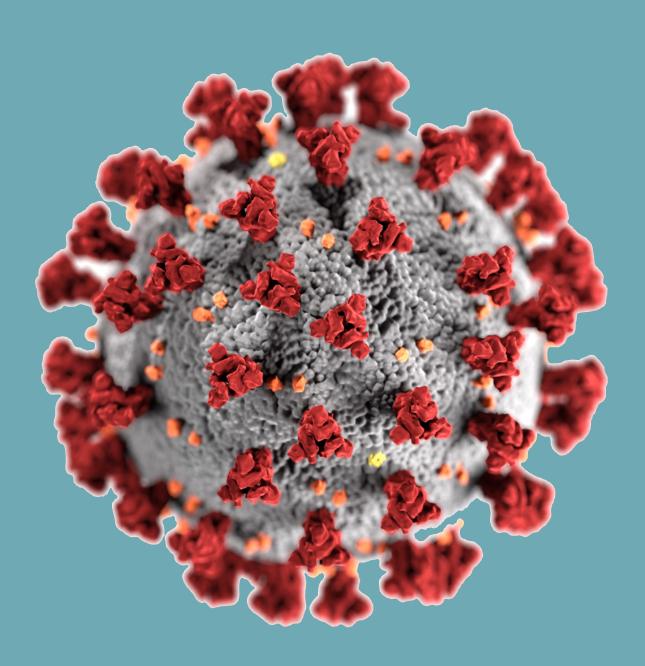


GRATIA First Edition 2020



Life at the University before and after

Covid-19









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PREVENTION OF

COVID-19



WASH HANDS

HAND SANITIZER





WEAR MASK





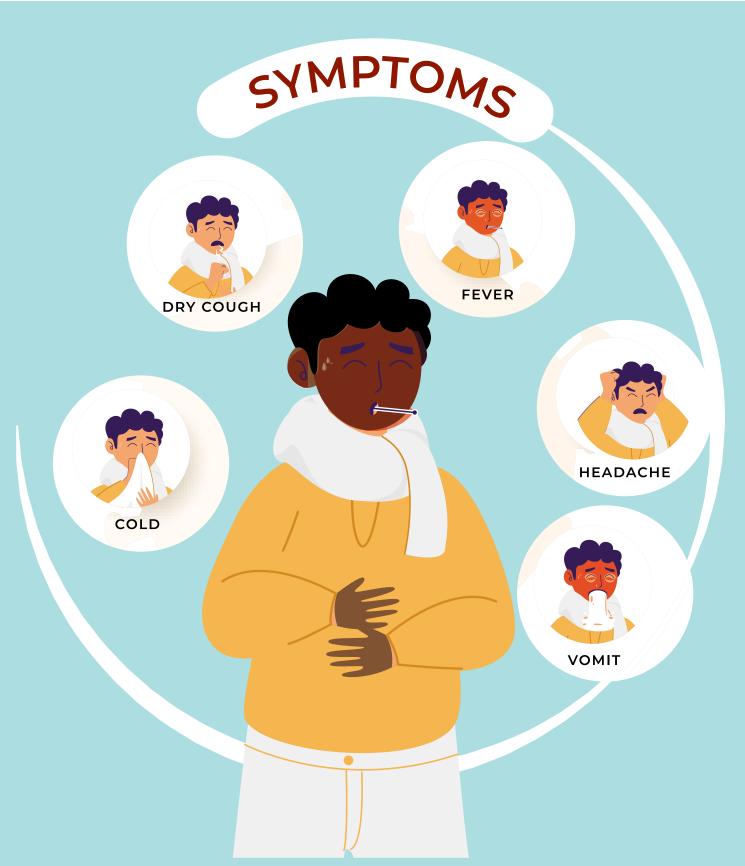
AVOID HANDSHAKE













"Reimagining CUT: Co-creating Vision 2030 – our people, our voices"

I trust that you are well and coping with what will be our new normal for the foreseeable future.

The COVID-19 pandemic continues to wreak havoc globally, and caused a massive human crisis. This is indeed a defining moment for modern society. Never before has the current generation been challenged to such an extent on a personal, emotional, psychological, physical, social and economic level. Could this be a message? One in which we are reminded to slow down; to reconsider our hectic and materialistic drive; to appreciate the treasures in life, such as family, friends, nature and creation; and to embrace life again? Will we be able to continue with life as we knew it? My answer is a definite "NO". The impact of this crisis will be too severe, and most, if not all, facets of existence will be affected. Universities will never be the same again.

Much discomfort is caused by the current situation, and the CUT community deeply empathises with all the hardships felt. Many people depend on our resilience and leadership, and we will not let them down. CUT's proactive approach will help us to emerge stronger from this crisis. In addition to safeguarding our staff and students, we implemented several initiatives during the past few weeks.

CUT made a grant of R1 million available to our COVID-19 research and innovation teams to support government in overcoming the pandemic. I am pleased to report that our researchers and engineers are currently co-operating with government in different processes related to the challenges associated with the pandemic. Some of the outputs include oxygen connectors, masks and mouthpieces, oscillating respiratory devices, non-invasive ventilation helmets, ventilators and sanitisers. To address the immediate needs in the region, CUT donated sanitisers, developed by the university's staff and students, to the Free State Provincial Government. In addition, we sponsored material to a community project on the manufacturing of masks, in which a local entrepreneur, a community radio station and community members are involved.

We remain confident that the strategies, programmes and resources we have implemented are beginning to bear fruit. We are currently busy with intensive planning to move from a short-term emergency response, to a long-term strategic trajectory. As we have adopted the higher education sectorial theme of save the academic year – save lives, the health and safety of our staff and students are paramount. Although we remain committed to complete the 2020 academic year, the CUT Council and Management will not compromise the health and safety of staff and students.

All buildings at both campuses have been decontaminated and cleaned. We also installed 450 sanitising stations across the two campuses, and all people entering our campuses are screened. Staff and students have been issued with washable cloth masks and undergo safety and health orientation.

Access to appropriate technology and the internet has been a significant challenge due to the deep inequalities between students. We have acquired 5 000 electronic devices that are currently distributed to students in need across the country, as well as zero-based and other data options. Furthermore, guidelines, online curricula, supporting mechanisms such as our learning platforms, and training were implemented to ensure the readiness of students and staff for online instruction. We have also developed alternatives for students in remote areas with limited or no access to e-technology. These challenges will be eased as we are implementing the phased return of students to our campuses.

We have also established the CUT COVID-19 Relief Fund (CCRF) to support needy students, staff and community members, whilst the CUT Thusanang Project continues to support needy students on its registered database, especially with food vouchers. To date, we have paid out a total amount of R428 000 from the CCRF. We are deeply grateful for all the support; however, the need remains dire, hence we implore all CUT stakeholders to display extraordinary generosity by contributing to the CCRF. Please visit https://www.cut.ac.za/cut-covid19-relief-fund for more detail and contribution procedures. Be assured that each contribution will be well managed and used to support COVID-19 affected organisations and individuals. Thank you in advance for your kind support.

The emotional and psychological well-being of staff and students during the adjustment process are particularly important to us. Our Wellness Centre was strengthened to provide support to students, including via the CUT StuComm App, and CareWays was contracted to provide support to staff on various wellness-related matters.

I would like to pay tribute to the men and women that are at the forefront of the fight against this pandemic at local and national level. Also, I want to convey my deepest gratitude to government, our President and his team, and the Free State Premier and her team, for their decisive leadership and the bold steps they have taken during this crisis to protect the safety of citizens and secure a safer and healthier environment for all.

Despite the current challenges related to COVID-19 that we as the CUT community and the nation are facing, we have continued with the development of Vision 2030, incorporating the challenges brought to the fore by this pandemic. In line with our theme for 2020, namely "Reimagining CUT: Co-creating Vision 2030 – our people, our voices", we have developed an engagement platform called "CUT Vision 2030", which allows anyone with an interest in the setting of our Vision 2030 to contribute to the process. We are making great strides in our Vision 2030 project and have received several contributions from various stakeholders during the past two months.

The following documents are now available on the engagement platform, namely CUT situational analysis, which includes a review of Vision 2020; draft Vision 2030 and high-level strategic objectives; and draft Strategic Plan 2021 – 2025. I would like to encourage all stakeholders – students, parents/guardians, alumni, employees, partners, business, industry, government and higher education affiliates – to comment on these documents and share their views and inputs with us. Please submit your inputs to Prof. Antoni Szubarga at szubarga@cut.ac.za.

Given the ever-unfolding complex and debilitating impact of this pandemic, institutions, systems, and indeed countries, will have to become accustomed to the notion of dynamic reorganisation. It will ultimately boil down to the resilience capacity of each of these entities once the consequences of this pandemic have become known or manageable. When that moment arrives, we will be required to immerse into a "new normal" – whatever that may be and focus on our Vision 2030.

In conclusion, this pandemic will pass, the "new normal" shall emerge, and the responsibility to ensure that we will be a stronger, unified and improved society after the pandemic, will rest on us. We require resilience, national solidarity, and unity in partnership, with coherent, coordinated, and decisive responses to address the long-term effects on the economy, to the benefit of society. Now is the time to think outside the box, create new paradigms, and rethink the existence of universities in its current format, including its modes of delivery and impact in society. Let us all embrace the well-known saying, "Crisis does not build character, it reveals it".

On behalf of the CUT Council and Management, I would like to acknowledge our external partners – including businesses, industry, government, universities, and society at large – for your continuous support. We remain committed to help our students succeed in the 2020 academic year.

I remain positive that, through this challenge, South Africa as a nation and the CUT community will become stronger and more unified than ever before. Take care and be safe!

Kind regards / Ditumediso tse mofuthu / Vriendelike groete

Prof. Henk de Jager Vice-Chancellor and Principal



CUT innovations assist with COVID-19 medical needs



CUT's innovative project to combat COVID-19 pandemic impress Free State Premier



CRPM 3D prints low cost prosthetic hand

CUT innovations assist with COVID-19 medical needs



CUT's Health Sciences masters student, Ms Dineo Mohapi Attela, is part of the Faculty of Health and Environmental Sciences team who produced sanitisers to assist the government. CUT's focus on applied research has made such contributions possible. Her research topic is "Prevalence and succession of microbial hazards associated with Brassica Oleracea and Spinacia Oleracea in the forms and retails in the Free State.

As the world fights an immense battle against the COVID-19 pandemic, CUT is lending a helping hand through its vast and innovative technological expertise.

The Centre for Rapid Prototyping and Manufacturing (CRPM), Product Development Technology Station (PDTS), Centre on Quality of Health and Living (CQHL), and CUT Innovation Services (CUTiS) are currently involved with government in different processes related to challenges associated with COVID-19.

"Our rapid research and innovative response to assist government with the COVID-19 pandemic, is proof of our commitment to work together in solidarity and unity to restrain the spread of COVID-19 (the coronavirus) and reduce the risk related to the community transmission phase. Furthermore, a COVID-19 Research and Innovation Grant of R1 million has been made available by CUT to support these entities in their endeavours," says Prof. Henk de Jager, Vice-Chancellor and Principal.

Two major problems resulting from the outbreak have been identified, namely the lack of appropriate Personal Protective Equipment (PPE) for hospital staff in the "hot zones", and the need for non-invasive ventilation helmets/masks that provide patients with positive pressure and reduce the spread of the virus in the hospital.

CUT is assisting by 3-D printing masks for non-invasive ventilation for use by COVID-19 patients. This project works on the concept of Continuous Positive Airway Pressure (CPAP) or Bilevel Positive Airway Pressure (BiPAP) systems.

The PDTS and CRPM are also assisting in manufacturing the muchneeded hospital equipment such as oxygen connectors and splitters, to increase the capacity of the hospitals.

Continue to page 12



CUT engineers get on board with the bubble helmet to contribute to the medical fraternity. Manufacturing medical devices is one of CUT's specialisation field. From left: Mr Allan Kinnear, Project Engineer: Medical Devices at Product Development Technology Station (PDTS) demonstrating the use of prototype of the non-invasive ventilation helmets/masks on Mr Sizwe Ntimane, Junior Project Engineer. The applied research is intended to provide patients with positive pressure and reduce the spread of the corona virus in hospitals. The helmet-based ventilation is envisioned to save lives and shorten ICU stays for patients in respiratory distress.

Some hospitals have requested assistance with possible spare parts they may need, and several old ventilators have been sourced from Universitas and Grootte Schuur hospitals, which will be used to reverse-engineer, and attempt to develop and manufacture ventilators to support hospitals nationally in this severe shortage of ventilators.

Several other hospital items such as connectors, splitters and mouthpieces/masks have been developed and manufactured by the CRPM and PDTS teams. Many of these items were manufactured through a novel approach of rapid tooling for injection moulding in appropriate polymers, which is not possible in Additive Manufacturing (AM), either because of the material or quantities needed.

Ongoing projects to assist hospitals in the Central Free State include Clinician PPE, non-invasive ventilation helmets, oxygen connectors ("Christmas tree connectors"), oxygen splitter connections and flutter devices.

CUT is currently participating in a number of active research discussion groups, which connects virtually, namely: Medical Supplies, Rapid Manufacturing, Ventilator Development, and a COVID Agile

Rapid Manufacturing Team. The team consisting of individuals from CUT, North-West University (NWU), the Council for Scientific and Industrial Research (CSIR), the Vaal University of Technology (VUT), Aerosud and Progressus Digital, to focus on an approach for urgent product development, and assessment of designs submitted by groups wanting to have a product manufactured (e.g. a valve, connector, etc.), or any new product related to COVID-19, for both design and possible manufacturing thereof within the group.

The Centre for Applied Food Security and Biotechnology (CAFSaB), ACS Promotions and Pro Ocre are also contributing by collaborating in the production of sanitisers for the Free State Department of Education. The team consists of experts within the field of Environmental Health, together with partners from business. ACS Promotions will be issuing 10 000 litres of ethanol, whilst CUTiS is providing the team with the required one thousand 500-ml bottles required for packaging.

For more information on the projects visit, https://www.cut.ac.za/rapid-research-and-innovation

CUT's innovative project to combat COVID-19 pandemic impress Free State Premier



Free State Health MEC, Montseng Tsiu; Premier, Sisi Ntombela; Finance MEC, Gadija Brown; with CUT's Dr Gerrie Booysen, Director: Centre for Rapid Prototyping and Manufacturing (CRPM) and Mr Allan Kinnear, Project Engineer: Medical Devices at Product Development Technology Station (PDTS).

Premier of the Free State, Sisi Ntombela and members of the Executive Council visited the Central University of Technology, Free State (CUT) on 14 April 2020, to assess the university's research and innovation efforts in response to government's call for support in the fight against the scourge of the Coronavirus (COVID-19) pandemic.

Premier Ntombela said that she was impressed by how advanced the province was technologically, after a demonstration of the projects currently being undertaken by CUT. The assessment included a tour of the Centre for Rapid Prototyping and Manufacturing (CRPM) laboratory, which is currently producing 3D non-invasive ventilation helmets for use by COVID-19 patients, as well as much-needed hospital equipment, such as oxygen connectors and splitters.

She added that the province was blessed to have locally manufactured sanitisers produced by the CUT's post-graduate students and academics in the Faculty of Health and Environmental Sciences. "We have been inundated with offers from companies selling sanitisers at abnormal prices. But today we know that we have our own, that can assist us at a reasonable amount," said Ntombela.

The MEC for Health, Montseng Tsiu commended CUT for an appreciable support it has received. "What is good about this is that the participants are our very own children from the Free State, and that makes us feel proud. This will put our province on the map. Let us continue to work together and make sure that we save the lives of our people," said Tsiu.



The PDTS and CRPM are also assisting in manufacturing much needed hospital equipment.

Finance MEC, Gadija Brown, added that they are using the challenge of the pandemic to empower the youth in the province. "We were very excited about the work that CUT has been doing, not only because it is situated in Mangaung, the epicentre of the pandemic in the province, but also for the fact that these are our own young people in the lead," said Brown.

The Vice-Chancellor and Principal, Prof. Henk de Jager added that some of the assistance offered by the university included donations. "Even before the lockdown we realised that this is a major international crisis and we mobilised our expertise, and our state-of-the-art equipment and it is for that reason that our researchers came together to work on various projects in order to assist our community. As a university, we have committed 1 million rand to a COVID-19 research and innovation fund for CUT, and it is through that fund that we can donate the one hundred and fifty bottles of sanitiser to help our community," concluded Prof. de Jager.

"We have been inundated with offers from companies selling sanitisers at abnormal prices. But today we know that we have our own, that can assist us at a reasonable amount."

CRPM 3D prints low cost prosthetic hand



An award-winning academic and mechanical engineer Dr George Vicatos and his Master's student at the University of Cape Town, Severin Tenim, designed and developed a low cost, mechanically operated prosthetic hand.

The designs of the prosthetic hand were sent to the Centre for Rapid Prototyping and Manufacturing (CRPM) at the Central University of Technology, Free State (CUT) to be printed and manufactured.

The prosthetic hand is said to offer a functional and aesthetically appealing device at a low cost compared to products currently on the market, making it suitable for application in the South African public healthcare sector. A patent application has been filed for this invention and the working prototype has been well-received at various expos and is currently undergoing evaluation by a practising prosthetist.

Technology Advisor at CRPM, Mr Els Johan, explained that the parts were produced in the PA2200 nylon material which was then graphite coated to give the grey finish. "We printed the product on our EOS P385 Selective Laser Sintering system at 150 micron resolution. All the internal components were machined from titanium."

CRPM is making progress in assisting patients in public and private health facilities who are disfigured by cancer or traumatic incidents by providing prosthetics or re-constructive surgery, state of the art technology thus restoring their dignity and quality of life and in some cases, saving lives.



CUT launches the i-KUDU collaborative online international learning project



SA and Sweden collaborate in workshops to improve the operations of IoT



CUT academic nominated to contribute in the Future Professors Programme



7th Construction industry conversations on enhancing soft skills in construction management



CUT employees fruitfully engage on how to attract fundraisers



CUT intentional about transformation



CUT launches the i-KUDU collaborative online international learning project



CUT academics who formed part of the official launch of the Collaborative Online International Learning (COIL). Some of the participating universities in this three-year funded project include CUT, the University of the Free State, Durban University of Technology, University of Limpopo, University of Venda, the Hague University of Applied Sciences, Coventry University and Antwerp University in Belgium.

The Central University of Technology, Free State (CUT) through the International Office and the Centre for Innovation in Learning and Teaching (CILT), officially launched the i-KUDU Collaborative Online International Learning (COIL) on 16 January 2020.

The COIL project is a European funded innovative teaching and learning initiative that promotes the development of intercultural knowledge and understanding across shared multicultural learning environments using internet-based tools and online teaching methods, mainly focusing on intentional development of intercultural communicative competence which comes inherently with two other benefits such as the development of digital and critical literacies as well as foreign language skills.

The project is also envisaged to improve management and operation of the South African partner Higher Education Institutions through addressing the process of internationalisation of the participating higher education institutions; and supporting equity and democratisation of higher education in internationalisation. In addition, it will build capacity for governance, strategic planning and management of higher education institutions relevant to internationalisation. It will also support the development of university services relevant to internationalisation, specifically, professional academic support services.

The project will also address curriculum internationalisation in the broader transformation context including the integration of indigenous knowledge, Africanisation, decolonisation, and reference to the contemporary local context.

According to Ms Refilwe Moleyane, CUT Academic Exchange Coordinator, the expected outcome of the project is to improve collaboration between the five partner universities in South Africa and five others in Europe, with 55 academics from each of the respective partnership groups. "COIL is about a virtual exchange of information between lecturers and students in the participating South African and the European universities. Lecturers would be expected to engage on teaching methods and developing new assessments for the respective student pools, while students will be expected to engage on how to solve or approach the currently existing academic assessments and support one another to have a better understanding of the field of study in general in order to improve the quality of education at both South African and European universities."

She further highlighted the threatening challenges faced during the execution stage of the project such as the internet connection for South Africans and the unreliable Eskom power supply which might result in poor online communication, that might lead to participants missing scheduled online sharing classes.

SA and Sweden collaborate in workshops to improve the operations of IoT



Prof. Cyrille Artho from KTH Royal Institute of Technology, Sweden, giving a presentation on software verification with code and models. The project brought together Information Technology researchers in the areas of networking, programming and security in South African and Swedish Universities namely; Dr Ntima Mabanza (Central University of Technology, Free State), Dr Gardner Mwansa (Walter Sisulu University), Prof. Bernd Fischer(Stellenbosch University), Prof. Konstantinos Sagonas (Uppsala University) and Prof. Cyrille Artho (KTH Royal Institute of Technology). The researchers will be working in collaboration to provide solutions and contributions to the improvement of operations of IoT devices. They will also educate students and professionals on recent techniques and tools that can enhance the security of IoT systems and applications.

Internet of Things (IoT) is known to operate in an open environment making it vulnerable to various security issues and attacks. There is always the possibility of hackers breaking into the system and stealing data. Therefore, there is a need to find innovative techniques and tools that can enhance the security of IoT systems and applications.

As part of taking security measures, the Central University of Technology, Free State (CUT) hosted the South Africa – Sweden University Forum (SASUF) collaboration workshops on Network Testing and Fuzzing for a Reliable and Secure Internet of Things from 03-07 February 2020. The purpose of the workshop is to introduce the participants to the recent range of testing technologies and tools that can enhance the security of the Internet of Things systems and applications.

It is expected that participants will be equipped with the necessary skills that will enable them to understand the Internet of Things security architecture and components including vulnerabilities, attack vectors for smart devices, analyse firmware and be able to identify vulnerabilities in firmware, perform smart device hacking using techniques such as firmware extraction techniques and conventional attack techniques and to perform exploitation and be able to take over smart devices.

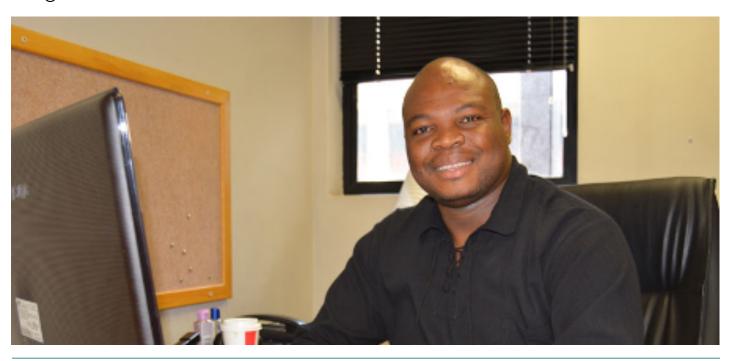
Topics such as software verification with code and models, property-based testing, testing software: from unit testing to model-based testing, grammar-based testing, Introduction for the hackathon, Java PathFinder and Hackathon were covered.

Dr Ntima Mabanza, Senior Lecturer in the Department of Information Technology said that the project aims to bring together information technology researchers from different expertise such as networks, programming and security. "The aim of this collaboration is knowledge sharing and exchange to build research capacities and establish new connections. In this project, we are more focused on students who are doing honours and master's degrees, advanced diplomas and PhD."

Prof. Muthoni Masinde, Head of the Information Technology department said that digital technologies are moving all the 17 Sustainable Development Goals' (SDG) from vision to action. "The tools and technologies we are going to learn about are completely in line with the vision of CUT especially with the research we are doing in the faculty. Everything that we are doing will give direct input into our Centre for Sustainable Smart Cities and many other things we are doing at CUT. Together, let's use these technologies to protect our planet and improve people's lives and the world."



CUT academic nominated to contribute in the Future Professors Programme



Future Professor, Dr Tshepiso J Makhafola Assistant Dean: Research, Innovation and Engagement in the Faculty of Health and Environmental Sciences, has been appointed to contribute in the Future Professors Programme.

The Department of Higher Education and Training has commenced with the implementation of the Future Professors Programme (FPP) in a quest to prepare academics to function at the professoriate level. The pilot programme seeks to empower academics who are not yet professors in various aspects. The programme includes national and international engagements with an expert panel who advise candidates on their intellectual project and give them exposure in international teaching. Dr Makhafola was amongst the 29 selected candidates of 130 nominations from all 26 universities for the first phase of the programme.

In his letter to Dr Makhafola, Minister of Higher Education, Science and Technology, Dr Blade Nzimande commended Dr Makhafola for a well-deserved success as a participant in the programme. "Congratulations and best wishes for an excellent experience. I trust that you will take full advantage of the opportunity that has been afforded to you and I look forward to the contribution you will make as leading academic in higher education in South Africa and beyond" said the Minister.

Dr Makhafola said he is hoping that the programme will allow him to pursue advanced scholarship and build, maintain and improve his NRF rating by focusing on his research outputs and impact. He also said that the programme would assist him to extend and strengthen his collaboration nationally and internationally. "As an attentive academic, researcher and professional person with extensive

training in toxicology, phytomedicine, ethnopharmacology, biochemistry and cancer biology, my goals and aspirations are to establish myself as a leading researcher in the field of genetic toxicology. I will further explore toxicological research for the prevention of mycotoxin-induced carcinogenesis, one of the under-reported health issues facing developing countries."

Dr Tshepiso Makhafola hails from Ga-Ledwaba, a small village in Limpopo Province. He holds a BSc degree (Biochemistry and Microbiology) and BScHons (Biochemistry) from the University of Limpopo an MSc (Vet Sci) and PhD from the University of Pretoria. He is currently conducting research on anticancer splicing activity on Natural Products at the University of Nottingham (Tumour and Vascular Biology Laboratories) and has experience in preparation of dossiers for the registration of health products with the South African Medicines Control Council. He is also a supervisor to four MSc students, two PhD's and three postdoctoral fellows and has several publications under his belt.

Dr Makhafola joined the Central University of Technology, Free State (CUT) as the Assistant Dean: Research, Innovation and Engagement and is also a Senior Lecturer: Clinical Technology in the Faculty of Health and Environmental Sciences.



7th Construction industry conversations on enhancing soft skills in construction management



At the workshop, a pocketbook on construction safety for South Africa by Prof. Fidelis Emuze, Professor: Built Environment (middle) was launched. The book will serve as a handy reference guide about the common hazards and risks faced on construction sites. With Prof. Emuze is Prof. Alfred Ngowi, Deputy Vice-Chancellor: Research Innovation and Engagement (left) and Prof. Nomvula Rakolote, CEO: Association of Construction Project Managers (right).

International literature indicates that core competencies in the form of self-concept, traits, and motives, are essential competencies in terms of the practice of construction management and the achievement of project success.

Previous South African research concluded that the core competencies are at the very least equally important to the surface competencies in the form of knowledge and skills, which alone will not assure the best practice of construction management and project success. On 12 March 2020, the Central University of Technology, Free State (CUT) in collaboration with the Chartered Institute of Building (CIOB), Association of Construction Project Managers (ACPM) hosted the 7th Construction industry conversations where various topics relating to enhancing soft skills in construction management were discussed.

In his address Prof. Alfred Ngowi, Deputy Vice-Chancellor: Research Innovation and Engagement spoke about the digitization of the construction industry. He said that the construction business faces a major productivity challenge and has lagged even with Artificial Intelligence. "Although the construction business faces a major productivity challenge and is behind other major sectors, the adoption of Artificial Intelligence (AI) could assist the industry to catch up with the rest. It can also help the industry overcome its major challenges which include cost and schedule overruns and safety concerns. By learning from the AI-powered applications that have been working successfully in other industries, the engineering and construction industry can shorten the learning curve, and by embracing machine learning algorithms, they can improve all aspects of the construction life cycle."



ACADEMIC PROGRAMMES

Meanwhile, Professor Fidelis Emuze scooped the 2019 Tailor and Francis Book and Digital Product Award. His book titled Construction Health and Safety in developing countries received the award in the Outstanding Monograph Category.

He is a member of the Association of Researchers in Construction Management and the Lean Construction Institute. He is the International Coordinator of CIB TG59 (People in Construction), and in 2017, he co-organised and hosted the Joint CIB W099 and TG59 International Safety, Health, and People in Construction Conference.

The global construction sector is infamous for high levels of injuries, accidents and fatalities, and poor health and well-being of its workforce. While this record appears in both developed and developing countries, the situation is worse in developing countries, where major spending on infrastructure development is expected. There is an urgent need to improve construction health and safety (H&S) in developing countries. The improvement calls for the development of context-specific solutions underpinned by research into challenges and related solutions.

This edited volume advances the current understanding of construction H&S in developing countries by revealing context-specific issues and challenges that have hitherto not been well explored in the literature and applying emergent H&S management approaches and practices in developing countries. Coverage includes countries from the regions of sub-Saharan Africa, Latin America, Asia and Europe.

The book, which is the first compendium of research into construction Health and Safety issues in developing countries, adds considerable insight into the field and presents innovative solutions to help address poor H&S in construction in developing nations. It is a must read for all construction professionals, researchers and practitioners interested in construction and occupational H&S, safety management, engineering management and development studies.



From left: Mr Hendri du Plessis, Lecturer Quantity Surveying and Construction Management: University of Free State, Ms Lungiswa Moko, Building Infrastructure, DPWI Eastern Cape, Prof. Alfred Ngowi, Deputy Vice-Chancellor: Research Innovation and Engagement, Prof. Nomvula Rakolote, CEO: Association of Construction Project Managers (ACPM), Ms Zimkitha Dlepu, Chief quantity surveyor, DPWI Free State, Mr Jiba Magwaza and Clive Rangata from Mabizo Projects. Back row: Mr Gabuka Booi, Marketing and facilitation from Moladi construction and Prof. Fidelis Emuze, Professor: Built Environment.



CUT employees fruitfully engage on how to attract fundraisers



Dr Saleem Badat, Programme Director of the International Higher Education & Strategic Projects at the Andrew. W Mellon Foundation in New York, Prof. Nosisi Feza, Dean of Humanities and Dr Henri Jacobs, Deputy Director: Wil/Skills Development.

On 11 February 2020, CUT invited Dr Saleem Badat to assist CUT employees with fundraising and proposal writing skills. The skills will enable them to pursue and secure external funding for research projects and research centres both locally and globally.

Drawing on his extensive experience, and having been responsible for distributing \$20 000 000 to African universities annually, Dr Saleem put forward that it is important for the university's prospective donors to get excited when reading through the proposal and that, a well-written, clear, planned out and innovative proposal will put the institution at the right doors.

He added that most donors are looking to invest in long-term relationships, which may turn into a fruitful partnership for both parties, but to achieve this, he said that patience is an important quality to possess. "Fundraising is like a courtship more than a relationship," said Dr Saleem. He highlighted the importance of doing proper research on potential donors and be able to connect with them on a personal level, not because it guarantees them funding, but rather an added advantage if the donor feels like their interests go beyond the funding. "You must be prepared to spend a lot of hours pursuing their targets and always propose projects or ideas that will benefit other universities around the country, and improve the higher education community, that is the kind of impact that donors wish to achieve through their contributions."

Prof. Henk de Jager, Vice-Chancellor and Principal acknowledged that at any university the Vice-Chancellor is responsible for fundraising, but further expressed that his objective is to equip all the relevant CUT staff members with this essential skill.

Dr Saleem Badat is an esteemed member of the academic community, he is a South African sociologist, higher education policy specialist, and researcher. He acquired his doctorate at the University of York in the UK and is also a Mellon research fellow at the College of Humanities at the University of KwaZulu-Natal (UKZN). He was the first Programme Director of the International Higher Education & Strategic Projects Programme at the Andrew. W Mellon Foundation in New York for four years. In 1990 he became the first Chief Executive Officer of the newly created Council on Higher Education, and the former Vice-Chancellor of Rhodes University.

Fundraising is like a courtship more than a relationship."



CUT intentional about transformation



Prof. Henk de Jager Vice-Chancellor and Principal (back row left), and Dr Gary Paul, DVC: Resources and Operations (back row right), with the Next Generation Women in Leadership (nGenWIL).

The Central University of Technology, Free State (CUT) continues to build on its progress of achieving its goal and becoming a transformative University of Technology. On 07 February 2020, CUT launched "The Next Generation Women in Leadership" (nGenWIL) program aligning the institution with one aspect of its mission statement which is to attract and retain expert staff and support their development and well-being.

In this case, the focus is on the female employees, as a result of the CUT's intent towards its transformation agenda. The purpose of the launch was to introduce the mentees to their respective mentors to establish personal interaction. The program aims to connect CUT female employees with influential and experienced female mentors from different parts of the country, specialising in different fields both in the educational and corporate sectors. This will assist in developing and preparing CUT women for high leadership positions and to promote gender equality.

Through the executive team of the CUT, a commitment was made and from the office of the Vice-Chancellor & Principal funding has been dedicated to this critical initiative. Opening the proceedings,

the university's Vice-Chancellor and Principal, Prof. Henk de Jager, thanked the mentors for not only accepting CUT's invitation to be part of the initiative but also for making time to meet their mentees.

The Vice-Chancellor also expressed his excitement about the initiative, because a joint effort from all members of the higher education sector will enhance the impact that the program has. Prof. de Jager further spoke on his dissatisfaction with the current number of four female Vice-Chancellors on the USAf board prompting him to consult with the CUT executive team to have the program under his office to give it priority. CUT has registered five of its female employees for the program but hopes to raise the number to ten.

In closing, Prof. Henk spoke on the ongoing in-depth study by the commission of Gender Equality at CUT that aims to identify the challenges that female employees experience in the organisation and nature thereof and how they can be addressed. With the Next Generation Women in Leadership program and the current study by the commission of Gender Equality, CUT shows serious intent about transformation in its ranks.



CUT scientist amongst SA top ten to attend the 70th Lindau Nobel Laureate Meeting in Germany



Mr Percy Hohne, Lecturer in the Department of Electrical Electronic and Computer Engineering, thrilled to be nominated to participate at the 70th Lindau Nobel Laureate Meeting where 660 other young scientists from 101 countries across the globe will be present.

The Academy of Science of South Africa (ASSAf) has successfully nominated ten top young scientists from South Africa to attend the 70th Lindau Nobel Laureate Meeting dedicated to the disciplines of Chemistry, Physics and Physiology this year in Lindau, Germany. The ten South African nominees were scheduled to join other 660 young scientists from 101 countries across the globe alongside the 70 Nobel laureates and meetings were scheduled to take place from 28 June to 3 July 2020.

Amongst the participants is one of CUT's very own scientist, Mr Percy Hohne, Lecturer in Electrical Electronic and Computer Engineering. Mr Hohne obtained his B.Tech degree in Electrical Engineering in 2016 and received his M.Eng degree (Cum Laude) in 2018 from the Central University of Technology (CUT). He is currently enrolled for the Doctorate in Electrical Engineering and is expected to complete his thesis at the end of this year. His research interests are based on power and energy systems, energy management, renewable and alternative energy systems.

When asked about his nomination for this precious opportunity, he

said that he is honoured and thrilled to be one of the participants of the 70th Nobel Laureate meetings. "To be in the presence of some of the most respected scientists in the world is a once in a lifetime opportunity and I would like to thank the CUT for nominating and providing me with a platform to realise this momentous achievement. I take great pride in representing CUT at this highly prestigious event and would also like to express my deepest appreciation to ASSAf and the Department of Science and Innovation for all their assistance. I promise to do my utmost to convey the knowledge I have gained to all the students under my supervision, as well as my peers."

ASSAf, as the official partner of the Lindau Foundation and with funding from the Department of Science and Innovation, annually nominates young scientists to attend the Lindau Nobel Laureate Meeting which serves as a platform for young scientists from all over the world to have an in-depth exchange of knowledge with Nobel Laureates.

"To be in the presence of some of the most respected scientists in the world is a once in a lifetime opportunity and I would like to thank the CUT for nominating and providing me with a platform to realise this momentous achievement."





Free State Librarians celebrate National Library Week with the elderly



CUT officially opens doors for the 2020 academic year



CUT activates the waste management project



Entrepreneurial Matriculant of the Year Competition kicks off at CUT

Free State Librarians celebrate National Library Week with the elderly



A reading nation is a winning nation. Seen here is Ms Willemien Steyn, Senior Library Assistant: Pre-Cataloguing, sharing interesting stories with some of the elders from the Boikhuco Old Age Home

The Library and Information Association of South Africa (LIASA) celebrated South African Library Week with the theme "Libraries: Your Partners for Life" from 16 - 22 March 2020. The national celebration of South Africa Library Week (SALW) is one of the key milestones of the Library and Information Association of South Africa (LIASA)

In commemoration of the National Library Week, CUT librarians in partnership with the University of Free State and Mangaung Metropolitan Municipality joined forces with the Library and Information Association of South Africa (LIASA), Free State Branch on 6 March, to visit the elderly at Boikhuco Old Age Home in Bochabela. The team held their first-ever read aloud activity of the branch to celebrate the library week with the elderly.

The celebration aims to create an understanding of the importance of libraries, and the important role libraries play in a democratic society. The reading extravaganza was also to encourage the elderly to read to the young ones during their visits.



Meanwhile at CUT, a new 55 Inch touch screen for PressReader was unveiled at the library reception as part of celebrating library week.

PressReader is a programme that CUT is using in terms of giving access to most recent world's newspapers and magazines. It could be in print, online, or on their mobile device, tablet or eReader, wherever they live, travel, work or play. It offers access to more than 6,000 newspapers and magazines from more than 100 countries in 60+ languages.

With PressReader, readers can hold an enhanced digital replica of their favourite publication in their hands and read from cover to cover, with no compromises in quality, fidelity, or content.

CUT officially open doors for the 2020 academic year



Walking the talk: Prof. Henk de Jager, Vice-Chancellor and Principal is seen here interacting with some of the first-year students at the Official Opening, Welkom Campus.

The Central University of Technology, Free State (CUT) officially opened its doors at both campuses on 29 and 31 January 2020 respectively, to welcome students in the 2020 academic year. The opening proceeded smoothly despite the sporadic tension surrounding universities around the country. More than 4 300 first-year students were welcomed at the university, from a total of 48 253 applicants. This figure is in line with the Department of Higher Education, Science and Technology approved CUT Enrolment Plan.

In his welcoming address, Prof. Henk de Jager, Vice-Chancellor and Principal applauded the first-year students for passing their matric and securing a spot at CUT, joining thousands of current students who have made CUT a home away from home. He also thanked them for choosing CUT as their intellectual home. "I would like to take this opportunity to welcome you to our university. Your arrival here marks an important chapter in your life, use this great opportunity to the best of your ability and never stop dreaming because each one of you has the potential to graduate and make a difference."

He also spoke about the challenges that students are facing and assured them that at CUT, students' safety, experience and success is a top priority. "Our students are at the centre of everything we do. We are aware that you are facing many challenges and as management. We do not want you to end up in an environment that is not conducive for you to live in. We are looking at expanding our on-campus residences and off-campus accommodation" in order to reduce infrastructure backlogs; especially at Welkom Campus.

When addressing students, the two SRC Presidents, Mr Ntonyane, and Phakamile Zangwa spoke about the importance of transformation within the institution and the challenges facing students in general. They pledged to work with all stakeholders including management in resolving issues that impact students on these two campuses.

"Our students are at the centre of everything we do. We are aware that you are facing many challenges and as management. We do not want you to end up in an environment that is not conducive for you to live in. We are looking at expanding our on-campus residences and off-campus accommodation."

CUT activates the waste management project



Smart bins for smart campus: CUT has invested in SMART Bins to protect the environment. The bins are envisaged to increase recycling efficiency and eliminate overflowing bins that ultimately cause unpleasant odours. The bins will sort out waste into recycling categories by recognising different types of waste via sensors. Charged by solar energy, the bins will send out a signal to the control room via App when they are full.

The Central University of Technology, Free State (CUT) is moving towards becoming a smart campus, to achieve this, the university has invested in SMART Bins, which are envisaged to increase recycling efficiency, control waste management, protect the environment, and eliminate overflowing bins that ultimately cause unpleasant odours. The SMART Bin project evolved from the CUT Smart Campus initiative, and the need to manage waste and reduce carbon footprint.

According to Dr Gary Paul, Deputy Vice-Chancellor: Resources and Operations, the university has already attracted recycling partners who believe in the Smart bin project. "We have had meetings with the office of the Premier, and they have expressed interest in partnering with us as part of their Smart City endeavours. This is also part of our Smart Campus activities in addition to the solar panels we already have. As CUT, we acknowledge the responsibility to protect the environment and, in the process, we want to be active participants in the Circular Economy.

There is a lot of behavioural changes that need to take place in order to match the technological enhancement and advancement, but as we engage with our students and get them involved, we will achieve our goal."



Entrepreneurial Matriculant of the Year Competition kicks off at CUT



Prof. Henk de Jager, Vice-Chancellor and Principal during the launch of the competition.

The Central University of Technology, Free State (CUT) in line with its entrepreneurship graduate attribute, launched the Entrepreneurial Matriculant of the Year Competition in collaboration with Standard Bank South Africa (SBSA) and Central Media Group (CMG) on 12 March 2020.

The launch was graced by executives and their teams from all partnering organizations and dignitaries from the provincial government. Amongst the attendees were, Mr Anton Nicolaisen, Free State and Northern Cape Provincial Head of Standard Bank South Africa (SBSA), Mr Nick Efstathiou, Chief Executive Officer of the Central Media Group (CMG), Mr Tsatsi Montso, Acting Chief Director of the Department of Education and Ms Gadija Brown, Free State MEC for Finance.

The Entrepreneurial Matriculant of the Year Competition (EMYC) is envisioned to be an annual contest hosted for grade 12 learners by CUT; Standard Bank of South Africa (SBSA); and the Central Media Group (CMG). The competition will allow learners to attempt to conceive and describe a business idea, in order to enhance their entrepreneurial skills with the aim of encouraging self-learning, instil basic research skills, consider entrepreneurship as a viable career path and to provide real-life experiences to learners in developing business plans and pitching to investors. The competition also aims to increase learners' problem-solving

and decision-making abilities, to improve their interpersonal skills, teamwork and knowledge of money management.

In his welcome address, Prof. Henk de Jager, Vice-Chancellor and Principal spoke about the need for an entrepreneurial enhancement amongst the youth, especially the grade 12 learners considering the high volume of unemployment in the country. He highlighted the importance of developing prospective students for CUT who have an entrepreneurial perspective and who will one day contribute to the central region's economy as job creators instead of job seekers. He mentioned the CUT Idea-Cym, incubation programmes and the innovation hub that are still in the developmental stages with a R5 million investment from the provincial government.

The Central Media Group's Chief Executive Officer, Mr Nick Efstathiou said that as the Central Media Group, they are obsessed about growth in the central region and will continue to support such initiatives and see it getting off the ground. "As the Central Media Group, we are delighted to be part of this exciting venture. Our goal is to grow as a proudly central South African business, which is fitting as a sponsor of the Entrepreneurial Matriculant of the Year Competition for the central population of South Africa," he said.

Mr Anton Nicoliasen, Provincial Head of Standard Bank South Africa said that as Standard Bank, they see the competition as an excellent opportunity to make a difference and they also see themselves as catalysts to change. "The youth is our future and we are faced with a big challenge of unemployment. As Standard Bank, we hope that this competition will plant a seed and give confidence to the matriculants of today to become the entrepreneurs of tomorrow."

Speaking on behalf Dr Tate Makgoe, MEC for Education, Mr Tsatsi Mantso, Acting Chief Director at the Department, shared a strong message of support from the provincial government. He said that their curriculum has built-in entrepreneurship skills but has been missing a partner to drive them. He also spoke about the entrepreneurship, employability and education (E-cubed) programme, which they have piloted for the past two years to ensure that South African learners from grade 7 to 10, are taught entrepreneurship skills as part of the curriculum. "The MEC for Education will be declaring focus schools in the Free State, where learners will be focusing on the skills needed for the future," said Mr Montso.

The Free State MEC of Finance, Honourable Gadija Brown, delivered a special message of support to the establishment of the Entrepreneurial Matriculant of the Year Competition. She said, "the executive committee of the provincial government places emphasis on entrepreneurship. Our provincial economy is not doing very well, and this is the opportunity for our matriculants to see the gap, tune in and be able to make money while supporting the economy of the province. I cannot contain my excitement and would like to thank Prof. Henk, Standard Bank and Central Media for this wonderful initiative."

The Entrepreneurial Matriculant of the Year Competition entries will be open for all matriculants from the central region of South Africa and neighbouring provinces such as Gauteng and the Northern Cape who attend quintile 1,2,3 and former Model C schools. The schools will conduct their internal competitions and then select their most promising business descriptions for a provincial-level competition. From the schools' submissions, a panel consisting of CUT, SBSA, CMG and business sector members will select and award prizes to the top five entries. Each award recipient will have the opportunity to play CUT's VALU-E game set, which will introduce them to the vagaries of setting up and running an actual business. The game set will culminate with players designing a real business plan. Participating learners will have enough time to work through their ideas and bring their best to the table.

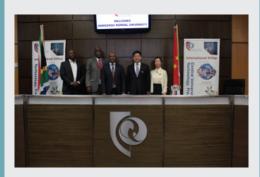
The Entrepreneurial Matriculant of the Year Competition webpage contains the entry form and update across the content to align with our latest information, https://www.cut.ac.za/emyc

The target group is Grade 11 learners who will be matriculants in 2021.

"The youth is our future and we are faced with a big challenge of unemployment. As Standard Bank, we hope that this competition will plant a seed and give confidence to the matriculants of today to become the entrepreneurs of tomorrow."



CUT Faculty maps a way forward with Botswana Open University



New partnership between CUT and Hangzhou Normal University will bring growth for Free State



CUT and PSC partner to address challenges in the public sector



CUT Covid-19 Relief Fund donates essentials to Towers of Hope Church

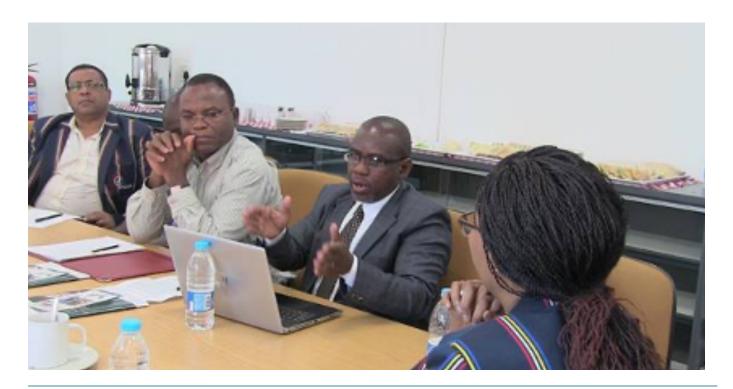


Provincial leaders, academics and industry experts lead the way into the 4th Industrial Revolution



CUT STEM Academy and Eskom Expo co-host the Free State Science Camp

CUT Faculty maps a way forward with Botswana Open University



Delegations from both BOU and CUT mapping the way forward to ensure that both partners are happy with all tabled agreements.

On 04 March 2020, the Faculty of Humanities, through the Department of Mathematics, Science & Technology Education, welcomed the delegates from the Botswana Open University (BOU).

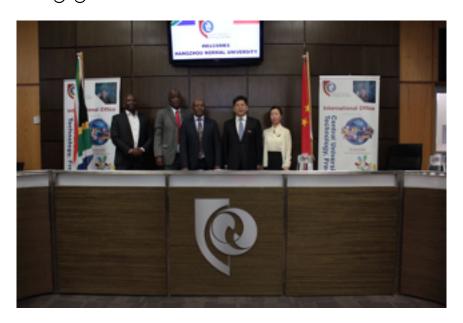
This visit emanated from the MoU signing between the two universities in 2019. The purpose of this visit was to map a way forward and engage in talks on possible collaboration between the School of Science and Technology for BOU and the Department of Mathematics, Science and Technology Education at CUT

Some of the points of interest discussed were:

- To identify curriculum programmes that both universities can partnership in,
- To look into staff or student exchange programmes for specific programmes
- Visit some community service initiatives on campus and within the city to appreciate potential and realised impact for benchmarking purposes.
- Explore research activities, online offerings and academic programmes (i.e. short courses).

Curriculum programmes of interest which were identified were all undergraduate programmes under the Department of Mathematics, Science & Technology Education, as well as the Postgraduate Certificate in Education programme which is offered by the Department of Postgraduate Studies: Education. The existing programme sharing policy of the institution was also considered.

New partnership between CUT and Hangzhou Normal University will bring growth for Free State



From left Mr Teboho Maine: Head of Economic and Rural Development at Mangaung Metro, Mr Moses Kau, Chief Director in the Office of the Premier responsible for international relations, Prof. Alfred Ngowi: Deputy Vice-Chancellor: Research, Innovation and Engagement, Dr Chen Chunlei – General Secretary of the CPC Committee of Hangzhou Normal University, China and Dr Yan Baiyan – General Secretary of the CPC Committee of Qianjiang College, HNU.

Central University of Technology, Free State (CUT) and the Hangzhou Normal University, China signed a Memorandum of Understanding to mark an important chapter of collaboration between the two universities.

The MOU aims to extend the effective and mutually beneficial cooperation between the two parties and develop academic and cultural exchange in education, as well as collaborative research projects.

Of great importance to this partnership is the envisaged establishment of the Confucius Institute at CUT which will be constructed once the architectural work is completed. The establishment of the Confucius Institute in the Free State demonstrates the university's commitment to the region's multiculturalism and cross-border partnerships that will benefit these universities by exposing their respective employees and students to the globalised world.

Prof. Alfred Ngowi: Deputy Vice-Chancellor: Research, Innovation and Engagement signing the MoU with Dr Chen Chunlei - General Secretary of the CPC Committee of Hangzhou Normal University, China.

In May, Prof. Alfred Ngowi, Deputy Vice-Chancellor: Research, Innovation and Engagement at CUT went to Hangzhou Normal University in China to explore areas of collaborations that will be pursued by the two universities.

"Prof. Ngowi's visit to China and our visit today to CUT symbolise a healthy relationship between the universities. We are very impressed by your beautiful campus, academic programmes and research at this university," said Dr Chen Chunlei, General Secretary of the CPC Committee of the Hangzhou Normal University earlier today before the signing.

"This partnership offers many opportunities of intercultural experiences, intellectual discourse and collaborative research for our students and academics from both institutions," said Prof Alfred Ngowi.

This partnership is inspired by the high-level trade agreement between South Africa and China, as well as gradual growth of the Chinese population residing in the Free State and the greater number of South African youth attending Chinese universities; some entering the labour market in China.

"This partnership offers many opportunities of intercultural experiences, intellectual discourse and collaborative research for our students and academics from both institutions."

CUT and PSC partner to address challenges in the public sector



Mr Sisa Mlisana, Acting Provincial Director: PSC, Dr Henk Boshoff, Commissioner: Public Service Commission, Prof. Henk de Jager, Vice-Chancellor and Principal and Prof. Alfred Ngowi, Deputy Vice-Chancellor: Research, Innovation and Engagement ready to action the agreement.

On 21 January 2020 the Central University of Technology, Free State (CUT) and the Public Service Commission (PSC), entered into an agreement and signed a Memorandum of Understanding (MoU) to provide a framework for collaboration between parties and improve public administration through knowledge sharing and capacitation, sharing of facilities and other resources related thereto.

Prof. Henk de Jager, Vice-Chancellor and Principal said that CUT is committed to enhancing the quality of the public services in the country. He also indicated that the MoU is aligned with the university's vision of engaging with the community for mutually beneficial development. He indicated that the PSC has agreed to share their reports with CUT students in ensuring that there is practical relevance in research contributions.

He also mentioned that both parties have agreed that the MoU should at least include among others, joint research on publications, research activities and programmes with high impact and relevance, share best practices on governance, strengthen collaboration on community services, enhance visibility, relevance and impact of this partnership.

"We would certainly like to cement this MoU and enhance service delivery and governance for all of us. We believe that this partnership will be fruitful and benefit all citizens in this country. Let us take hands and ensure that we tackle the challenges we are faced with."

Dr Henk Boshoff, Commissioner: Public Service Commission, said that the reality with the South African government and governance is a well-known factor and needs to be dealt with. "The intention of signing MoUs with universities across the country is to utilise the wealth of knowledge and expertise that our universities have to make a difference in service delivery and improve the lives of our people. We have excellent and empirical research documents on service delivery, governance issues, and good practices in management that we can share with you as a starting point to solving real-life concerns. We are looking forward to a massive collaboration and implementation of this MoU."

In his closing remarks, Prof. Alfred Ngowi, Deputy Vice-Chancellor: Research, Innovation and Engagement said the issue of service delivery in South Africa hardly needs to be emphasised. "There is no more critical issue than service delivery and governance because it cuts down to the vulnerable communities. The partnership with CUT and PSC is taking us to the 4th Industrial Revolution level where we take technology to solve these problems. As CUT, we believe that addressing community-based challenges is our duty and this agreement solidifies our vision as an engaged university. If we work alone, we can reach a little, but if we work with other sectors, we believe we can make a mark," he said.

CUT and University West take partnership to the next level



Prof. Alfred Ngowi, CUT Deputy Vice-Chancellor: Research, Innovation and Engagement; Prof. Henk de Jager, CUT Vice-Chancellor and Principal; Prof. Martin Hellström, UW Vice-Chancellor; and Prof. Lars Svensson, UW DVC: Research and PhD Studies.

CUT continues to take steps towards empowering its graduates. On 18 February 2020, CUT and the University West (UW) in Sweden formalised a partnership, and signed a Memorandum of Understanding (MoU) and declaration of intent of co-operation. The parties intend to establish co-operation in the field of doctoral education in work-integrated learning (WIL).

The two institutions have been working together since December 2017, and the partnership has flourished, based on commonalities identified between the two universities, as well as different niche areas of excellence, such as UW's focus on WIL research and delivery at postgraduate level, and CUT's focus on operationalising and managing WIL at undergraduate level.

WIL is UW's overarching profile. In 2011, the Swedish Department for Higher Education granted UW accreditation to award doctoral degrees with a specialisation in WIL. The university then developed an internationally acclaimed research environment in the field of WIL, becoming the only university that offers a complete doctoral degree programme in WIL



Prof. Henk de Jager, CUT Vice-Chancellor and Principal pointed out that the two universities have much in common, and that they should work together to take WIL to the next level. "One common area that brings us together is work-integrated learning. CUT has a resolution that work-integrated learning must be a compulsory part of all our academic programmes, while UW is offering the first PhD in work-integrated learning, and I believe that, by working together, we can promote WIL and make sure that our students are relevant and equipped with the right skills set", said Prof. De Jager.

The two universities aim to promote wider co-operation in health sciences and the digitalisation of education areas, working together by exchanging best practices to bring about efficiency.

Prof. Martin Hellström, UW Vice-Chancellor, said that students are the future, so universities must do their best to prepare them as such and handling difficult challenges in the world. "I think WIL is a way that we can contribute to a better future and pedagogy in higher education. Our new PhD programme is an interesting step for us, and the start of a new journey. We think that, together with our staff and professors, we will develop this programme, and take it to a high level. There are many other fields we can collaborate on, and we hope to learn a lot from this university."

Prof. Henk de Jager, CUT Vice-Chancellor and Principal, and Prof. Martin Hellström, UW Vice-Chancellor, shake hands after formalising their agreement.

CUT Covid-19 Relief Fund donates essentials to Towers of Hope Church



Mrs Nathlene van Wyk; CUT Executive Secretary: Office of the DVC; Pastor De la Harpe le Roux; Towers of Hope Pastor, Ms Juby Govender; CUT Acting Senior Manager: Unit for Development and Fundraising; Dr Gary Paul; CUT Deputy Vice-Chancellor: Resources and Operations (CCRF Chairperson)and Ms Rebecca De Wit; Towers of Hope.

Note: face masks were worn during the engagement but briefly removed for the photo.

The Central University of Technology, Free State's COVID-19 Relief Fund (CCRF) has donated food parcels, sanitisers and face masks to the Towers of Hope Church NGO in Bloemfontein. The CCRF was established to support needy students, staff and community members in the Free State Province.

Towers of Hope Church Pastor, De la Harpe le Roux said that the Non-Governmental Organisation (NGO), which had to shut down their daily soup kitchen during the national lockdown, has been assisting pastors in the city to feed their congregants who are facing tough times. "We distribute our food parcels through networks of churches and NGO's, they come collect the parcels and provide us with the details of the people who will be receiving them. The food parcels are primarily for people who are not receiving any form of income now because of Covid-19," said Pastor le Roux.

CUT Deputy Vice-Chancellor: Resources and Operations and CCRF Chairperson, Dr Gary Paul visited the church to learn more about the work they do.

"The university's vision is to provide technological solutions and because technology brought this about, through the production of the food and the generation of ideas, we are thus using technological solutions to provide a social impact. We are very proud and very privileged to be part of that impact," said Dr Gary Paul.

The CCRF continues to assist CUT students who have applied for assistance. "The students who applied and qualified all received R1 000 once-off relief support. The fund excludes the NSFAS-funded students as we are focusing on those without any assistance at all. We are still receiving many applications, and thus we appeal to those who can, continue to donating to the fund," added Dr Paul.

To donate to the CCRF visit, https://www.cut.ac.za/cut-covid19-relief-fund for more information.

The university's vision is to provide technological solutions and because technology brought this about, through the production of the food and the generation of ideas, we are thus using technological solutions to provide a social impact. We are very proud and very privileged to be part of that impact."

COMMUNITY ENGAGEMENT AND PARTNERSHIPS

Provincial leaders, academics and industry experts lead the way into the 4th Industrial Revolution



CUT Vice-Chancellor and Principal, Prof. Henk de Jager delivering his presentation on the 4IR Landscape in the Free State. With him in the picture is from left: Free State Premier Honourable Sisi Ntombela, Representative from the Mangaung Mayoral office, Councillor Molefe Morake and MEC for Education, Honourable Tate Makgoe.

The world is moving towards an era of artificial intelligence and the public sector, institutions of Higher Learning and Corporate giants, are coming together and collaborating to stay relevant with the times.

The Free State Provincial Government in partnership with the Central University of Technology, Free State (CUT) and the University of the Free State (UFS) hosted an international 4th Industrial Revolution Summit to zoom into opportunities, challenges and fears raised by the local communities regarding the province's participation in this new era. The 2-day event themed: 'Leveraging the Youth Dividend for the Socio-Economic Advancement of the Free State', took place on 28th and 29th November 2019 at the Performing Arts Centre of the Free State (PACOFS), in Bloemfontein.

The event was graced by dignitaries from the Provincial government including the Premier of the Province, Honourable

Sisi Ntombela and the respective MECs, academics, researchers, entrepreneurs, and industry giants from local and abroad. The aim of the summit is not only to educate, inform and showcase innovative ideas and solutions but also to motivate, inspire and come up with solutions on how everyone can benefit through participation in this era.

In her welcoming speech, the Free State Premier, Hon. Sisi Ntombela spoke about the alarming statistics of the Free State economy, highlighting that of their 2.8 million population, about 744 people are unemployed youth and that is why she felt the need for such an event to take place in her province. She further emphasised that the summit is primarily to liberate the youth of the Province. "The time has come for our young people in the Free State to grab every opportunity that comes their way and be job creators rather than job seekers. This 2019 Free State 4IR Summit is the first of many such opportunities to come, let us learn as much as we can and get on board, she said.

COMMUNITY ENGAGEMENT AND PARTNERSHIPS

Prof. Henk de Jager, Vice-Chancellor and Principal, expressed his excitement towards this new era in the province and all that it promises to bring to youth. He mentioned some of the 4IR technologies categories, which are already being utilised in the province and in the Higher Education system, such as artificial intelligence and the current research into the use of visual 4IR technologies at the CUT. He also said that he is aware of the ongoing debate between academics in the higher education system, which is based on the question: "is it a revolution or an evolution?"

He also said that he is of the view that South Africa has been keeping up with the times from the 3rd Industrial Revolution exposed to technologies such as computers, cellphones and Information Technology "We have world-class inventions and research initiatives that have occurred in our country in both industry and institutions of higher learning. At CUT, we have the Centre for Rapid Prototyping and Manufacturing. We are a public university, and this is where you can receive your world-class education and skills to match this new-age technology."

In conclusion, Prof. de Jager further mentioned that CUT had received a financial commitment of R5 million from the Free State Provincial Government and international investors towards establishing a Fourth Industrial Revolution Innovation Hub in 2020.

In his closing remarks, Prof. Alfred Ngowi, Deputy Vice-Chancellor: Research, Innovation and Engagement declared the summit a success and acknowledged the provincial leadership for stimulating economic growth in the province. He also applauded the 56 local and international presenters from industry, academia and policy-making who participated, interacted and showcased various 4IR-related technologies and investment opportunities for the province.

"We have world-class inventions and research initiatives that have occurred in our country in both industry and institutions of higher learning. At CUT, we have the Centre for Rapid Prototyping and Manufacturing. We are a public university, and this is where you can receive your world-class education and skills to match this new-age technology."



The Minister of Communications, Telecommunications and Postal Services, Honourable Stella Ndabeni-Abrahams (left) and CUT Deputy Vice-Chancellor: Research, Innovation and Engagement, Prof. Alfred Ngowi shake hands during the summit.

COMMUNITY ENGAGEMENT AND PARTNERSHIPS

CUT STEM Academy and Eskom Expo co-host the Free State Science Camp



Local learners and science teachers in attendance at the Free State Science Camp. The group learned about trends that are shaping the current practices in technology education. Young scientists are envisaged to develop the inquiring mind using research to ignite passion around science.

On 07 and 08 February 2020, CUT and Eskom hosted the Free State Science Camp in which educators and grade 6-12 learners from local schools participated. Eskom Expo for Young Scientists is a science fair where learners are given the platform to show-case their self-made scientific projects and an opportunity to compete against their peers in the science space from both local schools and around the globe.

The main objective of this camp is to spark the interest of keen learners, introduce and expose them to current trends in technology and science, to widen their knowledge and hopefully, to choose careers in Science, Technology, Engineering and Mathematics (STEM). The workshop was conducted by the CUT subject experts in the fields of Engineering, 4th Industrial Revolution and Entrepreneurship, from the Faculties of Engineering, Built Environment and Information Technology and Management Sciences.

In his welcoming address, Prof. Bankole Awuzie congratulated the participating learners and teachers for their attendance. He further encouraged them to use the knowledge acquired from the camp to bring about transformation in their respective schools and communities as Science, Technology, Engineering, Mathematics and Innovation (STEMI) champions.

Apart from the science lessons and presentations, participants also learnt about the practical side of technology and were workshopped on The Valu-E Game presented by the Faculty of Management Sciences. The workshop also included tours to CUT centres and laboratories such as RGEMS and FABLAB, where they further learnt about building and working on 3-D printing; making the practical side of technology a joyful experience for them

With the support of mentors, the learners will select and work on research topics in a variety of disciplines such as engineering, agriculture, arts and robotics. CUT also pledged to avail its laboratories to assist the schools to work and improve on their science projects, which will be exhibited at the Eskom Expo Regional Science Fair. Winners will walk away with attractive prizes.

According to Sister Mapiyeye, Project Manager: STEM Academy, plans are in progress to expand the project to CUT Welkom Campus and the University of the Free State Qwaqwa Campus. "With all the activities and gadgets that the learners experimented with, I am proud to say that CUT is indeed an institution of Technological advancement."



CUT academic lends dental expertise



CUT hosts Deputy President Mabuza and FS Government



CUT virtually commemorates the legacy of Nelson Mandela



Department of Business Management honours top achievers

CUT students and Mangaung community informed about opportunities to study abroad



Delegates from the British High Commission in Pretoria providing information on study opportunities in the UK.

"We have world-class inventions and research initiatives that have occurred in our country in both industry and institutions of higher learning. At CUT, we have the Centre for Rapid Prototyping and Manufacturing. We are a public university, and this is where you can receive your world-class education and skills to match this new-age technology."

Studying abroad is one of the exciting moments for students as it gives them an opportunity to move across the world to discover and shape their career path.

On 04 March 2020, the Central University of Technology and the Centre for Global Engagement (International Office) hosted the annual Study Abroad Fair to inform students and community members about the opportunities of studying abroad. The platform provided them with an opportunity to engage with foreign missions currently in South Africa and get clarity on the best available study opportunities outside the country. CUT and South African Government delegates of International Education exhibited the scholarship opportunities available in their countries and globally with embassies presenting representing USA, UK, Hungary, France, Germany and the Netherlands. The exhibition was open to students and Mangaung community with opportunities for Bachelors, Masters, PhD's and postdoctoral studies.

FNB CUT stun FNB Shimlas in Bloemfontein derby



March 2020-Bloemfontein derby: FNB CUT outplayed FNB Shimlas 35-14 in a titanic battle at Shimla Park and claimed back-to-back wins over their neighbours in the FNB Varsity Cup. The team performed exceptionally well in the last season and still aspires to reach greater heights. #RugbyThatRocks

Prof. Henk de Jager, Vice-Chancellor and Principal met with the CUT's team-#RugbyThatRocks players and their managers to wish them well ahead of their first game on 10 February 2020 against the University of Pretoria's Tukkies. CUT's Sports Programmes lead students into successful careers and give them the opportunity to make the most of their lives. The team are the three times winners of the Varsity Shields from 2011 to 2014 and have since joined the Varsity Cup in 2015, a premier league of rugby where they compete against some big universities with years of experience. The CUT community is immensely proud by the team's current and past players who continue to have major impact on the country's rugby landscape.



Singing of the National anthem during the Varsity Cup Rugby match between FNB Shimlas and FNB CUT.

CUT commends employees for their long service



CUT Vice-Chancellor & Principal, Prof Henk de Jager (right) presenting the long service certificate to Ms. Dimakatso Maile who has been in the CUT employ for the past 30 years. Ms Maile's career grew from being a cleaner to an experienced Librarian.

Employee appreciation is one of the top priorities on the CUT mandate and Long-service Awards are considered one of the most important forms of employee recognition.

The Central University of Technology, Free State (CUT) recently held its annual Long Service Awards to appreciate the long-serving employees for their loyalty, commitment and dedication demonstrated over their years of service in helping grow the university and carrying out its vision to where it is today.

When acknowledging the long-serving employees, Prof. Henk de Jager, Vice-Chancellor and Principal, said that it is important for any organisation to give recognition to its employees, which in turn speaks to the culture within the organisation. He further said that the main reason for such events is to say the simple yet very important words "thank you" to the people who have given most of their lives to the university. "The long service awards acknowledge solid performers, people who are loyal, committed and dedicated to this university", he said.

He mentioned the human project vision, which he said, is to make every employee feel at home and get opportunities available to achieve their full potential. He confidently indicated that it is his role as the Vice-Chancellor to unlock those opportunities. "The experienced employees are the anchor of this university and our 27 recipients together share a combined service record of 590 years between them, which is really a remarkable commitment."

Amongst the long-serving employees was Ms Dimakatso Maile, Library Assistant: Circulations, who spoke about her career growth path for the past 30 years. Ms Maile said she started as a cleaner at the student residences and that opened her up to what the university life was all about. "Over time, I grew with the university, was provided with opportunities from then to where I am as an experienced Librarian." Her story attests to Prof. Henk's human project vision.

CUT academic lends dental expertise to draft COVID-19 Infection Control Guidelines



The photos were taken prior to the COVID-19 lockdown. Students and Dr Oosthuysen as they took part in sessions at the Bloemfontein campus.

Oral Health is an integral part of overall health to prevent transmission of SARS-CoV-2 and the threat of the COVID-19 pandemic. Dr Jeanné Oosthuysen, a senior lecturer in Dental Assisting at the Central University of Technology (CUT), Free State, recently contributed to the South African Dental Association (SADA) through drafting a COVID-19 protocol for South African Oral Health Care providers. This comes after she drafted and submitted Infection Control Guidelines to the South African Dental Association in February, earlier this year.

Oral Health Care (OHC) has been identified as one of the occupations at highest risk for contracting the virus and/or becoming a node of transmission, this is due to the pure nature of dental procedures, dental equipment and instruments used, the environment and working at proximity of a patient's oral cavity.

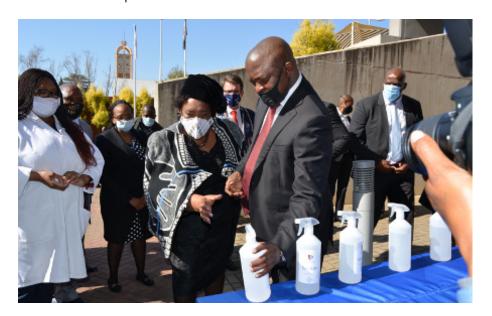
The South Africa Dental Association (SADA) identified this problem early, and immediately started a pro-active campaign to ensure safety of patients and OHC professionals during the pandemic. Different levels of restrictions and guidelines, just as those of the government, apply to OHC. The reason being, that some procedures produce aerosols during treatment and can potentially spread the SARS-CoV-2 virus, that is responsible for COVID-19.

In her doctoral study, Dr Oosthuysen focused on infection prevention and control challenges faced by oral healthcare workers in the dental industry. "Currently, there is no guideline or compliance measuring tool to monitor infection control in dentistry in South Africa. I embarked on an extensive literature review to source potential auditing compliance instruments for dentistry and established that auditing instruments used world-wide do not consider the unique South African challenges and the high incidences of HIV/AIDS, hepatitis and tuberculosis. I then developed a customised audit-feedback instrument that can be used in all South African dental facilities to monitor compliance with infection prevention and control. The findings of this study and others were published in national and international accredited scientific journals and presented at international conferences," said Dr Oosthuysen.

SADA recently published the first edition of Oosthuysen J, Potgieter E and Fossey A (2020): "Infection control guidelines for oral health care South Africa".

"What started as a small interest group of oral health care in dental implantology, soon escalated, to not only formulate a scholarly lawful and evidence-based document, but also consider all the specific dental specialities, as well as all socio-economic groups in our country. At one stage we had 500 dentists and other members of the oral health care team working together in simultaneous streams, to formulate a document to define the work of oral health care professionals after the initial COVID-19 lockdown," she added.

CUT hosts Deputy President Mabuza and FS Government as they assess the province COVID-19 Level-3 state of readiness



Free State Premier, Sisi Ntombela and Deputy President David Mabuza testing the sanitizers produced by CUT's postgraduate students and academics in the Faculty of Health and Environmental Sciences.

The Free State Premier, Sisi Ntombela hosted the Deputy President David Mabuza, who was joined by the Deputy Minister of Health, Dr Joe Phaahla at the Central University of Technology, Free State (CUT). Ntombela, accompanied by her Members of the Executive Committee presented on the state of readiness of the province, as the country settles into Alert Level 3 of the risk-adjusted approach to easing the nationwide lockdown.

CUT Vice-Chancellor and Principal, Prof. Henk de Jager welcomed the Deputy President, as well as the Free State Government. "On behalf of the tertiary institution we would like to commend government on your decisive leadership in guiding us through this pandemic and national crisis and linked to that is to ensure that health and safety of the people of this country is adhered to. I believe that it is through unity and solidarity that we will overcome this pandemic as a country, and it will leave us stronger."

Deputy President Mabuza took a tour of the Centre for Rapid Prototyping and Manufacturing (CRPM) Laboratory, where the university is currently working on 3D non-invasive ventilation printing masks for use by COVID-19 patients, as well as much-needed hospital equipment, such as oxygen connectors and splitters, to increase the capacity of hospitals. The CUT's postgraduate students and academics in the Faculty of Health and Environmental Sciences also displayed sanitizers they have produced.

Following the presentation by the Free State Provincial Government on their Response and Progress in Mitigating the Spread of Covid-19, Deputy President Mabuza said that he was happy that the province is gradually adapting to a new way of life. "You are trying your best to prepare yourself and ensure that you are not overwhelmed by the infections. We all have a responsibility to take charge and play an active role in combating the spread and transmission of this virus, as we have done in the past when faced with similar challenges such as HIV and TB epidemics. In the same trying times, let us heed the call by President Ramaphosa to be responsible citizens," said Mabuza.

"The power to defeat the coronavirus resides within all of us. As national government, we have confidence in your efforts to curb the spread of Covid-19," concluded Mabuza.

CUT virtually unites Africans from across the continent to celebrate Africa Day



Despite the challenging times brought by the outbreak of pandemic Novel Coronavirus disease (COVID-19), the Central University of Technology, Free State (CUT) virtually celebrated Africa Day on 25 May 2020 and subsequently hosted a public lecture in commemoration of the annual Africa Day. This year's theme: "The role of Higher Education (HE) in creating conducive conditions for African development" not only tapped into the critical issues faced by the continent in the 21st century, but also connected fellow Africans across the continent. The lecture also displayed solidarity amongst SADC and African countries.

In his welcoming remarks, Prof. Henk de Jager, Vice-Chancellor and Principal said that Africa Day is one of the most important calendar days in the life of CUT and hosting a public lecture thereof, stimulates and promote intellectual discourses and acknowledges the progress made by Africans, while reflecting upon the common challenges faced globally, regionally and locally. He also elaborated on the purpose of celebrating Africa Day as an opportunity to embrace diversity and success, as well as to highlight the cultural and economic potential that exists on the continent.

Prof. De Jager proudly mentioned that both his university campuses (Bloemfontein and Welkom) have staff and students that represent over 30 African States as a demonstration of commitment towards exposing local students to the globalised world within the African context. "These mixed blend of students and staff allows many local students to have an international experience through CUT internationalisation at home and curriculum initiatives."

Streaming live from his hometown in Kenya, the guest speaker, Prof. Patrick, Loch Otieno Lumumba, said that the presence of COVID-19 gave birth to a number of things including our inclination to interrogate the role of education in our affairs. "Africa's underbelly has been exposed in a number of sectors and this has demonstrated that we have not embraced science, research and development as a key component of development and that has brought us negative effects like relying hard on other countries to support us even in the provision of simple things like masks."

In his arguments, he raised critical questions asking if higher education will help Africa to realize the goal that is amplified under the Africa agenda 2063 to ensure that Africa becomes a middle level economy which is no longer famous for having people who live from hand to mouth. He also mentioned that the African continent continues to underperform and underachieve in all critical areas, which then legitimises the question of what is the role of higher education in the development of Africa and what is it that we want to do in Africa to realise development.

Prof. Lumumba believes that higher education is the game changer and that education is indeed the mother's milk of human progress.

He emphasized that the African continent must be present in Science, Technology, Engineering and Mathematics (STEM) and be a participant in the space of innovation and not just be a spectator and consumer. "Today we are talking about the 4IR, internet of things, robotics and artificial intelligence, as institutions of higher learning in Africa, we also need to collaborate, occupy this space and seize the moment. Africa can develop but we must first ensure our presence in the arena. Higher education is the lifeblood and if universities do not descend into the arena of action and only remain as ivory towers where academics only write academic papers, then we will not be able to contribute to the development of our continent. As we celebrate this day, let us give pride of place to science, technology, engineering, humanities, geography and the arts and if we do, Africa will be great again."

In conclusion he said that African countries are weak because they are divided. "We must ask ourselves how we can use education as a platform to realize what we need." He encouraged all African universities to embrace STEM, coordinate and collaborate more. He also commended Prof. Henk and CUT to be in that space. "Science is global and knows no boundaries. Innovations are critical to the development of Africa and that duty starts now."

Prof. Patrick Lumumba is an Associate Professor of Public Law, a holder of an LLD (Doctor of Laws) on the Law of the Sea from the University of Chent, Belgium, Master of Laws degree and Bachelor of Laws degree from the University of Nairobi. Prof PLO Lumumba holds an honorary Degree of Doctor of Letters (D.Litt.) (Honoris Causa) from the University of Cape Coast in Ghana. He is an Advocate of the High Courts of Kenya and Tanganyika and a Certified Mediator. He is a Fellow of the Institute of Certified Public Secretaries of Kenya FCPS (K), a Fellow of the Kenya Institute of Management (FKIM) and Honorary Fellow of the African Academy of Sciences (FAAS).

He is the Chairman of Farafina Investment Group in Monrovia, Liberia and Economic Strategic Growth and Development Initiative for Africa based in Nigeria. He is a renowned legal practitioner. He is a writer and co-author of several books. He has been named and recognized by the International Commission of Jurists (Kenya Section) and the Law Society of Kenya for his exemplary contribution to the legal profession. He was recognized by the Kenya-USA Association for the Martin Luther King Jnr., Leadership Award in 1996 and was the recipient of the 2008 Martin Luther King Africa Salute to Greatness He was awarded a Lifetime Achievement for Patriotism and Advocacy by the African Forum and has several other awards and recognitions. He currently practices Law with Lumumba and Lumumba Advocates and coordinates activities under the aegis of the PLO Lumumba Foundation.

"Africa's underbelly has been exposed in a number of sectors and this has demonstrated that we have not embraced science, research and development as a key component of development and that has brought us negative effects like relying hard on other countries to support us even in the provision of simple things like masks."

CUT virtually commemorates the legacy of Nelson Mandela



As we slowly adapt to the new normal and learn to live alongside COVID-19, the Centre for Applied Food Sustainability and Biotechnology (CAFSaB) in the Faculty of Health and Environmental Sciences held a virtual commemoration of Mandela Day on 17 July 2020.

The annual event is a global call to action that celebrates the idea that everyone has the power to transform the world and the ability to make an impact.

The two entrepreneurs in the fields of water and food analysis, Ms Shirleen Theisinger and Dr Elsabe Botes delivered insightful presentations on how their businesses are coping amidst the global pandemic.

Ms Shirleen Theisinger, Managing Director and Lab Quality Manager: SMT Labs, mentioned that one of her positives during the lockdown was the fact that they are part of essential services which allowed them to be fully operational. "Some of our challenges was that not all staff members could work from home, we didn't know how to implement social distancing in the lab, could not follow quality programme as normal, could not visit our clients and do sampling and our clients were unsure about their own situation and production and they were cutting their quality costs to save money."

Looking into the future, Shirleen said that they need to focus on new strategies and re-evaluate their plans. "We need to realise that we are all in uncharted territory, circumstances have changed, and the need has changed so we need to adapt."

On the other hand, while most of the companies are barely making money during these tough times, Director: Test It Lab, Dr Elsabe Botes said that one of the positives outcomes of the Covid-19 crises is that they have been doing better financially because of the directive to constantly wash hands. "We deal with Water Quality Testing and municipalities have added water infrastructure in a form of JoJo tanks and due to that, we have seen an increase in our monthly turnover." In her presentation she stipulated five approaches [leadership, buyin, trust, boundaries and tools] that makes business work for them post Covid-19. She further said that she is inspired by this Mandela day of 'taking action and inspiring change'. "The only way we can inspire change is by doing and living it."

When asked what message they would like to share with South Africa on this Mandela day under the theme Take action, inspire change they said: "We cannot deny patriarchy, racism and things that happened in the past. However, we need to analyse and understand our history so that we can have a firm footing, turn around and look to the future. We also need to stop focusing on ourselves and realise that if we want to survive as a country we need to stand together and make things happen."

Department of Business Management honours top achievers



From left: Mr SM Tsewu, best 1st year Marketing student, Ms KF Ratlhaa, best B-Tech Marketing, Ms Mahumapelo, best 2nd year Marketing, Mr Moteka best 3rd year Marketing, Ms Madelein Botha, Marketing Specialist, P.P.S for Professionals, Ms Lize Hunt, CEO of CPI Human Resource Consulting and Professor Naong, Head of Department of Business Management. The winners received certificates, trophies, and sponsored gifts from Van Schaik Bookstore.

The Department of Business Management in the Faculty of Management Sciences celebrated the hard work of the top academically achieving students on 12 March 2020. The prestige ceremony was held for Human Resource Management and Marketing students.

When congratulating the top achievers, industry expert, Chief Executive Officer and Founder of CPI Human Resource Consultants, Ms Lize Hunt, said that playtime is over and it's time for students and graduates to become doers and not moaners. She also spoke about the new age technology that is driving the economy and how the youth should find the balance to counter the negative impact. "We live in the land of milk and honey as we are not required any qualification to participate in the economy through business. We need to think out of the box; we need to re-think business and the future. We need more of you to be job creators in order to bridge that gap."

Amongst the recipients were Mr Adams, best first-year student with an average mark of 83%, Ms Shelile, best second-year with an average mark of 84%, Ms Tsusi and Mr Molefi, best third year and B-tech students were, with average marks of 77% and 82% respectively. Mr Tsewu received the best first-year Marketing student award with an average mark of 76%, while Ms Mahumapelo got the best second year with an average mark of 87%, the best third and B-tech students went to Mr Moteka and Ms Ratlhaa with an average mark of 79%.

Academics join in the international webinar on "COVID-19 Pandemic Outbreak



The present worldwide scenario of COVID-19 pandemic outbreak is life threatening. The disease has spread among nearly 7 million people worldwide, resulting in death of more than 6,00,000 patients and paralyzing the economy of 213 countries worldwide. (Based on June 2020 statistics)

Despite the progress and development made by the medical fraternity, the world is still desperate and to date, no specific FDA approved antiviral treatment or vaccine is available to curb the outbreak.

Considering the world's present picture, the Department of Chemistry, Deogiri College, Aurangabad and the Central University of Technology's Unit for Drug Discovery & Research jointly organized an International level Webinar on "COVID-19 Pandemic Outbreak: Global Scenario" on 23 June 2020. The purpose of the webinar was to provide an intellectual platform for researchers and the scientific community to interact and share knowledge in that regard.

For more information on the presentations click on link below. https://www.youtube.com/watch?v=9aP7W1zYFmU&feature=youtu.be&ab_channel=SunilTekale

