

Dean's Newsletter

Message from the Dean

Welcome back to those who have been away over the vacation period. It has been a busy time in the Faculty with conferences, advisory board meetings, outreach programmes and visitors. Over the past couple of months I have been involved in a number of exciting initiatives and have highlighted a few below.

The Minister of Public Works, Mr Geoff Doidge, and I have met several times to discuss developing a strategic relationship between the Faculty and the Ministry. We are looking at how we can position Construction Economics and Management and Civil Engineering closer to some of the key strategic challenges of the Ministry.

The National Advisory Council on Innovation (NACI) advises Minister Naledi Pandor on research development and innovation with respect to science and technology. As a member of the council, I chair one of the key committees on Innovation for Development. This is closely aligned to one of EBE's strategic priorities for 2009 – the Foundation for Public Good.

In May I attended the Platinum week in London to talk about the sustainability of the Platinum Group Metal (PGM) sector as a component of the mining industry. During this visit, I held discussions with CEOs from Anglo Platinum, Impala Platinum, Lonmin, Aquarius, Johnson Matthey and the International Platinum Association on the possible investment in the new engineering building.

In furthering the goals of innovation and technology transfer, I have successfully assisted Anglo Platinum in establishing a Beneficiation Fund (similar to the Innovation Fund), with an initial amount of R100 million, which will focus on technology transfer and commercialisation of PGM technologies. This will create opportunities for the Faculty in the areas of Chemical, Electrical and Materials Engineering. The Fund was officially launched in Johannesburg on 23 July 2009.

The Faculty hosted a breakfast for the Western Cape representatives of industry and government to inform them of the activities and strategy of the Faculty. I greatly value these sessions and look forward to ongoing discussions. This will become an annual event with a similar one planned for Gauteng in early November.

I would like to thank all the staff who contributed to the programme for Safety Week. I greatly appreciate the time and effort that you have put into the departmental activities. It is crucial that our students graduate with a full understanding and solid appreciation of safety.

A reminder of the ebe-speaktothedean@uct.ac.za email facility for any questions, comments or suggestions.

Kind regards
Francis



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CONGRATULATIONS



Associate Professor SP Chowdhury and his wife, Dr Sunetra Chowdhury, both from Electrical Engineering, are the co-authors of *Microgrids and Active Distribution Networks*, the result of a three-year collaboration with Professor Peter Crossley of the University of Manchester. Published by the Institute of Engineering and Technology (IET) in the UK under their *Renewable Energy Series*, the book focuses on detailed but comprehensive descriptions of the technologies that will enable future electricity systems. As companion to *Embedded Generation*, published by the IET in 2000, *Microgrids* is a timely publication for practising engineers, researchers and students in an evolving industry.

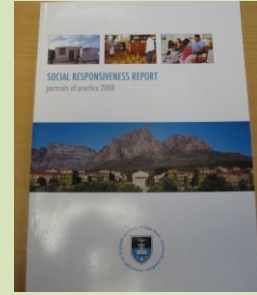
The *Journal of Energy in Southern Africa (JESA)* has been selected for inclusion in the internationally recognised *Science Citation Index Expanded*.

Published by Thomson Reuters and edited by Richard Drummond from the Energy Research Centre, the weekly publication indexes articles and citations from over 5 300 international scientific journals.

Professor Sue Harrison from the Department of Chemical Engineering was appointed to the Board of the Technology Innovation Agency (TIA). The TIA is a new public entity that is aimed at stimulating and intensifying innovation and inventions in order to improve the economic growth as well as enhance the quality of life of all South Africans.

Professor Jack Fletcher has been elected a Fellow of the South African Academy of Engineering (FSAAE). This is a worthy tribute to his many different engineering achievements throughout his career.

2008 Social Responsiveness Report



Congratulations to Karen Le Jeune and Mark Massyn from Construction Economics & Management for their contribution to the 2008 Social Responsiveness Report. (page 29)

Community Build in the Construction Studies Programme

In 2005 the Department of Construction Economics and Management aligned the Construction Studies programme with current local and South African building issues. The programme aims to expose students to the technical side of construction as well as to the broader social issues facing communities and the built environment professionals in South Africa. First-year students do a community-service project of 40 hours which exposes them to a live building project and the practical issues faced by emerging contractors each day. At the same time they contribute to the upliftment of the community by providing a family with a home.

Congratulations to Harald Winkler from the Energy Research Centre for his contribution to the Report. (page 54)

Mitigating South Africa's greenhouse gas emissions

In 2006, Cabinet commissioned a process to examine the potential for mitigation of the country's greenhouse gas emissions. The aim was to produce mitigation scenarios from which Cabinet could draw up a long-term climate change policy and devise realistic strategies for future climate action. The Department of Environmental Affairs and Tourism (DEAT) funded the Energy Research Centre to manage an inclusive process. The widely diverse team was able to agree on the Scenario Document, which has since been adopted by cabinet as a basis for a robust policy framework for climate change in South Africa. In the process UCT has gained greater visibility in the national discussion about climate change.

Read more about both contributions at (<http://www.socialresponsiveness.uct.ac.za>)

New Staff

A warm welcome to all new staff members who have joined us recently.

New faces in the postgraduate section of the Faculty Office



Estelle Nobin (seated) is the Postgraduate Officer and joins us from KwaZulu-Natal University and Inge Newman is the Postgraduate Assistant and joins us from the Deputy Registrar's office at UCT.

Arlene Warrin will be assisting the Finance Section in the Faculty Office until January 2010.

Architecture

Ralph Schroeder (*Senior Scientific Officer*)
Roshan Bhurtha (*Scientific Officer*)
Christoph Held (*Chief Scientific Officer*)
Stephen Wessels (*Scientific Officer*)

Civil Engineering

Jakobus Van Zyl (*Associate Professor*)
Denis Kalumba (*Senior lecturer in Geotechnical Engineering*)

Chemical Engineering

Andries van der Westhuizen (*Senior Research Officer Minerals Processing Research Unit*)
Dirk Reyskens (*Manager: Laboratory*)
Eloise Williams (*Admin Assistant - Catalysis Research Centre*)

CEM

Abigail Parenzee (*Senior Secretary*)

Electrical Engineering

Pierre Bizimana (*IT Technical Officer*)

Mechanical Engineering

Max Edkins (*Assistant Research Officer – ERC*)
Meagan Jooste (*Assistant Research Officer – ERC*)



Baby boom...

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Welcome to all the new babies and congratulations to their proud parents



Hlompho was born on 21 May to Bongeka and Tsenolo Matubatuba



Leigh-Ann was born on 8 May to Nathalie and Steeve Chung Kim Yuen



James was born on 5 June to Bev and Darryl Bailey



Dylan was born on 2 June to Gareth and Clare Floweday



Louanne Xoliswa was born on 13 June to Harro and Magali Von Blottnitz – a day after Magali had being awarded her PhD for a thesis on small business finance constraints. What an amazing feat! Hearty congratulations to Magali!



Resegofetse was born on 18 June to Disaapele and Lucky Mogashana

Obituary

The Department of Mechanical Engineering was sad to hear of the death of Emeritus Associate Professor Stegen who died on 5 July 2009 at the age of 90. Emeritus Professor Jasson Gryzagoridis paid tribute to him. "He has left a legacy in the Department of Mechanical Engineering as a brilliant academic which is attested by his excellence in teaching fundamentally sound based engineering. I do believe he will never be equalled." Our thoughts are with his family.

The Department of Chemical Engineering held a memorial service for Emeritus Professor Donald Carr, the founding head of UCT's Department of Chemical Engineering, who died on 24 June. "He retained a close association with the department since his retirement, and even in very recent years made his presence felt on more than one occasion," said Professor Jack Fletcher.

OUTREACH PROGRAMMES

The June/July holidays have been a busy time for the Faculty with a number of outreach programmes. I would like to thank all the staff who gave up their valuable time to participate.



Work shadow programme

Renè Toerien in the Department of Chemical Engineering has developed a work shadow programme for grade 11 and 12 learners to find out more about careers in chemical engineering. This year a total of 50 keen learners attended over a three-day period. The programme involved a session in a laboratory where the learners worked in

small groups to develop aspirin. They then had to design a scale-up version of the process and present it to their peers before going on a departmental tour with postgraduate students.

Renè said: "Presentations were of a very high standard and it is clear that the learners are quite aware of what happens in the world outside of the school classroom. Many groups considered the environmental impact of their choices and tried to come up with creative solutions for the problems." Academic staff members interacted with the learners over lunch, giving the learners the opportunity to ask questions about chemical engineering.



IGARSS Outreach Programme

180 enthusiastic Grade 12 learners from Shawco's Saturday programme as well as 150 learners from the University's Maths, Science Education Programme spent time with representatives from the IGARSS conference finding out more about remote sensing, GPS and GIS and the roles they play in the world.

Lead Global

60 Grade 10 and 11 learners from diverse areas around Cape Town and Johannesburg, together with 30 learners from the USA, participated in the first US-based Leadership Education and Development (LEAD) Global 10-day programme. The theme for the programme was 2010 – Soccer World Cup. The learners had the opportunity to meet engineers & built environment specialists who are involved in the Green Point Stadium and were exposed to the different engineering & the built environment departments at UCT. They were given a project to design and build a soccer stadium. They had a great learning experience with loads of fun and inspiration. Four engineering & built environment students were mentors to the learners during their stay.



Architecture's outreach programme



30 Grade 12 learners from around the Western Cape attended a three-day outreach programme in the School of Architecture & Planning to find out more about studying architecture, admission requirements and the career opportunities available. The programme was organised by Simone Le Grange.

GirlEng

The South African Women in Engineering subdivision, GirlEng, hosted a workshop at UCT on 16 May for girls from seven high schools around Cape Town. Fifty-six budding engineers braved the wet weather for an opportunity to meet with representatives from giants such as BHP Billiton, Unilever and Sasol. The girls also got a chance to meet the 12-strong GirlEng Western Cape team, all engineering students, who offered guidance on vocation choice, applications, bursaries and financial aid. "For some of the learners who live in Khayelitsha or Langa, this may well be the first connection and first step towards UCT," said GirlEng's Wiebke Toussaint.





OPEN DAY

The University Open Day took place on 09 May with a great turn out of staff and students in all departments. I wish to thank you all for giving up your valuable time on a Saturday to participate on the day. A particular mention must be made of Erica Schulschenk and Shaunelle Adams, who provided delicious refreshments throughout the day.



At ChemEng they start them young - seen at Open Day were Jenni Case's and Renè Toerien's children – wearing the One EBE T-shirts!

Cultural Evening



The annual Cultural Evening was held on 22 May to celebrate the diversity in the Faculty. This is an annual event organised by the EBE postgraduate council and this year we were delighted to have students and staff members participating in the event. In the photograph above left to right: Bradley Springer, David Springer (final year Mechatronics), Drewan Saunders (final year Mechanical) and Professor Mike Inggs (Electrical Engineering).

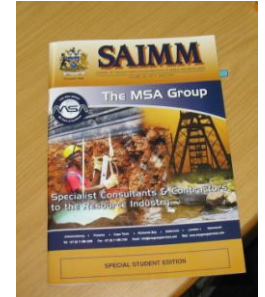
Faculty Awards Evening

On 20 May, the Faculty held its first awards evening with Dr Mamphela Ramphele as the guest speaker. Students were recognised for their excellent academic achievements and for their involvement in development and outreach programmes. This event will become an annual event in the Faculty's calendar.

Students

Getting published

Undergraduate students from the Department of Chemical Engineering are getting papers published.



In November 2008 a paper co-authored by Nabeel Hussain was published in the Journal of Power Sources. The paper was on the work Nabeel had done in 2007 during his 3rd year vac training at Johnson Matthey Technology Centre in the UK.

Dion Lusinga and Japhet Angombe co-authored a paper with Aubrey Mainza on the research they did as part of their fourth-year course. The paper is an extract from the thesis they wrote and was published in the Journal of the South African Institute of Mining and Metallurgy (SAIMM).

SAWomEng does it again!

The Mail & Guardian listed Naadiya Moosajee and Mabohlale Mampuru, the founders of SAWomEng, as two of the Top 300 Young South Africans you have to take to lunch. Naadiya graduated in June with a Master's in Transport Studies and Mabohlale graduated with a BSc Civil Engineering in 2007 and is working for BigEn Africa in Pretoria. They are both still very active in SAWomEng and held their third successful conference in June.



Naadiya and Mabohlale with the Minister of Science and Technology, Naledi Pandor, at the June SAWomEng conference.

Conferences

Congratulations to Mike Inggs and the organising committee for the very successful IGARSS conference which was held in July. Over 1200 scientists from all over the world attended the conference. Daily newsletters on the conference can be found at <http://www.igarss09.org/>

The 4th International Life Cycle Management Conference (LCM2009) is being hosted by UCT and is endorsed by the United Nations Environment Programme. Harro Von Blottnitz is the Chair of the organising committee. The conference will be held at the Vineyard Hotel from 6 to 9 September 2009. Visit the website www.lcm2009.org for more information.

HR Matters

Adhom Promotions

The closing date for academic applications was 9 July 2009. The Faculty Core Committee will meet on 14 August 2009 and the Final Merit Committee Meeting will take place on 1 September 2009

The closing date for the Scientific and Technical Officers is 7 August 2009 and the University Committee meeting will take place on 28 September 2009

PPS Training workshops

A half-day interactive training workshop has been developed to assist in preparing staff and line managers to participate in the formal Personal Performance System review process that occurs in August/September of every year. You are encouraged to register for the workshop using the online facility. You will have a choice of venues and dates. Workshop dates for permanent and T3 contract staff are from 14 July to 11 September 2009. Workshop dates for T1 and T2 contract staff are from 1 to 22 August 2009, where the contract spans at least one performance cycle. Please visit <http://www.staff.uct.ac.za/training/PPS/apply/> to register online.

Health Screening

The EBE Health screening programme will take place from 17 to 19 August. The screening is for the common “lifestyle” diseases which include hypertension, hyperlipidaemia, diabetes, body mass index (BMI) and HIV/AIDS. The screening days make provision for the early detection, prevention and management of these common lifestyle diseases. The venues are Room 2.03.1 (next to the reception) Chemical Engineering Building and Room 6.21 Menzies Building from 9h00 to 15h00.

HIV/AIDS Voluntary Counselling and Testing will be taking place in Jameson Hall 11 – 13 August. We urge all staff and students to know their status. Live positively. We call on you to commit to eradicating the stigma that surrounds HIV and AIDS – be mindful of how we are individually responsible for creating a caring and supportive community.

Transformation

Corrine Shaw is the Chair of the Transformation Committee with Jonathan Marks and Charles Nicholas as the deputy chairs. Jonathan is coordinating the Values and Culture working group and Charles the Employment Equity working group. Members of the Transformation Committee nominated themselves to work on the working groups and they are in the process of developing operational plans.

Safety Week

With safety being a top priority in industry, the Faculty embarked on a safety awareness week from 27 to 31 July to highlight the importance of safety and safety practices in the workplace.

An impressive programme was developed and Mr John Holt, Head of Safety for Anglo American plc, started the week off with a talk on safety. He emphasised that safety starts at the individual level and that we need to work together if we want to create a safe and caring place to work. He said that when looking at values that are important to the Faculty we will see that they are related to safety.



3D Printer

The School of Architecture, Planning & Geomatics has a 3D printer available for UCT staff and students to use. For information on the printer and the costs contact Leon Coetzer – 021 650 4109, Terence Swartz – 021 650 2382 or John Coetzee – 021 650 3808



Printed architectural models using the 3D printer.