



Dean's Spot

Student numbers for 2006 are looking very promising with undergraduate domestic offers up by approximately 20% and double degree offers up by 50%. All of the double degree students have high TERs, so we are continuing to see an increase in quality as well as quantity.

Also, international student numbers have increased. Word must be spreading about UOW's five star rating in six categories in the 2006 Good Universities Guide and our ranking as Australia's number one university for teaching performance.

Meanwhile, our excellence in research continues. Our Centre for Medical Radiation Physics (CMRP) continues to be recognized internationally and nationally for excellence in cancer research. For example, it has developed new methods of accurately locating and controlling radiation to maximise damage to cancers, whilst greatly reducing damage to surrounding tissues. Recently the Australasian College of Physicists, Scientists and Engineers in Medicine (NSW Branch) held its annual competition for the best research in the field of medical physics. In both Masters and PhD sections students from CMRP were recognized as the best and were awarded the Curie Prize.

CMRP PhD student, Andrew Wroe, received a Fulbright Award for his innovative research into the interaction of proton radiation on the cellular and DNA level. UOW researchers are working on a device that will improve treatment for prostate cancer by reducing unpleasant side effects and, therefore, encourage more Australian men to seek medical advice if they have symptoms of the deadly disease.

The research capability of CMRP has been greatly strengthened by the recent appointment of Professor Peter Metcalfe to a Chair funded by the NSW Cancer Institute. Peter has a distinguished career as a practicing radiation physicist in Australia's major hospitals and brings a wealth of practical industrial experience to the Faculty and the University. We warmly welcome Peter to the Faculty and the CMRP team.



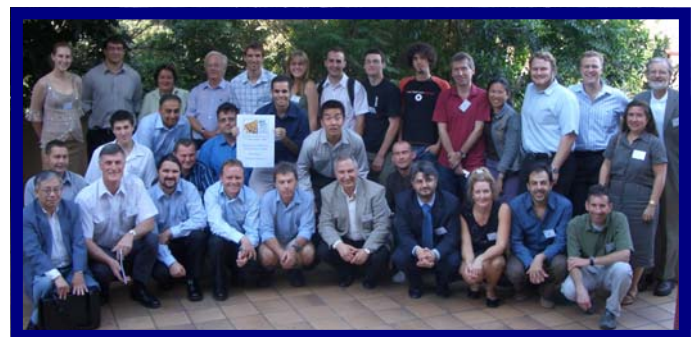
Combating Cancer

In December the Faculty's Centre for Medical Radiation Physics (CMRP) hosted two international workshops at UOW to discuss the latest ground-breaking developments in cancer detection and treatment.

The International Workshop on Micro and Mini Dosimetry (radiation protection and therapy) and the International Prostate Cancer Treatment Workshop had speakers from Johns Hopkins University School of Medicine, the Memorial Sloan Kettering Cancer Centre (USA), the University of Trieste (Italy), Toronto-Sunnybrook Regional Cancer Centre (Canada) and the Institute of Nuclear Physics in Krakow (Poland). Australian radiation oncology institutions also took part, including St. George Cancer Care Centre, St. Vincent's Hospital, Peter MacCallum Cancer Centre and the Illawarra Cancer Care Centre.

Issues covered at the workshops included microbeam radiation therapy applied to brain tumours, the dosimetry of clinical neutron and proton beams, image guided therapy, radiation protection, space science and the effects of radiation on astronauts, photo detectors and prostate brachytherapy.

The conferences will play an important role in improving treatment for prostate cancer and developing new approaches for radiation dosimetry and its application in radiation therapy.



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2005 Honeywell Engineering Summer School

Engineers of the future attended the 2005 Honeywell Engineering Summer School, which was held at UOW in December and was an overwhelming success. There were a record number of applications, which meant that some students were disappointed by not gaining a place.

Eighty Year 11 students were welcomed by Dr. Ian Porter and spent the day participating in organised activities from all engineering disciplines.



2005 Honeywell Engineering Summer School participants

Staff News

Prof Brian Uy, Head of the School of Civil, Mining & Environmental Engineering was recently appointed to Task Committee 5, Composite Design of the American Institute of Steel Construction. This committee contributes to the work of the main committee on Specifications for the structural steel design community and construction industry in the USA. This appointment complements his role as a member of the Technical Committee on Composite Construction of the Structural Engineering Institute of the American Society of Civil Engineers and his roles on similar committees for Standards Australia and the International Association for Bridge and Structural Engineers.

Dr David Nolan is currently overseas negotiating research collaboration into pipelines for hydrogen distribution. The success of the "hydrogen economy" may depend on the ability to safely transport hydrogen to businesses, homes and "gas stations" via pipelines. UOW is well placed to contribute strongly to the research needed to evaluate hydrogen pipe systems.

Visitors to the Faculty

During January a delegation from Tribhuvan University, Nepal visited UOW to promote research collaboration in civil engineering, particularly in the areas of geotechnical and water engineering, including landslide studies. A Memorandum of Understanding was signed by the two Deans of Engineering from UOW and Tribhuvan University, for future staff exchanges and to identify potential research collaboration. Professor Indraratna has been invited to visit Tribhuvan in 2006 to advance collaboration.



L-R: Assoc Prof Shubh Pathak, Assoc Prof Narayan Lal Shrestha, Prof Ram Krishna Poudel, Dr. Bhagwan Ratna Kansakar from the Institute of Engineering, Tribhuvan University, Nepal

Welcome to Dr. El-Mahllawy and Professor Chen Youliang, who are visiting the School of Civil, Mining and Environmental Engineering (CME) for extended periods to conduct research.

Dr. Medhat El-Mahllawy is from the Housing & Building National Research Centre, Egypt. He will be collaborating with Associate Professor Muhammad Hadi in the area of construction materials.

Professor Chen Youliang is visiting from Shanghai University and conducting research with Professor Indraratna and Dr. Shahin on the behaviour of ballasted railway tracks.

Library Training—Research Students

A library training session, aimed at new postgraduate research students, will be held on Thursday, 23 February at 2.30pm. Students who have not attended similar courses are strongly encouraged to attend. The session will cover topics such as searching key engineering databases, locating full text articles, tracking citations and searching the internet for scholarly material. Students wanting to attend should contact lorelle@uow.edu.au

Diary Dates

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| 14 February | Faculty Advisory Committee |
| 21 February | WAC Committee |
| 23 February | Postgrad Student Library Training |
| 28 February | Physics Safety Committee |
| | MMM Safety Committee |
| | CME Safety Committee |