

# ENGINEERING the future™

news bulletin

ISSUE 22 AUGUST 2000



THE **Warren** CENTRE  
FOR ADVANCED ENGINEERING

## **BITS, BYTES & BOATS: a high tech meeting on the harbour**

The Warren Centre will present an Olympic event on 22 September 2000. Bits Bytes and Boats is an exciting opportunity to hear about the future of Australia's ICT industries, to explore how to create success in a new industry, and to experience the most advanced maritime technology first hand. It will also be a good opportunity to network with business and government leaders.

At a breakfast on board the high tech, high speed Incat ferry that will be moored at Darling Harbour, Senator Richard Alston, Federal Minister for Information, Communication and the Arts, will outline his perception of how Australian companies can take advantage of global ICT opportunities. His Ministry encourages and supports the growth of these hi tech industries to ensure Australia is at the leading edge, poised to take advantage of all future opportunities. The Senator has agreed to 20 minutes of open questioning.

Mr Robert Clifford, MD of Incat Australia, will share the secrets of Incat's success and explain the role ICT has played in positioning his ferry and tour boats as world leaders. A major feature of the breakfast venue, the 98-metre Incat high-speed wavepiercing catamaran, is the Vessel Information Systems Interactive Telemetry (VISIT). This ICT diagnostic service tool allows Incat's main computer in Hobart to 'visit' a ship's computer in the vessel's region of operation permitting Hobart technicians to communicate with the operator and update operational programs, saving ship operators considerable time and money.

Incat has revolutionised ferry transport and has built almost half the high speed car



passenger ferry fleet currently in operation around the world, providing services in North and South America, Asia, New Zealand, Australia, the Mediterranean and Europe.

Some lucky participants at the breakfast will be ferried from Milsons Point in the Solar Sailor, a catamaran ferry powered by the sun and the wind. The ferry has metallic wings fitted with solar panels that rotate to capture wind power. This technology is expected to revolutionise water transport around the world. Designed and built in Australia, the Solar Sailor's performance compares favourably with diesel-fuelled ferries. Plus it is pollution free.

The breakfast is on 22 September at 7.00 for 7.30am. For information and to register, please contact **Danika Webb** on (02) 4422 2203, email [twc@welldone.com.au](mailto:twc@welldone.com.au) or go to [www.aussievents.com.au/twc](http://www.aussievents.com.au/twc).

## **FLEDGLING BIOMATERIALS INDUSTRY RECEIVES SUPPORT**

Biomaterials researchers need to establish networks and the fledgling industry needs to attract entrepreneurs and financial support. These issues emerged at a meeting of biomaterials industry experts in June 2000 at the Warren Centre. Biomaterials, materials that have to interface with living tissue, are a relatively new area of research and development in Australia.

Participants also believed that there is a need for entrepreneurial and finance people to create wealth from Australian biomaterials skills and technologies.

It was generally agreed that there is scope for a Warren Centre project to assist the industry in Australia. It was suggested that a focused definition of biomaterials would improve outcomes in areas where Australia has particular expertise and where market applications exist.

A small group, led by Project Champion Derrick Beech, was established to plan a round table meeting later in the year.

Contact **Derrick Beech** (02) 6299 7570 or [bepen@interact.net.au](mailto:bepen@interact.net.au)

## **DIARY DATES**

**22 September 2000:**

**7.00am, Bits Bytes and Boats, Senator Alston and Dr Robert Clifford AO (MD of Incat) on the Incat at Darling Harbour with transport provided by Solar Sailor.**  
**Lead participant:**  
**The Department of Communications, IT and the Arts.**

**16 October 2000:**

**Innovation Summit Implementation Group Report: NSW briefing. Australian Technology Park.**

**November 2000:**

**2nd Annual Information Society Lecture.**

**April 2000:**

**6th Annual Innovation Lecture.**

**For information on these events, contact Fiona Hearne. Phone (02) 9351 7205 email [fionah@eng.usyd.edu.au](mailto:fionah@eng.usyd.edu.au)**

**This Warren Centre bulletin is proudly sponsored by SGI Australia.**

**At the forefront of high performance computing, SGI is delivering computer systems with phenomenal power to compute the toughest problems. These two factors are helping organisations fundamentally change the way business is done in manufacturing, education /science, energy, government, entertainment and communications.**

**[www.sgi.com.au](http://www.sgi.com.au)**

# INNOVATION

## STILL IN THE COWBOY ERA

Although innovation is critical for business and national development, there is a lack of agreement about what innovation is and how to support it.

This was the view of nearly 100 business, finance and technology leaders as reported in a survey of the participants at the NSW National Innovation Summit Briefing, held in March 2000 with support from the Department of Industry Science and Resources and Griffith Hack. The Briefing, reported in our previous newsletter, was held to discuss the outcomes of the National Innovation Summit held in Melbourne in February 2000.

The survey report makes compelling reading as it adds a personal overlay to the interests and views in the numerous submissions and comments presented to the National Innovation Summit.

"This forum is an important, early step in getting innovation onto centre stage in Australia," says Howard Gwynne who conducted and analysed the survey.

"But it feels as if innovation is still in the cowboy era," he says.

The major themes emerging from the briefing support this view. Current socioeconomic systems do not support innovation and, generally, work against innovation and innovators because traditional drivers of the economic system, government and large organisations, do not appear interested in innovation. Seed capital and start-up funds for innovation projects are hard to find and overall,

the dominant image is that innovators battle against the odds on several fronts.

Michael Johnson, chairman of The Warren Centre's Enterprise Innovation 2000 Project Committee that organised the survey, stresses the need to focus on building networks and alliances and calls for a realistic picture of how the innovation process works.

Examples of progress also emerged from the survey. A strong theme was that although fragmented, territorial and competitive, the forces of change are supporting innovation through incubators, venture capital funds, innovation courses, mentor programs and angels.

Participants also called for more incentives, such as market places for ideas and problems, innovation networks, and opportunities to collaborate across traditional business and international barriers.

How can the innovation dilemma be solved? Participants offered short term actions such as changes to tax arrangements, establishment of an innovation centre and government leadership as well as longer term strategies. These include changes to government regulatory infrastructure, support for innovation in cultural values and behaviour, and development of an information and networking infrastructure.

The full Survey Report is available in the report section on The Warren Centre's web site at [www.warren.usyd.edu.au/projects/Ei2000/EI2000Frames.html](http://www.warren.usyd.edu.au/projects/Ei2000/EI2000Frames.html).

## AUSTRALIAN MICROELECTRONICS NETWORK GETS MASSIVE SUPPORT

The proposal to establish an Australian Microelectronics Network (AMN), presented by the Warren Centre to Federal Government, has gained in principle support and The Centre is working with the Department of Industry, Science and Resources to develop detailed plans to implement and operate the network. Most importantly, pledges of support have been received from a wide range of industry, universities and state governments around Australia, totalling over \$11 million.

Professor Trevor Cole, Chairman of the Steering Committee for the project, said the plan is for a national network that is able to respond quickly and efficiently to the particular needs of a region or company with appropriate programs and support.

"To have got this far is marvellous and is due to the drive of project champion Matthew Henderson and all those who have contributed to the AMN through its feasibility study, its committees, and most importantly through pledges of cash and in-kind support," Professor Cole said.

The goal is to make the AMN a national network that complements the efforts of individual regions and States by supporting their local microelectronics industries.

A draft constitution is being developed and, following contract finalisation, sign up of members, establishment of a Board and approval of the constitution, the AMN will be able to develop programs to support the microelectronics industry in Australia.

## NEWS FLASH

### National Innovation Summit Report: NSW briefing and response

The Warren Centre is organising a briefing for business, the investment community, professions and government to respond to the Innovation Summit Implementation Group's report, due out at the end of August 2000. We are hoping to stage the event on the morning of Monday 16 October. Register your interest now by faxing back this page and we will send you details as they emerge:

Please send me details about the Innovation Summit Report Briefing.

My name is

.....

My email address is

.....

The Warren Centre for Advanced Engineering  
Engineering Building, J13  
Sydney University NSW 2006

Telephone (02) 9351 3752 Facsimile: (02) 9351 2012

Email: [warren@eng.usyd.edu.au](mailto:warren@eng.usyd.edu.au)

Internet home page: [www.warren.usyd.edu.au](http://www.warren.usyd.edu.au)

Edited by: Kay Fay

Designed and produced by: Kannegieter & Jackson

Print Post No. PP224696/00070