

THE NEWSLETTER OF THE SYDNEY DIVISION OF ENGINEERS AUSTRALIA

ENGINEERS SYDNEY

YEAR OF WOMEN IN ENGINEERING

OCTOBER 2007



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SYDNEY DIVISION KEY SPONSORS



President's Report

Warren Newell

Excellence Awards a night to remember

What's that noise? What alarm? It feels like I have just put my head down. Then there is that slow realisation that "yes it is the morning after". Cloud nine slowly turns into the hotel bed at the Westin and reality is that in a moment of professionalism yesterday I told a client I would be on site at 8am to carry out pier inspections so the first concrete pours could commence by 11am on their multi-million dollar project.

I know that elsewhere in the Westin Hotel and somewhere else in Sydney, there are probably two or more other groups and individuals that will take a day or so to get off cloud nine. Very prominently in my recollection of last night there are two groups, Thompson Couplings Ltd and Meinhardt (NSW) Pty Ltd, that really did have that "Logie Reaction" when they learnt that they had won the Bradfield Award for Engineering Excellence and the Presidents Award for their entries' engineering and innovative qualities, respectively.

Our MC this year was Henri Szeps, of "Mother and Son" fame. Henri, for those of you who thought he was a dentist, is actually an Electrical Engineer and not only was he a great table guest, but he led us through the night with much humour, style and knowledge of our profession. "Doctor Scott" entertained, and when we cut away the jokes,

IN THIS ISSUE

Engineering Excellence Awards winners



See pages 6-7.

provided us with some sound knowledge based on life and also reminded us to laugh a lot and not take ourselves too seriously.

I honestly believe all segments of the night knitted together to make the 2007 Sydney Division Excellence Awards a night to remember.

My sincere congratulations go to all those that entered the Awards, as well as those stakeholders in the entries that won their categories. Each category generally has one winner but let me assure you, the judge's job was hard as there were some narrow margins in the final choices.

I may be biased because this is "My Year" but I feel the 2007 event set yet another benchmark, and I am left wondering if we can better this next year. Of course there is a lot of back room work in an event like this and thanks must go to the staff and volunteers that have worked for basically 12 months in preparing for the night of Friday 21 September, 2007.

BILFINGER BERGER Australia
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Bilfinger Berger Australia is currently enjoying significant growth in its core building, civil engineering and services subsidiaries in Australia. Career opportunities exist within all divisions of the Group's construction and services businesses. Your interest, which will be kept strictly confidential, should in the first instance be sent to enquiry@bbau.com.au.



While I thanked the Sponsors on the night I must do so again, and slipping on my Sponsor hat for a moment, say that as a Sponsor, I was pleased to be associated with such a prestigious event on the engineering calendar. I thank you all.

Congratulations to all the successful entrants.

In other news, I have started my Regional Group visits over the last month. We must remember that 33% of our Sydney Division Members live in regional areas and as one member put it "west of the sandstone curtain". You only have to realise that the Thompson Coupling comes from Orange NSW, to understand that Excellence in Engineering is occurring outside the metropolitan areas. Providing service, whether it is advanced education, CPD or just member support, is of paramount importance to the Regional Groups and Sydney Division.

E-learning has been embraced with enthusiasm in the regional areas and it has been an opportunity to discuss among many things the new structural changes and regulation changes. The shortage of Engineers is not just impacting on the city practices; it is impacting on the regional areas as well, if not in some areas more intensely than the city scene.

The visits also provide the forum for discussion on member needs and I have come home with more projects that we as a Division must tackle. There are education needs and assistance for our senior migrant engineers. There are the questions that are hard to find answers for such as, how do we attract younger engineers to the regions?

It is great however, to arrive at a venue and discover that the program for an evening may include technical topics or guest speakers discussing climate change with an audience that has up to 45 members attending – this equals some of our city functions albeit the range of topics may be limited to local experts or fellow consultants visiting the area.

I am pleased to say however, I have clocked up a few interesting hours of CPD, other than those meeting and service points, over the last few months.

*What do you think about the issues Warren raised in this column? You can comment via the President's Blog. Go to www.engineersaustralia.org.au then into "Discussion" and "President, Sydney Division Blog."

*Warren Newell
Sydney Division President*



Engineering Heritage Sydney

Conserving the Engineering of Our Past

Come along to our Next Public Lecture –

"Interpreting Australia's History on the Internet"

Presented by Lyndon Sharp – NSW Board of Studies

Monday 29th October 2007 – 5.30pm
at the Sydney Division offices – Chatswood
Open to non-members and the public

Membership to the Heritage Committee is open
to all interested persons, members & public.

<http://www.engheritage-sydney.org.au>

YEAS

The month of September is akin to the awards season in Hollywood for Young Engineers. On Friday 14 September, members of Young Engineers Sydney and many soon-to-be young engineers (high school students) attended the 2007 Young Engineers Public Speaking Presentation Final and Awards Night at the Swissotel. The evening included the announcement of the Young Student of the Year and the Young Professional Engineer of the Year.

YEAS would like to congratulate Michael Bewley, who was awarded the Young Student of the Year prize. Michael is currently completing his Electrical Engineering and Science degree at the University of Sydney. YEAS would also like to congratulate Jacinta Holmick for being awarded the Young Professional Engineer of the Year award. Jacinta is presently working as a Senior Project Manager for Cardno. Notably, for the first time this year, the judges also awarded a Highly Commended award for Young Professional Engineer of the Year – congratulations to Nathan Johns from BOC for receiving this award.

On behalf of YEAS I would like to congratulate all award winners and to sincerely thank Robyn Wright, from Sydney Division for organising such a fantastic event. I would also like to thank the sponsors for the evening, the RTA.

On Friday 21 September, the winners of the Young Student of the Year award and the Young Professional Engineer of the Year award were also recognised at the Sydney Division Engineering Excellence Awards. Many young engineers attended the spectacular evening, held at the Westin, including members of the YEAS committee who helped out on the night.

By the time you read this column, Young Engineers, Sydney would have participated in many events, including, a combined Women in Engineering (WIE) and YEAS event to celebrate the Year of Women in Engineering, the 2007 YEAS Leadership Reception, and the YEAS AGM. Details of these events will be included in the next column. For more information on upcoming events, please keep your eye on the YEAS website.

*Maryam Khajeh
YEAS Chair 2007*

Young Engineers Australia, Sydney Division (YEAS), represents the interests of all Engineers Australia student and graduate members aged 35 and under or within four years after graduation.

If you are interested in getting involved or learning more about YEAS please email our secretary Simon Reynolds at yeasyd@engineersaustralia.org.au. For upcoming YEAS events please visit our website at <http://syd.youngengineers.com.au>.

Sydney Division CELM

Friday 9 November 2007

FELLOWS LUNCHEON

CELM is delighted to be offering sponsorships for outstanding young engineers and female engineers to attend the Fellows Luncheon in November.

Time: 12 for 12:30pm.

Venue: NSW Parliament House, Macquarie Street.

Speaker: Peter Leahy, Chief of Army.

There are a limited number of CELM sponsorships available. For information about the application process, please contact Alexandra Meldrum at: almeldru@ozemail.com.au.

Illawarra/Sutherland Regional News

ISRG Engineering Week Activity

Professor Julie R Steele, Biomechanics Research Laboratory, School of Health Sciences, University of Wollongong gave a very interesting presentation on Developing Textile Biofeedback Technology: From Bouncing Breasts to Noisy Knees.

Professor Steele presented a very interesting presentation to 26 members and guests of the Illawarra/Sutherland Regional Group on Wednesday 22 August at the University of Wollongong.

A perpetual challenge confronting practitioners when they are evaluating and modifying human motion is to monitor characteristics of human performance in the field and then to "feed" this information back to the performer in real-time so the performer can modify their motion to achieve the desired outcome. Recent advances in polymer science, however, now enable inherently conducting polymers to be integrated into appropriate host fabrics, creating the opportunity to develop wearable sensors which offer novel biomonitoring options. Future applications of fabric biofeedback systems in enhancing patient rehabilitation following total knee replacement surgery were also presented. For further information, please visit the website: www.uow.edu.au/health/brl

ISRG September Technical Meeting on Nanotechnology Research at the University of Wollongong. Guest Speaker, Professor Geoff Spinks (Discipline Advisor for Materials Engineering, Co-ordinator of the Engineering Materials Institute and Program Leader in the ARC Centre of Excellence in Electromaterials Science)

Professor Spinks made his presentation on Nanotechnology Research at the University of Wollongong to 36 members and guests.

Areas covered in the presentation were: What is nanotechnology?, some nano products and the future of nanotechnology.

Jon Thompson (ISRG Deputy Chair), Nick DiBono (ISRG Committee Member), Prof. Geoff Spinks and Peter Nasta (ISRG Chair)

Nanotechnology – the next major technology revolution. Capitalising on the frontiers of knowledge in chemistry, materials engineering, physics, biology and mathematics.

The leading edge of the "new science" – the integration of science and technology. It is already affecting our lives, with applications in health, medicine, engineering, transport and many other areas.

The development of devices that are 1-100 nanometers in size (a nanometer is a billionth of a meter). One reason to make such small things is to shrink micro-electronics even smaller and, therefore, building much more powerful computers, smaller mobile phones, better digital cameras and so on.



Jon Thompson (ISRG Deputy Chair), Nick DiBono (ISRG Committee Member), Prof. Julie Steel and Peter Nasta (ISRG Chair).

Engineering Studies High School Competition

Engineers Australia Illawarra/Sutherland Region and Western Sydney Region Engineering Studies High School Competition Awards Evening was held on Wednesday 29 August at the University of Wollongong, attended



Jon Thompson (Principal Coffey Geotechnics in Unanderra) presenting Alistair Pialek (Bowral High School) with the Illawarra/Sutherland Winning Student Award.

by 145 Students, Parents, Teachers, Sponsors, Executives of Engineers Australia Sydney Division and committee members of the Illawarra/Sutherland Regional Group.

Winner of the Illawarra/Sutherland Region was Alistair Pialek from Bowral High School. Alistair received a cheque for \$500.00, which was sponsored by Coffey Geotechnics in Unanderra.

Winner of the Western Sydney Region was Adrian Campbell from Bathurst High School. Adrian received a cheque for \$500.00, which was sponsored by Thomas Coffey of Penrith.

This is the seventh year of the competition, which has now become state wide and each year becomes more successful. There were a total of 36 reports received from 17 high schools in both regions. Both Competitions are run from the Illawarra/Sutherland Regional Office located at the University of Wollongong. The Metropolitan Competition is run from Engineers Australia Sydney Division.

Each report is read by a team of Engineers who are members of the Illawarra/Sutherland Regional Group Committee and are judged in the various awards.

Over \$12,000.00 in sponsorship was received from 18 companies and organisations in the Illawarra/Sutherland and Western Sydney Regions.

A BIG THANK YOU to all the sponsors to whom we are very grateful.

Illawarra/Sutherland Region:

- Coffey Geotechnics.
- PHD Engineering.
- ANSTO.
- Faculty of Engineering – University of Wollongong.
- Faculty of Informatics – University of Wollongong.
- BlueScope Steel.
- Bunnings Warehouse.
- Hatch Associates.
- Industrial Timber Services Pty Ltd.
- Kiama Municipal Council.
- Shellharbour City Council.
- Joy Manufacturing Company.
- Tycan Holdings Group.
- Nebo Mechanical Engineering.

Western Sydney Region:

- Thomas Coffey.
- OneSteel Market Mills.
- School of Engineering – University of Western Sydney.
- Barker Ryan Consulting.

Engineering Excellence Awards category sponsor profile

Norman Disney & Young

This month's 2007 Engineering Excellence Awards category sponsor profile is Norman Disney & Young (NDY). NDY is sponsoring the Environment and Heritage category of the Awards.

Norman Disney & Young has enjoyed an excellent international reputation for the delivery of engineering services solutions for almost 50 years.

Beginning in Australia, the practice has expanded to include offices throughout New Zealand, the United Kingdom and Asia, employing over 600 staff worldwide.

The structure of each NDY office is set up to ensure the primary focus of client service is fully supported by specialist input in all key engineering disciplines. These include:

- Building Information Modelling (BIM)
- Communications & Security
- Electrical
- Fire Engineering & Life Safety
- Automation - Building & Industrial
- Hydraulics
- Mechanical
- Vertical Transportation
- Creative Lighting - NDYLIGHT
- Acoustics – NDY Sound
- Interiors
- MPlus

The company's focus on building services engineering, guarantees that its clients are provided with the benefit of leading-edge technical knowledge backed with a wealth of experience.

By working with their clients in achieving their objectives, the NDY team also share in their success. All Directors are actively involved with project design delivery, ensuring NDY's clients benefit by having the most extensive experience available. Clients are also assured of best practise engineering services solutions as a result of consistency of approach throughout the firm's international operations.



A Sustainable Office Workplace: Innovation Place is a 21 level, 25,000m² leading-edge quality office tower under construction at 100 Arthur St, North Sydney. The building will boast an office environment at the leading-edge of current technology, providing enhanced productivity and worker satisfaction.

Energy Efficiency: A key feature of 126 Phillips Street is the emphasis on energy efficient design. This led to a thorough and detailed review of all aspects of the design, including the refrigeration system, air handling systems and lighting design.



NDY's vision is "To be acknowledged as the best practitioner in their field".

NDY's mission is "To provide a consulting service that fulfils their clients' objectives".

Engineering Excellence is clearly evident in all aspects of the services provided by NDY. The company's participation in many landmark projects confirms its pre-eminent position in the industry.

The firm's contribution to the design of energy efficient and maintainable building services systems is well recognised within the construction industry and has been acknowledged with numerous awards.

To NDY, the most important ingredient in all of this is its people. The company is committed to providing training for its staff to keep ahead of new and emerging technologies, and encourages continual professional development programs across all levels of the firm.

At NDY, great value is placed on integrity, specialised knowledge in each discipline, management and interpersonal skills and practical "hands-on" skills.

The NDY team are delighted to be sponsoring the Environment and Heritage category of the Engineering Excellence Awards for another year.

Sponsorship of this category recognises the company's commitment both locally and globally to the broad principles of Ecologically Sustainable Development (ESD) and Heritage Conservation throughout all aspects of its operations.

The Engineering and Heritage Excellence Award recognises engineering activities particularly directed to achieve improvements in the quality of life, to protect our natural environment or conserve our engineering heritage to assess and mitigate environment impact and remediate environment damage.

The award also recognises excellence in the conservation and documentation of historical significance; in recording engineering accomplishment and the development of technology, or in education and raising awareness in engineering heritage and achievements.

THE AUSTRALASIAN CORROSION ASSOCIATION INC PRESENTS

Corrosion Control 007 Conference

**Sydney Convention & Exhibition Centre
Darling Harbour, Sydney
25 - 28 November, 2007**

Join corrosion industry leaders to learn how you can protect your assets from the ravages of corrosion.

With over 90 papers presented from leading international and local speakers on all aspects of corrosion, Corrosion Control 007 is the must attend show of the year.

Program Highlights Include:

- The Roads & Traffic Authority's Approach to Management of Corrosion in its Bridge Assets, Wije Ariyaratne, Principal Bridge Engineer, RTA
- Sustainable Management of US Department of Defense Facilities, Vincent Hock, US Army Engineering Corps
- Experience with Simple Corrosion Solutions for Concrete Corrosion, Carrick Stokoe, Ports Corporation of Queensland

Conference Secretariat

Ph: +61 (0)3 9890 4833; Fax: +61 (0)3 9890 7866

Email: aca@corrosion.com.au

Web: www.corrosion.com.au

AIIESEC

Can AIIESEC fill your skill shortages?

AIIESEC, the world's largest youth-run organisation, is the international platform for young people to discover and develop their potential to have a positive impact on society. To activate leadership within today's youth, AIIESEC facilitates an international internship program which provides organisations access to top talent from around our 103 country and 850 university networks. In Australia we partner with a variety of organisations including GE, Snowy Mountains Engineering Company (SMEC), Mirvac, Electrolux, Landgate and Woodside who engage with AIIESEC to access international top talent, overcome skill shortages, develop international market knowledge and inject an international mindset into their company.

Gizelle Sonneman, HR Learning & Development Manager
from Clipsal Australia says:

"The partnership with AIIESEC is an opportunity for us to source talent from overseas in order to serve the tight labour market conditions in Australia."

The Engineering and ICT sector has been experiencing skill shortages for the last few years. AIIESEC is a solution to this problem. We provide organisations access to top talented individuals in a diverse range of backgrounds, including Civil, Mechanical, Electrical, Industrial and Chemical engineering, computer science, project management and information technology. Being in Australia for over 40 years, AIIESEC presents an efficient and high quality solution to an organisation's labour force needs.

For more information, visit www.aiiesec.org/australia or contact Anne Delviziis on anne.delviziis@aiiesec.net or 02 9436 2600.

Engineering a Better Future

Rockdale City Council has made an important step towards improving quality of service and building staff development through the certification of Council's engineers, with Engineers Australia.

On 20 August 2007, Council's General Manager Chris Watson signed an agreement with Engineers Australia to begin certification of Council's 12 qualified engineers. By being certified with Engineers Australia, Council will be confident in the knowledge that it is providing the best possible service when it comes to engineering requirements. Each engineer that has signed up to the program will also be individually certified with Engineers Australia which is a boon for career development and professional growth.

General Manger, Chris Watson highlighted the crucial role engineers play at Rockdale City Council:

"Our engineers are a very important asset to our organisation. From road planning to building certification our engineers are always busy ensuring Council's infrastructure is in top form and the community is kept safe and their needs met", said Chris.

General Manager, Chris Watson signs the landmark agreement with Engineers Australia, surrounded by eager and enthusiastic Council engineers



General Manager, Chris Watson signing the landmark agreement with Engineers Australia, surrounded by eager and enthusiastic Council engineers.

Safety case guideline - new edition (e-publication)

Victoria Chapter, Risk Engineering Society, Engineers Australia
\$22 (GST included)

Managing safety is moving from the isolated application of strictly technical tools to a more robust safety case approach that applies multiple assessment methodologies to demonstrate that both technical and organisational risks are managed effectively. With the growing emphasis of performance-based

legislation, the safety case is not only a mechanism for achieving safety goals but has also become an important liability management tool. To act effectively as both a technical and liability management tool, safety cases need to have an initial argument for the approaches selected to demonstrate effective safety management. Three types of risk are defined, and seven paradigms for assessing downside risk and three enquiry methods of 'risk sign off' are described. This second edition has been prepared in response to significant changes made to Australian Risk Management Standard AS/NZS 4360:2004 and the Victorian Occupational Health and Safety Regulations 2007. As a result four major changes have been made. They are: Statutory and Common Law Safety Cases; 'Acceptable' to 'Not Intolerable' Risk; 'Good Practice' vs. 'Best Practice'; Focus on Controls Rather Than Risk Assessment.

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This e-publication is available from EA Books.
To order a copy phone 02 9438 5355 or order online at www.engineersmedia.com.au/bookshop.



2007 ENGINEERING E

The 2007 Engineering Excellence Awards were presented in grand style at a spectacular evening at The Westin Sydney on Friday September 21.

The 605 guests were entertained on arrival by 2 "french" mimes, before moving into the main venue. The evening's theme was set by a welcome video, followed up with a hilarious film clip from the old ABC series, "Mother and Son" which served as an introduction to the evening's MC, Henri Szeps (the comedy series' dentist son). The comedy theme continued later in the night with Scott Williams performing his brilliant entertainment act.

Professor Veena Sahajwalla, Guest of Honour, delivered a very informative talk on her project of recycling plastic in steel work.

"Sydney Division's Excellence Awards provides the opportunity to showcase the innovation and high level of expertise across the full range of engineering disciplines in our profession. The Awards offer chances through the various categories to recognise engineering research, product and system development, project management, manufacturing, and innovations and inventions" said Warren Newell, Sydney Division president.

A total of 4 Personal, 13 Excellence and 13 Highly Commended Awards were presented on the evening, with the inaugural President's Award going to Meinhardt (NSW) Pty Ltd for their entry, University of Notre Dame Proposed Darlinghurst Campus. The prestigious Bradfield Award went to Thompson Couplings Ltd for the Thompson Coupling.

It is a fairy tale come true for Thompson Couplings Ltd, a small Orange based company which was encouraged and assisted financially by the local community throughout the development process of the Thompson Coupling.

A two page broadsheet spread covering the Excellence Awards was featured in the Sydney Morning Herald's BusinessDay on Monday September 24.

All of the Excellence Award winners have been invited to participate in the National Awards which will be presented at Parliament House Canberra in November. A selection of the Excellence and Highly Commended award winners will be displayed in the Success and Innovations Gallery at the Powerhouse Museum from December 2007 – October 2008.

The Engineering Excellence Awards committee extends its sincere thanks to the Sponsors for their ongoing support of the Awards program, and to the Judges who volunteer their time to the mountainous judging process. Thanks also to the young engineer volunteers who assisted at the Awards Evening, and last but certainly not least, to the 71 entrants into the 2007 Engineering Excellence Awards.

The 2008 Engineering Excellence Awards will be launched at the Powerhouse Museum on Wednesday February 6.

The 2007 Winners and Sponsors are:

BRADFIELD AWARD

Sponsored by Bilfinger Berger

Thompson Couplings Ltd – Thompson Coupling.

PRESIDENT'S AWARD

Engineers Australia Sydney Division

Meinhardt (NSW) Pty Ltd – University of Notre Dame, Proposed Darlinghurst Campus.

PERSONAL AWARDS

Professional Engineer of the Year

Sponsored by NICTA

Presented to John Grill

Young Professional Engineer of the Year

Sponsored by Abigroup

Presented to Jacinta Holmick

Engineering Student of the Year

Sponsored by Hays Engineering

Presented to Michael Bewley

Entrepreneur of the Year

Sponsored by EAW Group

Presented to Gary Zamel

Control Systems

Sponsored by Phoenix Contact

Telstra Corporation Limited – Telstra's Next G(tm) National High Speed Wireless Network Deployment.

Highly Commended: City of Ryde Council – City Of Ryde's New Electronic Waste and Recycling Bin Tagging and Weighing System.

Manufacturing – Products, Facilities, Processes

Sponsored by Rittal

Highly Commended: Applied Robotics with joint entrants Pee Wee and AWTA – Residual Sub Sample Cutter

Environment & Heritage

Sponsored by Norman Disney & Young

Lothway-TBS – Tom Ugly's Bridge Refurbishment: Temporary Works.

Meinhardt (NSW) Pty Ltd – University of Notre Dame, Proposed Darlinghurst Campus.

Highly Commended: Nubian Water Systems Pty Ltd – Oasis Greywater Recycling System.

Welfare, Health, Safety, Education & Training

Sponsored by RTA

The UNSW Solar Racing Team – The Sunswift Project.

Highly Commended: CAE Australia Pty Ltd – Tactical Training Capability Upgrade.

Innovations & Inventions

Sponsored by Davies Collison Cave

Monkey Steel Pty Ltd – Monkey Bar.

Thompson Couplings Ltd – Thompson Coupling.

Highly Commended: Anglo-Australian Observatory – Echidna – a novel multi-fibre feed for astronomical spectroscopy.

Macquarie University – Laser Written Waveguides for Use in All-optical Data Networks.

Research & Development

Sponsored by UNSW

CSIRO ICT Centre – Multi Gigabit Millimetre Wave Wireless.

Project Management

Sponsored by Cochlear Limited

Abigroup Contractors with joint entrant Roads and Traffic Authority NSW – Albury Wodonga Hume Freeway.

Highly Commended: Arenco (NSW) Pty Ltd – Wagga Wagga Rail Underbridge.

Infrastructure Projects

Sponsored by Leighton Contractors

Sydney Catchment Authority with joint entrants NSW Department of Commerce and Boulderstone Hornibrook Pty Ltd – Warragamba Dam Deep Water Recovery.

Highly Commended: Connell Wagner – Tainui Bridge Strengthening, Sinclair Knight Merz with joint entrants Abigroup Contractors and Roads and Traffic Authority NSW – Albury Wodonga Hume Freeway Project.

Highly Commended: Connell Wagner – Tainui Bridge Strengthening, Sinclair Knight Merz with joint entrants Abigroup Contractors and Roads and Traffic Authority NSW – Albury Wodonga Hume Freeway Project.

Building & Structures

Sponsored by American Express

Connell Wagner with joint entrants John Holland & Downer Engineering Joint Venture and INVAP – ANSTO "Opal" Reactor.

Highly Commended: Leighton Contractors Pty Ltd with joint entrants Hyder Consulting, Webb Australia Group, George Floth Pty Ltd,

EXCELLENCE AWARDS

Connell Wagner Pty Ltd, NDY, Golder Associates and Stephen Grubits & Associates – Westpac Place.

Small Business Ventures / Projects & Reports

Sponsored by Anchor Retaining Walls

Applied Robotics with joint entrant Pee Wee – Residual Sub Sample Cutter.

Department of Environment & Climate Change Coast & Floodplain Management Directorate – Best Practice Guidelines for Landuse Planning, Subdivision Design & Building Construction.

Highly Commended: Partridge Partners Pty Ltd – 2006 Asian Games

Temporary Performance Structures.

Engineering for Regional Communities

Sponsored by EnergyAustralia

Sinclair Knight Merz with joint entrants Abigroup Contractors and Roads and Traffic Authority NSW – Albury Wodonga Hume Freeway Project.

Highly Commended: Telstra – Telstra's Next G(tm) National High Speed Wireless Network Deployment.

MWH with joint entrant Kyogle City Council – Kyogle Integrated Water Cycle Management Strategy Study.



1. Jacinta Holmick, Young Professional Engineer of the Year with sponsor, Peter Walton, Abigroup. 2. The Venue. 3. Mimes entertain the guests. 4. Henri Szeps OAM, MC; Warren Newell, Sydney Division President and Connie Newell. 5. Guest of Honour, Prof Veena Sahajwalla. 6. Scott Williams, entertainer, holding the keyboard, with "volunteers". 7. Bradfield Award Winners – Thompson Couplings. 8. President's Award winners, Meinhardt (NSW) Pty Ltd with Warren Newell.

The 2007 Event Sponsors are:

University of Wollongong, ResMed, Clextan-Peak, University of Technology Sydney, Hyder Consulting, GHD, URS, The University of Sydney.

Young Engineers Public Spea



PROUDLY SPONSORED BY



The Swissôtel SYDNEY Hotel was the venue for the Young Engineers Australia, Sydney Division 2007 Public Speaking Finals & Awards Night on Friday, September 14. An excellent location coupled with 191 people set the tone for a successful evening.

Those in the room weren't quite sure what to expect, but as usual, were not disappointed.

Of course none of this would have been possible without our major sponsor. A very special "thank you" goes to RTA. This has been the fifth year that RTA has been the major sponsor for this event.

Our MC for the evening, Salma Farouque guided us through a very stimulating night. The Public Speaking Competition Final commenced the evening. Four finalists from the University Campuses entertained guests on an "Engineering Related" topic. The finalists included Kate McCutcheon from UNSW, Anita Ho from USYD, Ben Withers from UOW and Adam Alamade from UTS.

Thank you and congratulations to those who took part. What an effort by all concerned and as usual, so entertaining!! – I am sure all those present enjoyed the interesting topics. Adjudicators for the Final from RTA were Ian Matthews and Jay Stricker, along with Richard Hanna, Industry Manager Engineers Australia, Sydney Division.

Another successful year with winners and schools from the Engineering Studies High School Competition awarded with their prizes. It is a pleasure to see the quality of the younger students involved in Engineering Studies. The High School Competition has had steady momentum in growth over the past few years with all three regions competing in the competition. The three Regional Winners, Daniel Soliman – Syd Metro, Alistair Pialek – Illawarra/Sutherland and Adrian Campbell, Western Sydney were all present for the announcement of the Overall Winner of the competition.

Women in Engineering (WIE) Committee, Sydney Division, sponsored and presented Scholarships to three female Engineering Students. Hope Dilworth-Kidd, Chair of WIE announced and presented the Scholarship Winners.

Thanks also go to Abigroup and Hays Engineering and last but not least Young Engineers Australia, Sydney Division and Engineers Australia, Sydney Division.



Senior Bachelor of Engineering Award Winner, Amrita Singh, USYD and presenter Peter Letts, RTA Manager, Project Management Office.



Opening the evening – Michael Bushby, RTA Director, Network Management.

High School Competition – Overall Winner – RTA was the sponsor for the Metro and the Overall Winner. Norm Himsley, Chair Education & Assessment, Sydney Division announced and presented the Award.

Senior University Bachelor of Engineering Student Award sponsored by Education & Assessment SubCommittee, Sydney Division. Peter Letts, RTA Manager, Project Management Office, announced and presented the Award.

Industrial Training Report – Campus Winners – sponsored by RTA & Young Engineers Australia, Sydney Division. Peter Letts, RTA Manager, Project Management Office, announced and presented the Award.

Public Speaking Competition Final – sponsored by RTA & Young Engineers Australia, Sydney Division. Jay Stricker, RTA Regional Manager, Southern Region made the announcement and presentation of the winner and placegetters.

Student of the Year Award – sponsored by Hays Engineering, Sarah Bayley, Manager, made the announcement and presented this prestigious Award.

Young Professional of the Year Award – This Award acknowledges and rewards Young Professional Engineers who have reached a high level of achievement and involvement in engineering and community affairs. Andrew Botros briefly spoke to the guests about his thoughts as recipient of the 2006 Young Professional of the Year Award.

Representing the sponsor of this Award, Peter Walton, Manager, Major Projects & Technical Services Group, Abigroup, announced and presented this prestigious award.

Monetary Prizes and Certificates were awarded to

Engineering Studies – High School Competition

Overall Winner – Alistair Pialek, Bowral High School

Women in Engineering Student Scholarships

Susana Jimenez Ochoa

– University of Wollongong

Philippa Griffin

– University of New South Wales

Winey Suen

– University of Sydney

Engineering Finals and Awards Night

Campus Winners – Industrial Training Reports

Hassan Makkouk – University of Technology, Sydney
 Liam Pettigrew – University of Wollongong
 Ray Slaviero – University of Western Sydney
 Mark Nun – University of New South Wales

Michael Bewley – University of Sydney

Senior University Bachelor of Engineering Student Award – Thesis Competition

Amrita Singh – University of Sydney
 Chris Randall – University of Western Sydney (Highly Commended)

Public Speaking Winners & Runnerups

First Anita Ho – University of Sydney
 Second Ben Withers – University of Wollongong
 Third Kate McCutcheon – University of New South Wales

Student Engineer of the Year

Michael Bewley – University of Sydney

Young Professional Engineer of the Year

Jacinta Holmick, Cardno (NSW) Pty Ltd

Nathan Johns BOC Ltd (Highly Commended)

Congratulations once again to all those who entered and competed – recipients of awards not only receive recognition from both their peers and Engineers Australia, but also receive monetary rewards – so when you see the posters around the campuses don't forget to get involved – it really is worth the effort!



Sarah Bayley, Manager, Hays Engineering, presenting the 2007 Student Engineer of the Year Award to Mark Bewley, USYD.



2007 Young Professional Engineer of the Year Award (Andrew Botros, Cochlear Limited (2006 Young Professional Engineer of the Year), Nathan Johns (Highly Commended), Dominic Lynch receives the Award for 2007 Winner, Jacinta Holmick, Cardno, from presenter Peter Walton, Manager, Major Projects & Technical Services Group, Abigroup Contractors Pty Ltd.



Public Speaking Winner & Placegetters 1-3: 3rd Place, Kate McCutcheon UNSW; 2nd Place, Ben Withers UOW; Winner, Anita Ho USYD, with presenter Jay Stricker, RTA Regional Manager, Southern Region.



Industrial Training Competition – Campus Winners – 1-6 Hassan Makkouk UTS, Mark Nun UNSW, Liam Pettigrew UOW, Michael Bewley USYD, Ray Slaviero UWS and presenter Peter Letts, RTA Manager, Project Management Office.

Leighton Contractors – investing in our talent

Leighton Contractors (NSW & ACT) is a wholly owned subsidiary of Leighton Holdings Limited. It is a market leader in the delivery of a wide range of civil, telecommunications, resource, transport and social infrastructure projects. The aspirations of Leighton Contractors is represented in its five shared values which represent what the company stands for as an organisation and how it will go about achieving its business objectives. These values are:

- Safety & Health Above All Else
- Enduring Business Relationships
- Achievement Through Teamwork
- Our People are the Foundation of Our Success
- Respect for Our Community and Environment.

With a reputation for winning iconic projects, Leighton Contractors can provide a wide range of opportunities for employees to excel in their chosen fields. The company recognises that its greatest strength is the quality of its people and that their expertise and dedication are the building blocks of its success.

To ensure this success continues, Leighton Contractors looks to provide development opportunities for its talented employees. As part of this initiative, Leighton Contractors has chosen to partner with Engineers Australia to offer its employees the opportunity to gain Chartered Status. The Engineers Australia Professional Development Program (PDP) implemented at Leighton Contractors offers employees an opportunity to further their growth and development in the engineering industry by developing skills and knowledge through work tasks, work experience and on the job learning.

The PDP program has been integrated into Leighton Contractor's Graduate Development program giving further direction to the careers of our young and talented employees with their quest towards achieving professional chartered status.

Leighton Contractors is looking forward to a long and rewarding association with Engineer's Australia, ever building on our belief that people are the foundation to our success.



Engineers Australia National President Rolfe Hartley (l) and Michael Metcalfe, General Manager Leighton Contractors NSW and ACT Branch at the signing PDP of the agreement.



Ever wondered where your career could take you?

The RTA is a leader in road and transport management and an innovative public sector organisation. We offer a range of exciting career opportunities for young engineers, including the Graduate Recruitment and Development (GRAD) Program and undergraduate scholarship and cadetship schemes for talented Year 12 students who plan to study engineering at university.

The RTA is proud to be the major sponsor of Young Engineers Australia, Sydney Division, Awards Night 2007.

www.rta.nsw.gov.au



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).

OCTOBER

- Wed 17 Water Engineering Panel**
"Water for Life: Engineering Development in Tenganan"
UTS, Broadway
17:30 for 18:00 to 19:30
Contact: Peter Brady
Phone: 9514 2734
- Wed 17 Electrical Energy Society of Australia**
"Committee Meeting"
Board Room
10:30 to 13:00
Contact: Larry Meng
Phone: 4822 7120
- Wed 17 Illawarra Sutherland Regional Group**
"Site Visit - Sydney Water, Waste Water Treatment Plant"
Sydney Water, Waste Water Treatment Plant
17:30 to 19:00
Contact: Elaine Bailey
Phone: 02 4221 4086
- Wed 17 Society of Fire Safety**
"Fire Engineering Solutions"
Auditorium
17:30 for 18:00 to 19:30
Contact: Zyg Ryter
Phone: (02) 9369 4828
- Wed 17 Excellence Awards Committee**
"Committee Meeting "
Board Room
17:30 to 20:00
Contact: Robyn Worthing
Phone: 9410 5612
- Thurs 18 Mechanical Branch**
"Committee Meeting"
Chairmans Room
16:30 to 17:30
Contact: Jim Vickery
Phone: 9570 2576
- Thurs 18 Illawarra Sutherland Regional Group**
"Committee Meeting "
University of Wollongong UniCentre Function Room No 1, Northfields Avenue, Wollongong
17:30 to 19:30
Contact: Elaine Bailey
Phone: 02 4221 4086
- Thurs 18 Women In Engineering National**
"The Inaugural Women In Engineering Distinguished Speakers Breakfast for 2007 "
Vibe Hotel, 88 Alfred St, Milsons Point
7.15am for 7.30 to 9.30am
Contact: Sydney WIE Committee
Website: http://www.sydneywie.org/documents/WIESyd_Breakfast_Brochure_18Oct07.pdf
- Thurs 18 Women In Engineering**
"Committee Meeting"
Board Room
17:30 for 18:00 to 19:30
Contact: Celeste Salter
Phone: 4758 9228
Website: www.engineersaustralia.org.au/sydneywie

- Thurs 18 Mechanical Branch**
"IMechE Speak-out for Engineering Competition"
Auditorium
17:30 for 18:00 to 19:30
Contact: Jim Vickery
Phone: 9570 2576
- Thurs 18 Quality in Engineering Panel**
"Committee Meeting"
Chairmans Room
18:00 to 19:00
Contact: Vic Manuja
Mobile: 0414 443 327
- Fri 19 Nuclear Engineering Panel**
" Australian Nuclear Association - A Nuclear Future"
Sydney Mechanics School of Arts, 280 Pitt Street
08.30 to 18.00
Contact: John Harries
Phone: na
Website: www.nuclearaustralia.org.au
- Tues 23 Civil and Structural Engineering Panel**
"Committee Meeting "
Board Room
16:30 to 17:30
Contact: Nick Livanes
Phone: 9279 2366
- Tues 23 Civil and Structural Engineering Panel**
"Legal Topic"
Auditorium
17:30 for 18:00 to 19:30
Contact: Keith Wilson
- Wed 24 Chemical Engineering Branch**
"Committee Meeting"
Chairmans Room
16:30 to 17:30
Contact: Ian Ackland
Mobile: 0414 183 368
- Wed 24 Chemical Engineering Branch**
"Research Presentations"
Auditorium
17:30 for 18:00 to 20:00
Contact: Ian Ackland
Mobile: 0414 183 368
- Wed 24 Toastmasters, Sydney Division**
"TV Shows"
For venue details please contact the event organiser
19:00 to 21:00
Contact: Kaye Segelov
Mobile: 0424 240 062
- Thurs 25 Joint Electrical Branch - Engineers Australia, IET, IEEE**
"Soil De-Contamination Using Ultrasonics"
Auditorium
17:30 to 19:30
Contact: Mark Edmunds
- Thurs 25 EngQuest**
"State Judging"
Board Room
15:00 to 19:00
Contact: Sarah McMahon
Phone: 940 5618
- Mon 29 Engineering Heritage Committee**
"Interpretation of History on the Web"
Auditorium
17:30 to 19:30
Contact: Glenn Rigden
Mobile: 0408 025 219

- Wed 31 Toastmasters, Sydney Division**
"Inventions"
For venue details please contact the event organiser
19:00 to 21:00
Contact: Kaye Segelov
Mobile: 0424 240 062

NOVEMBER

- Thurs 1 Railway Technical Society of Australasia Syd Div Chapter**
"Committee Meeting"
Chairmans Room
16:30 to 17:30
Contact: Bill Laidlaw
Mobile: 0409 602 833
- Thurs 1 Electrical Branch Sydney Division**
"Committee Meeting"
Board Room
18:00 to 19:30
Contact: Mark Edmunds
- Thurs 1 Women In Engineering**
"Mentor Networking Evening"
Maunsell, City
17:30 for 18:00 to
Contact: Mai
Phone: 8295 3684
Website: www.engineersaustralia.org.au/sydneywie
- Tues 6 Australasian Tunnelling Society**
"Committee Meeting"
Hyder Consulting (Australia) Pty Ltd, Level 5, 141 Walker Street, North Sydney
17:30 to 19:00
Contact: Bob Nowotny
Phone: 9552 0252
- Wed 7 Engineering Heritage Committee**
"Committee Meeting"
Board Room
17:00 to 19:00
Contact: Glenn Rigden
Mobile: 0408 025 219
- Thurs 8 Joint Electrical Branch - Engineers Australia, IET, IEEE**
"Experience with 25kV Locomotives in Queensland and 25 kV Passenger Trains in Brisbane"
Auditorium
17:30 for 18:00 to 19:30
Contact: George Fox
Phone: 9449 8536
- Fri 9 Sydney Division**
"Fellows Luncheon"
Parliament House
12:00 to 14:30
Contact: Robyn Worthing
Phone: 9410 5600
- Mon 12 Sydney Division**
"Division Committee Meeting"
Board Room
17:00 to 19:30
Contact: Kristian McInnes
Phone: 9410 5600
- Mon 12 Western Sydney Regional Group**
"AGM"
Bldg X, Room XB305, UWS
17:30 for 18:00 to
Contact: Steve Middleton

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.

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Mon 12	Chemical Engineering Branch "Site Visit" Date and site subject to change 16:30 to 20:00 Contact: Ian Ackland Mobile: 0414 183 368	Thurs 15	Mechanical Branch "Engineering a Chrome-Molly Cat-Cracker" Auditorium 17:30 for 18:00 to 19:30 Contact: Jim Vickery Phone: 9570 2576	Wed 28	Nuclear Engineering Panel "Committee Meeting" Board Room 16:00 to 17:30 Contact: Rod Corrigan Mobile: 0409 302 814
Mon 12	Young Engineers Australia, Sydney Div "Committee Meeting" Chairmans Room 18:00 to 19:30 Contact: Maryam Khajeh	Tues 20	Centre for Eng. Leadership and Management "Annual General Meeting and Seminar" Auditorium 17:30 to 19:30 Contact: Doug Roser Phone: 9817 1759	Wed 28	Toastmasters, Sydney Division "Romantic Reminiscences" For venue details please contact the event organiser 19:00 to 21:00 Contact: Kaye Segelov Mobile: 0424 240 062
Tues 13	Education & Assessment Subcommittee "Committee Meeting" Chairmans Room 17:00 to 19:00 Contact: Robyn Wright Phone: 9410 5615	Tues 20	Centre for Eng. Leadership and Management "Committee Meeting" Board Room 16:30 to 17:30 Contact: Doug Roser Phone: 9817 1759	Wed 28	Nuclear Engineering Panel "ANSTO Education Program" Auditorium 17:30 for 18:00 to 19:30 Contact: Rod Corrigan Mobile: 0409 302 814
Wed 14	Australian Geomechanics Society, Sydney Chapter "Committee Meeting" Board Room 16:30 to 18:00 Contact: Henk Buys Phone: 8837 0244	Wed 21	Water Engineering Panel "Land Development and Water Management" UTS Broadway 17:30 for 18:00 to 19:30 Contact: Peter Brady Phone: 9514 2734	Thurs 29	Joint Electrical Branch - Engineers Australia, IET, IEEE "AGM" Auditorium 17:30 to 20:00 Contact: Mark Edmunds
Wed 14	Australian Geomechanics Society, Sydney Chapter "2007 E H Davis Lecture: Foundations on Rock" Auditorium 17:30 for 18:00 to 19:30 Contact: Henk Buys Phone: 8837 0244	Wed 21	Quality in Engineering Panel "Six Sigma & Quality" Auditorium 17:30 to 19:30 Contact: Vic Manuja Mobile: 0414 443 327	Fri 30	Maritime Panel "AGM Dinner" Manly Ocean Beach House 19:00 to Late Contact: James Carley Phone: 99494488
Wed 14	Excellence Awards Committee "Committee Meeting" Chairmans Room 17:30 to 19:30 Contact: Robyn Worthing Phone: 9410 5612	Wed 21	Water Engineering Panel "Land Development and Water Management" UTS Broadway 17:30 for 18:00 to 19:30 Contact: Peter Brady Phone: 9514 2734	Fri 30	Western Sydney Regional Group "WSRG Christmas Function" Rooty Hill RSL Club 20:00 to Contact: George Grodziki Phone: 4736 0798
Wed 14	Toastmasters, Sydney Division "Colour" For venue details please contact the event organiser 19:00 to 21:00 Contact: Kaye Segelov Mobile: 0424 240 062	Thurs 22	Illawarra Sutherland Regional Group "Committee Meeting" University of Wollongong UniCentre Function Room No 1, Northfields Avenue, Wollongong 17:30 to 19:30 Contact: Elaine Bailey Phone: 02 4221 4086	Mon 3	Sydney Division "AGM" Auditorium 17:00 to 19:30 Contact: Nimali Herath Phone: 9410 5600
Wed 14	Illawarra Sutherland Regional Group "Climbing Mt Kilimarijaro" University of Wollongong UniCentre Function Room No 1, Northfields Avenue, Wollongong 18:00 for 18:30 to Contact: Elaine Bailey Phone: 02 4221 4086	Thurs 22	Illawarra Sutherland Regional Group "Committee Meeting" University of Wollongong UniCentre Function Room No 1, Northfields Avenue, Wollongong 17:30 to 19:30 Contact: Elaine Bailey Phone: 02 4221 4086	Tues 4	Mechanical Branch "Eminent Speaker Presentation - Dynamic Crowd-Structure Interaction in Stadium Design" Auditorium 17:30 to 19:30 Contact: A/Prof Philip Mathew, Phone: 02 93854154
Thurs 15	Women In Engineering "AGM" Board Room 17:30 to 19:30 Contact: Hope Dilworth Kidd Mobile: 04 0959 6655 Website: www.engineersaustralia.org.au/sydneywie	Tues 27	Civil and Structural Engineering Panel "Timber Topic" Auditorium 17:30 for 18:00 to 19:30 Contact: Nick Livanos	Tues 4	Australasian Tunnelling Society "Committee Meeting" Hyder Consulting (Australia) Pty Ltd, Level 5, 141 Walker Street, North Sydney 17:30 to 19:00 Contact: Bob Nowotny Phone: 9552 0252
Thurs 15	Mechanical Branch "Committee Meeting" Chairmans Room 16:30 to 17:30 Contact: Jim Vickery Phone: 9570 2576	Tues 27	Civil and Structural Engineering Panel "Committee Meeting" Board Room 16:30 to 17:30 Contact: Nick Livanos Phone: 9279 2366	Wed 5	Engineering Heritage Committee "Committee Meeting" Board Room 17:00 to 19:00 Contact: Glenn Rigden Mobile: 0408 025 219