

Faculty Newsletter

In this edition

Page 2



Page 5



Page 10



A new Dean for the Faculty

Congratulations to Professor Alison Lewis, who will be taking up her new position as Dean of the Faculty of Engineering & the Built Environment on 1 June 2015. The Acting Dean, Professor Barry Downing, has started the process of finding a new HOD for Chemical Engineering.

Alison will be the first woman dean and the fifth permanent dean of the EBE faculty. The first permanent dean was Professor Vincent Granger (1972 to 1982), followed by Professor John Martin (1983 to 1998), Professor Cyril O'Connor (1999 to 2008), and



Professor Francis Petersen (2008 to 2014).

Alison will be moving in to the Deanship during a busy time in the Faculty Office and will be working closely with Professor Barry Downing.

Over the past seven months, Professor Downing has done a sterling job in keeping the Faculty on track. He will be returning to the Department of Electrical Engineering where he will continue his work in the Radar Group.

We would like to take this opportunity of thanking Professor Downing for his hard work and commitment to the Faculty.

Construction industry supports research in CoMSIRU

The Concrete Materials & Structural Integrity Research Unit (CoMSIRU) has been successful in securing new funding for its research. In the past, the unit was mainly funded by the Cement & Concrete Institute (C & CI), which channelled funding from the cement industry to tertiary institutions. Owing to dynamic changes in the industry, the Institute closed down in 2013. Efforts were made to replace C & CI, and the Concrete Institute came into being, with the same mandate around education and training, but with a significantly reduced staffing and budget.

Professor Mark Alexander, CoMSIRU Director, is to retire at the end of 2015 and is keen to see the unit in a strong financial position going forward. Together with his co-directors, Prof Pilate Moyo and A/Prof Hans Beushausen, it was decided to approach construction companies for further funding. They have been successful in securing funding from Haw & Inglis and Aveng Grinaker-LTA, with another two companies still in



Professors Pilate Moyo, Mark Alexander and A/Professor Hans Beushausen

the pipeline.

Mr Enzo Menegaldo, MD of Haw & Inglis, graduated from UCT in 1983 with a BSc in Civil Engineering. The company's core focus is major national and provincial arterial roads and urban highways, and its expertise extends to urban infrastructure and select industrial, commercial, residential and sporting building projects. The group has strong vertical integration with in-house crushing and concrete work operations to support its roadwork activities.

Mr Chris Botha, MD of Aveng Grinaker-LTA, is looking at ways of retaining young graduates in the company. He has decided to give young graduates the opportunity to register for the MEng degree in CoMSIRU, which will take three to five years to complete. The research projects they will be working on will feed into the company, and Aveng-Grinaker-LTA will give funding for the research work.

CoMSIRU has 30 to 40 full-time master's and doctoral students at any time, with some part-time MEng students. Over the years, the unit has received strong financial and other support from major agencies and companies such as the Concrete Institute, the National Research Foundation, Sika (SA) Pty Ltd, PPC Ltd, AfriSam, the Tertiary Education Support Programme of Eskom, and the Water Research Commission, as well as UCT.

Professor Mark Alexander will step down as director of the unit at the end of the year, and Professor Pilate Moyo will be the new director.

Prestigious award for Dr Skatulla and Dr Kirsten Corin



Congratulations to Dr Sebastian Skatulla and Dr Kirsten Corin who were selected as recipients of the Claude Leon Merit Award for Early-Career Researchers. This award is given to encourage the outstanding scholarly achievements of young researchers. The award is granted annually to young researchers at UCT to support their demonstrated ability to make a significant independent contribution to their field.

Professor Danie Visser, Chair of the Claude Leon Merit Award for Early-Career Researchers Committee, said, "We are delighted with their contribution to research and proud of the recognition that they will continue to bring to the University of Cape Town."



2nd International Syngas Convention for c*change

The 2nd Syngas Convention, took place in March, and drew experts and delegates from around the world. South Africa is the world leader in the area of syngas – the result of Sasol's pioneering innovation since its inception in 1950, and its ability to change its methods, facilities and products to respond to shifting market needs and stakeholder expectations.

Organised by c*change, which is hosted by the Centre for Catalysis Research in the Department of Chemical Engineering, the Syngas Convention seeks to present cutting-edge research and new thinking in the area of syngas, and inspire a series of further conventions, as well as increase international recognition of the

pivotal role South Africa plays in the use of synthesis gas for the production of fuels and gases.

"The industry is in a critical growth-phase and a key factor driving its ability to deliver value sustainability to its shareholders is, and will continue to be, its efficient utilisation of various feedstocks," said Michael Claeys, Director of c*change, adding that this is one of the key foci of the research within the national c*change network.

The theme of the 2nd Syngas Convention was *Fuels and chemicals from synthesis gas: state of the art 2* – and the focus of the work presented over the three-day event was mainly on the uses



of synthesis gas for the production of fuels and chemicals.

UCT Technologies at Innovation Bridge

The Research Contracts & Intellectual Property Services (RICPS) department participated in the DST's first-ever [Innovation Bridge](#) event at the CSIR Conference Centre in Pretoria. The event was designed to showcase technologies emerging from universities across South Africa, seeking commercial partners.

Innovation Bridge was well-attended, and many useful leads were obtained and a great deal of interest was shown in the three UCT technologies profiled (all from EBE) – HyCat hydrogen fuel cells, Elemental CFD software and the Lumkani fire detector.

Lumkani resulted in two wins for UCT: the best pitch given by Paul Mesarcik and the innovation most likely to have an impact on inclusive development.

The event was held on 2 and 3 February and included a technology expo, pitching sessions and parallel sessions on a variety of topics related to technology commercialisation and entrepreneurship. Piet Barnard, Director: RCIPS, participated in the panel discussing Exchange Control regulations. The panel included representatives from the SA Reserve Bank, IP law firms and Standard Bank as an authorised agent of



SARB. From a UCT perspective, the proposal for "categories" of agreements to be pre-approved by SARB and merely reported on annually could certainly smooth our research contracts process and timelines.

Article from the RCIPS website

Electrical Engineering celebrates excellence

To celebrate their academic achievement, third and fourth year electrical engineering students on the 2014 Dean's merit list were invited to join staff from the Department of Electrical Engineering on a hike to visit an old radar station at Slangkop.

Professor Mike Inggs heads up the Radar Remote Sensing Group in the Department of Electrical Engineering and has been in the field of radar for the past 20 years. Radar was a critical technology that allowed the Allies to win the Second World War and 75 years ago South Africa was at the forefront of its early development. Prof Inggs gave a brief account of the history of South African radar and the role that a UCT professor, Basil Schonland, played in the development of radar. The students were given the opportunity to explore the various radar buildings before returning to the bus and visiting the old naval guns above Simonstown. At Neptune Grill they were treated to a braai where they were able to engage freely with the HOD, Professor Ed Boje, and the academic staff.

Professor Boje said, "Of course, there is no such a thing as a free lunch (in real life or in mathematical optimisation). The outing was not only to celebrate achievements, but to encourage students to keep up the good performance and to



Third and final year students from the Department of Electrical Engineering seen with Professor Ed Boje and Mrs Kehinde Awodele

think about postgraduate possibilities offered in the Department."

Matthew Botha, a final-year student, said, "Getting up early on a Saturday morning for the radar outing, I wondered at my wisdom in accepting the invitation. However, being outdoors, listening to information regarding the beginnings of radar in South Africa, seeing the gigantic cannons above Simonstown, and hearing about the destroyers in the harbour,

made it all worthwhile."

Brandon Piner added, "Being able to spend time with lecturers outside of the university allowed us to ask them general questions. We were able to find out about the master's programmes that helped me to decide whether I want to do master's. Nothing could top the delicious meal at the yacht club to end off the field trip."

Construction Industry Development Board Doctoral Workshop

Dr Abimbola Windapo from the Department of Construction Economics and Management was the workshop convener of the 3rd Construction Industry Development Board (cidb) Doctoral Workshop. The workshop took place in Cape Town on 4 February 2015 and is organised to provide valuable contributions, constructive criticisms and meaningful feedback to doctoral students undertaking research with a focus on the construction industry development.

The workshop provided an opportunity for students to present their research proposals to academics and peers in order to make sense of and adapt a range of ideas to enhance their on-going research. Cidb also uses it as an instrument for human-resource development. The workshop attracted participants from the cidb (the sponsoring body), academics and PhD research students from five schools of Construction Economics and Management in South Africa, the University of Cape Town, University of the Witwatersrand, University of Johannesburg, Central University of Technology and the Cape Peninsula University of Technology.

Prior to the workshop, each PhD student prepared a synopsis of his/her research, which was circulated to the workshop



moderator and rapporteur for review and to assess the suitability of the research for presentation. At the end of this process, seven synopses were approved. The selected topics centered on current issues within the construction industry. The workshop participants provided useful feedback, which would positively enhance the on-going research of the presenters.

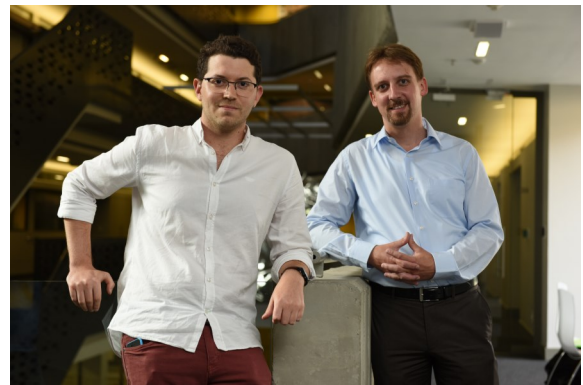
Government delegation visits HySA/Catalysis



On 16 April, HySA/Catalysis hosted a delegation from the Limpopo Provincial Government as well as Mr Mmbonene Muofhe, the Deputy Director-General: Technology Innovation, DST, and Dr Cosma Chiteme, Director—Hydrogen and Energy, DST. The visitors spent the afternoon with staff from HySA/Catalysis finding out about the research work they are doing in fuel cells. The afternoon ended off with a tour of the new HySA/Catalysis labs in the New Engineering Building.

Prestigious medal for Civil Engineering master's student

Congratulations to Kevin Sack who was awarded the SA Association for the Advancement of Science – S2A3 medal. The medal serves to commend outstanding South African research students graduating at the master's level. Kevin's master's degree was awarded with distinction in the dissertation and the degree with distinction. His supervisor was Dr Sebastian Skatulla from the Department of Civil Engineering. His thesis title was *Biological Tissue Mechanics with Fibres Modelled as one Dimensional Cosserat Continua. Applications to Cardiac Tissue in Healthy and Diseased States*. Kevin is currently registered for his PhD in Biomedical Engineering.



Kevin Sack and Dr Sebastian Skatulla

ACC news

In March the ACC hosted a three-day workshop exploring comparative urbanisms in Southeast China and South Africa. Seventeen scholars attended, including two from China, a Chinese academic from France, a Chinese scholar from the USA, and English-speaking academics from the USA, UK and South Africa. The workshop explored new ways of thinking about urbanism from the perspective of newly and rapidly growing cities, and set foundations for future research collaboration.

The ACC is a partner in a third ESRC-DfID (UK) grant award, this one focusing on Urban Risk and Knowledge in six African cities. A project inception conference in Cape Town in April brought the funder together with partners from the university and practitioner sectors to discuss research timetables, methodologies and approaches to assessing risk and planning for it.

Site-specific visits and studies are concluding in the ACC's DfID-funded project on Urban Land Values and Infrastructure Development in three African cities, and will culminate in a conference in Cape Town in July.

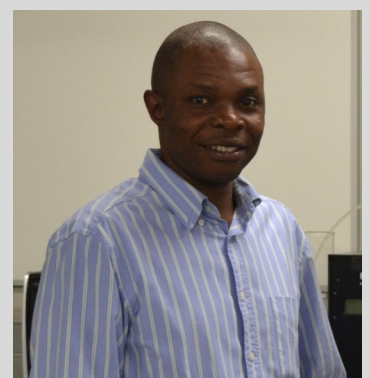
The ACC convened a four-day training workshop for municipal officials and other practitioners to discuss violence and its prevention, safer cities strategies, policy frameworks, and urban upgrading for violence prevention.



Representing South Africa in Tunisia

The South African Institute of Civil Engineers Geotechnical Division has appointed Dr Denis Kalumba to go to Tunisia in April to present the South African bid to host the 17th African Regional Conference on Soil Mechanics and Geotechnical Engineering in Cape Town in 2019. The ARC has not been held in South Africa since the 1999 Durban conference despite several previous bids.

The African Regional Conferences on Soil Mechanics and Geotechnical Engineering, which are a series of four-yearly conferences, provide excellent platforms and opportunities for the advancement of geotechnical engineering in Africa.



Two EBE winners at the Better Living Challenge

Following a two-week public exhibition and a strict voting process, the Better Living Challenge announced its winners in November 2014. The Challenge, launched by the Western Cape Government's 110% Green programme, is a design competition showcasing green and affordable solutions to improve the homes of people living in low-income communities.

There were three overall winners chosen from 21 finalists, selected out of 130 original competition entries. The 21 finalists showcased their work in October and November at the V & A Waterfront and Cape Town Station Forecourt, where the projects were judged. One overall winner was chosen in each of the three entry categories: Structural Home, Comfortable Home and Connected Home.

Lumkani, a low-cost fire detector and alert system designed for low-income households, received the prize in the Comfortable Home category. The project was developed under the supervision of Samuel Ginsberg in the Department of Electrical Engineering and has gone on to win many awards.

In addition to the three category winners, two Student



All the winners seen with MEC Alan Winde, Western Cape Minister of Economic Opportunities.

Awards were made. Lawden Holmes, an Architecture Honours student, received one of the awards for his *Embracing Informality*, an architectural development plan.

Cape Town book launch for Prof Zingoni

The Cape Town launch of the book *Vibration Analysis & Structural Dynamic for Civil Engineers*, written by Professor Alphose Zingoni, took place on Wednesday 15 April. It was well attended by students, staff and industry guests. The book was first published by CRC Press (Taylor & Francis Group, London) in November last year and has sold over 2000 copies.

Deputy Vice-Chancellor Professor Francis Petersen congratulated Professor Zingoni on a truly outstanding achievement. "Not only have you produced an excellent book for students, but for lecturers, researchers and practitioners as well." He added, "We are here today to celebrate a major scholarly achievement, an international book authored by one of our own."

Mr Truman Goba, Chairman of Hatch Goba said, "Industry expects universities to provide innovative solutions based on sound research. How grateful we are that Professor Zingoni and his UCT colleagues continue to do this work. The book fulfils a great technical need for practitioners."

Dr Gansen Pillay, Deputy CEO of the NRF, added his congratulations to Professor Zingoni and said it was wonderfully inspiring to have such an excellent role model for the younger generation.



Undergraduate and postgraduate students seen with Prof Zingoni at the launch: Rugare Masendeke, Nosakhare Enoma, Matthias Schulz, Prof Zingoni, Abdulkadir Ibrahim, and Kenny Mudenda

Postgrads showcase winning research



Winners of the 2015 Research Week: Postgraduate Research Expo. Forty researchers ranging from master's students to postdoctoral fellows competed for cash prizes sponsored by McKinsey. Judges awarded best research in six categories. In category five, Engineering & the Built Environment, first prize went to Moritz Wolf, second prize to Shanna Swart, third prize to Mehdi Safari, all PhD students in the Chemical Engineering Department. An Honorary Mention went to Thakunda Chitaka, a master's student in Chemical Engineering.

Photograph by Je'nine May

Off to Paris for an international conference

Olukayode Alao, an MSc student in CoMISRU, has been selected for an oral and poster presentation at **Our Common Future under Climate Change**, an international scientific conference to be held in Paris from 7 – 10 July 2015. His supervisor, A/Professor Hans Beushausen said, “We are extremely proud of Olukayode and it is an excellent opportunity for him to showcase his work.” The French Embassy in South Africa will be sponsoring Olukayode to attend the conference.

The title of his oral and poster presentation is “(Con)Fusing Durability Performance of Reinforced Concrete Structures with Environmental Sustainability.” The four-day conference will address key issues concerning climate change in the broader context of global change. Organised around daily themes the conference focuses on moving from present knowledge to future solutions. It is the largest forum for the scientific community to come together ahead of the COP21 of the UNFCCC in 2015.



New Director for the School of Architecture, Planning & Geomatics



Professor Tomà Berlanda is the new director of the School of Architecture, Planning and Geomatics. He graduated in 2002 from the Accademia di architettura di Mendrisio in Switzerland and went on to work as an architect.

His first teaching stint was at Ecole Polytechnique Federale de Lausanne. He then won a scholarship to do his PhD in Turin and at the same time opened lat45N, a collaborative practice with two school friends, doing speculative and critical questioning work. After three and a half years, he decided it was time to move on, and he got a position at Syracuse University in the United States. After his contract had ended, he returned to Italy where he was asked if he was available to go and work in Africa. He found himself in Rwanda, teaching a one month

workshop at a very young architecture school at the Kigali Institute of Science and Technology. He felt this was a worthwhile project to invest in and stayed on for four years.

The Rwandan adventure transformed a lot of things for Berlanda - his perspective on the world and the urgency to develop critical thinking on under-investigated areas. With his experience in Rwanda and dealing with rapid transformation, he was invited to teach a class on Kigali and the rapid urbanisation process at Cornell University in New York.

Back in Rwanda in the summer of 2012, he opened ASA (short for active social architecture), together with a Spanish colleague and over the next two and half years, they completed almost 30 buildings, mostly for early childhood development. They worked with local communities and international partners and NGOs. They set up a framework with Unicef Rwanda, and the firm provided architectural services to the Unicef projects across Rwanda. As architects, they were able to gather valuable information as they worked on a wide variety of projects.

“South Africa is ahead of the game, comparatively, but there are still very uneven areas that are slower in developing. Can these lessons influence the way we look at things, how we teach and investigate them?” asked Berlanda. “I have told staff and students, that my tenure here is not going to deliver a specific product, and there is no end result, but we are going to be ‘under-construction’ to constantly push ourselves to improve.”

Professor Berlanda is here with his wife and four and half month old baby.



The centre courtyard of the Centlivres Building is nearing completion. It has created a great open space for staff and students.

Alumni bequest for Architecture

Victor Glasstone graduated from UCT around 1949 from the School of Architecture. He went on to become a world-renowned theatre architect and consultant. He was a prolific writer and photographer and was published throughout the world over the course of 40 years.

In January 2013, at the age of 88, Victor passed away. In his will, he left the proceeds of an Irma Stern painting to the School of Architecture. In April 2014, the painting was sold for £140,100 which equated to R1,8 million. The money was bequeathed to enable a student to visit Italy annually, and on their return, to write a report on the experience. The School is busy drafting the regulations for the travel grant.

Harry Glasstone, Victor's nephew, who facilitated the transfer of the bequest, said, "Although he left South Africa in the 50s, he always held fond memories of UCT. He kept in contact with his UCT friends for many years."

Giving back to honour Prof McLaren

Mlamli Booi arrived at UCT in 1982 where he found life on campus quite a challenge. On top of this, his bursary had not been paid which meant he had no money for stationery, books or transport. At registration, Prof McLaren, a professor in the Department of Electrical Engineering, noticed him. Needless to say, in the 80s you could count black students on one hand, so that made him conspicuous. Because of the interest he showed, Mlamli found it easier to go to him and inform him of his financial situation. Prof McLaren made the decision to personally help Mlamli and gave him money to buy stationery and books, and for his transport, as in those days, as a black student, he had to stay off campus.

Mlamli said, "I have never forgotten the kindness that Prof McLaren showed me. It remained in my heart that some day I will honour him by extending the same gesture of support as he did to me. It is for that reason that I am part of this project – the Prof McLaren Book Fund - to honour a man who took a stranger and supported him. During my third year, he lectured me in the electrical machines course. He was a great teacher who did not leave any student behind. May his family know that he was such a great man on campus."



Director: Green Economy

Dr Rethabile Melamu graduated with a BSc in Chemical Engineering in 2005, an MSc in 2008 and a PhD in 2014. Professor Harro Von Blottnitz was her supervisor.

In 2014, Thabi was a Biofuels Project Manager for Green Cape and in February 2015 she joined the Gauteng Provincial Government as Director: Green Economy.



Arthur returns to ChemEng

Arthur Mabentsela has come a full circle and returned to UCT as a lecturer in the Department of Chemical Engineering. Arthur graduated from UCT in 2010 with a BSc in Chemical Engineering (with honours). He began his working career in 2011 with Anglo American Rustenburg as a graduate engineer and was involved in commissioning work at their base metals refinery. In 2012, he moved to Anglo American's Platinum smelters, located in Northam, Limpopo, and worked on a furnace upgrade project.

In 2013, he joined Exxaro in Mayoko, in the Republic of Congo, where he worked in their new iron-ore washing plant and mine. Wanting to further his studies, Arthur resigned from Exxaro in 2014 to pursue his master's degree at the University of Stellenbosch. In January 2015 he joined the Department of Chemical Engineering as a lecturer in a contract position. He is hoping to do his PhD in the Pyrometallurgy field. During his working career, Arthur has been involved in mentoring programmes and training graduates on image management.

Arthur said, "I have always wanted to be a lecturer. I want to motivate the young talented minds that we have in this country and instil in them the knowledge that will help better themselves and South Africa as a whole."

He added, "Being back in the Department of Chemical Engineering is a fantastic opportunity to share ideas with the best chemical engineers in Africa, and in the world. At the same time, I think it is a key position to be in as I have the understanding both of what it means to be a young graduate in a company, and of what the industry requires. I can construct my courses to fill in some of the gaps which I experienced during my early working years."



Inaugural Dinner for Klaus-Jürgen Bathe Leadership Scholars

A dinner to inaugurate the 16 new scholars of the Klaus-Jürgen Bathe Leadership Programme was held at the Vineyard Hotel on 19 February 2015. The event was hosted by the Programme Director, Professor Alphose Zingoni, and the Programme Donor, Professor Klaus-Jürgen Bathe. The Consul General of the US Consulate in Cape Town, Mr Teddy Taylor, the Head of Cultural Affairs of the German Consulate in Cape Town, Ms Kirsten Buchhorn, and UCT Deputy Vice-Chancellor Professor Francis Petersen, as well as other invited guests, attended the evening.

The event welcomed the first cohort of Bathe Leadership scholars and introduced the programme to the German and US governments. Together with the South African government, they are seen as key partners for the future sustainability of the programme.



Prestigious Yenching Scholarships for two civil graduates

Congratulations to Nothando Kumalo and Thuthukile Mbanjwa, two civil engineering graduates, who were awarded a Yenching Scholarship for a one-year master's programme at the Yenching Academy at Peking University in China. Both will be doing the economics and management stream in the programme.

The programme is designed to prepare future leaders to meet the challenges of the 21st century global landscape. The Academy selects 60 candidates from the top universities around the world. In November last year, Nothando and Thuthukile went through an intense interview process and they heard in January that they were successful. Two other students from UCT will be joining them.

The Yenching Academy offers an intensive programme of interdisciplinary classroom and field study of Chinese history and culture, as well as real-time issues in China's development.

Thuthukile and Nothando graduated with their BSc in Civil Engineering in 2012

and their MSc in 2014.

Thuthukile's supervisor for her thesis was Professor Pilate Moyo and the title of her thesis was *An Investigation of the relationship between Inventory and Inspection data of RC bridges and RC culverts in the Western Cape*. She is currently working at Royal HaskoningDHV in Pietermaritzburg, where she is doing some bridge design.



Thuthukile said, "I hope to merge my knowledge of civil engineering with a better understanding of economics and management, in order to deepen my understanding of the relationship between infrastructure management and economics." She plans to use this opportunity to become a leader in her field.

Nothando's supervisor was Associate Professor Marianne Vanderschuren and

the title of her thesis was *Visibility Improvements through Information Provision regarding Sun Glare: a case study in Cape Town*. Nothando is working for Aurecon South Africa (Pty) Ltd in Pretoria as a graduate engineer. Nothando said, "As a young person who is passionate about her country and the African continent, I have made it my mission to expose myself to as many opportunities and experiences as I can, which will enable me to contribute to society and engineer economic change in any way I can." She added, "I hope I also get the chance to build long-lasting friendships, relationships and networks, as well as walk away with one of the best memories that I will treasure for life."



Thuthukile and Nothando will be leaving for China in September.



CELEBRATING AFRICA

- WomEng in Africa - Naadiya Moosajee - Tuesday 5 May, Snape 3B 13h00
- Research Expo - celebrating research in Africa for Africa, Monday 11 May, 2nd level, foyer, NEB at 17h00

Welcome to new staff

Mrs Suleiga Schröder joined the Division of Geomatics in January as a laboratory assistant.

Mr Sa-aadat Parker joined the Department of Mechanical Engineering in January as a senior lecturer.

From January, Ms Jenny Broadhurst is a Chief Research Officer in the Department of Chemical Engineering.

Professor Pieter Rousseau joined the Department of Mechanical Engineering in January.

Mr David Oyedokun joined the Department of Electrical Engineering in January as a lecturer.

Mr Jonathan Green joined the School of Architecture, Planning & Geomatics as an adjunct lecturer for a two-year contract.

Mr Michael Wentworth joined the School of Architecture, Planning & Geomatics as an adjunct lecturer for a two-year contract.

Mrs Samantha Keen joined the Energy Research Centre in January as a research officer.

Miss Tara Caetano joined the Energy Research Centre in February as a research officer.

Dr Zarina Patel joined the African Centre for Cities in February as a senior lecturer.

Resignations

Professor Bernhard Sonderegger resigned from the Centre for Materials Engineering at the end of December 2014.

Dr Asif Siddiqui resigned from the Department of Civil Engineering at the end of January 2015.

Dr Olaf Conrad resigned from the Centre for Catalysis in the Department of Chemical Engineering at the end of January 2015.

Obituary

Sandile Mahlangu, a first-year electrical and computer engineering student passed away on 10 December 2014. He died shortly after being admitted to hospital from "natural causes". Sandile is survived by his mother and his eight-year-old sister, Buhle.

Sandile came from Kwamhlanga in Mpumalanga. He had worked hard in his first-year and had passed all his first-year courses. It is tragic to lose anyone at such a young age, and especially someone who showed such potential. The faculty's condolences were conveyed to his family.



CONGRATULATIONS

A/Professor Hans Beushausen (Civil Engineering) and his wife, Rukshani, welcomed their daughter, Raya Sehara, to the world on 25 February 2015.



A/Professor Paul Barendse (Electrical Engineering) and his wife, Michelle, welcomed their new baby, Reece Barendse, who was born on Valentine's Day, Saturday 14 February 2015.

Long Service Awards

Ten Years

Mr Eghsaan Matthews	Chemical Engineering
Mrs Jill Rumbelow	Professional Communication Studies
Dr Rein Weber	Centre for Catalysis
Mr Stephen Roberts	Centre for Catalysis

15 Years

Mrs Rowen Geswindt	Civil Engineering
Mrs Janine Buxey	Electrical Engineering
Mrs Sandra Jemaar	CPD
Mr Dirk Matthee	Geomatics
Mrs Mareldia Fagodien	Construction Eco. & Management
Ms Nazeema Ahmed	EBE Faculty

25 Years

Mrs Betsie Koch	Construction Eco. & Management
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35 Years

Mr Terence Swarts	Architecture
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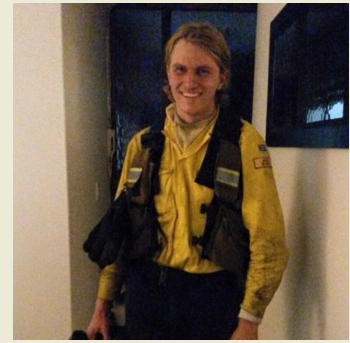
45 Years

Mr Harry Daniels	Electrical Engineering
Mr Granville De La Cruz	Chemical Engineering

Fire fighter volunteer

Hats off to a third-year civil engineering student, David Le Roux, who took the day off lectures on Tuesday 3 March, the hottest day in Cape Town, to help fight the fires burning around the Cape Town.

A big thank you to all the staff who donated so generously to help the fire fighters. By the end of Tuesday 3 March, the faculty had raised R3 456. R2000 was used to buy supplies and the remaining R1 456 was transferred into the Volunteer Wildfire Services bank account. Thanks to Penny Park-Ross and Liezl Matthews from the Centre for Materials Engineering for coordinating the fundraising.



Welcome event for new postgraduate students

On Wednesday 11 March, the EBE postgraduate student council hosted a welcome event for the new postgraduate students. The postgraduates were introduced to the Postgraduate council and were informed of the role they play. The Acting Dean, Professor Barry Downing welcomed them to the faculty, and Professor Sue Harrison, Deputy Dean for Postgraduate Studies, spoke to them about being a postgraduate student in the faculty and gave them some valuable information to assist them during their studies. Dr Nelleke Bak, Director of Postgraduate Studies, informed them of the numerous resources her office provides to enhance their postgraduate experience. The evening ended with an opportunity for the new postgraduate students to network with staff and other students.



EBESC disability talk

As part of the SRC Transformation month activities, the EBESC organised a talk on disability and the role of the engineer. Christian Leprince Polorigni, the EBESC transformation rep said that last year he had to consider disability in one of his projects and this got him thinking on how disability was thought about in the different fields of engineering.

Reinette Popplestone from the Disability Unit welcomed the students and told them what an important role engineers had in making sure that whatever they design is accessible to disabled people.

Vic McKinney, paralysed from the neck down from an accident when he was 19 years old, thanked the students and staff who attended the talk for taking the issue seriously enough to give up their lunch time. He said that disabled people are excluded from so much as they are not able to access venues, transport or sometime even leave their home. He added that there was a lack of awareness as you don't see people with



*Behind: Christian Leprince Polorigni, Chris Sexwale, and Jessica Bothma
In front: Zain Bana, Vic McKinney,*

disabilities as they cannot get out to enjoy the facilities.

Jessica Bothma, a partially deaf student spoke about how important visual aid and good lighting was to deaf people

and that engineers should consider making things visual—use colour, light, vibrations to attract deaf people's attention. Jessica spent some time teaching basic sign-language to the audience.

EBE Faculty awards evening

The annual EBE Faculty awards evening was held on 23 April in the foyer of the New Engineering Building. Over 160 guests, students and staff attended the event, where students were recognised for their excellent academic achievements. The guest speaker was Mrs Mabohlale Addae, a 2007 civil engineering graduate, and one of the co-founders of SAWomEng. Five additional Special Faculty Awards were made to students who make a contribution to the university over and above their academic work and have shown a strong commitment to civic engagement. These went to Kelly Blair, Kai M’Njira, Athenkosi Nzala and Kurai Gombiro. The Association of the Built Environment Students received an award for the remarkable work they did in coordinating the first-year community build.



Guest speaker Mrs Mabohlale Addae

The move of the Mechanical Man



In 1965, the Mechanical Man sculpture was placed at the official entrance to the Civil Engineering Department. With the demolition of the Snape Building and the final completion of the new buildings, the sculpture was moved on 9 April to the open space between the New Snape Building and the New Engineering Building.

Lippy Lipschitz, from UCT’s Michaelis School of Fine Art sculpted the Mechanical Man. He merged a human figure with mechanical elements, which invites questions about human nature in a world increasingly being dominated by machines. As Lipshitz noted, “It is not only the work we do, but what it does to us that is important.” Lippy Lipschitz was one of South Africa’s foremost 20th Century sculptors, and his work was said to be “not sculptures of Africa by a European, but the heart of Africa is in them.”

(Information taken from the UCT Heritage pamphlet.)

Supporting Lumkani



As part of a campaign with Chivas Regal (The Venture) of which Lumkani was the South African winner, they are launching a crowd-funding campaign on Indiegogo. What this means is that in **May** you will be able to directly support their campaign to put 3000 fire detection devices in high-fire-risk households across South Africa.

Working in tandem with the Indiegogo campaign, starting early May, Chivas will have a section on The Venture website (www.theventure.com) which will enable you to vote for them. The votes they get here, the greater will be share of \$250,000 from Chivas for their Indiegogo campaigns.

Please keep an eye out for extra communications around the campaign as they would greatly appreciate your support in the Indiegogo campaign and/or the voting section.

EBESC's debate on transformation in the Faculty

On 29 April, the EBE student council organised a debate around transformation issues that affect them in the Faculty. There were four panellists – Kelly Blair (fourth year), Byron Mawer (Master's student), Khumo Mampuru (third year) and Mixo Maphophe (second year).

The debate was chaired by the Ombud – Zetu Makamandela-Mguqulwa. Each panellist was asked to answer three questions:

- What does transformation mean to you?
- What has your experience been in the Faculty relating to transformation issues?
- What should we be doing to make a difference/ recommendations moving forward to push the transformation agenda?



The audience was then invited to participate in the conversation.

The points raised were:

- Gender issues
- Transformation of the curriculum – more community projects
- Lack of South African students in postgraduate studies
- Lack of South African black academic staff – mainly foreign black academics
- Need to be aiming to create a society that represents the people
- Insensitive guest lecturers – making black students feel inferior
- Create an environment where students feel free to ask academic questions
- Lack of students with disabilities in the Faculty
- Faculty needs to transform at management level
- Why the university's ranking is so important – shouldn't we be spending more energy on transformation
- There can't be real transformation if the fees remain so high for international students
- From a social point of view the tuition fees and the opportunity cost of postgraduate studies are still viewed as highly problematic
- EBE looks good on the number of black students they take in first year but then they don't get the support they need to succeed and are excluded or drop out before graduating.
- There is a disconnect between lecturers and students – black students don't like to ask questions and are not encouraged to participate.
- ASPECT – not clear what it means – felt it is not advertised properly.
- ASPECT – doesn't address all courses – mainly maths and physics. What about computer science?
- When students get into second year after ASPECT, there is no support.
- Honours year in architecture – only 4 or 5 black students – the smaller departments in the Faculty get forgotten – what is in place for Architecture to transform the school?
- What social support system is available for students from poor backgrounds who do not get the support they need from home? They need to not only adapt to the academic work, but also to the culture of the faculty and often need to develop the basic skills required to succeed in the Faculty. They shouldn't be left behind because of their social background.

The students were left with the question: What are you doing to make sure the change you want to see is happening? You need to do something if you want to be part of transformation.

Thank you to all the staff who took the time out to attend the debate. Your support and interest was greatly appreciated by the student council.

The EBE student council feel that they now have a better understanding of where we stand as a faculty. They are putting together task team to help tackle the issues. They have already set up meetings with architecture representatives and will be meeting with the new Director of the School.

Open Day 2015

Thanks to all the staff and students who participated in the 2015 Open Day. The talks were a huge success and each venue was packed to capacity. A great deal of work had gone into the displays in each department. The visitors engaged with academics and students and went away feeling satisfied that they knew more about their study options in the engineering & built environment departments.

