

# ENGINEERING the future™

news bulletin

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THE **Warren** CENTRE  
FOR ADVANCED ENGINEERING

## Experienced Managers

key to wealth creation



*Chancellor Dame Leonie Kramer, Denis Hanley, Hugh Ralston, Michael Quinn.*

Experienced, successful operating managers are the key to creating wealth through innovation, said Denis Hanley AM in The Warren Centre Innovation Lecture given at the Hotel Inter•Continental Sydney on 29 April.

Founder and Chairman of the successful global filtration company, Memtec Limited, Mr Hanley described how the Memtec management team was drawn largely from two networks: that of the Harvard 'Mafia' and the Baxter Alumni.

"These were well qualified people who knew and trusted one another and who had all done big things in their career. There was minimal risk when they combined to build the Memtec success."

Everyone who joined Memtec in the early years received a salary reduction but were given share options to enable them to participate in the growth in the company value.

## INNOVATION PLANNING: new project

How do companies plan for innovation to sustain their competitive advantage? What processes have worked? What is happening at the leading-edge in Australia and overseas?

These questions and others will be explored in a new Warren Centre project currently under consideration. Innovation Planning has already attracted strong interest from State and Federal Government and a number of companies.

Many businesses, both large and small, are anxious to capitalise on innovation as a source of competitive advantage so that they are not left behind, explained Michael Johnson, the Project Champion.

"They thus had concomitant goals with all of the stakeholders."

The other key to creating wealth, said Mr Hanley, is understanding that wealth is a stream of cash and earnings from a business, not the components of business itself.

In 14 years Memtec grew from a small start-up with four employees and proprietary technology from the University of New South Wales to become a successful global business with 1800 employees, multiple technology platforms and a market capitalisation of approximately \$660 million.

The Warren Centre wishes to thank the major sponsors of the 1999 Innovation Lecture: **AusIndustry, IR&D Board, Macquarie Bank, FB Rice & Co, and Ansett Australia.**

**For copies of the Innovation Lecture Handbook, contact Cheonhee Sohn.**

"Planning for innovation is now essential. However, there is little guidance available as to how to do it."

The project will bring together the companies that plan successfully and those that want to find out how, State and Federal Government representatives, and chartered consultancies to explore methodologies.

The project will conduct case studies, produce brief, high-quality papers on the innovation planning process and conduct seminars and workshops to disseminate the knowledge.

**Your input is invited to contribute to the project direction. Contact Michael Johnson on (02) 9810 8107 or Robert Mitchell.**

## DIARY DATES

8 July:  
Innovation Metrics at the Australian Technology Park. Numbers are limited.  
Contact: Cheonhee Sohn.

## CONTACT DETAILS

Robert Mitchell: (02) 9351 4048;  
r.mitchell@eng.usyd.edu.au  
Cheonhee Sohn: (02) 9351 3752;  
c.sohn@eng.usyd.edu.au

Many thanks to Adrian Blessington of Green and Gold Printing for the great print job on The Warren Centre's new brochure.

The Industrial Energy Efficiency Project Report and Technical Papers will be available mid-June. Contact Cheonhee Sohn.

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.

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## KEN COLES:

### Honorary Doctorate



**Recognised by The University, Warren Centre Honorary Governor, Ken Coles with Professor Judy Raper, Dean of Engineering.**

The University of Sydney has awarded Ken Coles, Ex-Director and now Honorary Governor of The Warren Centre, a Doctorate in recognition of his remarkable career in engineering and his contribution to industry, commerce and society.

A graduate in engineering from The University of Sydney, Mr Coles went on to apply his knowledge and skills towards management and corporate roles including Managing Director of K G Coles & Co, Executive Chairman of Australian Materials Handling Development, and Executive Chairman of Conveyor Company of Australia for 34 years.

While Ken has undertaken many roles in professional and community organisations, his heart has always been in his engineering roots.

Chairman, Peter North said: "As director from 1984 until last year, Ken's wise counsel, university and industry linkages, and commercial acumen made major contributions to the Centre's deliberations".

"He was not only an active Board member but also an active participant in many of the project activities of the Centre particularly local area networks and winning through new product design."

## FOSTERING THE RIGHT ENVIRONMENT

How to create the right environment to foster technology company start-ups was the topic of the Governors' luncheon hosted by Governor Dan Phillips of Macquarie Bank in February.

At the luncheon, attended by Loftus Harris, Director General of the NSW Department of State and Regional Development, Dr Tony Castagna, a consultant with Macquarie Bank, outlined three critical factors for Australia:

- Technology companies themselves need to satisfy the conditions for success including management quality, proprietary technology with a defined and significant global market, a compelling business model, sustainable competitive advantage, and access to capital.
- The overall operating environment needs to provide an underlying infrastructure that supports a critical mass of entrepreneurs and institutional networks.



**From left to right: Dr Tony Castagna, Macquarie Bank consultant, Loftus Harris, Director General of the NSW Department of State and Regional Development, and Warren Centre Governor Dan Phillips.**

- The operating environment must also provide appropriate incentives and rewards for risk taking and foster a culture of revering success and not punishing failure.

Dr Castagna drew on his extensive experience in technology start-ups, education and management in both Australia and the US.

**For more information, contact: Dan Phillips on (02) 9237 3587.**

## Measuring innovation

In the first in a series of Governor meetings with the theme 'Managing the innovative global enterprise', Darren Smith of Arthur D Little explored the importance and ways of driving change toward high performance innovation through metrics measuring innovation.

"In order to increase the impact of innovation, you must treat it as a system and use measures beyond traditional lagging output metrics," said Mr Smith.

At the function hosted by Arthur D Little, Mr Smith outlined some of the company's work in systematised high-performance innovation and its latest management tool for measuring and driving innovation in the established, successful enterprise.

Arthur D Little will run a roundtable on innovation metrics on 8 July at the Australian Technology Park. If you are interested in the roundtable and/or wish to receive a recent paper published on the topic, **contact Cheonhee Sohn or Jane Howes at ADL on (02) 9247 9955.**

## Sustainable TRANSPORT for Sustainable Cities

A planning methodology to create a sustainable transport system for the sustainable city of the 21st century is the goal of The Warren Centre's recently launched series of projects.

Entitled 'Sustainable Transport for Sustainable Cities', the series will present opportunities, strategies and a methodology to achieve such a goal using Sydney as the model.

Project Director, Ken Dobinson explained: Throughout the world, major cities have been struggling to accommodate the insatiable demand for travel.

"In Sydney alone, traffic congestion costs over \$2 billion per year, traffic accidents over \$1 billion and pollution impacts \$2 billion. And things are getting worse," he said.

The Warren Centre, with its unbiased position free from institutional constraints, is taking up the challenge to address the issues and set strategies to reverse these trends.

The first of 10 distinct projects within the series, is already underway. Under the leadership of John McKerral from McMillan Britton & Kell, 'The State of Play' will research and document all information pertinent to the current situation (with a focus on Sydney) and the need for a strategic approach.

Project Champion of Sustainable Transport for Sustainable Cities is Warren Centre Director, Hugh Ralston.

Sponsor benefits include: opportunities to create new business; access to working sessions; range of networking, publicity and image building opportunities; and priority access to technical information.

Parties interested in contributing to the project or in becoming a sponsor, contact Ken Dobinson on (02) 9481 0453 or Robert Mitchell.

The Warren Centre for Advanced Engineering  
Engineering Building, J13  
Sydney University NSW 2006  
Telephone: (02) 9351 3752 Facsimile: (02) 9351 2012  
email: warrenc@eng.usyd.edu.au  
Internet home page: www.warren.usyd.edu.au