Vale past Presidents

It has been a month of high and lows in some ways. We have seen some exciting new advances but sad to say, we have lost two of our senior members and past Division Presidents.

I extend my sympathy to the families of Barry Robertson and John Gebler. Both Barry and John were our Division Presidents in 1988 and 1989 respectively. Barry continued with his service to EA with work on the Engineering Excellence Awards Committee. Many of us knew John as a Champion of our organisation’s rules and by-laws, and I assure you many Division Presidents have had an interesting adviser or source of advice in John over the past years.

Perhaps one of the highlights of the last month was attending the opening of the new Opal research reactor at Lucas Heights. This facility is built for research and to continue providing service to the medical sector. The associated research capabilities springing from this facility are nothing short of amazing. The taking-off of neutrons from the core and beaming these to various sample “viewing” devices allows scientists to gain unprecedented insights into the structure and composition of not-only solids and liquids but biological samples as well.

The inbuilt safety of the reactor, its controls and monitoring was an area of interest, given our growing debate on the future of nuclear energy. While accepting that this facility is very small, it does have the very latest “fail Safe” technology and we must remember it is the nuclear industry that has had an important role in developing the safety methods used in many of our other industries today.

While attending the opening I was fortunate enough to have a comprehensive tour of the facility and when I reflected on the day, several things stood out. Due to more important people being there than me, the security around the site had been strengthened. However, the flow of the occasion was outstanding. The pride and enthusiasm of the staff stood out, and Australia can now be proud of the fact that we have one of the top three research reactors in the world.

On May 24, Engineers Australia presented the new Professional Standards Scheme at the launch in Chatswood. I urge as many Engineers as possible to look at the scheme and if appropriate,
consider joining. There are some areas that you will have questions about and I ask that these questions be addressed to National Office. There may be some difficulties in relation to appropriateness where you have a multi-discipline organisation. In this case, it may be necessary to either restructure sign-off or wait for changes to the scheme. Don’t forget to discuss the scheme with your broker as well, and make sure they also understand it.

Warren Newell
Sydney Division President

New agreement strengthens dam building skills at UNSW

The New South Wales Government has committed to work with the University of New South Wales (UNSW) to build local dam engineering skills, with the signing of a memorandum of understanding by UNSW and NSW Minister for Water Utilities, David Campbell.

The agreement signing marks the official start of a partnership between UNSW and the State Water Corporation to create a new generation of engineering students.

Mr Campbell said the agreement would encourage future research in dam engineering. “Through the five-year partnership that will fund a Senior Lecturer/Associate Professor of Dam Engineering, we are investing in future infrastructure to benefit our community.

“This important position will add focus and strength to geotechnical engineering research and dam engineering within the School of Civil and Environmental Engineering and encourage and foster learning of dam and civil engineering students.”

The relationship will increase UNSW’s ability to train future geotechnical engineers as well as contributing to the learning of dam owners such as the State Water Corporation.

It is anticipated that the new position will be filled by the end of June and will continue for five years. The State Water Corporation will support the position with five annual payments of $50,000 to the UNSW Foundation Limited during the five-year term of the agreement.

YEAS Report

You will note from previous columns that Young Engineers Australia Sydney (YEAS) members are often invited to attend events held by other professional organisations. On Thursday May 10, YEAS members were invited to take part in a Young Professionals Networking event at the offices of DLA Phillips Fox. The night included a special presentation by Stephen Mayne, the founder of Crikey and provided plenty of opportunity for networking amongst other young professionals.

The month of May also included an invitation from the Young Business Professionals (YBP) to YEAS members to attend a YBP event with key-note speaker Mia Freedman (Creative Service Director, Nine Network Australia). For more opportunities to attend events organised by other professional organisations, keep an eye on our website!

On Thursday May 24 YEAS held the 2007 “Hear from Young Engineers” event at the spectacular Watershed Hotel, located at Darling Harbour. The night included presentations from two leading Young Engineers – Andrew Botros (Engineers Australia’s Young Professional Engineer of the Year, 2006), and Nick Harley (Young Engineers National Committee Chair, 2007). On behalf of the YEAS committee, I would like to thank both Andrew and Nick for their fantastic presentations, and for taking the time out to speak to us.

By the time this column goes to print, Young Engineers Sydney would have also held the first Trivia Night of the year, at Paddington Bowls Club, which will be more formally reported in the next column. There are also many other interesting and exciting events coming up in the next few months. There is an Entrepreneurs Workshop in July, and during Engineering Week in August there will be the YEAS / Engineers Without Borders Trivia Fundraising Night, as well as the YEAS Cocktail Function. Make sure you check out the YEAS website: http://syd.youngengineers.com.au for more information on upcoming events.

If you are interested in getting involved or learning more about YEAS please email our secretary Simon Reynolds at yeasyd@engineersaustralia.org.au

WSRG Telstra Stadium tour

Western Sydney Regional Group held a very informative behind the scenes tour of Telstra Stadium at Sydney Olympic Park, Homebush Bay. The visit included the corporate, members and media areas of the stadium as well as the athletes and players areas, which are not normally accessible to the public. Our tour guide, Gina, provided insight into the complex organisational requirements involved in holding the major sporting and entertainment events at the stadium. She also provided some interesting anecdotes of her experiences over the seven years she has worked at Telstra Stadium.

L to R: Ms Jennifer Bott, Chief Executive Officer, UNSW Foundation, Professor David Waite, Head of School, Civil and Environmental Engineering, Mr Ken Bennett, Dam Safety & Audit Manager, State Water, Mr Ross Barrie, Manager Strategic Asset Services, State Water, Professor Brendon Parker, Dean, Faculty of Engineering, Professor Dianne Wiley, Associate Dean (Academic), Acting Dean from 1st April to 31 December 2007, Professor Nasser Khaill, School of Civil and Environmental Engineering.

Site visit to Telstra Stadium.
Barry Donald Robertson
17 June 1939–26 April 2007
Barry Robertson tragically passed away on April 26 after a long battle with a brain tumor.
Barry was first admitted into the Institution of Engineers on May 30, 1961, at the young age of 22 years. He achieved the ranking of Fellow on July 26, 1977, and President Sydney Division, or Chairman as the position was then known, in 1988.
In 2006 Barry was in his seventh year as chair of the Project Management Category of the Engineering Excellence Awards when he stepped aside to undergo treatment for his condition. His ongoing support of Sydney Division and the Excellence Awards program will long be remembered.
Barry leaves his wife Sue and sons Guy and Duncan.

National Heritage List: Sydney Harbour Bridge
By listing the Bridge in the National Heritage List, the Minister’s decision ensures that its National Heritage values will be protected under the provisions of the Environment Protection and Biodiversity Conservation Act 1999 (the Act). Further information on the Act is available on the Department’s website at http://www.environment.gov.au/epbc/index.html.

Nominations are invited for the 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 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. The nomination and supporting material should be mailed to the Administrator, Engineering Heritage Australia, 11 National Circuit, Barton, ACT 2600, (Tel 02 6270 6530).
An electronic version of the nomination is also required. This version should preferably be in Microsoft Word on a floppy disk (or CDROM) and mailed as above, or sent by email to the Administrator AGarden@engineer-australia.org.au.
Nominations and the supporting documentation should reach the Administrator by Tuesday, 31 July 2007.

John Wesby Gebler
17 April 1933–27 April 2007
It is with deep regret that we advise that John Gebler has passed away as a result of Leukaemia.
John was a guiding force in the Sydney Division for over two and a half decades. He served on the Division Committee from 1983-2006 and was the Division Treasurer from 1991-2004. John was the Sydney Division Chairman in 1998 and an elected delegate to the National Congress from 1999-2005. He was also a long term member of the NSW Council of Professions and its President from 2002-2003.
In November 2006, in recognition of his enormous contributions to his profession, John received the Engineers Australia Medal. John was widely recognised for his knowledge of the Institution’s Royal Charter and Bye-Laws and his dedication and passion for the engineering profession. He was also keenly interested in the welfare of his local community at Greenwich and he was a key organiser of its local progress group.
John’s passing is a sad day for his wife Bronte, and his son James and his daughter Amelia. Sydney Division says goodbye to a wonderful friend and supporter.

Australasian Structural Engineering Conference 2008
ASEC 2008 is a two-day conference scheduled June 27 and 27, 2008 and is directed at structural engineers. This conference is a time out, providing an opportunity for like-minded people to meet, share ideas and broaden their technical skills.
ASEC 2008 is open to anyone in the structural engineering profession and allied industries.
Conference Themes
- Turning theory into practice
- Sustainable structural engineering
- Risk in structural engineering
- Lessons from failures
- Other
Abstract submissions are now open and close by July 1, 2007
Early Bird Registration Close on March 7, 2008.
The conference is being held at The Sebel Albert Park (Formerly Carlton Crest Hotel Melbourne) and is being hosted by Engineers Australia.
To show your interest in the conference, or for more information visit www.asec2008.com.
Winner of the Richard Kell Scholarship Announced

Cardno is pleased to announce Ms Jacinta Holmick as the winner of the inaugural Cardno Richard Kell Scholarship for 2007.

The annual scholarship has been established to provide one of Cardno’s exceptional young engineers with the opportunity to attend international management and training seminars.

Ms Holmick will participate in the prestigious FIDIC (International Federation of Consulting Engineers) Young Professionals Management Training Program culminating in the annual international FIDIC conference in Singapore in September.

Ms Holmick says she was proud to receive the award and believes it will present her with an opportunity to develop strong management skills and a global understanding of the issues facing the consulting industry.

The award is a fitting legacy for Dick Kell given his long involvement with FIDIC as President and his ongoing support and encouragement of young engineers in the Cardno group of companies.

Ms Holmick joined Cardno more than two years ago and is now a Project Manager in Cardno’s Urban Infrastructure team in Baulkham Hills. Ms Holmick has worked on a number of major projects including Stage Two of the Second Ponds Creek development and the Harrington Park project.

Nominations are invited for the Colin Crisp Award FOR ENGINEERING HERITAGE

The Colin Crisp Award is Australia’s premier award for excellence in Engineering Heritage projects. It is awarded biennially at the National Engineering Heritage Conference.

The Award is made by Engineering Heritage Australia, a special interest group of Engineers Australia.

Criteria for the Award

An award shall be for demonstrated excellence through one or more of the following activities:

- Conservation of an engineering work of historic or heritage significance (in this context conservation includes maintenance and may include preservation, restoration, reconstruction, and adaptation);
- Engineering work that facilitates or is essential to the successful conservation of an historic or heritage work, including machinery, structures, buildings or electrical equipment;
- Education, or the creation of awareness in engineering history or heritage; and
- Such other endeavour related to engineering history or heritage, deemed by the Subcommittee to be worthy.

Nominations shall be submitted by individuals, firms or organizations. The project must have been completed after 29 June 2003.

Making Nominations

Nominations may be made by Engineers Australia members, Divisional Engineering Heritage Groups, their members or by Members of EHA, including Corresponding Members.

Any nomination for any Divisional Engineering Excellence Award in an Environment & Heritage category (or similar) may be submitted as an entry for the Colin Crisp Award. A letter nominating a particular project for the Colin Crisp Award signed by the firm/organization which prepared the Engineering Excellence Award nomination is the only documentation required.

Nominations shall be submitted through the Divisional Engineering Heritage Group in the Division in which the nominated project is located, or to the Administrator, Engineering Heritage Australia, 11 National Circuit, Barton, ACT 2600 (phone: 02 6270 6530).

Entrants should provide two bound copies and one CD-ROM of their entry, together with any supporting material such as photographs, discs and videos, which must be clearly labelled.

Nominations will be treated as confidential.

A document providing further detailed information for entrants is available from the Administrator, EHA.

Form of Nomination

Entries should not be more than 6,000 words or 12 pages in 12 point Arial font excluding attachments. There is no limitation on the size of attachments.

Closing Date

Nominations and the supporting documentation shall reach the Administrator by Friday 31 August 2007.
**Delta Electricity signs PDP**

Delta Electricity is an electricity generation corporation which was formed on 1 March 1996 as part of the NSW Government’s restructure of the State’s electricity industry. This restructure was in response to large scale changes in generation, transmission and supply of electricity in eastern Australia following the Federal Government’s program of competition reform.

In order to meet the demands of its business, a heavy reliance is placed upon the engineering knowledge and skills within the organisation. While graduates have traditionally received exposure to a variety of projects, a recent review of Delta’s Graduate Program highlighted a need for a formal component to be incorporated where participants were able to have their development assessed against an external benchmark. Based upon this approach, Delta has recently incorporated into its Graduate Program the requirement for participants to pursue the award of Chartered Status through Engineers Australia. Accordingly work completed by the Graduates within Delta will not only enhance their skills and experience, but will also contribute towards their professional recognition.

![Image of Delta Electricity and Engineers Australia officials](image-url)

**Engineering Heritage Sydney**

**Conserving the Engineering of Our Past**

**Join one of our Guided Harbour Cruises**

Next Cruise is being held during National Engineering Week.

**Sunday 19th August**

Visit our web site for other guided & self-guide tours.


If you’re interested in industrial history and old works, then browse through our web pages for some interesting facts.

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**YEAS Careers Evening April 26**

The YEAS Careers Evening took place on Thursday, April 26 at the University of Technology Sydney (UTS). The event was supported by a record 31 exhibitors and attracted 250 student registrations.

The evening was opened by Warren Newell, President of Engineers Australia Sydney Division. The Master of Ceremonies for the evening, Amal Hanna, Immediate Past President of the Engineers Australia Sydney Division, introduced a programme of very informative and interesting presentations. Our first presenter was Anthony Kadi from UTS who covered the area of postgraduate education and the benefits it can bring to young engineers and their future careers. Presentations were also given by four recent graduates from an array of engineering disciplines, focussing on their transition from university to working life. These were Jacinta Holmick from Cardno, Len Gervay from SKM, Nick Porters from Golder Associates and Ryan Kirk from Parsons Brinckerhoff.

![ YEAS Careers Evening group photo ]


Following the formal presentations, students moved to the exhibition area where they mingled with exhibitors and gained valuable information and guidance for future working opportunities. The evening finished with a draw for movies tickets and five lucky winners took home double passes to the next blockbuster of their choice!

![ YEAS Careers Evening group photo ]

Students registering for the Careers Evening.

Many thanks to all our volunteers who gave up their time and helped to make the evening a success.

Sarah Hartnett
Event Co-ordinator
Henry & Hymas sign up for PDP

Sydney based multi-disciplinary consultant, Henry & Hymas (H&H Consulting Engineers), has recently committed to the Engineers Australia Professional Development Program (PDP).

Henry & Hymas has 60 professional staff in a range of disciplines, capable of undertaking the most complex of engineering commissions. We believe our commitment to Engineers Australia’s PDP will complement the firm’s current graduate program and ensure the continued development of our staff members.

H&H’s design philosophy is to provide economical and buildable solutions by considering alternative solutions that preserve the integrity and serviceability of the project. Our aims are achieved through the diversity of experience and maturity of our design teams, thus making it essential for our staff continue their learning and skills development.

At the signing with Richard Phillips, Executive Director – Sydney Division, Henry & Hymas Director, Mr Bruce Bradnam said “the PDP will work in well with the firm’s ongoing commitment to developing and broaden our skills base. The program will create an environment that will encourage younger engineers and engineers with international qualifications to attain Australian Chartered status.

Ben Withers speaking to as couple of budding engineers.

The No 5 Blast Furnace Re-Line Project is a major capital project currently being planned at BlueScope Steel’s Port Kembla Works and is one of two operating blast furnaces. It was commissioned in 1972 and has been previously shut down for re-lining (i.e. major repair of furnace internals) in 1978 and 1991. It is currently planned to undertake the re-line of No 5 in 2009, to be completed in three months with an expected expenditure of $300 million. The re-line is projected to last at least 20 years.
Robot car contest

A group of Australian artificial intelligence experts have combined with the University of Sydney to chase cyber glory and a $US2 million ($A2.4 million) prize by entering a contest for robot cars in the USA.

One of the team members, Alen Alempijevic worked part-time with Membership Services, Sydney Division whilst completing his Degree. Alen is now a Doctoral Candidate & Academic Intern ARC – Centre of Excellence in Autonomous Systems at UTS.

The 2007 Urban Grand Challenge, run by the US Defence Advance Research Projects Agency (DARPA), involves a 97km city-like course. Conditions will be similar to that of a city environment ie traffic signs, road markings, rules of the road max speed limited for a town, where the cars will move through checkpoints over a long period at max speed limit for a town.

Multiple cars will be on the track at the same time, but will be fully autonomous. The cars must drive themselves through the course with no human intervention, either direct or via remote control, allowed.

The aim of the exercise is to develop cars and trucks that safely drive themselves in real-world traffic including the Defence Forces. The savings for long-haul trucking operators alone are potentially huge and then there are other highly beneficial implications, such as allowing supplies to be delivered to troops without human loss.

With a large prize, the competition is fierce and the Aussie team must get through a series of elimination rounds.

They have to motor through a bunch of obstacles to even make it to the start at an abandoned military base in California, where the challenge begins on November 23.

The Australian Centre for Field Robotics at Sydney University got the UGC robot car challenge under way and cleared the first hurdle, which under DARPA rules was having a US citizen as the team leader, by enlisting the University of California at Berkeley as a partner. The Sydney-Berkeley Driving Team also has NICTA and the University of Technology, Sydney, on board.

The RAV4 Challenge car, donated by Toyota, has been mainly developed in Australia, with the Berkeley group contributing logistical and material support in the USA and some software development.

Instead of a human, the RAV4 is driven by a group of four PCs running Linux and Intel Core 2 Duo processors. The car’s brain uses a combination of 3D cameras, GPS, an inertial navigation system and laser range finders to get its bearings and sense obstacles and traffic control systems along the route.

Web Links for your information

The Civil & Structural Engineering Panel

wishes to announce the following free seminar:

“Design for Durability of Structures in the Maritime Environment”

Date: Tuesday, 26th June 2007
Time: 5.30 pm for 6.00 pm start, concluding by 7.30pm
Venue: Engineers Australia Auditorium
8 Thomas Street, Chatswood

The seminar will feature the design and construction of structures in the maritime environment.

It will focus on the design of concrete, steel and timber structures for durability.

Relevant case studies will highlight the problems and design solutions to be considered by those designing or managing projects in a marine situation.

Areas to be discussed include:
• Design of durable concrete structures in the maritime environment including relevant examples.
• Precautions to be taken when constructing in steel in the maritime environment.
• Design of timber structures in the maritime environment, durability and the need for maintenance.
• Case study of the Pyrmont Wharves 8/9 development and the designs adopted to satisfy the required design life of the steel, concrete and timber elements.
• The seminar will also refer to the requirements of the new Australian Standard: “Guidelines for the Design of Maritime Structures” AS 4997-2005.

Speakers:
• Jim Millar, Director, Waterway Constructions
• Andrew Patterson, Principal, Patterson Britton & Partners
• Jillian Kilby, Engineer, Waterway Constructions

Continuing Professional Development:
CPD Points apply per Engineers Australia criteria

For more information, contact:
Jillian Kilby, Ph: (02) 9555 2211, Email: j.kilby@waterway.com.au
RSVP, by Friday 22nd June 2007, to:
Jillian Kilby, Ph: (02) 9555 2211, Email: j.kilby@waterway.com.au

Note – RSVP is essential as there are only 100 seats available.
The high standard of entries received into this year’s Awards program clearly demonstrates the innovation, expertise and commitment to engineering excellence by individual engineers and organisations throughout the entire Sydney Division.

Judges of the 11 award categories were tasked with assessing each entry on its individual merit, and selecting those which displayed the highest level of excellence to progress to Level 2 – Finalist status.

The Excellence Awards committee gives its sincere thanks to the 34 judges involved in the selection process. Without their ongoing support the Excellence Awards would not be possible.

The very best of luck is extended to all of the category finalists whose names are listed below.

**KEY DATES:**

- **Level 2 entries close:** Friday 22 June
- **Awards Evening:** Friday 21 September – The Westin Sydney

For further information on the Awards program or Awards Evening please contact Robyn Worthing on 9410 5612 or email rworthing@engineersaustralia.org.au.

### Control Systems

**ENTRANTS**

- City of Ryde Council
- Telstra
- BlueScope Steel Ltd
- Hatch Associates

**PROJECT**

- City Of Ryde’s New Electronic Waste and Recycling Bin Tagging System
- Telstra’s Next G National High Speed Wireless Network Deployment
- Western Sydney Service Centre Project

### Manufacturing

**ENTRANTS**

- PeeWee
- Applied Robotics
- AWTA
- BlueScope Steel

**PROJECT**

- RSS Cutter
- A case in manufacturing and new solution commercialisation

### Environment & Heritage

**ENTRANTS**

- Building Services Engineers Pty Ltd
- Lothway-TBS
- Robert Bird Group
- Vision Water Pty Ltd
- Orica Australia Pty Ltd
- Meinhardt
- BlueScope Steel Ltd
- Hatch Associates
- Nubian Water Systems Pty Ltd

**PROJECT**

- IKEA Logan
- Tom Ugly’s Bridge Painting and Refurbishment: Temporary Works
- Towns Place North
- The Watercell
- Orica Botany Groundwater Remediation Project
- University of Notre Dame, Proposed Darlington Campus Project
- Western Sydney Service Centre Project
- Oasis GT600 Greywater Recycling System

### Education & Training

**ENTRANTS**

- University of Technology, Sydney
- CAE Australia Pty Ltd
- The UNSW Solar Racing Team

**PROJECT**

- Flexible Education Framework to address Skills Shortages and increase participation of Women in Engineering
- Tactical Training Capability Upgrade
- The Sunswift Project

### Innovations & Inventions

**ENTRANTS**

- Anglo-Australian Observatory
- Katru Eco-Inventions Pty Ltd
- Magswitch Technology Worldwide Pty Ltd
- Cochlear Limited
- TUNRA Ltd
- Wollongong City Council

**PROJECT**

- Echidna – a novel multi-fibre feed for astronomical spectroscopy
- Thermal-Brick
- Implux Wind Power Turbine
- Magswitch Array Project – Switchable Permanent Magnetic Industrial Automation Solutions
- LEAP Electrode
- Laser Written Waveguides for Use in All-optical Data Networks
- Investigating and Mapping our Urban Stormwater Network
- Monkeybar
Engineering Science & Technology Pty Ltd
E (Ted) Baker

Thompson Couplings Ltd

Research & Development

ENTRANTS
GSL Electronics

CSIRO ICT Centre
Val Dyadyuk
John Bunton
Oya Sevimi
Joseph Pathikulangara
Leigh Stokes
Ian Davis
David Abbott

Magswitch Technology Worldwide Pty Ltd

Centre for Ultrahigh-bandwidth Devices for Optical Systems (CUDOS)
Michael Withford
Graham Marshall
Peter Dekker
Martin Ams
Alexander Fuerbach

Project Management

ENTRANTS
Connell Wagner
Leighton Contractors Pty Limited
Abigroup Limited
RTA NSW
Arenco (NSW) Pty Ltd

Infrastructure Projects

ENTRANTS
Sydney Catchment Authority
NSW Department of Commerce
Baulderstone Hornibrook Pty Ltd
Connell Wagner
CW-DC Pty Ltd
John Holland
Sinclair Knight Merz
Roads and Traffic Authority, NSW
Abigroup
Arenco (NSW) Pty Ltd

Building & Structures

ENTRANTS
Building Services Engineers Pty Ltd
Connell Wagner
John Holland & Downer
Engineering Joint Venture
INVAP

PROJECT
IKEA Logan
ANSTO “Opal” Reactor

Townsend Group

Leighton Contractors Pty Ltd

Small Business Ventures / Projects & Reports

ENTRANTS
PeeWee
Applied Robotics
AWTA

PROJECT
RSS Cutter

Hydroplus Australia

PROJECT
Improving Safety at Jindabyne Dam

Partridge Partners Pty Ltd

PROJECT
Assessment of Wind Loading for Design of Temporary Performance Structures

Keller Ground Engineering Pty Ltd

PROJECT
Soilfract Grouting on Perth New Metrorail City Project

Department of Natural Resources, Coast & Floorplain Management Directorate

PROJECT
Best Practice Guidelines for Landuse Planning, Subdivision Design & Building

Engineering for Regional Communities

ENTRANTS
University of Technology, Sydney

PROJECT
Flexible Education Framework – to address Skills Shortages and increase participation of Women in Engineering

Telstra

PROJECT
Investigating and Mapping our Urban Stormwater Network

Hydroplus Australia

PROJECT
Improving Safety at Jindabyne Dam

Wollongong City Council

PROJECT
Kyogle Integrated Water Cycle Management Strategy Study

Sinclair Knight Merz

PROJECT
Albury Wodonga Hume Freeway project

Roads and Traffic Authority, NSW

University of Wollongong

PROJECT
University Co-operative Initiative in Promoting Engineering in High Schools: the Year 11 Competitions
With six product lines, Phoenix Contact offers an innovative portfolio of industrial electrotechnology. The best connections “from the sensor to the controller”, from the classical modular terminal block to splash-proof machine connectors, to the wireless Ethernet.

**Industrial Connection Technology CLIPLINE**
From the terminal block through the assembly material and practical tools and marking system, everything required for the perfect control cabinet.

**Industrial Connectors PLUSCON**
Phoenix Contact provides a modern and comprehensive program of industrial connectors for all applications.

**PCB Connection Systems COMBICON**
For industrial electronics, the COMBiCON product range offers a complete program of PCB terminal blocks and plug connectors for the printed circuit board.

**Surge Protection TRABTECH**
Phoenix Contact offers one the market’s widest product ranges, structured in surge protection for power supplies, data interfaces and measuring and control applications.

**Signal Converters INTERFACE**
The INTERFACE product range comprises interfaces for binary, serial and analogue signals, as well as power supplies, PLC cabling and electronic load relays.

**Automations Systems AUTOMATIONWORX**
From the serial sensor/actor box up to the visualisation software, AUTOMATIONWORX offers everything modern automation technology requires.

Phoenix Contact is a corporation achieving a globally significant and technologically leading position in each of its business fields. With its products and services, Phoenix Contact in principle pursues a strategy of differentiation.

Innovative products are a huge part of the company’s success, but how the members of the Phoenix Contact family treat one another is also an important part of the process. Its corporate culture is based on partnership and trust, for staff as well as for customers and business partners. This creates room for ideas and opens up possibilities for solutions.

The company has chosen to sponsor the Control Systems category of the 2007 Engineering Excellence Awards because Engineering Excellence goes hand in hand with Phoenix Contact’s company and product philosophy. As a supplier, it prides itself on providing innovative engineering solutions, primarily aimed at process control and automation applications.

Through the exposure the company receives from its commitment to the awards, in particular the Control Systems category, Phoenix Contact is able to outline its competence to Australia’s leading engineers. For the company, both Engineers Australia and the Excellence Awards are important forums to communicate the Phoenix Contact brand and its benefits to the engineering community.

As a user, the advantage to going with the company is Phoenix Contact’s local branches. A total of 40 of Phoenix Contact’s own sales companies and some 30 agencies in other countries form the close-knit sales network of Phoenix Contact. Being at home all over the world and speaking the language of the user is what the company understands by customer proximity—proximity that guarantees ideal service for its partners.
DIARY DATES

Most meetings are held in the Auditorium, Ground Floor, 8 Thomas St, Chatswood with refreshments at 5.30 for a 6pm start. As meetings are liable to cancellations at short notice, members should ring the organisers for updated information.

PLEASE NOTE: Members are advised to check under “Latest News” on the Sydney Division website: www.engineersaustralia.org.au/sydney for any changes to the listed times/dates (updated weekly on Friday preceding).

JUNE

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td>Wed 20</td>
<td>Society of Fire Safety</td>
<td>&quot;D-t-s Fire Safety&quot;  &lt;br&gt; Auditorium  &lt;br&gt; 17:30 for 18:00 to 19:30  &lt;br&gt; Contact: Jack C Kilavuz  &lt;br&gt; Phone: 9272 8078</td>
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<tr>
<td>Wed 20</td>
<td>Australasian Tunnelling Society</td>
<td>&quot;Tugun Bypass Airport Tunnel&quot;  &lt;br&gt; Chatswood RSL, 446 Victoria Ave, Cnr. Thomas St. Chatswood  &lt;br&gt; 17:30 for 18:00 to 19:00  &lt;br&gt; Contact: Bob Nowotny  &lt;br&gt; Phone: 02) 9552-0252</td>
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<tr>
<td>Thurs 21</td>
<td>Quality in Engineering Panel</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Chasman Room  &lt;br&gt; 18:00 to 19:00  &lt;br&gt; Contact: Patrick Lovely  &lt;br&gt; Mobile: 0418 464 841</td>
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<tr>
<td>Thurs 21</td>
<td>Women In Engineering</td>
<td>&quot;Community Project Update&quot;  &lt;br&gt; Board Room  &lt;br&gt; 17:30 for 18:00 to 19:30  &lt;br&gt; Contact: Hope Dilworth-Kidd  &lt;br&gt; Mobile: 0409 596 655</td>
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<tr>
<td>Thurs 21</td>
<td>Mechanical Branch</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Chasman Room  &lt;br&gt; 16:30 to 17:30  &lt;br&gt; Contact: Jim Vickery  &lt;br&gt; Phone: 9570 2576</td>
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<tr>
<td>Thurs 21</td>
<td>Mechanical Branch</td>
<td>&quot;Emerging Technologies – Reliability &amp; Risk Issues&quot;  &lt;br&gt; Auditorium  &lt;br&gt; 17:30 for 18:00 to 19:30  &lt;br&gt; Contact: Jim Vickery  &lt;br&gt; Phone: 9570 2576</td>
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<tr>
<td>Thurs 21</td>
<td>Illawarra Sutherland Regional Group</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; University of Wollongong UniCentre Function Room No 1, Northfields Avenue, Wollongong  &lt;br&gt; 17:30 to 19:30  &lt;br&gt; Contact: Elaine Bailey  &lt;br&gt; Phone: 02 4221 4086</td>
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<tr>
<td>Tues 26</td>
<td>Civil and Structural Engineering Panel</td>
<td>&quot;Marine Structures&quot;  &lt;br&gt; Board Room  &lt;br&gt; 16:00 to 17:00  &lt;br&gt; Contact: Nick Livanes  &lt;br&gt; Phone: 9279 2366</td>
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<tr>
<td>Tues 26</td>
<td>Civil and Structural Engineering Panel</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Board Room  &lt;br&gt; 16:00 to 17:00  &lt;br&gt; Contact: Jack C Kilavuz  &lt;br&gt; Phone: 9272 8078</td>
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<th>Date</th>
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<tr>
<td>Wed 27</td>
<td>Toastmasters, Sydney Division</td>
<td>&quot;Money&quot;  &lt;br&gt; Chasman Room  &lt;br&gt; 18:00 to 20:00  &lt;br&gt; Contact: Kaye Segelov  &lt;br&gt; Mobile: 0424 240 062</td>
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<tr>
<td>Thurs 28</td>
<td>Joint Electrical Branch – Engineers Australia, IET, IEEE</td>
<td>&quot;Solar Tower Power Generation&quot;  &lt;br&gt; Auditorium  &lt;br&gt; 17:30 for 18:00 to 19:30  &lt;br&gt; Contact: George Fox  &lt;br&gt; Phone: 9449 8536</td>
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<tr>
<td>Fri 29</td>
<td>Sydney Division</td>
<td>&quot;Chartered Professional Workshop&quot;  &lt;br&gt; Board Room  &lt;br&gt; 9:30 to 12:30  &lt;br&gt; Contact: Richard Hanna  &lt;br&gt; Phone: 9410 5616</td>
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<tr>
<td>Sat 30</td>
<td>Sydney Division</td>
<td>&quot;Chartered Professional Workshop&quot;  &lt;br&gt; Board Room  &lt;br&gt; 9:30 to 12:30  &lt;br&gt; Contact: Richard Hanna  &lt;br&gt; Phone: 9410 5616</td>
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<th>Date</th>
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<tr>
<td>Tues 3</td>
<td>Transport Engineering Panel</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Chasman Room  &lt;br&gt; 16:30 to 17:30  &lt;br&gt; Contact: Dave Kilby  &lt;br&gt; Mobile: 0411 639 172</td>
</tr>
<tr>
<td>Tues 3</td>
<td>Excellence Awards Committee</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Board Room, 17:30 to 20:00  &lt;br&gt; Contact: Robyn Worthing  &lt;br&gt; Phone: 9410 5612</td>
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<tr>
<td>Tues 3</td>
<td>Australasian Tunnelling Society</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Board Room  &lt;br&gt; 16:30 to 18:00  &lt;br&gt; Contact: Henk Buys  &lt;br&gt; Phone: 8837 0244</td>
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<tr>
<td>Wed 4</td>
<td>Engineering Heritage Committee</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Board Room  &lt;br&gt; 17:00 to 19:00  &lt;br&gt; Contact: Glenn Ridgen  &lt;br&gt; Mobile: 0408 025 219</td>
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<td>Thurs 5</td>
<td>Railway Technical Society of Australasia Syd Div Chapter</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Board Room  &lt;br&gt; 10:30 to 13:00  &lt;br&gt; Contact: Larry Meng  &lt;br&gt; Phone: 4822 7120</td>
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<tr>
<td>Thurs 5</td>
<td>Engineering Week Committee</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Hyder Consulting, North Sydney  &lt;br&gt; 18:00 to 20:00  &lt;br&gt; Contact: Sarah McMahon  &lt;br&gt; Phone: 9410 5618</td>
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<tr>
<td>Thurs 5</td>
<td>Electrical Branch Sydney Division</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Board Room  &lt;br&gt; 16:00 to 20:00  &lt;br&gt; Contact: Mark Edmunds</td>
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<td>Thurs 5</td>
<td>Railway Technical Society of Australasia Syd Div Chapter</td>
<td>&quot;Annual General Meeting &amp; Seminar&quot;  &lt;br&gt; Auditorium  &lt;br&gt; 17:30 to 19:30  &lt;br&gt; Contact: Bill Laidlaw  &lt;br&gt; Mobile: 0409 609 833</td>
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<td>Mon 9</td>
<td>Western Sydney Regional Group</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Bldg X, Room XB305, UWS  &lt;br&gt; 17:30 for 18:00 to 19:00  &lt;br&gt; Contact: Steve Middleton</td>
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<td>Tues 10</td>
<td>Education &amp; Assessment Sub Committee</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Chasman Room  &lt;br&gt; 17:00 to 19:00  &lt;br&gt; Contact: Robyn Wright  &lt;br&gt; Phone: 9410 5615</td>
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<tr>
<td>Wed 11</td>
<td>Toastmasters, Sydney Division</td>
<td>&quot;Revolutions&quot;  &lt;br&gt; Board Room  &lt;br&gt; 18:30 to 20:00  &lt;br&gt; Contact: Jack C Kilavuz  &lt;br&gt; Phone: 0424 240 062</td>
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<tr>
<td>Wed 11</td>
<td>Australian Geomechanics Society, Sydney Chapter</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Board Room  &lt;br&gt; 16:30 to 18:00  &lt;br&gt; Contact: Henk Buys  &lt;br&gt; Phone: 8837 0244</td>
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<td>Wed 11</td>
<td>Australian Geomechanics Society, Sydney Chapter</td>
<td>&quot;Poulos Lecture: Some Reflections on a Geotechnical Life&quot;  &lt;br&gt; Auditorium  &lt;br&gt; 17:30 to 19:30  &lt;br&gt; Contact: Henk Buys  &lt;br&gt; Phone: 8837 0244</td>
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<td>Wed 11</td>
<td>Electrical Energy Society of Australia</td>
<td>&quot;Committee Meeting&quot;  &lt;br&gt; Board Room  &lt;br&gt; 10:30 to 13:00  &lt;br&gt; Contact: Larry Meng  &lt;br&gt; Phone: 4822 7120</td>
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DIARY DATES
Most meetings are held in the Auditorium, Ground Floor, 8 Thomas St, Chatswood with refreshments at 5.30 for a 6pm start. As meetings are liable to cancellations at short notice, members should ring the organisers for updated information.

PLEASE NOTE: Members are advised to check under “Latest News” on the Sydney Division website: www.engineersaustralia.org.au/sydney for any changes to the listed times/dates (updated weekly on Friday preceding).

Thurs 12 Joint Electrical Branch – Engineers Australia, IET, IEEE
“Introduction to Safety Engineering”
Auditorium
17:30 for 18:00 to 19:30
Contact: David Burger

Mon 16 Young Engineers Australia, Sydney Div
“Committee Meeting”
Chairmans Room
18:00 to 19:30
Contact: Maryam Khajeh

Mon 16 Sydney Division
“Division Committee Meeting”
Board Room
17:00 for 17:30 to 19:30
Contact: Nimali Herath
Phone: 9410 5600

Tues 17 Centre for Eng. Leadership and Management
“Committee Meeting”
Board Room
16:30 to 17:30
Contact: Scott Pierce
Mobile: 0415 739 070

Wed 18 Water Engineering Panel
“Sewer Mining”
UTS, Broadway, Building 2, Room 411
18:30 to
Contact: Peter Brady
Phone: 9514 2734
Website: http://www.sydneywaterpanel.org.au

Thurs 19 Joint Electrical Branch – Engineers Australia, IET, IEEE
“Design of Thermoplastic Pipe Systems”
Auditorium
17:30 for 18:00 to 19:30
Contact: Jim Vickery
Phone: 9570 2576

Thurs 19 Women in Engineering
“Brainstorm Meeting”
Board Room
17:30 for 18:00 to 19:30
Contact: Hebbat Manhy
Mobile: 0416 412 136

Tues 24 Civil and Structural Engineering Panel
“Committee Meeting”
Board Room
16:00 to 17:00
Contact: Nimali Herath
Phone: 9514 2366

Tues 24 University of Technology Sydney
“2 Day Course: Contracting and Dispute Resolution for Non Lawyers”
UTS: LAW 1-59 Quay Street, Haymarket NSW 2000
09:00 to 17:00
Contact: Sharraine Gewohn
Phone: 9514 3793
Website: www.law.uts.edu.au/courses/pdu/contracts

Tues 24 Civil and Structural Engineering Panel
“Landslip & Retaining Structures”
Auditorium
14:00 to 19:30
Contact: John Owen

Wed 25 Education & Assessment SubCommittee
“Deans Forum”
Board Room
14:00 to 17:00
Contact: Robyn Wight
Phone: 9410 9815

Wed 25 Toastmasters, Sydney Division
“Fireside Stories”
Board Room
18:00 to 20:00
Contact: Kaye Segelov
Mobile: 0424 240 062

Thurs 26 Engineering Week Committee
“Committee Meeting”
Board Room
18:00 to 20:00
Contact: Sarah McMahon
Phone: 9410 6618

Thurs 26 Joint Electrical Branch – Engineers Australia, IET, IEEE
“EEG & BRAINWAVES – Cross-over between Medicine and Electronics.”
Auditorium
17:30 for 18:00 to 20:00
Contact: David Burger

Mon 30 Maritime Panel
“Wollongong Ocean Outfall”
Auditorium
17:30 to 19:30
Contact: James Carley
Phone: 9949 4488

Mon 30 Maritime Panel
“Committee Meeting”
Chairmans Room
16:30 to 17:30
Contact: James Carley
Phone: 9949 4488

Tues 31 Nuclear Engineering Panel
“Accelerator Driven Sub-Critical Nuclear Reactors”
Auditorium
17:30 to 19:30
Contact: Rod Corrigan
Mobile: 0409 302 814

Tues 31 Nuclear Engineering Panel
“Committee Meeting”
Board Room
16:00 to 17:30
Contact: Rod Corrigan
Mobile: 0409 302 814

Reinforced Concrete Basics
RF Warner, SJ Foster, AE Kilpatrick
$78.14 + GST = $85.95
This up-to-date treatment of reinforced concrete design deals with latest industry developments worldwide, including the use of higher-strength reinforcing steels and high-strength concretes. While particular attention is paid to the design clauses in the latest edition of the Australian Standard for Concrete Structures, AS 3600, the concepts of analysis and design are presented from a fundamental viewpoint so that the text should also be of value to readers using other design codes and standards.
2007 9780733988691 471pp
This book is available from EA Books.
To order a copy phone 02 9438 5355 or order online at www.engineersmedia.com.au/bookshop