

# Engineering Update - 4/2005 (June)

## NEWS FROM THE DEAN

I recently attended a conference in Liaoning Province China at the invitation of the group of 5 Universities that we have signed agreements with in this province. It was an opportunity to talk with and promote the University of Wollongong to all these Universities, plus the majority of other major Chinese Universities who have also been invited to this conference

On 9 June 2005 at Shoalhaven Campus I gave a guest talk as part of the Visiting Eminent Speakers Program for the Shoalhaven Country Group of Engineers Australia. The topic was the "Application of Robots in Industry" with specific reference to using robots to improve aircraft safety and using robots for ship cleaning.

## BIOTECHNOLOGY ENTREPRENEUR PROGRAM

UOW has been selected as the first NSW University to participate in Young Achievement Australia's Biotechnology Entrepreneur Program, which gives students practical experience in establishing and running a company to commercialise an idea (with a focus in biotechnology).

Three Engineering students are participating: **Mouly Ethiraj, Behzad Fatahi and Brad Winton.**

If any other students are interested in participating, please contact Troy Coyle on 4221 4420 or [tcoble@uow.edu.au](mailto:tcoble@uow.edu.au).

## NEW BOOK – PROF INDRARATNA

*"Mechanics of Ballasted Rail Tracks-A Geotechnical Perspective"* by Indraratna and Salim, published by Taylor and Francis (UK).

A book launch is planned in Portugal at the 6th International Ground Improvement Conference in mid-July during the special session on Rail Track Improvement and Stabilisation.

## TRAILBLAZER

Congratulations to the following Faculty people who have been selected as finalists in the UOW Trailblazer competition:

### Students

Nuri Elbasha "*Enhancing the strength & ductility of high strength reinforced concrete beams*"

Bin Liu and De Weihua Li "*Actuator Joystick for Virtual Reality Applications*"

Luke Scott "*Vacuum membrane distillation*"

### Staff

Prof Shi Xu Dou "*Magnetic field processing to enhance materials performance*"

Dr Dominic Phelan "*Novel Porcelain*"

Troy Coyle will be contacting all applicants to discuss potential commercial opportunities for their ideas.

## EEC REPORT

During the final week of Autumn session the EEC took in assignments for at least 40 different subjects across the Faculty. We took in close to 800 student assignments during this week, which have now all been sorted and distributed to the subject co-ordinators. During the final weeks of session we also have taken in Thesis drafts and progress reports for all disciplines.

The EEC tea ladies have also been very busy providing lunches and morning teas for the following events over the last few weeks - CME PG seminars, High School visits, MMM PG seminars, Physics PG Seminars and Physics meetings.

Although session is now over, the EEC is still busy, looking after the Sub Dean, PG Coursework Co-ordinator appointments and handing back many assignments to students that have been marked by our hard working academics.

## VISITORS TO THE FACULTY

Two Japanese Students will be visiting the School of CME from 1 June 2005 to 1 Sept 2005. The students are **Takashi Suyama** and **Norimasa Hashmoto** both from Tokuyama College of Technology, Shunan, Japan. They will be undertaking research with Muhammad Hadi.

**Mr Stephen Giblett** an Associate at Connell Mott MacDonald (a leading international structural engineering firm) visited the School of Civil, Mining and Environmental Engineering. He gave two presentations to our Civil Engineering students in order to promote structural engineering. Steve is our own graduate and was the structural designer of the UniBar.

## RECENT STAFF ARRIVALS

Name	Position	Working with	Time Period	Project
<b>Candace Gabelish</b>	Associate Research Fellow	Dr Andrea Schaefer	1 Year	DEST Grant
<b>Andreas Broekman</b>	Associate Research Fellow	Dr Andrea Schaefer	1 Year	ARC LP Grant
<b>Ken Agenson</b>	Associate Research Fellow	Dr Andrea Schaefer	1 Year	ARC Discovery Grant
<b>Jung Ho Kim</b>	Associate Research Fellow	Prof Shi Dou	1 Year	Control of Nano-structure for enhancing the performance of Magnesium Diboride Superconductor by Chemical Doping.
<b>Santos Shrestha</b>	Research Associate	A/Prof Roger Lewis	1 Year	Study & Implementation of Solar Thermal Electron Power Generators with an Efficiency close to the Theoretical Limit funded by NSW Sustainable Energy Research & Development Fund
<b>Dong-Yun Zhang</b>	Visiting	Prof Hua Liu	1 Year	PEM Fuel Cell
<b>Deepankar Choudhury</b>	Visiting	Prof Buddhima Indraratna	1 Month	Development of Cyclic Pore Pressures in Soft Clays and Application of Vertical Drains

## IMPORTANT UPCOMING DATES

	<u>Date</u>	<u>Time</u>	<u>Event</u>	<u>Location</u>
<b>July</b>	5 <sup>th</sup>	2:30	Faculty Advisory Committee	1.105
	12 <sup>th</sup>	2:30	Faculty Education Committee	8.119
	12 <sup>th</sup>	12.30	PG Research Committee	8.119
	19 <sup>th</sup>	2:30	Workplace Advisory Committee	8.119
<b>August</b>	2 <sup>nd</sup>	2:30	School Safety Committees	CME 4.118, MMM 8.119, Physics 15.208
	9 <sup>th</sup>	2:30	School Safety Committees	CME 4.118, MMM 1.111, Physics 15.208
	23 <sup>rd</sup>	2:30	Faculty Research Council	8.119