

news from

# ENGINEERING WA

ENGINEERS AUSTRALIA WA DIVISION NEWSLETTER JULY 2010

## Public Forum to explore 'car-free' Perth

What if Perth was a city without cars? That will be the question discussed by a panel of experts at a Public Forum during Australian Engineering Week, 2 - 6 August.

The Forum, scheduled for the evening of Wednesday 2 August, will call on experts from both industry and academia to examine how a futuristic Perth could achieve having no cars from the Parliamentary Precinct to St Mary's Cathedral and from the Waterfront to Wellington Street.

In other events, a Breakfast will officially launch the Week's proceedings on Monday 2 August along with a special Lift Out in the West Australian Newspaper.

On Thursday 5 August, Andrew Forrest, CEO, Fortescue Metals Group, will make a presentation on his indigenous engagement program at the Centre for Engineering Leadership and Management Luncheon.

Also during the week, some of WA's brightest young engineers will be promoting careers in engineering to high school students, and in the regions, Spaghetti Bridges and Towers will once again be inspiring young minds.

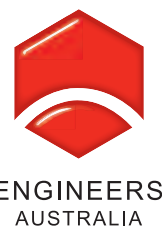
If you'd like to take part in spreading the message at your children's school as part of Australian Engineering Week, Engineers Australia can also supply some materials to assist you in your visit. Contact the WA Division for more information.

Engineers Without Borders will also be running its annual workshop, 'Pathways to working with developing communities' on Saturday 7 August.

For the complete list of Australian Engineering Week events, visit the web site [www.makeitso.org.au](http://www.makeitso.org.au)

# AUSTRALIAN ENGINEERING WEEK 2010

*make it so.*



2nd-6th August

## Georgiou named Best Employer

**Georgiou, one of Australia's fastest growing companies and Partner of Engineers Australia WA Division, has been awarded Best Large Employer in Western Australia for the second consecutive year.**

The win comes off the back of unprecedented growth for the family owned and run company, with a doubling of staff in the past two years to 600 people and revenue expected to nearly double in 2010 to \$400million.

Georgiou Chief Executive Officer, John Georgiou, said the win was evidence the company lives its vision to be 'the best people to work with'.

"Our challenge has been to stay connected to our people and make sure we maintain the essence of who we are as a family owned business as we experienced this rapid growth," said Mr Georgiou.

"Some of our staff have been with the company since inception over 30 years ago and over 18 per cent have worked with us for 10 years or more," he added.

Georgiou edged out fellow Western Australian success story iiNet to take out the 2010 WA Business News Best Large Employer Award.

### Principal Partner



### Partners



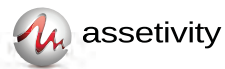
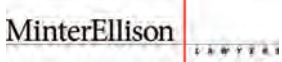
ENGINEERS AUSTRALIA  
Western Australia Division

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Produced By  
Engineers Australia WA Division  
712 Murray Street, West Perth WA 6005  
Phone: (08) 9321 3340  
Web: www.engineersaustralia.org.au/wa  
Content was correct at time of printing.  
Advertising & Editorial  
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Printed by Focus Press using sustainable methods including:

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Paper: From plantation forest managed, grown and produced under EMS ISO 14001

## Recently Chartered Engineers awarded at Certificate Presentation

At a Certificate Presentation Evening held at Engineers Australia on Thursday 17 June several members were presented with their certificates after successfully obtaining Chartered Status by WA Division President Professor Tony Lucey FIEAust.

Chartered Status represents the highest standards of professionalism, leadership, up-to-date expertise, quality and safety, and the ability to undertake independent practice.

Also on the night, over 50 other members received their new or upgraded membership certificates. Congratulations to all!



Antonio Perez  
MIEAust CPEng



Fernando Da Silva  
MIEAust CPEng



Mahendra Kurrupu  
MIEAust CPEng



Namvar Yaghooti  
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Gamini Weerakoon  
MIEAust CPEng



Thomas Schmidt  
MIEAust CPEng



## Engineering Innovation

Professor Tony Lucey FIEAust

**'Innovation' both as a word and an identifiable activity is now in common use as a descriptor for the broad developmental process and as a means of advancement. Although only a relatively recently recognised concept, it has rapidly come to assume an importance equal to that of 'discovery', well-understood for centuries, in the human endeavour that drives progress. Scientists would justifiably claim discovery as their central calling. For engineers it is innovation that, at the highest level, motivates and defines their vocation. Engineering innovation, together with its sources and causes, needs to be understood, lifted and continuously inculcated for engineering to make its greatest contributions.**

When asked to define Engineering it is usual to describe it as the application of Science to create artefacts, products or processes. These are, of course, the outcomes that Engineering delivers. Traditionally, then, engineers were seen to be inventors, at their best harnessing analytical knowledge and skills in Science with a creative ability to produce something new and useful. This continues to be the case. The beauty of Engineering is that its practitioners master and combine both analytical and creative processes – this distinguishes Engineering as a unique discipline. Why then did the vocabulary to describe Engineering not stop at invention? And why is innovation different from invention?

If invention, in layperson's terms, could be paraphrased as 'finding a way to do things', then innovation is 'finding better

ways to do things'. The critical difference lies in the finality of the former – once achieved, one's task is at an end – while innovation represents a continuous process of improvement. Invention is stop-start and responsive while innovation always seeks to move forwards and is pro-active. Innovation overarches invention. While it includes the deployment of analytical and creative skills, it does so within an outlook or cognitive framework that is always enquiring, restless and eager to make advances. This is why innovation has come to be the most important characteristic of successful modern engineering.

Given its importance in Engineering, how then is innovation, and innovatory thinking, developed? Like finding the source of inspiration, the answer to this question to this can be elusive. However, we can look for clues in a number of situations or behaviours from which innovation originates. First, innovation can be sparked by answering a new challenge or identified need. Engineers Australia's make-it-so campaign is an example of this. By calling directly upon the community to bring forward its aspirations, Engineering is presented with a set of challenges that, on its own, it might otherwise not have considered; this stimulates the creative process. Second, innovation is triggered by the critical observation of existing products or systems and the realisation that these could be improved, especially in the context of new factors in their operational environment. Third, the opportunity and encouragement to think outside of the conventional can lead to entirely new approaches, products and processes. Finally, innovation can emerge from the cross-fertilisation of engineering with

ideas from beyond the traditional confines of the discipline; Bio-mimicry is one such example in engineering design.

What all of the foregoing sources have in common is that innovation stems from an outward-looking focus, acuity of observation and an instinct to seek out and adapt ideas and constructs from beyond those accessed by conservative Engineering practice. It is then entirely consistent that modern engineering, and Engineers Australia through its new strategic plan, embraces cross-disciplinary, cross-professional, international and community engagement. Such engagement yields the richness, flexibility and originality of thought from which innovation emerges. Innovation is not just the creative process – it is an entire way of thinking and a philosophical outlook that informs our behaviour and best-practice in engineering..

At humanity's present stage of development it is fair to say that we have invented all the things that are necessary for a modern way of life. Some of these have inadvertently led us to the global challenges of climate change, fossil-fuel dependence or the criticality of water supplies that we now face. What is now needed is a better way to do things. Engineering innovation is the means and the way of thinking that will maintain our quality of life within a sustainable future.

## Nominations invited for 2011 Office Bearers

**Nominations are invited for the following office bearer positions for the WA Division for terms beginning in 2011.**

- WA Congress Rep 1 position, elected by WA Division members (two year term)
- Division Committee 5 positions (one year term)
- College Board Representatives - 1

each for Structural, Environmental, Biomedical, Electrical and ITEE Colleges (two year term)

Nomination forms will be available on line from the Engineers Australia web site during the nomination period Monday 12 July to Friday 27 August 2010.

Nominees will be advised in early September if their nomination has been

accepted and if elections are to follow.

Should you wish to nominate for one of the positions available please follow the instructions on the web site and return your completed nomination by the closing date.

Should elections be necessary they will be conducted in October by the Australian Election Company.

## Young engineers briefed on first 6 star rated building in WA



*Durack II, located at 2 Victoria Avenue, was the first six Green Star rated building in Western Australia*

**The first Young Engineers WA technical tutorial kicked off on the 19th of May with a focus on sustainability.**

The presentation was on the Durack II building, the first six Green Star rated building in Western Australia.

Durack II located at 2 Victoria Avenue, Perth, is owned by Stockland. The project management and design was completed by AECOM and construction by Diploma group. It is a four storey office building occupying approximately 7000m<sup>2</sup>, incorporating several 'green' technologies, the first of its kind in the state. The building has won multiple awards cementing its status as a world leading sustainable design.

Marcello Greco & Nic Lee from AECOM kindly volunteered their time to prepare and present the project for the Young Engineers WA group. The presentation highlighted the building's award winning technology which includes a chilled beam cooling system, automated shading, grey water recycling and wind turbines for power. The presentation also highlighted the accreditation process for the Green Star rating in Australia.

The chilled beam units achieve efficiency by pumping water instead of air to cool the building. The automated shading is positioned to take into account specific time of the year, optimising shading. A proposed wind turbine, once incorporated will generate 15kW Peak power generation

equating to approximately 10% of the building energy consumption. The Grey Water system from basins and showers are treated with the majority reused for toilets, and any surplus utilised for irrigation. Once in effect, approximately two and a half Olympics swimming pools of water will be saved each year.

The incorporation of these technologies has halved the carbon emission in the building, saving approximately 472 tonnes of Carbon Dioxide, equivalent to the quantity produced in 54 households.

The presentation was well received, with over 30 young engineers attending the event. At the end of the event, light refreshments were served and attendees were given the opportunity to network.

Young Engineers would like to thank Marcello Greco for volunteering his time and especially for staying back at the end of the event to answer queries from the audience.

The next technical tutorial will be a site visit to FESA headquarters including the newly constructed Fire Station along Wellington Street. Keep a lookout for this existing event in the Engineering WA Weekly Email Alert.

**By Hendrik Wijaya GradIEAust**

## SKM develops new pollution mitigation system

**Leading engineering, project delivery and sciences firm, Sinclair Knight Merz (SKM), has developed an innovative air quality system which enables problems to be mitigated before they occur.**

The ProActive Management System (PaMS) is a dynamic online solution to assist in significantly reducing air quality issues before they become a problem. The system goes beyond standard weather predictions and uses dispersion models to predict future pollution episodes.

This allows the most effective mitigation options for a facility to be determined, based on a range of conditions (meteorology, regulatory requirements, community expectations, site personnel support) and incorporated into the system. The facility can then be advised of the meteorological forecast, predicted pollution events and a table of mitigation options to avoid any issues before they occur.

SKM will be presenting the PaMS system at the "Best Practices in Mine Haulage 2010" conference to be held in Brisbane in June.

## AECOM completes the largest 5 Star Green Star Rated building in WA on schedule

**A new CBD retail precinct is set to open above Perth's William Street underground rail station in Western Australia's largest 5 star Green rated building.**

Professional technical services consultancy AECOM, completed the ecological sustainable design work allowing tenants to move into the landmark \$200m building known as One40 William Street. AECOM has also undertaken the design of all building services.

The new office complex and shopping destination is located next to the city's historic Post Office. It will feature 21 floors of commercial space, house two new bars, food outlets and a mix of well known retailers including Swarovski Crystal which has already opened.

One40 William Street was completed on time and on budget and took two years to construct.

## Making his mark

As part of the Year of Engineering Leadership, the Centre for Engineering Leadership and Management (CELM) is profiling prominent engineers for their thoughts on the profession and leadership.

**2010** YEAR OF  
ENGINEERING  
LEADERSHIP

As a design engineer, Peter Bruechle has left his mark all over WA.

He and his firm Bruechle Gilchrist and Evans were responsible for the structural engineering behind such WA landmarks as Central Park, Exchange Plaza, the Forest Place redevelopment, the grandstand and lights at the WACA cricket ground, and many buildings on the University of WA campus.

Bruechle is regarded as one of Australia's foremost structural engineers, and in 2002 he was awarded Engineers Australia's John Connell Gold Medal for his industry leadership and innovative design work.

Now 77, he shows few signs of slowing down. He still rides a turbo-charged motorbike and has ridden around and across Australia several times.

"On one trip in my late 60s, I crashed doing about 120 kph and broke various bones, and was misguided enough to buy another bike and ride it to Melbourne, around Tasmania with my eldest son and then back across the Nullarbor," he recalls with a smile.

The outspoken Bruechle is not afraid to give voice to opinions that might be unpopular or politically incorrect. And he has some firm ideas about leadership in the engineering profession.

"I have learned many lessons in my career from many people," he says. "The most important, and the most difficult to live up to, is to be honest in your approach to your work and in your dealings with people. Strive for the overall good, not for a short-term gain."

He credits many people with influencing his career: early mentors included Erich Shilbury and A.E. 'Paddy' Clare, the head of the government department he worked at. Two other key influences were his two



*Leading by example ... acclaimed structural engineer Peter Bruechle prepares his motorcycle for a spin*

business partners, Norm Gilchrist and Ernie Evans.

There was one common factor: "We were all aiming at engineering excellence," he says.

Bruechle believes leaders are not created by the actions of others, they're born.

"I think good leaders are those who inspire their people to do the best they can possibly do and create an environment where this is possible," he says.

"Leaders should set standards, aspire to improve the performance of themselves and others and lead by example. True leadership is a responsibility. It is not the golden whip of authority poor leaders take it to be."

He says those contemplating an engineering career should make an honest assessment of their strengths and weaknesses, such as their technical skills and whether they like working on their own or in teams.

"If profit is your main motivation, it might be better to step away from an engineering career," he says.

Yet the man who seems perfectly suited to his chosen career has a few concerns about the profession. Bruechle says society doesn't appear to sufficiently recognise the

importance of engineers.

"Engineers are extremely important to society and have been since Imhotep first started building pyramids," he explains.

Although retired, Bruechle is still busy acting on judging panels and forensic matters involving disputes. But he's not happy with the adversarial system where such cases are argued and resolved using lawyers.

"I would prefer a return to engineering disputes being argued and resolved by engineers," he says.

He says engineering teaches logic, which can be a powerful tool for a leader.

"However, logic can also be inhibiting of inspiration and good leaders must also be inspirational," he says.

And although in the past, engineering leaders might have been selected on the basis of experience, seniority and wisdom, that's no longer the case.

"Now, being a leader appears to require personal and public performance skills," he points out. "Once leaders were expected to lead by example. Now many lead by what they say – not by what they do."

**By Tony Malkovic**

# Special Notices

## BCA 2011 Draft Proposals available for comment

The draft changes for the 2011 edition of the Building Code of Australia (BCA 2011) have been placed on the ABCB website for public comment and to give BCA users advance notice of proposals that may take effect on 1 May 2011.

Proposed changes from the current version of the BCA (BCA 2010) are marked with underlining (for new text) and strikethrough (for deleted text). It should be noted that inclusion of a proposal in the public comment draft does not mean that that proposal is supported by the ABCB or its committees. Visit [www.abcb.gov.au](http://www.abcb.gov.au) for more information.

## John Monash Medal for Engineering Heritage

Engineers Australia has established the John Monash Medal as an award to recognise outstanding contributions made by individuals towards increasing the awareness and conservation of Australia's engineering heritage.

The Medal is awarded by Engineering Heritage Australia (a Special Interest Group of Engineers Australia).

Any person or organisation is invited to nominate an individual they feel has made, over a considerable period of time, an outstanding contribution to engineering heritage in Australia through one or more of the following:

- the raising of awareness of engineering heritage within the profession;
- the promotion of engineering heritage within the community;
- the recording and documentation of engineering heritage;
- the conservation of engineering heritage;
- such other contribution to engineering heritage as Engineering Heritage Australia may consider worthy of recognition.

This award is open to members and non-members of Engineers Australia.

Nominations are to be in original hard copy signed by the person (or a representative of the group) making the nomination. Photocopies of non-original material should be legible and suitable for scanning. A "How to Nominate" guide is available from the Administrator of EHA and on the Engineers Australia website

Four copies of the nomination and supporting material should be mailed to the Administrator, Engineering Heritage Australia, 11 National Circuit, Barton, ACT 2600, (Tel 02 6270 6525).

Four copies of the electronic version of the nomination is also required. This version should preferably be a Microsoft Word or PDF file on a CD and mailed as above, or sent by email to the Administrator [HSlat@engineersaustralia.org.au](mailto:HSlat@engineersaustralia.org.au)

Nominations and the supporting documentation should reach the Administrator by Thursday 31 August 2010.

## International Conference on Advances in Geotechnical Engineering 2011 7-9 November 2011, Burswood Entertainment Complex, Perth, Western Australia

### Call For Abstracts Now Open

Authors are invited to submit abstracts of a maximum of 300 words. Authors of accepted abstracts will be invited to submit full papers for peer review. One author of each accepted paper will be expected to present the paper at the conference. Abstracts can be submitted online via the Conference website [www.icage2011.com.au](http://www.icage2011.com.au)

ABSTRACTS DUE: 30 SEPTEMBER 2010

The International Conference on Advances in Geotechnical Engineering (ICAGE 2011) is an inaugural international conference that aims to bring together academics and practitioners from across the world with a common interest in the field of Geotechnical Engineering. The conference will provide a platform to discuss the recent advancements and address the future challenges within the profession of Geotechnical Engineering.

It will be an excellent opportunity for exchange of information and ideas pertaining to the profession. Both academics and engineers are cordially invited to attend the conference to share and exchange their knowledge.

Hosted By: Department of Civil Engineering, Curtin University of Technology | For additional information: EECW Pty Ltd T: +61 08 9389 1488 E: [emma@eecw.com.au](mailto:emma@eecw.com.au)

## MAKE IT SO I CAN INSPIRE THE NEXT GENERATION OF ENGINEERS

As part of Australian Engineering Week, we are encouraging engineers to visit primary schools and spread the word about careers in engineering.

This might be your child's school or even a school you attended.

To assist you, we have a new Volunteer Survival Guide for Primary Schools that contains valuable tools and resources to support your efforts in promoting the profession. The CD Rom includes things like speaker notes, power point presentations and exercise sheets for students and it's available on request from the WA Division Office.

For more information please contact Tim Davies on (08) 9321 3340.

Let's show the world that engineers **MAKE IT SO.**

Schools Program Sponsor



## 2010 WA Engineering Excellence Awards

### Cocktail Party

6:00pm, Friday 10th September  
Woodside Plaza

### Presentation Dinner

7:00pm, Saturday 18th September  
Perth Convention Exhibition Centre

For more information and tickets contact Engineers Australia WA Division (08) 9321 3340.



## Australian Engineering Week Calendar of Events

In this event-filled week, engineering opens its doors to the public, informing and inviting the whole community to share in the excitement, momentum and direction of engineering; it also spotlights the career and business opportunities that it holds. For the most up to date event listing and details on how you can register your attendance visit the website [www.makeitso.org.au](http://www.makeitso.org.au)

### Monday 2 August

#### Breakfast Launch

Join special guests to celebrate the launch of Australian Engineering Week  
Venue: Perth Convention Exhibition Centre  
Time: 7:15 Am - 9:00 AM

### Tuesday 2 August

#### Engineering Leadership in a Rapidly Changing World

Guest Speaker: David Mofflin FIEAust CPEng  
Executive Director, WorleyParsons  
Venue: Geraldton Club, 160 -166 Marine Terrace, Geraldton

#### Make it so I can be an Engineer Student Night (North)

Venue: Challenge Stadium, Mt Claremont  
Time: 6:00 PM - 9:00 PM

### Wednesday 3 August

#### Spaghetti Towers for Year 6 Students

Venue: Eaton Fair Shopping Centre, Eaton  
Time: Weigh-in commences at 5:30 PM

#### Public Forum - What if Perth was a City without cars

Venue: Curtin University Technology, Tim Winton Lecture Theatre  
Time: 7:00 PM - 9:00 PM

### Thursday 4 August

#### Centre for Engineering Leadership & Management Luncheon

Guest Speaker: Andrew Forrest, CEO, Fortescue Metals Group  
Venue: Perth Convention Exhibition Centre  
Time: 12:00 Noon - 2:00 PM

#### Spaghetti Bridges for Year 7 Students

Venue: Eaton Fair Shopping Centre, Eaton  
Time: Weigh-in commences at 5:30 PM

#### Make it so I can be an Engineer Student Night (South)

Venue: East Fremantle Yacht Club  
Time: 6:00 PM - 9:00 PM

### Friday 6 August

#### Margaret River Spaghetti Towers

Students from year 6 and 7 invited to facilitated session to build towers from spaghetti and marshmallows with prizes for best structures.  
Venue: Margaret River, WA

#### Australian Engineering Week Cocktail Party

Join us to come and celebrate the closing of Australian Engineering Week with a Cocktail Party  
Venue: Matilda Bay Function Centre, Crawley

### Saturday 7 August

#### Engineers Without Borders Pathways to Working with Developing Communities

Venue: Engineers Australia, 712 Murray Street, West Perth  
Time: 8:30 AM - 5:00 PM

### Sunday 8 August

#### Curtin Open Day

Discover the engineering study options at Curtin University of Technology  
Venue: Kent Street, Bentley, Perth

### Sunday 15 August

#### University of Western Australia Open Day

Attend a range of information sessions, demonstrations and workshops, faculty events and tours  
Venue: The University of Western Australia  
35 Stirling Highway, Crawley

# AUSTRALIAN ENGINEERING WEEK 2010

make it so.



2nd-6th August

# Dates for your Diary

ENGINEERS AUSTRALIA  
WA DIVISION NEWSLETTER

| Date/Time                  | Host  | Event & Venue   | For more information  |
|----------------------------|---|---|---|
| Thu 22 Jul                 | ATSE/Engineers Australia/<br>Curtin University of<br>Technology   | City to Cape – 2100 Sea-Level Rise Seminar<br>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.<br>Curtin University of Technology, Perth (Elizabeth Jolley lecture theatre) | Contact:<br>Ms Kelly Pilgrim-Byrne<br>Phone (08) 9266 1792 or email<br>k.pilgrim-byrne@curtin.edu.au  |
| Fri 23 Jul<br>7:30 AM      | Young Engineers WA and<br>the Centre for Engineering<br>Leadership and Management   | Community Leadership and Engineering Skills<br>Speaker: Hon Bill Marmion MLA FIEAust CPEng, Minister for Commerce; Science and Innovation; Housing<br>Auditorium, Engineers Australia WA Division   | Visit:<br><a href="http://www.engineersaustralia.org.au/wa">www.engineersaustralia.org.au/wa</a>  |
| 2 - 6 Aug                  | Engineers Australia   | Australian Engineering Week including the Breakfast Launch, CELM Luncheon and Cocktail Party  | Visit:<br><a href="http://www.engineersaustralia.org.au">www.engineersaustralia.org.au</a>  |
| Tue 03 Aug<br>6:00 PM      | WA Oil and Gas Facilities<br>Group  | Wax inhibitor selection for the Browse basin<br>Speaker: Dr Braden Dunsmore, Technical Manager, Baker Hughes<br>Auditorium, Engineers Australia WA Division   | Visit:<br><a href="http://www.engineersaustralia.org.au/wa">www.engineersaustralia.org.au/wa</a>  |
| Sat 7 Aug<br>8:30 AM       | Engineers Without Borders   | Pathways to Working with Developing Communities<br>Engineers Australia, 712 Murray Street, West Perth   | Visit:<br><a href="http://www.ewb.org.au/events/108/10328">www.ewb.org.au/events/108/10328</a>  |
| Wed 18 Aug                 | Engineers Australia   | Chartered Status Workshop<br>An Engineers Australia National Assessor delivers a free public workshop on the requirements and process involved in becoming a Chartered Member in your occupational category<br>Lecture Room, Engineers Australia WA Division              | Register Online:<br><a href="http://www.engineersaustralia.org.au/wa">www.engineersaustralia.org.au/wa</a>  |
| Fri 10 Sep<br>06:00        | Engineers Australia WA<br>Division  | 2010 WA Engineering Excellence Awards Cocktail Party  | Visit:<br><a href="http://www.engineersaustralia.org.au/wa">www.engineersaustralia.org.au/wa</a>  |
| Thu 16 Sep<br>5:30 PM      | Engineers Australia   | Chartered Status Workshop<br>An Engineers Australia National Assessor delivers a free public workshop on the requirements and process involved in becoming a Chartered Member in your occupational category.<br>Auditorium, Engineers Australia WA Division               | Register Online:<br><a href="http://www.engineersaustralia.org.au/wa">www.engineersaustralia.org.au/wa</a>  |
| Sat 18 Sep                 | Engineers Australia WA<br>Division  | 2010 WA Engineering Excellence Awards Dinner<br>Perth Convention Exhibition Centre  | Visit:<br><a href="http://www.engineersaustralia.org.au/wa">www.engineersaustralia.org.au/wa</a>  |
| Mon 20 Sep - Fri<br>24 Sep | Society for Underwater<br>Technology  | Subsea Awareness Course<br>Parmelia Hilton Hotel, Perth   | Please contact Joyce Bremner on<br>j.bremner@sut.org Tel +61 8 9446<br>9903   |
| Thu 21 Oct<br>5:30 PM      | Engineers Australia   | Chartered Status Workshop<br>An Engineers Australia National Assessor delivers a free public workshop on the requirements and process involved in becoming a Chartered Member in your occupational category.<br>Auditorium, Engineers Australia WA Division               | Register Online:<br><a href="http://www.engineersaustralia.org.au/wa">www.engineersaustralia.org.au/wa</a>  |
| Thu 28 Oct<br>9:00 AM      | Society for Underwater<br>Technology  | Autonomous Underwater Technology - Subsea Solutions for a new Decade  | Please contact Joyce Bremner on<br>j.bremner@sut.org Tel +61 8 9446<br>9903   |
| 12 - 16 Dec                | Engineers Australia's National<br>Committee on Applied<br>Mechanic & the Australian<br>Institute for Non-Destructive<br>Testing (AINDT) | The 6th Australasian Congress on Applied Mechanics<br>Perth Convention and Exhibition Centre  | Visit the congress website at:<br><a href="http://www.acam6.org">www.acam6.org</a> or<br>email <a href="mailto:acam6@acam6.org">acam6@acam6.org</a> |

*Some event dates and times are subject to change. Please check our website [www.engineersaustralia.org.au/wa/events](http://www.engineersaustralia.org.au/wa/events) for up-to-date information*