

SPIRIT

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**Mandela month
round-up**

**MUT Acting Vice-Chancellor implements the
internationalisation agenda**

**MUT Leaders welcome academia to
10th MUT Focus Conference**

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MESSAGE FROM THE EDITOR-IN-CHIEF



Editor-in-Chief:
Mbali Mkhize

Something great is happening at MUT: our core values and purpose are inspiring our stakeholders with a fresh determination to “shape and own the future”. One of the ways of doing this is through more intentional collaboration and integration – two themes that recur throughout this edition of the MUT Spirit, and which are the cornerstone of MUT’s success.

First, the publication congratulates the sterling work of Dr Manyane Makua, Deputy Vice-Chancellor, Teaching and Learning and his team for successfully executing the 10th edition of the Teaching and Learning conference, the Focus Conference which was attended by delegates from South Africa’s 26 universities and one university from Canada. The conference also brought in heavy weights from the higher education sector. The collaboration and top notch conceptualisation of the conference did not go unnoticed by the stakeholders, and particularly, MUT’s administrator, Professor Lourens Van Staden.

This year, MUT took a more intentional step in recognising South Africa’s first democratic president, Nelson Mandela, whose contribution to social cohesion and nation-building is recognised the world over. Our Community Engagement and Development (CEAD) Directorate’s call for a collaborative and integrated celebration was met with enthusiasm by departments across the University, and their creativity was nothing short of inspiring.

A week dedicated to MUT by Cape Peninsula University of Technology to assist in setting up an international office is also a good example of organisational collaboration. It became evident that internationalisation is not the responsibility of one office but cuts across teaching and learning, research, community engagement and every support department. A visit to CEAD by a Fulbright scholar has shown that as a university located in the Township, we need to also expose our communities to internationalisation.

The leadership of the Administrator and his team has also not gone unnoticed by the University as part of its collaboration and integration approach. The MUT spirit is at an all-time high. In addition, the gains by the choir and MUT sport are worth recognising as all these are adding colour to our core values and purpose.

MESSAGE FROM THE ACTING VICE-CHANCELLOR



Acting Vice-Chancellor & Principal:
Professor Marcus Ramogale

Many of us use the expression, “Umuntu ngumuntu ngabantu”, roughly translated as “a person is a person through others”, when we appreciate the support that we get from our stakeholders

The success of our University is founded on this very principle, from the way it was established to where it is now and where we are going. We owe our existence to our Founder, Prince Mangosuthu Buthelezi, who took it upon himself to approach and persuade Sir Harry Oppenheimer, the then Chairman of both Anglo-American Corporation and De Beers Consolidated Mines, to establish what was then Mangosuthu Technikon, and the other donors who came to rally around it. Equally, we owe our existence to the first intake of 15 students and their parents who placed their faith in this brand new institution in the midst of the Umlazi community.

Our subsequent growth into a fully-fledged University of Technology with 13 000 students would not have happened without the Department of Higher Education and Training (DHET) and all the donors that continue to support us. Their efforts to put MUT on par with the historically advantaged universities are not lost to us. Through their support, we have completed two massive buildings as part of our strategic intent of creating an enabling teaching and learning environment. Standing tall in our landscape in 2023, the one building houses the Faculty of Engineering with its several laboratories, and the other houses Student Centre – the first building to house any student-supported activities.

We also acknowledge further support from the DHET in the form of an additional R341 259 402 allocated to MUT’s constrained budget. The news, delivered in a letter from the Minister of Higher Education and Training, Dr Blade Nzimande, to our Administrator, Prof Lourens Van Staden, could not have come at a better time. This will go a long way in advancing the mission and vision of the University. Special thanks go to various offices which submitted proposals for various projects. These projects will be housed in these divisions: Office of the Vice-Chancellor, Operations, Marketing and Communications, the Registrar’s Office, the faculties of Engineering and Natural Sciences, and the Information Technology & Networks department. The Engineering Faculty will be able to furnish all its new offices and laboratories, while the infrastructure division will be able to refurbish residences, construct new labs, and procure boreholes. We are getting bigger and better soon, and we are grateful to the Minister for conceptualising the Sibusiso Bengu Development Programme which has enabled much of our recent infrastructural growth. Some of the projects have already commenced.

Lastly, let me congratulate Dr Manyane Makua, who has elevated the scholarship of teaching and learning at MUT by conceptualising a teaching and learning conference from ground up. This conference has now become an international conference. Congratulations to Dr Makua and his team.



MUT VICE-CHANCELLOR PAYS TRIBUTE TO THE FOUNDER PRINCE MANGOSUTHU BUTHELEZI

The passing away of His Excellency Prince Mangosuthu Buthelezi, the Founder of Mangosuthu University of Technology, Traditional Prime Minister of the Zulu Nation, and Founder and President Emeritus of the Inkatha Freedom Party has left the university community and all stakeholders reeling with shock. This shows that one may never be prepared for death. May His Royal Highness' soul rest in perpetual peace.

Prince Mangosuthu Buthelezi was also a mentor, friend, philanthropist, and father to many South Africans. He meant so many things to so many people. One thing, we will never forget him. His passing came as a shock to all of us because we had rejoiced when he was discharged from hospital, and he re-joined his family. The community of Mangosuthu University of Technology is in grief.

To his family, friends, MUT staff, MUT students and alumni, we say *"Uwile umuthi omkhulu"*, a big tree has fallen. The gigantic tree that Prince Buthelezi was, has spread its roots across South Africa, the entire African continent, and globally. When Prince Buthelezi established MUT in 1979 with just 15 students, he knew, as a visionary, that this small institution would grow into a large educational organisation that would have the greatest impact on the poor and the marginalised. Today MUT has over 14,000 students and has produced more than 42,000 alumni who are employed across the world as industry and business leaders, as CEOs and



as technical specialists in wide-ranging careers.

We thank God and the Buthelezi family for the gift that Shenge was. Prince Buthelezi was bold and knew how to use his network for the benefit of *"abantu abampisholo"*, meaning marginalised people and communities. He used this expression many times. It was indeed his compassion for the poor that impelled him to approach Sir Harry Oppenheimer of Anglo-American to

provide seed funding for the establishment of MUT in 1979. Anglo-American continues even today to support MUT with student bursaries.

For our part, we are grateful that we were able to honour Prince Buthelezi when he was still alive at our 2022 graduation ceremony of the Faculty of Engineering, for his vision that led to the establishment of MUT with the Faculty of Engineering as a founding faculty. That was not the first time we honoured him; we dedicated a graduation ceremony in his honour in 2014. We also dedicated our inaugural public lecture in his honour.

May Shenge's soul rest in eternal peace. Umntwana wakwaPhindangene, uShenge, Sokwalisa, Phungashe!

THE 10TH MUT FOCUS CONFERENCE



The University of Stellenbosch's Emeritus
Professor Chrissie Boughey

THE SOCIAL JUSTICE OF EDUCATION ALWAYS REQUIRES CRITICAL THINKING

The University of Stellenbosch's Emeritus Professor Chrissie Boughey, a full research professor in the Centre for Postgraduate Studies and a Professor Extraordinaire in the Centre for Adult and Higher Education, discussed her research on critical social theory's pursuit of social justice as she opened her first session of the 10th MUT Focus Conference. This year's conference focused on SDG Goal 4:

“ equal access for all women and men to affordable and quality technical, vocational and tertiary education including university. ”

In demonstrating the theme of the conference, Prof Boughey focused on the cohort analysis released annually. Her comments echoed the deep need for social justice.

“Although our higher education system has massive ties and access is improved, we are still not a big system. Incidentally, we are not in terms of participation. Our participation rate is 18- to 24-year-olds, it only just qualifies us as a massified higher education system which is over 20% of the cohort places like the United States and so on. So, we still have an exceedingly small proportion of young people going to university in this country when you view it as a cohort, even though the system has doubled its size since the early 1990s. So, although we have grown and a lot more people are now in the universities, what is astonishing and we cannot shift this is that regardless of the institution at which they registered, the qualification for which you are enrolled and the field of study, black students consistently do less well than their white peers. We have really got to ask some critical questions about why that is the case, particularly given the efforts of people like us. I really devoted earnest efforts to try to change the situation.”

Professor Boughey continued her keynote by speaking about two dominant discourses shown in the teaching and learning arena on a global scale which are the Efficiency and Equity discourses. She described discourse as a social science term; a set of ideas that hang together in language and unsigned systems. “And discourse is not stable and is a set of ideas that we have together. And what is important about discourse is that it is all around us, every day, all day, and it has the power to make us believe, value, understand, and act in particular ways. They normalize the world for us. And so, what happens is that we then start thinking, believing and acting in ways in relation to that world.”

The focus on higher education for jobs continued with a reflection on the 1997 White paper and the Four Purposes for Higher Education that were identified: meeting the learning aspirations of individuals

throughout their lives; producing a creative and critical citizen rate as a New Democracy; producing knowledge, just for the sake of knowledge, blue skies, knowledge, philosophy, knowledge about literature, and so on and so on, and finally, producing workers for the global economy and contributing to economic development.

“Provided you have those abilities, you can come to university, and you can succeed. But to make that argument, what you then have to say is that the forms of knowledge and ways of knowing that underpin higher education are themselves neutral. That is what we offer as knowledge.”

Professor Boughey concluded the morning session encouraging academics to understand the nature of their students and the dynamics of power. This, she explained, would aid in understanding what it means to sterilize knowledge for students who are going through a pace of change.

The Focus Conference took place at the Capital Zimballi Resort 2023 bringing together academics from over 80% of universities across South Africa.



ACTING DVC: TEACHING AND LEARNING GIVES CONFERENCE DELEGATES LESSONS IN LEADERSHIP



From left: Prof Mahlapahlapana, Dr Makua, Prof Van Staden, and Prof Ramogale

The success of any organisation largely depends on the strength of its leadership. This was the main message of the Acting Deputy Vice-Chancellor: Teaching and Learning, Dr Manyane Makua, to the more than 200 delegates that attended the 10th annual Focus Conference that took place off campus, from 23-25 August 2023. Dr Makua lamented the lack of good leadership in all parts of the society and emphasized this lack of leadership in the government in the country, and how this fact affects higher education.

Dr Makua said that leadership was not about positions, but about relevant and the required qualities that leaders should have. “Leadership becomes less about position and more about engagement and action ... and practice,” he quoted one of the experts.

He said that was what constitutes leadership, and that, “You are either a leader or not a leader.” ‘Leadership’, by definition, is positive. Dr Makua said that the higher education sector needed leaders that would understand

the sector, and then take the right decisions. These are leaders who can face the challenges, and find solutions, not leaders who “bury their heads in the sand” and hope the problems would go away. They have a vision, he said.

In the higher education sector, Dr Makua emphasized the need for all levels of leadership to work together towards the common goals. He said a malfunction in the chain of leadership in a university, for instance, would result in adverse results that would affect the core business of the institution, it did not matter what level of leadership that would be, he said. Dr Makua said that research on higher education indicated that there were “challenges” in the sector.

True to this academic background, Dr Makua continued to quote several writers that have commented on leadership. He said: “A central tenet of leadership-as-practice decentralises leadership away from an individual, usually pre-established as the leader, and

repositions leadership as an outcome rather than a prerequisite of practice involving more than one person and non-human artefacts,” again quoting another expert writer in the subject.

For Dr Makua, staff involved in the higher education sector must spend some time reading about leadership. There is plenty of literature available that staff can consult. Some of this literature are religious books. Dr Makua quoted from one of these books. According to Dr Makua, leadership should not be a positive coincidence; it must be based on a planned effort which is guided by

some foundation, so it does not crumble, but achieve its set aims.

Dr Makua’s presentation was highly appreciated by the delegates, and well supported by a panel that was asked to respond to it. The members of the panel were the University’s Acting Vice-Chancellor and Principal, Professor Marcus Ramogale, the Administrator of the University, Professor Laurens van Staden, and Professor Mahlapahlapana Themane from the University of Limpopo. In his response, Professor Ramogale said people in general, should stop thinking that problems emanate from outside; they needed to look from within to find solutions to their problems.

ChatGPT USE BY STUDENTS FACED FIERY DEBATE AT THE 2ND DAY OF THE MUT FOCUS CONFERENCE



Prof Roger Cooposamy

The use of ChatGPT by students was a robust debate amongst participants on day 2 of the MUT Focus Conference. The debate was part of a full day workshop dedicated to Digital Transformation in Higher Education and Learning. The Workshop led by lead Facilitator Dr Juliet Stoltenkamp of the University of the Western Cape, included Rassie Louw as a



Prof Alfred Msomi

facilitator and a support team to encourage dialogue and learning. Many academics reported having to use multiple AI Tools for detection on student submissions. Other academics reported not knowing how to navigate determination on the authorship of student’s overall submissions with and without using ChatGPT.

Higher education leaders and managers, experts, researchers and practitioners in the learning and teaching domain participated in this interactive workshop, which addressed the digital transformation agenda theoretically and practically, within the broader “Role of Higher Education in the Attainment of Sustainable Quality Education.”

The roadmap for the day took participants through the creation of a concept map, a digital story, and the development of a digital transformation concept plan. The first task to Create a Concept Map, included linking concepts in relation to the drivers that impact digital transformation in higher education. Creating a Digital Story (production of digital video and audio content) highlighted drivers of digital transformation, and the Development of a Digital Transformation Concept Plan in alignment with the digital drivers which impact the teaching and learning environment, continuous professional development lifecycle, student academic support life cycle, and learning design.

The workshop used an experiential and participative pedagogy to ensure that participants not only developed a deeper understanding of the digital transformation process, but also had a hands-on experience of digital tools and engagements.

Participants at the workshop were required to:

1. Bring a laptop

2. Download the free software prior to the workshop
 - <https://cmapcloud.ihmc.us/> [for concept map]
 - <https://www.capcut.com/> [for digital story]
 - <https://www.audacityteam.org/download/>
 - <https://pixlr.com/>

Professor Roger Coopoosamy, Acting Dean of the Natural Sciences Faculty joined by colleagues Pradesh Ramdeyal, Dr Themba Mthethwa and Professor Alfred Msomi shared the enthusiasm of all participants. “The importance of this workshop is to drive towards understanding the digital technologies that exist currently and more especially with the faculty developing an AI platform and enhancement towards digitalisation and involvement in terms of the fourth and fifth industrial revolution. At MUT, we want to be one of the pre-eminent universities to utilise the technology. The main reason we are attending this workshop is to learn what’s there and plan ahead progressively.

Professor Msomi, Head of MUT’s Mathematical Sciences Department, was equally enthusiastic about the capability of digital to positively impact operations, teaching and learning. “Currently in our teaching space, we try our level best to move to digital technology. I’m hoping that through this I will have some information that I will take back to my colleagues in the Department and share with them in terms of how we can talk about Digital Transformation in the Mathematics space.”



INTERNATIONALISING MUT



From left: Mbali Mkhize, Prof Ramogale, Prof Sibiya, Dr Terry Hofecker, Mr Ben Hofecker

MUT ACTING VICE-CHANCELLOR IMPLEMENTS THE INTERNATIONALISATION AGENDA

A passion for an internationalised university is one of the things that drives Professor Marcus Ramogale. His studies for a Master's and a PhD degree at the University of Nottingham, United Kingdom were a game changer for him. Returning to South Africa as a sought-after academic, he was committed to prioritising an internationalisation agenda once he got into a position of authority.

MUT's internationalisation journey started with creating awareness around internationalisation during the Inaugural International Week in November, 2021. At the

time, the University only had two formal partnerships with universities.

Today, MUT has partnerships with universities in the USA, Europe (France, Sweden, United Kingdom), India and Africa. "Our partnerships centre around staff and student exchanges, research collaborations and capacity development in teaching and learning. These partnerships provide us with an opportunity to elevate our profile internationally, to co-host conferences as well as seek funding opportunities with various multilateral organisations," said Professor Ramogale.



Professor Marcus Ramogale and Mr Ben Hofecker signing the MOU

In May, Professor Ramogale led a delegation that went to formalise partnerships with the Florida Agricultural and Mechanical University (FAMU) in Florida, Tallahassee and with Spelman College in Atlanta, Georgia. The delegation also visited Ohio research institutes where he signed a Memorandum of Understanding (MoU) in Dayton with Soil1, a soil testing company which is part of an entrepreneurship programme with the University of Ohio. There are many other partnership discussions under way with USA universities. "I have been reviewing strengths and opportunities these partnerships present to us, and I am happy that I will soon be making announcements on capable leaders from the University to lead some of the initiatives that we discussed during my visit," said Professor Ramogale.

The visit included Professor Nokuthula Sibiyi, MUT's Deputy Vice-Chancellor: Research, Innovation and Engagements, and Mbalu Mkhize, Senior Director: Marketing and Communications, who is tasked with internationalisation responsibilities.

Professor Ramogale has paid tribute to the key team hosts at each of the locations: Dr Larry Robinson, President of FAMU; Dr Helene D Gayle, President of Spelman College; and Dr Terry Hofecker, CEO of Demeter, Inc., who was instrumental in setting up meetings that will see MUT partner with universities in Ohio. The Vice-Chancellor's delegation had a series of successful meetings with provosts, deans and directors of institutes in the states of Florida, Atlanta and Ohio.

The team was excited by the potential for collaboration that came out of each engagement they had on the trip. "I observed a high level of collaboration between each city and its state, and between universities themselves. The fact that FAMU and Florida State University share resources for their engineering programme showed me that as neighbours, universities could achieve huge success through collaborations," said Professor Ramogale.

MUT TAKES A GIANT STEP TOWARDS CREATING AN INTERNATIONAL OFFICE

At the opportune time...with the right partners... support is guaranteed...and now the way is clear. This is how the members of the University's Department of Marketing and Communications felt at the end of a three-day workshop with members of the Cape Peninsula University of Technology's (CPUT) Strategic Initiatives and Partnerships office.

The main purpose of the workshop was to discuss the possibilities of creating structures that will underpin and guide MUT's internationalisation process. The workshop, which is a follow-up on a MoU that the two institutions signed two years ago, took place from 17 to 19 July 2023, off campus. The CPUT staff, led by Professor Judy Peter, presented a workshop to the MUT staff on how CPUT conducts internationalisation, and pointed out ways in which MUT could adapt what they learnt to the University's own circumstances. One of the features of the CPUT approach is that staff members and students that have been overseas are required to report back to various structures back home so that a bigger pool of people benefit from their

international experience.

According to Mbali Mkhize, Senior Director: Marketing and Communications at MUT, having proactive links with higher education institutions and other economic and social partners in Africa and beyond is a requirement of the Department of Higher Education and Training's Policy Framework for Internationalisation of Higher Education in South Africa. MUT is putting in place many initiatives to develop staff and students who are global citizens. Introducing formal internationalisation will support both students and staff in gaining access to opportunities beyond South Africa's borders and assist them to be more productive in their dealings with their international partners. Mkhize has been involved in international engagements for more than two decades and is well travelled. She is now tasked with putting together the required structures for internationalisation at the University.

CPUT has come a long way in its internationalisation



Seated, Prof Judy Peter, left, and Mbali Mkhize. Standing, MUT and CPUT staff

process, but Professor Peter and her team indicated that they themselves still have some way to go and are learning from MUT. Although MUT did not have a dedicated international office, it soon became clear during the discussions with CPUT that MUT does have internationalisation, albeit in an unstructured way. For instance, the University has had staff and students going overseas for many years, but there has been little follow-up on upon return. Now this is set to change. In time the Department of Marketing and Communications will put in place first the required policy that will govern how internationalisation will be conducted, and the procedures that will be followed.

Giving finer details of what CPUT does, Professor Peter and her team discussed important aspects of their daily business – like internationalisation at home; how to formalise a memorandum of Understanding or Agreement (MOU and MOA), why this matters, and what their main contents should be; and the types of partnerships that are possible between different partners. Professor Peter emphasised the need for such efforts to be properly guided by a framework that will have been developed and agreed upon by all parties involved. “Aspects that would govern the relationship between the parties should be agreed upon well before time,” said Professor Peter.

MUT HOSTS A FULBRIGHT SCHOLAR FOR THE FIRST TIME IN OVER TWO DECADES

The last time MUT hosted a Fulbright Scholar was in 2000, when Professor Joyce Brickhouse-Marshall was deployed in the Office of the Vice-Chancellor as part of the USA’s Tertiary Education Linkages Project. In 2023, it was MUT’s Community Engagement and Development (CEAD) Directorate, led by Professor Busi Mandleni, that had the honour of hosting such an auspicious academic.

On 31 July 2023, MUT’s executive management welcomed Fulbright Scholar Professor Wilson Majee from the University of Missouri in the USA. “My first port of call was to ensure that we introduce Professor Majee to MUT’s Executive Management Committee (EMC) so that as a university we could explore opportunities for integration with his university beyond his tenure as a Fulbright Scholar,” said Professor Mandleni. Coincidentally, Dr Connie Israel, Executive Director: Institutional Advancement, a Fulbright Scholar herself, was requested to welcome Professor Majee on behalf of the EMC and to set the tone for the visit, including how it aligns with MUT’s Strategy 2025.

Professor Mandleni said, “I am proud to say that Professor Majee has undertaken workshops with academic staff members to integrate community engagement into teaching and learning, and research.” Professor Majee engaged academics in the design of



From left, Prof Nokuthula Sibiyi, Deputy Vice-Chancellor: Research, Innovation & Engagement, Prof Majee, and Prof Mandleni

modules to include Service-Learning, and attended many productive information-sharing sessions in which he made comparisons between what is happening in the USA and South Africa.

FULBRIGHT SCHOLAR ENGAGES GRASSROOTS STAKEHOLDERS

On 2 August 2023, Professor Wilson Majee, Fulbright Scholar, had discussions with MUT staff and community partners such as Sivosisizwe Boys to Men Africa Initiative, Seed of Hope, and ward councillors from eThekweni Municipality. This stems from the University's Anchor Strategy, which requires staff of the University to make efforts that will empower the local communities. Professor Majee also visited the sites of MUT community partners such as Impilo Home (an orphanage) and Seed of Hope (a place for the vulnerable children) in the municipality. MUT students were likewise privileged to meet with Professor Majee who engaged them on the importance of community development.

Professor Majee was content with the responses received from community members, noting that "I think the community members have a lot of interest about engagement with the University". One of them, Skhonza Nxasana, said community engagement is the way to go. "We can't say we are doing research and leave the community out. The community must be included. It is not going to be overnight, but we will get there. Rwanda, in eastern Africa, is very community driven. The people there own their spaces. This is what needs to be inculcated into our communities," said Nxasana.

Sivosisizwe's founder, Dudu Thabede, said it would be good to partner with MUT staff who can support her efforts from a research perspective, so that she can build programmes that are evidenced-based. Professor Majee felt that MUT academics see the value of incorporating community engagement, both for the sake of students' learning experiences and the University itself.



From left: Prof Majee with Skhonza Nxasana



Prof Majee, 4th from left with Prof Mandleni and MUT colleagues

MANDELA MONTH ROUND-UP

STUDENT STRUCTURE VISITS LOCAL OLD AGE HOME IN HONOUR OF MANDELA

The Twelve Apostles Church in Trinity Students Organisation (THE TACTSO), one of the student structures at the University, also observed the Mandela Month by contributing to a Durban Home of the Aged.

The Deputy Secretary of the organisation, Senzo Luthuli, said that on 21 July 2023, 22 members of the organisation visited John Dunn House, in Durban's Wentworth where they did several activities at the old age home. "We washed windows and cleaned the hall, cleaned the garden and the rest of the yard, moved garden pots, cleaned the library, and played funny games with old people," said Luthuli. Luthuli also said that they blessed the elderly "with our beautiful voices". This was part of the 67 Minutes that South Africans are expected to dedicate to those in need during the month of July, which is regarded as Nelson Mandela Month. Luthuli said that the gesture was appreciated by the manager of the old age home.



Senzo Luthuli at the John Dunn House resident



The Twelve Apostles Church in Trinity Students Organisation (THE TACTSO) went to clean John Dunn House, Wentworth, Durban

MUT TAKES THE UNIVERSITY TO NDWEDWE MUNICIPALITY

A sense of solidarity was created by the University when its academics and support services left everything for two days to reach out to the learners of Ndwedwe Municipality. On 24 and 25 August, members of MUT became citizens of Ndwedwe where they hosted over 1 000 learners from Ndwedwe Municipality schools who attended a two-day Career Fair at two locations in the municipality. The learners now have a clear idea as to how they need to plan their future as they go through the last months of their Grade 12 journey before they enrol for their post-matric education. The first leg of the fair was at the Ndwedwe Civil Hall on 24 July 2023; the second leg was at Mary Gray Hall, near Bhamshela, a day later.

The aim was not just to recruit students but first, “To empower them with skills so they could make life-long career and personal choices. We are here to ensure that you make a mark for yourselves, your families, and communities,” said Sthembile Ndlovu, Schools Liaison Officer. The Career Fair was organised by the Stakeholder Relations Directorate, led by Zama Sishi and her team, and took weeks to plan and prepare. “We worked with the Office of the Mayor, the municipality and the Department of Education District to get project buy-in, project support, and investment into the project,” said Sishi. Carrying the MUT flag were academics from various departments as well as Student Financial Aid, Health Services, Sports, and of course the Marketing and Communications Department, the project leader.

Sishi’s unique approach to Career Fair planning has provided more leverage for the University than when the University piggy-backs on activities planned for various universities. “Teaming up with many universities during open days has limitations. For instance, the learners get information from many sources. In most cases it is a case of just picking up flyers and moving on to the next stand. The format we used at the Ndwedwe Municipality gave the

learners a chance to not only listen to our presenters, but also interact with our academic staff, who displayed some of the teaching aids that they referred to during their conversations with the learners,” said Sishi. According to Sishi, this might be a way to conduct their Open Day next year.



A Biomedical Science demonstration



Sthembile Ndlovu interacting with learners at Ndwedwe Municipality

THE MAYOR, HIS COMMUNITY AND MUT

Councillor Sam Mfeka, Mayor of Ndwedwe Municipality, dedicated his entire Tuesday morning on 25 July to be a part of the Ndwedwe Municipality Career Fair convened by MUT with support from his office and the Ndwedwe district of education.

Mayor Mfeka said he “appreciated the MUT contribution towards society upliftment”. Most of these learners are from vulnerable families. They are receiving career guidance for the first time. I will do my best to make this an annual event because my role is to see my community developed to a higher level. As a community, we need to invest into the future generation so that the community could prosper”. The mayor appealed to learners to take what they were told seriously. He said the ward where Mary Gray is, has produced learned individuals. “We

want 100 percent pass from all of you. We offer bursaries to those that do well. We want to be number one in the province. We are currently number three in the province,” said the mayor. He also made a special plea to the learners to “please do the Central Applications Office (CAO) application properly. Be clear about what you want and expect to pass and be prepared for the way ahead”.

Mayor Mfeka also advised the learners that qualify to register with the Independent Electoral Commission (IEC), so they can vote next year. He thanked the University “for dedicating their time to empower our learners”. The Mayor said the learners were lucky to have been given the information that he and his peers were not given when they were at the learners’ age and stage of education.



Councillor Mfeka addressing learners at the Open Day

MUT'S WOMEN IN CLIMATE CHANGE IMPRESS YOUNG MINDS



Dr Thobeka Makhathini

There was a time in the history of this country when each opportunity was used to talk about HIV/AIDS, and that had an impact on behaviour change. Those conversations still need to continue. To add to conversations that need to captivate the youth, MUT's Women in Climate Change Mitigation forum have taken it upon themselves to raise awareness on food and climate change. MUT senior lecturers Dr Xolile Mkhize and Dr Thobeka Makhathini from the departments of Community Extension and Chemical Engineering, discussed the economic, social, and physical impacts of climate change on food, and what everyone should do to lessen the effects of the change in climate.

"Climate Change is linked to food security, or lack of food security. Climate change is having a negative impact on what we can bring to the table, and it is threatening the ability of farmers to survive and to

feed the world," said Dr Mkhize. Dr Makhathini also drove the point home on the impact of climate change on food. She also explained the meaning of climate change in simpler terms: "One of the climate change drivers is air pollution. Air pollutants like CO₂, NO_x, and CH₄ gases are emitted from activities like burning fossil fuels like coal, natural gases, crude oil, wood, etc. These pollutants are called greenhouse gases. So, if you think of a cold night, you use a blanket to keep your body warm, not because the blanket gives off any energy but rather your body emits heat, then the blanket traps the heat to keep you warm".

Both Drs Mkhize and Makhathini had rigorous discussions with learners after their presentation, with one learner requesting them to come and visit his dad's farm which has been ravaged by the impact of climate change.

MUT MEETS REFUGEE YOUTH AND PARENTS

A few weeks ago, MUT visited the Refugee Social Services Centre to build relations and broaden its knowledge about the refugee community. As a result of that outreach, Study Trust invited MUT on Thursday, 28 July to be a part of a road show where it explained funding opportunities to the refugee community.

Study Trust was founded as an educational trust and public benefit organisation which connects learners with potential and determination to bursary and scholarship opportunities. "I am here to make your application through the Central Applications Office seamless and worthwhile," said Sithembile Ndlovu as she explained how her office, Schools Liaison has taken it upon itself to go the extra mile towards assisting refugees to gain access to MUT. The outreach was part of the Mandela Month celebrations and was more to inspire young minds, even those not from SA, with the message that education, as Mandela said, "is the most powerful weapon which you can use to change the world".

Mbali Mkhize, Senior Director: Marketing and Communications, thanked the parents for attending the outreach meeting with their children, and explained how the internationalisation efforts at MUT also included the recruitment of international students. "We believe that at MUT the presence of more international students will be an invaluable experience for our students as we roll out the Internationalisation at Home agenda. Within this agenda, we do believe that intercultural communication between our students and those coming from outside SA will be broadened and allow for curiosity among our students about other cultures. Many employers are already looking at students with a different worldview given the impact of globalisation. It is therefore befitting to expose our students to sharing a class with students from other countries. The next visit will be by the parents and their children to MUT. On that day, I hope we could get most of our colleagues from other countries to meet all of you. You will also get to experience our culture and what we have to offer," she added.



Sthembile Ndlovu addressing parents and students at the Durban Refugee Centre



Farewell MUT Founder

Lala ngokuthula Shenge, Nggengelele.
Ziyohamba izinsizwa kosala izibongo



MUT COLLABORATES WITH A LOCAL NPO TO PROVIDE SOLUTIONS TO FATHERLESS BOYS

While the country is shocked by the surge in teenage pregnancy, the University's Community Engagement and Development (CEAD) Directorate has gone a step further in trying to provide solutions to the social ills that are engulfing our society. The directorate has partnered with an Umlazi Township NPO (non-profit organisation) to provide much-needed help to young boy children who are fatherless. CEAD's Dr Bonginkosi Zondi said the directorate has joined hands with Sivusisizwe Boys To Men (B2M) Africa to help adolescent fatherless boys with a variety of life skills that will likely empower them so they do not perpetuate the vicious cycle. The joint project is called Sivusisizwe Africa Initiative and is registered with CEAD. Sivusisizwe Africa Initiative focuses on the plight of Fatherless Adolescent Boys and Young Men (ABYM) aged between 13 and 24 years, as well as single mothers raising boys without their biological fathers.

The aim of this project is to build better, more productive, purposeful young men for tomorrow instead of "repairing" broken men. This will be achieved by providing values-based experience, where peers can have a shared learning environment, build trust, and create a safe space for their emotional wounds to heal.

The project is expected to run for five years. Dr Zondi said this would give them time to monitor the boys as they grow.

The 50 boys that are part of the project come from Umlazi Township schools. From 3 to 6 July 2023 the boys attended a school holiday camp at MUT where they were taken through a number of activities. These are intended to contribute towards raising them to be good men who have been empowered to live a purposeful life and be a positive influence in their families and communities. The character-building activities included a mix of academic and fun elements. Topics included were: what it means to be a man; effective communication; anger management; handling conflict; problem solving; learning to forgive; dangers of substance abuse; my sexual body; HIV & AIDS; human rights; and being a role model.

The activities included mountain climbing with Sibusiso Vilane, and life-related lessons learnt from the adventure; "men inspiring boys" sessions; a digital skills training programme; exposure to various careers, such as aviation, marine life and drone piloting; visits to



CEAD staff with project partners

institutions of higher learning (MUT and DUT); and the launch of a virtual mentorship programme.

Sivusisizwe Africa Initiative was established by concerned single mothers raising boys without their biological fathers. According to Stats SA's 2021 report, "Children's education and well-being in South Africa", Black children are least likely to stay with both biological parents at home. The report states that only 31,7% of Black children aged 0 – 17 years stayed with their biological fathers, compared to 51,3% of Coloured children, 86,1% of Indian/Asian children, and 80,2% of White children. The high rate of children growing up in the absence of

their biological fathers is concerning and could be an indicator that we are facing a "Daddyless Pandemic". While there are numerous challenges faced by fatherless children in general, fatherless boys are likely to face an identity crisis when growing up without a man to model what it is and how to be a man. Some of the struggles they face include continuously trying to determine who they are, where they come from, what their lineage/ clan/tribe are, and a sense of belonging. In the process they deal with several challenges ranging from social, psychological to emotional traumas which are often left unattended in an environment where "tigers don't cry".

THE GIFT THAT KEEPS GIVING... AND THE RECENTLY OPENED 'PANTRY' THAT CAME TO STUDENTS' AID

MUT's association with Gift of the Givers continues to grow. The Founder of Gift of the Givers, Dr Imtiaz Sooliman, continues to support MUT. He has delegated his son, Mr Rayhaan Muhammad Sooliman, a professional mechanical engineer, to pay special attention to MUT. "They are always a call away. Sometimes, we even get scared to call them, but they are always there. This year, Gift of the Givers has increased its support for indigent students. There is now a dedicated pantry where students get the support at any given time of the month. They also installed a 450 000-litre water tank and this has reduced water challenges at MUT. Last year, they trained 100 students including some community members on First Aid and they also restored an Electrical Engineering Computer Laboratory after it was damaged in the floods. We are so grateful to have this NPO so dedicated to MUT. They collaborate with us for any corporate social responsibility initiatives. To quote our Vice-Chancellor, 'Umuntu ngumuntu ngabantu', has never been so true for Gift of the Givers' relationship to MUT," said Mbali Mkhize, Senior Director: Department of Marketing and Communications at MUT.

On 26 and 27 July 2023, 279 students of all levels of study descended on the recently opened pantry where they were given different types of food parcels, and canned food. These included rice, teabags, instant porridge, cooking oil, milk, and table salt. The majority of the University's students are from low-income families. These students are not funded by the government financial aid system called NSFAS.



Gift of the Givers staff, MUT staff, CPUT guests with some MUT students

DEPUTY VICE-CHANCELLOR: RIE APPEALS TO FEMALE STAFF TO SUPPORT EACH OTHER



Prof Sibiyi

In her message to the University's female staff at the Women's Day celebration off campus on 10 August 2023, Deputy Vice-Chancellor: Research, Innovation and Engagements (RIE), Professor Nokuthula Sibiyi, highlighted the importance of women supporting each other so that they can be resilient against hardship, and be able to reinvent themselves when they fell. She called this support "sisterhood". Women need to support each other because of the common situations they find themselves in, Professor Sibiyi said. Some of these situations emanate from the way their societies are organised, and the attitudes and beliefs that shape gender relations in the large community.

Professor Sibiyi also appealed to women to make decisions that will protect their health and improve their job positions. Using herself as an example, she said that she left her last place of employment for the sake of her health and to ensure she would progress in her professional life. Professor Sibiyi said that in some cases, women were set up for failure and that they must make decisions that shield them from these situations.

She lamented the lack of women in high and influential positions in workplaces, and noted that there were still

very few with higher education qualifications, particularly the PhD. She appealed to women to stop "pulling each other down but support each other". This would include furthering their studies and making a telling contribution to research at the University. Professor Sibiyi said "only 3% of papers last year were published by women". This could be attributed to the amount of time that women have as mothers, wives, partners and workers. Professor Sibiyi also pointed out that the workload must make it possible for women to have time to do research and publish.

Professor Sibiyi challenged MUT women to form a Gender Forum that would deal with women-related issues at the University. Professor Sibiyi said that women should improve their academic qualifications. She told the audience that she has been appointed to support MUT women in this regard.

Professor Sibiyi and guest speaker, Moretlo Mokuele, responded to some questions that were asked by the female members of staff. Mokuele said that the University should create an Employee Assistance Programme (EAP) division that would deal with staff personal issues.

ONWARD AND UPWARD FOR THE FACULTY OF MANAGEMENT SCIENCES

MESSAGE FROM THE DEAN OF THE FACULTY OF MANAGEMENT SCIENCES

After being appointed Acting Dean of the Faculty of Management Sciences, Dr Bhekabantu Ntshangase said that his focus was to ensure that there was a marked improvement in the faculty. True to his word, Dr Ntshangase is now reporting progress in the faculty, as reflected below. But first his core message to everyone.

The Faculty of Management Sciences is in the process of making huge but well-guided changes, largely in its programme and qualification mix (PQM) where it is introducing vertical (higher degree) programmes and continuing to encourage staff to acquire vertical qualifications. The faculty is well on its way to offer Master's and Doctorate degrees which will enable it to increase research activities and research output, and more significantly, to obtain more funding from the Department of Higher Education and Training (DHET) and institutions that fund research. Planned new programmes include a Human Resources and Management Master's; a Marketing Master's; a Public Administration and Economics Diploma in Economics; a Postgraduate Diploma in Public Administration; an Advanced Diploma in Human Settlements; and an Advanced Diploma in Public Supply Chain Management. The Department of Office Management and Technology is also working on two Higher Certificates. These are niche area-driven programme offerings that seek to be impactful for community engagement projects, and to help establish a strong network with government and industries, who are some of our main natural partners in the sector of management.

We are also developing undergraduate programmes that target working people with no formal qualifications. The purpose is to sharpen skills required by industry and



Dr Bhekabantu Ntshangase

to give access and articulation. These developments are in line with the faculty's vision, which is to become a faculty that is visible and competes with national and international commerce and management faculties, in impactful research output and entrepreneurship-underpinned curricula.

The last twelve months have seen at least five staff members acquiring either Master's or PhD degrees. Nomsa Majiya graduated with her doctoral degree from the Durban University of Technology; Bonginkosi Zwane graduated in May with a doctoral degree from the same institution; Lynelle Martin graduated with a doctoral degree from the University of KwaZulu-Natal;

and Bonginkosi Shangase graduated with a Master's degree from the Durban University of Technology. In addition, two members of the faculty, Dr Steven Msosa and Mathews Smangalisa Shange, published books, as reflected in this publication.

The faculty has done very well in its research output. This is owing to writing retreats attended by 35 staff members, and weekly research seminars, organised by the Dean's Office. The faculty pass rate, throughput rate and graduation rate have been maintained at good levels. The faculty has appointed a second retired professor and will be appointing a third one shortly to focus on further improving the research profile of the faculty. The faculty is also coordinating entrepreneurship activities at MUT. We cannot emphasise enough the

importance of this business angle at the University. In fact, there is a strong move to have all three faculties of the University involved in business activities. One of these initiatives is the Social Entrepreneurship Training for MUT students, conducted in collaboration with Ranyaka, which capacitated students for participation in the EDHE Intervarsity Competition. The first round of the competition staged by MUT.

Lastly, Lindokuhle Zulu, an Advanced Diploma in Marketing student, was appointed National Deputy Chair for the EDHE Studentpreneur community of practice (CoP). Zulu represents the CoPs of the country's 26 public universities.

POSTDOCTORAL FELLOWS TEAM UP TO PUBLISH A BOOK

Dr Steven Msosa, a postdoctoral fellow in the Faculty of Management Sciences, has teamed up with Dr Courage Mlambo, another postdoctoral fellow in the same faculty, and Shame Mugova, who is a Lecturer at Birmingham City University in England and a research fellow at Durban University of Technology, to publish a book. It is titled *Corporate social responsibility in developing countries: Challenges in the extractive industry*.

According to Dr Msosa, their book examines corporate social responsibility theories and models in the context of developing countries. "Developing countries are among the poorest countries of the world, despite vast natural resources," he said, and their natural resources tend to be "mismanaged, proceeds are misappropriated, corruption and conflict are centered on resource control". He added that governments and multinational corporations (MNCs) are at the centre of the controversy of corporate social responsibility (CSR) in the affected countries.

Dr Msosa observed that companies in the extractive (mining) sector "frequently violate the rights of host

communities by stealing resources, forcibly relocating people, and wreaking devastation on the environment to maximise profits".

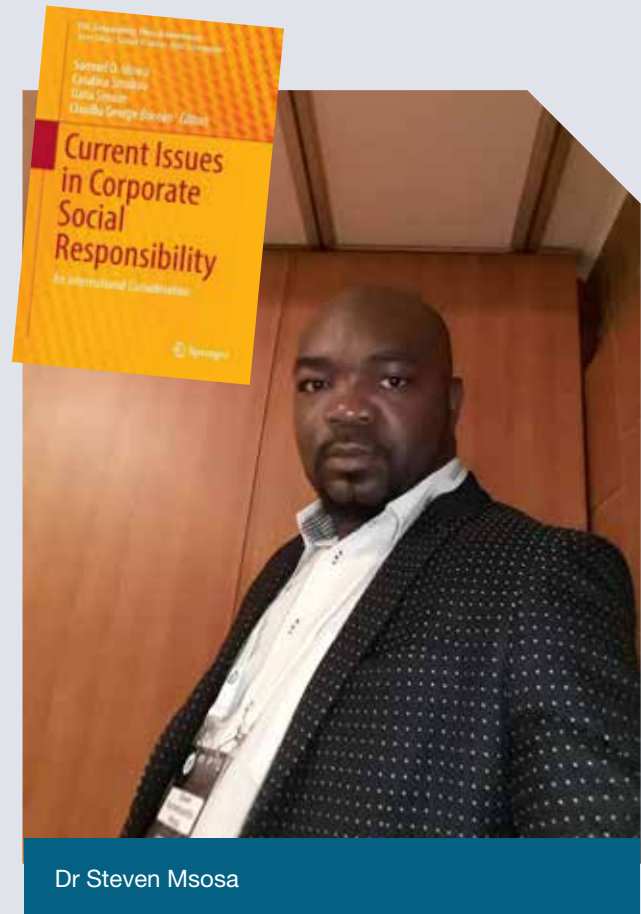
Dr Msosa pointed to a lack of systems, procedures and legislation to enforce CSR "which has led to environmental degradation and a decline in business ethics and morality". He said that there are many unanswered questions about the responsibilities of key stakeholders such as governments, community leaders, and non-governmental organisations (NGOs), who are sometimes considered the last line of defense for protecting human rights and the welfare of society when there are no effective policing mechanisms in place to protect vulnerable communities.

Delving into the core of the book, Dr Msosa highlighted that the concept of social responsibility was extremely important in forming relationships between businesses and the communities in which they are located. He says that businesses can foster peaceful cohabitation with communities in their surrounding areas, using CSR activities. According to Dr Msosa, in the extractive industry, corporate social

responsibility (CSR) can be a strategy to alleviate conflict among various stakeholders and meet their respective interests. He says that both social and economic forms of CSR are viable options for mediating resource disputes in locales rich in mineral deposits. Dr Msosa argued that projects with a social focus, such as building schools, health centres, entertainment centres, and water facilities, could reduce the number of fights between businesses and the people nearby. "To help mining towns, companies are also expected to provide the needed resources and infrastructure. It is necessary to have alternative livelihood initiatives available to keep the local communities' economic lives going to maintain peaceful coexistence," he said.

Dr Msosa argued that multinational corporations have the potential to create a positive impact on society, and gain legitimacy in the eyes of their customers. Nonetheless, many questions remain about the morality of extractive companies' practices. CSR researchers and practitioners have an obligation to determine whether CSR activities are merely a public relations (PR) stunt designed to make the company look good to its stakeholders, or whether they are essential to the success of the business. "Therefore, academics and professionals in underdeveloped nations should prioritise creating a sustainable business model to guarantee that funds go toward long-term community development," he concluded.

The book was published by Springer on 21 June 2023. Its target readers are academics, researchers and management professionals. The book is available on Springer and Amazon <https://www.amazon.com/>



Dr Steven Msosa

MARKETING LECTURER AND FRIENDS PUBLISH **CUSTOMER SERVICE HANDBOOK FOR ACADEMICS, BUSINESS AND STUDENTS TEAM**

Mathew Smangaliso Shange, a lecturer in the Department of Marketing in the Faculty of Management Sciences, together with Dr Pfano Mashau, a lecturer at the Graduate School of Business, University of KwaZulu-Natal, and Dr Andrishya Beharry-Ramraj, a lecturer in the

College of Law and Management Studies at the same university, jointly contributed a chapter titled "Attitudes, Awareness, and Use of the Consumer Protection Act Among Retail Furniture Consumers in the Umlazi Township, South Africa" in a new book, the Handbook

of Research on the Interplay Between Service Quality and Customer Delight. Shange says that the core of the chapter is the Consumer Protection Act (CPA) of 2008. The Act was developed to protect consumers from unscrupulous dealers, and to promote fair dealings and responsible conduct on the part of retailers. However, the authors found that this safety measure does not guarantee the safety and fair treatment of consumers. Shange said that they discovered that consumers “continue to suffer in the marketplace due to defective products, unfair dealings, and poor service despite there being a CPA that was developed to protect the consumers’ rights”.

The book considers how companies around the world in a cross-cultural environment are dealing with service quality and customer delight and proposes a global outlook on the current trends, tactics, and opportunities. Covering key topics such as buyer funnels, consumer dissonance, and digital solutions, this reference work is ideal for business owners, managers, industry professionals, researchers, scholars, practitioners, academicians, instructors, and students. It was



Mathew Smangalis Shange

published by IGI Global Publishers in January 2023. The Electronic Book is \$295 and individual chapters are \$37.50 each.

PUBLIC ADMINISTRATION AND ECONOMICS PUBLIC LECTURE GUEST SPEAKER ARGUES FOR A ‘**PROFESSIONALISED PUBLIC SERVICE**’

As the country’s 2024 general elections come ever closer, sharp focus is being placed on the performance of the government in all spheres. ‘Service delivery’ will continue to be the buzz word and public servants, also known as street-level bureaucrats, will get some attention. This has been a natural response since the country gained independence from the apartheid yoke in 1994.

An expert in public administration has pointed out where the problems lie. Presenting a public lecture at MUT on 7 August 2023, Professor Somadoda Fikeni said the

main cause of the problems in all spheres of government was that public servants were appointed based on their political affiliation, not their academic qualifications. The public lecture was organised by the Department of Public Administration and Economics. According to Professor Fikeni, South Africans talk about leaders because they think they are important. He argues that South Africans should be talking about public servants and their performance. This is what affects them most. It has been said many times that local government is the most vital sphere of government because what it does affects the people directly.

Professor Fikeni, the Chairperson of the Public Service Commission, said these problems continue even though South Africa has a constitution that was revered by the world and is respected by most countries. South Africa also has very good regulations that should guide government officials when they are doing their jobs. Some of these are the Public Finance Management Act, Systems Act, the 11 Bato Pele principles, and some by-laws. But still, there are problems associated with service delivery, which is the core function of government. Said Professor Fikeni: “We have poor outcomes; South Africa has become the protest capital of the world. We have built institutions of democracy, yet we still have problems.” He cited the case of the Mangaung Prison in the Free State which “is state of the art, but values and principles are lacking”. It was widely reported by the media that the officials of this prison are allegedly involved in the escape of a high-profile prisoner.

Professor Fikeni also said that public servants that have no relevant qualifications for their public positions are vulnerable because they must put their political masters first, not the public for which they should be working, and to whom they should be accountable. Professor Fikeni said that politicians take advantage of this flaw and seek to benefit from it.

Advising particularly the students from MUT, Durban University of Technology, and the University of Zululand who were part of the audience, Professor Fikeni said they should ask themselves what their generational mission was. He listed names of South African public leaders who identified their “generational mission” and acted upon it. Professor Fikeni warned the audience not to join the “lamentation brigade”. He said the institutions of higher learning had a duty to mould students to become leaders.

Professor Fikeni said that the Zondo Commission highlighted the lack of moral integrity on the part of public servants and government officials. He said those public servants that want to do good were hamstrung by the toxic environment they were working in. “The parliament has emphasised a need to professionalise the public service. We are now



Professor Somadoda Fikeni

asking what needs to be done. Without a capable public service there will be problems,” he said.

The public lecture was attended by staff from MANCOSA, University of KwaZulu-Natal, University of Zululand, members of the South African Association of Public Administration and Management (SAAPAM), the Psychology Society, and officials from the KwaZulu-Natal Premier’s Office. The Head of the Public Administration and Economics Department, Dr Yvonne Mvuyana, said the department intended to have the public lecture every year and would continue to involve all the province’s universities.

MUT ENGINEERING IN FOCUS

MUT EXPANDS ITS ENGINEERING QUALIFICATIONS



Dr Jean Gad Mukuna

The University continues to strengthen its academic position by revising its existing academic programmes on a regular basis, as required by the government and other regulating bodies, and by adding new programmes that are designed to respond to socio-economic needs and affirm the institution as a centre of excellence. The University recently added an Advanced Diploma in Mechanical Engineering to its programme and qualification mix. The qualification provides students with a sound knowledge base in Mechanical Engineering in response to the needs of the community, as well as local, regional and national industry, by producing competent graduates. It closes the gaps and disparities in students' educational and life experience so that they can be better equipped to contribute to the economy. It also provides students with broad educational and life skills, including Mathematics and Mechanical Engineering subject-specific knowledge.

Dr Jean Gad Mukuna, the Head of the Mechanical

Engineering Department, said the programme was intended for Mechanical Engineering practitioners who, on achieving this qualification, would be able to apply management, analytical and practical engineering techniques and knowledge to conduct operations, and solve problems in a mechanical engineering working environment in the areas of design, manufacturing, maintenance, environmental engineering and automation and control.

Admission requirements and further opportunities

Admission to the Advanced Diploma programme is subject to the MUT's general academic admission rules and the specific requirements of the Faculty of Engineering. In addition, students must be in possession of one of the following:

- National Diploma in Mechanical Engineering (NQF Level 6)
- Diploma in Mechanical Engineering (NQF Level 6)
- An appropriate National Diploma in Mechanical Engineering equivalent to NQF Level 6
- A cognate qualification in mechanical engineering equivalent to NQF level 6 – foreign qualifications approved by SAQA.

Dr Mukuna said the programme is designed in such a manner as to offer a pathway to horizontal and vertical articulation possibilities within the Higher Education Qualifications Sub-Framework (HEQSF). "For horizontal articulation, the qualification will provide access to enter relevant cognate (related) programmes at NQF level 7, such as the B.Eng Tech. With this qualification, graduates could articulate vertically to other related programmes, such as the Postgraduate Diploma or Honours programme.

“The Advanced Diploma in Mechanical Engineering is aligned with ECSA’s (Engineering Council of South Africa) prescribed standards. The graduate must be able to demonstrate competence in the Graduate Attributes (GAs) 1 to 11 described in ECSA document: E-05-PT REVISION 4 of 05 November 2019,” said Dr Mukuna.

The need for the programme

Dr Mukuna explained that the need for the programme arose from “the growing complexity and evolving demands of the field. As technology continues to advance at a rapid pace, professionals in Mechanical Engineering must acquire specialised knowledge and skills to address emerging challenges, and contribute to innovative solutions.” Dr Mukuna also said that the programme would meet the needs of the rapidly-changing industry by providing specialised expertise, career advancement opportunities, industry relevance,

practical skills development, expanded career prospects, networking opportunities, and personal and professional growth. According to Dr Mukuna, the programme equips individuals with the necessary knowledge and skills to thrive in the field of Mechanical Engineering and contribute to technological advancements and societal progress.

The programme, which will be offered from 2024, is at the NQF Level 7, and has 144 SAQA credits. The minimum duration for a full-time study period is one year, or two years if studied on a part-time basis. The mode of delivery is contact. “While students are mostly tutored separately in small groups, they undertake their studies and lectures as integral members of the Advanced Diploma student group,” said Dr Mukuna.

The department is already accepting applications for the academic year 2024.

ENGINEERING STUDENT CAPTURES HER WORLD THROUGH ART

At what age does a child show his or her talent? This question could elicit different answers. But surely, not three years. Sibongakonke Ntombela, a first-year Mechanical Engineering student from Mandeni, north of KwaZulu-Natal, swears she remembers doing drawings for her teachers at her pre-school at three years of age. These drawings, which she did on the chalk board, were used by the teachers when they were teaching. “I remember when I had to draw the solar system, and at some time, I made a drawing of the food chain, that had a lot of animals,” she recalls.

Ntombela is the youngest of four siblings. Unlike her siblings and her father, who have stopped doing artwork, Ntombela still continues to create art. Now she mostly focuses on drawing portraits and other things like animation figures. “I started when I was young. I was three years old. My dad and my siblings could also draw. They have stopped. I continue because I love doing hand work. Most of all, drawing,” she said.



Sibongakonke Ntombela

Ntombela does not have a favourite category of portraits to draw. "I can draw just about anybody. High profile people, to ordinary individuals," she said. Three weeks ago, she drew a portrait of Prince Mangosuthu Buthelezi, the Founder of the University. Two weeks later, she drew a portrait of the University's Chancellor, Sandile Zungu. Ntombela said she drew Zungu because she believed he is going to do a lot for the University. In fact, during his installation, Zungu said he was going to contribute to the upliftment of the University.

Ntombela said drawing portraits of people captures their life at a particular time, and that pictures tell a lot about people. Ntombela's file contains drawings of ordinary people and at least two drawings of human eyes. She said she drew eyes because eyes tell a lot about someone.

Ntombela said she intends to generate some cash from her talent. Ntombela says for now she is focusing on drawing on A4 paper. She said her A4 drawings would be from R400 to R800, depending on what an individual has requested.

"I will sell my portraits to generate some cash to buy material so I can do canvas drawing. Canvas drawing is expensive. Just a small piece can come to R500," she said.

"Very soon I will be setting up my social media accounts so I can communicate with prospective buyers."

BEST STUDENT IN THE FACULTY OF ENGINEERING GRADUATES WITH A **MASTER'S DEGREE IN JAPAN**

For Nomvelo Nzimande, it was not enough to be the "Best Student in the Faculty of Engineering" in 2010 – the year in which she graduated with a Diploma in Electrical Engineering from MUT. Nomvelo went on and did more, including working at the Electricity Supply Commission, better known as Eskom. For the last three years Nomvelo has been in Japan studying towards a Master's degree at Kogakuin University in Tokyo, and graduated in March 2023. Nomvelo's research thesis was titled "Frequency Regulation and Transient Stability of Power System with Wind and Photovoltaic Power Penetration".

Giving a short description of what her thesis is about, Nomvelo said it addressed a topical issue nowadays – global warming! She described this as "a major issue worldwide. Countries of the world are encouraged to reduce greenhouse gas emissions by using clean energy. Integrating large-scale solar photovoltaic (PV) generation plants and wind farm power plants with

electric power systems as a renewable energy (RE) source is crucial to achieving targets. High penetration of intermittent renewable energy (IRE) will put pressure on frequency regulation, and frequency fluctuation will increase because IRE does not participate in frequency regulation," Nomvelo said. She added that the integration of large-scale renewable energies, such as wind and PV, requires control techniques to maintain the stability of a power system.

In her study, various control strategies were employed to improve the performance of Load Frequency Control (LFC). The LFC model was built in the MATLAB Simulink environment, based on the Republic of South Africa's (RSA) electrical power system. Automatic generation control (AGC) was introduced to maintain the system frequency deviation within the operating limit. A battery energy storage system (BESS) was integrated into the LFC model to support the frequency regulation of a grid with high IRE penetration. Due to high IRE penetration,

the frequency fluctuation increased, and thermal power plants output changed regularly to balance power supply and demand. This may lead to high fuel consumption by thermal power plants and deterioration of economic performance. In this study, the economic dispatch control (EDC) was integrated into the LFC model to ensure that the demand is supplied at the lowest cost possible by prioritising the most cost-efficient power generation plants during demand allocation. The LFC model was able to keep the frequency deviation of the power system with high IRE penetration within RSA's prescribed operation limits, with support from BESS. The operating costs were reduced with the help of EDC.

Nomvelo also explained how she is going to implement what she has learnt in Japan in the South African situation. She said that South Africa was at the transition stage where it was introducing renewable energies into the grid, "which comes with grid stability challenges since our grid was not designed for distributed generation. Upon my return, I will continue to work for Eskom. I will negotiate with Eskom to be deployed to the department where I will be able to contribute my knowledge towards renewable energy integration into a grid".

Nomvelo also explained the difference between her university in Japan, and the South African system. She said that in Japan students are encouraged to write and publish academic papers. "There is a student branch conference where undergraduate final-year students present their research. Graduates are encouraged to participate in local and international conferences. Our laboratory supervisor recommended three papers per student, one international conference paper and two local conference papers. However, it is not a compulsory requirement for a Master's degree," Nomvelo said. She said that Kogakuin University assists all students with job hunting. "There are job hunting programmes and events



Nomvelo Nzimande

where they share tips; students take tests to check their readiness. The job hunting for a Master's student starts as soon as you enroll at the university, and students get hired during their last year of university, but they start working after graduation," Nomvelo said.

Nomvelo is now doing her internship, which is a requirement from the sponsor, not the academic qualification. She is done with her Master's degree. Nomvelo is from Pietermaritzburg, KwaZulu-Natal.



MUT STAFF MEMBERS GRADUATE WITH DOCTORATES

Sphesihle Mtsweni, a lecturer in the Department of Chemistry, studied his PhD at the Durban University of Technology. The title of his PhD was: Performance Optimization Modelling of a Horizontal Roughing Filter for the Treatment of Mixed Greywater.

Dr Mtsweni said he chose this topic because “it accurately reflects the scope of my research and its contribution to the field of wastewater treatment and reuse. My research was about optimizing the performance of a horizontal roughing filter (HRF) system for the treatment of mixed greywater”. Dr Mtsweni said his research aimed to investigate the option of domestic greywater reuse for delivering desired water quality for non-potable applications, as well as the applicability, effectiveness, and predictive ability of an Artificial Neural Network (ANN) for the operation of a HRF system.

Dr Mtsweni said the problem addressed in his research was the increasing demand for the development of appropriate and relevant wastewater treatment technology in rural and urban communities in many parts of the world, including South Africa. “This is largely exacerbated by the escalation of water demand and decreasing potable water availability. My research aimed to provide a solution to this problem by designing and fabricating a HRF system that can effectively and efficiently treat wastewater and reduce the reliance on potable water use by modelling and optimising the performance of the horizontal roughing filter for effective operation,” said Dr Mtsweni. He said one of the key points from his research was the use of the HRF for the pre-treatment of mixed domestic greywater, as the HRF can effectively remove pollutants and produce an effluent with desired water quality for non-potable reuse.

Dr Mtsweni said that research holds potential benefits for both MUT and the general public in a number of ways. “Firstly, it provided an in-depth understanding of the characteristics of domestic greywater and the pollutants it contains, and could be used to develop more effective



Sphesihle Mtsweni

and efficient wastewater treatment technologies that can be used in rural and urban areas and result in the reuse of greywater for non-potable purposes, thereby reducing the reliance on potable water,” he said. He added that his research enabled the development of an efficient and effective pre-treatment system for domestic greywater, which in turn would reduce the cost and energy associated with wastewater treatment. The research also provides insight into the potential of using artificial neural networks to model and optimise wastewater treatment processes, including the horizontal roughing filter, which could lead to further advances in this field, and could be used as a monitoring tool in terms of performance and as an indicator of any quality deviation that might be occurring during the filtration. “Finally, my research has identified the most significant contributing factors to the performance of the HRF, which will enable the optimization of the design parameters of the HRF for better performance,” said Dr Mtsweni. He added that the findings from his research could also be used to inform future policy and legislation related to the reuse of greywater, which would promote the sustainable use of resources. Dr Mtsweni’s supervisor was the Acting Dean of the Faculty of Engineering at MUT, Professor Babatunde Femi Bakare. Professor Bakare heads the Environmental Pollution and Remediation Research group at MUT.



Buyi Makhanya

Buyi Makhanya, Deputy Director: Academic Literacy and Language Unit (ALLU) and one of the University’s long-serving staff members, studied her PhD at the University of KwaZulu-Natal. The title of Dr Makhanya’s thesis was: *Academic writing experiences and literacy development of Engineering students at a South African university of technology.*

Dr Makhanya explored the academic writing and literacy development experiences of Engineering students at MUT. She said that her study contributes immensely to the field of Higher Education Studies by highlighting how to improve the academic writing capabilities and literacy development of students, especially those who come from rural areas and low socio-economic backgrounds. Dr Makhanya said that such students often have limited cultural capital. For this study, Dr Makhanya chose the S4 Engineering students “as they receive and attend the academic support classes and workshops at the ALLU when they are introduced to the University and are prepared for S1”.

Lynelle Martin, a Lecturer in the Faculty of Management Sciences’ Department of Marketing, did her study on: The impact of cultural values on consumer behaviour: A case study of specialty products at a University of Technology in KwaZulu-Natal. Dr Martin said the aim of the study was to contribute to the body of knowledge by investigating if cultural values influence the purchasing behaviour of speciality products by academic and support staff at a tertiary institution. Through her study,

Dr Martin highly recommends that marketers and brand promoters offer unique products tailored to suit the needs of higher education staff. A “delighted” Martin – the only child in the family, the only female staff member in her department, and the youngest to have a PhD in it – thanks her parents and colleagues for their support. Dr Martin studied at the University of KwaZulu-Natal.



Lynelle Martin

Karabo Molomo, a senior lecturer in the Department of Agriculture: Animal Production, graduated with a Doctor of Philosophy degree from the University of the Free State on 9 November 2022. Dr Molomo's thesis is titled *Factors influencing the commercialisation of emerging dairy farmers in South Africa: A case study of the Free State Province*.

The research aimed to identify factors that influence the commercialisation of emerging dairy farmers in the Free State Province and assess the utility of dairy business hub models to address the identified factors.

Dr Molomo said his research would assist in developing sound strategies for commercialising emerging dairy farmers in South Africa to bridge the gap between commercial and emerging dairy farmers. By studying multiple cases of emerging dairy farmers, Dr Molomo was able to compare their experiences under various conditions. He said the study identified the main constraints to the commercialisation of emerging dairy farmers in the Free State Province as: lack of access to financial support; market limitations; lack of infrastructure; low milk prices; importation of dairy products; and lack of appropriate management skills. "The results further showed that there are good prospects for commercialising emerging dairy farmers in the Free State Province. The research also revealed that,



Karabo Molomo

provided they are correctly implemented, dairy business hub models can pave the way for the commercialisation of emerging dairy farmers in the Free State Province," said Dr Molomo.

Dr Molomo's thesis was supervised by Professor Cuthbert Banga from the Department of Animal Sciences at Botswana University of Agriculture & Natural Resources, and co-supervised by Dr Japie Van Der Westhuizen, General Manager at SA Studbook.



Rafiq Jamal

Rafiq Jamal, a lecturer in the Department of Communication, in the Faculty of Management Sciences, studied his PhD at the University of KwaZulu-Natal. Dr Jamal's research topic was *Academic and industry conceptions of professional knowledge*. Dr Jamal focused on "the discontent between academic and industry conceptions of professional knowledge". Dr Jamal has proposed two solutions to the problem: that two-way exchange programmes take place between universities of technology and industry (for academics and other personnel); and that a 'third space' be created in which convergences between industry and university could occur, to facilitate learning. Dr Jamal's promoters (supervisors) were Professor Michael Samuel and Dr Miranda Swart.

Ayanda Magwenyane is a Lecturer in the Department of Chemistry. He studied at University of KwaZulu-Natal's College of Health, in its School of Laboratory Medicine and Medical Sciences. The topic of his study was: *Molecular dynamic simulation approach to explore heat shock protein 90 (Hsp90) as an anti-cancer target for drug discovery*. Dr Magwenyane said he chose this topic because "I am passionate about expanding my knowledge of infectious and complicated diseases. Cancer is one of the diseases that can lead to deficiency, and it does not refer to a single disease," he said.

Dr Magwenyane said he faced a lot of challenges as he was doing his study. One of these was the Covid-19 pandemic. "We could not continue our work as usual. But the support of the University with online platforms to communicate with the supervisor, the support groups for postgraduates, and the online workshops helped me a lot. I was even able to publish my first paper during the pandemic in an international



Ayanda Magwenyane

journal with an impact factor of more than 5. The exciting thing is that you always know what you will be at the end of the challenge, and the positive results of the work I have done during the study," said Dr Magwenyane.



Sfundo Gumede

Sfundo Gumede, a lecturer in the Department of Mathematical Sciences, studied his PhD in Applied Mathematics at the University of KwaZulu-Natal. The title of Dr Gumede's study was: *New exact solutions for neutral and charged shear-free relativistic fluids*.

Dr Gumede's thesis presented new classes of exact solutions to the Einstein field equations, which is the subject of study in Albert Einstein's theory of General

Relativity. Dr Gumede said the results of his thesis describe dynamics of gravitating charged and neutral fluids. These dynamics can be explained using a set of partial differential equations called the Einstein field equations which Dr Gumede solved.

Dr Gumede said the theory of General Relativity is so far the most successful and widely accepted mathematical theory describing gravity. Since it was proposed in 1916, the exact solutions to the field equations in different spacetimes have been sought by many researchers. However, not so many have been able to give them explicitly; and this is what motivated Dr Gumede to tackle this problem. "In my PhD I was able to explicitly give the exact solutions to the field equations, particularly in higher dimensional spacetimes, which is a great advance in the subject. These results will give insight to many mathematicians and astrophysicists who are interested in studying dynamics of astronomical objects," he said.

Dr Gumede said his study enhanced his academic writing skills as its results were published in high impact journals. Dr Gumede's supervisors were Professor Sunil Maharaj and Professor Kesh Govinder from the School of Mathematics at the University of KwaZulu-Natal.

HARD WORK AND A STRONG SUPPORT STRUCTURE UNLOCK SUCCESS FOR BK

Just as it takes a village to raise a child, “it takes dedication and a strong support system to attain a terminal qualification”. That is a very humble acknowledgement by Bonginkosi Keith Zwane of the many people who played an important role in his PhD journey: from his wife and children, his sister, Happiness and his parents to his colleagues – the Acting Dean of the Faculty of Management Sciences, Dr Bheka Ntshangase; the Head of the Department of Accounting and Law, Dr Kevin Ramsarghey; the Research Professor in the faculty, Evan Mantzaris; Dr Misery Sikwela of the Department of Public Administration and Economics; former member of the Department of Marketing, Dr Nkululeko Fuyane; and the Head of the Department of Public Administration and Economics, Dr Yvonne Mvuyana who spoke positivity to him from the day he registered.

Dr Zwane graduated with a PhD from DUT’s Faculty of Management Sciences, specialising in Business Administration. His study focused on financing agricultural co-operatives and the significance of financial bootstrapping, using an uMshwathi



BK Zwane

Municipality case study. UMshwathi Local Municipality is situated in UMgungundlovu District Municipality in KwaZulu-Natal. Dr Zwane said that the purpose of the research was an attempt to contribute to scientific knowledge by investigating the different methods of financing agricultural co-operatives in uMshwathi Municipality, and how financial bootstrapping can be used as a tool for the success and growth of these co-operatives. An elated Zwane said: “The last chapter is beautiful, we win. With this PhD, I will now be able to lecture our Master’s degree cohort and become a supervisor. This is the direction the faculty is taking, and I am humbled and excited to be a part of this stride for our Master’s degree in the Faculty of Management Sciences. While my PhD is in Management Sciences, specialising in Business Administration, my study was multi-disciplinary with the primary focus on Management Accounting, a touch of Economics and a dash of Entrepreneurship.”

BANKSETA GIVES STUDENTS MILLIONS FOR THEIR 2023 STUDIES

On 26 July 2023, the Banking Sector Education and Training Authority (BANKSETA) inducted 33 MUT students that it is funding to the tune of R3.6 million for the 2023 academic year. Senior Bursaries Officer in MUT’s Financial Aid Office, Cynthia Nkosi, said the students are from the Faculty of Management Sciences and Faculty of Natural Sciences. “Most of these are Advanced Diploma students,” said Nkosi. She added that the Office Management and Technology students will be added later to the students that are funded. The Financial Aid Office applies for funding

every year, and the students are funded for the current year of study. Ngwako Mpebe, BANKSETA’s Regional Specialist, told the students that applicants should be South African citizens, and must be between the ages of 18 and 35. The applicants should not be funded by another organisation for that year of study, Mpebe said. Mpebe added that applicants should preferably be from disadvantaged backgrounds. The BANKSETA officials also told the students about their rights and responsibilities as bursary holders, and how the money would be paid into the University account. The students



Cynthia Nkosi, 3rd from left

must have the necessary documents, Mpebe said. One of the beneficiaries, Nonkululeko Mlambo, is an Advanced Diploma in Accounting student and said she was happy to have received financial help from the SETA. "I was going to struggle to pay my tuition fees for my present study, and not receive my certificate after

graduation," said Mlambo. The 22-year-old Mlambo has been supported by NSFAS from her first year. Mlambo is from Vryheid, in the Midlands of KwaZulu-Natal.

GRADUATE WINS AWARD FOR HER BOOK

A graduate of the Department of Community Extension, and now Research Assistant in the department, has won an award for her book – *The Black Graduate in a Corporate World*. Nonhlanhla Vezi received her Africa Honoree Author's Award on 31 July 2023 at the 6th African Global Honorees Authors Awards. Annually, an organisation called African Child Your Time Is Now (ACYTIN) honours authors who have done well in literature. Vezi's award was under the "Best Novel in 2023" category. The CEO of the company, Anthea Thyssen, said Vezi wrote "the most relevant book in history". Thyssen said she loved how Vezi touched on different themes and believed that it would benefit the youth.

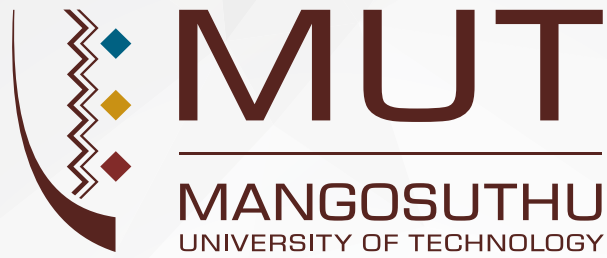
Vezi said she was humbled by this recognition. "I would like to thank Anthea Thyssen for believing in African



Nonhlanhla Vezi

writers and celebrating their efforts. Winning the African Honoree Author's Award signifies that my little contribution towards literature is acknowledged, and what I do matters; my writing matters; telling African stories matters," Vezi said.

A few weeks ago, Vezi was interviewed by Vuma FM about her book. Those that would like to buy the book can contact her on 078 466 6656. The book is R250.



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