



ENGINEERS
AUSTRALIA
Canberra Division

engineers canberra

COME TO THE PARTY! It'll be a celebration of all that is engineering

With a 'Make it so' theme this year, **Australian Engineering Week** in Canberra will have a bit of the old and a lot of the new. With activities for the whole community, please get involved with your family and friends.

The week will commence with a lunch-time launch on Monday 2 August with a visit from a very special guest, who will have you thinking about just what is possible!

An interesting FREE public forum is planned on 'Living Sustainably in Cities.' It will cover everything from affordable housing through to seven (7) star rating design – bringing together development, design, architecture, building, innovation and engineering under the one roof.

A second FREE public forum titled 'Reach for the Stars' will focus on explaining what's out there in the night sky.

Engineers Australia Canberra Division, in conjunction with Engineers Without Borders and Women in Engineering, will be at the *Canberra Careers Market* – an event specially designed for senior students to check out potential career choices, including the diverse range of engineering careers.

The renowned *Engineering Games* will once again be held at Questacon. The *Engineering Games* are open to all age groups – including primary, secondary & tertiary students and an open section for adults. It's FREE, it's great fun, there are great prizes and it's inspirational to see the talent and ingenuity at work on the night, check out this website for all the information and details.

Canberra's Australian Engineering Week program is designed to appeal to everyone across the community –

AUSTRALIAN ENGINEERING WEEK 2010

make it so. 

ENGINEERS
AUSTRALIA

members, students and the general community are invited to join in and better understand how engineers improve and shape the quality of our community and everyday lives.

Members are welcome to pass this information and program to colleagues, friends and family and encourage them to participate. Bookings for all events are essential.

Jennifer Murray
Deputy President and Chair of
Australian Engineering Week Committee
Canberra Division

AUSTRALIAN ENGINEERING WEEK LUNCHEON LAUNCH

'Social Impact of Stereotypes & Role Models' Speaker: Mark McCrindle Monday 2 August 2010 – 12.00 for 12.30

REGISTRATION FORM. Please RSVP by Friday 23 July 2010. \$50.00 (incl.GST)

Tel: 6270 6519, Fax: 6273 2051, Email: cmays@engineersaustralia.org.au or Post to: Engineers Australia PO Box 6038 Kingston ACT 2604

Name(s)	<input type="text"/>		
Organisation	<input type="text"/>	Phone	<input type="text"/>
<input type="checkbox"/> Cheque enclosed (payable to Engineers Australia) or <input type="checkbox"/> Debit my credit card: <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> Amex <input type="checkbox"/> Diners Club			
Card number	<input type="text"/>	Expiry Date	<input type="text"/>
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2-8 Aug

PROGRAM



Mark McCrindle, speaker at the AEW launch event.

Date/time

Event/venue

AUGUST

MONDAY 2

12.00 for 12.15-2.00pm

Launch of Australian Engineering Week

'Social Impact of Stereotypes & Role Models'

National Press Club, 16 National Crt, Barton

TUESDAY 3

5.30 for 6.00-7.30pm

2010 Engineers Without Borders ACT Challenge

Auditorium, Engineering House, 11 National Crt, Barton

WEDNESDAY 4

5.30 for 6.00-8.30pm

Free Public Forum: 'Living Sustainably in Cities'

National Press Club, 16 National Crt, Barton

WEDNESDAY 4 & THURSDAY 5

Canberra Careers Expo

AIS Indoor Arena

Wednesday: 9.30am-2.30pm & 4.30pm-7.30pm

Thursday: 9.30am-2.30pm

THURSDAY 5

5.30 for 6.00-7.30pm

Free Public Forum: 'Reach for the Stars'

'Engineering challenges for the Giant Magellan Telescope'

'The Square Kilometre Array: A radio telescope for the 21st Century'

National Press Club, 16 National Crt, Barton

FRIDAY 6

5.30-8.30pm

Engineering Games Competition

Questacon, King Edward Tce, Parkes

Date to be advised

Launch of the Cotter Dam Discovery Trail (incorporating the Cotter Dam viewing platform)

Disclaimer: Engineers Australia reserves the right to change the content, speakers, format or timing of the program at this event.

RSVP to all events by emailing canberradivision@engineersaustralia.org.au

2010 Engineers Without Borders (EWB) ACT Challenge

Tuesday 3 August, 5.30 for 6.00-7.30pm Auditorium, Engineering House, 11 National Circuit, Barton

Each year, Engineers Without Borders Australia (EWB) works with one of its community development partners to set the EWB Challenge. The EWB Challenge is an Australasian design competition that challenges first year university students to develop solutions to problems faced by disadvantaged and developing communities EWB works within Australia and south-east Asia. In 2010, over 7,000 students in Australia and NZ will be working to design innovative sustainable engineering solutions in partnership with the remote Aboriginal communities living in the Kooma Nation in south-western Queensland.

First year engineering teams selected from hundreds of students involved in the ACT at the ANU and UNSW@ADFA will present their final designs for the 2010 EWB Challenge. Members of the general public, members of the engineering team and those interested in community development are welcome to see how engineers of the future can incorporate sustainable community development into all of their work.

The winning ACT team will be announced on the evening. That team will go into the running to represent the ACT/NSW Region as one of six teams in the national finals in Melbourne in November. The EWB Challenge and the ACT judging is supported by EWB's university partner, the ANU, along with UNSW@ADFA and the Young Engineers' Australia Canberra.



August 2010 of EVENTS

Speaker/notes

Mark McCrindle is a social researcher with an international reputation for tracking the emerging trends and analysing the diverse generations. He is the Director of McCrindle Research, whose clients include over 100 multinational organisations. His highly valued research and reports have developed his renown as a futurist, demographer and social commentator. \$50.00 – for bookings see registration slip on page 1.

First year engineering teams selected from hundreds of students involved in the ACT at the ANU and UNSW@ADFA will present their final designs for the 2010 EWB Challenge.

FREE
EVENT

The forum will provide three short presentations of current initiatives that are designed to showcase what is being done to promote living sustainably in cities. It will be followed by a Panel discussion that will include several 'representative stakeholders'.

FREE
EVENT

This Careers Market is the largest event of its type in Canberra and is the best opportunity available to help young people in Canberra and the region to consider their post-school options. There are over 80 local and national exhibitors, including universities, colleges, and career placement organisations providing a wide range of information sources.

For more information log on to: www.canberracareersmarket.com.au

Prof Harvey Butcher – RSAA Director & GMT Board member, Mr Arnold Swart – Australian GMT Project Manager.
Dr Carole Jackson – Business Development Manager and ASKAP Antenna IPT Leader,
CSIRO Astronomy & Space Science.

FREE
EVENT

Spectators Welcome

FREE
EVENT

Guided tours throughout the day (to be confirmed).
See below for further information.

Event without notice at any time. Engineers Australia accepts no liability for any loss or damage a person suffers because of any changes to the event.

Cotter Dam Discovery Trail Community Opening Event

Canberra's much anticipated Cotter Dam Discovery Trail is due to open to the public in August 2010. This initiative is based on feedback from the community, and will include a two metre wide walking trail of an approximate length of 1 kilometre, culminating in a circular platform 16 metre in diameter, providing visitors with extensive views of the construction site where the Cotter Dam is being enlarged from 4 to 78GL. Along the trail interpretive signage will tell visitors the story of the Cotter area and the history of water in the ACT. The viewing platform will also provide information on the construction process adopted for the Enlarged Cotter Dam and other technical information.

Stay tuned for details of the public "Opening Event" to be held on a Saturday, where ACTEW will provide guided tours throughout the day, a free sausage sizzle, a brochure to help walk you through the trail if you prefer to go at your own pace, and a commemorative certificate for all participants.

Dates will be announced closer to the time, and could potentially fall within Engineering Week so try to keep your Saturdays flexible. For any questions on the Cotter Dam Discovery Trail or ACTEW's water security projects, phone 6248 3563 or send an email to watersecurity@actew.com.au.

PUBLIC FORUM

Living Sustainably in Cities

This Public Forum will discuss issues to help promote understanding of what it takes to live sustainably in cities.

The forum will provide three short presentations of current initiatives that are designed to showcase what is being done to promote living sustainably in cities. Speakers include Jeff Bell (Land Development Agency) and Matt James (Molonglo Group).

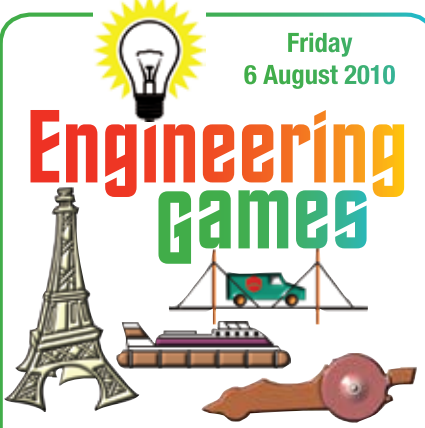
It will be followed by a Panel discussion that will include several 'representative stakeholders', including Gesa Rusa (Sustainability Manager, Property Council for Australia), Craig and Dee Gowling, with their first-hand experience with building sustainably, and Douglas Lang (Education

Manager, Engineering Sciences, Canberra Institute of Technology).

The panel will take questions from the audience along the proposed key themes of:

- What actions can we take to promote living sustainably in cities?
- What is the most important decision that we can make to develop a sustainable city?
- What will it mean if we do not achieve sustainability?

Wednesday 4 August
5.30pm for 6.00–8.30pm
National Press Club
16 National Circuit, Barton




Friday
6 August 2010

Engineering Games


At **Questacon**
King Edward Terrace, Parkes

5.30–8.30pm

Organised by
Engineers Australia,
Canberra Division



With support from



Australian Government
Department of Innovation,
Industry, Science and Research

The National Science and Technology Centre



PUBLIC FORUM: REACH FOR THE STARS

Engineering Challenges for the Giant Magellan Telescope

Presenters: Prof Harvey Butcher and Mr Arnold Swart

We have entered an era of big telescopes to take big steps into the world of Astronomy but in the same time creating immense engineering challenges that must first be overcome. The Giant Magellan Telescope (GMT) project entails the design and development of a next generation Extremely Large Telescope, something that does not exist in the world. The GMT will be built in Chile and operated by a consortium of institutions from the United States, South Korea, and Australia. Larger and more powerful than any previous optical telescope, it will be up to 100 times more sensitive than current ground-based telescopes, and will produce images 10 times sharper than those from the Hubble Space Telescope.

This talk will give a brief description of the GMT system, the GMT project and the Australian Government interest and investment in this project. It will also intend to explain why we are building these big telescopes, the key technologies that need to be developed for such a telescope and the engineering challenges involved with these technologies. Although the talk will describe the main science drivers, the emphasis will be on engineering and some interesting points of these big optical telescopes.

The Square Kilometre Array – a radio telescope for the 21st Century

Presenter: Dr Carole Jackson

The Square Kilometre Array (SKA) will be a revolutionary radio telescope made up of thousands of antennas, spread across a continent and working together to probe the distant Universe. Astronomers and engineers from more than 20 countries are now designing the SKA with construction planned for 2014–2022. The SKA will cost around \$2.5 billion, and will be built in either Australia & NZ or in Southern Africa, with the final site decision made during 2012. The Murchison Radio Observatory in remote Western Australia is the proposed Australia-NZ core SKA site; currently CSIRO and other partners are building a major new radio telescope, the 'Australian SKA Pathfinder' (ASKAP), at this amazingly radio-quiet site.

Thursday 5 August
5.30pm for 6.00–7.30pm
National Press Club, 16 National Circuit, Barton