



**ENGINEERS MAKE IT SO**



**AUSTRALIAN ENGINEERING WEEK 5-11 AUGUST 2013**

## SUNDAY 4

### University of Wollongong Lymph Sleeve for Cancer Patients

**10:30am** Julia Fellows will give a brief overview of Lymphedema and its incidence and current treatments. She will also discuss UOW's lymph sleeve concepts and her experiences with the project and how these experiences have complemented her university students.

**11:00am**

**Speaker:** Julia Fellows

**Location:** Diamond Room, SeaCliff

**Cost:** \$30pp

## MONDAY 5

### SITE TOUR: ANSTO Discovery Tour

**2:00pm** A tour of Australian Nuclear Science and Technology Organisation offers a compelling insight into the role of nuclear science, technology and engineer plays in the development of life saving-medicine, climate change research, materials engineering and national food security.

**Location:** Lucas Heights

**Cost:** FREE

### LAUNCH EVENT: Harricks Address

**5:30 for 6:00pm** Dr. Marlene Kanga will lead a discussion on how an innovative culture can be developed and the importance of engineering and new technology in commercialising innovations for the benefit of Australia and its economy. Winners of the 2013 Art of Engineering Competition will also be announced on the evening by Engineers Media.

**Speaker:** Dr Marlene Kanga, National President Engineers Australia

**Location:** Museum of Sydney

**Cost:** FREE

## TUESDAY 6

### Women in Engineering & IT Hands on Day

**8:30am** As part of Australian Engineering Week, the UTS Women in Engineering & IT Program is hosting a 'Hands on Day' for High School Girls in years 8-12 on Tuesday 6 August at their City Campus, 10min from Central Station. Students will learn how to solder, code using HTML and Javascript, learn about 'Cars of the Future' and apply design skills to build structures in developing countries.

**Location:** University of Technology Sydney

### Aurecon Bridge Building Competition

**10:00am** Can your school build the strongest bridge out of balsa wood, cardboard, string and glue? Would your students benefit from learning about engineering in a fun and practical way? Aurecon, an engineering, management and specialist technical services consultancy, is running a model bridge competition for year 8 and 9 school students throughout NSW and ACT. Cash prizes for winning schools and students. Numbers are strictly limited.

**Location:** Art Gallery of NSW

### Migrant Engineers Workshop

**12:00pm for 12:30pm** A presentation will be conducted for overseas qualified engineers seeking employment. The objective is to provide skilled migrant engineers guidance and motivation to improve their chances of securing employment in the Australian engineering industry.

**Location:** Blacktown TAFE

**Cost:** FREE

### SITE TOUR: Sydney Harbour Pylon

**2:00pm** Experience the history of the Sydney Harbour Bridge and view from Sydney's original lookout with this guided tour of the Pylon Museum.

**Location:** Sydney Harbour

**Cost:** \$12pp

### The Next Step – Careers Talk Sponsored by Hyder Consulting

**5:30pm for 6:00pm** Want to make it big in the world of engineering? We have brought together some of the best in Engineering and HR to help answer some of your nagging questions about resume building, internships and interview skills.

**Location:** Engineers Australia, Chatswood

**Cost:** FREE

### Engineering in the Era of the Personal Genome Sequence

**6:00pm** What might we see in the next period with the continuing convergence of physics, chemistry and biology and a Moore's Law not yet spent? Dr Bob Frater AO, and Vice President for Innovation with ResMed will present a lecture on the remarkable developments in technology in all fields over the past half century and potential for the future.

**Location:** Macquarie University

**Cost:** FREE

### Design & Construction of a Diaphragm Wall in Brisbane

**6:00pm for 6:30pm** David Tevanian will give an overview on the background into the design and construction of the diaphragm wall at 111 Eagle Street in Brisbane.

**Speaker:** David Tevanian

**Location:** University of Wollongong

**Cost:** FREE

## WEDNESDAY 7

### Great Engineering Challenge

**8:30am** High School Students compete in a full day of hands of Engineering Challenges.

**9:00am**

**Location:** Roundhouse, UNSW

### Discover Engineering Day

**9:00am** This is a unique opportunity for students in Years 9, 10 or 11, who are interested Engineering. The day includes hands on activities and guest speakers from within the Engineering profession.

**Location:** Wagga Wagga High School

**Cost:** FREE

### SITE TOUR: RAAF Base Richmond

**10:00am** A formal presentation of RAAF Richmond engineering and maintenance activities will be conducted in the morning followed by a tour of the facilities in the afternoon. Fee includes: morning tea, lunch and transport around the base.

**Location:** Richmond

**Cost:** \$15pp

### SITE TOUR: Sustainable Buildings Research Centre

**4:15pm for 4:30pm** The Sustainable Buildings Research Centre (SBRC) will be a multi-disciplinary facility that brings together a wide range of researchers to holistically address the challenges of making our buildings sustainable and effective place in which to live and work.

**Location:** Fairy Meadow

**Cost:** FREE

### FORUM: All You Wanted To Know About Energy But Never Dared to Ask

**6:00pm for 6:30pm** The Forum will feature an expert panel who will take questions from the audience and debate the topic "All You Wanted To Know About Energy But Never Dared to Ask" in Q&A style. Panel members will include representatives from CSIRO, ANSTO, Pacific Power and Sinclair Knight Merz.

**Location:** Museum of Sydney

**Cost:** FREE

## THURSDAY 8

### Engineers Breakfast Sponsored by Engineering Education Australia

**7:00am** Green Materials and Recycling End-of-Life Polymers in Steelmaking – An example of successful translation of research into industry. Scientia Professor Sahajwalla is an international award-winning scientist and engineer, whose achievements include inventing a process of recycling plastics and rubber tyres in steelmaking. Veena was also The Overall winner of 2012 The Australian Innovation Challenge Award.

**Speaker:** Scientia Professor Veena Sahajwalla

**Location:** Museum of Contemporary Art

**Cost:** \$45pp

### Regional Great Engineering Challenge

**9:00am** High School students will compete in a full day of hand on engineering challenges.

**Location:** Dubbo Sport World

### SITE TOUR: CSIRO Astronomy and Space Science

**10:00am** CSIRO operates radio telescopes near Parkes and Narrabri in NSW and is building an advanced telescope array in WA. On this tour you can see the design and construction of telescope systems and components – microwave and millimetre-wave technology, cryogenic techniques and digital systems.

**Location:** Marsfield, Sydney

**Cost:** FREE

### CPEng Workshop

**1:00pm** Do you want to upgrade your professional status by becoming a Chartered Professional Engineer (CPEng)? Sydney Division of IEAust can help. We will be conducting a CPEng Workshop, so that in 3 hours you can accomplish the first draft stage of your application.

**Location:** UWS, Kingswood

**Cost:** FREE

### SITE TOUR: St Mary's Recycling Plant

**1:00pm** See the new processes that have been put in place to treat final wastewater from three different plants replacing 50 million litres a day being released from Warragamba Dam.

**Location:** St Mary's

**Cost:** FREE

### SITE TOUR: Pre building the new Olympic Drive Bridge

**1:00pm** In order to renew the Olympic Drive bridges with the minimum possible impact to the public RailCorp is in the process of precasting the bridge elements locally. This site visit will show the innovations that have been developed to allow pre construction of this large bridge structure in a very constrained space.

**Location:** Lidcombe

**Cost:** FREE

### UNSW Women in Engineering Awards, Presented by the School of Chemical Engineering and Sponsored by Aurecon

**6:00pm** The UNSW Women in Engineering Awards is a new initiative designed to recognise and profile successful female engineers within the industry and encourage more female engineers in Australia.

**Speaker:** Professor Mary O'Kane – The NSW Chief Scientist & Engineer

**Location:** The Mint

**Cost:** FREE

## FRIDAY 9

### SITE TOUR: CSIRO Australian Astronomical Observatory

**10:00am** The Australian Astronomical Observatory operates the Anglo-Australian Telescope and UK Schmidt Telescope in NSW, and designs and builds instruments for telescopes around the world, specialising in fibre-optic technologies.

**Location:** North Ryde, Sydney

**Cost:** FREE

### YEAS/EWB Trivia Night

**6:00pm for 7:00pm** Do you want to show off your deep knowledge to your friends and be the brainiest team on the night? Young Engineers Australia Sydney (YEAS) in association with Engineers Without Borders (EWB) presents you the highly popular annual EWB Trivia Night, with fancy dress theme of "Geek Chic"! Prizes will be awarded; all profits raised go to EWB.

**Location:** Paddington RSL

**Cost:** \$15pp or \$120 table of 10

## SATURDAY 10

### Engineering Art Talk and Walk

**11:00am** Eamonn Madden from Partridge will give a short lecture on Engineering Art giving a historical perspective, review on various projects Partridge have been involved with including the award winning sculpture 'Halo' which won the Engineers Australia Sydney Division President's Award. The self-guided walk will include 4 current permanent art works around Sydney city which Partridge engineered.

**Speaker:** Eamonn Madden

**Location:** UTS, Broadway

**Cost:** FREE

### Women in Engineering Winter Gala Dinner

**6:00pm for 6:30pm** This black tie affair is a celebration of women in engineering and the closing event for the 2013 Engineers Australia Engineering Week festivities. A perfect opportunity to enjoy an elegant night out at the newly renovated Park Hyatt Hotel and a 3 course meal overlooking the night lights of Sydney Harbour.

**Location:** The Gallery, Park Hyatt Hotel

**Cost:** EA Member: \$110, Non EA Member: \$130, Table of 10: \$1200

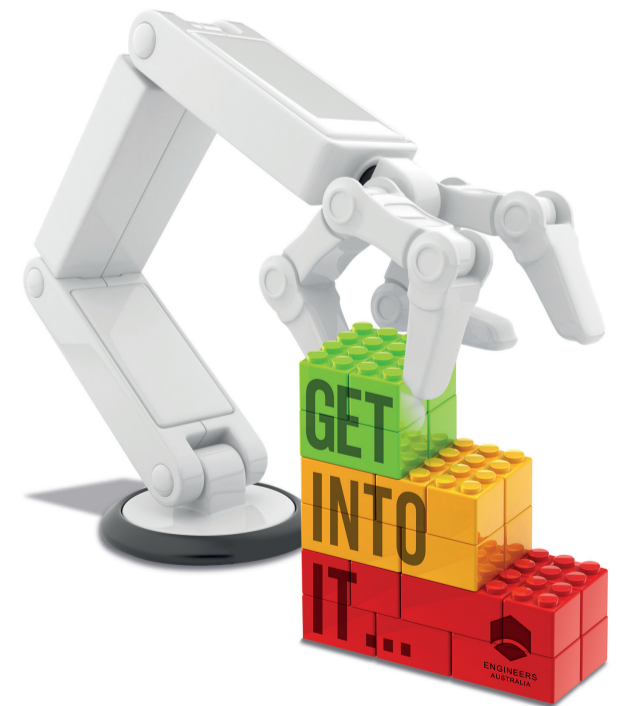
## SUNDAY 11

### Macquarie University Robotics Fun Day

**2:00pm** As part of Australian Engineering Week, Macquarie University is hosting an afternoon of robotics fun and learning including presentations, displays, and the opportunity to drive and program robots built by students competing at an international level. Robot enthusiasts of all ages are welcome to join in the fun. If you are a school student, bring along a lego robot you have built and show it off at our robot display table.

**Location:** Macquarie University

**Cost:** FREE



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