

WORLD-CLASS FOOD TECHNOLOGY COMPLEX FOR CPUT

Construction work has begun on an advanced Food Technology Complex that will play a crucial role in increasing human capacity and research in the national food industry.

The state-of-the-art building, which will house the Food Technology Department and Agrifood Technology Station, comes at a price tag of R40.6 million. The funds have been made available by the CPUT management.

Dr Jessy van Wyk, Head of the Food Technology Department, said the complex will be the only education and training facility of this nature in South Africa.

Based at the Bellville campus, it will house a research and development laboratory, a functional food research unit, an instrument laboratory, a food chemistry laboratory, a microbiology laboratory and a sensory analysis facility.

However, the main feature of the complex will be the 1 500m² multi-functional pilot plant.

Dr van Wyk said these facilities will enable the department to produce world class food technologists.

She said in order to properly train food technologists, institutions need to expose students to facilities that are on par with that they would use in the food industry.

"With the advance of technology in the food industry, the gaps are starting to show. This

factory is going to bridge the gap in enabling us to train a food technologist to be job ready when they go into the industry," she said.

Meanwhile, Mr Larry Dolley, head of the Agrifood Technology Station said the facility will allow them to expand and improve industry related activities.

Earmarked to open its doors in November 2010, Mr Dolley said: "The added space implies safer equipment operation and also the capacity

to obtain more equipment to increase the diversity and capacity of the things we can do."

They are looking at becoming involved in technology transfer by means of "shop-floor training" and collaborating with other academic institutions.

"This new facility with its impact will generate more business, increase our reputation and in so doing rub off on the academic intake," he said.

Currently the department is meeting with industry in order to raise additional funds for various fittings.

An estimated R25.4 million is still needed to fit out the Sensory Analysis Facility and install various hi-tech fittings throughout the building.

Mr Dolley said the facility will play a crucial role in ensuring that CPUT becomes the institution of choice for food technology training in the country and on the continent.

"The complex will be the only education and training facility of this nature in South Africa."



FACILITY: Mr Larry Dolley and Dr Jessy van Wyk at the construction site.



NRF IMPROVES RATINGS of two professors

Two of our CPUT professors have made the institution proud by having their ratings improved by the National Research Foundation (NRF).

Prof Maureen Robinson, Dean of the Education and Social Sciences Faculty, has improved from a C3 to a C2 rating while Prof Chris Winberg of Applied Linguistics' rating has improved from an L to a C2.

According to NRF criteria, the C rating is for scholars who are considered to have produced a body of quality work which has coherence and attests to ongoing engagement with the field, and who have demonstrated the ability to conceptualise problems and apply research methods to investigating them.

"A C3 rating is awarded when most reviewers feel the candidate meets these criteria, whereas a C2 rating indicates that all reviewers agree on this," said Prof Robinson.

She said the reviewers were impressed with the way in which her "research outputs demonstrate a critically reflective engagement with the practices of teacher education and action research.

This conclusion was based on items published over the last seven years in national and international publications".

Prof Robinson said reviewers suggested ways to broaden this work theoretically and comparatively, so that people in South Africa, as one reviewer reportedly put it, "could see their work and its significance in a wider context and continue to speak to ethically infused social research that can build scholarly networks across multiple countries."

Prof Winberg on the other hand has been the leader of the Work-Integrated Learning Research Unit (WILRU) since 2002. WILRU is an

NRF-funded unit that studies the relationship between higher education and workplaces.

"I have initiated several research projects that study the effect of different kinds of curricular, teaching, learning and assessment practices on students' work readiness, professionalism, and so on. I've published around 30 articles in accredited journals, and graduated several Masters and Doctoral candidates since the founding of WILRU," said Prof Winberg.

Prof Winberg feels that she is researching an area that is important for the development and identity of universities of technology.

"As an institution we have traditionally had very close ties with the industries that we prepare students for. As the world of work is changing very rapidly, it is important for us to know about these changes and to implement research-based interventions to address the changing contexts of work," she said.

She mentioned that there are not many rated researchers in applied linguistics, so she is happy to contribute knowledge to the field. She recently convened the joint South African Applied Linguistics Association (SAALA) and Linguistics Society of Southern Africa (LSSA) conference, and was elected chairperson of SAALA for a two year term of office.

Prof Winberg said she was "particularly interested in relationships between language and discourse practices in higher education and in workplaces – as well as how they can be more productively aligned".

Prof Robinson is currently finalising four articles. These are on teacher development in South Africa and Namibia, professional learning communities as an approach to teacher development, teacher education practices in three Southern and East African countries, and the impact of the changing qualifications structure



EDUCATION: Prof Maureen Robinson



LINGUISTICS: Prof Chris Winberg

on teachers' sense of themselves.

She said she enjoys working collaboratively, as this increases opportunities to share expertise and insights. Some of these articles are therefore co-authored by two colleagues in the Faculty, Melanie Sadeck and Chiwimbiso Kwenda, as well as a recent Fulbright visitor, Prof Peter Hewson.

Prof Robinson's own long-term agenda is to establish a Chair in Teacher Education in the Faculty, so that the excellent work of her colleagues can be better supported and profiled.

CPUT officially launched its Satellite Systems Engineering Programme, which is aimed at developing human capacity in the field of satellite engineering.

The event, which took place on 16 November 2009, marks the start of CPUT's role in ensuring the success of South Africa's National Space Strategy.

The roll out of the programme comes just months after the National Space Agency Bill, which will drive space-related activities, was passed. With the Bill in place, the institution saw an opportunity to develop students for the South African Space Industry.

This venture into space science and technology is being backed by the National Research Foundation (NRF), who approved funding of R21 million for the Satellite Systems Engineering Programme.

It also received a stamp of approval from the Department of Science and Technology (DST).

At the launch, which took place at the Bellville campus, the institution also signed a Memorandum of Understanding with EADS Astrium, a French based consortium that is involved in all spheres of space activity.

Deputy Minister of Science and Technology, Mr Derek Hanekom, who delivered the keynote address said: "We attach enormous significance to this programme."

Hanekom said space science and technology is one of the focus areas identified in the DST's 10 year plan.

According to the plan, South Africa must grow the local satellite industry and increase research, development and innovation in space science.

Hanekom said they have identified human capacity as one of the factors that will limit development in this area.

"It is not by chance that we are supporting this programme. This programme will help develop human capacity," he said.

He said CPUT has a strong foundation on which to build this programme, which is based in the French South African Institute of Technology (F'SATI), a specialised unit at CPUT that focuses on Electronic Engineering.

"This is the beginning of something big. We are putting the pieces together systematically," he said.

The NRF also commended F'SATI for venturing into space engineering.

Director of Institutional Capacity Development Dr Romilla Maharaj, said: "I want to applaud CPUT for putting this programme together."

She said the NRF is excited when institutions' take up such challenges.

During the next two years, the first intake of students who will specialise in Satellite Systems Engineering, will build a nano satellite.

Director of F'SATI, Prof Robert van Zyl, who will drive CPUT's space activities, said they will develop a CubeSat, which will measure 10x10x30cms and will weigh 3kgs.

The payload of the first mission includes a camera and science experiment in conjunction with the Hermanus Magnetic Observatory.

If all goes as planned, the satellite will be completed in 2011.

Prof van Zyl said it will then be showcased at the International Astronautical Federation Conference, which will be held in Cape Town in October 2011.

Dr Chris Nhlapo, CPUT Deputy Vice-Chancellor for Research, Technology Innovation and Partnerships, said the institution is committed to innovation.

"If we want to improve the technology index in South Africa, then we have to take innovation seriously," he said.

He said the roll out of the programme is a move in the right direction.

F'SATI ventures into SPACE SCIENCE AND TECHNOLOGY



SPACE: DVC Academic, Prof Anthony Staak and Deputy Minister of Science and Technology, Mr Derek Hanekom officially opens the new facilities where CPUT's first CubeSat will be built.



ACADEMICS: Dr Chris Nhlapo, DVC Research, Technology Innovation and Partnerships and Prof Mzamo Mangaliso who visited CPUT.

WORLD-RENOWNED PROFESSOR VISITS CPUT

The world-renowned Professor Mzamo Mangaliso of the Isenberg School of Management, Massachusetts recently visited CPUT.

Professor Mangaliso, a former President and Chief Executive Officer of the National Research Foundation, met with CPUT management and academics to deliver presentations on various issues, ranging from research to building strong partnerships and collaborations that will generate a greater and effective network.

On 17 November 2009, Professor Mangaliso, met with CPUT researchers at the Bellville campus to discuss academic leadership, research and planning.

Prof Mangaliso, who has held top positions in higher education both locally and in the United States, drew attention to the poor doctoral graduate rate in South Africa.

He said proper academic leadership and planning can play a vital role in increasing the number of doctoral graduates in South Africa.

According to the NRF, South Africa produces doctorates at only one eighth of the rate of the European Union. Annually only 1 200 students graduate from South African universities with PhDs.

Prof Mangaliso said CPUT must strategically address the issues of PhDs and set a goal as to how many doctoral graduates the institution must produce within a specific period.

He said academics must play a role in increasing the number of students who take up doctoral studies.

"University staff influence a student's decision to take the next step," he said.

Prof Mangaliso challenged academics to recruit students for doctoral studies in order to address this national problem. He also touched on issues surrounding academic support for students.

In the United States five postgraduate students are allocated to one supervisor, whereas in South Africa, 10 students are allocated to one supervisor.

"There needs to be a paradigm shift in which PhDs are done," he said.

Referring to a PhD support programme launched at a university in the United States, Prof Mangaliso said since its inception, doctoral graduates increased by 17%. The drop out rate decreased from 25% to 10%.

The programme involved support such as PhD conferences and bursaries. Prof Magaliso said the NRF launched a similar programme in 2007.

Myths around doctoral studies which negatively impact on students' decisions to further their studies must also be addressed.

"There are common myths around getting PhDs. You have to be smart, have a lot of money and be connected," said Prof Mangaliso.

He said if concerted efforts are made by institutions then South Africa will be able to increase its number of PhDs.

Dr Chris Nhlapo, DVC Research, Technology Innovation and Partnerships who invited Prof Mangaliso to CPUT said the institution is delighted and thankful for the visit by the eminent researcher, scholar and strategist.

"He rekindled our inner spirit by reminding us about some key aspects of our values such as Ubuntu and its origin." It is appropriate to say "thank you" to this great scholar for bringing smiles, joy, hope and energy to the university community that interacted with him. We will take his advices seriously and will endeavor to improve the areas of difficulty as much as possible," said Dr Nhlapo.

"We are looking forward to a long-lasting strategic relationship with Prof Mangaliso to help us in creating a better environment where we can achieve world-class research and innovation outcomes," he said.

CPUT HOSTS SYRIAN MINISTER OF EDUCATION

CPUT could strengthen ties with the Middle East after hosting the Syrian Minister of Higher Education, Dr Ghiath Barakat.

Currently CPUT has a Memorandum of Understanding with two Saudi Arabian higher education institutions. This includes the Prince Sultan College of Tourism and Business and the Saudi International Academy for Tourism and Hospitality.

During their stay in South Africa, the Syrian delegation met with members of several higher education institutions and various education bodies. Their visit to CPUT on 12 November 2009 came just a day after the Minister of Higher Education and Training Dr Blade Nzimande signed an agreement of cooperation with the Syrian Minister of Higher Education.

The agreement proposes cooperation in institutional collaboration and research, and aims to strengthen relations between the two countries. It also facilitates the establishment of an African Studies Programme and the Middle Eastern Studies Programme at the universities



EDUCATION: (middle) The Syrian Minister of Higher Education, Dr Ghiath Barakat and CPUT Vice-Chancellor Prof Vuyisa Mazwi-Tanga, with the Syrian delegation.

of Damascus and Cape Town.

The Syrian delegation, which consisted of several high ranking education officials and the Syrian Ambassador to South Africa, met with Vice-Chancellor, Prof Vuyisa Mazwi-Tanga and members of top management at the Bellville campus.

Prof Mazwi-Tanga as well as several CPUT directors gave a brief overview of activities at CPUT. Areas covered included teaching and learning, research and community engagement.

During the visit, which also included a brief tour of facilities at CPUT, Dr Barakat expressed interest in developing ties with the institution.

He said they are open for discussions on collaboration in various areas and that they would like to look at collaboration in the area of lecturer exchange programmes and research.

Syria has five universities, of which the largest boast a student enrollment of 100 000. It also has 15 private higher education institutions.

Dr Chris Nhlapo, DVC Research, Technology Innovation and Partnerships at CPUT said the institution was honoured to host the Syrian delegation.

"Research and innovation is about partnerships. To build capacity as a county, it is important to partner with other countries and higher education institutions."



POSTGRADUATE: Prof Ernst Uken, the head of the Energy Institute at the CPUT's Cape Town campus.

Prof Ernst Uken, head of the CPUT Energy Institute, was recently unanimously elected as chairperson of the newly-established Alexander von Humboldt Association of Southern Africa (AHASA).

AHASA, an organisation that was formed in October this year, aims to promote scholarship among South African senior students. The organisation is the brainchild of the Alexander von Humboldt (AvH) Foundation, a German scholarship for doctoral students and post-doctorates.

The organisation also aims to promote awareness about the scholarship and encourage

AHASA pushes for MORE DOCTORAL and POST-DOCTORAL STUDIES

more prospective students to take up doctoral and post-doctoral studies in Germany.

A trust from the German government supports the scholarship and partners with various universities. Once granted the AvH scholarship, doctoral and post-doctoral students all over the world can take up studies at a partner university in Germany. In order for students to qualify for the first time, they also need to be younger than 45 years of age.

CPUT's involvement in AHASA came about after Prof Uken was awarded the Senior AvH scholarship, which led to the completion of his PhD in Nuclear Sciences prior to joining CPUT. Later he studied for a second year at Europe's largest Renewable Energy laboratories at the Fraunhofer Solar Energy Institute in Freiburg.

The scholarship also promotes exchange programmes between German and other participating universities from other countries.

According to Prof Uken this is a multi-disciplinary senior scholarship and once the candidate completes the studies, she/he will come back to the country and that particular university can

subsequently host an expert from Germany to conduct research for a few months. So far, Dr Bohua Sun from CPUT's Mechanical Engineering Department is the only other CPUT recipient of the AvH scholarship.

AHASA has 64 living South Africans who work and conduct research at various universities in the country. This also includes former rectors and a chief justice.

Prof Uken said: "I would like to encourage my colleagues who would like to double their salaries to take up the scholarship during their sabbatical leave. They will not only become richer financially, but the professional interchange of ideas with world-class researchers is an experience not to be missed."

Because CPUT already had two AvH bursars studying in Germany, it now qualifies to host top German scientists under the Lynen Programme.

"This programme will allow German researchers to guide research at CPUT. We are still working on selecting that researcher who would come and do research with us," said Prof Uken.

PROF KHAN clinches top research award

Providing small medium micro enterprises (smme) with support in order to develop high efficiency low energy products saw Prof Mohamed Tariq Kahn clinch a top award at the Department of Trade and Industry Technology Awards.

This annual event celebrates successful research projects which received funding from the three Innovation and Technology Programmes, which have been set up by the South African government. This includes the Technology and Human Resources for Industry Programme (THRIP), managed by the National Research Foundation (NRF), the Support Programme for Industrial Innovation, managed by the Industrial Development Corporation and the Seda Technology Programme, managed by the Small Enterprise Development Agency.

Prof Khan, who is the head of the Centre for Distributed Power and Electronic Systems at CPUT, was declared the national winner in the THRIP SMME Development Category at the awards, which took place on 22 October 2009.

THRIP's mission is to improve the competitiveness of South African industry, by supporting research and technology development activities and enhancing the quantity of skilled people. It does this through a partnership programme which challenges private companies

to match government funding for innovative research and development in South Africa.

Prof Khan said the award is quite an achievement. For the past three years Prof Khan has provided advice and technical support to three companies that are involved in the production of low energy, high efficiency products. Supported by research assistant Mr Fazel Mongalo, Prof Khan worked on various research projects in collaboration with Phoenix Contact, Green Solutions and LMP Enterprises. The research projects ranged from the production of low energy cookware to an off-grid project which involved supplying solar or renewable energy to rural villages.

Prof Khan said currently South Africa has an energy capacity of 40 gigawatt, with a usage of 37 gigawatt. Machinery in South Africa alone makes use of 10 gigawatt, he said.

"We have to look as way to use energy more efficiently," said Prof Khan.

Although South Africa's energy problems are not as severe as that of other African countries, Prof Khan said the industry must look at decreasing energy use and in turn reduce the consumption of fossil fuels.

Prof Khan said he is planning to further research



ENERGY: Prof Mohamed Tariq Kahn who clinched a top award at the Department of Trade and Industry Technology Awards and research assistant Mr Fazel Mongalo.

in this area and focus on how to take devices off the energy grid and instead generate power from wind, the sun and other resources more effectively.

Dr Chris Nhlapo, DVC Research, Technology Innovation and Partnerships at CPUT said the institution's Executive Management is excited about the achievements of Prof Khan and his research team.

"It added the necessary impetus in a quest of being a world-class innovative university by contributing to the competitiveness of South African industry through research and technology development activities and enhancing the quality and quantity of appropriately skilled people, which is a core mission of THRIP," said Dr Nhlapo.

MARKETING AND COMMUNICATION scoops MACE award

CPUT recently walked away with a top award at the Marketing, Advancement and Communication in Education (MACE) Conference. MACE is the umbrella body for tertiary practitioners in the fields of communication, marketing, school liaison and advancement.

The conference, which is hosted annually, took place at the Nelson Mandela Metropolitan University in Port Elizabeth during the last week of October.

The Excellence awards, which recognises work in marketing, advancement and communications at South African higher education institutions, was the highlight of the conference.



AWARD: Director of Advancement Dr Garth van Gensen, Advertising Manager Mr Sevérus Cerff and Director of Marketing and Communication Mr Norman Jacobs proudly display the 2009 MACE Excellence Award won by CPUT.

This year, an electronic advertising campaign developed by Advertising Manager Mr Sevérus Cerff was awarded first prize in the Campaign/Advertising category. The campaign, which ran from June to August this year, was aimed at the youth and other individuals who were interested in taking up tertiary studies in 2010. Making use of new media, Mr Cerff said the purpose of the campaign was to raise awareness among youth of the courses on offer at CPUT.

"We used Google Adwords and Facebook as platforms to advertise each and every undergraduate course of CPUT," he said.

The campaign material consisted of fully fledged web page advertisements of each faculty. These advertisements were linked via google to the webpages of the various faculties.

"A variety of 74 advertisements and banners were used over a two month period to increase the website traffic," said Mr Cerff.

The campaign proved to be a huge success with a total of 15 million impressions created over a two month period. Mr Cerff said the electronic advertising campaign also augmented the traditional campaigns, which entailed using print and broadcast media. A similar electronic campaign that features CPUT's postgraduate programmes has also been set up by Mr Cerff. It is also the second year running that Mr Cerff won this category. In 2008 he received the award for a traditional advertising campaign that he devised.

ADMINISTRATORS IMPROVE THEIR SKILLS

The hard work of a group of CPUT administrators recently paid off, when they were each awarded a certificate in Business Administration.

For the past two years, administrators from various faculties, departments and units participated in the Business Administration Certificate course. The course, which is accredited by the Services Seta, was offered by the CPUT Training and Development Department and facilitated by Siyathembana, a local training consultancy. The course focused on developing skills in various areas of business administration, from event management to ethics.

Ms Glenda Mathven from Siyathembana, who moderated the course, said she was impressed with the caliber of the CPUT staff members. Addressing the administrators at the certificate ceremony, which was held on 6 November 2009 on Bellville campus, Ms Mathven said: "I am very proud of you."

Services Seta, who evaluated the staff members' portfolios, was also impressed with the standard of work.

"They informed me that this is the best group of business administration portfolios they have ever seen," said Ms Mathven.

Ms Beverly Dolley, an administrator in the office of the Dean of Health and



PROUD: CPUT staff members who completed the Business Administration certificate.

Wellness Sciences, who completed the course, clinched the top student award. She said the course was interesting and well presented. "It was applicable to my work situation," she said.

Manager of Training and Development at CPUT, Mr Thelo Wakefield, said he was proud of the group who managed to complete the two-year course, whilst juggling the demands of work and their personal lives. He encouraged the group to continue participating in activities which will aid their development.

"The quest for knowledge is never ending," he said.

Mr Wakefield said they have developed a similar two-year course, which is aimed at the development of secretaries at the institution.

This course will be rolled out in 2010.

ENVIRONMENTALISTS sharpen their skills



SKILLS: Environmentalists who received certificates.

CPUT's Environmental Management Department awarded 86 students with certificates at a ceremony that was held at the Bellville campus' auditorium on 20 October 2009.

The students, who work at Environmental Management units at municipalities around the country, completed three different training programmes. This included Supervision of Waste Management Practices, Middle and Senior Waste Management Training and Environmental Management Inspector Training.

Supervision of Waste Management Practices, which is an HQF level 4 qualification, deals with management of facilities such as landfill sites and transfer sites.

The Middle and Senior Waste Management, an HQF level 5 qualification, is designed for students who are currently working in budgetary divisions and who deal with personnel management and waste management practices.

The Environmental Management Inspector training, which is popularly known as the "Green Scorpions" programme, deals with the implementation of the Environmental Management and Strategic Environmental Acts like the Air Quality, Waste Management and Water Acts. The "Green Scorpions" programme is an HQF level 7 qualification and deals with legalities of the environment.

According to Mr Jacob Seconna, the department's head, this was productive year for the department. He said: "Most of the candidates that we were working with already had basic qualifications in disciplines other than waste management. Our students did very well as they managed to put together the first Landfill Gas Harvesting workshop in the Western Cape and it was very successful. We are proud of the contribution we are making out there especially in different municipalities nationally."

The students were also given an opportunity to share their experiences while they were studying.

Mr Desmond Stewart, one of the graduates who spoke on behalf of other students, said: "Today is just the graduation day. After this, there are lots of things to do. I have learnt a lot from this course and would like to encourage my younger colleagues to grab the opportunity offered here with both hands."

One of the lecturers, Mr Joseph Ketano was the master of ceremonies while Mr Mike du Plessis, the head of CPUT's Centre for Continuing Education, delivered the keynote address.

Addressing the graduates, Mr du Plessis said: "Students shouldn't let learning curves discourage them, but they should rather keep on doing something about them. You should all live according to standards."

Next year, the department will offer two new courses. This includes the Peace Officers: Compliance and Enforcement and Advance Tertiary Certificate in Integrated Waste Management. The Waste Management courses are also expanding into Africa as they are now being offered in Botswana and Zambia at partner universities. The department is also looking at working with partner universities from Namibia, Kenya and Malawi.

"We have already established relationships with universities from different countries in Africa. CPUT will be the training institution for the five institutions that we will be working with. This is part of the exchange programme that we hope to develop with the other African countries," concluded Mr Seconna.



RHEOLOGY: Prof Irina Masalova with the Department of Trade and Industry award.

Researchers at CPUT have recently been awarded a million rand to extend a research project that focuses on emulsion technology and the development of a safer and more accurate blasting practice for the mining industry.

For the past nine years, the Material Science and Technology group, which is based at the Cape Town campus, has been conducting research in collaboration with African Explosive Limited (AEL), a world leading innovator in explosives technology and manufacturer of bulk emulsion explosives.

The emulsion research project lead by Prof

Research project RECEIVES R1M FUNDING

Irina Masalova has proved to be such a success that AEL has committed to fund CPUT for an additional three years.

The research has allowed AEL to develop an eco version of their repump, dope and blend emulsion bulk explosives, using waste fuel oil generated by mining machinery.

"We have managed to successfully apply rheology, which is the study of the flow of complex and multi-phase liquid, as a tool for predicting the stability and pumpability of AEL's bulk emulsion explosives," said Prof Masalova.

"Methods for investigation surfactant characteristics have been developed as well, which allows the company to do quick optimisation of the quality and quantity of the right surfactant in order to manufacture cost effective emulsion with optimal stability."

Prof Masalova said funding from AEL and the National Research Foundation's Technology and Human Resources for Industry Programme (THRIP), has also resulted in CPUT establishing a world class rheology laboratory, at a cost of R8.5 million.

Recently the centres' achievements and projects with AEL was highlighted at the Department of Trade and Industry's award

ceremony, which celebrated successful research projects that received THRIP funding.

THRIP's mission is to improve the competitiveness of South African industry, by supporting research and technology development activities and enhancing the quantity of skilled people. It does this through a partnership programme which challenges companies such as AEL to match government funding for innovative research and development in South Africa.

The emulsion research project clinched runner up prize in the Advanced Higher Technologies Category at the awards ceremony which was held in Somerset West on 22 October 2009.

Prof Masalova said: "The DTI evaluated projects in terms of the outcomes and how it impacts industry. They have seen this project to be efficient and beneficial for industry."

She said the collaboration would not have been possible without the buy-in of AEL, a South African company.

"The Research and Development Department at AEL is lead by Dr Piet Halliday, who believes that investment in research will allow the company to produce a new generation of products and technology," said Prof Masalova.

AGRIFOOD drives innovation in food sector

In a bid to drive innovation in the food sector, the Agrifood Technology Station (ATS) along with the Provincial Department of Economic Development and Tourism are rolling out the Food Innovation Programme.

The programme will see the ATS design, develop and pilot a comprehensive food innovation programme in the Western Cape Province.

Head of the ATS, Mr Larry Dolley said this venture will see them work with small medium and micro enterprises (SMMEs) over several months in a bid to provide them with the necessary skills and tools to develop their innovative ideas.

"Some companies have ideas which possibly have innovative potential, others have good ideas ripe for innovative practice and then there are

those who have ideas but just don't know that it has potential," he said.

Mr Dolley said they are currently in the process of meeting and interviewing various businesses who have applied to participate in this unique programme. Businesses eligible for participation in the programme are not only those who want to develop an innovative product.

Mr Dolley said innovation is also about taking an existing product, system or process and improving on it. He said businesses who meet these criteria will also qualify for participation in the programme. With funding of R200 000, the ATS plans to work with 10 businesses during the next few months. The programme includes workshops, on-site visits, business planning and various other technical programmes that will support innovation.

The station, which is located on the CPUT Bellville campus, is well positioned to provide innovation support to small and medium enterprises. It boasts highly qualified and experienced staff, including scientists, technologists and technical experts. The station will also roll out the Food Technology for Non-Technologists programme, which is aimed at equipping un-skilled individuals who are working in the industry with the appropriate skills and the Food Safety programme, which looks at helping businesses to formulate safety programmes. Both programmes are funded by the department. Mr Dolley said funding for the three projects totals R450 000.

Meanwhile, Dr Chris Nhlapo, DVC Research, Technology Innovation and Partnerships, said CPUT supports this initiative as it will add impetus to the institutions bid in vigorously driving the regional innovation system.

RESEARCH TRIP TO STOCKHOLM A SUCCESS

A pump efficiency test rig, designed and built by researchers based at the Flow Process Research Centre, was recently used to test the characteristics of sewage sludge and paper pulp waste fluids in Stockholm.

The centre, which is based in the Civil Engineering and Survey Department at the Cape Town campus, is tasked with researching problems that relate to the flow of industrial fluids.

The researchers have expertise in making precise measurements of the viscous characteristics (called rheology) of complex fluids, and then relating these characteristics to the flow of industrial fluids and pumping systems.

The test rig, which was shipped to Stockholm earlier this year, was used by the researchers to test the characteristics of these fibrous suspensions.

The team, Prof Rainer Haldenwang, Dr Veruscha Fester and Mr Richard du Toit recently returned from Stockholm, where they spent several weeks conducting tests.

Prof Haldenwang said: "It took us only two days to assemble the rig and to do the water tests, showing that the rig is truly portable, despite its physical size."

He said the portability of the test rig and ease of reassembly stems directly from Mr du Toit's unique modular design of the test loop and its support structures.

"Without him it would have taken much longer," said Prof Haldenwang.

The team's host and project partner in Stockholm, Dr Richard Holm, who works for Innventia, a paper pulp research institute, was also impressed that the facility was operational in such a short time.

A research facility at Hammarby Sjöstadverk in Stockholm, operated by the Swedish Environmental Research Institute and the Royal Institute of Technology, supplied centrifuged sludge.

Two types of sludge (lysed and unlysed) from another water treatment plant, were also tested



RESEARCH: The CPUT Team Prof Rainer Haldenwang, Dr Veruscha Fester and Mr Richard du Toit with host Dr Richard Holm.

to determine their viscous properties. In total, eight sludges and three concentrations of fibre suspensions were tested over a period of three weeks.

Prof Haldenwang said one significant achievement was finding the characteristic pump curve for fibre suspensions in laminar flow, which is a huge point of debate in this area of research and rarely obtained experimentally.

The project sponsors, which include the Swedish International Development Cooperation Agency and Tillväxtverket, a Swedish Agency for Economic and Regional Growth, were impressed by the amount of test work completed.

They were also pleased to witness the efficient pumping of very viscous slurries by centrifugal pumps at a much lower pumping power than is often the case in industry. The sponsors indicated that they would like to see the results implemented in industry.

Prof Haldenwang said the results of the tests are invaluable for further research.

He said they are now planning to conduct an audit of the type of pumps and energy usage in local sewage treatment plants, and to demonstrate how knowledge of the viscous properties of sludge can be used to monitor and control pumps for optimum use of energy.



TEAMWORK: The CPUT team assembling the rig.



TESTS: Dr Veruscha Fester sampling sludge.

DREAM LAB INCUBATOR promotes entrepreneurship

First year Events Management students recently organised a successful awareness function for the Dream Lab Incubator, a project that aims to develop entrepreneurship among CPUT students.

Ms Tania Petersen, a Marketing lecturer and the initiator of the Dream Lab Incubator approached the Events Management students to organise the function.

CPUT employees, students and former students, attended the function, held at the Granger Bay Hotel School on 22 October 2009.

The guest speakers were two alumni from the former Peninsula and Cape Technikons.

Mr Rhiyaan Cupido completed his Marketing Diploma at the former Peninsula Technikon and worked for six years before deciding to start his own project management business, Anix Consulting.

"As black people, we are always judged as being not good enough until the job is done, so starting my own business and excelling at what I do was key for me," said Mr Cupido.

He shared how his business had grown from having no salary to employing more than 100 people.

"I started taking a salary home, which was just R5 000 in my sixth year. Many people are good at planning, but very few will implement, so I encourage the students not to fall into that trap," Mr Cupido added.

Mr Casper de Villiers, who is an alumnus of the former Cape Technikon, as well as Operations Director and a founder member at Clickatell, was the second guest speaker. Clickatell is a world leading communication provider specialising in bulk messaging services and SMS gateway connectivity, situated in Bellville.

Ms Petersen was also one of the speakers at the function.

"Because we want to develop entrepreneurs from CPUT, our target market is third and fourth

year students. We decided to use the skills inside and groom the first years. One of the Graphic Design students designed the Dream Lab logo," she said.

The project will provide students who want to become entrepreneurs with premises and resources, entrepreneurship advice and mentoring, improved business skills, services and networking, assistance with funding and cost saving techniques.

Ms Petersen said: "I learnt about the concept while I was in Sweden through a lecturing exchange programme with Dalarna University. Dalarna University introduced me to the entrepreneurship incubator concept and I decided to import the idea. After that, I decided to write a proposal, which was later approved and I started with the work."

"I learnt about the concept while I was in Sweden, through a lecturing exchange programme with Dalarna University."

Initially, the programme will be piloted with students from the Business Faculty, but could be extended to all students at a later stage.

In 2009, the Dream Lab Incubator will run a business plan workshop, followed by a competition.

From the business plan competition, the Dream Lab team will select 10 students who will be assisted in becoming entrepreneurs.

"After that, a Needs Analysis will be conducted in order to determine which areas the entrepreneur needs mentoring in," said Ms Petersen.

The Dream Lab will assist with the registration of the business, patenting and in developing the branding of the business. It will also implement a dual mentoring system. The first part will be offered by a pool of specialists drawn from the Business Faculty.

The second part will attach a student to an industry specific mentor, where the student would spend a month with this particular mentor to familiarise themselves with the industry in which the business will operate.



ROLE MODEL: Dream Lab Incubator founder and Marketing lecturer Ms Tania Petersen.

The Faculty of Informatics and Design's annual exhibition is growing by leaps and bounds.

This year's week-long exhibition - which showcases students' work in all genres of design - kicked off on Monday, 23 November 2009, with an official opening by the Dean of the Faculty of Informatics and Design, Professor Johannes Cronje at Cape Town Campus' Student Centre.

The official opening was marked by the awarding of certificates to students who fared well in various departments and programmes within the faculty, and was later punctuated by a well organized and colourful fashion show held at the Multipurpose Hall the same evening.

The exhibition showcases works in all genres of design, including graphic, fashion, industrial, and surface design among others.

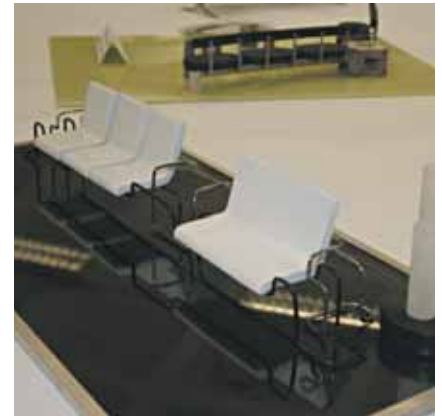
For the first time this year a fashion show has been organized on campus as part of the program. In the past it used to be held off campus. Many designers, students, parents,

academic staff and industry representatives braved the sweltering heat wave and attended the opening session of the exhibition. The fashion show drew much interest with the models strutting their stuff in the most colourful designs created by third year and BTech fashion design students.

Prof Cronje described this year's exhibition as "Amazing creativity coupled with excellent execution". He said this year's exhibition was different in that it is bigger than ever before, which makes it 'vibey'. He also mentioned that this year is the first time that some items are on sale across all genres.

"The most important thing about this exhibition is that it is the celebration of the hard work of students and the launch of their careers," said Prof Cronje.

Mr Nick Mills, a third year student specializing in Illustration, said it was a great pleasure and privilege for him to be part of the exhibition. Moja caught up with Mr Mills putting the final touches on his illustration on an exhibition wall in the design building.



TALENT: The exhibition showcased students' work in all genres of design.

FID EXHIBITION

a kaleidoscope of colour and talent



BUSINESS FACULTY OFFERS SAP COURSE

The CPUT Faculty of Business and Africa's SAP University Alliance programme recently presented, for the first time, an introduction to SAP01 training.

The course focused on providing insight to lecturers who on completion will be able to plough back the knowledge and help senior students gain experience in SAP. The course ran from 26 to 29 October 2009.

The SAP University Alliances program is a global programme that provides university faculty members with the tools and resources necessary to teach students how technology can enable integrated business processes and strategic thinking and gives students the skills to add immediate value to the marketplace.

Mr Ferdo Maree, a lecturer at CPUT said, "We are very excited to be part of this initiative. We joined the Alliance to offer hands-on experience



TECHNOLOGY: Participants of the SAP course.

on SAP to help increase graduate recruitment rates when the student leave varsity for the job world or if they wish to be entrepreneurs."

A deeper understanding of SAP solutions can jumpstart students' careers by combining business process knowledge with enterprise software expertise to develop the most valuable skills portfolio in the market today.

"Our focus as Cape Peninsula University of Technology is to empower tomorrow's workforce through education," said Mr Maree.

Career-ready graduates, as part of an educated workforce, are fundamental for competitiveness and success in today's global business environment. At regional and global

levels, a combination of business and information technology (IT) skills as well as industry expertise, promote stability and economic growth.

"Our education and training programmes enable users and partners to leverage ICTs and business process know-how as drivers of growing economies as well as sustainable communities," explained Mr Max Fuzani, SAP Africa University Alliances manager.

Course material included SAP Introduction, Navigation; System-wide concepts; Logistics; Accounting; Human Resources; Products, solutions and services among others. Delegates from Namibia Polytechnic, University of the Western Cape; Free State University as well as CPUT attended the four day training.

INDUSTRY BURSARIES for students

More academically deserving CPUT students are set to benefit from additional bursary funding from the Hosken Consolidated Investments Limited (HCI) Foundation and Golden Arrow Bus Services.

Bursaries to the value of R1 520 700 have been made available by HCI Foundation, while Golden Arrow contributed R37 330 in addition to R98 000 which was announced earlier this year.

The contributions are part of a bursary programme partnership between CPUT, Golden Arrow Bus Services and HCI Foundation aimed at making higher education accessible, as well as contributing to the reduction of the skills shortage in the country.

The Golden Arrow bursaries cover tuition and accommodation costs, books and travel expenses as well as a living stipend, while the HCI Foundation bursary covers a large portion of registration and tuition fees only.

CPUT Advancement Director Dr Garth van Gensen expressed gratitude for the funding on behalf of CPUT.

"This additional funding from HCI and Golden Arrow will ensure that more of our students achieve their academic goals without worrying about funding for their studies," he said, adding that "we are grateful for the generous support and we look forward to a strengthened partnership."

Speaking on behalf of the HCI Foundation,

bursary programme manager Mr Khaya Jack said the Foundation was committed to supporting and encouraging students at tertiary education level, as well as to assisting them to complete their studies in order to increase the number of youth who are qualified, skilled, and employable.

Mr Jack said the bursary programme had retained its focus on providing financial assistance to academically deserving students from historically marginalised groupings whose families were least able to afford the cost of higher education.

"Our financial contribution to student funding is a direct commitment to an educated society which helps to improve the quality of life of its people," he said.

PHOTOGRAPHY STUDENT wins top prize

A third year student's passion for photography recently helped her clinch a top prize at the Sanlam Private Investments Innovation Awards.

Photography student Ms Robyn Rickers is one of 10 tertiary students who recently walked away with R10 000 in prize money.

The awards, which were launched this year to mark the 10th anniversary of Sanlam Private Investments, celebrate students who in their field produce unique ideas and concepts which are practical and add value.

The awards, which took place on 30 October 2009, were exclusive and only institutions that were identified as being among the top in their respective fields, were invited to participate.

The photography department at CPUT and all its third year students were invited to showcase their skills and participate in the awards.

Several other tertiary institutions were invited to participate in the categories of fashion design, wine-making, interior design, architecture, culinary arts, jewellery design, music and fine art.

The CPUT students were tasked with creating an entry that displayed one or a combination of the criteria, which included creativity, beauty, luxury and quality.

Ms Rickers, who hails from Wellington, produced an emotive portrait that featured a man and woman embracing. She said although well dressed, their faces tell a story of individuals who have struggled with poverty and other hardships. Ms Rickers, who comes from a family of photographers, said she was inspired by the conditions in her community to capture the image.

Although she hopes the photograph will raise awareness of what is happening in communities, Ms Rickers said: "Everyone creates their own story when they see a picture".

One of the judges, celebrity photographer Ms Gerda Genis, who was moved by the photograph, and said Ms Rickers is a great photographer. Ms Genis described the photograph as visually captivating and communicating instant and alarming honesty. She said the photograph highlights the social issues of those less fortunate and offers insight into the couple's platonic love and their lost aspirations.



ART: Photography lecturer Mr Irvine Meyer and Ms Robyn Rickers with the winning photograph.

FILM STUDENTS MAKE DOCUMENTARY FOR A GOOD CAUSE

Two Film and Video Technology students have successfully put together a documentary for the Saartjie Baartman Centre for Women and Children in Athlone.

Ms Carrissa Andrew and Ms Nadine Lindsay, both in their third year, were approached by their lecturer, Mr Jared Borkum, following a request from the centre.



MAKING A DIFFERENCE: Third-year students Ms Carrissa Andrew and Nadine Lindsay have completed a documentary for the Saartjie Baatman Centre.

The students were required to put together a documentary that showcased the operations at the centre.

The Saartjie Baartman Centre for Women and Children project served as the In-service training for both students, who are required to complete two months experiential training.

Ms Andrew focused on producing, while Ms Lindsay's specialty was shooting and editing the documentary.

"We had to first visit the centre so that we could understand how it operated. We later set up interviews with three women from the centre who told us where they have been and how the centre has empowered them," said Ms Andrew.

The students also interviewed a social worker from the centre and that enabled them to understand what abused women and children experience.

Ms Lindsay said: "The work that we did at the centre is very important. The experience also helped us to realise that the centre needs sponsors.

"Hopefully, the documentary that we have made will serve its purpose and touch more people out there to get involved."

The centre recently celebrated its 10th anniversary and the documentary was not only used for potential sponsors, but also it carried highlights of what the centre has been doing for the past years.

"Being in the film industry involves a lot of working for someone else, but doing this documentary was different. It gave us a chance to work independently and produce work that we can claim as ours.

"Seeing how much the centre has achieved through the help of someone else, made me realise that what we did there was for a good cause," said Ms Andrew.

ANGLO CLEANERS celebrate christmas in October

Christmas started early for Metro cleaners working at the Anglo Residence as students rewarded them with Shoprite Christmas vouchers.

On Monday October 26th, the cleaners were surprised with a special lunch and vouchers that were handed over to them as tokens of appreciation for a job well done.

After the residence was declared the cleanest on the Bellville campus, residence coordinator Ms Bulelwa Dlephu, house committee members and students decided to do something for the cleaners in return.

The idea came about earlier this year and it was decided that each student would contribute R20 towards the vouchers.

They raised enough money to buy each cleaner a R500 voucher and to contribute towards the residence's end of the year function that was held on 24 October 2009 at Anglo Residence.

Ms Dlephu said: "At Anglo, we want to truly create an atmosphere of home away from home. At home we have people who help us with the house chores and at the end of the day one needs to convey a gesture of appreciation."

Even though it was not easy for students to raise money, they managed to do this through designing the donation forms that enabled them to ask for donations from other students.

Ms Nomonde Mondleki, the house committee's treasurer, said: "We felt the exercise of walking around asking for money was worth it as we wanted to do good for people who do great in our residence.

"We have cleaners that are dedicated and they know their job. By doing this, we want to motivate them and hopefully other cleaners from other residences will get motivated also."

Metro cleaners responded well to the gesture.

Ms Nozuko Lamla, one of the cleaners, said: "What the students have done for us is very exciting. We feel loved and appreciated for our hard work and the vouchers came at the right time.

"I will never forget what they have done; I feel that saying thank you was just not enough, considering the fact that the money they used was a sacrifice as they are still studying."

Anglo residence students also made a follow-



GIFT: A cleaner receiving her voucher.

up visit to the Imitha Yelanga Children's Home in Eerste River that they initially visited in August.

Apart from the groceries that they distributed during their first visit in August, they also handed over toiletries and clothing to the home.

"We have done so much work this year and that has been noticed and appreciated. We plan to do more next year," said Ms Dlephu.

ELECTRICAL ENGINEERING DEPARTMENT HOLDS BTECH CONFERENCE

The Department of Electrical Engineering hosted the 13th annual BTEch conference at the Lecture Theatre Complex on the Cape Town campus recently.

Thirty-four students presented their work at the conference that was held on 13 November 2009. The students were required to present their industrial project results to their peers and industry representatives. During the conference, students were given an opportunity to present their papers after which the audience asked questions about the project research, findings and recommendations.

According to Ms Judy Rogers, the conference liaison officer, the students were evaluated and the marks formed part of the overall Industrial Project course.

One of the objectives of the conference was

to provide interested industry representatives with an overview of the standard and range of technical projects investigated. It also aimed to bring together the industry, researchers and designers to review research conducted at BTEch level. The department has produced a number of graduates who are making a success of their careers in the industry for the last 13 years.

The evaluation panel was made up of industry representatives from different companies, which included Eskom, Tellumat, VoiceAmp and Peralex.

Ms Rogers said: "The evaluation panels are chosen in such a way that they are comprised mostly of ex-students who have gone on to start their own businesses or who are currently studying towards or who have completed post-graduate qualifications."

At the conference three students were given

awards for the best presentations.

Mr Zak Blomerus received an award for the Electronic Communication stream while Mr Paul Kalombo received an award for his Industrial Electronics presentation. Mr Clarence Arendse received an award for the Power Engineering presentation.

The department recently celebrated Mr Blomerus' achievement after he was selected to participate in the regional South African Institute of Electrical Engineers (SAIEE) paper presentation, which took place on 17 November 2009. He competed against students from Stellenbosch University and University of Cape Town.

Mr Blomerus' won at the regional level and his presentation was forwarded to the SAIEE National Student Paper presentation. He is still awaiting the outcome.

MARKET DAY

FOCUSES ON SOCIAL RESPONSIBILITY

Market Day 2009 not only provided fun and entertainment for CPUT students, but also communicated an important message about social awareness and social responsibility.

The event, which was co-ordinated by Student Affairs and Student Counselling in conjunction with the Sunflower Fund, took place on Cape Town Campus on 19 October 2009 and on Bellville Campus on 22 October 2009.

Market Day, which takes place annually at CPUT, allows students to practise their entrepreneurial, craft, cooking and marketing skills by setting up stalls and selling their wares to members of the CPUT community.

This year, in keeping with the 2009 theme, students belonging to the Association of International Students and other cultural societies

sold traditional food and crafts, thereby helping their fellow students learn more about different cultures and nationalities.

A stall offering a wide spectrum of South African delicacies titled "Rainbow Nation", managed by Public Relations students wearing local outfits, won the best stall prize.

The Student Counselling Department's peer helpers distributed a special edition of the Student Counselling newsletter dealing with the importance of keeping human relationships healthy and active.

"We understand that if there is one part of our connection with others that is in distress, other parts of our lives will be affected as well," said Intern Psychologist Ms Samantha Hanslo in her introduction to the newsletter.

The Student Counselling peer educators also used the opportunity to recruit new peer helpers for 2010 and to thank students for their support this year.

In addition to stalls representing CPUT student wellness services such as the HIV/AIDS Unit and the Disability Unit, Market Day also featured national organisations promoting social responsibility, including CANSA, SANCA, Epilepsy SA and Diabetes SA.

The Sunflower Fund, a charity that assists leukemia patients, held a "shave a little, save a life" campaign and sold bandanas to raise funds for their organisation. One of the highlights of Market Day 2009 was a concert at the Cape Town campus piazza by Idols co-winner Ms Sasha-Lee Davids, who wowed the crowds with her hit single 'True Believer' and later signed autographs for her CPUT fans.

Heart 104.9FM DJ Mr Sam Roy, who acted as master of ceremonies at the concert, asked students and staff to make a pledge around tolerance for diversity not only on campus, but in South Africa as well.

Students compete in national off-road race

A team of CPUT Mechanical Engineering students recently clinched second place in the annual Sasol Baja Challenge, which was hosted at the University of Pretoria.

This annual event sees students from across South Africa compete in off-road races, with vehicles they designed and manufactured. CPUT is no stranger to this innovative event. In 2008, the CPUT team clinched the top prize and at previous events managed to secure second and third place.

This challenge aims to teach mechanical engineering students the reality of the engineering world. Each team, which consist of four members, are required to design and build a single seated off-road vehicle. In order to achieve this, students need to accomplish all the planning and manufacturing tasks required when introducing a new product to the consumer industrial market.

This year, the institution entered three teams, which consisted of BTech and diploma students. Mr Fareed Ismail, a lecturer in the Mechanical Engineering Department who coordinated the teams said students worked on the design from February to June. "Thereafter re-design and building took place," he said.

Mr Ismail said students were required to adhere to strict engineering rules and regulations



RACING: The Baja that was built by CPUT Mechanical Engineering students.

throughout the design and manufacturing process. Students were also required to reach deadlines and goals within a specified period of time.

Mr Ismail said the experience that the students gained from participating in the challenge is invaluable. It allowed students to bring together a number of theoretical and practical skills which they developed over the past few years at CPUT.

Each year entries are judged in two sections – the theoretical, which consists of the design and safety aspects, and the practical, which is made up of the acceleration, top speed, skid pull,

manoeuvrability and hill climb tests as well as a four hour endurance event. The winning Baja team is the one that can perform consistently over all the various sections.

According to students, this year's event was "extremely hard." They faced treacherous terrain and competed in bad weather. However, all three of the CPUT Bajas performed well and completed the endurance race.

Car number eight took second place overall, as well as second position in the endurance race and third place in feasibility of mass production.

HUGE TURNOUT AT CORPORATE GOLF DAY

The first CPUT Corporate Golf Day, which was held at the Devonvale Golf Estate in Stellenbosch, proved to be a huge success.

A total of 16 four-ball teams, which were sponsored by local and national companies, participated in the event.

The aim of the Corporate Golf Day was to raise money for the institution as well as to promote the corporate image of CPUT.

The event, which took place on 13 November 2009, was organised by several CPUT staff members from various departments, faculties and campuses. This included staff members Mr Tyrone Africa, Ms Cathy Cloete, Ms Juanita Stoop, Mr Christo Arnoldus, Ms Bridget Par and Mr Quinton Summers.

The first tee-off took place at 11am and saw golfers battle it out on the green for the top prize.

The day culminated at 6pm, with a prize giving ceremony at the club house.

The winning team was sponsored by the Pinnacle Health group, a company that acts as an intermediary between CPUT and Discovery Medical Aid. Members of the winning team were Director of Facilities Mr Stanley Dennis, Director of Finance Mr Vernon van der Linde, Director of Human Resource Mr Charles Gilbert and Ms Fazlin Kinear, a member of Pinnacle Health group.

Companies who participated in the event said it was well organised and that they are looking forward to supporting CPUT next year.

The organising committee said with the success of the event and the huge response from companies, the CPUT Corporate Golf Day could become an annual feature on the institution's calendar.



WINNERS: The winning team, Director of Facilities Mr Stanley Dennis, Director of Finance Mr Vernon van der Linde, Director of Human Resource Mr Charles Gilbert and Ms Fazlin Kinear, a staff member of the Pinnacle Health group.



TEAM SPIRIT: Ms Juanita Stoop, Coordinator of the CPUT Golf Business Academy participated in the golf day.

