

Faculty Newsletter

IN THIS EDITION

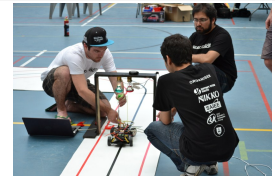
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Message from the Dean

As the 2012 academic year comes to an end, I would like to take this opportunity to thank you all for the contribution you have made to the Faculty. I greatly appreciate the hard work and the commitment you have shown throughout the year. Thank you to everyone who supported my next term in office. I am pleased to say that it has been formally approved by the University Council, and I look forward to working with you over the next five years.

2012 has been a challenging year but I think a successful year with lots to celebrate. There are a number of major infrastructure projects on the go which will improve the Faculty's space issues and overall facilities; the appointment of the alumni officer and the engagement with our alumni; new industry partners supporting research chairs, and various international agreements. Academic staff and students have been recognised for

their work and have received a number of prestigious awards and fellowships. All the SARChI chairs in the Faculty have been renewed for the next five years. There are now 47 NRF rated staff in the Faculty, which is a big increase from 2011 and something we can be



very proud of. Many of the new funded Chairs have been filled and will bring with them new energy and exciting opportunities for the Faculty.

With the world economy still recovering and government departments having to cut their expenses over the next three years, 2013 is going to be tough year, and we will all need to tighten our belts. The

University has held various discussions on the budget and the bottom line is that 2013 will be a "holding budget". The University has put together a task team to assess what its current financial base is, and how we can be more efficient and maintain what we are doing with a limitation on resources. The DAC Indaba held on 10 December focused on developing a financial model for the Faculty and looked at how to manage our finances with a decline in state funding. We will all need to work together to develop creative solutions.

I would like to encourage all staff to be active members of the EBE team and help us deal with the challenges we face. Be inspired by all the positive happenings that have occurred in the Faculty in 2012 and find new energy to go into 2013.

I wish you all well over the festive season and safe travelling to those who will be on the road.

NRF Ratings

Congratulations to the following staff members who were either rated for the first time or received a new NRF rating. NRF ratings are allocated based on researchers recent research outputs and impact as perceived by international peer reviews. The rating system encourages researchers to publish high-quality outputs in high-impact journals/outlets. We are indeed proud to have 47 NRF-rated staff in the Faculty. Keep up the good work.

Professor Paul Bowen	B2
Dr Jochen Petersen	B2
A/Professor Kobus Van Zyl	B2
Professor J-P Franzidis	B3
Professor Komla Folly	C2
Dr Ronald Herman	C2
A/Professor Azeem Khan	C2

Dr Megan Becker	Y1
Dr Kirsten Corin	Y2
Dr Olabisi Falowo	Y2
Dr Niya Isafiade	Y2
Dr Brett Cohen	C2
Mr Heinrich Wolff	C1
Professor Vanessa Watson	B1

Architecture students host annual Congress

Architecture students hosted a very successful Architecture Student Congress which was attended by 650 students from 11 Schools of Architecture around the country. Some of the events included an Amazing Architectural Race through the city, with students required to complete tasks at various stations along the route in order to pick up instructions to proceed. The students also staged a successful Flash Mob that followed a route through the Company Gardens and entertained hundreds of passers by. The accompanying photo shows the Murray & Roberts Des Baker Awards function that was held in the Old Mutual Banking Hall, a beautiful Art Deco space in the city. Finally, the students joined the three-day AZA2012 Conference in the Cape Town City Hall that featured an impressive range of local and international speakers.



(Photo by Leon Krige).

Wining Team



Congratulations to our 2012 undergraduate student council. The Chair, Vusi Baleni, received the award for the Most Outstanding Leader in an Undergraduate Faculty Council, and the Council received the Team of the Year Award. The team that receives the Team Award must have excelled in promoting team work, thus creating opportunities for members of both the team and the student organisation to grow. In addition, the team must have played an exceptional role in developing the student organisation concerned.

Future Foreshore



The Faculty has partnered with the City of Cape Town for the 2014 World Design Capital.

In 2013, final-year undergraduates and postgraduate students from across the Faculty will be doing projects that will look at various possibilities for the future development of the north Foreshore Precinct.

The projects will be embedded in the curricula and normal course assessment processes will be followed. The students will work in project groups and the different classes will continually use work and information from each other to inform what they are doing. Questions these students will grapple with include, but will not be restricted to:

- How can we reconnect the CBD with the sea?
- How can we create vibrant public spaces that will attract residents and tourists?
- Could the unfinished highway

sections be used as markets or viewing platforms?

- How do we consider the effects of climate change and rising sea-level?

The best proposals will be brought together in a public exhibition, which will tie in with 2014 World Design Capital events.

The Faculty has established a Steering Committee to manage the process, involving representatives from participating departments and additional specialists, convened by Deputy dean of special projects Vanessa Watson. The City has appointed a Mayco member (Brett Herron) and Richard Perres (Design Capital co-ordinator) as contact points for the project.

In November the Dean was selected as one of the members of the board that will govern the implementation of Cape Town's World Design Capital 2014 programme. Thirteen board members were chosen out of 103 nominees, through a rigorous selection process coordinated by the Cape Town Partnership and headed by an independent selection panel.

EBE Sustainable Development Forum

In September, there was the first informal gathering of the EBE Sustainable Development Forum. The object is to get people together from across the Faculty to talk about their work and to see if there are opportunities for staff to collaborate on sustainable projects.

A/Professor Harro Von Blottnitz presented his sabbatical work on "Mastering the Green Economy". Matthew Docherty, chair of EWB, gave a presentation of the work the EWB members are involved in.

The idea is for the forum to be hosted by the different departments in the Faculty and then see how this could evolve to incorporate other faculties across the university.



Visiting academics

Professor Mike Inggs from the Radar Remote Sensing group in the Department of Electrical Engineering hosted a visiting academic, Dr Karl Woodbridge from the University College London. Dr Woodbridge gave a presentation on the University College London's radar systems research, which included some specific examples of current research in the areas of target recognition and classification, multi-static/netted sensing and passive sensing. These programmes involve hardware design, signal processing and experimental data collection and analysis.



Simon Winberg, Dr Amit Mishra, Prof Mike Inggs, Dr Karl Woodbridge and Craig Tong, a PhD student



In October Professor Alison Lewis from the Crystallisation and Precipitation Research Unit hosted Professor Patrice Nortier from the Grenoble Institute of Technology, Pagora, France. Prof Nortier teaches thermodynamics, heat transfer and energetics, and has a research laboratory for Paper Process Engineering. He gave a seminar on Controlled Heterogeneous Nucleation for the Synthesis of a New Filler for Paper.

Alumni networking event

On 16 October, the Dean hosted a very successful EBE alumni networking event in Johannesburg where he gave a presentation on "Roadmap to the Future: EBE's achievements and vision". Professor Jack Fletcher, Mandisa Zitha and Mary Hilton accompanied the Dean. The alumni were very appreciative of the opportunity to reconnect with the Faculty and said that they would like to see more of these networking events in the future. On the morning of 17 October, the Dean hosted a breakfast for four prominent EBE alumni to get their feedback and input on the Faculty and the work we are doing.



Building Infrastructure



The Department of Civil Engineering has moved into their new space in the New Engineering Building. The rest of the building is still under construction and Chemical Engineering, the Faculty Office and the Dean's Suite will move across in April/ May next year.

The Centlivres Building has been handed over to the

building contractors. Staff from Architecture and Planning have moved into the old Classroom Facilities offices up at the back of Maintenance Place, and staff from Construction Economics & Management have moved into a prefab (Zozo) which is positioned in the parking area at the back of Maintenance Place. The temporary venues will house the HOD, space for programme convenors and admin staff. Most academics will work from home during this time - or hotseat in the space available for them. The telephone numbers have been transferred to these new spaces so that there is continuity.

It is planned that both departments will move back to the Centlivres building at the start of February 2013, which will mark the end of Phase One of the refurbishment project of the Centlivres Building.

The demolition of the Snape Building has begun in preparation for the new Teaching and Learning Building.

Faculty News

Resignations

Dyllon Randall resigned from his post as Research Officer in the Department of Chemical Engineering. He will be working as a consultant for Aurecon in Cape Town on various industrial wastewater treatment projects. He started his studies at UCT in 2003 and says UCT is like a second home to him. He promises to keep in touch and visit as often as he can.

Sanet Minnaar, a senior lecturer from the Department of Chemical Engineering, has left to join SAPPI in Pretoria. Sanet was the Chair of the Values & Culture Working group and played a big role in coordinating all the activities.

Nuraan Isaacs resigned from the Faculty Office. She got married in November and has moved to Australia.

Jonathan Marks, a senior lecturer from the Department of Construction Economics and Management has resigned and will be leaving at the end of December 2012. He is joining the Gibbs Business School in Gauteng.

Ellen Hurst, the Academic Development lecturer from the Department of Construction Economics and Management, has resigned and will be leaving at the end of December. Ellen is joining the Humanities Faculty at UCT.

New Staff

Matthew van der Westhuizen joined the Faculty Office as an Undergraduate Administration Assistant.



Donrick April moved from Undergraduate Administration Assistant to the Postgraduate Administration Assistant in the Faculty Office.

A/Professor Henri Comrie joined the School of Architecture on 1 September.

Dr Marcos Rodrigues Pascual joined the Crystallisation & Precipitation Unit as a Research Officer on 1 September.

Dr Pieter Levecque joined the Centre for Catalysis as a Research Officer on 1 October.

Dr Mahomed Hanif joined the Department of Electrical Engineering as a Senior Lecturer on 26 November.

Congratulations

To Paul Barendse and his wife, who are the proud parents of a little boy, Jamie Barendse. Jamie was born on 4 October.



Graduation News

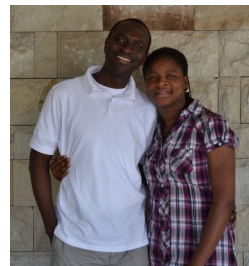
Congratulations to all the staff members who have children or family members graduating in December, and to those who are graduating themselves.

Professor Vanessa Watson has two sons graduating, one with a BSc in Civil Engineering and the second with a LLB.

Professor Sue Harrison's daughter is graduating with a Bachelor of Architectural Studies.

Professor Gerald Nurick's son, Saul, is graduating with his MSc in Property Studies. It is the 10th degree that the Nurick family is getting from UCT.

Mr Noor Hassen's son, Tariq, will be graduating with MARCH Professional with Distinction. He also received a Corobrick Award and the prestigious Renzo Piano Award, which entitles him an internship with this architect in Italy for 6 months.



Dr Niyi Isafiade's wife is graduating with a MSc in Computer Science.

Ms Sandra Naidoo's son will be graduating with a BSc in Chemical Engineering.

Mrs Renee Smit's son is graduating with a BSocSc

Mrs Karin van Wyk will be graduating with an honours degree from the Humanities Faculty.

Ms Corrinne Shaw from the Department of Mechanical Engineering will receive her PhD.

Mr Jonathan Marks from the Department of Construction Economics and Management will receive his PhD



Engineers without Borders

Engineers without Borders has had a busy year with over 10 projects running during the year. The projects were: the Solar Geyser project in collaboration with Students in Free Enterprise, Biodigester project at a community garden in Khayelitsha, Wildevool Vlei project out in Noordhoek, Storm water handling and flood prevention manual for community leaders, Shawco Health, Township caterers, Container Conversion, Research project into low-cost fencing material for pre-school in low-income area, Schools Development project and a project in Lesotho for a vacation project in 2013.

Matthew Docherty is the new chair for the 2013 EWB committee and he is seen on the right with other committee members. Wiebke Tousant, the 2011 EWB chair, is now the EWB-SA National Coordinator.



Avashen Pather, Nonhlelo Mathunjwa, Makgabo Moloto, Matthew Docherty, Kashir Singh, Penelope Yaguma and Rowan Nicholls

Constructing an HIV/AIDS Competent Society

The EBE Faculty teamed up with HAICU to challenge the EBE students to design a sculpture that expresses and symbolises the theme 'Constructing an HIV/AIDS Competent Society'. The competition was open to all EBE students who had to compete in a team which comprised at least one engineering student and one student from the built environment.

On 1 October the winners were announced at an event which acknowledged EBE staff and students who have been actively involved in HIV/AIDS education. The Dean said the event highlighted three components of the faculty's work: research, communication and curriculum-based aspects of HIV/AIDS.

Tensional Integrity was the winning team. They received R 5000 prize money from Murray and Roberts and their sculpture design will be created and will hopefully be displayed in the new engineering building when it is officially opened in 2013.



Tensional Integrity – the winning team from left to right: Professor Francis Petersen, Eric de Ridder (Civil Engineering), Astrid Gebhard (Fine Arts), Alexander Frehse (Architecture), Sakena Parker (Murray and Roberts), Aleksandar Stojakovic (Architecture) and Professor Crain Soudien

Student News

Rhodes Scholarship

Congratulations to Heloise Greef, the 2012 Chair of EWB and a final-year Mechatronics student, who has received a Rhodes Scholarship and will be going to Oxford to study next year. This is the second Chair of EWB UCT to receive a Rhodes Scholarship.

Chapter Published for ACC graduate

Liza Cirolia, a recent graduate from ACC's MPhil in Urban Infrastructure: Design and Management, published a chapter in an edited book out of the prestigious Wilson Centre's Comparative Urban Studies Project. The Washington DC organisation co-sponsored an academic paper for graduate students. A panel of experts reviewed 70 abstracts, from which 15 were invited to write full papers. Of those 15, eight were selected for this publication, "Changing Cities: Climate, Youth, and Land Markets in urban Areas". Liza's paper is about informal land and housing markets in Nairobi. Liza is now working in ACC's CityLab on Human Settlements.

Best MSc Poster

Shaun Katz, a master's student in the Department of Electrical Engineering, received the prize for the best MSc poster at the MeerKAT student meeting held in November.

First Graduates from the Radar Programme

Jurgen Strydom and Stephen Middleton are the first two graduates from the Master of Engineering specialising in Radar, convened by Professor Mike Inggs.

Celebration Event

At the end of November, the Dean hosted a celebration event to celebrate and acknowledge the awards, fellowships, published books, retirements, ad-hominem promotions, research rating and many other staff achievements in the Faculty.

Retirements

Romano Del Mistro will be retiring after 14 years of working at UCT. Romano is one of our alumni and graduated in Civil Engineering in 1969 and in Town and Regional Planning in 1978. He joined the Department of Civil Engineering in 1998 as an ad-hoc supervisor and was promoted to an Associate Professor in 2004. In 2008 he became a permanent staff member. Romano has been the convenor of the interdisciplinary MPhil programme in Urban Infrastructure Design and Management Programme since 2006.

Kevin Bennett will be retiring after 37 years at UCT. Kevin is one of our alumni, having completed his PhD at the Energy Research Institute. He joined the Energy Research Institute in 1975, as a Chief Research Officer. In 1985 he was appointed to the post of Associate Professor in the Department of Mechanical Engineering and from 1989 to 1993 he was the HOD of Mechanical Engineering and again in 2000 and 2001. In 1992 he was promoted to full Professor and became the Director of the Energy Research Institute. Since 2005, Kevin has been the Director of the Energy Research Centre, which was the result of the logical merger of activities of the Energy Research Institute and the Energy Development Research Centre at UCT.



Bill Randall will be retiring after 37 years at UCT. Bill is one of our alumni and joined the Department of Chemical Engineering in 1975 as the chief scientific officer and is retiring as the Principal Technical Officer. Bill has seen an enormous change and growth in the department. In March this year he was part of the organising committee which was responsible for the 6th International Symposium for Processed Tomography, which was attended by over 70 people from all over the world.



Stanley Johannes will be retiring after 21 years at UCT. Stanley joined the university as a cook in the Student Housing Department. He moved to the Department of Mechanical Engineering around 1993 as a messenger and around six/seven years ago he became departmental workshop assistant.

Early Retirement

Candy Lang from the Centre of Materials Engineering has taken early retirement after 27 years at UCT. Candy is an alumnus of the university and completed her BSc in Physics and Mathematics in 1986 and her PhD in 1993. She was the founder and convenor of the BSc (Hons) in Materials Science. In 2005 she received the NSTF award for Research Capacity Development, which was awarded for the development of research capacity of young people, particularly those from under-represented groups.

Fran Pocock took early retirement in June 2012 after 22 years at UCT. She joined the Department of Chemical Engineering as a Scientific Officer and took early retirement as the Scientific Officer and Lab Manager for the Centre of Bioprocess Engineering Research.

An exciting new elective course for EBE students

END1019S - Social Infrastructures: Engaging with Community for Change

Employers are looking for EBE professionals who not only have good technical skills, but also an understanding of the social, cultural, global and environmental responsibilities of the professional engineer, and the need for sustainable development.

END 1019S will expose students to new ways of learning about important global issues such as climate change, technology, cities, social justice, engagement with communities and sustainable development.

There is limited space on the course and students will need to sign up during registration. The course is 18 HEQF credits at level 5, elective second semester course and is administered by the Professional Communications Unit and delivered by CHED.

The convener is Dr J McMillan. There are no prerequisites and the lecture times are the 5th period in the second semester.

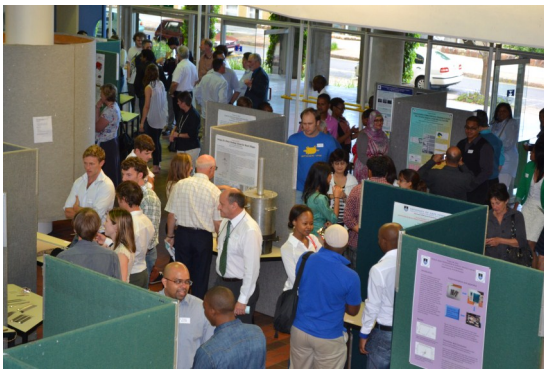


Student happenings

On 1 November, Electrical Engineering held their Open Day where final-year students presented their projects to academic staff, industry and visitors.



On 14 November, Mechanical Engineering held their Open Day where their final-year students exhibited their projects and four students gave presentations on their projects.



The Master's of Architecture Class of 2012 presented their work to an examination panel and members of the public. The presentations and exhibition took place from 15 to 17 November, with a closing function and prize-giving on the evening of the 17th.



RoboRace



On 2 December, Mohamed Ziyaad Mukuddem, a fourth-year mechatronics student, together with a team of fellow students, held the first RoboRace SA in the Sports Centre on campus. Mohamed was introduced to RoboRace at an engineering conference in Europe earlier this year and was determined to hold one in South Africa.

Nine teams from UCT, Cape Peninsula University of Technology and Stellenbosch University competed in the race. The teams each received a remote-controlled car - either a rear-wheel drive or four-wheel drive. They were then tasked with adding a sensor that would allow the car to pick up and follow a line of black masking tape laid out down the centre of the track. They could do just about anything they wanted to make the cars race around the track autonomously, except tamper with the motor and chassis, and pit crews were furiously tweaking their designs throughout the event.

Team Hammerhead, from UCT's Robotics and Agents Research lab, posted the quickest time in the final to claim the best Leatherman knives and the title of the first winners of the pioneering RoboRace SA.

EBE Mentoring Programme

An event was held to acknowledge the EBE mentors, and the important role they play in helping first year students to adjust to life at university.

A/Professor Rochell Kapp, the interim director for the First Year Experience, said that the EBE's mentor

programme was seen as a flagship programme in the university. The Faculty is extremely grateful to the mentors who volunteer their time to help the first-year students.

