



EBE Alumni Update

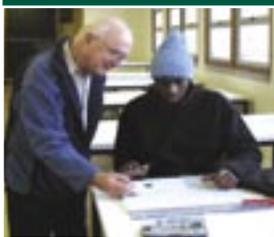
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INSIDE

- 2 Undergraduate nuclear engineering-first for UCT



- 3 Alumni take time out to help with drawing class



- 4 Reunions



From the Dean's desk



This newsletter marks my first two months as Dean of the Faculty of Engineering & the Built Environment. I would like to take this opportunity to pay tribute to my predecessor, Professor Cyril O'Connor who has led the Faculty over the past ten years. He and his team did outstanding work in building a highly reputable Faculty.

The EBE Faculty has well-segmented, accredited undergraduate courses attracting good quality students from all over South Africa, Africa and internationally. Our challenge over the next five years will be to ensure that we increase the throughput rate in all of our programmes – an approach which will require careful intervention with respect to teaching, mentoring and foundation support. It is critically important to use these approaches to contribute positively to the skills shortage currently experienced in South Africa and globally.

At a postgraduate level, I am pleased to report that we have 870 students, representing 43 countries globally, performing honours, masters and doctoral research. This strong research cohort is supported through well-funded research groupings with excellent links to government, industry and other private sector disciplines. The Faculty is well-positioned to interact through the Department of Science & Technology's 10 year plan; the South African drive towards the hydrogen economy; government's infra-structure programme; the small & medium enterprises development plan for the Department of Trade and Industry; and the exciting innovation growth plans of industries in the engineering and built environment disciplines.

Against the above exciting challenges, the Faculty is continuing to face space constraints and the pressure to retain and attract good academics. There is no doubt that with the increasing skills shortage, this phenomenon will continue, and I will keep you informed how the Faculty will address these challenges in our quest to be the Faculty of choice – nationally and internationally.

I would like to increase our interaction with our alumni and will start with a quarterly email update. Should you wish to provide input with respect to matters within EBE, please feel free to email Mary.Hilton@uct.ac.za.

Best wishes

FW Petersen
Dean:EBE



Anglo Platinum boosts the development of Minerals Processing research at UCT



Mr Mike Halhead and Professor Cyril O'Connor

Anglo Platinum in partnership with the University of Cape Town has established an Endowed Chair in Mineral Processing. The sponsorship of this Chair highlights Anglo

Platinum's commitment to building research capacity and the development of skills in South Africa.

For over 20 years the Department of Chemical Engineering has been developing a strong capability in mineral processing technology.

The Centre for Minerals Research in the Department of Chemical Engineering is an internationally recognised centre of excellence and has become a strategic partner to Anglo Platinum.

The Department of Chemical Engineering provides an invaluable research and development service to Anglo Platinum, and it also supports the company's graduate development programme.

The first occupant of the Anglo Platinum Chair in Minerals Processing is Professor Cyril O'Connor, who is also the Director of the Centre for Minerals Research. Mr Mike

Halhead of Anglo Platinum said: "Professor O'Connor is a person of international stature in the area of minerals processing research and has played a leading role in the development of critical skills development in this discipline."

One of the fundamental aims of the Chair will be to promote minerals research amongst key role players in South Africa and through effective collaboration, assist in building research capacity at previously disadvantaged universities. Significantly, through this Endowed Chair, Anglo Platinum will provide the Centre of Minerals Research with in-perpetuity funding to the value of R18-million.

"This is a most significant investment by one of South Africa's leading mining companies and represents a major contribution to the development of the skills the country will need in the next few decades to sustain the present strong economic growth in the country much of which depends on the success of the minerals sector," said Professor O'Connor.

Undergraduate Nuclear Engineering – a first for UCT

The University of Cape Town became the first university in South Africa to introduce undergraduate courses in nuclear engineering. Two elective courses for fourth year students were introduced in February this year at the request of Eskom, the state-owned power utility.

The Faculty was approached in late 2006 to establish a stream in nuclear engineering at undergraduate level to allow electrical, mechanical and chemical engineering students, especially but not only, Eskom bursars, to be better prepared for a career in nuclear engineering. Following extensive negotiations two courses were introduced in February 2008: *Nuclear Power Engineering* and *Nuclear Power Sources*. Koeberg/Eskom (nuclear) has provided significant funding for the first three years.

The next challenge was to find someone with the expertise to teach the courses. The Faculty is extremely privileged to have recruited Dr Tony Williams from Switzerland, who has been involved in nuclear work since 1986, and will visit UCT twice a year to deliver these

courses. Dr Williams is presently working at the Fuels Manager & Business Unit at Nordostschweizerische Kraftwerke AG, in Switzerland where he and his team are responsible for all fuel related aspects of a boiling water reactor at Leibstadt as

well as the pressurised water reactors at Beznau. Dr Williams has been elected three times as a board member of "World Nuclear Fuel Market" and is a member of a number of nuclear associations.



Dr Tony Williams (centre) seen with the fourth year students and Professor Trevor Gaunt (back right), head of Electrical Engineering at UCT.

African Centre for Cities



Professor Edgar Pieterse

The African Centre for Cities (ACC) was established in 2007 to serve as a platform for interdisciplinary research on urban issues – both theoretical and applied – across the University of Cape Town. The primary focus is on applied research to address complex, intractable urban problems and challenges. This is undertaken in a manner that advances novel ways of thinking about, and understanding, urbanism across the global South yet is rooted in the realities of African urban spaces.

The director of the centre, Professor Edgar Pieterse says “Our mission is to facilitate critical urban research and policy discourses for the promotion of vibrant, democratic and sustainable urban development in the global South.”

Funding has been received from: African Centre (Spier); City of Cape Town; Council for the Built Environment; Eskom Foundation; National Research Foundation; Department of Science and Technology; Department Local Government and Housing – Western Cape; Ove Arup Foundation; Rockefeller Foundation; Vodacom Foundation and the University of Cape Town. For further information on the Centre or engagement, contact: michelle.armstrong@uct.ac.za

Faculty Highlights

PROFESSOR CYRIL O’ CONNOR, former Dean, received an A2-rating by the National Research Foundation which brings the total of A-rated scientists in the Faculty to four. Professor O’Connor enjoys an outstanding international reputation for his research in the field of Minerals Processing and is well respected by his colleagues and leaders of industry. The A2 rating is appropriate recognition. The Faculty enjoys an outstanding reputation as having the highest number of rated researchers of any engineering faculty in South Africa.

EMERITUS PROFESSOR ALEXANDER Petroianu of the Department of Electrical Engineering has been nominated as a Fellow of the Institute of Electrical and Electronics (IEEE). IEE awards pay tribute to professionals who have made a lasting impact on technology, society and the engineering profession.

KEVIN HARDING, A PHD student from the Department of Chemical Engineering, received the Environmental Life Cycle award from the UN Environment Programme for the pioneering new research he is involved in to measure the environmental impact of sugar production in South Africa.

PROFESSOR JACK FLETCHER was awarded the THRIP (Technology and Human Resources for Industry Programme) award for the “Best Research Collaboration”. This was in recognition of his outstanding leadership of the Catalysis Centre of Excellence (C*Change) in which his Centre for Catalysis Research in Chemical Engineering is the host institution and the major player but which also embraces nine other research groups at various Universities around the country.

The School of Architecture, Planning and Geomatics’ Professor Charles Merry is the first South African to have been elected a Fellow of the International Association of Geodesy (IAG). With 50 member countries, the IAG is a member association of the International Union of Geodesy and Geophysics. Merry said his nomination was for “esteemed services rendered”.

PROFESSOR JO NOERO from the School of Architecture, Planning and Geomatics, was awarded the 2007 International Architecture Award for the Best New Global Design by the Chicago Athenaeum, Museum of Architecture and Design in Chicago, USA for his work on Usasazo Secondary School in Khayelitsha. He also received a number of national awards throughout 2007.

Centre tackles urban transport problems



Seen at the launch: Professors Petersen and Nhlapo, Måns Lönnroth, A/Professor Behrens and Professor Danie Visser

UCT was awarded R25 million over the next 5 years from the Volvo Research and Education Foundation to develop an African Centre of Excellence in Public and Non-motorised Transport

The African Centre of Excellence in Public and Non-motorised Transport (ACET) at the University of Cape Town is the newest research centre in the Future Urban Transport programme established to produce and disseminate knowledge in African cities and to serve as a hub of research and capacity building with university partners from Kenya and Tanzania.

Associate Professor Roger Behrens who is heading up the centre said “This is an exciting multidisciplinary group of researchers – including sociologists, civil engineers, city and regional planners, transport engineers, historians, economists, political scientists and medical doctors.”

“It’s a hugely important programme and a great opportunity to address unique problems in Africa,” said Måns Lönnroth who is a member of the Volvo Research & Educational Foundations Board.

“It will create an African research basis for urban transport.”



REUNIONS

50th Reunion for Civil Engineering Graduates

Civil Engineering graduates of the 1958 class gathered at UCT on 4 April to celebrate their 50th reunion. Twenty-nine of the original 58 students – from as far afield as Australia, Canada, the US, Zimbabwe and, of course South Africa – were joined by two of their lecturers, Professor Mike de Kock and Tony Kilner, to relive their happy days at the university. The gathering was organised by classmate, Ron Strybis. Some of the graduates had not seen each since the day they graduated in 1958 so there was lots of catching up to do. They all expressed that they had a wonderful time and were so impressed by the university and all the new developments happening in the Faculty. When asked what made this class so special that there was such a good turn-out after 50 years – they all replied: ‘Bing Walker - he was the greatest cheer leader for 6 years!’ They have all diarised their 60th reunion which will be taking place in 2018!



From left to right: Bob Blyth, Jannie De Villiers, Neil Grant, Bing Walker and Eric Burnett

EBE Alumni gather in Gauteng

Professor Cyril O'Connor hosted an EBE alumni reunion at the Johannesburg Country Club in February 2008. Over 60 graduates ranging from 1959 to 2007 attended the reunion. “I was delighted to see many of my past students, EBE student council members and alumni from a wide range of disciplines.” said Professor O'Connor. “It is rewarding to see how keen the alumni are to keep in contact with the University and how much they appreciated the contact.” He updated everyone on the status of the Faculty and the new exciting developments and thanked Ntokozo Mthembu who initiated the development of a Postgraduate Alumni Scholarship Fund to assist students struggling to pay for their postgraduate studies. Anyone interested in contributing can contact Mary. Hilton@uct.ac.za We look forward to another event in Gauteng in 2009.

Reunion for the Engineering Class of '67

Graduates from the Civil, Electrical, Chemical and Mechanical engineering were invited to a 40th reunion on Friday 26 October 2007. The reunion was instigated by Cecil Rose and Alex Visser, Civil Engineering graduates. The event started off at 12h30 with a lunch at the UCT Club which was hosted by the former Head of Civil Engineering, Professor George Ekama. After lunch there was a walk up to the Chemical Engineering Building for a talk by Professor Cyril O'Connor followed by Associate Professor Roger Behrens who gave a brief presentation on the development of a new Centre for Transport Studies. In the evening the alumni met up with their wives at the Wild Fig restaurant. Kevin Wall, a Civil Engineering graduate said: “We enjoyed ourselves enormously. Professor O'Connor's talk was an inspiration. It was especially good to see Professor Sparks - still on top form and undiminished by the years”.



Back (left to right): Nigel Mudge, Cecil Rose and Richard Rawson
Front (left to right): Dr Kevin Wall, Robert van Baarsel, Professor Alex Visser and Alan Shelly.

Alumni giving back

Dave Bradley graduated in 1965 with a BSc in Mechanical Engineering. During his career, Dave assisted apprentices with their technical studies. Now that he has retired he is keen to assist a new generation of student engineers by tutoring in the Engineering Drawing course at UCT.

Whilst many things may have changed over the past 50 years and the size, race and gender mix of the student body is very different to those of the 60's, the problems and anxieties the students face remain much the same.

Mr Roger Wood, the lecturer for the Drawing course, says: “I really appreciate having retired engineers assisting me in the training of these students. Their wealth of knowledge and work experience is invaluable in opening the eyes of these young people to the diversities of opportunities which are available to them.” Dave is also involved with the Rotary Organisation and is presently managing a project to uplift seven rural schools in Namaqualand. Retirement has simply opened new doors for service and I suppose the challenge to each

one of us is to ask the question ‘How can I better use the talents, skills and knowledge that life has taught me?’

As Dave says, “I enjoyed working with young people and helping them on the road to a fulfilling career. I remain profoundly grateful to my mentors and I earnestly believe that we stand tall because we stand on the shoulders of those who went before us.”



David Bradley (BSc (Mechanical Engineering) year of 1965) assisting a student.

For information on alumni reunions or the Faculty in general contact Mary Hilton 021 650 4108 or mary.hilton@uct.ac.za

