

WorleyParsons CEO sees engineering leadership as key to energy outlook

Over 320 Engineers Australia members and industry stakeholders attended a breakfast presentation by John Grill, CEO of WorleyParsons, to kick-start the Year of Engineering Leadership on 25 February.

During the presentation, Mr Grill urged engineers to step up and take a much greater leadership role in shaping our future in response to the two big issues of 'Energy Availability' and 'Sustainability'.

"We have a tremendous opportunity to strengthen the image of the engineering profession, to increase our role as leaders in the community, and to be seen as the solution providers to some of the major challenges that our world currently faces," he said.

One of the big changes that Mr Grill believed would challenge engineers in the coming decade was the need to shift to cleaner forms of electricity generation.

"It appears inevitable that we are going to turn towards clean forms of electricity rather than oil as the most valued source of energy.

"This will result in us... entering the era of clean electricity. This will cause a fundamental shift to our business, and of course create many new opportunities."

Mr Grill discussed one of these opportunities, namely nuclear power generation.

He said that, while it was not up to engineers to say what is right or wrong, engineers should take a much greater leadership role in ensuring that the best



John Grill FIEAust CPEng EngExec, CEO, WorleyParsons, presented to over 320 members and industry stakeholders at a breakfast hosted by the Centre for Engineering Leadership and Management WA Chapter to officially launch the Year of Engineering Leadership

available technologies are developed and applied for nuclear power generation, so that the community can be fully informed and have available to it the best and safest possible array of solutions.

"It is vital that engineers provide the community with the facts around the issues that are of concern so that informed and sensible decisions can be made," Mr Grill stated.

The sell-out breakfast event with John Grill was organised by the Centre for Engineering Leadership and Management WA Chapter (CELM WA).

The key purpose of the CELM is to enhance professional opportunities for members of Engineers Australia by developing, recognising and promoting their ability to participate in and lead business, innovation and change.

CELM WA has developed an exciting program of future events to support the Year of Engineering Leadership.

Visit www.engineersaustralia.org.au/wa to keep yourself fully informed of up coming events.

By Dave Mofflin FIEAust CPEng
CELM WA Chapter Committee

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BGC re-commits to PDP



Civil Engineer Graduate Forum February 2010. Left to Right Back Row: Fraser Brown, Joshua Zaehner, Joel Teraci | Left to Right Centre Row: Richard Tanner, Janice Lake (Engineers Australia), Greg Heylen | Left to Right Front Row: Yu He, Alexandra Sparvell (Engineers Australia), Ray Jordan, Michelle Song, Peter Brearley (Engineers Australia)

After a successful 5 years with Engineers Australia, BGC have re-signed a Professional Development Program (PDP) agreement, committing to an ongoing relationship providing their Engineers with a variety of developmental experience, mentor support and feedback.

The Graduate Civil Engineer Program develops young graduates in line with Engineers Australia's PDP, providing

the support and mentoring to achieve Chartered Engineering Status. Chartered Status is the highest standard of competence in Engineering in Australia and is recognised globally.

Through the PDP, Engineers are provided with the opportunity of continuous assessment and feedback while working towards Chartered Status.

Students inspired on Women's Day

Monday 8 March 2010 importantly marked the 99th International Women's Day. On this day, thousands of events were held around the world to connect, inspire and celebrate the economic, political and social achievements of women.

In recent years, International Women's Day has attracted increasing support from global firms like Arup, who proactively partner with local industry groups and organisations to champion women in the workplace. As part of Arup's ConnectWomen activities held across the UK and Australia, Arup Perth hosted a morning tea for high school students to encourage young women to pursue careers in the built environment.

Arup's Dr Sarah Elkhatab, Cara Moreland, Emma Heyes, Diana Cameron and Catherine Pearce captivated students from Presbyterian Ladies College and

Shenton College providing insights from their own personal experiences working within the industry.

"We were pleased to offer local students the opportunity to discuss the field of engineering, the vital work engineers do and the many diverse career paths and travel opportunities engineering can lead to. It is important to make a career in engineering attractive to women as it enhances our profession through the promotion of diverse thinking", says Dr Sarah Elkhatab, Geotechnical Engineer Group Leader at Arup.

For Arup, International Women's Day provides a unique opportunity to promote engineering as an inclusive profession which values, supports and celebrates the contributions of women. More information on Arup's International Women's Day events is detailed on our website at www.arup.com.

Engineering Leadership

Professor Tony Lucey FIEAust
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Leadership typically conjures up images of famed individuals: statespersons, military strategists, captains of industry, or those who have founded or led religions or systems of thought. Leadership can then seem remote and derived from virtues somehow endowed upon a few chosen people. It may seem to have little to do with the majority, other than deciding who to follow. However, the concept of leadership is much broader, calling upon each of us to lead in our own ways – considering carefully the tenets upon which leadership is based – as individuals, members of a team and as a professional body.

In this year of Engineering Leadership, Professor Doug Hargreaves, our National President, has called for the development of a value-driven leadership that is based upon *identity*, *purpose* and *belonging*. All three attributes must co-exist in harmony for engineering leadership to be at its most effective.

Identity is a *sine qua non* for engineers; we must continue to possess the fundamental knowledge and skills that permit us to carry out the technical and creative requirements of our roles as practising engineers. We are the specialists, the experts, and the leaders recognised by the community to whom it turns for solutions and advances in our engineering-dependent world. Accordingly, we recognise and fulfil the responsibility to develop ourselves continuously through CPD so that the expertise upon which this identity is reliant is always current.

Purpose speaks to a broader attribute that has more recently emerged in engineering. It asks us to reflect upon why and how the specific activities we undertake drive engineering towards its overall goals of serving the community and progressing creativity and innovation in its practice. Such reflection allows the design and execution of engineering activities to contribute to a higher-level movement and leadership of the profession, while also meeting

clearly defined current needs of the project or challenge at hand.

The most personal of the three touchstone descriptors is *Belonging*. This emphasises the strength that we draw from – and create through – working together in teams at every level in engineering. Our professional organisation embodies this attribute. It provides a community to support its individual members. At the same time it distils and conjoins the many individual voices, and body of knowledge, of its members to create a powerful single voice that can influence and provide leadership to the community and Government.

Bringing these qualities together, engineering leadership flows from having a recognised expertise that is deployed within an overarching vision, to a common purpose, by an engineering team that is far greater than the sum of its parts.

With the capability assured, we can then consider the ways that engineering leadership manifests itself. As a profession there exist three principal mechanisms that be distinguished. Firstly, Engineering provides leadership *to* the community as a leader in the generation of wealth and devising products and services that improve Society's standard of living. Secondly, Engineering leads *with* the community, working hand-in-hand, not only to develop solutions to secure our shared future but also through collaborations that result in forms of community well-being, values and behaviour that may not be readily quantifiable in pure economic terms. Thirdly, Engineering exercises leadership *for* the community through the provision of education and expert advice that permits the community to have a better understanding of the engineered world in which we live.

How then can individuals make their contribution to these forms of engineering leadership? Leadership occurs at every level of the engineering organisation and within every team.

An answer is succinctly given by John Quincy Adams as "If your actions inspire others to dream more, learn more, do more and become more, you are a leader." Such actions are explicitly required by the role of team, section or organisation leader. However, even without an overt leadership role, actions such as carrying out one's tasks at the highest standards and contributing fully to the team set an example that is also leadership. Thus, we all have leadership opportunities and responsibilities in our roles as members of the engineering team. Taken together, these many teams sum to what we call the engineering profession and shapes its leadership in Society.

In more dynamic and contemporary phraseology, a leader is described by John C. Maxwell as one who "knows the way, shows the way, and goes the way". At every level of engineering we must *know the way* by understanding the setting, the challenge and the identifying solutions. We must *show the way* by explaining, by educating and working with clients and the community and then we must *go the way* using the highest standards of practice and innovation to carry through the solution and meet the challenge faced.

Finally, the rewards of successful leadership reside not with the individual but are found through a sense of satisfaction for the many in the team. "A leader is best when people barely know he exists; when his work is done, his aim fulfilled, they will say: we did it ourselves," said the Taoist philosopher Lao Tzu. So it is with engineering: leadership is about bringing out the best from the individuals who make the engineering team.



Recently appointed Fellows acknowledged at Engineering Leadership Launch



Left to right: WA Division President Prof Tony Lucey, Kenneth Brown, Stephen Brown, Peter Jordan, Russell Byfield and Paul Nichols

At the recent CELM Breakfast with John Grill several recently appointed Fellows were acknowledged and presented with their membership certificates. They were:

- Paul Nichols FIEAust CPEng – Paul is a Senior Principal with Cardno WA.
- Russell Byfield FIEAust CPEng – Russell is General Manager for Uhde Shedden in WA and a Chartered chemical engineer.
- Peter Jordan FIEAust CPEng – Peter is an Executive Project Manager and Major Client Manager with SKM.
- Stephen Brown FIEAust CPEng – Stephen is a business unit leader for AECOM, responsible for the electrical engineering discipline at the Perth office.
- Kenneth Brown FIEAust CPEng – Ken is a Chartered electrical engineer and is currently the General Manager System Management with Western Power.

Electrical engineer receives high accolade



Kenneth Brown FIEAust CPEng (above left) was recently awarded the 2010 National Electrical Engineer of the Year Award by Albert Koenig, Chairperson of the Electrical College Board (above right) in recognition of his excellent performance as a senior member of the College.

On the day, Don Young FIEAust CPEng (pictured below right) was also awarded the Engineers Australia Medal for meritorious service in the pursuit of Engineers Australia's goals in the interests of the profession.



Top engineering students presented with EA medals



At the recent WA Engineering Excellence Awards Launch several students who achieved top marks in their engineering studies in 2009 were presented with medals. They were:

- Alan Punch StudIEAust – IEAust/Murdoch Medal, Murdoch University
- Kai Karvinen StudIEAust – Digby Leach Medal, Curtin University of Technology
- Dinesh Tamang – Harry Appleby Medal, TAFE
- Behnam Taherian – Russell Dumas Medal, University of Western Australia

Left to Right: Behnam Taherian, Dinesh Tamang, Kai Karvinen and Alan Punch

Chartered engineers awarded certificates

At an Engineers Australia Certificate Presentation on March 11, six members were presented with their certificates after successfully obtaining Chartered Status by WA Division President Professor Tony Lucey.

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



Vishnu Kadekodi MIEAust CPEng



Allan Devlin MIEAust CPEng



Martin Hoy MIEAust CPEng



Paul Dyson MIEAust CPEng



Mohammadreza Lotfinejad MIEAust CPEng



Jalil Jalili MIEAust CPEng

Country Groups on a Roll

The WA Division Country Groups are currently more active than they have been for several years. We have member groups in the regional areas of Port Hedland, Karratha, Newman, Mid West (Geraldton), Goldfields (Kalgoorlie), Peel, South West (Bunbury) and most recently in Great Southern (Albany).

At the Country Groups yearly meeting at the Division Office on Monday 15 March, the reports and discussion highlighted the stronger involvement by members in the regional areas. Activities during 2009 ranged from technical sessions and the ever popular site visits to schools presentations and competitions.

The meeting also discussed the on-going need for more professional development and social networking in regional areas. While electronic delivery of CPD sessions is welcomed, members are also keen to have more face to face activities.

Division Advisory Board members and staff had the opportunity to meet informally with the County Group Chairpersons during the afternoon and to attend a professional development session with Greg Bayne entitled "Influencing without Authority".

Chartered Status

When you employ engineers with Chartered Status your company will benefit now and for many years to come. Engineers with Chartered Status, an internationally-recognised symbol of professionalism, are committed to keep pace with advancing engineering knowledge. Your stakeholders, customers and the community can be confident that Chartered practitioners represent the best in their field.

Only Engineers Australia grants Chartered Status, attained through our Professional Development Program. It gives your engineers the skills needed to build the reputation and bottom line of your company.

To learn more about how Engineers Australia can help, visit our website www.engineersaustralia.org.au or call 1300 653 113



ENGINEERS
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Engineers Australia WA Division Handbook

The Engineers Australia WA Division Handbook contains up-to-date information about Governance and Organisational Structure, Division Committee and Staff contacts as well as the various policies and procedures that could be important to you as a member and volunteer.

You can download a copy of the Handbook online at engineersaustralia.org.au/wa in the About Us section.



6 Star homes – The New Standard

New homes across Australia are taking the next step towards sustainability as the Building Code of Australia (BCA) raises the bar on requirements for energy efficiency.

From 1 May 2010, the BCA will include new provisions to help reduce power bills and greenhouse gas emissions from both commercial and residential buildings. For residential buildings, the changes will include:

- An increase in thermal comfort to '6 Stars',
- New requirements for highly efficient hot water systems, and
- The introduction of measures for lighting efficiency,

Software-based energy rating of houses will also become mainstream. Not only will ratings be acceptable as a deemed-to-satisfy (DTS) solution for houses, but apartment buildings can only be approved using software-based ratings.

Further Information

The Building Commission will be running seminars in April/May, detailing the new requirements in the BCA 2010. Building Advisory Notes are regularly published by the Building Commission on building regulation and standards issues.

To register for the seminars and Building Advisory Notes and for further information on changes to the BCA visit the Building Commission website – www.buildingcommission.wa.gov.au.

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

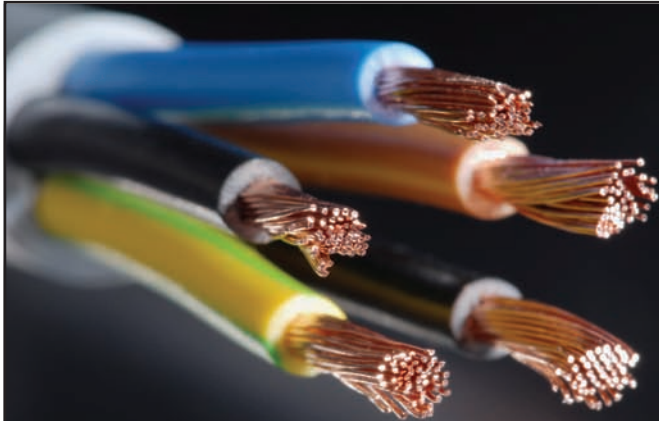
Focused on WA, yet many issues addressed are applicable elsewhere. Speakers and panel members are leaders in their fields

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: Further information contact Ms Kelly Pilgrim-Byrne, Executive Officer, Australian Sustainable Development Institute if you wish to register your interest to receive detailed program information. Phone (08) 9266 1792 or email 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





DOWN TO EARTH CONFERENCE 2010

Perth, Western Australia
29 & 30 April



A conference dedicated entirely to EARTHING for Electrical, Electronic, Control & Communications Engineers.

REGISTRATIONS CLOSING 21 APRIL

The year 2010 will mark 128 years of amazing progress, however the Electrical, Electronic, Control and Communication Engineering Professions still lack a unified approach to earthing and are generally divided on what constitutes 'correct' earthing practices. This conference aims to bring earthing issues to the forefront, challenge existing thinking and hopefully move us all closer towards a unified approach to earthing.

The Electrical Engineering Panel invites you to take part in this conference to be held at Sheraton Hotel in Perth, Western Australia on Thursday 29 and Friday 30 April 2010. For more information on how to register visit engineersaustralia.org.au/wa or call the WA Division Office on (08) 9321 3340.

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Located just a ten minute walk from the main settlement and situated amongst a nine-hole golf course the newly renovated Rottnest Island Country Club and Conference Centre is the perfect location for your next conference, meeting or team building exercise.

Contact our Events team on (08) 9432 9351 for venue and booking information or visit www.rottnestisland.com for more information.



Dates for your Diary

ENGINEERS AUSTRALIA
WA DIVISION NEWSLETTER

Date/Time	Host	Event & Venue	For more information
Thu 22 Apr	Australian Institute of Refrigeration, Airconditioning and Heating	AIRAH INFORMATION WORKSHOPS ON SECTION J (VOLUME ONE) City West Function Centre 45 Plaistowe Mews, West Centre, West Perth	Register online at www.airah.org.au or email: rhonda@airah.org.au
29 & 30 Apr	Electrical Engineering Panel	Down to Earth Conference 2010 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
Mon 3 May	CIBSE WA Chapter & SBSE WA	Integration of ELV systems in hospitals Speaker: Paul Dearlove (IBMS) Auditorium, Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
Mon 3 May 5:30 PM	Royal Aeronautical Society Australian Division & The College Of Electrical Engineering	Eminent Speaker Series: Mr Fred Abbink, General Director, The Netherlands National Aerospace Laboratory Topic: Survival of the Fittest: 90 Years of Dutch Aeronautics – RDT&E in a Globalising Environment Auditorium, Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/eminentspeaker/
Tue 4 May 6:30 PM	WA Oil and Gas Facilities Group	Update on IBM's "Integrated Operations" Program with Statoil Speaker: David Haake, Oil Industry Solutions Executive, IBM Australia Auditorium, Engineers Australia WA Division	Visit: www.engineersaustralia.org.au/wa
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
Thu 13 May 5:30 PM	Engineers Australia WA Division	Chartered Status Workshop Auditorium, Engineers Australia WA Division	Register online: 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 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
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 for up-to-date information