by the Ground Improvement Committee to Hamish Nelson email hamish_nelson@coffey.com.au

Down to Earth Conference 2010

The Electrical Engineering Panel invites you to submit an abstract for this Conference to be held at the Sheraton Hotel in Perth, Western Australia on Thursday 29th and Friday 30th April 2010. This should be done in the form of a synopsis to be received no later than Friday 29th January. More information on the Conference including additional instructions for submission of abstracts can be found at www.engineersaustralia.org.au/wa or by contacting Fiona Thorniley on (08) 9321 3340.

Dates for your Diary

ENGINEERS AUSTRALIA
WA DIVISION NEWSLETTER

Date/Time	Host	Event & Venue	For more information
Tue 9 Feb 5:30 PM	Australian Geomechanics Society	Lessons Learnt from Numerical Analyses of Geotechnical Problems Mostafa Ismail, Arup Geotechnics, Perth Auditorium Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
Wed 3 Mar	The Australian Council of Built Environment Design	Practical BIM: Now and In the Future A practical guide for the professions, builders, government and building owners on the use of BIM and its future development. Perth Convention Exhibition Centre	Register online: www.engineersaustralia.org.au
Tue 9 Mar	Australian Geomechanics Society	Urban Stormwater and Groundwater management for Water Sensitive Urban Design Outcomes Auditorium Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
Wed 10 Mar	Engineers Australia WA Division	2010 WA Engineering Excellence Awards Breakfast Launch Auditorium Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
24 – 26 March	Diversified Exhibitions	Australasian Oil & Gas Exhibition & Conference Perth Convention Exhibition Centre	Visit: www.aogexpo.com.au
Sat 27 Mar 5:30 PM	Engineers Australia WA Division & BPA Events	Face to Face Expo Engineering students get "Face to Face" with possible employers Robinson Pavilion, Claremont Showgrounds	Exhibitors contact BPA P: (08) 9409 5143
29 & 30 Apr	Electrical Engineering Panel	Down to Earth Conference A conference dedicated entirely to Earthing for Electrical, Electronics, Control & Communication Engineers Sheraton Hotel, Perth	Fiona Thorniley P: (08) 9321 3340 E: fthorniley@engineersaustralia.org.au
5 – 7 May	Centre for Engineering Leadership & Management	Engineering Leadership Conference 2010 Brisbane Convention and Exhibition Centre, Brisbane, QLD	P: +61 7 3844 1138 W: www.engineeringleadership.org
11 & 12 Jun	Australian Geomechanics Society	Ground Improvement Workshop Curtin University of Technology	Visit: www.engineersaustralia.org.au/wa
Thu 22 Jul	ATSE/Engineers Australia/Curtin University of Technology	City to Cape – 2100 Sea-Level Rise Seminar All-day seminar on coping with the likely impacts of sea-level rise on Australia's Southwest Coast – from Perth to Cape Naturaliste – by 2100.	N/A
2 – 8 Aug	Engineers Australia	Australian Engineering Week	Visit: www.engineersaustralia.org.au
Sat 18 Sep	Engineers Australia WA Division	2010 WA Engineering Excellence Awards Dinner Perth Convention Exhibition Centre	Visit: www.engineersaustralia.org.au/wa

Some event dates and times are subject to change. Please check our website www.engineersaustralia.org.au/wa/events for up-to-date information



YEAR OF
ENGINEERING
LEADERSHIP



ENGINEERS
AUSTRALIA