

Engineering Tasmania

August 2011



ENGINEERS AUSTRALIA
Tasmania Division

Newsletter of Engineers Australia, Tas Division - Royal Engineers Building, 2 Davey Street Hobart
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*We would like to
thank our
2011 Engineering
Excellence Awards
Sponsors*

SILVER SPONSOR



TRANSEND

BRONZE SPONSORS



EXCELLENCE AWARD WINNERS

"Davis Station Antarctica - Living Quarters"
Australian Antarctic Division, Hyder Consulting



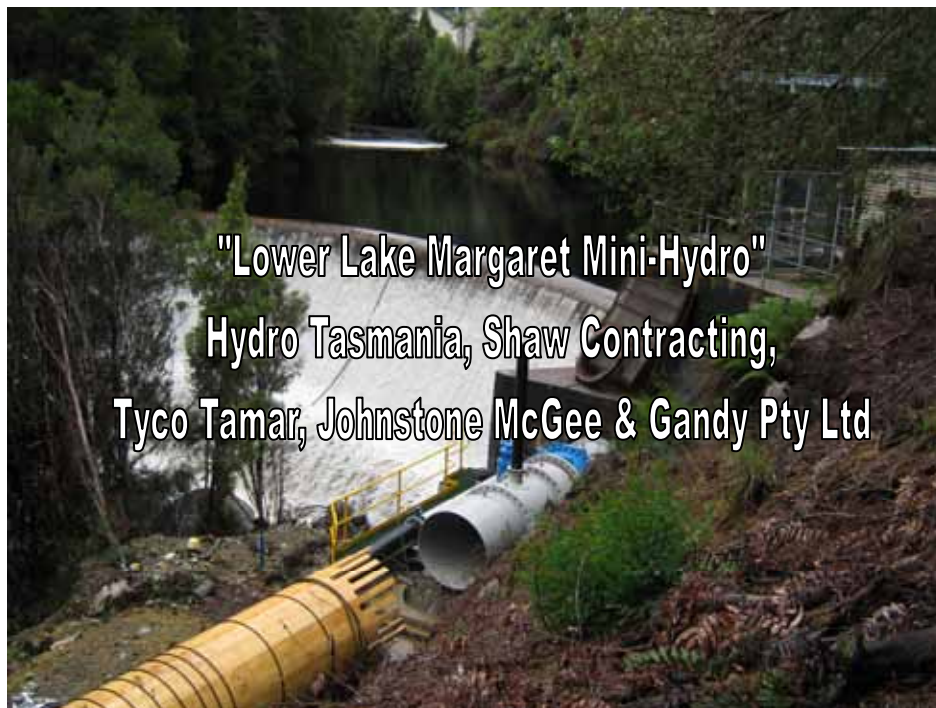
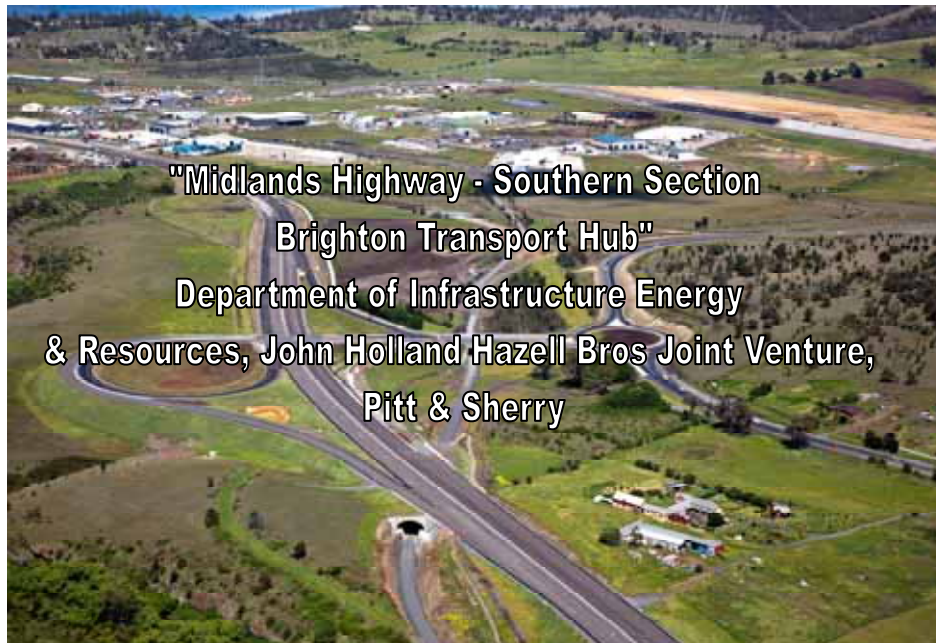
"BRA Automated Pellet Handling Facility"
Tasmanian Consulting Service,
Botanical Resources Australia



"Catagunya Dam Restoration Project"
Hydro Tasmania, D A Tanner Holdings
Entura, Wildtribe, Richard Rodd & Assoc
Hawkins Engineering, Structural Systems
Sides Drilling, Cut and Core



HIGHLY COMMENDED WINNERS



INDIVIDUAL AWARD WINNERS

PROFESSIONAL ENGINEER OF THE YEAR

Dr Jane Sargison, MIEAust MASME, MAIE

Dr Jane Sargison was a Senior Lecturer at the University of Tasmania and a Director of JSA Consulting Engineers until June 2011 when she joined BMT WBM as Senior Mechanical Engineer. She is a specialist in turbines and energy systems with 15 years experience across R&D and industry sectors and a Rhodes Scholar. Her strong analytical and practical engineering skills have been applied to a wide range of projects, where she takes engineering solutions and applies them to novel situations to provide practical outcomes. She has won awards for research and has over 60 publications. She is a member of a number of advisory groups and board member of the Australian Institute of Energy.



ENGINEERING OFFICER OF THE YEAR

Ronald Bessell, OMIEAust



Ron is an Associate at JMG Engineers and Planners, working as Group Manager of JMG Northern Region since 2005 where he is responsible for leadership, resource management, financial responsibility, and marketing of JMG's activities throughout the north of the State. He has a background in design and drafting, and his practical background combined with extensive knowledge of the construction industry built up from around 30 years experience allows Ron to provide options to both original designs and to solving challenges on site. He recently oversaw the merging of people and resources and the development of future business opportunities associated with the merger of JMG and Dale P Luck and Associates. Ron is involved in community organisations including the RACT's Northern Regional Advisory Committee and as a rugby referee.

YOUNG PROFESSIONAL ENGINEER OF THE YEAR

Michael Sylvester, MIEAust CPEng BEng MTech

Mike is an advocate of improving the world in which we live and work and applies his engineering competence within society in such a manner. He is a member of both the Tasmanian and National Committee of Young Engineers Australia and enthusiastically aides in specifically contributing to the strategy setting and improving the sustainability of both Committees. In Mike's current role with Hydro Tasmania, he is Project Director and team manager for half of the company's capital works on existing assets. He specialises in the establishment of projects and project teams for major works such as power station modernisations, refurbishments of dams and works associated with significant isolating devices such as gates and valves. Mike's team was recognised by Engineers Australia in 2009 when they were awarded the national award for engineering excellence for their work titled "World Class Machine Operation". Mike wrote the paper on behalf of his team.





PRESIDENT'S REPORT

The state of our roads

In a recent report, the federal government's advisory body Infrastructure Australia deemed the nation's infrastructure "barely adequate", echoing the results of Engineers Australia's own *2010 Australian Infrastructure Report Card*. Infrastructure Australia's chairman, Sir Rod Eddington, acknowledged that Australia's productivity rate has slowed over the past decade to a point below the average of OECD nations because of poor infrastructure. In the July issue of *Engineers Australia* magazine, our national infrastructure report card committee spokesman Rolfe Hartley welcomed the report noting: "As a large proportion of Australia's infrastructure slides towards the end of its useful life, the report is another wake-up call to all Australian governments about the perils of the prevailing inertia."

In last month's column I discussed the state of Tasmania's water infrastructure. Given the growing recognition of the impact of infrastructure on productivity, this month I would like to look at the state of our transport infrastructure and in particular our road networks.

The latest Tasmanian Infrastructure Report card noted that between 2005 and 2010 the quality of our overall road network had deteriorated. The ratings of our roads were:

Infrastructure Type	Rating
Roads Overall	C -
National Roads	C+
State Roads	C
Local Roads	D

A rating of C indicates that the infrastructure is adequate but that major changes are required to enable infrastructure to be fit for its current and anticipated future purposes. A rating of D indicates that the infrastructure is poor and that critical changes are required to enable the infrastructure to be fit for its current and anticipated future purposes.

These ratings recognise that our local roads are generally poor and failures are common due to the employment of reactive maintenance practices. State roads have maintained their standard, with the additional expenditure on these roads resulting in some of the backlog of work being addressed. National roads have deteriorated due to increasing freight usage and road pavements exceeding their design life, while the significant investment on national roads has principally been catch-up expenditure.

In order to improve our road infrastructure in Tasmania we must:

- **Ensure adequate funding:** The Tasmanian road network is mature and extensive and therefore has substantial maintenance baseline costs. The Tasmanian Government has recognised that parts of the road network are deficient in terms of alignment for existing and future heavy vehicles. Increasing road funding must be obtained to both eliminate the backlog of infrastructure development projects and maintenance required, and to address the growing traffic volumes.

- **Improve the planning and delivery of local roads:** Local roads are facing a series of challenges that result in considerable variability in road quality. These include the need to:

- properly allocate the revenue from heavy vehicle registrations fees to the areas experiencing heavy vehicles damage;
- develop comprehensive and comparable asset management data across Tasmania;
- develop awareness and cooperation between neighbouring councils regarding capital works programs in order to reduce inefficiencies and costs; and
- implement significant reforms to local road provision to improve efficiency, such as amalgamating the road functions of the councils and DIER.

- **Improve the efficiency and safety of key freight and passenger corridors:** High Productivity Vehicles (HPV) offer significant freight efficiency gains. Improvements are required in making key HPV routes capable of supporting current and future HPV vehicles. Unless these roads are improved, business will experience higher transport costs and governments will experience higher road maintenance costs.

- **Achieve integrated land use and transport planning outcomes:** The integration of land use and infrastructure planning requires significant improvement. Principle amongst this is the need for a single state-wide planning scheme, or in the interim, for the regional planning schemes to have high levels of commonality and consistency.

MANAGER, EDUCATION PROGRAM

To improve the standard of our transport infrastructure, there needs to be better planning, funding and delivery of road infrastructure. I note that the Department of Infrastructure Energy and Resources has implemented a much improved and far more rigorous planning process over the past 12 months but whilst the State government is to be acknowledged for recognising the criticality of transport infrastructure in the recent State budget in which the existing major roads projects remained funded, funding for ongoing road maintenance continues to be inadequate.

Adequate infrastructure is the necessary precondition for attracting investment to our State. Without sufficient investment in our transport infrastructure we cannot hope to attract and retain the necessary income and employment generating businesses that are critical to the future of this state.

I would also like to congratulate the winners of our 2011 Engineering Excellence, Highly Commended and Individual Awards. The quality of these winners is further evidence of the quality and depth of the engineering excellence within our profession in Tasmania. Finally the 2011 Australian Engineering Week will run nationally on 1-7 August. The week is designed to demonstrate what engineering is all about and show how engineering plays a major part in everyday life. Please have a look at the program of events being run across the Division this year as outlined in this newsletter. I look forward to seeing you at some of these events.

Greg Walters, FIEAust CPEng EngExec

Please send any comments and feedback to:

TasPresident@engineersaustralia.org.au



Dr David Pointing, MIEAust
dpointing@engineersaustralia.org.au
Tel: 6234 2228

The education portfolio is continuing to take shape and I am enjoying finding my feet in this new role. I have been busy in the last month meeting with stakeholders across Tasmania who are contributing to the education and development of high school and university students.

I have also had the great pleasure of attending several of the initial meetings of the Mentors and Year 10 students (and their families) involved in the Engineering Initiative program for 2011. It is inspiring and humbling to see the capabilities of these

Tasmanian engineers and their interest in and support for the development of high school students who have an interest in engineering as a career.

It is also encouraging to see the calibre of the Tasmanian students who are contemplating a future in engineering. Through the generous support of our Members, I have succeeded in placing 31 of the 32 students involved in the program this year with mentors for their industry experiences. Only one student is yet to be placed who recently relocated from Hobart to Devonport. **If you are interested in showing this student one of your projects for a few days over the next 3 months, please let me know**, as I am having some difficulty finding an appropriate mentor.

I will be attending the Excellence Awards Gala dinner in Hobart, the Young Engineers casual networking evening on the 2 August and will also be visiting Burnie for the AEW2011 networking night on the 5 August. I look forward to meeting with members at these events.

Dr David Pointing, MIEAust

STAFF UPDATE:

New Industry Liaison Manager for Tasmania

David Pointing (Phd, MIEAust), who was recently appointed as our Education Program Manager, will in late August take on the additional role as Industry Liaison Manager for Tasmania as part of Engineers Australia's National Industry Team. David takes on this role following Rowan Crosbie-Gould's resignation from Engineers Australia.

His primary focus in this role will be the management of Professional Development Programs for individuals and businesses in Tasmania as a pathway for members to acquire Chartered Status. Having a member of the Industry Team based in Tasmania will enable us to better service members around the State.

UPGRADING MEMBER



ALOK VARMA, MIEAust

Alok Varma is a professional Chemical Engineer (Graduated in 1987) and completed an MBA from the University of Tasmania in 2007. He has experience in many facets of manufacturing industries and projects.

He has been in Tassie for the last 7 years. He began work in Tasmania as a freelance Consultant and worked on 'Brewery project' (Targa Beverages Pty Ltd., Legerwood) -- preparation and submission of planning document for "Development Plan & Environmental Management Plan" for Council approval.

Alok has been working with Ecka Granules, Bell Bay, as a process consultant. He has been involved in projects such as; design and installation of heat exchanger eliminating frequent plant shutdowns, designed and installed in-process cleaning system improving ergonomics and reducing manual effort. He has been involved in many productivity improvement projects. He has done Hazardous Area Classification of all sections of the plant as per latest Australian Standards.

Alok has a passion for productivity improvement techniques and has lead many programs like TPM, 5S and facilitating problem solving teams. He had trained and instituted the Kaizen teams in Ecka Granules, Bell Bay, who worked on productivity improvement projects achieving substantial savings for the company.

Alok has exposure to various aspects of manufacturing i.e. production, projects, maintenance, and procurement in diverse

processes - metal processing, paints and resin manufacturing, Caustic Chlorine and Petrochemical industries.

As Senior Engineering Manager, Alok had achieved major reduction on % downtime and improvement in fuel and energy efficiency. He modelled electricity and fuel consumptions by modelling the section wise consumptions based of product mix and implementing many projects to reduce specific consumption in complex paint manufacturing scenario. He worked with production team optimising batch cycle times by introducing tailor made solutions.

He has led multiple project sites approximately managing capacity enhancement projects for Asian paints Ptv Ltd (Largest paint company in India) each costing approx. \$50 million.

He was given the opportunity to lead the team of design engineers to co-ordinate the design and installation of caustic chlorine project costing approx. \$80 million. He co-ordinated all process and project planning activities from basic and detail engineering phase to installation.

CONGRATULATIONS/ WELCOME

**Members joining, rejoining
or upgrading**

FELLOWS

Vere Cooper, FIEAust CPEng
Robert Lowther, FIEAust

MEMBERS

Ron Bessell, OMIEAust
Cassandra Blazely, MIEAust
Glenn Crouch, MIEAust
David Gaskell, MIEAust
Nicholas Johnston, MIEAust
Matthew Jordan, MIEAust
Shivani Jordan, MIEAust

GRADUATES

Hannah Atkins, GradIEAust
Jarad Hughes, GradIEAust
Thomas Karpiniec, GradIEAust
Angela Magill, GradIEAust
Tim Tritton, GradIEAust

STUDENTS

(StudIEAust)

Bradley Arnold
James Bayles
Daniel Bloomfield
Samuel Keenan
Til Rai
Dominic Spinks
Bernie Tan

Interested in getting involved?

...the call for nominations for vacant Division Committee, College Board and National Congress positions for 2012 will open from Monday 11 July 2011 – Friday 26 August 2011.

Look out for the call for nominations and election advertisements on the web site at www.engineersaustralia.org.au/elections.

Online voting for all vacant positions for 2012 will be between 3-28 October 2011.

This is your opportunity to not only benefit from an increased engineering network and to contribute to the governance of Engineers Australia, you will also have an opportunity to influence and to give something back to the profession.



www.engineersaustralia.org.au/elections



VALE

Raymond Stanley Rice, FIEAust CPEng (19 March 1917 – 24 June 2011)



Friends and former colleagues of Raymond Stanley Rice were saddened to learn of his death on 24 June, 2011 at the age of 94 at St John's Hospital in Hobart.

Born in northern New South Wales on 19 March 1917, Ray was educated at Coffs Harbour High School and the University of Sydney, from where he graduated in 1939 with a degree in Electrical and Mechanical Engineering.

Having always had an interest in flying, Ray joined the Citizen Air Force whilst an undergraduate, and subsequently enlisted in the Royal Australian Air Force in late 1938 serving until the end of the Second World War as an engineering officer and pilot. After training in Australia at Richmond and Narrmome RAAF establishments, he was relocated to the United Kingdom in August 1941 with the rank of Flight Lieutenant and attached to 10 Squadron of the Royal Air Force. He flew Short Sunderland Flying Boats with the Coastal Command patrolling the coast and shipping lanes during the attempted blockade of Britain by German U-boats. Ray was promoted to the rank of Squadron Leader in 1942 and Wing Commander in 1943. He returned to Australia in April 1944 and was discharged from the RAAF on 31 October 1945.

Returning to northern NSW, he worked with the Northern Rivers County Council and rose to the position of Chief Engineer. In 1953 he joined the Hydro-Electric Commission in the Investigations Division of the Electrical Engineering Branch and was subsequently promoted to lead that Division as Electrical Investigations Engineer. In this capacity he had responsibility for planning the development of the generation and transmission system, involving, among other things, work at a high level in system load forecasting, load flow analysis and the dimensioning of the major electrical and mechanical components of the Commission's system.

He assumed further responsibility in 1969 when appointed as Assistant Chief Electrical Engineer, Development and again in 1976 as Chief Electrical Engineer, the position he held until retirement in 1979. The period from 1953 to 1979 was a period of great expansion of the Commission's system, and Ray contributed to this expansion at a senior level with great professional skill and expertise, ultimately reaching the highest level of professional engineering management in the organisation.

On the national scene, Ray was a valued and active contributor at various levels to the work of the Electricity (now Energy) Supply Association of Australia and the Australian National Committee of the International Council on Large Electrical Systems (CIGRE Australia). He was a member of the Faculty of Engineering, University of Tasmania for many years and represented the State and the Commission on interstate committees including a number concerned with nuclear power generation.

A Fellow of the Institution, he was an active member, serving as Chairman of the Tasmania Division in 1966 and as a Federal Councillor.

For recreation Ray played squash and golf and enjoyed the music of the bagpipes, playing regularly with a Hobart pipe band and was a student of classical bagpipe music. At retirement an ambition was to master playing the flute.

In his working life in Tasmania Ray Rice made a major contribution to engineering in the Hydro-Electric Commission and to the profession. He will be long remembered for this, for his professionalism and as a valued and amiable colleague.

Noel Kerrison



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

Leadership in the Corporate World

The WIE Tasmanian Committee has organised a seminar by Mark Toner and Gunilla Burrowes which will explore the difficulties of working in male-dominated industries. This seminar is kindly sponsored by Aurora.

Date: Wednesday, 28 September 2011

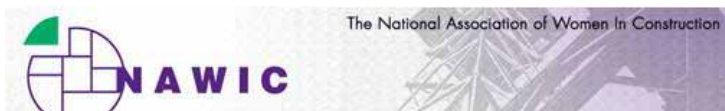
When: 6pm onwards

Venue: The Old Woolstore Theatrette, Hobart.

Cost: \$20 for non-members, \$5 for EA members & Aurora employees.

The seminar shall be followed by drinks & finger-food and an opportunity to network.

VIC/TAS 2011 NAWIC Awards for Excellence



This awards night promises to be an inspiring and exciting chance to see the amazing projects women have contributed to in 2011.

Where: NAWIC Awards Dinner Savoy Ballroom, Grand Hyatt Melbourne.

When: Friday, 7 October 2011.

Time: 6.30 pm (for 7.00 pm)

Dress Code: Lounge Suit / After 5

Cost: Members \$150, Non-Members \$170 , Students \$120, Table of 10 \$1600

More info: <http://www.nawic.com.au/>

News

Ideas for WIE Events

The WIE committee are always looking for new ways to engage with other engineers and the wider professional community.

If you have any great ideas for events or seminars that we can organise please contact us at the following email address: wietas@gmail.com

Reflection

Women in War



Did you know that Tasmania was the second Australian state after Queensland to form an AWLA (Australian Women's Land Army) group to combat a rural labour shortage during World War II.

The work was often hard and laborious and not at all like the vintage 1950s posters which glamorised their efforts.

The Australian Women's Archives Project has documented many women who contributed to the Australian war effort. One such woman was Florence McKenzie;



In 1924 Florence Wallace (as she was then known) became Australia's first certificated woman radio telegraphist and in 1924, the only woman member of the Wireless Institute of Australia.

She was the founder and director of the Electrical Association for Women, established in 1934. In 1939 she founded and directed the Women's Emergency Signalling Corps.

Rosemary Broomham wrote in the biography of Florence McKenzie in *200 Australian Women* that altogether Mrs McKenzie trained over 10,000 servicemen in morse, visual signalling and international code, and she trained 3000 women, a third of whom went into the Services. On 8 June 1950 Florence McKenzie was appointed an Officer of the Order of the British Empire for her work with the Women's Emergency Signals Corps.

In honour of the Tasmanian land army's contribution to the war effort, the Lindisfarne RSLA will erect a plaque in Anzac Park which will be unveiled on the 23 August 2011

More info: <http://www.womenaustralia.info>

Number of WIE in Australia

Good news and bad news on the National WIE numbers front.

For the first time we have more than 100 women members who are Fellows:

- 3 Honorary Fellows
- 100 Fellows
- 1 Officer Fellow

This is partly as a result of the WIE National Committee program to invite women members to become Fellows.

The bad news is that nationally the numbers of WIE graduates has started to drop despite the student numbers increasing, thus indicating that students are enrolling, but not graduating. (See graph below)

Quote of the month

"Failure is never quite so frightening as regret"

Cliff Buxton from 'The Dish'

Women in Engineering Committee Members:

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

Email: wietas@gmail.com

Member Grade	Total Number of Women Members at 30 June											
Year	1980	1990	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011
Fellow	0	4	39	46	49	60	62	64	74	73	79	104
Member	46	263	496	938	1102	1192	1280	1453	1664	1890	2097	2345
Graduate	41	346	1741	2138	1638	1768	1851	1989	1983	1983	1997	1936
Total	87	613	2276	3122	2789	3020	3193	3506	3721	3946	4173	4385
Students	14	467	1295	3904	4012	4318	4540	4754	5023	5200	5745	6256
Total incl Students	101	1080	3571	7026	6801	7338	7733	8260	8744	9146	9918	10641



*Sandra Thaow, MIEAust CPEng
Chair
Young Engineers Tasmania*

new minds.
new ideas.

YEAT had the pleasure of hosting Engineers Australia's **National Careers Manager**, Jenny O'Donovan, in Hobart on the 12th & 13th of July. We kept Jenny busy with site visits to EA's Professional Development Program partners and then a presentation at the University of Tasmania to the approximately 50 engineering students on resume writing, interview skills and preparation, followed by seven one on ones with students before launching into a public career development session on the Tuesday evening.

The Tuesday evening session was attended by approximately 20 engineers at various stages of their careers, seeking advice on career planning and development. Jenny addressed specific questions that attendees asked such as:

1. How long should you stay for when you join a company?
2. How do you leave professionally?
3. Resumes and interviews – where do you start? How are they done? How do you prepare for interviews? How do you ask referees?
4. How do you have a conversation as a graduate if you join an organisation that doesn't have a great graduate program? How do you convince an organisation to invest money in your development?

Jenny provided some excellent advice during the evening and some of her top tips for career planning were:

- Goal setting – Think about where you want to go and what the key things that you need to have to be employable in the market place. Work with colleagues, mentors, managers to develop an action plan to achieve your goals.

- Networking – Helps you know what the next job opportunities are and where they are. Most engineers find their next job through networking.
- Mentors – Involve one or more people that you would like to help guide you through your career now and in the future. Mentors don't have to be someone within your field and don't necessarily have to be technical.
- Work experiences – what opportunities have you had at your current employer? If there are no more opportunities left in the company that you're at, are there any external opportunities? Maybe consider a change of field, or location.

Jenny highly recommended the use of a skills matrix to assist in goal setting and career planning and working with mentors and managers to direct your future career path. For EA members, a skills matrix is available on the EA website under Professional Development – Career Planning & Advice – Access the Career Planning & Advice member pages.

This session was recorded and an audio file of the event can be found on the Tasmanian Division website. For any people that missed out on a one on one with Jenny can contact her for career advice on 1300 366 613 or at: careers@engineersaustralia.org.au

July also saw the heats of the **Science and Engineering Challenge**. I had the opportunity to attend one of the Hobart heats and was pleased to see a

large number of industry representatives and engineering students volunteering at the event. The Super Challenge will be held on 9 August in Devonport so I wish all the schools that made it through good luck!

For those that have never been, it is a fantastic opportunity to get involved with year 9 and 10 students in science and engineering activities and I strongly encourage you to speak to your colleagues and friends that participated and consider participating in the Challenge next year.

By the time this newsletter comes out the Tasmanian winners of the 2011 **Engineering Excellence Awards and the Individual Awards** will have been announced at Engineers Australia Engineering Excellence Awards Gala Dinner on 29 July. Congratulations to all the organisations and individuals that nominated for the Awards and to the 2011 winners of each.

YEAT are hosting a **casual networking evening** at The Metz on Tuesday, 2 August. I know everyone always groans when they hear the word "networking" but these are honestly fantastic opportunities to meet some new people that could help you into the future. Students and professional engineers are strongly encouraged to attend – you never know who you might meet! Light refreshments will be served and there will be a lucky door prize. Best of all, it is **FREE OF CHARGE** !! I hope to see many of you there.

YEAT and WIE will also be holding a casual networking event in

Launceston in late August. More information to follow once details are confirmed!

The career development evening with Jenny O'Donovan also turned into a bit of a pseudo **Chartered Professional Engineering (CPEng)** discussion and just highlighted again that there are many engineers out there slogging through it that would appreciate some advice. A CPEng assessor will be visiting the State in the not too distant future and YEAT will be coordinating a CPEng workshop/forum for CPEng participants to come and share war stories and seek advice from other CPEng-ers. Keep your eyes open for more information.

Sandra Thaow, MIEAust CPEng

UTAS RESEARCH SEMINARS

All presentations will go from
12.00noon to 1.00pm
No RSVP's required

UTAS Engineering Seminar, **Dr Jessica Andrewartha**, "Leadership – Not Just for Managers", Centenary Lecture Theatre, **Tuesday 16 August, 12pm.**

UTAS Engineering Seminar, **Dr Hui Jiao**, "Developing an innovative assessment system to provide distinctive learning experiences for engineering undergraduate students", Centenary Lecture Theatre, **Tuesday 20 September, 12pm.**

UTAS Engineering Seminar, **Sam Perkins**, "Flow phenomena around compressor blades in jet engines", Centenary Lecture Theatre, **Tuesday 27 September, 12pm.**

Meet your Young Engineers Tasmania Committee

Introducing Adela Parnell, GradIEAust



Adela Parnell (née Morton) joined the YEAT committee in December 2010. She decided to join YEAT because she wanted to get more involved with Engineers Australia and the local engineering community. She sees it as a way to make a difference and help people get the most out of their membership through events YEAT runs.

Adela graduated from the University of Tasmania in 2008 with the combined degree of Bachelor of Science and Bachelor of Engineering (with honours in Engineering). She started full time work as a Graduate with SKM in Hobart in December 2008, having spent the previous two summers working there as a student engineer. Whilst predominantly working as a Civil Engineer on water related projects, she also gains field time by moonlighting in the local Contaminated Lands group. In her free time Adela enjoys:

- reading fiction (most genres except horror)
- taking her dog for walks (or being taken for walks by her dog, depending on the dog's mood)
- knitting (has recently graduated from making scarves to making things with shape)
- cooking (if there are no time pressures)
- sewing (still a novice, as it's been a long time since lessons in high school)
- playing touch football and lawn bowls with work teams (only in summer, as she says she's too "soft" for winter sports)

Save the Date: Casual Networking Event

When: Tuesday, 2 August 2011

Time: 5.30 pm to 7.30 pm

Where: The Metz, 217 Sandy Bay Road, Sandy Bay

What: Light refreshments, good company, a chance to casually network with your peers.

Lucky door prize – remember to bring your business cards!

RSVP: by Thursday, 27 July for catering purposes

Email: creading@engineersaustralia.org.au

Phone: 6234 2228

This is an all ages/all experiences event: UTAS students are encouraged to attend and meet some professionals. Senior professionals are encouraged to attend and bring their junior staff. Junior professionals are encouraged to attend and bring their senior managers.



SCIENCE & ENGINEERING CHALLENGE



The Challenge has again proved very successful with 6 heats held during July in Hobart, Devonport & Launceston with 1,095 students from 37 teams participating. The results from each day are shown below with the winning school from each day and the two highest scoring second placed schools now to participate in the **State Super Challenge on Tuesday 9 August at the Devonport Sports Centre**. The winning team will represent Tasmania in the National Grand Challenge on 18-20 October in Wangaratta VIC .

Thank you to our major sponsors, the Minister for Education, Nick McKim and the University of Tasmania in making the Challenge possible in Tasmania. We also thank the many volunteers from Rotary, industry and Engineers Australia who assisted with setting up and supervising the activities.

Hobart

Devonport

Launceston

DAY 1		DAY 2		DAY 3		DAY 1		DAY 1		DAY 2	
<i>Taroona</i>	<i>1,782</i>	<i>Calvin</i>	<i>1,729</i>	<i>Calvin</i>	<i>1,814</i>	<i>Devonport</i>	<i>1,656</i>	<i>Launceston Christian</i>	<i>1,957</i>	<i>Riverside</i>	<i>1,790</i>
Huonville	1,704	MacKillop	1,699	Hutchins	1,681	Marist	1,629	Queechy	1,684	Exeter	1,628
St Virgils	1,670	Tasman District/ Woodbridge	1,593	Mount Carmel	1,635	Burnie	1,621	St Mary's	1,675	St Patricks	1,609
Kingston	1,553	New Town	1,565	New Town	1,540	Ulverstone	1,596	St Helen's	1,559	Kings Meadows	1,566
St Mary's	1,497	Emmanual	1,542	Collegiate	1,471	Latrobe	1,496	Scottsdale	1,554	Prospect (A)	1,515
Dominic	1,392	Clarence	1,469	Rose Bay	1,457			Brooks	1,476	Prospect (B)	1,489
								Star of the Sea	1,458		
								Cressy DHS	1,434		





Coasts & Ports 2011

PERTH WESTERN AUSTRALIA
28-30 September 2011

diverse and developing

Perth Convention Exhibition Centre

- Five concurrent technical sessions
- Poster session
- Pre-Conference Short Courses (26-27 Sept.)
- Field trips
- Trade exhibition
- Welcome reception, Conference dinner and Closing sundowner

REGISTER ONLINE: www.coastsandports2011.com.au

→ 2011 year of humanitarian engineering

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

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.

2.6 BILLION PEOPLE



LACK ACCESS TO BASIC SANITATION

1 IN 4 PEOPLE



LACK ACCESS TO ELECTRICITY

1 IN 6 PEOPLE



LACK ACCESS TO SAFE DRINKING WATER

All statistics sourced from 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.

Australian Geomechanics Society (Tas Chapter)

Tuesday, 16 August 2011

5.30 for 6.00pm start - 7.30pm finish

University of Tasmania (Sandy Bay Campus)

Engineering Building, Room 209

“GEOTECHNICAL WORK ASSOCIATED WITH THE CONSTRUCTION OF MONA”



The Museum of Old and New Art (MONA) is a landmark development consisting of almost 10,000m² of floor area over three levels and is cut into the side of a peninsular on the banks of the Derwent River in Tasmania.

The museum building includes an international standard exhibition space, gallery, theatre, administration and an art conservation area. It is integrated with the existing heritage listed Moorilla Estate house via an internal lift shaft and tunnel created by an extensive underpinning and excavation process.

At entry, an internal spiral staircase takes you 17 metres down the cliff to the main gallery. The sandstone cliff face exposed during the early works was plugged, bolted and pinned to form the 140m long northern wall. This is a visible feature within the completed museum building.

The museum cost is 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”

The presentation will focus on the geotechnical input from planning through to completion and operation in the following stages:

1. Input to planning services
2. Geotechnical site investigations
3. Shaft & tunnel design
4. Retaining walls, bulk excavation & foundations
5. Construction phase
6. Risk assessments
7. Wall inspections

SPEAKER: **MS DELIA SIDEA**
Associate Geotechnical Engineer
Coffey Mining

HERITAGE MEETING

DATE: Thursday, 29 September 2011

TIME: 7.30pm

PLACE: Royal Engineers Building
2 Davey Street, Hobart

TONY HOPE



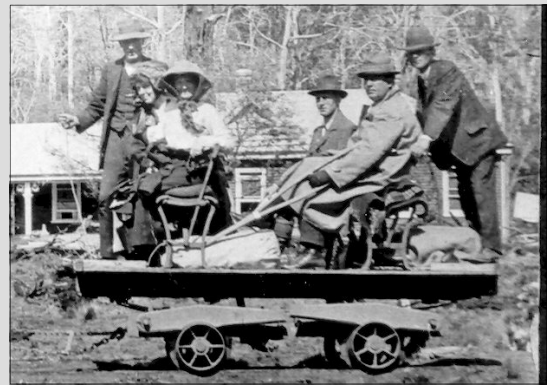
Tony Hope is an author who lives in Hobart.

On returning to his birthplace in Hobart in 2000 he began researching some of Hobart's colourful history.

Being a geologist, an obvious place to start the research was the Salamanca Quarry first worked by convicts from 1830.

Tony is a professional geologist with over forty years experience working in Australia and overseas.

Tony's presentation will appeal to persons of many ages and hopefully create a renewed interest in the fascinating history which abounds in Hobart's Sullivan's Cove, Battery Point and Salamanca Place over the past two hundred years.



“A QUARRY SPEAKS”

The illustrated talk covers a period in Hobart's history from 1803 to the present, concentrating on people and activities which made the areas of Sullivan's Cove, Battery Point and Salamanca what they are today. The quarry at Salamanca and adjacent reclaimed land, wharfs, warehouses and industries are outstanding examples of the contribution of the ingenuity and engineering skills of Hobart's pioneers.

RSVP: Catherine on 6234 2228 or
creading@engineersaustralia.org.au



For up to date information on these
and other events, please visit
www.engineersaustralia.org.au/tasevents

Day	Events	Location	Time	Details
Friday 29 th July	GALA DINNER & ANNOUNCEMENT OF ENGINEERING EXCELLENCE AWARDS & INDIVIDUAL AWARDS	SOUTH, West Point Convention Centre,	7.00 for 7.30pm	
Monday, 1 st August	North West Group AEW Opening Dinner and Presentation Engineering Week Dinner; Guest Speaker: Geoff O'Loughlin – Storm Water Pits	NORTH WEST, Lucas Hotel, 46 Gilbert Street, Latrobe	7.00pm	Presentation Only FREE
Monday 1 st to Wed 3 rd	Urban Stormwater Drainage Workshops	NORTH WEST, Lucas Hotel, Latrobe	9am – 5pm daily	
Tuesday, 2 nd August	Open Evening – Polytechnic, Hellyer Campus, Burnie Inspection of Engineering Educational Facility Pizza and Soft drink Night (6pm) – <i>Thanks to YEAT</i>	NORTH WEST, Engineering D- Block, PolyTechnic – Hellyer Campus, Burnie	4pm – 8pm	Free to Members and General Public
Tuesday, 2 nd August	Casual Networking Night Light refreshments, good company, (an all ages, all experiences event!) RSVP: creading@engineersaustralia.org.au	SOUTH, The Metz, 217 Sandy Bay Rd, Sandy Bay	5.30pm – 7.30pm	Free to members and general public
Tuesday, 2 nd August	Rosny College Careers Expo Booth by UTAS School of Engineering and EA Tasmania Division	SOUTH, Rosny College, Rosny	11.00am – 1.30pm	Free to general public, targeting students
Wednesday, 3 rd August	Public Lecture – The Light in Our Lives Guest Speaker Urbain de Plessis – Optical Engineer Supper served afterwards; RSVP: andrewboyd@wadams.com.au	NORTH WEST, UTas, Cradle Coast Campus, Burnie	5:45 for 6:00pm	Free to Members and General Public
Thursday, 4 th August	Lighting Workshop with Urbain de Plessis Discuss lighting concepts, measurement and design considerations.	NORTH WEST, PolyTechnic – Hellyer Campus, Burnie	9am – noon	Polytechnic students
Thursday, 4 th August	Taster Day in Engineering for Year 10 students Guest speaker Rod Neville (Engineering Edge) and a tour of AMC facilities	NORTH, Launceston College	9am – 5pm	Only for Year 10 students
Thursday, 4 th August	Heritage Walk and viewing of Excellence Awards posters RSVP: creading@engineersaustralia.org.au	SOUTH, Royal Engineers Building	12.30pm Departure	Members and General Public
Friday, 5 th August	Official Close and Networking - Sponsored by GHD Followed by an <i>optional Dinner at Bayviews</i> (at own expense) RSVP to both events: andrewboyd@wadams.com.au	NORTH WEST, GHD Burnie Office, Bay Renaissance Complex	5pm – 7pm	EA Members & Invited Guests
Saturday, 6 th August	Site Visit to Southern Water's Selfs Point Wastewater Treatment Plant This is a great opportunity to visit a fully functional wastewater treatment plant and see what happens. RSVP: creading@engineersaustralia.org.au	SOUTH, Selfs Point Road, Selfs Point (just after the Cat Centre)	10.45am for 11.00am Departure	Free to Members and General Public
Saturday, 6 th August	Heritage Walk and viewing of Excellence Awards posters See website for full details. RSVP: creading@engineersaustralia.org.au	SOUTH, Royal Engineers Building,	11.00am Departure	Members and General Public
Tuesday, 9 th August	Science and Engineering – Super Challenge (State Final) Refer to page 12 & 13 for further details	NORTH WEST, Devonport Sport and Recreation Centre,	Grand Finale 2pm	9.30am - 3.00pm Open to all!
Tuesday, 16 th August	Geotechnical work associated with the construction of MONA Ms Delia Sidea, from Coffey Mining will focus on the geotechnical input from planning through to completion and operation of the building of David Walsh's Museum of Old and New Art	SOUTH UTAS Sandy Bay C a m p u s , E n g i n e e r i n g Building, Room 209	5.30pm for 6.00pm start – finishing at 7.30pm	Free to Members and General Public