

## Engineers promote important role of leadership in the community

Member for Nedlands Bill Marmion and Sue Murphy, CEO of the Water Corporation, promoted the important role of engineers as leaders in the community at a Centre for Engineering Leadership and Management (CELM) Breakfast at the UWA Club on 21 April.

Bill Marmion discussed how the skills learnt whilst studying and working as an engineer have held him in good stead for his more recent roles as a public servant and in politics.

He also implored listeners to take on the challenge of volunteering, reflecting on some of his roles within Engineers Australia including Presidency of the WA Division in 1999 and Chairing the judging panel for the WA Engineering Excellence Awards from 2006 to 2008.

Sue Murphy was next to present at the Breakfast, focusing on the need for community engagement in achieving a sustainable water future.

Sue commented on how community consultation has been an integral part of Water Corporation's plan to bridge the massive gap between projected water supply and demand over the next 50 years.



Left to Right: CELM Chairperson David Mofflin FIEAust CPEng with Sue Murphy FIEAust CPEng and Bill Marmion MLA FIEAust CPEng at the recent Centre for Engineering Leadership & Management Breakfast

She stated that community acceptance of directions such as reduced water consumption and recycled waste water will be vital to a sustainable future.

"Persuading others to share your vision works best when you issue an invitation," she said in conclusion.

The Breakfast was another initiative of CELM in recognition of the Year of Engineering Leadership.

*News Flash ... at the time of going to print Bill Marmion was appointed the portfolios of Commerce; Science and Innovation; and Housing and Works for the WA State Government. Congratulations Bill!*

## Nominations invited for 'WA Engineer of the Year'

Engineers Australia WA Division invites nominations for the 2010 WA Engineer of the Year and Young Engineer of the Year, across the three occupational categories of Professional, Technologist and Officer.

The winners will be announced at the 2010 WA Engineering Excellence Awards

Presentation Dinner in September.

The process for entry includes two stages, where initially nominations are submitted online, and following this, nominees will be contacted to provide additional supporting documentation. Nominations will be accepted during the month of June with

supporting documentation to be supplied in July.

For more information please visit: [www.engineersaustralia.org.au/wa/honoursandawards](http://www.engineersaustralia.org.au/wa/honoursandawards)

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## Officer Fellow achieves Engineering Executive

Rob Williamson was recognised at the recent Centre for Engineering Leadership and Management Breakfast for achieving the Engineering Executive (EngExec) post-nominal.

EngExec recognises the achievements of members who satisfy relevant leadership and management competency standards.

It suits engineers with a proven professional engineering track record who are interested in pursuing management and leadership opportunities in both the private and public sectors.

Rob Williamson is an Officer Fellow of Engineers Australia and the General Manager of Technologies with Snowden Mining Consultants.

Rob joins the increasing number of senior



Rob Williamson OFIEAust CEngO EngExec (I) with WA Division President Prof Tony Lucey FIEAust

Engineering Executives who have obtained EngExec.

## Hatch and Water Corporation re-commit to Professional Development Program

Hatch and Water Corporation have re-committed to the Professional Development Program with Engineers Australia.

Hatch provides consulting, design engineering, technology, environmental services, operations support and project and construction management to the global mining, metallurgical, energy and infrastructure sectors.

The development of young engineers through the Professional Development Program is a key component of their capability strategy.

At the Water Corporation, re-committing to the Professional Development Program provides Water Corporation Young Engineers with a guide for their professional formation and the opportunity for structured development pathways towards Chartered Status.

The Water Corporation's purpose is to provide sustainable water services to make Western Australia a great place to live and invest.



The team at Hatch with Alexandra Sparvell, National Industry Relationship Manager, Engineers Australia



Sue Murphy, CEO, Water Corporation and David Robinson, Director Education and Assessment, Engineers Australia with some stakeholders in the Professional Development Program

## Humanitarian Engineering

Professor Tony Lucey FIEAust  
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**Engineers Australia has designated 2011 to be the year of the humanitarian engineer. This reflects, and resonates with, our organisation's increased outward-looking focus as articulated in the 2010-2015 Strategic Plan. Humanitarianism is often regarded as solely altruistic and born from a spirit of self-sacrifice. However, this is not the case; engagement in humanitarian work drives personal development and increases both societal and cultural awareness. For engineers, this can add another dimension to the practice of our profession, enriching its diversity and extending its impact. Equally, it can stimulate reflection and review of the way we address engineering challenges in our own communities, and thereby lead us to more effective solutions and ways of working.**

In designating 2011 as the year of the humanitarian engineer, Engineers Australia has unequivocally signalled Engineering reaching out to regional and overseas communities. It expresses Engineering as having a social conscience that seeks to alleviate the adverse conditions of those less materially fortunate and empower, especially in the communities of developing countries. This again reflects the maturity of Engineering as a profession; it is not self-absorbed but can use its strength and confidence to lead development beyond the barriers of parochialism.

It also recognises the emergence, growth and energy of the Engineers Without Borders (EWB) movement that is inspiring many engineers, students and young people by realising a motivation and job satisfaction that goes beyond that of traditional personal-career development. Perhaps emulating *Medecins Sans Frontieres (MSF)*, that through its work reinforces medical practice as a force for good, EWB signally projects the idealism of engineering as a force that serves and improves Society. Western Australia has assumed a fairly spectacular position in EWB leadership and participation. In the only national competition for all first-year engineering students in Australian universities – the EWB design challenge – teams from Western Australian universities took four of six places in the finals of the 2009 competition that sought engineering

solutions to improve the lives of the lake people of Tonle Sap in Cambodia. These successful teams were just the pinnacle of the thousands of students who took part in the challenge and by doing so, not only applied design principles as part of their engineering education, but also saw far beyond their daily vistas and living norms.

Humanitarian engineering is already a reality as evidenced by the crucial work undertaken by engineers in rebuilding infrastructure after natural disasters. In the immediate aftermath of such events, it is most often engineers, either through their direct presence, or through the equipment and processes that they have developed, who provide essential short-term relief through securing clean-water supplies, shelter and transportation access that permits the inflow of aid. This vital work is given little publicity and recognition. The year of the humanitarian engineer will permit us to redress this situation, bringing to the fore the support that engineering gives to communities whether these be within our nation or in those with distant shores, crossing cultural boundaries, building relationships and creating a global community based on increasingly shared values.

What is perhaps less well understood is that while humanitarian engineering clearly benefits the recipient of such outreach, the provider also stands to gain through the often unusual challenges that must be overcome. These, of course, can be technical and logistical but they also arise from the need to implement engineering solutions that are appropriate to the community being assisted. Appropriateness here means that the solutions should be sustainable within the financial, technical and cultural make-up of the community. Engineering solutions and support must be designed so that it does not engender dependence upon an outside agency but instead leads to ownership, responsibility and growth for the community. These challenges can go far beyond those encountered in conventional engineering projects, stretching the engineering team and prompting creativity and innovation within a set of often very different constraints. Those who participate in humanitarian engineering, either directly in country, or through support from Australia, are presented with unique opportunities for their development as individuals and

members of what most often must be a highly effective team.



The rewards of participation in humanitarian work are deep. They can be both personally enriching and life-changing. If I may be excused a personal reflection, I recall the first occasion on which I lived and worked in a developing country as a volunteer teaching Science and Mathematics. On arrival, I held the rather arrogant view that I had a monopoly on knowledge and knew the only path to progress along which I would lead the community in which I was stationed. Two years later, at my departure, I realised that I had learned as much as I had taught, both about myself and my home culture that had effectively formed me and which I represented. When I returned to a 'normal' working environment, I saw it afresh and with greater insight than I had previously when taking it for granted and with unthinking acceptance.

Engineers Australia's year of the humanitarian engineer is therefore a great opportunity for us to look further than perhaps we normally do. While it is clear that only a few can actually work on the 'front-line' of humanitarian engineering, the practical support that such personnel receive from the home-based members of the engineering profession is vital. So too is the moral underpinning of actions that evidence the broadest reach and impact of engineering as it serves the community.

## Employers and students come together at Face to Face Expo

Over 900 students and 73 employers attended the 2010 Face to Face Expo, hosted by Engineers Australia on 27 March at the Claremont Showgrounds.

The Expo aims to bring together engineering students and employers under the one roof with vacation work and graduate employment high on the agenda.



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ENGINEERS AUSTRALIA

## Student wins engineering experience to the north-west

As part of the promotion for the Face to Face Expo all pre-registered attendees went into the running to win an all expenses paid trip to the North West with the WA Division and National President, visiting several key engineering projects.

The lucky winner was Marty Symmons (pictured below), with the trip to take place in late June.



WA Division Director Janice Lake with competition winner Marty Symmons StudIEAust

## Letter from London

Jerome Bowen MIEAust

2009 WA Young Professional Engineer of the Year

We've asked 2009 WA Young Professional Engineer of the Year Jerome Bowen MIEAust to contribute a series of articles following his recent secondment to London with WorleyParsons. In this edition he talks about his first impressions.

I've been seconded to the WorleyParsons London office from Perth for 6 months. So apart from the snow on the ground when I got here, and the proximity to a large part of Europe, it's pretty much the same as Perth, lots of people, lots of work to do. There are some noticeable differences though.

I'm helping to chase projects in the carbon, energy and sustainability area for WorleyParsons in Europe and Africa. Noticeably over here there is a larger appetite for sustainability, which makes WorleyParsons' EcoNomics™ brand more powerful than in Australia. However, of note also is the sheer size of the engineering markets over here.

In Australia, WorleyParsons is the biggest engineering consultancy; in the UK, as the centre of operations for Europe and Africa, the company has significant numbers of people, but the scale is so different that WorleyParsons is no longer the biggest.

This makes for larger challenges in winning engineering work, but also more opportunities for young engineers to help get over these challenges.

It is also a great region from which to work

on some interesting jobs in interesting places. The process engineer next to me just got back from 3 weeks in Kazakhstan, and a couple of electrical engineers came back from Madrid a few weeks ago.

Engineering is quite a transferable job. As a young engineer, the experience of working in a different country seems beneficial so far, and I encourage any graduate to go for it. When your company sorts out the airfares for you, it's even better!



Jerome Bowen near Buckingham Palace at the "Australia" pillars

## Teachers Award back again in 2010

Engineers Australia will once again be taking nominations for its Award for Excellence for Teaching.

The award was first launched in 2009 and aims to recognise and celebrate a secondary school teacher who has demonstrated excellence in applying the principles of engineering in the classroom, enhancing the learning experiences of their students and increasing the community awareness of the value of engineering to society.

The Award will comprise a certificate and cash prize of \$5000 for the individual teacher and \$5000 for engineering related projects at the teacher's school.

For more information please check out the Schools Program section of the WA Division web site. The award is proudly supported by the Schools Program Sponsor Western Power.



Last years winner Darren Hamley receives the award from the Hon Peter Collier and past President Chris Fitzhardinge

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# Special Notices

## Vale Dr Daniel Berinson BE PhD MIEAust

On March 28th Daniel was a co-pilot in a twin engine Piper Comanche aircraft that crashed just east of Perth while on a private flight to Northam from Jandakot. Daniel was an active member of Engineers Australia being involved in a wide range of professional activities. He was a member of the ITEE Committee, and in 2008/9 was an active proponent to bring the ASWEC2009 conference to Perth and served on the organising committee. Daniel was also an active member of the Software Engineering Forum.



1990. He went on to complete his doctorate at UWA in 1996 in cross disciplinary research in Physics and Mechanical Engineering in the field of vibration control systems for gravitational detectors. Daniel has worked with a number of Western Australian companies and organisations, and more recently with his own consulting company, Systec Engineering Pty Ltd. Through Systec he had established a considerable reputation in the application and development of software engineering processes and technologies to many engineering problems and applications.

private pilot's licence with Night VFR and CS/RG ratings.

Daniel will be remembered for the enthusiasm that he radiated – always bubbling with the greater issues of design and philosophy and the need to ensure that all around him appreciated the finer points of the engineering challenges that concerned him. Daniel was an exceptional example of what an engineer should be. He will be missed by his many colleagues in Engineers Australia and the wider industry in WA.

Daniel graduated in Electronic Engineering from The University of Western Australia in

Daniel had an active involvement in a wide range of community activities, and of course a great love of flying. He held a

## Did you do your engineering training overseas and you now live and work in Australia?

Are you interested in participating in an interest group that will provide opportunities for overseas qualified members to make contact with other engineers in an informal environment and also identify issues for professional development with a focus on those of interest to overseas trained engineers?

If you are, then you'll be pleased to know that the WA Division has formed a Migrant Engineers Interest Group to assist overseas qualified engineers, who have migrated to Western Australia, in making the most of

their careers in the Australian engineering industry.

The group was officially launched in November last year and a committee has now been formed to guide the group and plan activities.

The objectives for the Group will include:

- Providing members with social and networking opportunities for career enhancement.
- Developing, coordinating and implementing appropriate professional development activities.

- Developing, maintaining and improving communication with members.
- Seeking opportunities to hold cooperative events with other Division groups and panels.
- Providing the Division Committee with advice on local matters.

If you'd like to register your interest in attending sessions held by the Migrant Engineers Group please send your name, membership number and email address to Elisa Reale at [ereale@engineersaustralia.org.au](mailto:ereale@engineersaustralia.org.au).

## New to the WA Division



Engineers Australia WA Division would like to welcome Christine Webster to the team as Senior Bookkeeper.

Christine takes over from Sarah Cotterill and we'd like to take this opportunity to thank Sarah for her efforts over the years.

### Engteam.com.au – the Engineers Australia recruitment service

Engteam.com.au is the Engineers Australia recruitment service – a new hybrid online recruiting service, catering for engineers, technologists, associates, graduates and students – the whole engineering profession! Check it out online.

## Chartered Professional Engineer

In our April edition of Engineering WA we ran some photos of recently Chartered Engineers who were presented with their certificates at a Presentation Evening in March.



Red Lim MIEAust CPEng

We regret that we missed Red Lim, who is now a Chartered Professional Engineer at Western Power.

Congratulations Red!

## City to Cape – 2100 sea-level rise

Coping with the likely impacts of sea-level rise on Australia's Southwest Coast – from Perth to Cape Naturaliste – by 2100.

**Purpose:** To raise the level of understanding of this important theme through presentations by experts and through informed debate and analyses.

**Date:** Thursday, 22nd July 2010

**Venue:** Curtin University of Technology, Perth (Elizabeth Jolley lecture theatre)

**Topics will include:** Geology of our living coastline | Science of sea-level rise, best estimates, drivers and implications | Engineering principles with regards to protection, adaptation and costs | Planning perspectives, issues and uncertainties | Social realities, loss of beaches, impact of sea walls, coastal retreat, community attitudes | Legal perspectives

Focused on WA, yet many issues addressed are applicable elsewhere. Speakers and panel members are leaders in their fields

**Who should attend:** Engineers, state and town planners, government and local government decision makers, developers, lawyers, politicians, technological scientists, social scientists, environmental scientists, students, school teachers, and the public.

**For further information:** Visit [www.engineersaustralia.org.au/wa/sea-level-rise-seminar](http://www.engineersaustralia.org.au/wa/sea-level-rise-seminar) or contact Ms Kelly Pilgrim-Byrne, Executive Officer, Australian Sustainable Development Institute Phone (08) 9266 1792 or email Email: [k.pilgrim-byrne@curtin.edu.au](mailto:k.pilgrim-byrne@curtin.edu.au)

Hosted by The Academy of Technological Sciences & Engineering (ATSE), Engineers Australia and the Australian Sustainable Development Institute at Curtin University of Technology



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# Dates for your Diary

ENGINEERS AUSTRALIA  
WA DIVISION NEWSLETTER

Date/Time	Host	Event & Venue	For more information
Fri 21 May 7:00 PM	Electrical College and ITEE College	Electrical College and ITEE College Annual Awards Dinner 2010 Matilda Bay Restaurant Crawley, Perth, WA	Email: engpracawards@engineersaustralia.org.au
Tue 1 Jun 6:00 PM	WA Oil and Gas Facilities Group	Development and successful deployment of custom built remote operated NDT inspection tools for subsea pipelines Speaker: Roland Fricke, Principal Pipeline Engineer & Pipeline Technical Authority, Woodside Energy Limited Auditorium, Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
Thu 03 Jun 6:00 PM	Engineers Australia & 2020 DIRECTINVEST	DIY Investing – What you really need to know 2020 DIRECTINVEST invites you to attend our free educational investment seminar Auditorium, Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
Fri 11 & Sat 12 Jun	Australian Geomechanics Society	Ground Improvement Workshop Curtin University	Visit: www.engineersaustralia.org.au/wa
Wed 30 Jun 5:30 PM	Engineers Australia WA Division	Chartered Status Workshop Auditorium, Engineers Australia WA Division	Register online: www.engineersaustralia.org.au/wa
Tue 6 Jul 6:00 PM	WA Oil and Gas Facilities Group	Just when you thought it was safe to go back into the water! Speaker: WJ (Ivan) Skibinski, General Manager, Australian Marine Oil Spill Centre Auditorium, Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
Tue 13 Jul 6:00 PM	Australian Geomechanics Society	AGS Young Geotechnical Professionals' Evening Seminar and the 9th Dr Baden Clegg Award Auditorium, Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
Thu 15 Jul 5:30 PM	Engineers Australia WA Division	Chartered Status Workshop Auditorium, Engineers Australia WA Division	Register online: 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. Curtin University of Technology, Perth (Elizabeth Jolley lecture theatre)	Contact: Ms Kelly Pilgrim-Byrne Phone (08) 9266 1792 or email k.pilgrim-byrne@curtin.edu.au
2 – 8 Aug	Engineers Australia	Australian Engineering Week	Visit: www.engineersaustralia.org.au
Tue 03 Aug 6:00 PM	WA Oil and Gas Facilities Group	Wax inhibitor selection for the Browse basin Speaker: Dr Braden Dunsmore, Technical Manager, Baker Hughes Auditorium, Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
18 Sep	Engineers Australia WA Division	2010 WA Engineering Excellence Awards Dinner Perth Convention Exhibition Centre	Visit: www.engineersaustralia.org.au/wa
12 – 16 Dec	Engineers Australia's National Committee on Applied Mechanic & the Australian Institute for Non-Destructive Testing (AINDT)	The 6th Australasian Congress on Applied Mechanics Perth Convention and Exhibition Centre	Visit the congress website at: www.acam6.org or email acam6@acam6.org

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