Engineering research to improve rail track safety

Engineering researchers at the University of Wollongong have discovered an innovative way of stabilising railway tracks to cater for modern high-speed trains that carry heavy loads.

Research students working under the guidance of Professor Buddhima Indraratna, of UOW’s Department of Civil, Mining and Environmental Engineering, have found that inserting plastic (polymer) grids underneath ballast and the placing of a synthetic fabric to separate the foundation soil from the overlying rock particles can make the railway tracks withstand much higher dynamic loads imposed by the passage of fast trains.

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$8.4 million broadband link announced

The Federal and State Governments will provide $8.4 million in funding to allow for fibre optic telecommunications linking the University of Wollongong’s main campus and the new Wollongong Innovation Campus at Fairy Meadow to Sydney.

“This is one of the most major infrastructure achievements in the University’s history – it is of critical importance to the future of UOW,” Vice-Chancellor, Professor Gerard Sutton said.

The project is due to start later this year and is expected to take about seven months to complete.

Professor Sutton said the announcement would ensure that research growth at the University would not be impeded by a lack of affordable and reliable bandwidth link to Sydney.

“This will ensure our researchers are able to work at a level comparable to their metropolitan counterparts and, in turn, colleagues of the University’s researchers based in Sydney will be able to take advantage of the high bandwidth,” he said.

The Vice-Chancellor said the Wollongong Innovation Campus could now be assured of genuine broadband access to the world at very high reliability.

The proposal resulted from collaboration between the University, the Office of Information Technology in the NSW Department of Commerce, the NSW Premier’s Department and the NSW Rail Infrastructure Corporation’s communications unit, Argus Telecommunications, and Australian Research Education Network Advisory Committee (ARENAC).

The total cost of the project $8.4 million comprises funds of $4.2 million from the Federal Government through ARENAC; $3.4 million from Argus Telecommunications (part of the State Rail Infrastructure Corporation); and $800,000 from the NSW Premier’s Department and UOW.
Regional universities have a special responsibility

Vice-Chancellor Professor GERARD SUTTON prepared this report for the Business Higher Education Round Table B-HERT News July edition that focused on the “Regional Provision of Higher Education”. This is an abbreviated version of his report.

Australia’s regional universities have the potential, indeed the responsibility, to provide much more than higher education to their communities.

At the University of Wollongong, we see our role as being the engine to drive the economic as well as the social and cultural development of the Illawarra region of New South Wales. We have the capacity to generate increased employment and to attract new industries and investment to the region, and a responsibility to utilise that capacity.

That responsibility is set out in the University’s Strategic Plan, and has become an increasingly important focus for the University in recent years.

To put this into context, the City of Wollongong has a long history as the industrial heartland of the nation, with its economy based on steel production and coal mining through much of the 20th century.

That reliance was severely tested in the 1980s, when the then BHP started a rationalisation program at its Port Kembla Steelworks that has seen the workforce cut by around 75 percent from more than 23,000 to around 6000. That process has been crucial to the continued viability of the steel-making operation, and has seen the plant emerge as one of the most modern and efficient in the world, producing cost-effective, quality steel for domestic and international markets. A lean, efficient BHP Steel, as the company is now called, is still the major employer in the region, but after the downsizing of its workforce other significant players needed to emerge to help drive a broadening of the regional economy, and particularly to generate employment.

Taking up the challenge

The University of Wollongong has taken up that challenge. From a student population of around 3000 in 1982, UOW now has 14,000 students and 1500 staff, who contribute an estimated $1.3 million daily into the regional economy directly and indirectly in the form of wages and the consumption of goods and services. This translates into an estimated employment impact of close to 6400 direct and flow-on jobs and means we are one of the most significant economic entities in the Illawarra.

Capitalising on our established reputation as a centre for research and development in Information Technology and Telecommunications, we are now working with all tiers of government as well as corporations to secure a major role for the region in the “knowledge economy” of the 21st century.

We are the driving force behind the Wollongong Innovation Campus, an IT and T research and development precinct that will cement the Illawarra Region as a national Centre of Excellence in this field. The New South Wales Government is a strong partner, having contributed $16 million in infrastructure funding late last year. Presenting the cheque, the Premier Bob Carr said the campus would “power the growth of highly skilled jobs and new business opportunities” and that the new jobs would be the “economic dividend for the Illawarra”.

This project will eventually employ more than 4500 people, and represents a potential capital investment of $300 million. It will indeed provide a significant economic dividend for the region.

International connections

Regional universities can also provide their communities with international links on a scale that would not otherwise be possible for areas outside capital cities. At the University of Wollongong, we see ourselves as providing a bridge for the region to the international community.

There are now around 3000 overseas students from 70 countries enrolled at the University, who will be forever connected with Wollongong. In years to come, many of those graduates will attain positions of influence around the globe in politics, industry and other fields. They will remember the University where they gained the qualifications that set them on their career paths, and the region and country where they lived. We will forever be part of their lives. Our aim is to make their experience with us as rewarding and memorable as possible, as well as maintaining our links through Alumni connections.

Strong partnerships

On a regional level, we have strong partnerships in research and co-operative programs with Illawarra-based industry. Significantly, we have a long-standing relationship with BHP Steel and work closely with that company on a number of important initiatives and projects, including the BHP Steel Institute for Steel Processing and Products. Other local partners include the Illawarra Area Health Service, Integral Energy and Metal Manufacturers, a major international supplier of copper products based at Port Kembla, which is involved in our Institute for Superconducting and Electronic Materials.

They complement our national and international research partnerships with major corporations, foundations and government agencies from Australia and overseas.

Core responsibility

Clearly, though, regional universities’ most important responsibility is to provide higher education opportunities to the students from their areas. Statistically, high school students in regional Australia are naturally disadvantaged, with University Admission Index scores lower than their capital city counterparts. There are a number of reasons for this, including the fact that many students in regional areas come from homes where their parents don’t have tertiary qualifications, so they lack educational support mechanisms at home. Some also come from high schools that are classified as disadvantaged, for socio-economic reasons.

The University of Wollongong currently offers Illawarra students a bonus of three UAI points to address disadvantage and help them achieve entry to our courses, but such a system has limitations.

It is preferable to cater for this natural disadvantage by a combination of support mechanisms that will lift the UAI across the region. These include working with high schools to provide specialist support for teaching staff and students, by providing bridging programs through TAFE colleges, and by instituting summer schools in subjects like mathematics and chemistry designed to lift standards among local Higher School Certificate students.

Therefore, an important responsibility of universities in the regions is to provide aspirational leadership through the pursuit of excellence in education, because it is only through education that socio-economic disadvantage can be removed and each person achieve their full potential.
Government announces
Wollongong’s inclusion
in regional funding pool

The Federal Government has announced that the University of Wollongong will receive funds totalling almost $4 million over the next four years through the Government’s regional loading initiative.

The 1.5 per cent loading, sought by the University, is in recognition of the close links that UOW has within the community and to assist with the higher costs faced by regional universities such as Wollongong.

The University’s main campus had been excluded from regional funding, based on its population size, when the Budget was brought down in May but the University and regional MPs lobbied the government to reconsider the decision. UOW argued that with a Wollongong population of 257,000 the University was borderline to be considered for regional loading funds. The cut-off for support under the program had been set at 250,000.

The Minister for Education, Training and Youth Affairs, Dr Brendan Nelson, made the announcement in Canberra in a telephone hook-up to the Vice-Chancellor, Professor Gerard Sutton on September 15.

Present during the telephone hook-up were the Member for Gilmore, Ms Joanna Gash, and the Member for Eden-Monaro, Mr Gary Nairn. The two MPs, along with the Member for Hughes, Ms Danna Vale, were among politicians who strongly supported the University in its bid to have the regional money.

The Vice-Chancellor said he greatly appreciated the Minister listening to the issues raised by the University and he also particularly welcomed the support he received from the three MPs - Ms Gash, Mr Nairn and Ms Vale.

Professor Sutton said the announcement was now clear acknowledgment of the vital role that the University plays within the region.

The Vice-Chancellor said it must be stressed that the University of Wollongong would receive money from a new funding band and the decision did not mean that money would be taken from those regional universities that had already qualified.

The Federal Government has earlier agreed to provide regional funds to UOW’s satellite campuses of Bega (7.5 per cent loading); Nowra, Batemans Bay and Moss Vale (5 per cent loading).

Railway safety on track

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Professor Indraratna said that the flexible but strong polymer grids when placed within the ballast bed would introduce internal resistance against the ballast particles wanting to move horizontally against each other during the passage of trains - thereby reducing the risk of fracturing of particles.

At the same time, the synthetic geo-fabrics will prevent the upward movement of foundation soils in to the voids of the ballast bed making the ballast particles lose friction as well as blocking drainage during wet weather, he said.

“The result is a novel rail track in which natural geological materials are blended with synthetics to give a stronger composite with greater load bearing capacity and reduced settlement," according to Professor Indraratna.

The rail track research has been undertaken within the Cooperative Research Centre for Railway Engineering and Technologies, funded by the Federal Government, where close to $1 million a year is received in research grants. The funding has enabled the design and construction of several items of unique, large-scale testing equipment to simulate the conditions that occur in rail tracks. Professor Indraratna said the research findings based on these test rigs was certain to lead to Australian railway authorities modernising the old fashioned tracks.

He said Australian geosynthetic companies were extremely excited because of the huge potential for using their polymer products in national railway tracks that are among the longest in the world.

In NSW alone, more than $12 million is spent annually on replacing the crushed ballast on rail tracks over regular track maintenance periods.

“With synthetic grids and fabrics used in railway tracks, this maintenance cycle can be significantly extended, thereby saving the rail industry several million dollars a year,” Professor Indraratna said.

He said the cost of the synthetics was actually much cheaper than the cost of quarrying good quality rock for ballast, which would extend the life cycle of ballast and reduce the frequency of maintenance. Professor Indraratna travelled overseas during September to speak at various international conferences in the USA, Europe and South-East Asia about some of his team’s findings.

Functional Foods Centre
established at UOW

Australian consumers are set to benefit from the establishment of a new Centre of Excellence at the University of Wollongong in partnership with the CSIRO Division of Health Sciences and Nutrition and Food Science Australia.

The National of Excellence Centre in Functional Foods will receive $5.5 million over four years from the Australian Government and the National Food Industry Strategy (NFIS).

It will apply its expertise to the commercial application of research and learning on ‘functional foods’, which are described as foods that support human health and wellbeing, providing health benefits beyond basic nutrition.

UOW Vice-Chancellor Professor Gerard Sutton congratulated the new Centre’s Director Associate Professor Linda Tapsell and the team in the Smart Foods Centre, also based at the University, on securing funding for the Centre.
Inspiring speakers urge students to follow their dreams

Rachael Pickworth inspired and Tim Cope amazed more than 200 Year 11 students from southern Sydney and Illawarra high schools at the University of Wollongong’s annual Role Model Breakfast in August.

But both speakers had the same message for the students: follow your passion, if you want to be happy, successful and fulfilled.

The University hosts the Role Model Breakfast each year to give talented high school students from its main drawing areas in the Illawarra and Sutherland Shire an insight into what can be achieved by following their dreams.

Each year inspirational people who achieved extraordinary things at a young age talk to the students about their experiences

Rachael Pickworth was inducted into the Australian Business Women’s Hall of Fame in 1999 when she was just 27 after the glittering success of her business, Gifted, which she started from the loungeroom of her mother’s home when she was 19.

She spoke of the power and freedom that teenagers have before they face the responsibilities of adulthood, including families and mortgages, and urged them to follow their dreams. She said personal success was not about making money, and that young people should pursue a future based on their passions and what interested them, not on what might be the most financially rewarding.

Tim Cope, named 2002 Young Australian Adventurer of the Year, cycled 10,000 km across Russia and Mongolia in 1999-2000 when he was 19 and rowed a wooden boat 5000 km through Siberia to the Arctic Ocean in 2001. His passion for adventure and the road less travelled has been captured in his documentary, Off the Rails, On the Back Roads to Beijing, and his book Riding the Taiga co-authored by Chris Hatherly who shared the cycling trip.

Tim showed the students video highlights of the epic cycling journey, and spoke of the extraordinary challenges that had to be overcome on the way. He also urged the students to follow their passion.

“If you’ve got something that you enjoy and love, you should follow it,” he told them.

Wollongong number 1 again

An independent guide has rated the University of Wollongong as the number one university in the country for the fourth successive year in the two pivotal categories of the ‘educational experience’ and ‘graduate outcomes’ for students.

UOW Pro Vice-Chancellor (Academic) Professor Rob Castle said the two categories were the core outcomes of any university and UOW has topped the country.

“And we have not only done it four times in a row but we have actually pulled away from the field this year,” Professor Castle said.

The 2004 edition of the Good Universities Guide, to be distributed in newsagents and bookshops throughout Australia, has given UOW a ranking of 28 stars out of a possible 30 for the categories of educational experience and graduate outcomes.

UOW’s nearest rivals were on 24 stars. Last year, UOW scored 27 stars with the nearest rival on 25 stars.

The category of educational experience includes: (1) A graduate rating, (2) Staff-student ratios and (3) Staff qualifications; while graduate outcomes includes: (1) Getting a job, (2) Positive graduate outcomes and (3) Graduate starting salary.

$200,000 brain camera launched at University

The $200,000 Beta Imager Camera was launched at the University of Wollongong on August 29, marking the end of a highly successful fundraising campaign which was embraced by the Illawarra community.

The ‘brain camera’ will be used by the schizophrenia research group at the University and will be the only one if its kind operating in the Southern Hemisphere.

Don McDonald from The Neuroscience Institute of Schizophrenia and Allied Disorders (NISAD) started recruiting support for purchasing the Beta Imager for the University just over a year ago.

The Wollongong Lord Mayor’s Schizophrenia Awareness Project Committee recently met the $200,000 target thanks to donations from organisations and individuals from the community.

Mr McDonald spoke at the launch at the University on behalf of NISAD. Other speakers included Stephen Mayers Chairman of the Lord Mayor’s Schizophrenia Awareness Project, Professor Philip Ward Scientific Director of NISAD, Professor John Patterson Pro Vice-Chancellor at UOW, Marilyn Mitchell who is living with Schizophrenia, Barry Wood representing City Coast Credit Union, Mitchell Murphy editor of the Illawarra Mercury, Member for Wollongong Noreen Hay and Wollongong Lord Mayor Alex Darling.

$200,000 brain camera launched at University
Centre for Health Services Development wins $1.5mil grant

The University of Wollongong’s Centre for Health Service Development (CHSD) has been recognised for the significant contribution it has made to the funding and delivery of health services in NSW over the past 10 years by winning a NSW Health Capacity Building Infrastructure Grant.

Awarded by the NSW Health Department, the grant is valued at $1.5 million ($500,000 a year for three years).

Director of the CHSD, Professor Kathy Eagar, said the grant would further enable the Centre to maintain and extend its existing close working relationships with NSW Health and the NSW health system more broadly. She said the funds received under the grant would be used to build the CHSD’s capacity to interpret and use research and development to inform health policy and practice.

“This will include an increased focus on national and international collaboration, staff career development, and postgraduate student research. My goal is that the CHSD continues to operate as a prestigious and exciting centre and continues to attract, retain and develop excellent health service researchers,” Professor Eagar said.

The grant will allow CHSD to further improve its national and international reputation as a centre of excellence in: Casemix classification across settings; Health and community care financing; Care co-ordination and integration; Health care outcomes; Health service delivery and organisation, and Management decision-making.

The CHSD was established in 1993 to undertake a continuing program of active research into methods to improve the management and provision of health services with the goal of making a significant contribution to improving the funding and delivery of health services in Australia.

Since its establishment, it has undertaken about 150 health services research, development and evaluation projects, ranging in size from $10,000 to $1.5 million. These have included designing funding models for a number of programs, better models of aged care, boarding house reform, rehabilitation services and hospital emergency departments.

Professor Eagar Director is pictured third from right with the team from the Centre at the University of Wollongong.

Navy and University sign maritime research agreement

Senior personnel from the Navy and the University of Wollongong recently participated in a Memorandum of Understanding signing ceremony at the University.

The Navy was represented by the Director General of Navy Strategic Policy and Futures, Commodore Russ Baker, and the Director of Sea Power Centre Australia, Captain Richard Menhinick.

UOW was represented by the Pro Vice-Chancellor (Research), Professor Margaret Sheil, together with the Director of UOW’s Centre for Maritime Policy, Professor Martin Tsamenyi and the Centre’s Naval Research Fellow, Commander Barry Snushall, RAN. The Navy representatives initially met the Centre for Maritime Policy staff and were briefed on activities of the Centre and visited their new accommodation on the campus.

The Agreement signed covered a new five-year directed research program between the Centre for Maritime Policy and the Navy mainly focused on research and other activities concerning ocean governance, maritime strategy and maritime security.

The relationship between the University and the Navy has existed since 1994 and the formation of the Centre for Maritime Policy.

Fels focuses on competition law

Former head of the Australian Competition and Consumer Commission (ACCC) Professor Alan Fels kept the focus on competition during his recent visit to the University.

The new Dean of the Australian and New Zealand School of Government delivered the University’s inaugural Economic and Social Policy Lecture on ‘The Future of Competitive Law’.

During his speech, Professor Fels said that competition law really took off in 1990 and now the momentum needs to be sustained despite big business pressures to water it down.

Professor Fels taught at Monash University before becoming Chairman of the Prices Surveillance Authority in 1989, adding the job of Chairman of the Trade Practices Commission in 1991. The two organisations were combined to form the Australian Competition and Consumer Commission in 1995. The School of Economics and Information Systems plans to hold a major public lecture annually beginning with the lecture by Professor Fels.

The Australian and New Zealand School of Government, based in Melbourne, is a joint initiative of the Australian and New Zealand Governments and 10 universities and business schools. It provides postgraduate education for emerging leaders and executives in the public and government sectors.

Professor Alan Fels at the lecture.
Visiting scientists discuss latest techniques in cancer treatment

Scientists from the United States, Italy, France and Israel visited the Centre for Medical Radiation Physics at the University of Wollongong in August during their visit to Australia to attend the World Congress on Medical Physics and Biomedical Engineering being held in Sydney.

Their visit, which included the presentation of seminars, was part of the overall Congress program.

The program at Wollongong focused on the second International Workshop on ‘Mini Micro Dosimetry (MMD) and its Application’ which includes looking at the latest techniques for radiation therapy in the treatment of cancer patients.

The MMD works in collaboration with the Memorial Sloan Kettering Cancer Centre in New York to address a range of important issues of radiation dosimetry (measurement of medicine doses) in radiation therapy and radiobiological effects of radiation in medicine and space environment.

One of the visiting scientists from the United States, Dr John Dicello, from Johns Hopkins University in Baltimore, has been working with scientists from UOW to study the radiation levels in space and whether or not astronauts are at a greater risk of developing cancer from space travel.

Dr Dicello has collaborated closely with UOW’s Professor Anatoly Rozenfeld in an attempt to determine the cancer risk in space.

In regard to space environment, a tiny radiation monitoring device has been developed at UOW which will orbit the earth on the next generation of United States satellites and spacecraft, gathering vital information on radiation levels to help NASA predict the radiobiological effect of cosmic radiation. It will help NASA determine the safe levels of exposure for astronauts aboard space shuttles and orbiting space stations.

Following a formal seminar at the University, the visiting scientists toured the Centre for Medical Radiation Physics site and CT scanner and gamma camera donated by GE Medical Systems for medical physics education and research.

Bega centre a major boost for nurse retention

The recruitment and retention of nurses and medical practitioners in south east NSW gained a major boost with the joint University of Wollongong/Australian National University/Southern Area Health Service Clinical Education Unit launch at Bega Valley Hospital on 4 August.

Among guests attending the launch were the Federal Minister for Education, Science and Training, Dr Brendan Nelson; the Member for Eden-Monaro, Mr Gary Nairn; State Member for Bega, Mr Andrew Constance; the Deputy Mayor of Bega Valley Shire Council, Councillor Bill Taylor; the Vice-Chancellor of the University of Wollongong, Professor Gerard Sutton; Dean of the Australian National University’s Medical School, Professor Paul Gatenby; and Chair of the Southern Area Health Service Board, Mr Gratton Wilson.

The Federal Government announced in 2001 that the University of Wollongong had been awarded 25 HECS-funded undergraduate positions to establish a Bachelor of Nursing Program through its Bega Education Access Centre.

The Bega community had been very concerned about the lack of educational opportunities in the region and specifically about the lack of registered nurse recruitment and retention. Efforts by the community via the Nurse Education Project have resulted in an increase in the number of HECS-funded places available to Australian and New Zealand citizens and Australian permanent residents. Among them, 20 students admitted annually will enter a Rural Stream that will provide rural educational experiences in southeast NSW throughout the four-year course.

The focal point of these experiences will be in the third year of the course - students will complete their entire year three studies in the regional centres surrounding Canberra, including clinical settings in the Bega area.

Pictured below at the opening are UOW Vice-Chancellor Professor Gerard Sutton, Education Minister Dr Brendan Nelson, Education Centre Coordinator Ann Montague and Member for Eden-Monaro Gary Nairn.
Awards, achievements and accolades

Wollongong farewell Australia’s first female professor of IT

A farewell event was held at the University of Wollongong recently for the University’s Dean of the Faculty of Informatics, Professor Joan Cooper.

Professor Cooper, credited with leading the faculty to a position of international renown across the world, has taken up the position of Pro Vice-Chancellor (Academic) at Flinders University.

Professor Cooper was the Head of the School of Information Technology and Computer Science from 1997-2001, Head of Information and Communication Technology from 1991-1997, and has more than 20 years’ experience within the Information Technology field. As the foundation Professor of Information Technology at the University of Wollongong, Professor Cooper was also the first female IT professor in Australia. As well, she is the co-ordinator of the Centre for Electronic Business Research and her most recent work is in Electronic Commerce and Health Informatics.

And retirements also for...

The Head of Civil and Mining Engineering at the University of Wollongong Robin Chowdhury who was farewelled by colleagues and friends after 31 years.

As well, a retirement dinner was held on September 12 for Professor Martin Bunder and Associate Professor Phillip Laird. Professor Bunder was at UOW for 34 years and Professor Laird for 29.

University gains first member to Australian College of Health Informatics

A lecturer in UOW’s School of Information Technology and Computer Science, Dr David Bomba, has been accepted to become a member of the prestigious Australian College of Health Informatics.

Membership is based on an applicant’s research contribution to the Australian health informatics community.

Wollongong academic receives Bougainville peace process plaque

The Papua New Guinea Government recently presented plaques expressing its appreciation for the contributions that the United Nations, the neutral regional Peace Monitoring Group (PMG), and others had made to the Bougainville peace process. Professor Edward (Ted) Wolters, who has been on leave from his post as Professor of Politics at the UOW to act as Adviser to the Papua New Guinea Government on the Bougainville peace process, was among the individuals to receive a plaque from the Papua New Guinea Minister for Inter-Government Relations, the Hon Sir Peter Barter.

CEDIR educationalist awarded founding fellowship for quality teaching

Maureen Bell, Senior Lecturer, Educational Development at the Centre for Educational Development and Interactive Resources (CEDIR), at UOW was awarded one of the founding fellowships in a new scheme designed to provide professional recognition for quality tertiary education teaching.

The Higher Education Research and Development Society of Australasia (HERDSA) Fellowship is an internationally recognised qualification that recognises academic staff who facilitate high-quality learning according to defined standards.

The scheme is based upon a peer review process, through cross-institutional networks of teachers engaged in critical reflection into teaching practice and the learning process.

NSW Governor awards Churchill Fellowship to Wollongong geographer

Senior UOW Research Fellow, Dr Michael Adams, received a Churchill Fellowship from NSW Governor, Professor Marie Bashir, at a ceremony at Government House in August.

Such fellowships must run in the family as Dr Adams’ aunt was one of the first ever recipients of a Churchill Fellowship in 1967. She is a psychologist who went to the USA while Dr Adams is a geographer who is going to Sweden. Dr Adams will leave for Sweden in March to conduct research on the relationships between Saami (indigenous people of Scandinavia) and national parks agencies. Each

Summer the Saami graze reindeer in the national parks that make up the Lapponia World Heritage Area.

Dr Adams plans to spend two months in Sweden interviewing senior bureaucrats, national park rangers and indigenous reindeer herders in the country’s national parks.

Wollongong academic awarded 2003 NSW young rural science award

Wollongong academic Dr Wendy Russell was named the NSW winner of the 2003 Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry at a ceremony at Parliament House on September 18.

Dr Russell, who lectures in biochemistry and biotechnology at UOW, was presented with a trophy and funding to go towards a one-year research project by Warren Truss the Federal Minister for Agriculture, Fisheries and Forestry.

The funding will be used by Dr Russell to help design and develop a framework to evaluate the potential of genetically modified crops to contribute to improved sustainability in rural Australia.

Doctoral student embarks on multicultural arts course

A UOW doctoral Creative Arts candidate, Canadian Lycia Danielle Trouton (pictured), has completed the first week intensive of a Multicultural Arts Professional Development (MAPD) course – an Australian national initiative of the arts, together with the Australian Council. MAPD brings together Creative Arts practitioners, curators and managers from around Australia.

Ms Trouton said the program was a great practical adjunct to theoretical academic work for her Doctorate of Creative Arts in which her thesis focuses on the role of performative art, memorial and textiles in fostering communication in post-colonial, multi-cultural communities.

Fotis Kapetopoulos, who initiated and runs MAPD, will visit Wollongong at the end of this year to discuss Ms Trouton’s creative art project, The Irish Linen Memorial. He will also network with Associate Professor Gerry Turcotte of the Canadian-Australian Studies Centre about multicultural issues in the Arts and hopes to make links with the many international postgraduate students.
Eloise on track for Athens Olympics

World University Games 5000 metres gold medallist Eloise Poppett has reluctantly put her studies on hold in an all-out bid for the Athens Olympics.

The Sutherland athlete returned home in triumph from South Korea, where she became the University of Wollongong’s first gold medallist at a World University Games in a heartstopping victory over China’s Zhang Yuhong.

She was joined in the medals by fellow UOW student, swimmer Benjamin Denner who was a member of Australia’s silver medal-winning mens 4 x 100m freestyle relay team and Ryda Tracey who brought home a bronze medal with the water polo team.

Eloise ran a smart tactical race in searing heat, breaking away from the pack with 500m to go then fighting off a valiant challenge from the Chinese athlete in the final 80m.

“Times are irrelevant in championship races,” said Eloise.

“It is all about tactics, and holding something in reserve so that you can respond when someone kicks (inside the last kilometre) and go with them. I was ready to respond, but it ended up being me who kicked when we had 500m to go, because no-one else looked like they were going to.

“The last 80m was really tough. I thought the Chinese girl was going to catch me but I just held her out.”

However, her success helped her decide to defer her studies for an Exercise Science degree at UOW for six months as she strives for selection in the Australian team for Athens.

Eloise will now prepare for the Telstra Series-A athletes series around Australia this summer, culminating in the combined national championships and Olympic trials in February.

“It was a really hard decision to defer, but I’ve just got to give Olympics selection everything I’ve got while I have the chance,” said Eloise, 20, who ran 17 seconds under the qualifying time for the Sydney Olympics before injury cost her any chance of competing. That bitter disappointment has made her all the more determined to qualify for the next Olympics.

She plans to crank up her training regime by running 120 km a week from the 80km she has been running as she prepares for the Series-A, and will also spend a few weeks training at altitude in the Victorian Alps.

Eloise said trying to fit studies into a gruelling training and competition schedule would be too difficult. However, she vowed to return to University to finish her degree.

Researchers target spinal cord injuries

The Kiama Rotary Club hosted a garden party at Hartwell House, Kiama, in September to support the pioneering research of the University of Wollongong’s Intelligent Polymer Research Institute (IPRI) and Melbourne’s Bionic Ear Institute.

The two research organisations have entered a partnership aimed at using “intelligent” polymers (plastics) from IPRI that will not only improve cochlear ear implants but also facilitate nerve repair for those who have suffered spinal cord injury.

The inventor of the bionic ear, Professor Graeme Clark, and the Director of IPRI, Professor Gordon Wallace, were guests at the garden party. The Kiama function represents the overall drive the institutions are making to raise public awareness and seek funds for their research activities.

Since the first bionic ear was implanted in 1978, about 50,000 people in 120 countries have had their hearing restored to some degree. The institute will work with IPRI on a new generation cochlear implant as well as developing a way to give motor function to quadriplegics and paraplegics.

The plan is to place a honeycomb of intelligent plastic between the cut sections of the spinal cord and the honeycomb will then be filled by adult stem cells taken from the patient. The aim is to control the growth of the nerves from the top to the bottom to restore the motor nerves. To assist in this research, the Bionic Ear Institute is currently negotiating with the University to establish an annexe at the planned Innovation Campus at Fairy Meadow.

Professor Alan MacDiarmid, a Nobel Prize winner for chemistry in 2000 for discovering that plastic under certain conditions could conduct electricity, is also working with IPRI.

Professor Wallace (centre) and Professor Clark are pictured below at Hartwell House with Edward Hilliar, 16, who had a bionic ear implant when he was two years old. Edward is a student at Chevalier College in Bowral.