



# Adelaidean


NEWS FROM THE UNIVERSITY OF ADELAIDE


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## ▶ inside this issue

3  Hannah's global experience paves Rhodes to Oxford

7  Sophie makes impact in Geneva

8  Trial by fire for online disaster simulation

14  Beef traders up to the challenge

2 *Lumen* wins national award

5 Breast cancer support a click away

6 Innovator gets smart with web business

9 Seeing forest for the trees - via satellite

11 Fossils fuel dinosaur interest

12 Harry's Adelaide link stands test of time

15 Golden celebration for Grasso family

16 Hi-tech flames heat up The Ring

# Smoke's deadly chemical under fire



University of Adelaide researchers have made a discovery that could help prevent major health problems caused by smoke.

Smoke inhalation from bush and scrub fires is a major concern  
Photo by Ashley Hocking, courtesy of CFS Promotions Unit

A freely available blood pressure drug could be used to block one of the most poisonous chemicals in smoke, according to researchers at Adelaide's Department of Clinical & Experimental Pharmacology and the Department of Chemistry.

This may have major implications for the treatment of people affected by smoke inhalation, such as in house fires, bushfires and acts of terrorism. It also opens up new possibilities for the prevention of some illnesses caused by toxic chemicals present within smoke.

### ■ Why smoke is deadly

Smoke comprises a cocktail of hundreds of potentially hazardous substances, one of the most important of which is a highly toxic chemical called acrolein.

Acrolein readily attacks proteins and DNA in human cells, especially those of the respiratory tract in victims of smoke exposure.

This can cause a range of life-threatening illnesses, including lung and heart disease and cancer, and is one reason why smoke can be more

deadly and inflict more injuries than the fire itself.

"Injury to the lung by inhaled smoke is receiving increased attention from toxicologists around the world, in part because of the increase in global terrorism," said University of Adelaide toxicologist Dr Phil Burcham (Pharmacology).

"For example, lung injury by inhaled smoke was a common problem in hospitalised survivors of the 9/11 attacks in New York three years ago."

continued on page 4

## Life Impact



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## McWha's Words

### Different, and the same

I was recently out of Australia for a few weeks to attend a number of important university functions that have a direct bearing on what it is we do here in Adelaide. These events serve to highlight a crucial issue: that although there are many differences in higher education right across the world, we share many similarities and stand to gain from cooperation.

The University of Adelaide is no stranger to cooperation, having many links with Australian and international universities, industry, government and research organisations.

One of the cooperative ventures that is extremely important for us, and which we don't talk about as much as we probably should, is the Group of Eight universities in Australia. These are Australia's most prestigious universities and there is no doubt that as a group we are able to create many opportunities for the benefit of each university. During my time overseas, one of these unique benefits was officially launched in Berlin – the Group of Eight Australia Centre Europe.

This new centre is effectively a European office for the Group of Eight, acknowledging

the strong ties that already exist between our universities and European universities and research organisations. It is aimed at positioning the Group of Eight to build on these relationships and develop new partnerships in research, scholarship and education.

That's good news for the University of Adelaide, as it will help us to further promote our research and educational opportunities, provide exchange programs for staff and students, and perhaps develop alumni networks in the European Union that will maintain a close association with Adelaide over the years.

This theme of global cooperation was continued – albeit in a different way – in Cairo at last month's conference of the International Association of University Presidents (IAUP). Importantly, this was the first time in the IAUP's 40-year existence that a Middle Eastern country had hosted the association's annual meeting.

The overall mission for the IAUP is to involve members in the world's crucial issues: to reduce economic and social differences between countries and people, to reduce inequality between races and sexes, to improve

competence and knowledge globally, to increase mutual understanding, tolerance and respect between peoples, and to contribute to a more peaceful global society.

With everything going on in the Gulf Region and across the world today, these key messages were extremely important at the meeting, which included a discussion on the Israel-Palestine conflict and building international peace through education. It was a fitting way to celebrate the IAUP's 40 years, and I was proud to be a part of it.

Some of the benefits to be gained from such activities may well take many years to realise, but we are hopeful that education – and cooperation among universities – will bring benefits to all peoples in all corners of the globe, no matter how different we may be.

JAMES A. McWHA  
Vice-Chancellor

### Adelaidean

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Please send all coming events to the editor at the address below. There is no charge for coming events, but they must be university related.

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# Lumen wins national award

The University of Adelaide's colour magazine, *Lumen*, has won a national award for excellence.

The award comes from ADAPE (the Association of Development and Alumni Professionals in Education), a peak body in Australia, New Zealand and South-East Asia.

*Lumen* is published twice a year and showcases the University of Adelaide's many achievements to alumni, government, business and industry. Its particular focus is alumni of the university, with around 45,000 alumni receiving the magazine.

The judges were impressed with the high quality of the entries, with *Lumen* beating strong competition from Australia and New Zealand to win the award for best Tertiary Alumni/Community Magazine.



This is the second time *Lumen* has won the ADAPE National Award for Excellence, having originally won the award in 1996. Notably, the magazine has only been submitted to the awards twice and has won each time.

Produced by staff in the university's Marketing & Strategic Communications Office, *Lumen* is

edited by John Edge with design and layout by Chris Tonkin and editorial input from staff in Alumni, Community Relations & Development.

Pamela Lyon was the editor of *Lumen* when it won its first ADAPE award in 1996.

[www.lumen.adelaide.edu.au](http://www.lumen.adelaide.edu.au)





Photo by Ben Osborne

# Hannah's global experience paves Rhodes to Oxford

Hannah Tonkin is the 97th Rhodes Scholar in the University of Adelaide's 130 years.

The 23-year-old Adelaide law student will arrive at Oxford University in October next year with a strong appreciation and understanding of international affairs – and as she gets to meet many like-minded scholars from numerous parts of the world, her global perspective will continue to grow.

A six-month internship in The Hague earlier this year at the International Criminal Tribunal for the former Yugoslavia – where former Yugoslav strongman Slobodan Milosevic is currently on trial – not only provided an absorbing experience involving intellectually challenging work, but also paved the way to uncovering her niche in the legal world.

“My internship was a fantastic experience, combining practical work in a trial team with intellectually challenging issues on a legal digest project,” Hannah said.

“And I feel that I have found my niche in International Law and International Relations. This is where I would like to make a difference and I am setting my sights on specialising in this area.”

During her internship, she worked in the Office of the Prosecutor and performed many

functions, including: assisting in the preparation of examinations in chief and cross examinations; assisting in the proofing of witnesses and the preparation of opening addresses; and undertaking general research on comparative and international criminal law issues.

In this role, she worked with University of Adelaide law graduate Michelle Jarvis, who is in the Appeals Section of the Office of the Prosecutor serving as an Appeals Counsel.

**“I feel that I have found my niche in International Law and International Relations. This is where I would like to make a difference”**

A Blackwood High graduate who obtained perfect scores in Year 12 in 1998, Hannah received a Bachelor of Science in Jurisprudence in 2001 and will graduate at the end of this year with her Honours degree in Law. She has also completed a year of study for a Diploma in Languages, majoring in French.

As the Rhodes Scholar status sinks in, Hannah said Oxford University was the ideal venue to undertake postgraduate study in this area having one of the largest and best centres for graduate work in International Relations in Europe.

“Now that I have the opportunity to attend Oxford, I will be reading for a M. Phil (Masters degree) in International Relations,” she said.

“The course appears fascinating, it is challenging and relevant to my career path and this is where I am looking forward to interacting with world-class staff and students.”

Hannah said in the final year of her M. Phil, she would like to undertake a cross-disciplinary thesis in International Law – and if possible, to remain at Oxford and read for a D. Phil, using her Masters dissertation as the basis for her doctoral work.

As much as she enjoys the academic challenges, Hannah is also looking forward to the joys of exploring historical Oxford and immersing herself in numerous extracurricular activities within the university.

“I am already attracted to a number of clubs and societies such as the United Nations Association, the Debating Society, the Ski and Snowboard Club and the Netball Club,” she said.

Hannah said she believes that Oxford University's history, architecture and traditional collegiate system will provide a rich environment conducive to personal growth and development.

“Thanks to this wonderful opportunity, I hope to equip myself with the knowledge, qualifications and life experiences necessary to continue my pursuit for social justice in the international arena,” she said.

Story by Howard Salkow



# Smoke's deadly chemical under fire



continued from page 1

Dr Burcham and colleague Dr Simon Pyke (Chemistry) have been researching acrolein and its effect on the human body for some years.

"Most Aussies love a barbecue, but you're probably less fond of the smoke that emanates from the hotplate when cooking your favourite cut of steak or lamb. Stepping instinctively out of smoke's way is a smart thing to do," Dr Burcham said.

"Cigarette smoke contains many deadly substances apart from acrolein, but anyone who doesn't appreciate secondary smoke and wants to get out of a smoky area and into fresh air is also being extremely wise."

"Although it's only a small molecule comprising a handful of carbon and hydrogen atoms and a single oxygen, acrolein is very reactive with other substances. To a toxicologist this is bad news."

In addition to diseases associated with exposure to smoke, acrolein contributes to many other important diseases.

"Over the past decade, a growing body of international research has shown that acrolein participates in tissue damage during ageing, since it forms during damage to lipids (fats) in cell membranes by free radicals," Dr Pyke said.

"Free radicals are by-products of normal metabolic processes in all tissues, and contribute to the cell damage that accompanies the ageing process.

"Diseases involving cell damage by acrolein formed by this route include degenerative brain diseases such as Alzheimer's disease, fatty deterioration of blood vessels (atherosclerosis) and even kidney diseases affecting diabetic patients."

## ■ Latest discovery

In recent decades, a great deal of effort has been made by researchers to identify antioxidants, drug-like molecules that protect the body against damaging free radicals. However, Dr Burcham and Dr Pyke decided on a different approach: why not identify drugs that block the toxicity of acrolein and related

"secondary" or "downstream" products of free radical damage?

Over the past few years, together with PhD student Lisa Kaminskas, they have focused much of their effort on hydralazine, a long-standing blood pressure-lowering drug.

"We found that this drug is a great scavenger of acrolein, and it blocks toxicity induced by acrolein in cultured cells and also in laboratory animals," Dr Burcham said.

Their research recently earned them the cover story in the international journal *Organic and Biomolecular Chemistry*, published by the Royal Society of Chemistry in the UK.

For the paper, Ms Kaminskas carefully studied the chemistry of reactions between acrolein and hydralazine.

"Hydralazine is a far from simple drug and it probably works in several ways to block acrolein toxicity," Dr Burcham said. "Figuring out which mechanism is the most important within the body will be a tough ask. However, our work so far has been a big step in the right direction."

Top: A house fire at Roseworthy  
Above: Where there's fire, there's smoke  
Photos by Pip McGowan, courtesy of CFS Promotions Unit

## ■ What the future holds

Much of their work to date has been funded by the university's Faculty of Health Science Research Committee, but the researchers and their collaborators are currently seeking additional funds to extend this novel research.

"For the future applications of our work, we will be exploring the Alzheimer's disease option first up, but the treatment of smoke inhalation injury will also be a priority," Dr Burcham said.

"Since our strategy is fairly experimental, these are still very distant properties. The main drug we've been working with, hydralazine, has some problems with its widespread use, so we will also focus on identifying safer derivatives of the drug."

Story by David Ellis



# Breast cancer support a click away



The Internet can provide valuable support for women with breast cancer, new research has found.

A team from the University of Adelaide, led by Associate Professor in Psychology Dr Helen Winefield, set up a breast cancer-related website called WINGS (Women in Need Getting Support) to explore how useful the Internet can be for women with the condition.

Other team members included Department of Surgery Associate Professor Brendon Coventry, and Project Manager Vanessa Lambert; in addition a lot of valuable contributions were made by breast cancer organisations and informatics experts, with funding coming from the National Breast Cancer Foundation and Australia Post.

Their findings, which have just been published in the journal *Patient Education and Counseling*,



deal with their experiences of setting up such a website and suggest the information and community provided by such a site are valuable in helping women cope with breast cancer.

“The idea was that women with breast cancer who live in isolated areas might have more difficulty in accessing information and emotional support. We wanted to show that having a website available was helpful to women with cancer and their families,” Dr Winefield said.

The most innovative aspect of the website, Dr Winefield said, was the e-mail discussion group. Here women could share their feelings, ask for tips from others who had been through the experience, and offer encouragement to each other.

“The interaction through a discussion board is very useful; there is information, there is emotional support and there are links to other breast cancer sites. We received a lot of positive feedback.”

Due to funding constraints the site is no longer being actively maintained, but is still popular, with an average of between 6000 to 8000 hits per month (with at least 20% of those coming from Australia). The researchers would be pleased to see management of the site taken up by a group with relevant expertise and resources.

Dr Winefield (pictured left) said that documenting how the WINGS site was set up could be of assistance to other health professionals who want to take advantage of this new medium of communication.

“We think that people, both here in Australia and internationally, may benefit from reading about our experiences because we were one of the first in Australia to establish this sort of website and we wanted to share what we learned about all its aspects,” Dr Winefield said.

Story by Natalie De Nadai

## Ever wanted to know more about psychology?

National Psychology Week is being held from November 7 to 13, with two free public events the main features.

The first will be a forum entitled “All Psyched Up: One year of Psychology in the classroom”, which will discuss the introduction in 2004 of Psychology into the year 11 and year 12 secondary curricula. The forum will take place at the Australian Mineral Foundation, 63 Conyngham St., Glenside, at 6.30pm on Monday, November 8.

The second event is an information marquee in Rundle Mall all day on Friday, November 12. Materials will be available that describe the diverse range of services psychology provides, together with information for studying psychology at each of Adelaide’s universities.

Interested in medical research but confused by the jargon?  
Our young researchers will tell you the latest in everyday language

## Young Investigator Award

An initiative of the Women’s and Children’s Hospital and Faculty of Health Sciences, University of Adelaide

Bringing women’s and children’s health research to the public.

# 2004

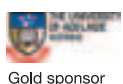
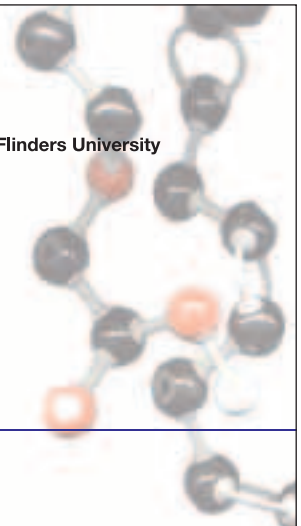
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# Innovator gets smart with web business

SmartyHost managing director Anoosh Manzoori epitomizes the quintessential entrepreneur.

He is also one of many success stories to emerge from the University of Adelaide's Graduate Entrepreneurial Program at Adelaide University Research Park – Thebarton Campus.

Created in 1993, Thebarton is one of the premier university-owned technology/research parks in Australia. Within its business incubator, graduates have the chance to develop their skills with some of the country's most innovative companies.

Armed with a Bachelor of Science degree from Monash University, Mr Manzoori enrolled in Adelaide's entrepreneurial program and at the same time put his considerable talent and innovative juices to work.

With the backing of an Ernst & Young/American Chamber of Commerce Graduate Entrepreneurial Scholarship, and capitalising on business mentoring, Mr Manzoori established three separate ventures in the diverse areas of health (PracSmart), travel (atGuru Consulting) and a small-to-medium enterprise (SmartyHost) out of Thebarton.

All three ventures were based on good value, high levels of customer service and advanced



technology solutions. SmartyHost is the third and broadest of the three, and the one making Mr Manzoori a man in demand.

"I created SmartyHost in 1999 with a view to providing the small-to-medium sized business sector with much better value web hosting and management services than currently existed in the market," Mr Manzoori said.

"I saw an opportunity to exploit a technology gap where the leading players were consistently overcharging their customers. Our aggressive pricing model challenged the web hosting industry

to offer better-value services and is likely to shake up the market considerably."

SmartyHost is the only business of its kind in Australia that can bill, register domains and set up a web server in real-time within 2-3 minutes. The larger players take 7-10 days to complete all three.

It has not been slow going. SmartyHost receives some 4000 email support questions per week, and the company is growing at more than 20% per month.

"This is a truly remarkable story," said Kankana McPherson, Coordinator of the Graduate Entrepreneurial Program. "Anoosh typifies the individual we attract to our program.

"Since its inception in 1993, we have assisted 59 graduates and TAFE diplomates to develop 54 innovative businesses. These are powerful statistics and it speaks volumes for the talent."

"Coupled to this, it has signalled the university's commitment to fostering a culture of entrepreneurship through relevant programs and coursework, providing self-employment as a training outcome and ultimately contributing to the state's economic development."

For more information about the Graduate Entrepreneurial Program call Ms McPherson on (08) 8303 3273 or email: kankana.mcpherson@adelaide.edu.au

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Story by Howard Salkow



## Graduates

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# Sophie makes impact in Geneva



It's not every day you get to meet a former US President and work on health programs that could affect the lives of hundreds of millions of people.

But that's exactly the experience University of Adelaide PhD student Sophie La Vincente had earlier this year when she became an intern at the headquarters of the World Health Organization (WHO) in Geneva, Switzerland.

Sophie, who is currently finishing her PhD in Clinical & Experimental Pharmacology, spent two months working in the WHO's Department of Mental Health and Substance Abuse.

She was chosen for the position based on her academic excellence, and her background in psychology (she graduated with Honours in Psychology from Flinders University) and drugs (thanks to her PhD work at the University of Adelaide).

"In Geneva, I worked mainly on projects related to the management of drug abuse, and in particular the prevention and treatment of health and social consequences that can result from drug use, such as HIV/AIDS," Sophie said.

"Mental health disorders including drug and alcohol abuse can have a devastating impact on families and communities. Such illnesses currently account for five of the 10

leading causes of disability for people aged between 15-44.

"Injecting drug use and the risky behaviour that can accompany it are driving the HIV epidemics in several world regions, including a number of our neighbouring countries in Asia.

"The experience at the WHO gave me a first-hand insight into how these major health challenges are being addressed at an international level. It showed me the difficulties and limitations involved in improving the health of a population, but it also showed me how much can be achieved."

During her time in Geneva, Sophie attended the 57th World Health Assembly held at the UN European Headquarters. This is the annual gathering of world health leaders to determine the direction of world health policy.

"Meeting former US President Jimmy Carter and hearing his address to the Assembly was inspirational. Through the Carter Center both he and former First Lady Rosalynn Carter have achieved some great successes for people struggling with poverty and disease," Sophie said.



Above: Sophie La Vincente at the University of Adelaide  
Photo by David Ellis

Above Left: Sophie at the World Health Assembly at UN European Headquarters, Geneva

Another highlight was hearing the former Director General of the WHO and Prime Minister of Norway, Dr Gro Harlem Brundtland, give an address on macroeconomics and health.

"It gave me a different perspective on how health, the environment and the economy are inextricably linked," she said.

Sophie has now been offered an internship with a primary health care program for the prevention and management of HIV/AIDS in Mozambique. She is hoping to take up the opportunity after she completes her PhD studies at Adelaide.

"Having participated in the technical activities of the WHO based at Headquarters, I'm now eager to get

some field experience so I can see how programs stemming from the research and activities conducted by the WHO are being implemented.

"This will give me a better understanding of the logistics and limitations encountered on the ground in translating the work of the WHO into real benefits for people in need."

Sophie's unique experience at the WHO would not have been possible without the support of a number of sponsors. Support for the Geneva internship was provided by the University of Adelaide's Department of Clinical & Experimental Pharmacology, the Foundation for Young Australians (Youth for Youth Investment Grant), and the Rotary Club of Adelaide.

Story by David Ellis

# Trial by fire for online disaster simulation



A new online program is helping to prepare for the unthinkable.

A University of Adelaide team has created the disaster simulation program which can prepare responders to crises such as terrorist bombings, hurricanes, bushfires, industrial explosions and train crashes.

The multi-disciplinary team combined their skills, expertise and experience to develop the "Through the Fire" simulation program, which focuses on the response to mass burn casualties at a simulated Australian military installation in Central Australia.

"Through the Fire" is based on an online simulation (or e-sim) co-developed by Dr Holger Maier from the School of Civil and Environmental Engineering. Set in the Mekong River Region of South-East Asia, the Mekong e-sim has won numerous teaching awards and has been praised by hundreds of students.

For "Through the Fire", Dr Maier enlisted the help of Ms Sheila Kavanagh, a Burns Nurse educator from the Department of Clinical Nursing, who was involved in the response to the Bali bombing disaster and received an Order of Australia for her contribution, and Mr

Allan Carrington, Instructional Designer from the Learning and Teaching Development Unit (LTDU).

Also involved were Judi Baron and Dayle Hall, experts in online delivery from the LTDU, and Dr Randall Kindley, an expert in simulation and scenario-based learning, from The Performance Group based in Minnesota in the USA.

"In the wake of escalating risks, many organisations are developing response plans to cater for a potential disaster," Dr Maier said.

"We reasoned that online role-play simulations and scenario-based learning were an alternative to expensive physical simulations for testing and familiarising emergency response teams with such plans."

At this pilot stage, the only participants are burns nurses, but there are plans to expand the simulation to include other disciplines.

"It is quite difficult to familiarise first responders with the hectic environment and help them make good decisions under extreme stress. Too often, these issues take second place to emergency

Above: Sheila Kavanagh shows "Through The Fire" to Royal Adelaide Hospital burns nurses Stuart Harper (back) and Natalia Adanichkin

plan tests that are primarily concerned with infrastructure," Ms Kavanagh said.

"Studies like the United States' September 11 reports showed that it is the skill level of responders that determine success. However, a simulated emergency response event is often too expensive to obtain this training."

Mr Carrington said this is a learning and teaching methodology whose time has come.

"Over the last few months, there has been growing interest in this work, with the collaborators giving a multimedia presentation at an online conference on e-learning hosted by the University of Calgary," Mr Carrington said.

"We were recently involved in a live webcast on the work to a worldwide audience of educators. As a result of this presentation, we have been invited to present six more online events to learning communities of over 20,000 educators before the end of the year."





Photo by Ben Osborne

# Seeing forest for the trees – via satellite

Understanding and predicting climate change could be easier thanks to hi-tech radar imaging being developed at the University of Adelaide.

Staff at the university’s Centre of Expertise in Microwave Radar (CoEMR) are developing a new technique of radar sensing to provide global 3-D maps of vegetation structure.

It is hoped that the technique will help reduce uncertainties surrounding the use of the carbon cycle and its impact on long-term climatic trends – and ultimately improve predictions for climate change.

The timing could not be more appropriate with many more nations, including Australia, preparing to sign the Kyoto Protocol. The Kyoto Protocol seeks to impose political constraints on nations based on the connection between climate change and increased emission of greenhouse gases such as carbon dioxide (CO<sub>2</sub>). It allows for trade in carbon-credits between nations,

but requires new technology for monitoring and verification.

Shane Cloude, Professor of Microwave Radar with the university’s School of Electrical and Electronic Engineering, said changes in vegetation structure, induced by climatic conditions, natural disturbance and human activities, can have a substantial impact on carbon storage and the exchange of greenhouse gases such as CO<sub>2</sub> with the atmosphere.

“Fossil fuel burning and deforestation, which release CO<sub>2</sub>, are believed to be the two dominant contributions to the rise of atmospheric carbon over the past 50 years,” Professor Cloude said.

“Trees store carbon in their biomass and so forests have the potential to act as carbon sinks to re-absorb some of the excess CO<sub>2</sub>. Given

the importance of forests in both scientific and political terms, there remain surprisingly large uncertainties in our global knowledge of vegetation biomass.

“In addition, the dynamic processes of carbon flux due to changes in vegetation and its interaction with the wider carbon cycle call for a better quantitative understanding of the spatiotemporal variations in biomass,” he said.

With the erosion of large scale land-based observation networks, interest is turning to remote sensing technologies to make a big impact in this area and establish reference global maps of biomass for input to climate change models.

“One key technology is microwave radar imaging from space satellites,” Professor Cloude said.

“It was realised more than 20 years ago that microwaves have the advantage over optical sensors of being able to penetrate dense forests and provide a signal related to the total biomass of the vegetation.

“However, radar brightness alone is insufficient to provide the kind of accuracies required.

“Therefore, at the CoEMR, we are developing a new approach that relies on measurement of forest height by using a radar technique called polarimetric interferometry, or POLInSAR, which is both well suited to satellite technology and can provide the kind of accuracies required for global mapping.

“This method employs two passes of the satellite in orbit over the same scene and by very accurate measurement of the phase or time shift between the two signals in different polarisations, provides an estimate of the mean vegetation height.

“Height is then used to estimate biomass via growth models or allometric relations.”

Initial experiments with this mode of the satellite will take place in 2005/06 using the new Japanese ALOS satellite, with a possible global mapping mission to follow by the end of the decade.

The University of Adelaide will establish a POLInSAR calibration site in South Australia and work with data from a well-characterised forest test site near Injune in Queensland to validate the technology.



## Ira Doley Raymond (1917-2004)

Ira Raymond, who died on September 12, was appointed University of Adelaide Librarian in 1964 and served in the position for 18 years until his retirement in 1982. He was born on July 6, 1917 in O'Halloran Hill, South Australia.

His mother died in 1930 and in 1932 his father, a leading Churches of Christ minister, moved with his three sons and a new wife to West Australia.

Ira was educated at Adelaide High School, Fremantle Boys' School, Perth Modern School and the University of Western Australia. He graduated with a BA in English and French in 1941 and a MA in 1951.

From 1937 to 1941 Ira taught at schools in Western Australia. This was followed by War service in the RAAF from 1941 to 1945, when he was posted to New Guinea. In 1946 he entered the Library School of the Public Library of New South Wales.

After gaining professional qualifications he held a number of library positions in West Australia before appointment to the staff of the National Library of Australia in 1949. Here he moved through a number of positions with distinction, and in 1954 was appointed Liaison Officer in New York. He was accompanied by his wife Patricia, whom he had married in 1951. Their long and remarkable relationship continued until the end of his life. They remained in New York until 1957 and Ira took the opportunity to gain the degree of Master of Library Science from Columbia University.

On return to the National Library he held several senior positions in succession. This was a time of unprecedented growth and development at the National Library and Ira made a major contribution to the planning and establishment of national bibliographical services.



He continued his involvement in national initiatives throughout his career. He served on a number of Committees of the Australian Advisory Council for Bibliographical Services; sat on the National Library Advisory Committee on the Humanities 1973-1978, and was also Chair of the Committee of Australian University Librarians 1973-1978.

He took a lifelong interest in education for librarianship, serving in a number of advisory roles with the then Library Association of Australia, and establishing a short-lived Library School at the University of Adelaide between 1975-1979. He received the highest accolade of his profession, the H.C.L. Anderson Award from ALIA (Australian Library and Information Association) in 1982 for his outstanding contribution to librarianship.

When Ira Raymond moved to Adelaide in 1964 the University Library was in a stage of rapid growth. During his service the size of the collection passed the half-million and million volume mark and the Barr Smith Library building doubled in size.

While he was an outstanding bookman, Ira was also ahead of his time in the development of library systems. Operations were steadily computerised from the 1960s onwards and cataloguing went online in 1980. His meticulous planning and execution helped to ensure success of these developments.

He was highly able in working with the university community and was noted for his thorough "homework" with all stakeholders before he launched any initiative.

His concern to provide the best possible conditions of work and development for staff, which gained him their unstinting support. He always maintained the role of the Barr Smith Library was for the community at large.

His great contribution to the university was recognised in 1989 when the title of Librarian Emeritus was conferred on him. The Ira Raymond Exhibition Room in the Barr Smith Library perpetuates his memory. A Festschrift in his honour, entitled *Innovation no stranger*, was published and presented to him in 1983. In his retirement he achieved an Honours Degree in Chinese from the University of Adelaide.

While he was determined in character, Ira's self-effacement was legendary. His wit was equally characteristic: when told by an admirer that he was the most humble man they had met, he replied, "I agree". While Christian by upbringing he was deeply persuaded in his own mind of a Christian position which he held in an exemplary manner.

Contributed by Paul Wilkins



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# Fossils fuel dinosaur interest

A remote Queensland location has Adelaide researchers excited about Australia's fossil future.

Palaeontologists from the University of Adelaide and South Australian Museum are undertaking research to better understand how giant prehistoric marine reptiles may have adapted over time to changing environments.

"The work we are doing near Boulia in western Queensland will help to fill the 'dark ages', or the parts we are missing from the early part of the Cretaceous period," said Dr Ben Kear, a research scientist at the South Australian Museum and the School of Earth & Environmental Sciences at the University of Adelaide.

Dr Kear said the project was important because it would allow Australian specimens to take their place on the world stage.

"We eventually hope to have a better understanding of Mesozoic marine reptile evolution on a global scale and provide new information of benefit to researchers around the world," he said.

The range of fossils preserved in the Boulia will allow palaeontologists the opportunity to collect, document and examine faunas from the Early Cretaceous period, which was about 110-115 million years ago.

"The early history of Mesozoic marine reptiles has been extensively documented from Europe, and the later stages of their evolution are well represented in late Cretaceous rocks from the United States," Dr Kear said.



While the project is important for international research purposes, Dr Kear said it is also significant for the role it can play in establishing and maintaining fossil tourism opportunities in Australia.

"Across the globe there has long been a fascination with dinosaurs and prehistoric reptiles," Dr Kear said. "Areas with significant fossil deposits such as those in northern South Australia and western Queensland give us an opportunity to connect with regional museums and to maximise the potential of fossil tourism. We have already seen this yield positive educational and commercial results.

Dr Ben Kear working on an opalised plesiosaur  
Photo courtesy of the South Australian Museum

"Fossil tourism can directly benefit regional communities and is an effective way of bringing palaeontology to the general public," he said.

The research being undertaken in western Queensland, as well as other areas of Australia, has been made possible by a Federal Government grant to the University of Adelaide and South Australian Museum in partnership with the Umoona Opal Mine and Museum in Coober Pedy and Outback at Isa Fossil Centre in Mt Isa.

## Coming Events

### Thursday, November 4

**5.45pm Cultural Celebration:** Sculpture Walk with artists Silvio Apponyi, Greg Johns, Meliesa Judge, Will Kuiper and Dr Gillian Robertson. Waite Arboretum. RSVP to Tupp Carmody on 8303 4194 or email [tupp.carmody@adelaide.edu.au](mailto:tupp.carmody@adelaide.edu.au).

### Friday, November 5

**1.10pm Elder Hall Lunch Hour Concert Series:** Australian String Quartet performing works by Haydn and Janacek. Elder Hall, North Terrace. Tickets \$5, available at the door from 12.30pm.

**4.00pm Obstetrics and Gynaecology seminar:** "The mystery and magic of macromolecules" by Professor Rosemary Lyons Ryall (Department of Surgery, Flinders University). Department of Obstetrics and Gynaecology Seminar Room, N229, 2nd Floor, Medical School North, Frome Road.

### Monday, November 8

**6.30pm Psychology Week forum:** "All Psyched Up: One year of Psychology in the classroom" with panel including Dr Paul Whetham (UniSA) and Dr Julie

Robinson (Flinders University). Australian Mineral Foundation, 63 Conyngham St., Glenside. Free entry.

### Wednesday, November 10

**Architecture students' exhibition:** "Folio 04" is the final-year student exhibition and runs until November 14. Art Gallery of South Australia (North Terrace), for more information email: [sky.allen@adelaide.edu.au](mailto:sky.allen@adelaide.edu.au)

**1pm Cultural Conversation:** "From the Olympic torch to Wagner: A transformation of a simple flame to a spectacular special effect". Speakers: Michael Scott-Mitchell (South Australian State Opera) and Dr Richard Kelso & Associate Professor Gus Nathan (School of Mechanical Engineering). Ira Raymond Room, Barr Smith Library. Entry is free – all welcome.

### Friday, November 12

**1.10pm Elder Hall Lunch Hour Concert Series:** Janis Laurs (Cello), David Lockett (Piano) performing works by Shostakovich, Peteris Vasks and Rachmaninoff. Elder Hall, North Terrace. Tickets \$5, available at the door from 12.30pm.

**4pm Obstetrics and Gynaecology seminar:** "Regulation and Dys-Regulation of Aldosterone Synthesis" by Professor Bill Rainey (UT Southwestern Medical Center, Dallas, USA). Department of Obstetrics and Gynaecology Seminar Room, N229, 2nd Floor, Medical School North.

**Psychology Week:** An information marquee all day, in Rundle Mall. Materials will be available that describe a diverse range of services, together with program information for studying Psychology at each of Adelaide's universities.

### Friday, November 19

**1.10pm Elder Hall Lunch Hour Concert Series:** Beta Sigma Phi Music Awards. Four finalists from the Elder School of Music will compete for a total of \$1,800 in prize money. The winners will be announced at the end of the concert. Elder Hall, North Terrace. Tickets \$5 available at the door from 12.30pm.

### Monday, November 22

**5pm Cultural Celebration:** Launch of the reinstated Geoff Wilson Medley Theatre Mosaic. Napier Building Forecourt, RSVP

to Tupp Carmody on 8303 4194 or email [tupp.carmody@adelaide.edu.au](mailto:tupp.carmody@adelaide.edu.au). All welcome.

### Wednesday, November 24

**12.30pm Clinical Nursing seminar:** "JBI Research Software for the analysis of qualitative research" by Professor Alan Pearson. Room 36, 3rd floor, Eleanor Harrauld Building.

### Friday, November 26

**6pm 2004 Young Investigator Award Final: featuring guest speaker** Professor Lowitja O'Donoghue (Yunggoorendi, First Nations Centre for Higher Education and Research, Flinders University). Union Hall, North Terrace Campus. All welcome, but RSVP required. For more information visit: [www.health.adelaide.edu.au/yia2004](http://www.health.adelaide.edu.au/yia2004)

### Saturday, November 27

**8.00 pm Elder Hall Evening Concert Series:** "A Child of Our Time" by M. Tippett. Elder Hall, North Terrace Campus. Tickets \$25/\$17/\$10, available from BASS. Phone (08) 8303 5286 for further information.

# Harry's Adelaide link stands test of time

Harry Hua shares more than a name with Harry Medlin.

The pair has a bond stretching back more than 25 years through their association with the University of Adelaide.

A boat refugee from Vietnam, Mr Hua arrived in Adelaide in 1977 and was barely able to speak English when he commenced a Civil Engineering qualification at the South Australian Institute of Technology at Salisbury.

"My English was very poor when I first arrived, and I didn't think I was going to get into university," Mr Hua said.

"But I worked hard at it and I was lucky enough to get into Adelaide to study Electronic Engineering in 1979. I was also working night-shift at Kelvinator to earn some money to send to my family back home."

It was in his first year at Adelaide that he met Dr Medlin in circumstances neither is likely to forget.

"Harry (Hua) came to my room and told me his story – and then he burst into tears, and told me he that he had just heard that one of his younger brothers was being held in a refugee camp in Malaysia," Dr Medlin said.

"Harry wanted my advice about what he could do. I knew the then Foreign Minister Michael MacKellar was going to Malaysia within days, and I contacted him and he promised that he would do what he could.



"Ten days later, Harry and his brother came to my room to say thank you! I was staggered – it was the quickest political response I had ever seen!"

Mr Hua has since settled – along with many members of his family – in the Victorian region of Sale where he has become a leading figure in the local community. Along with his eldest son Alex, he recently visited Adelaide and caught up with Dr Medlin. Alex is a talented mathematician and musician who is now in Year 12 and will soon have to choose which university to attend.

None of Mr Hua's achievements in Australia would have been possible, he said, without the help of the University of Adelaide.

Harry Hua (centre) with son Alex (right) and Dr Harry Medlin. Story and photo by Ben Osborne

"I am still very emotional about it," he said. "Harry Medlin helped to bring my brother to Australia, and in addition to this, I got sick in my final year of studying Adelaide.

"I had to have an operation at the Royal Adelaide Hospital, and Tony Parker (now Deputy Executive Dean of the Faculty of Engineering, Maths and Computer Science) came to visit me while I was in the hospital recovering.

"I was very touched by those gestures, and I will always be very grateful to the university for the opportunities it gave me to start my new life in Australia."



## News in Brief

### Mozart? SchMozart!

Elder School of Music composition students will put their skills to the test on Wednesday, November 3 in a unique edition of their annual Composers' Workshop.

Rather than the normal practice of composing music for a general theme, this year they have had to "re-compose" memorable scenes from three great operas to be performed by vocal students from the school – with only the words as a guide.

Titled *SchMozart* and directed by Felecia Hick, the night promises to be one of invention and wit.

*SchMozart* will be held at Little Theatre at 7.30pm on Wednesday, November 3 – entry is free.

### Award for composer

Highly regarded Adelaide composer Graeme Koehne has received one of the most prestigious individual awards in Australian music.

Mr Koehne was named as the recipient of the Sir Bernard Heinze Award for 2004 for his outstanding contribution to music in Australia.

The award honours the memory of Sir Bernard Henize, who was one of the major pioneers of orchestral

musical life in Australia, and who was Ormond Professor of Music at the University of Melbourne for 31 years. Former winners include composer Peter Sculthorpe and singer Yvonne Kenny.

Mr Koehne is Head of Composition at the University of Adelaide's Elder School of Music, and has written extensively for orchestra and chamber ensembles, as well as dance and theatre.

### Student architecture exhibition

Here's your chance to see the work of the next generation of architects – free!

Final-year students from the university's School of Architecture, Landscape will be showcasing their work in the Folio 04 Exhibition.

The exhibition will be held at the Art Gallery of South Australia from Wednesday, November 10 to Sunday, November 14.

Folio 04, while supported by the school, has been organised entirely by the student body, and funded mainly through private sponsorship and fundraising.

For more information, contact Sky Allen via email at: [sky.allen@adelaide.edu.au](mailto:sky.allen@adelaide.edu.au)



# Timely evening concert



The final concert in the Elder School of Music Evening Concert Series for 2004 promises to be a moving and inspirational event.

The only work on the program is Sir Michael Tippett's *A Child of our Time*, which he began to compose on the day World War II broke out in 1939.

It will feature the Elder Conservatorium Choral, Adelaide Voices and Elder Conservatorium Symphony Orchestra with conductor, Carl Crossin.

Tippett completed the work in 1941, however its first performance was not until 1944 at the Adelphi Theatre, London under the baton of Walter Goehr.

A conscientious objector, Tippett shared in the public horror which the events leading to the commencement of war had unleashed and responded with a composition which was to be his first major public statement as an artist.

Influenced by negro spirituals, his composition speaks of oppression, violence and morality and their consequences. *A Child of our Time* is an inspirational work, embodying texts and music of an inherently universal significance, and is as relevant today as when written some 60 years ago.

*A Child of our Time* will be performed at Elder Hall on Saturday, November 27 at 8pm. Tickets are \$25 adult/\$17concession/\$10 student at BASS outlets or phone 131 246.

## Trio's youthful performance

A world premiere highlights the Macquarie Trio Australia's last performance in Adelaide for 2004.

The Trio will perform the brand new piano trio, *The Maiden and the Well Spirit* by Elena Kats-Chernin as part of its Youthful Masters national tour at Elder Hall from 2.30pm on Sunday, November 21. Other composers on the program include Mozart and Schubert.

For Kats-Chernin, who grew up in Russia, *The Maiden and the Well Spirit* is unashamedly her most Russian piece, and is also her first narrative piece. It is based around a fictional Russian tale of a young girl who falls in love with a young boy (a well spirit) who hypnotises her and takes her down into his well, where she drowns. The boy eventually transforms the young girl into a beautiful water lilac to bloom forever next to his well.

Macquarie Trio Australia pianist Kathryn Selby says: "My colleagues and I are looking forward to the collaboration between Elena and us. It is not every day we have the opportunity to work so closely with the composer of a work we are to perform, and a world premiere is always a genuinely exciting event for performers, composers and audiences alike."

### Giveaway

The *Adelaidean*, in conjunction with Neil Ward Publicity, has two double passes to the Macquarie Trio Australia's Youthful Masters concert to be held at Elder Hall on Sunday, November 21 at 2.30pm.

To enter, phone *Adelaidean* acting editor Ben Osborne on (08) 8303 5414. The first two callers will receive one double pass each.

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# Beef traders up to the challenge

A proposed red meat supply chain from South Australia to Singapore has won its developers the 2004 University of Adelaide Entrepreneurs' Challenge (Echallenge).

Barossa Valley-based Kalperri Trading were recently announced as the competition winners at the Echallenge final awards dinner, hosted by key sponsor Hewlett-Packard and MCed by Channel Seven newsreader Graeme Goodings.

The Echallenge provides a launch pad for early stage companies – with each company consisting of at least one University of Adelaide student – to showcase and gain support for their new business concepts. It aims to stimulate innovation, entrepreneurship and create commercial entities from viable business ideas.

Second prize in the competition went to Microbric, a company developing an electronic construction set based on the concepts of Lego and Meccano, and third went to Track to Track, a company aiming to launch Australia's first racehorse magazine to enable the trading of 1.2 million racehorses across the country.

Kalperri Trading consists of David Rutley, who is completing his PhD in animal selection and marketing at the university and is currently Business Development Officer for Biometrics SA, and Chris Duffield, a prime lamb producer in the Barossa Valley.

Their concept is based on statistical techniques, which analyse product quality and customer satisfaction. These techniques quantify product consistency and reward producers for making small continuous improvements in product quality.

"I am thrilled to win the University of Adelaide's Echallenge and this triumph has brought me one step closer to realising my dream of commercialising Kalperri Trading," Mr Rutley said.

"Our business concept benefits South Australia in many ways. We are

rewarding producers for the quality of their beef, and in return, South Australia is gaining recognition from Asian importers on the quality of our produce.

"I am extremely grateful to the University of Adelaide and Hewlett-Packard for giving me this opportunity through the Echallenge program."

Echallenge project manager Ms Marissa Haltis said this year's competition was a fantastic success.

"The teams that competed should be extremely proud of their efforts

David Rutley (left) and Chris Duffield celebrate their win  
Photo by Mark Spaven

– even picking the five finalists was very hard for the judging panel, let alone the overall winner," she said.

"I am also very grateful for the outstanding support which the South Australian business community continues to give this competition. Without their assistance and encouragement, it would not be the success it is."



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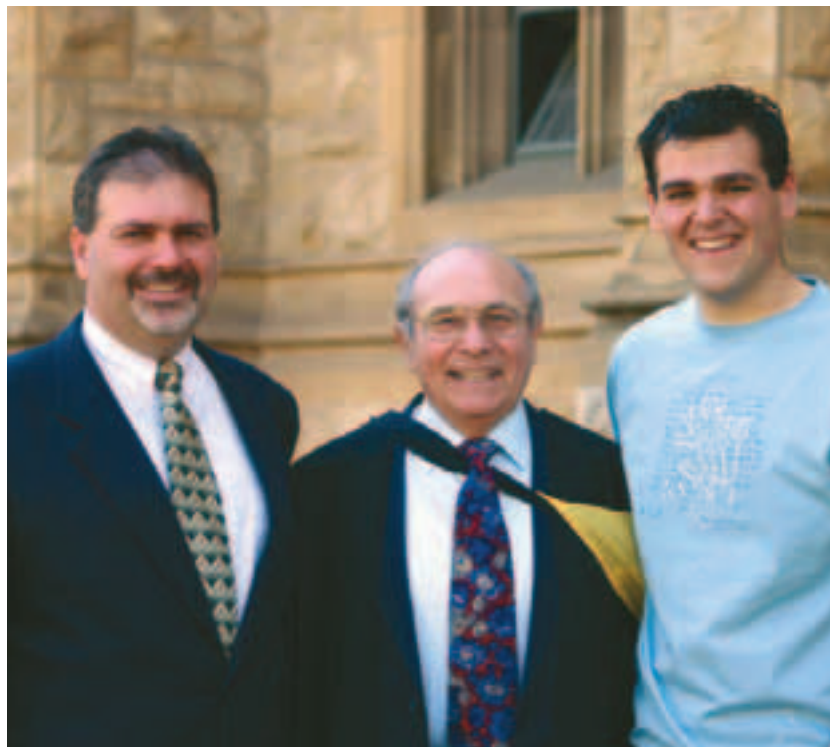
# Golden celebration for Grasso family

For one family, the University of Adelaide is home to three generations of achievers.

Rosario Grasso first graduated from Adelaide in 1954 with a degree in Science and last month celebrated the Golden Jubilee of his graduation at a ceremony in Bonython Hall.

After 1954, Rosario went on to study Honours and then Masters in Science (graduating in 1961) and later followed a career as a geologist. He worked for Geosurveys of Australia Ltd for seven years, a company specialising in South Australian geology, mineralisation and natural resources, and was also a consultant for Fitzpatrick, Johnson and Associates Pty Ltd for two years before becoming a freelance Geological Consultant.

The tradition of education continued for the Grasso family with Rosario's son, Alfio, who graduated from the University of Adelaide in 1979 with



Three generations of Grassos (from left) Alfio, Rosario and Anthony  
Photo by Ben Osborne

a Bachelor of Science (Mathematical Sciences) and 1980 with a Bachelor of Engineering (Hons) in Electrical Engineering, and now Alfio's sons are also studying at Adelaide. Anthony is in his final year of a Bachelor of Biotechnology and David is in his first year of Mathematical Sciences.

"I am very proud that my grandsons chose to study at Adelaide," Rosario said. "I'm as proud as a father and grandfather can be."

This year also marks Alfio's Silver Jubilee, having graduated from Adelaide 25 years after his father, and he has rejoined the university,

working as a Research Associate in the School of Electrical and Electronic Engineering.

Rosario said the Golden Jubilee brought back a lot of memories of his graduation day 50 years ago.

"I enjoyed the ceremony very much," he said.

Although Rosario has many memories of his uni days, a few in particular stand out.

"I had a marvellous time at Adelaide," Rosario said. "It was a lot of hard work but I made many good friends.

"My favourite memory was meeting all the people and especially being a student in Professor Douglas Mawson's last class before his retirement," he said.

Rosario said he has definitely seen many changes at the university from when he was a student.

"University was nothing like it is today. The sheer number of people; classes were a more private affair, and we all had to come to university in suits!"

Story by Natalie De Nadai

## 04 Alumni Events

### MBA Chapter: Guest Speaker Series No. 4

The next speaker in this series will be Dr James Bailey from George Washington University, on "Leading Change through Emotional Intelligence".

Date: Monday 8 November  
Time: 6pm for 6.15pm - 8pm  
Venue: AGSB, NAB Room 5th Floor, 233 North Terrace, Adelaide  
Cost: MBAAA members \$15, non-members \$20

For more information, visit [www.adelaide.edu.au/alumni/ne/events.html](http://www.adelaide.edu.au/alumni/ne/events.html) or email [alumni@adelaide.edu.au](mailto:alumni@adelaide.edu.au)

### Friends of the Barr Smith Library: Jack Turner

Jack Turner, Rhodes Scholar and MacArthur Foundation Junior Research Fellow will be speaking about his book, *Spice*.

Date: Thursday 18 November  
Time: 6pm for 6.30pm  
Venue: Ira Raymond Exhibition Room, Barr Smith Library  
RSVP: Patricia Hawke, phone + 61 8 8303 4064 by 16 November

For more information, visit [www.adelaide.edu.au/alumni/chapters/library\\_chap.html](http://www.adelaide.edu.au/alumni/chapters/library_chap.html) or email [phawke@library.adelaide.edu.au](mailto:phawke@library.adelaide.edu.au)

### Cornell Chapter

The Cornell Chapter is holding its Annual Dinner and AGM and has invited Professor Colin MacMullin, Dean of Education at Flinders University, to speak. The program also includes music from the State Opera by young artists and Elder School of Music graduates Patrick Lim and Anthony Hunt. Numbers are limited, so book early!

Date: Friday 5 November  
Time: AGM 6pm; Dinner 7pm for 7.30pm  
Venue: AGM: Senior Common Room; Dinner: Ballroom, St Mark's College, North Adelaide  
Cost: \$40  
RSVP: Alumni, Community Relations and Development Office, telephone on +61 8 8303 6356, fax +61 8 8303 5808, or email [gaynor.tyerman@adelaide.edu.au](mailto:gaynor.tyerman@adelaide.edu.au).

For more information about Chapter and Network events, visit the Alumni, Community Relations and Development Office website at [www.adelaide.edu.au/alumni](http://www.adelaide.edu.au/alumni), or call the office on +61 8 8303 5800.

# Hi-tech flames heat up The Ring

Adelaide engineers are making sure that the State Opera's long-awaited performance of Wagner's Ring Cycle will go up in flames.



Photos clockwise from left: The Line of Fire being tested in the Festival Theatre; Mechanical Engineering PhD students Adam Langman and Grant England getting fiery in the workshop  
Photos courtesy of Dr Richard Kelso

The same team that developed the Olympic flames for both Sydney and Athens has also developed the hi-tech fire effects for *Der Ring des Nibelungen*, Wagner's epic series of four operas exploring the ideas of love, passion and power.

Performances of The Ring are rare and thousands of international and interstate Ring fans are expected to flock to Adelaide later this month with the cycle beginning in the Festival Theatre on November 16.

For the Adelaide team, it will be the culmination of years of researching, testing and developing flame technologies that complement the grand scale and feel of the production.

Two major flame effects will be in operation during The Ring: a "Ring of Fire" and a "Line of Fire". The Ring of Fire consists of 12 burners arranged in a circle around a rising platform, while the Line of Fire extends more than 18m across the back of the stage.

The design and development work was performed at Adelaide University Research Park – Thebarton Campus by staff and postgraduate students from the School of Mechanical Engineering. The final product was manufactured by FCT-Combustion.

"Developing the technologies for The Ring was different in many ways to developing those for

the Sydney and Athens Olympics," said Associate Professor Gus Nathan.

"For the Olympics, we had to have flames which worked well in the open air, particularly the flames for the cauldron, which was obviously well away from people and needed to be highly visible.

"For The Ring, we had to design effects for an enclosed, indoor venue and which had to be visually spectacular, but also allowed the performers in the operas to be safe and comfortable.

"Safety was the major concern for us – we didn't want to create flames that looked impressive but were too large or hot for their surroundings or the singers who would be performing in close proximity."

Senior lecturer in the School of Mechanical Engineering, Dr Richard Kelso, said the effects for the State Opera reinforce how well the university combines with industry to make enduring and significant contributions for people around the world.

"This has been another successful collaboration with our industry partner FCT-Combustion," Dr Kelso said.

"For the Olympics, we took Adelaide to the rest of the world and showed what we can do – and now with The Ring, the world will be coming to Adelaide to experience it first hand!

"It has been fantastic for us to be involved in major sporting and arts events like these, because they have an impact on a lot of people around the world – and that means our work does too."

Story by Ben Osborne

## Cultural Conversation

Associate Professor Nathan and Dr Kelso will be among the guest speakers at the free Cultural Conversation being held on Wednesday, November 10 from 1pm to 2pm in the Ira Raymond Room at the University of Adelaide's Barr Smith Library.

Along with the set designer for the State Opera's Ring Cycle, Michael Scott-Mitchell, they will speak on "From the Olympic torch to Wagner: a transformation of a simple flame to a spectacular special effect".

Entry is free, and all are welcome. A Wagner memorabilia exhibition will also be on display.