

## STOP PRESS:



**YOU ARE INVITED to the  
STC/ANBF CHRISTMAS PARTY!**  
see page 3

\*\*\*\*\*

**YOUR NEXT MOVE  
HAS NEVER BEEN SO EASY....**

**Caribbean Park - the Innovation Smart Park on EastLink offers the total solution - from a workstation to a custom designed 10,000 square metre new facility. Everything is looked after for you – planning, approvals, building, fit-out, finishes, carparking, landscaping.**

**Please see page 5 for further details.**



## IN THIS ISSUE:

- STC Christmas Party
- SPOT-light
- STC News Update
- COMS2007 Melbourne

## CEO UPDATE:

### COMS2007 Melbourne – an OUTSTANDING success!

This year's 12th International COMS Conference was the most successful COMS yet. Several special events were organised as a part of the conference activities such as an open "Education Day" for teachers, students and the general public, at the BMW Edge Theatre at Federation Square as well as speakers, Kees Eijkel (Netherlands), Lou Hermans (Belgium) and Bob Mehalso (USA) at a breakfast seminar hosted by Engineers Australia.

The Governor of Victoria, Professor David de Kretser and Mrs Jan de Kretser, welcomed us to an evening reception at Government House. The Governor highlighted education and workforce development as key issues in these emerging new technologies. The Victorian Minister for Innovation, Mr Gavin Jennings, emphasised the role of micro and nanotechnology in "Greentech".

Mr Evan Thornley, the Victorian Parliamentary Secretary, and founder of the NASDAQ listed "LookSmart", opened the conference and gave our first plenary stressing the need for nanotechnology to progress in balance with ethical and societal concerns.

Prof Hiroshi Yokoyama from the AIST in Japan, described how Japan had lost ground in manufacturing and how they were moving to win it back.

Dr Richard Jefferson, challenged us over locking up IP in preference to making platform technology available as "open source" to accelerate innovation. Prof Mandyam Srinivasan showed us how the humble honey bee manoeuvres across the countryside using the most elegant simple navigation system. We have so much to learn from Mother Nature.

Delegates visited the Australian Stem Cell Centre, the new Australian Synchrotron and MiniFAB, followed by a casual dinner at the Great Provider Restaurant at the Small Technologies Cluster.

We explored individual countries in our Global Overview and investigated Business Methods with Dr Janusz Brysek showing us how to make our next \$Billion in the stream "Pure Play Foundries: Hot Commodity?". Dr Donald Bruce delved into societal impacts and risks and we couldn't have a COMS without a synchrotron based HARMST stream.

The Minister for Skills and Workforce Participation, Ms Jacinta Allen, launched the Nanotechnology Victoria (NanoVIC) "Nanobits" education kit.

On behalf of COMS2007 Melbourne I wish to express our gratitude to the Victorian Government in particular Jane Niall for her support and vision in attracting and hosting COMS2007 in Melbourne.

**Clive Davenport**

Please see page 4 – COMS 2007 Pictures



[Clive@stc-melbourne.com](mailto:Clive@stc-melbourne.com)

## SPOTLIGHT:

### DAINTREE NETWORKS

Based in a quiet corner of the Small Technologies Cluster building, Daintree Networks is taking on the world—and winning. Daintree's products are exported globally and are helping to make the world a smarter, greener and more efficient place. From humble beginnings in 2003, Daintree now has offices in both Scoresby and San Jose, California, and employs over a dozen people.

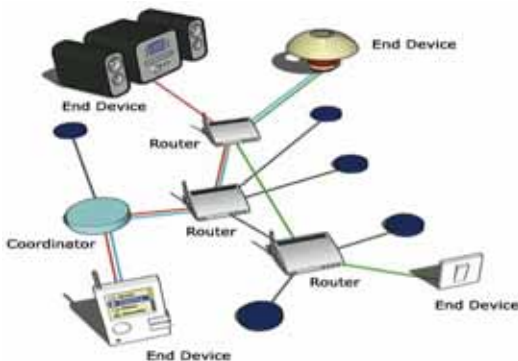
It was recently named a "Top 50 Cool Company" in the 2007 Anthill Cool Company awards.



Daintree's flagship product, the Sensor Network Analyzer, is one of the industry's leading software tools for developing, testing, deploying, and managing devices and networks based on ZigBee and IEEE 802.15.4 standards and protocols. These are wireless networks that consist of many devices working together and supporting sensing and control applications. This interconnected world of "things" is the next tier of the Internet, providing connectivity not only between people and all kinds of objects, but also between objects and other things.

Key applications for this "Internet of Things" include

- Energy management and efficiency, where suppliers and customers can both gain greater control over energy use and better manage demand and supply.
- Home automation, to manage things like lighting, heating, cooling and security, and to improve not only convenience and flexibility, but also conservation and safety.
- Commercial building automation, to integrate and centralise management of services such as lighting, heating, cooling, and security, which allows for cost savings through optimised management and more equitable billing.
- Industrial automation, to not only extend and improve existing manufacturing and process control systems, but also to cost-effectively and continuously monitor critical equipment and quickly identify any performance problems.



You can find out more about Daintree at [www.daintree.net](http://www.daintree.net), and about ZigBee at [www.zigbee.org](http://www.zigbee.org)

## SPOTLIGHT:

### MEMS-ID

Mems-ID is a dynamic, young company developing a new Radio Frequency Identification (RFID) technology, based on a MEMS (**Micro-Electro-Mechanical Systems**) platform, offering wide temperature capability and sterilisation survivability.

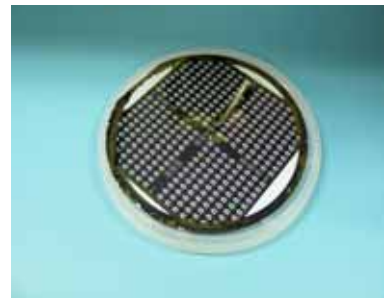
The company has been developing its technology platform since 2003 and has demonstrated the following:

- Proof of concept MEMS device and prototype interrogator
- Beta chip and interrogator system
- Modified surgical instruments and tray, demonstrating orthopaedic loaner kit application

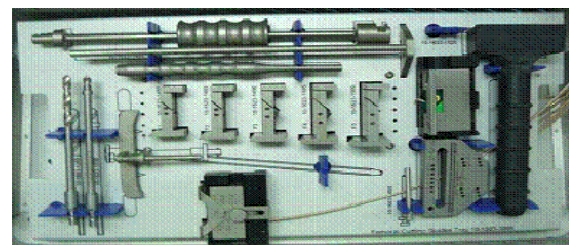
Mems-ID is now engaged in the completion of the system development, including:

- Next generation MEMS chip, working towards commercial product in 2008
- 3<sup>rd</sup> Generation Interrogator system
- Integration within the orthopaedic industry logistics process
- Demonstration to potential customers and technical partners

"We are now at a very exciting phase, having established the core benefits of the technology" remarked Fraser Clayton, Mems-ID's CEO. "While very focused on getting to commercial application in the orthopaedics industry, we are receiving an increasingly diverse range of enquiries for the technology, both from the healthcare industry and wider manufacturing sector". "The challenge will be to select and manage these opportunities as we enter commercial production of the chip and interrogators".



4" beta chip wafer



Orthopaedic Instrument Tray equipped with the Mems-ID™ tracking solution

For more information please visit [www.mems-id.com](http://www.mems-id.com)

## STC NEWS:

### STC ACCESS PROGRAM ROUND 3

Round 3 of the program supported development of:

1. Microfluidics for DNA amplification.
2. Interdigitated Electrode Structures for Dye-Sensitized Solar Cells.
3. Wind speed and direction sensor on a polymer substrate.
4. DNA-check: Microfluidic biosensor platform for

### STC / ANBF CHRISTMAS PARTY!!

“The End of Year Nano Network Event”



The STC & ANBF will again be hosting their end of year Christmas Party. Please join us for drinks and nibbles from the kitchen of The Great Provider.

Erol Harvey (MiniFAB), Tina Rankovic (ANBF) and Clive Davenport (STC) will look back at 2007 and speculate on Nano opportunities in 2008. We will also be featuring the “Nano Showcase” – a display of Nanotechnology, products and services.

**Date:** Wednesday 12<sup>th</sup> December 2007

**Venue:** The Great Provider – Caribbean Drive, Scoresby VIC 3168

**Time:** 4:30pm

Please RSVP [claudia@stc-melbourne.com](mailto:claudia@stc-melbourne.com) by the latest Fri 7<sup>th</sup> December.

Proudly Supported by:



### ▶▶ STC NEWSFLASH ▶▶

**Francesca Calati**, one of our key speakers at the COMS Education Day, has just been awarded the Australian Prime Minister's Prize for Excellence in Science Teaching in Secondary Schools for her work on a nanotechnology curriculum.

Please see:

<http://www.nanovic.com.au/?a=news.news&p=51&id=428>  
<<http://www.nanovic.com.au/?a=news.news&mp;id=428>>

## STC NEWS CONTINUED:

### THE AUSTRALIAN PRODUCT REALISATION CENTRE

The Australian Product Realisation Centre (a program supported by the Victorian Government and operated by the Small Technologies Cluster) offers a complete product development service from product definition and IP management through to manufacturing implementation and product compliance - and everything else in between. The more innovative and disruptive your technology is, the more care and experience is needed in defining the right launch product. The Australian Product Realisation Centre uses Concept Engineering and Voice of the Customer methodologies to help you understand your customers and their needs even better than they do.

Beyond product definition, the Centre offers expert services in electronics, software, firmware and mechanical engineering, along with industrial design and project management. The team has a strong track record of delivering product solutions especially around innovations in micro, nano and bio technology.

If you have an innovation in small technology and need:

- prototype development to create a stable platform for further research
- prototypes that “look and feel” like a real product to gain more traction with the investment community
- or full product development for market launch

The Australian Product Realisation Centre could be the perfect partner for you.

Not only are our services innovative, but our business model is as well. By virtue of generous support from the Victorian Government, the Centre offers subsidised product development services so that start up businesses and SMEs can conserve cash reserves (available only to Australian organisations).

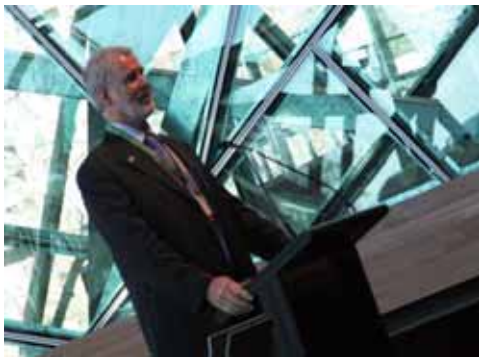


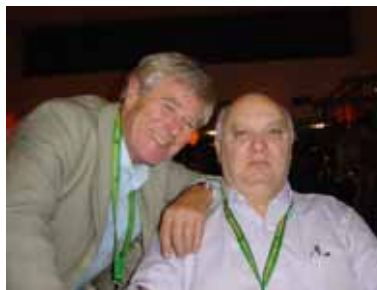
Figure 2: Product Realisation complements the other innovations offerings at the STC



Figure 2: Examples of Product Realisation for micro and bio technologies

COMS2007

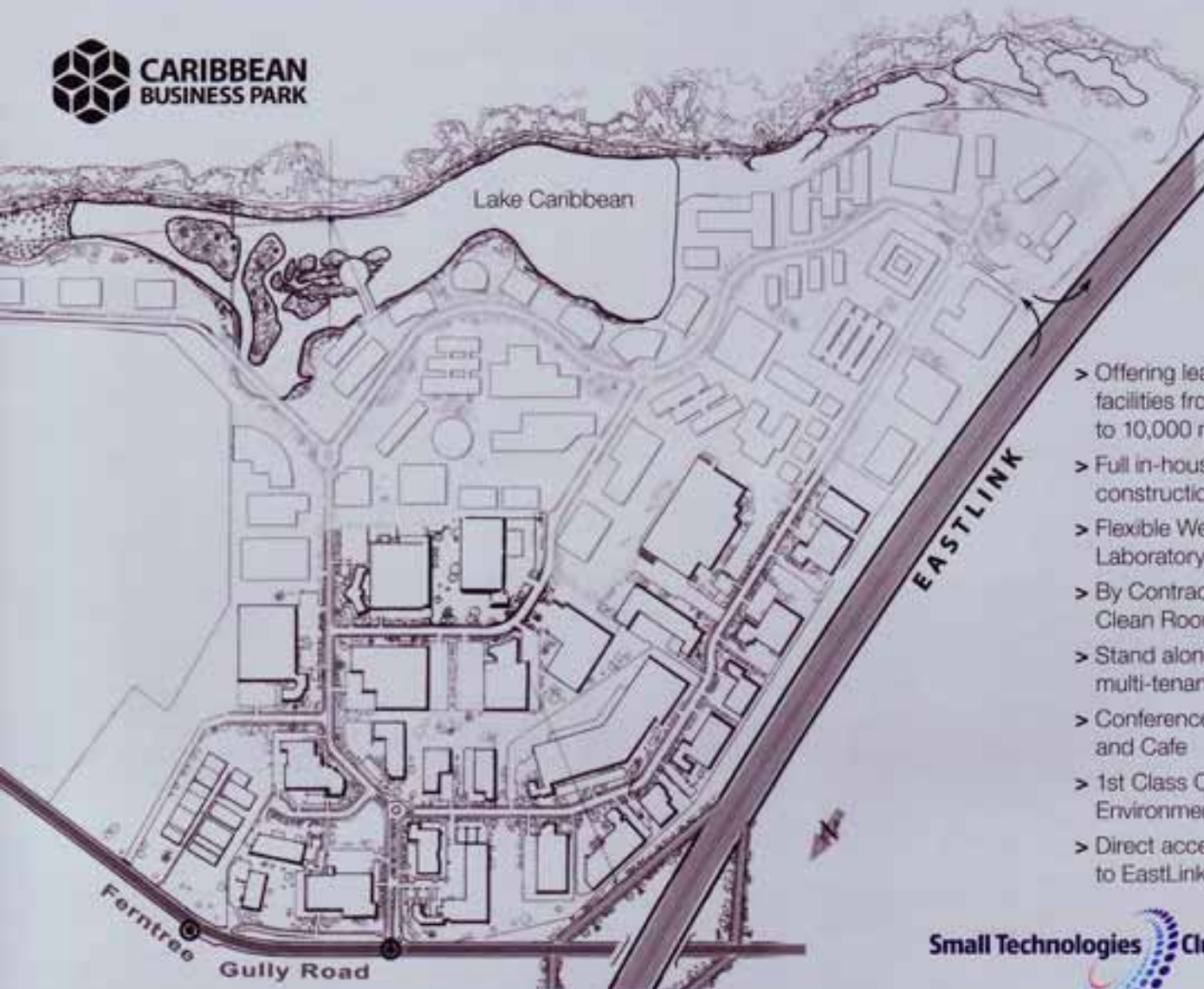




# Everything you'll need

30 minutes from the CBD, in the heart of the eastern technology corridor, at Caribbean Park, Scoresby, we're readily accessible by all Universities and Research Institutes.

We take care of everything including finance, architects, planning, approvals, building, landscaping and services, it's never been as easy as this to plan the future of your business.



- > Offering leased facilities from 100 m<sup>2</sup> to 10,000 m<sup>2</sup>
- > Full in-house design & construction service
- > Flexible Wet & Dry Laboratory Service
- > By Contract Clean Room Facilities
- > Stand alone or multi-tenanted
- > Conference Centre and Cafe
- > 1st Class Corporate Environment
- > Direct access to EastLink



Contact Clive Davenport, Small Technologies Cluster to discuss the future of your business  
Telephone +61 3 9763 4777 [clive@stc-melbourne.com](mailto:clive@stc-melbourne.com) / [www.stc-melbourne.com](http://www.stc-melbourne.com)

# It's never been easier, the only thing missing is you!

