

# Engineering Tasmania

June 2011



ENGINEERS  
AUSTRALIA  
Tasmania Division

Newsletter of Engineers Australia, Tas Division - Royal Engineers Building, 2 Davey Street Hobart  
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## PRESIDENT'S REPORT



The **2011-12 Tasmanian State Budget** will be handed down by the Premier and Treasurer, Hon Lara Giddings MP, on Thursday, 16 June 2011. It is therefore timely to remind our elected members that Tasmania must have adequate infrastructure such as transportation and communications systems, water and energy supply if we are to have a viable economy and to support the economic, environmental and social aspirations of our current population and future generations. This will require an adequate level of investment.

Last year the Engineers Australia **Infrastructure Report Card** for Tasmania identified that major changes were required in the areas of Roads, Wastewater, Stormwater, Gas and

Telecommunications to enable this infrastructure to be fit for its current and anticipated future purposes. In particular our Local Roads were rated as poor and our Rail Network was considered inadequate. Some work has been started in addressing these issues, but more needs to be done.

In particular, we believe that:

- State Government must take responsibility for implementing a long-term integrated infrastructure plan for Tasmania.
- Strategies must be developed alongside the infrastructure plan to ensure that Tasmania has, and can access, adequate skills to deliver infrastructure projects.
- Private sector funding for infrastructure must be encouraged, and
- Investment in infrastructure must increase overall.

I recommend you consider these things when you assess the effectiveness of the budget.

**Strategic planning.** We recognise that given our small and rapidly ageing population compared to other states, infrastructure funding will always be a critical issue. Shortfalls cannot always be met by the State Government. We must therefore attract investment to our State. In order to do this it is essential that we have clear and consistent Planning Regulations in place. Strategic land use planning is urgently required and it is at the State level that this planning, taking due cognizance of regional issues, should ultimately be undertaken. There are significant opportunities at this level to better

integrate land use and infrastructure planning (both social and physical). Regional Planning schemes are an important step in this process and it is essential that there be a high degree of consistency between those schemes being developed. We no longer have the luxury of suffering the piecemeal and uncoordinated land use planning decision making of the past.

We have received strong support for our **Parliamentary Fellow Program**, which has now been re-badged as the **Engineers Australia Parliamentary Support Program**, with over 34 of our senior members confirming their interest in being involved. I have now written to all of our Tasmanian State and Federal Parliamentarians inviting them to be part of the Program.

Judging has now commenced for the **2011 Tasmanian Engineering Excellence Awards**. We have 15 entries in a very strong field this year. I recommend you put Friday, 29 July 2011 in your diary and start planning a table for the Awards Gala Dinner to be held at Wrest Point. It looks like being a great event. (Refer to page 9 for the Gala Dinner details)

Please note that entries for the **Individual Awards** will remain open until 30 June 2011. Nominations can be submitted online or by completing a nomination form and emailing it to [tasmania@engineersaustralia.org.au](mailto:tasmania@engineersaustralia.org.au) For further information and a copy of the nomination form, please go to [www.engineersaustralia.org.au/tasawards](http://www.engineersaustralia.org.au/tasawards)

**Greg Walters FIEAust CPEng Eng Exec**

Please send any comments and feedback to:  
[TasPresident@engineersaustralia.org.au](mailto:TasPresident@engineersaustralia.org.au)

## CONGRATULATIONS/ WELCOME

Members joining, rejoining  
or upgrading

### FELLOWS

Bruce Lord, FIEAust  
David Mounter, FIEAust CPEng

### MEMBERS

Scott Atkins, MIEAust CPEng  
David Pointing, MIEAust  
Simon Wright, MIEAust

### STUDENTS

(StudIEAust)

Chris Coppard  
Joel Granger  
Chai Hing  
Michael Holmes  
Rhys Ikin  
Boon Lee  
Clancy McGowan  
Ryan Ockerby  
Ian Sypkes  
Hou Tang  
Tamam Younes



**BRUCE LORD,  
BE(Hons) BEc FIEAust**

Bruce Lord graduated Bachelor of Engineering from the University of Tasmania in 1955. He started work as a structural design engineer with the Hobart Marine Board and then set off, as many young engineers did at that

## UPGRADING MEMBERS

time, to Canada to join the British Columbia Power Commission. His designs included a woodstave pipeline! Then followed a period with Gore and Storrie, Consulting Engineers of Toronto, where he worked on design of water supply projects. He returned home in 1960, and spent the rest of his career as a hydraulic design engineer with the Hydro-Electric Commission.

There he became involved in waterhammer studies for the Great Lake penstock, the hydraulic design of dam diversion tunnels and dewatering outlets, pressure transients in penstocks and rising mains, shaping of intake structures, scouring rock trap studies in unlined tunnels, canal capacities, pumping stations etc. He supervised many hydraulic model studies at the university hydraulics laboratory for spillways, intakes, valves, energy dissipators and power station tailraces.

For 10 years prior to his retirement in 1990, he led Hydraulics Design Section. His great strength was innovative problem solving, whether it was limiting scour below spillways, reducing load rejection surges in penstocks or avoiding damaging vortices sucking air at intakes. He was a key contributor during the great engineering era of hydro development in Tasmania.



**DAVID MOUNTER,  
FIEAust CPEng**

David graduated from the University of Tasmania with a Bachelor of

Engineering with Honours degree in 1993. He has also completed a Masters of Business Administration (Technology Management) in 2001, a Masters of Engineering specialising in Pavements in 2006 and is currently studying a Masters of Construction Law. He also has an Advanced Diploma in Project Management.

David has been a member of Engineers Australia since 1987. Between 1993 and 1996 held state and national positions with Young Engineers. He has also been a member of the Tasmania Divisional Committee.

David was Tasmania Chapter Councillor for Australian Institute of Project Management for eight years and was Chief Judge for the Tasmanian Project Management Achievement Awards for 4 years and a national Judge for 3 years.

David is currently Head of Construction for Roaring 40s Renewable Energy. In this role he was responsible for the delivery of the 111MW Waterloo Wind Farm in South Australia and progressing the 168MW Musselroe Wind Farm in Tasmania. David has the overall responsibility for the finalisation of all preconstruction activities in relation to Musselroe and Waterloo Wind Farm and for their construction. This role involves: the development and management of a \$700million construction budget; preparation, negotiation and execution of construction contracts up to \$200million in value; responsibility for site safety, permit and environmental compliance; and stakeholder management for wind farms in the construction phase. David also provides construction, project management and contractual expertise to the wider Roaring 40s team as required. As Head of Construction David established and manages the Graduate Development Program for the young engineers within Roaring 40s.

Whilst going through University David worked with Hydro Tasmania as a Hydrographer and as a Technical Officer. After graduation he joined Hazell Bros Civil Contracting as a Project Engineer working on a variety of projects including Brooker Highway upgrades, Wayatinah Water Supply, Penstock Lagoon works, and Marlborough Highway upgrade works.

In 1995 David moved to Works Tasmania and worked there till 1999. In this time he work on State Roads and National Highway Maintenance Contracts. On his departure from Civil Construction Corporation (formally Works Tasmania) David was the Operations Manager responsible for all operational areas of the business including, road and bridge construction, road and bridge maintenance, Registered Training Organisation, Consulting Group and bituminous sealing crew.

In 1999 David took up a role as the manager of Hebou Construction in Port Moresby, PNG. In this role he was responsible for the delivery of a wide range of projects including extensions to Kennedy Drive, industrial subdivisions, major asphalt resheeting works, over 50km of resealing works and various other works in and around Port Moresby.

David moved to Western Australia in 2000 and accepted a position with Main Roads Western Australia as the Contract Management and Systems Manager. in this role he was responsible for all of Main Roads' technical specifications and contract management processes. In 2001 David accepted a role of Senior Project Manager responsible for infrastructure upgrades in the southern Perth metropolitan areas. David had a team of five project managers working on a variety of projects from Black spot improvement works to major highway improvements.

In 2002 David returned to Tasmania to take up the position of Manager of Hazell Bros Civil Contracting. In this role David was responsible for achieving a \$20 million budget in a highly competitive market.

David worked as an independent consultant on the Bluff Point Wind Farm Stage 2 project in late 2003 before taking up a role with Aurora Energy as Safety, Health and Environment Coordinator. This role was an opportunity to round out specific safety and environmental competencies.

Prior to joining Roaring 40s David worked with Works Infrastructure as a Project Manager on the Glenn Huon Main Road upgrades works and upgrade works on Esk Main Road.

David has also been a member of the Army Reserve for over 20 years. He has worked in Infantry and Engineer units in Tasmania, Western Australia and New South Wales. David holds the rank of Major and is currently posted to a Regular Army Unit providing engineering, project management and contract management assistance to full time members.

David is married to Andrea and they have four boys Sam 8, Hayden 6, Campbell 4 and Joseph 6 months.



**SCOTT ATKINS,  
MIEAust CPEng**

I graduated from the University of Tasmania in 2004 with an honours degree in Civil Engineering. In my final year of University I obtained a scholarship with **pitt&sherry** Consulting Engineers which involved work placement over the summer of 2003 in their Launceston office. Following graduation I commenced full time employment with **pitt&sherry** in their Devonport

office as a Project Engineer; a role in which I am still employed.

Early into this role I was involved with numerous small structural and civil engineering projects, including structural design of residential slabs, footings and wind bracing design and civil design and supervision of smaller residential subdivisions. Being based in a smaller office has exposed me to a vast variety of projects in a fairly short period of time, with the added benefit of working with a reasonably large organisation like **pitt&sherry** I am also exposed to, and have the opportunity to work on, larger projects from other offices to provide an interesting balance.

With greater experience and confidence the complexity of the projects I was involved with gradually increased to include areas of commercial and industrial structural design, bridge design and investigation and to a lesser extent civil supervision and design. Bridge structural investigations have taken up a large majority of my time over the last 3-4 years, with this including completing structural inspections of the majority of the rail bridges on the states rail network, bridge inspection works for the Australian Rail and Track Commission (ARTC) in Tamworth, Maitland, Newcastle, Taree and a particularly enjoyable 4 weeks inspecting road bridges for the Gold Coast City Council. This inspection work and knowledge of the states rail bridges has led to my current role as the Contract Supervisor for the replacement of approximately 20 rail bridges throughout the states rail network.

Other projects of note that I have been involved with include Contract Supervisor roles on numerous DIER road construction projects, structural design of several large portal frames and associated industrial structures and the epic structural inspection work of the Port Latta pelletised iron ore offshore conveyor.

In 2009, I elected to change my

employment with **pitt&sherry** from a full time capacity to approximately 50-75% fte. This has allowed me to pursue work on my families 2000acre mixed (dairy/beef and sheep) farm at Dairy Plains near Deloraine, a role which I had planned on coming back to since the commencement of my University studies. I am finding this role greatly rewarding providing an enviable mix between the theoretical office based engineering work and practical framing. With both vocations facing skills shortages this arrangement ensures that my spare time is kept to a minimum!

Since obtaining my CPEng status earlier this year I am now planning on continuing with post-graduate studies in 2012. At this stage I am debating on completing a Masters Degree in either Structural Engineering, Agricultural Science or a Masters in Business Administration.



**DAVID POINTING,  
MIEAust**

Completing a Materials Engineering degree at UNSW in 1998, David began his engineering career as an LWD (logging while drilling) engineer for Schlumberger Oilfield Services on oil rigs in the Middle East. He worked in two person teams to provide real-time information on the geological features of oil wells (while the holes were being drilled). Responsibilities ranged setting up the data acquisition equipment on the rig and just behind the drill bit (including loading radioactive sources) to quality checking and interpreting real-time data.

In 2000 he moved to Tasmania to pursue his interest in sustainable energy systems, and began post-grad studies at UTas in the Institute for Antarctic and Southern Ocean Studies focusing on energy solutions for Australia's Antarctic research communities. This included a PhD, submitted in 2007, on strategies to manage the technical and non-technical challenges associated with implementing sustainable energy solutions in communities. His research used a case study of deploying wind and hydrogen energy systems to operate the "Mawson" Antarctic station independent of imported diesel fuels, exploring the drivers, barriers and issues associated with integrating clean energy technologies into existing communities.

During his studies he also worked part-time for the Australian Antarctic Division as a project engineer (focused on temporary accommodation systems) and completed small consulting projects, in collaboration with partners, for the Australian and Norwegian governments (focused on sustainable energy solutions for Antarctic communities).

While doing consulting work in Norway in 2006, he established a collaboration with the UNEP Risø Centre for Energy, Climate and Sustainable Development (URC) in Denmark and developed a project proposal to assist isolated communities in the Nordic region (Greenland, Iceland, Faroe Islands, etc) in implementing sustainable energy solutions.

After volunteering for 5 months with Engineers Without Borders-Australia in Cambodia (on ceramic water filters) and submitting his PhD, he then moved to Denmark and began working for the URC in late 2007 as a researcher and project manager. He was responsible for creating a network of community, industry and education stakeholders in the region, facilitating workshops, and providing expert advice to individuals and communities.

David recently resigned from the URC to return to Tasmania with his wife and young children (2 and 0.5 year old, both born in Hobart) and has begun working part-time as the Manager, Education Programs for Engineers Australia Tasmania Division.

The strategic goal of this new role is to improve the Division's engagement with students and teachers to increase the number of students studying science and maths (and ultimately becoming engineers).

He also works as an independent consultant for a range of clients, and is an Honorary Research Associate in the UTas School of Engineering. David is a member of the Tasmanian Division Committee, a past Chair of the Tasmanian Young Engineers committee, and 2002 winner of the Tasmanian Young Professional Engineer of the Year.

### Continuing professional development online

Engineers Australia has more than 500 webcasts available for continuing professional development covering all areas of engineering.

To access the webcasts visit:

[www.engineersaustralia.org.au/search/events/mediavision](http://www.engineersaustralia.org.au/search/events/mediavision)

Some of the recent additions to the site are:

#### [Crossrail & Cross River Rail](#)

Speakers:

Dr Mark Raiss, Arthur Stamatoudis

#### [Joint RINA/IMarEst Technical Presentation](#)

Speaker: Tim Holt, Country

Manager - Maritime - Australia & New Zealand, Det Norske Veritas

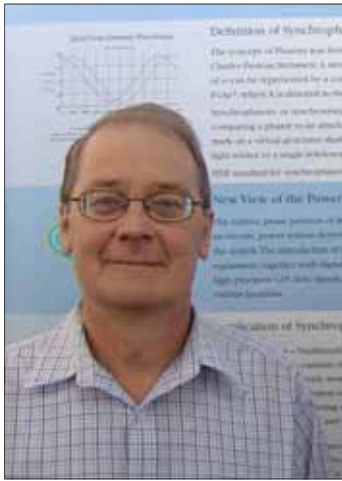
#### [Earth Friendly Concrete - Developing and Commercialising Geopolymer Concrete in the Queensland Market](#)

Speaker: Tom Glasby

Plus many more available .....

**VALE**  
**GRAHAM SHEPHERD, MIEAust CPEng**

**31 March 1948 - 24 April 2011**



Graham Shepherd passed away on Sunday 24 April 2011 at the age of 63 years.

He will be remembered as someone who was passionate about his work as a protection and control engineer and the engineering profession.

Graham was born in Smithton and attended Launceston Matriculation College before moving to Hobart to study engineering at the University of Tasmania. Two years into his degree, he was conscripted to the Australian Army to serve in the Signal Corps in Melbourne during the war in Vietnam.

On his return to Hobart one-and-a-half years later he went back to university and obtained his degree in 1975.

Graham's first role was as an electronics engineer with Marconi Space and Development in Portsmouth, England, working on electronic circuitry for defence weapons for four years.

In 1980 he returned to Tasmania and worked with a small electronics company in Devonport for nine months. Graham then found work at the zinc works in Hobart as an engineer in the design office. Graham stayed at the zinc works until he was made redundant in the mid-1990s.

He then worked as a consulting engineer, working throughout Tasmania and other parts of Australia, until joining Transend Networks in July 2001.

Graham was actively involved with Engineers Australia and a respected member of the Tasmania Division Committee for many years. He had also previously been a National Electrical College Board representative for the Division.

Graham had an ongoing battle with his health. In December 2005 he had a life-saving liver transplant and in 2008 was diagnosed with bowel cancer which was treated through surgery and chemotherapy. In July 2010 Graham was again diagnosed with bowel cancer and had more surgery. Graham then battled to regain his health but, unfortunately, on this occasion he failed.

Graham is survived by his wife Krystyna and his children Caroline, Sarah and William.

**Richard Bevan, FIEAust CPEng**

**EECON2011**



The Electric Energy Society of Australia (EESA), a learned society of Engineers Australia, held its 87<sup>th</sup> National conference in Hobart in early April 2011.

The conference, dubbed EECON2011, was a great success and covered a wide range of issues under the conference theme ***“Future energy...empowering sustainable solutions”***

International key note speakers included Professor Jovica Milanovic from the University of Manchester (*Modelling, Control and Operation Challenges Facing Owners and Operators of Power Systems of the Future*) and Professor Felix Wu from the University of Hong Kong (*Smart Operation of Smart Grid*). The third keynote speaker was Ken Brown from Western Power (*Impacts of Emerging Technologies on Power Systems*).

Over 30 speakers contributed to conference sessions covering; wind power, intelligent networks and power supply, emerging technologies and embedded generation, energy market operation, challenges in power industries in retaining staff, sustainable solutions and asset management, load modelling, and protection control and earthing.

A panel session on *Sustainable energy solutions for the 21<sup>st</sup> century* was conducted with the CEOs of Aurora Energy, Hydro Tasmania, Roaring 40s and Transend Networks.

A pre conference technical tour was hosted by Hydro Tasmania at Tungatinah Power Station to inspect refurbishment works in progress.

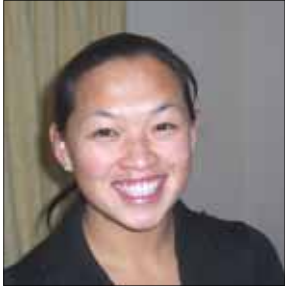
Over 150 people attended the Alstom Grid sponsored conference dinner at Bellerive Oval with guest speaker David Boon very well received.

EECON2011 included over 20 industry exhibitors and was well supported by sponsors. Special thanks to Gold sponsor ABB, and Silver sponsors Aurora Energy, Hydro Tasmania and Wilson Transformers. Thanks also to the Conference Organising Committee and Phil Holmes and his team at Convention Wise who provided event management.

**Richard Bevan, Chairman EECON2011 Organising Committee**



# YOUNG ENGINEERS



*Sandra Thaow, MIEAust CPEng  
Chair,  
Young Engineers Tasmania*

new minds  
*new ideas.*



I'll keep it short and sweet this month after the mammoth effort by Young Engineers last month!

Members of YEAT and WIE visited the University in May to meet the current members of the Engineering Society and to see how we can better assist and support our student members. Items that were discussed were the possibility of an engineering employers careers expo targeted at engineering students with local and national companies, industry speakers, more information on Engineers Australia and career planning and events that are happening in other states, casual networking events nearby the university and strengthening of the relationship between Engineers Australia and the University. This meeting is hopefully the beginning of a more meaningful relationship between Engineers Australia and its student members in Tasmania and I look forward to seeing the future development of this relationship.

In last month's article I mentioned that **Jenny O'Donovan, Engineers Australia's Careers Manager**, would be visiting the State for a few days in the second week of May. This unfortunately did not proceed, however I have the pleasure of confirming that Jenny will be in Hobart on the Tuesday, 12<sup>th</sup> and Wednesday, 13<sup>th</sup> of July 2011.

Jenny's current schedule for her visit is:

- Tuesday morning – PDP partner visits.
- Tuesday 12:00 pm – Presentation and the School of Engineering for students covering topics such as career planning, resumes and interview skills.
- Tuesday afternoon – Opportunities for students to have a one on one session with Jenny.
- Tuesday evening – public session for Engineers Australia members.
- Wednesday – PDP partner visits and opportunities for Engineers Australia members to have a one on one session with Jenny.

**To book a one on one session with Jenny**, please email Catherine Reading at the Engineers Australia office on [creading@engineersaustralia.org.au](mailto:creading@engineersaustralia.org.au)

**Jenny has also kindly offered to review any resumes prior to her visit if people wish to receive feedback when she is in Hobart.** Please send your resumes to Jenny at [careers@engineersaustralia.org.au](mailto:careers@engineersaustralia.org.au)

I know this is cutting it a bit fine but YEAT and YPNT are also hosting a joint **"Finance Forum"** on Tuesday, 7 June at The Salamanca Inn. Jarrod Jeremiah has over 15 years experience in the financial services industry and will be offering advice on what investment options are available for young professionals. Registration for the event costs \$10 and covers drinks and nibbles. (**Refer to advertising flyer on page 15**)

Download the advertising flyer at [www.engineersaustralia.org.au/tasevents](http://www.engineersaustralia.org.au/tasevents) for more information. **PRE-REGISTRATION IS ESSENTIAL.** RSVP to Catherine Reading if you are interested in attending.

Last but not least, don't forget about our Tasmania Division **Individual Awards**. **Nominations close on 30 June 2011 for the:**

- **Professional Engineer of the Year**
- **Engineering Technologist of the Year**
- **Engineering Officer of the Year**
- **Young Professional Engineer of the Year**
- **Young Engineering Technologist of the Year**
- **Young Engineering Officer of the Year**

If you know anybody that you believe is suitable for any of the above awards and prizes, please pass on this information or nominate them so that we can appropriately recognise, acknowledge and celebrate their achievements.

More information about the Awards can be found at [www.engineersaustralia.org.au/tasawards](http://www.engineersaustralia.org.au/tasawards)

We are always looking for motivated people to join and help us improve the service that we deliver to our peers. If you're interested in joining or participating on the YEAT committee, contact me about the Committee and attending one of our meetings on [yeatas@engineersaustralia.org.au](mailto:yeatas@engineersaustralia.org.au)

**Sandra Thaow, MIEAust CPEng**  
Chair YEAT

# YOUNG ENGINEERS



Professor Tony Wong visited Tasmania on the 18<sup>th</sup> & 19<sup>th</sup> of April as part of the Eminent Speaker series.

He gave presentations at the Tamar Yacht Club in Launceston, the University of Tasmania in Sandy Bay, and at the Old Woolstore in Hobart. The topic of these presentations was *“Urban Water Management in Cites of the Future”*.

The population of the world will grow to 9 billion people by the year 2050. 80% of the population will live in cities and towns. The population of Australia will increase by the equivalent of:

- 59 x Canberra
- 12 x Perth
- 10 x Brisbane
- 5 x Melbourne
- 5 x Sydney

This is within the lifetime of many current engineers. The debate regarding expanding the urban sprawl vs increasing the densities of cities generally focuses the liveability of the cities, let alone whether or not there will be enough water.

In the 2006 CSIRO did a study mapping the vulnerability of water supply. With the exceptions of Brisbane and Hobart all other capital cities are in vulnerable areas. Future rainfall is uncertain, however increased temperatures are not. This in turn will lead to dryer catchments. When rainfall does occur, more will be absorbed by the ground before runoff starts to flow. Catchment yield is likely to decrease in the future.

The way we manage urban water influences almost every aspect of our urban environment and quality of life. Cites have traditionally been located based on a reliable water supply. As society developed and grew cites became sewerred.

The next evolution was to provide stormwater drainage and flood mitigation measures. Future evolutions are dubbed as water ways cities, water cycles cities, and water sensitive cities. All water sources and streams needs to be seen as a resource. To do this there needs to be a societal change with how people live with water. An example of a similar change that took place regarding waste management was the move from rubbish bins, to rubbish bins and recycling bins, to rubbish bins, recycling bins, and green waste collection.

Australia has varied climates and experiences extremes, from bushfires to floods. Climate change and population growth emphasise the vulnerability of the cities. We need to build resilience into our systems to face the uncertainties before us.

There are multiple factors where urban water management can alter the liveability of cities. In the traditional system, potable water is used for everything one and then disposed of. Other approaches to water use include indirect potable reuse, and dual water supply pipelines, which are flexible.

Stormwater is currently generally not treated, merely collected and discharged. It is generally polluted, containing elevated nutrients and gross pollutants. There is a movement to improve the treatment of stormwater and thus improve the environment. When treated stormwater is treated to predictable results, it will become a valuable water resource. This is a topic of current research. Eventually captured stormwater could be treated and supplied to people as a non-drinking water supply.

Capturing existing resources whilst using different sources will support population growth. Adelaide is an example of a city using multiple sources, as aquifer storage and recovery (ASR) is utilised.

Adela Parnell,  
GradIEAust  
Young  
Engineers  
Tasmania  
Committee



A case study for modern water management is Melbourne’s E-Gate. E-Gate is a dense development, including 90 dwellings per hectare. The development will have its own gas fire power generator, sized for the district level. Waste head will be used for energy to disinfect water and produce a hot water service. This will be a reticulated hot water service throughout the development. Considering it takes seen to ten times the energy needed to produce hot water compared to drinking water, this is a great saving.

Urban water management can be used to mitigate urban heat. Heat is absorbed by cities during the day and released during the night. During heat wave conditions cities don’t completely cool down at night. The longer the heatwave lasts, the hotter the city becomes. While this is not necessarily a concern for Tasmania, it is certainly a concern for mainland cities. Green infrastructure helps mitigate this urban heat. This is done through water in the landscape, trees providing shade and evapotranspiration.

Water is a limited resource, and as populations grow we need to use existing sources more efficiently. Future challenges include water extremes and vulnerability, population growth, degrading environmental values and urban heat. All these issues have been mitigated separately in the past. However all of them are influenced by how urban water is delivered. An interdisciplinary (not multi disciplinary) and integrated approach is needed to solve society’s issues.

For more information on water sensitive cites visit <http://www.watersensitivecities.org.au/>

## CREATING FUTURE ENGINEERS at EAST DERWENT PRIMARY

Students at East Derwent Primary School have embraced building with Knex in a big way! This has become an integral part of our flexible learning program. Students of all ages and abilities have enjoyed building models – from simple snowflakes to complex roller coasters that take 4 people to carry!

Their creations are displayed in the school library and at assembly, creating even greater interest.

Introduced and established by Lois Letchford with her 40,000 piece collection, other classroom teachers have bought KNEX for their classrooms for children to use their imaginations and other skills that come with this construction toy.



*ABOVE: (L-R) Brody Jones, Sam Lewis-Johnson and Riley-Jack Murtagh with their roller coaster*

Many students enjoy the challenge of turning a 2D image into a 3D shape which develops their visualisation skills and helps them gain a crucial engineering skill. In interpreting the drawings and plans into completed models, students are generally working in teams, following instructions and making decisions based on evidence. These are all important skills for a successful engineering career.



*ABOVE: A display of KEX models for the school assembly*

**East Derwent would welcome practicing engineers and engineering students to come and talk about design and construction and work with students to build models of other structures, including local buildings and bridges.**

For more information, contact Daniel Loader, Flexible Learning Leader at:

[daniel.loader@education.tas.gov.au](mailto:daniel.loader@education.tas.gov.au)

**Lois Letchford  
Raising the Bar, Literacy Teacher  
East Derwent Primary School**



**WE WOULD LIKE TO  
THANK OUR  
SPONSORS:**



**Opportunities are still available to sponsor the Excellence Awards, please contact Geoff Harper to discuss on 6234 2228 or [gharper@engineersaustralia.org.au](mailto:gharper@engineersaustralia.org.au)**

**ALL MEMBERS ARE CORDIALLY INVITED TO ATTEND THE**

**GALA DINNER FOR THE  
ANNOUNCEMENT & PRESENTATION OF THE  
2011 ENGINEERING EXCELLENCE AWARDS**

**WREST POINT CONVENTION CENTRE  
FRIDAY, 29 JULY 2011**

**7.00 for 7.30pm**

**Dress: Black Tie**

**\$100.00 per person (all inclusive)  
or \$950.00 per corporate table (10 people)**



## **MIDLAND HIGHWAY – BRIGHTON BYPASS PROJECT SOUTHERN SECTION**

*Department of Infrastructure Energy and Resources,  
John Holland Hazell Bros Joint Venture, Pitt & Sherry*

The Brighton Bypass Southern Section Project involved the design and construction of a 3.4 kilometre section of the Midland Highway and the Brighton Transport Hub. Highway works included two interchanges and two rail underpasses. Hub works included provision of access roads, 6 kilometres of new rail and container handling areas.

## **LOWER LAKE MARGARET MINI-HYDRO** *Hydro Tasmania, Shaw Contracting, Tyco Tamar, Johnstone McGee & Gandy Pty Ltd*

Hydro Tasmania, Shaw Contracting, JMG, Tyco Tamar and US based ITP teamed to build a 3.2MW mini-hydro station including a new woodstave pipeline, GRP penstock and the re-use of existing heritage listed infrastructure. All engineering, heritage, commercial and safety objectives were met, facilitating the generation of renewable energy.



## **DAVIS STATION ANTARCTICA – LIVING QUARTERS**

*Australian Antarctic Division, Hyder Consulting*

A new Living Quarters for Davis Station in Antarctica has been constructed through using a hybrid building method of fibre composite panels with a minimalistic structural steel frame. The building method has provided for faster construction times and a subsequent decrease in overall construction costs.

## **JMG – BELLERIVE OVAL SPORTSLIGHTING** *Johnstone McGee & Gandy Pty Ltd*

In order to meet the exacting requirements for colour TV broadcasting of international cricket matches, latest technology sportslighting was installed at Bellerive Oval.

JMG acted as project managers for the design and construction, in a project which featured innovative design modeling and tower design, and successful completion within budget and program.



## **KALGOORLIE NICKEL SMELTER WQ GUILLOTINE DAMPER REPLACEMENT**

**GHD**

The water quench Knife Gate Valve installed between the nickel flash furnace and the acid plant at the BHP Kalgoorlie Nickel Smelter required replacement. GHD designed a unique air actuated fume duct butterfly damper, addressing significant environmental and safety issues, and meeting client needs.



## **BRA AUTOMATED PELLET HANDLING FACILITY** *Tasmanian Consulting Service, Botanical Resources Australia*

A completely new approach to the storage of pyrethrum pellets, the handling facility provides fully automatic operation, and climatic control of the stores, through the innovative design integration of technology previously untried in world pyrethrum production, to deliver improved pellet quality, higher processing recovery and award-winning operational health and safety benefits.

## **AUSTRALIAN STANDARDS COMPLIANCE REVIEW OF GOLDWIND AUSTRALIA GW1500 WIND TURBINE**

*Sinclair Knight Merz, Goldwind Australia*

GWA engaged SKM to review the GW1500 wind turbine against Australian and State standards. This preceded introduction of the turbine to the Australian Market. Activities included a desktop audit of GQ standard design; inspecting an established windfarm in China; identifying recommended modifications; and a design review to implement those modifications.



## **MUSEUM OF OLD AND NEW ART (MONA) DESIGN AND ENGINEERING TEAM**

*Felicetti Pty Ltd, WSP Lincolne Scott/Vision Design, Coffey Mining Pty Ltd  
Johnstone McGee & Gandy Pty Ltd*



Landmark development on the banks of the Derwent River at Berriedale, Moorilla Vineyard, Tasmania. The museum costs are estimated at \$75 million dollars and is privately funded by the owner, David Walsh. Unique combination of architecture, structural, civil, services, mining and geotechnical engineering practices to deliver an extraordinary building. Voted #1 in the Gourmet Traveller Hot 100 list in April 2011 as the “most awesome museum”.

## **TBS CONTRACT SERVICES POATINA PENSTOCK REFURBISHMENT PROJECT**

*TBS Contract Services, Marine Industrial Design, WECO, Hydro Tasmania, Beatson & Associates*

TBS Contract Services were challenged with refurbishing the internal protective coating of the Poatina Power Station Penstock. The work, undertaken in a confined space, at vertical grades and in extreme weather conditions has been tackled with a number of innovative engineering solutions.



## **GEILSTON BAY TRUNK SEWER RELINE PROJECT**

*Southern Water*

The Geilston Bay trunk sewer transfers residential wastewater to Rosny Treatment Plant. The plant, in turn, supplies grey water to farmers in the Coal River Valley. One section of the sewer, approximately 1,700m, is submerged at high tide. The resulting saltwater infiltration makes the wastewater unusable for irrigation. Relining was undertaken to reduce this infiltration.

## TRANSEND NETWORKS – ADMIN 2 BUILDING, MARIA STREET, LENA VALLEY

*Transend Networks Pty Ltd,  
Kingston & Associates (Aust) Pty Ltd,  
Gandy & Roberts Pty Ltd, Fairbrother Pty Ltd*



Transend Admin 2 Building at Maria Street, Lenah Valley, is an innovative office building epitomising features for occupant comfort and well being. The building structure allows large open plan and flexible spaces and use of natural lighting via sawtooth roof profiles. Building Services focus on low energy use, renewable energy use and flexibility for changing office environment. The building is registered for 5 Star Greenstar Design.

## CMW HORSEHEAD CREEK SEWAGE RETENTION BASIN

*Tasmanian Consulting Service, Cradle Mountain Water*

The integral component of a major upgrade to the Devonport Sewerage Scheme, the retention basin at Horsehead Creek pumping station greatly improves network capability during major events and delivers a range of significant environmental benefits, including the virtual elimination of overflows, a fully enclosed design with biofilter odour control, and rainwater capture for automated washdown.



## SOUTHERN WATER SMALL TOWNS PROJECT

*Sinclair Knight Merz, Southern Water*

Investigation of potential options for the improvement of water quality to comply with DHHS requirements for Colebrook, Gretna, Hamilton, Judbury, Ouse, Tunbridge and Wayatinah.

## CATAGUNYA DAM RESTORATION PROJECT

*Hydro Tasmania*

Catagunya Dam was commissioned in 1962 in central Tasmania. The dam has a unique cross section and was the highest pre-stressed dam in the world at that time. The integrity of these original pre-stressed anchors can no longer be assured and this project was commissioned to restore the design capacity of the dam by installing ninety two modern post tensioned anchors.



## CATCHMENT TO CUSTOMER TO COAST MANAGEMENT FRAMEWORK

*Southern Water*

The Catchment to Customer to Coast Management Framework was developed by Southern Water to meet the new regulatory challenges of the Tasmanian water and sewerage reforms. The framework is used to assess risk and drive improvements across ten key topic areas and provides a novel and consistent approach to managing water and sewage.

# NORTH WEST GROUP



## The “Julie Burgess” Restoration Project

By Andrew Boyd, GradOIEAust

The grant included an amount for a berthing pontoon to be located at East Devonport, an interpretive centre and the actual restoration. It is anticipated the pontoon will be in place some time in mid-2011, with the vessel undergoing internal fitting out from about May, when the hull work is complete.

Restoration commenced in November 2010. The aim of the project is for the Julie Burgess to be a major tourist attraction, and by meeting stringent MAST survey requirements, to operate the vessel for tourism and training purposes.

On 14 April the North West Group conducted a technical presentation of the Restoration of the “Julie Burgess” at the Portslip Yards in Devonport. It was well supported by local members along with a number of wives and partners. The event was completed with a meal at the Tapas Lounge also in Devonport. Thanks to Chris Martin for his organising of such an interesting event .

The “Julie Burgess” is a 64 foot 40 ton fishing ketch built in 1936 in Launceston. She carries 7 sails with a total area of 2000 square feet when fully rigged and is powered by a 110 hp diesel motor. She is the last of the fishing ketches that were once common in Bass Strait. The “Julie Burgess” was originally built for Harry Burgess and until recently was owned by Captain Dick Burgess prior to Devonport Council’s acquisition of the vessel in 2010.

### SPECIFICATIONS:

<b>Built -</b>	1936
<b>Shipwright -</b>	Ned Jack, Launceston,
<b>Construction –</b>	Blue Gum
<b>Rig -</b>	Topsail Ketch
<b>Sail Area -</b>	Approx 2,000ft <sup>2</sup>
<b>Engine -</b>	Gardiner 6LX
<b>LOA –</b>	64ft (19.4m)
<b>Beam –</b>	16.4ft (5.0m)
<b>Draught –</b>	7ft (2.13m)
<b>Displacement -</b>	64.25tonne
<b>Net Tonnage -</b>	34.4tonne
<b>Purpose -</b>	Crayfishing



The funding for the restoration came from an Australian Government grant, the basis for which was work generation following the global financial crisis slowdown.

The restoration team includes full-time shipwrights, trades assistants, trainees, and volunteers.





## Is Your Company Interested in Humanitarian Engineering?



*Henry talking to a local construction engineer in Ghana*

As a final year Honours student, I was excited to learn Engineers Australia was earmarking 2011 as the 'Year of the Humanitarian Engineer.' Accordingly, I decided to formulate my thesis around the question of *'what factors affect small to medium engineering consultancies from engaging in Humanitarian Engineering projects/giving.'*

This was inspired by conversations I had with Rod Neville, Director of Engineering Edge, who said he was interested in becoming involved in Humanitarian Engineering, but lacked the time to "figure out how."

Over the past few years, I have been actively engaged in humanitarian aid and development projects both in Tasmania and overseas, and am currently managing a student-volunteering program.

Initially, I struggled to see a link between my engineering degree and my aid and development interests.

However, as the 2010 Tasmanian Manager of the *'Live Below the Line'* campaign, I was able to successfully engage engineering students and consultancies. Through this campaign, more than 30 engineering students took part and a number of companies donated, raising over \$10,000.

My current research is aiming to gauge the current level of interest and involvement in humanitarian engineering projects and what opportunities/partnerships would best benefit small to medium engineering consultancies.



*Henry with some students in Ghana*

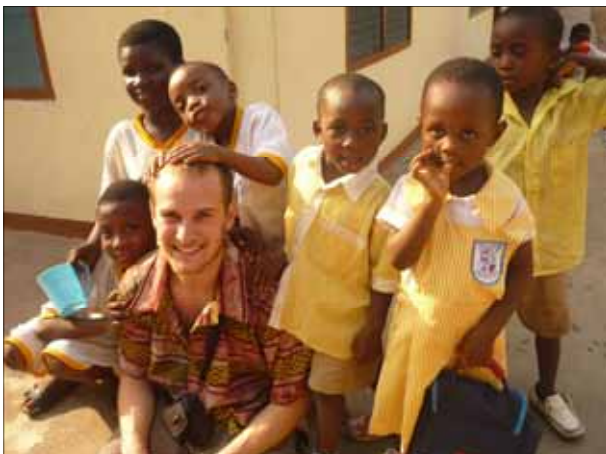
From my project I hope to make Humanitarian Engineering opportunities more accessible for engineering consultancies in Tasmania.

As part of my research I am planning to have short interviews with a number of engineering consultancies across Tasmania.

If you are interested in being part of this research please contact Henry at [h.fowkes@theoaktree.org](mailto:h.fowkes@theoaktree.org)



HENRY FOWKES, StudIEAust





**YPNT**  
YOUNG PROFESSIONALS  
NETWORK TASMANIA

# FINANCE FORUM

presented by Jarrod Jeremiah (BCom CA MTax DipFS)

Jarrod is an expert in providing financial advice to young professionals and has over 15 years' experience in the financial services industry. He will be offering general insights, tips and strategies to help answer questions like:

- What can I do with my salary?
- If I wanted to save for a house how would I do it?
- Should I buy the yacht, the gold bullion, or the art collection?

**REGISTRATION ESSENTIAL - NO DOOR SALES**  
Download Registration form at  
[www.engineersaustralia.org.au/tasevents](http://www.engineersaustralia.org.au/tasevents)

**WHEN** Tuesday 7 June 2011  
**TIME** 6:00pm for 6:30pm start  
**HERE** The Salamanca Inn, 10 Gladstone Street, Hobart  
**COST** \$10 (drinks & nibbles included)  
**RSVP** Wednesday 1 June 2011  
**TO REGISTER** Please complete attached application form and return with payment to Catherine Reading: [creading@engineersaustralia.org.au](mailto:creading@engineersaustralia.org.au), 03 6234 2228

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TASMANIAN ALKALOIDS

**Supported by**



ENGINEERS AUSTRALIA Tasmania Division

## → 2011 year of humanitarian engineering

It's up to us to engineer a better world.

[makeitso.org.au/humanitarian](http://makeitso.org.au/humanitarian)

Engineers Australia is proud to announce that **2011 is the Year of Humanitarian Engineering** – a year in which we will recognise the role of engineering in improving quality of life and disaster recovery in Australia and abroad.



All statistics sourced from [www.globalissues.org](http://www.globalissues.org)



**ENGINEERS MAKE IT SO.**

Engineers Australia, a not-for-profit organisation that exists for the advancement of engineering and the professional development of our members, is proud to be hosting the Year of Humanitarian Engineering.



Nyssa Muir, GradIEAust

# WOMEN IN ENGINEERING

**Women in Engineering, Tasmania**  
**Attract. Support. Develop. Celebrate.**  
*Our mission is to increase the participation of women in the engineering profession and allow our members' aspirations to flourish.*

## Events

15<sup>th</sup> **International Conference for Women Engineers & Scientists**



This is an international forum and Australia is fortunate is host it in 2011.

This conference has attracted some very big sponsors and influential speakers so far.

**When:** 19 – 22 July 2011

**Venue:** Adelaide

**More info:** [www.icwes15.org](http://www.icwes15.org)

## News



**Co-operation between WIS & WIE**

A couple of months ago WIS (Women in Spatial) held a very successful breakfast event to which the WIE were also invited. We are pleased to announce that more future joint forums will be organised. The purpose of the collaboration will be to offer forums for networking, exchange of ideas, share unique experiences, empowering women in Spatial & Engineering, and to influence change.

- All events will be open to both men and women
- Potentially four events per year to be organised
- The ultimate aim is to hold a multi – profession conference in late 2012 focussing on issues facing women in non traditional areas.

## Networking Night

On a cold and wet Wednesday evening last month the WIE organised a networking evening for all its members and guests. It was a well attended event and a great opportunity to have a chin-wag with a glass of vino (or other beverage). Some great ideas for future events were discussed as well as amusing anecdotes about the pros & cons of being a female in a male dominated industry. The majority of people stayed on for dinner and ONBA must be commended for their good food and drinks (particularly the pinot noir...).



*Some happy people enjoying what would've otherwise been a fairly dull Wednesday night. Taken with a battered & abused phone camera ...*

## Reflection

**FACTS report: Women in Science in Australia**

FACTS (Federation of Australia Scientific and Technological Societies) released a report titled 'Women in Science in Australia' in 2009. It presented a pretty sobering account of the progress of women in Technological societies (i.e. Engineers Australia). It refers to a similar report in 1995 and notes that little has changed in the last 14 years.

The report notes that continued under-representation and under-participation of women in technology-based education, training and employment is a cause for social concern on equity grounds.

Further, it is also likely to inhibit Australia's capacity to develop internationally competitive research and industries.

The report affirmed the importance of diversity in maximising productivity and innovation.

Cutting a long story short (the report is 97 pages long): lack of diversity is holding back Australian science and engineering innovation.



For more information visit: <http://www.fast.org/>

### Quote of the month

*"I'm being extremely clever up here and there's no one to stand around looking impressed. What's the point in having you all?"*

Doctor Who - Season 6

## Computer Engineer Barbie

This is a real thing, I'm not joking!

Computer Engineer Barbie® debuted in 2010 and was created by Mattel with the help of the Society of Women Engineers (USA) and the National Academy of Engineering (USA) to develop the wardrobe and the accessories.



Wearing a binary code patterned tee and equipped with all the latest gadgets including a smart phone, Bluetooth headset, and laptop travel bag, Computer Engineer Barbie® is geek chic. It was designed to inspire a new generation of girls to explore this important high-tech industry, which continues to grow and need future female leaders.

Recently it was voted the most popular of all Barbie's careers (her 126<sup>th</sup> career, she's a busy and learned girl!). If you look closely on her box, there's even a Linux penguin!

### Women in Engineering Committee Members:

Meredith McQueen, Fiona Evershed, Erin Jackson (nee Driscoll), Cassandra Blazely, Nyssa Muir and Sarah Kube.

Email: [wietas@gmail.com](mailto:wietas@gmail.com)

The image is a promotional poster for EngQuest 2011. It features a blue background with a roller coaster track and a yellow gear. The text says 'EngQuest powered by imagination'. It describes the program as a free, hands-on problem solving program for primary and middle years students. It lists features like student projects, flash entry animation, and curriculum-linked support material. It also mentions that each student receives a participation prize and a merit certificate. The website www.engquest.org.au is provided. Logos for Engineers Australia and Valemus are at the bottom.

## 2010 JOHN MADSEN MEDAL WINNER



Phil Mathers FIEAust (Ret) has been awarded the 2010 John Madsen Medal and will travel to the Engineers Australia Electrical and ITEE College Awards Dinner in Brisbane for the presentation on 3 June 2011.

This award is made annually by Electrical College and the Information, Telecommunications and Electronics Engineering College for the best paper written by a current member of Engineers Australia, and published in the Australian Journal of Electrical and Electronic Engineering.

Phil's paper "*Lake Margaret Power Scheme: A long history and assured future*" examines the history and heritage significance of the Lake Margaret Scheme, together with a description of recent restoration and redevelopment works that will ensure the scheme continues to operate well into the future. The history includes a description of the original construction and the major refurbishments, replacements and upgrades that have taken place throughout the life of the scheme.

**Background:** This medal perpetuates the memory of Sir John Madsen who was Foundation Professor of Electrical Engineering at the University of Sydney from 1920 to 1949. Sir John Madsen was one of Australia's great electrical engineers and some of his outstanding community service was through his active co-operation with CSIRO. He proposed the founding of a Radio Research Board and was a leader in the development of radar in Australia. He was also active in forming the Electrical Research Board and the National Standards Laboratory.

## HERITAGE MEETING

**DATE:** Thursday, 23 June 2011  
**TIME:** 7.30pm  
**PLACE:** Royal Engineers Building  
2 Davey Street, Hobart



### "SHIPS' BRIDGES & CONTROLS"

The presentation covers Integrated Bridge Systems, which along with Integrated Navigation Systems (E-Nav), Bridge Alert Management and Bridge Design, Equipment and Arrangements is the subject of ongoing consideration by International Maritime Organisation (IMO) marine safety working groups. It tracks the initial slow development of technology in ship control to the current day where the speed of technology now appears to be outstripping the capacity for regulation. The presentation is based on service in modern high speed craft although the concept is applicable to all ships. Research into the subject has involved involvement with high speed craft designers and builders, IMO working groups and visits to integrated bridge systems manufacturers in the US and UK.

### **SPEAKER: CAPTAIN MIKE JACKSON**

Hobart based Captain Mike Jackson is a marine consultant who has specialised in high speed craft operations and training. He has been a high speed ferry Master on Bass Strait, the English Channel and the Irish Sea. He conducts high speed navigation, systems and safety training on behalf of the Australian Maritime College and also acts as Incat Tasmania's Operations and Training Captain. He has trained high speed craft crews from a number of countries around the world both military and civilian both for Incat and also operating companies.

Mike has also held management positions with Marine and Safety Tasmania, Tidewater Port Jackson Marine and P & O Maritime Services. A Commander in the Royal Australia Navy Reserve, Mike is currently undertaking a full time service contract working with the Navy's Seaworthiness Board.

**RSVP:** Catherine Reading on 6234 2228 or  
[creading@engineersaustralia.org.au](mailto:creading@engineersaustralia.org.au)

# Writing Winning Technical Documents

This **two day** course provides practical skills to ensure that technical documents are written and presented with clarity, accuracy and impact.

This course offers current best practice and strategies in technical writing skills inherent in the principles of good written communication. Participants' own writing samples are collected before the course and are worked on by participants during the course. These practical writing tasks significantly increase the relevance of the learning experience.



**21 June & 22 June 2011**  
**Salamanca Inn, Hobart**  
Download flyer at:  
[www.engineersaustralia.org.au/tasevents](http://www.engineersaustralia.org.au/tasevents)

**Target Audience** For those who want to improve their technical writing skills. Whether it is writing reports, specifications, tenders, or emails, you need to ensure that your writing can win an outcome for your organisation in a competitive situation, be clearly understood and trigger effective and efficient results, rather than perhaps be confusing or ambiguous.

## Course Outline

### Introduction

Discussion of the documents written by participants together with profiling the key steps involved in writing effective technical documents.

### Audience Analysis

Tailor written text to suit different audiences whether they be managers, clients, technical experts or the general community; identify skills and techniques to integrate the appropriate readability and tone for the reader(s).

### Organising Information

Learn strategies and tactics to prioritise and categorise information as well as make insightful decisions about the relevance and appropriate level of detail required. Providing 'signposts' to the readers to keep them 'on track' throughout complex documents.

### Write with Clarity, Power & Impact

Create clear, concise and readable technical documents and demonstrate the flexibility to write at appropriate difficulty levels for different audiences from expert to non-experts; participants will apply a readability formula to their own documents. Produce correct paragraphs and well constructed

sentences whilst using words that avoid confusion and ambiguity. Understand the relevance of correct grammar and punctuation whilst learning the principles of integrating numbers into text. Write winning recommendations that highlight the action outcomes.

### Optimise Layout

Achieve a consistent, clear and uncluttered look to technical documents; use appropriate numbering systems; and know the current standard regarding integrating graphics into text.

### Quality Assurance/Checking

Opportunities throughout the course to review/workshop participants' own sample documents, whether they be reports, tenders, specifications, correspondence, emails.

### Apply Effective Proofreading Strategies

Strategies to be more effective in proofreading; giving and receiving feedback.

## Course Objectives

At the end of the course participants will be able to:

- Understand how to tailor written text to suit different audiences
- Implement strategies to prioritise and categorise information (ie the structure of a document)
- Implement writing techniques to keep the reader 'on track' (even throughout complex documents)
- Write with more clarity, power and impact
- Achieve a more consistent, clear and uncluttered look to technical documents
- Apply better assurance/checking of technical documents
- Implement effective proofreading strategies

**\$792 EA Members**  
**\$990 Non Members**

“Great techniques. Turns writing into a logical, effective and easy task.”

*Electrical Engineer  
Norman Disney Young*

Recognised for Continuing Professional Development (CPD) by Engineers Australia [refer to EA CPD Guidelines]



Engineering Education Australia

[www.eeaust.com.au](http://www.eeaust.com.au)



# CALENDAR 2011

For up to date information on these and other events, please visit [www.engineersaustralia.org.au/tasevents](http://www.engineersaustralia.org.au/tasevents)

## JUNE

**Tuesday 31 May & Wednesday 1 June - EEA 2 DAY COURSE - Negotiation Skills - Salamanca Inn - 8.30am to 5.00pm - HOBART - \$792 (EA Members) - \$990 (Non Members) - Download registration form at [www.engineersaustralia.org.au/tasevents](http://www.engineersaustralia.org.au/tasevents)**

**Tuesday 7 - Joint Young Engineers & Young Professionals Network Tasmania - FINANCE FORUM - Jarrod Jeremiah (BCom CA MTax DipFS)- 6.00pm for 6.30pm - Salamanca Inn, 10 Gladstone Street, Hobart - \$10 per person - REGISTRATION ESSENTIAL - NO DOORSALES - Download registration form at [www.engineersaustralia.org.au/tasevents](http://www.engineersaustralia.org.au/tasevents) and forward to Catherine Reading at [creading@engineersaustralia.org.au](mailto:creading@engineersaustralia.org.au) (Refer to page 15)**

**Tuesday 21 & Wednesday 22 - EEA 2 DAY COURSE - Writing Winning Technical Documents - Salamanca Inn - 8.30am to 5.00pm - HOBART - \$792 (EA Members) - \$990 (Non Members) - Download registration form at [www.engineersaustralia.org.au/tasevents](http://www.engineersaustralia.org.au/tasevents) (Refer to page 19)**

**Wednesday 22 - North West Group - Andrew Rundle, OMIEAust (Devonport City Council) - New Zealand Asset Management - Ulverstone Civic Centre - 5.30 for 6.00pm Dinner - Members & Partners \$15 per person, Non Members \$20 for meal - RSVP to Rowan Sharman 6430 5752 or [rsharman@burnie.net](mailto:rsharman@burnie.net) (Refer to this page)**

**Thursday 23 - Heritage - Captain Mike Jackson - Ships' Bridges & Controls - 7.00pm - Royal Engineers Building, 2 Davey Street, Hobart - RSVP to Catherine Reading 6234 2228 or [creading@engineersaustralia.org.au](mailto:creading@engineersaustralia.org.au) (Refer to page 18)**

### 16th Engineering Heritage Australia Conference - Hobart - November 2011

**Registrations are now open.**

Full information on the website

Register on line at

[www.cdesign.com.au/ehac2011](http://www.cdesign.com.au/ehac2011)

Early bird registrations close 31 August 2011

## NORTH WEST GROUP

**DATE:** Wednesday, 22 June 2011

**TIME:** 5.30 for 6.00pm Dinner

**PLACE:** Ulverstone Civic Centre

### New Zealand Asset Management

The presentation will focus on New Zealand best practice examples, levels of service, community consultation of the, and long term community plans incorporating Asset Management financing needs and the impact on Christchurch City of the Canterbury 7.1 magnitude earthquake.

Consideration and commentary will also be given outlining the emergency management and infrastructure recovery experiences and lessons learnt following the earthquake.

#### ANDREW RUNDLE OMIEAust

Technical Support Manager, Devonport City Council

Andrew Rundle is a member of the North West Tasmania Group and also Technical Support Manager at Devonport City Council. He visited New Zealand in November 2010, as a Tasmanian representative of an Institute of Public Works Engineering (IPWEA) asset management study tour group.

The group attended the 2010 NAMS NZ Advanced Asset Management Forum, and visited Audit NZ in Wellington, Upper Hutt City Council, Wellington City Council, Waimakariri District Council, Selwyn District Council and Christchurch City Council. The visit to Christchurch was two months after the Canterbury earthquake of 3 September 2010 and preceded the February Christchurch earthquake. The forum theme was *Asset Management in a Constrained Environment*

**MEAL COST:** \$15 Members and partners and \$20 Non Members.  
Attendance for the presentation only is free of charge at 6.45 pm

**RSVP:** Rowan Sharman on 6430 5752 by 16 June or email [rsharman@burnie.net](mailto:rsharman@burnie.net)

**THIS MEETING WARRANTS 1.5HRS CPD**