

WESTERN AUSTRALIAN MUSEUM PRESENTS

# immerse

EXPLORING THE DEEP

## Public Programs

### Floortalk Program

Presented in association with the Society for Underwater Technology

#### Remote operations

Chris Saunders, Engineering Manager – Wood Group Integrity Management, SUT – Perth Committee

11.00am, Saturday 15 October

Imagine designing something to last for 50 years to operate within a high pressure and corrosive environment deep underwater. How do you keep subsea equipment running safely?

#### Immerse: dive deeper ...

Corioli Souter, Exhibition Curator – Immerse, Curator – Maritime Archaeology, WA Museum

11.00am, Sunday 16 October, Thursday 10 November and Friday 16 December

Want to know more about these fascinating objects? From the one atmosphere 'Jim' suit to the clever technology that allows us to map the seabed, explore the key individual object stories of the Immerse exhibition.

### Our world of energy

Dr Jim Leven, Secretary – Subsea Energy Australia, SUT – Perth Committee

11.00am, Sunday 23 October

Today's world of readily available and cheap energy is a relatively recent phenomenon. What are the future prospects for these energy sources, and how does all this relate to global warming? Subsea technology may provide some interesting answers.

### Designing Immerse

Mike Dixon, Exhibition Designer – Immerse, Dixon Design + Development

11.00am, Sunday 13 November and Sunday 11 December

How does a collection of fascinating but disparate objects get brought together to form a cohesive exhibition experience? Hear the inside story on what's been involved in designing and putting together Immerse!

### What does an underwater engineer do?

Ian Wilson, Subsea Engineer, Churchill Fellow, SUT – Perth Committee

11.00am, Saturday 10 December

Where does the gas for your home come from? A long way from Perth, way below the seabed... Underwater engineers hold the key to unlocking this valuable energy resource.

**Exhibition showing**  
**3 September 2011 – 2 March 2012**

Western Australian Museum – Maritime  
Victoria Quay, Fremantle



GE Oil & Gas



WESTERN AUSTRALIAN  
MUSEUM

[museum.wa.gov.au](http://museum.wa.gov.au)

## Lecture Program

Presented in association with the Society for Underwater Technology

### Adventures in subsea technology: new horizons, new challenges

Terry Griffiths, Principal Pipeline Engineer at JP Kenny; Society for Underwater Technology – Perth Chairman

6.00pm, Friday 23 September  
NWS Shipping Theatre

Western Australia has gained much from underwater technology – from pearl diving off Broome to the new horizons for offshore mega-gas projects. Join Terry Griffiths for a fascinating insight into the recent challenges which have been overcome in subsea exploration. These developments are providing the tools and knowledge needed for tackling the complex mega-gas projects which are currently a focus of resource development off the WA coast. This includes the potential opportunities for bright minds to pursue rewarding and challenging career pathways in subsea technology.

Along the way we will explore the extraordinary creatures which live deep in the ocean and look at the future potential for marine science and subsea engineering to power us towards a more sustainable future.

#### COST

\$12 per person. Includes refreshments after the lecture

**Bookings Essential** on 9431 8455.  
Please RSVP by 5.00pm, Wednesday 21 September, 2011.

### Woodside-operated Angel Gas and Condensate Project

Harry Mackay, Principal Subsea Engineer, Woodside Energy Ltd., Society for Underwater Technology – Perth Committee

6.00pm, Wednesday 19 October  
NWS Shipping Theatre

The A\$1.6 billion Angel project represents a first for the Woodside-operated North West Shelf (NWS) Project. Positioned 120km off shore of Karratha in about 80m of water, the gas processing facility was designed to be not normally manned (NNM). It is powered and remotely controlled via a subsea cable from the North Rankin A platform situated 50km away.

The challenge was to deliver not only the NWS Project's first but Australia's largest NNM platform, which was achieved safely, on time and under budget. Angel is believed to be the most complex, highest production, glycol dehydration NNM facility in the world, with state of the art environmental management.

Join Harry Mackay as he discusses the subsea design and engineering challenges that were overcome to deliver this world class asset, and why in 2009 it won the Engineers Australia – Engineering Excellence Award (WA Division).

#### COST

\$12 per person. Includes refreshments after the lecture

**Bookings Essential** on 9431 8455.  
Please RSVP by 6.00pm, Monday 17 October, 2011.

### There are old divers and bold divers, but there are no old bold divers...

Ray Farrier, Managing Director, Unitech Subsea Australia; Society for Underwater Technology – Perth Committee

6.00pm, Friday 18 November  
NWS Shipping Theatre

Saturation divers live, eat and breathe (sometimes weeks at a time) under pressure in a pressurized steel tube they call home. Going to work in a pressurized diving bell and working hundreds of feet below some of the roughest oceans in the world, in a world inhabited by creatures that live in the dark...not a job for the faint hearted!

Ray was a former member of the elite British Commando Brigade based in Plymouth-UK. In 1974 and looking for even bigger adventures Ray ventured offshore into the (then fledgling) North Sea oil & gas industry as a commercial diver. In 2004 Ray hung up his diving boots but over his 30 years of diving had spent collectively over 1500 days encapsulated in a saturation diving chamber living in a twilight world, a world where survival was completely dependant on others. Come and hear the perils and pit falls of what it takes to be a commercial deep sea diver.

#### COST

\$12 per person. Includes refreshments after the lecture

**Bookings Essential** on 9431 8455.  
Please RSVP by 5.00pm, Wednesday 16 November, 2011.