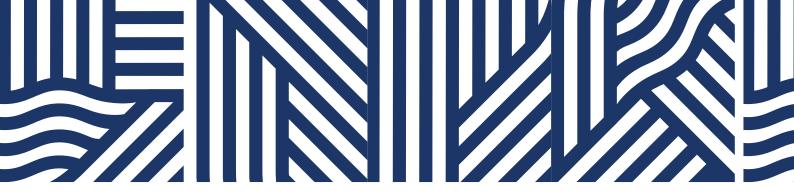


APPLIED & COMPUTER SCIENCES

MONDAY, 15 SEPTEMBER 2025 SPRING GRADUATIONS 2025

MOKETE WA DIKAPESO TSA BAITHUTI
WA SEHLA SA LEHWETLA - 2025
DIKAPEŠO TŠA BAITHUTI TŠA
SEHLA SA LEHLABULA 2025



VUT Road to 60 campaign

The VUT Road to 60 campaign is an exciting initiative leading up to the university's diamond jubilee in June 2026. Running from August 2025 to June 2026, the campaign is designed to:

- Celebrate VUT's 6oth anniversary by honouring its history and legacy.
- Strengthen institutional pride and identity among staff, students, alumni, and external stakeholders.
- Mobilise resources and partnerships to support the university's long-term sustainability and growth.
- Enhance VUT's reputation and visibility locally, nationally, and internationally.

The campaign includes a series of activations, events, and communications across the university, such as alumni engagement, donor mobilisation, student and staff activations, and outreach to external stakeholders. It is not only a commemorative activity but also a strategic positioning platform that aligns VUT's brand with its long-term ambitions.

CAMPAIGN LOGO



FLOW OF LEGACY 1966-2026

Designed by Ms Lerato Makhethe, a student in the Department of Visual Arts and Design, this emblem celebrates 60 years of strength, unity, and purpose at the Vaal University of Technology. The '6' and 'o' are seamlessly connected by a ribbon, symbolising an institution that has stood firm and connected for six decades. Incorporating the VUT shield, the four lines complement the original logo. The ribbon, inspired by the Vaal River, flows from the 'o' to the base of the '6', representing a gateway to the future. The design captures VUT's forward-looking vision while honouring its enduring legacy.

Join us as we celebrate the university's past, present, and future.







Letsholo la VUT la Tsela e lebisang dilemong tse 60

Letsholo la VUT la Tsela e lebisang dilemong tse 60 ke mohato o thabisang o lebisang ho jubile ya taemane ya yunivesithi ka Phuptjane 2026. Ho tloha ka Phato 2025 ho isa Phuptjane 2026, letsholo le etseditswe ho:

- Keteka sehopotso sa bo6o sa VUT ka ho hlompha nalane le lefa la yona.
- Matlafatsa boikgantsho le boitsebahatso ba setheo hara basebetsi, baithuti, baithuti ba kgale le bankakarolo ba kantle.
- Kopanya disebediswa le dilekane ho tshehetsa yunivesithi e tsitsitseng le kgolo ya nako e telele.
- Ntlafatsa serithi le ponahalo ya VUT sebakeng sa heno, naheng ka bophara le matjhabeng.

Letsholo lena le kenyelletsa letoto la tshebetso, diketsahalo le dikgokahano ho pholletsa le yunivesithi, jwalo ka boitlamo ba baithuti ba kgale, ho bokella bafani, tshebetso ya baithuti le basebetsi le ho fihlella bankakarolo ba kantle. Ha se ketsahalo ya sehopotso feela empa hape ke sethala sa maemo a leano se hokahanyang letshwao la VUT le ditabatabelo tsa lona tsa nako e telele.

LETSHWAO LA LETSHOLO



PHALLOYA LEFA 1966-2026

Letshwao lena le entswe ke Mof. Lerato Makhethe, moithuti Lefapheng la Bonono le Boqapi ba tsa Pono, le keteka dilemo tse 60 tsa matla, bonngwe le morero Yunivesithing ya Thekenoloji ya Lekwa. '6' le 'o' di hoketswe ka lente, ho tshwantsha setheo se ileng sa ema se tiile mme se hokahane ka dilemo tse mashome a tsheletseng. Ho kenyelletsa thebe ya VUT, mela e mene e tlatsana le letshwao la mantlha. Lelente, le buduletsweng ke Noka ya Lekwa, e phalla ho tloha 'o' ho ya botlaaseng ba '6', e emelang monyako wa bokamoso. Moralo ona o hapa pono e shebileng pele ya VUT ha o ntse o hlompha lefa la wona le tshwarellang.

E ba le rona ha re ntse re keteka yunivesithi ya nakong e fetileng, ya hona jwale le ya bokamoso.



Lesolo la leeto la VUT la go ya mengwageng ye 60

Lesolo la leeto la VUT la go ya mengwageng ye 60 ke kgato ye e kgahlišago yeo e lebišitšego go taemane ya jubilee ya yunibesithi ka kgwedi ya Ngwatobošego 2026. Go tloga ka kgwedi ya Phato 2025 go fihla ka kgwedi ya Phupu 2026, lesolo le le hlametšwe go:

- Go keteka segopotšo sa ngwaga wa bo 60 sa VUT ka go hlompha histori le bohwa bja yona.
- Go tiiša boikgantšho le boitšhupo bja setheo magareng ga bašomi, baithuti, baithuti ba kgale, le bakgathatema ba ka ntle.
- Go kgoboketša methopo le ditirišano go thekga go tšwelapele le kgolo ya nako ye telele ya yunibesithi.
- Go godiša seriti le ponagatšo ya VUT mo selegaeng, nageng, le boditšhabatšhabeng.

Leeto le le akaretša tlhatlamano ya meletlo, ditiragalo, le dikgokagano go ralala le yunibesithi, bjalo ka tlemano le baithuti ba kgale, go hwetša baabi, meletlo ya baithuti le bašomi, le go fihlelela bakgathatema ba ka ntle. Ga se fela mošomo wa segopotšo eupša ke sefala sa go beakanya maemo a maano ao a kopanyago leina la VUT le phišagelo ya yona ya nako ye telele.

LESWAO LA LESOLO



TŠWETŠOPELE YA BOHWA 1966-2026

Leswao leo le hlamilwe ke Mohumagadi Lerato Makhethe, moithuti ka Lefapheng la Bokgabo bja go Bonwa le Bohlami, le keteka mengwaga ye 60 ya maatla, kopano le maikemišetšo Yunibesithing ya Theknolotši ya Vaal. Dinomoro tše '6' le 'o' tšeo di kgokagantšwe gabotse ka lelente, di laetša setheo seo se emego se tiile ebile se kgokagane mengwagasome ye tshela. Go akaretša seka sa tšhireletšo sa VUT, methaladi ye mene e tlaleletša leswao la mathomo. Lelente, le hlohleleditšwe ke Noka ya Vaal, le elela go tšwa go 'o' go ya motheong wa '6', go emela kgoro ya go ya go bokamoso. Moakanyetšo o laetša pono ya VUT ya go lebelela pele mola o hlompha bohwa bja yona bjo bo sa felego.

Eba le rena ge re keteka tša moragorago, tša bjale, le bokamoso bja yunibesithi.





TO THE CLASS OF 2025

Esteemed Graduates, Distinguished Guests, Faculty Members, Families, and Friends

Today we gather in the spirit of Spring, a season of renewal, to celebrate the remarkable achievements of the Class of 2025. This day is not only a recognition of your dedication and perseverance, it is a call to rise and play your part in shaping the future.

South Africa continues to face complex challenges. Unemployment remains stubbornly high, poverty persists, and inequality continues to test our collective resolve. These realities cannot be ignored. Yet they are not immovable. They are waiting for innovators, leaders and visionaries, people like you, to bring forth solutions that transform hardship into opportunity.

At the Vaal University of Technology (VUT), you have been equipped with more than academic knowledge. You have gained resilience, sharpened your critical thinking, and embraced collaboration. These are the tools that empower you to create employment, to build enterprises, to lead with integrity, and to contribute meaningfully to society.

As we approach VUT's Diamond Jubilee in June 2026, celebrating sixty years of academic excellence and innovation, you carry forward a proud legacy. The Road to 60 campaign is not just about commemorating our past, it is about charting a bold path into the future. You, our graduates, will be the living testament to this legacy. Your contributions in industry, research, and community development will give substance to the promise of the next sixty years.



This season reminds us that every ending is also a new beginning. Like Spring itself, your journey is a renewal: of dreams, of purpose, of hope. The knowledge you have gained is not a finished story, but a seed. And seeds demand to be planted, nurtured, and allowed to bloom into something greater than themselves.

As you step beyond these gates, I challenge you to:

- **Be Builders of Legacy:** As VUT approaches sixty years, carry its story forward by writing new chapters of excellence and innovation.
- **Be Voices of Courage:** In a world clouded by uncertainty, speak with clarity, truth, and conviction.
- **Be Stewards of Possibility:** Create spaces where others may grow, where communities may thrive, and where progress becomes inevitable.

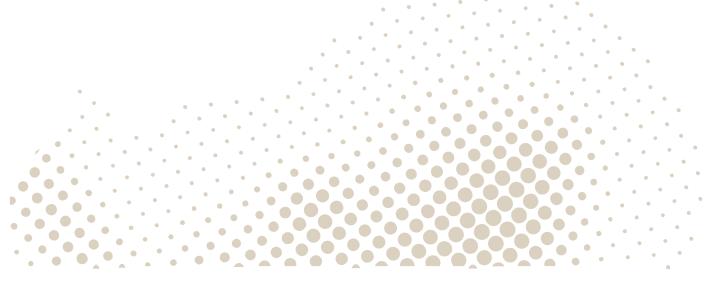
Do not measure your success only in what you achieve, but also in how many lives you touch, how many doors you open, and how many futures you help shape.

Today, you join the long line of VUT graduates who have carried our institution's values into the world. Tomorrow, you will be remembered not just for what you became, but for what you enabled others to become.

Graduates of Spring 2025: this is your season. Step forward with the energy of renewal, the pride of sixty years behind you, and the vision of a brighter tomorrow ahead.

Congratulations. The world is ready for you.

I thank you.





SESOTHO



HO SEHLOPHA SA 2025 – MEKETE YA DIKAPESO TSA SELEMO

Maapara kobo ya thuto ba hlomphehang, Baeti ba Hlomphehang, Ditho tsa Fakhalethi, Malapa le Metswalle

Kajeno re bokana ka moya wa Selemo, nako ya ntjhafatso, ho keteka dikatleho tse makatsang tsa Sehlopha sa 2025. Letsatsi lena ha se feela kananelo ya boinehelo le mamello ya hao, ke pitso ya ho tsoha le ho bapala karolo ya hao ho bopeng bokamoso.

Aforika Borwa e tswelapele ho tobana le diphephetso tse rarahaneng. Ho hloka mosebetsi ho ntse ho phahame ka manganga, bofuma bo ntse bo tswelapele mme ho se lekane ho ntse ho tswelapele ho leka boikemisetso ba rona bo kopanetsweng. Dintho tsena tsa sebele di ke ke tsa hlokomolohuwa. Le ha ho le jwalo ha di sisinyehe. Ba emetse baqapi, baetapele le ba bonang dipono, batho ba kang wena, ho hlahisa ditharollo tse fetolang mathata monyetla.

Kwano Yunivesithing ya Thekenoloji ya Lekwa (VUT), o hlomeletswe ka tsebo e fetang ya thuto. O se o tiile, o tjhorisitswe monahano wa hao o tebileng mme o amohetse tshebedisano. Tsena ke disebediswa tse o matlafatsang ho theha mesebetsi, ho aha dikgwebo, ho etella pele ka botshepehi le ho ba le seabo ka mokgwa o utlwahalang setjhabeng.

Ha re ntse re atamela *Diamond Jubilee ya VUT ka Phuptjane 2026*, re keteka dilemo tse mashome a tsheletseng tsa bokgabane dithutong le boqapi, o ntshetsa pele lefa la boikgantsho. Letsholo la Road to 60 ha se feela ho ikgopotsa nako ya rona e fetileng, e mabapi le ho rala tsela e sebete ya bokamoso. Lona, baithuti ba rona, le tla ba bopaki bo phelang ba lefa lena. Menehelo ya hao indastering, dipatlisisong le ntshetsopeleng ya setjhaba e tla fana ka bohlokwa tshepisong ya dilemo tse mashome a tsheletseng tse tlang.

Sehla sena se re hopotsa hore pheletso e nngwe le e nngwe le yona ke qalo e ntjha. Jwalo ka Selemo ka bosona, leeto la hao ke ntjhafatso: ya ditoro, morero, tshepo. Tsebo eo o e fumaneng ha se pale e felileng, empa ke peo. Mme dipeo di hloka ho lengwa, ho hlokomelwa le ho dumellwa ho thunya ho ba ntho e kgolo ho feta bona.

Ha o feta diheke tsena, ke o phephetsa ho:

- **E-bang Bahahi ba Lefa:** Ha VUT e ntse e atamela dilemo tse mashome a tsheletseng, ntshetsa pale ya yona pele ka ho ngola dikgaolo tse ntjha tsa bokgabane le boqapi.
- E-bang Mantswe a Sebete: Lefatsheng le kwahetsweng ke ho hloka botsitso, bua ka ho hlaka, nnete le kgodiseho.
- **E-bang Batsamaisi ba Monyetla:** Theha dibaka tseo ba bang ba ka holang ho tsona, moo setjhaba se ka atlehang le moo tswelopele e fetohang e ke keng ya qojwa.

O se ke wa lekanya katleho ya hao feela ho seo o se finyellang, empa hape le hore na o ama bophelo bo bokae, o bula mamati a makae le hore na o thusa bokamoso bo bokae.

Kajeno, o kenela lenane le lelelele la baithuti ba VUT ba nkileng ditekanyetso tsa setheo sa rona lefatsheng. Hosane, o ke ke wa hopolwa eseng feela ka seo o bileng sona, empa ka seo o thusitseng ba bang ho ba sona.

Maapara kobo ya thuto ba Selemo ba 2025: sena ke sehla sa hao. Tswelapele ka matla a ntjhafatso, boikgantsho ba dilemo tse mashome a tsheletseng ka mora hao le pono ya hosane e kganyang ka pele.

Ke a leboha. Lefatshe le le emetse.

Ke a leboha.



SEPEDI



BAITHUTI BA 2025 – MELETLO YA DIKAPEŠO TŠA SERUTHWANE

Dialoga tše di hlomphegago, Baeti ba go Ikgetha, Maloko a Difakhalithi, Ba Lapa, le Bagwera

Lehono re kgobokane ka moya wa seruthwane, sehla sa mpshafatšo, go keteka katlego ye botsebotse ya Baithuti ba 2025. Letšatši le ga se la fela go lemoga boikgafo le kgotlelelo ya lena, ke pitšo ya gore le eme le go raloka karolo ya lena ya go bopa bokamoso.

Afrika borwa e tšwelapele go kopana le ditlhohlo tše thata. Go hlokega ga mešomo go sale godimo kudu, bodiidi bo a ganelela, le go selekalekane go tšwelapele go lwantšhana le go rarolla ga rena. Mabaka a a bophelo a ka se hlokomologwe. Efela ga se ao a ka se fetošwego. A emetše bahlami, baetapele le ba go ba le pono, batho ba bjalo ka wena, go tliša ditharollo tšeo di ka fetolago mathata go ba monyetla.

Yunibesithing ya Theknolotši ya Vaal (VUT), le filwe go feta tsebo ya tša thuto. Le hweditše kgotlelelo, le kaonafaditše go gopola ka tsenelelo, le go amogela go šoma mmogo. Tše ke ditlabelo tša go le matlafatša go hlama mešomo, go aga dikgwebo, go etapele ka seriti, le go kgathatema ga go ba mohola setšhabeng.

Ka ge re e ya go Taamane ya *Jubilee ya VUT ka Ngwatobošego 2026*, go keteka mengwaga ye masometshela ya bokgoni bja tša thuto le boitlhamelo, le ya pele ka bohwa bja go ikgantšha. Lesolo la Leeto la go ya go mengwaga ye 60 ga se fela segopotšo sa go keteka tša kgale, ke ka go tšea leeto la maatla la bokamoso. Lena, dialoga tša rena, le tla ba dipaki tša bohwa bjo. Go kgathatema ga lena go tlhabollo ya intasteri, nyakišišo le setšhaba go tla hlola morero go tshepišo ya mengwaga ye e tlago ye masometshela.

Sehla se se re gopotša gore go fela ga se sengwe ke mathomo a se sengwe. Bjalo ka Seruthwane, leeto la lena ke go mpshafatšwa: ga ditoro, maikemišetšo le tshepho. Tsebo yeo le e hweditšego ga se kanegelo yeo e feletšego, efela ke peu. Gomme dipeu di nyaka go bjalwa, go nošetšwa, le go dumelelwa go thunya go ba tše di kaone.

Ge le sepela go tšwa dikeiting tše, ke le tlhohla go:

- Ba Baagi ba Bohwa: Ka ge VUT e fihlelela mengwaga ye masometshela, išang kanegelo pele ka go ngwala dikgaolo tše dimpsha tša bokgoni bjo bo botsebotse le boitlhamelo.
- Ba Mantšu a Bagale: Lefaseng la go hloka bonnete, bolelang ka go kwagala, go ba le nnete le mmono.
- Ba Baabi ba Kgonagalo: Dirang dibaka tša moo ba bangwe ba ka golago, ditšhaba di ka atlegago, le moo tšwelopele e diragalago.

Le seke la lekanyetša katlego ya lena go seo le se fihlelelago fela, eupša le go maphelo ao le a fetolago, mabati ao le a bulago, le bokamoso bjo le thušago go bo bopa.

Lehono, le tsena mothalading wo mo telele wa dialoga tša VUT tšeo di išago ditekanyetšo tša setheo lefaseng. Gosasa, le ka se gopolwe fela ka seo le bilego sona, eupša ka seo le kgontšhitšego ba bangwe go ba sona.

Dialoga tša Seruthwane sa 2025: se ke sehla sa lena. Eyang pele ka maatla a mphsafatšo, boikgantšho bja mengwaga ye masometshela, le pono ya bokamoso bja go kganya.

Re a le lebogiša. Lefase le le emetše.

Ke a leboga.





Mr VZ Mntambo Chancellor LL.M (Yale), LLB (Unibo);B.luris.



Prof MJ Radebe
Chairperson of Council: 2022 - 2025
PhD: Media Studies (WITS), MA and BA Hons:
Journalism and Media Studies (WITS),
BSc: Computer Sciences (VISTA)



Prof SK Ndlovu
Vice-Chancellor & Principal
DEd (UZ), M Ed (UKZN), B Ed (UZ), B Paed (UZ),
SSTD (UZ), EDP (SU)







Ms T Maluleke Registrar (Acting) MBA (GIBS), PGDip(GIBS), PGDip (UJ), Btech (TUT), NDip (TUT)



Mr SA Mahlalela
Deputy Vice-Chancellor: Resources & Operations
Executive Leadership Development (Harvard University),
MBA(Regent Business School), CA(SD), FCCA(UK).



Dr MG Kanakana-Katumba Deputy Vice-Chancellor Teaching & Learning Dphil (UJ), MSE (GWU), MBA (NMMU), BTECH (TUT) and ND (TUT)



Dr SM Nelana
Deputy Vice-Chancellor:
Research, Innovation, Commercialisation and
Internationalisation
PhD (UJ), MSc (UWC), BSc Hons (UWC), BSc (UWC)



Ms N Dhumazi CA(SA)

Chief Financial Officer

MBA (Henley Business School), MCOM (UP); BCOMPT

Hons (UNISA), BCOM (UNIVEN)



DIDINI TSA PHETHAHATSO I DIDINIPHETHIŠI



Dr N MkhumbeniExecutive Dean: (Acting)

Applied & Computer Sciences

PhD (TUT), MTech (VUT), PGDip (RBS),

BTech (CPUT), NDip (PT)



Prof C Mafini
Executive Dean:
Management Sciences
PhD (NWU), DTech: (VUT), ADHE (UFS),
MSC (CUT), BBA (MSU), ADP (UFS)



Prof K Abou-El-Hossein

Executive Dean:

Engineering And Technology

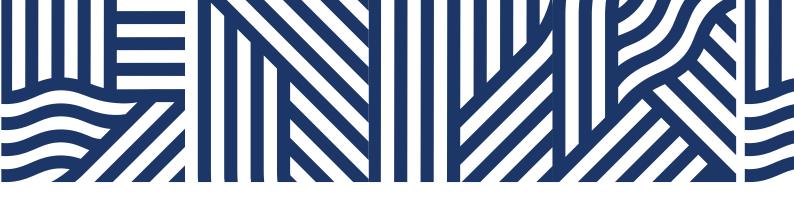
PhD: Eng (NTU, Ukraine), MSc: Eng (NTU, Ukraine),

Grad.Cert: (Curtin, Aus)



Prof L Maleho
Executive Dean:
Human Sciences

DTech: (TUT), MTech: (VUT), BTech (VUT),
N.Dip: (VUT)



HONORARY DOCTORATES

2002:

Archbishop Emeritus D Tutu - Humanities

2006:

Prof M Hinoul – Extraordinary Professorship
Dr Adv PDF Tlakula - Legal Studies
Dr M Oliphant - Sports Management

2008:

M Mangena - Applied Sciences
Adv IA Semenya - Law
DN Koloane - Fine Arts
SM Pityana - Humanities
Adv G Bizos - Law
Archbishop WHN Ndungane - Humanities

2011:

H Masekela - Human Sciences

2012:

Reverend BE Lekganyane - Human Sciences M Mohapi (posthumously) - Human Sciences

2013:

Judge MM Mabesele - Human Sciences
G Immelman - Engineering

2016:

B E E Molewa - Applied Sciences
T Tebeila - Business Administration
I I Sooliman (Dr) - Humanities
J B Irkhede - Arts and Design Human Sciences
Mme C M Nku (posthumously) - Human Sciences

2018:

M Meyer - Management Sciences T Makgoe - Human Sciences

2019:

Z V Sobukwe (posthumously) - Humanities





ORDER OF PROCEEDINGS

MOKGWA WA TSAMAISO YA MOSEBETSI | TATELANO YA LENANEO

The Academic Procession enters the Desmond Tutu Great Hall

Mokoloko o kena setsing sa kopanelo Desmond Tutu Molokoloko wa Dirutegi o tsena ka Holong ya Desmond Tutu

The Vice-Chancellor & Principal Constitutes the Congregation

Motlatsa-Motjhanselara le Mosuwehlooho o Bula Mosebetsi Semmuso Motlatša Mokhatshelara le Hlogo o Bula Kopano Semmušo

NATIONAL ANTHEM

PINA YA SETJHABA | KOŠA YA SETŠHABA

PRAYER AND WELCOME

THAPELO LE KAMOHELO | THAPELO LE KAMOGELO

PRESENTATION OF GRADUANDS

DIKAPESO | DIKAPEŠO

Executive Dean

Dini ya Phethahatso | Diniphethiši

CONGRATULATORY MESSAGE TO STUDENTS

TAKALETSO YA MAHLOHONOLO HO BAITHUTI | MOLAETŠA WA DITEBOGIŠO GO BAITHUTI Vice-Chancellor & Principal

Motlatsa-Motjhanselara le Mosuwehlooho | Motlatša Mokhantshela le Hlogo

Vice-Chancellor & Principal Dissolves the Congregation

Motlatsa-Motjhanselara le Mosuwehlooho o Qhala Kopano | Motlatša Mokhatshelara le Hlogo o Phatlalatša Kopano

The Academic Procession leaves the hall, followed by Guests.

Mokoloko o tswa setsing sa kopanelo, o latelwa ke baeti ba bohlokwa.| Molokoloko wa Dirutegi o tšwa ka holong, o latelwa ke Baeng

The congregation is requested to rise and remain standing when the academic procession enters and leaves the hall.

Phutheho e koptjwa ho ema ha Mokoloko o tswa setsing sa kopanelo | Batho ba kgopelwa go ema ge molokoloko wa dirutegi o tsena le go tšwa ka holong.



NATIONAL ANTHEM

Nkosi sikelel' Afrika

Maluphakanyisw' uphondo lwayo,

Yizwa imithandazo yethu,

Nkosi sikelela, thina lusapho lwayo.

Morena boloka setjhaba sa heso,
O fedise dintwa le matshwenyeho,
O se boloke, O se boloke setjhaba sa heso,
Setjhaba sa South Afrika - South Afrika.

Uit die blou van onse hemel,
Uit die diepte van ons see,
Oor ons ewige gebergtes,
Waar die kranse antwoord gee,

Sounds the call to come together,
And united we shall stand,
Let us live and strive for freedom,
In South Africa our land.





GENERAL ANNOUNCEMENTS

Ditsebiso | Ditsebiso

In order to maintain the dignity of the ceremony, you are requested to take note of the following:

- The congregation is requested to rise and remain standing when the academic procession enters and leaves the hall.
- · Do not move around during the ceremony in order to take photographs.
- · Please refrain from unacceptable actions such as whistling.
- Please switch off your cellphone.
- We strive to conduct the ceremonies in a dignified manner, please do not leave the hall before the graduation proceedings have been concluded.
- Qualifications of candidates who are unable to attend the graduation ceremony will be conferred in absentia.







FACULTY OF APPLIED AND COMPUTER SCIENCE

10H00 - 15 SEPTEMBER 2025

DIPLOMA IN **ANALYTICAL CHEMISTRY**

M+3

M+3

BALOYI Vutlhari †
BILA Mthokozisi Alijah

CHAVALALA Tintswalo Goodness **HLANGWANI** Tsakani Eucretia

KHANYE Tshepiso

MAGABE Letsebang Rosaline MAGANE Lebogang Gosebo MAHLANGU Kamohelo Colane

MALEKA Leshego

MATHEBULA Khanyisa Mixo Abigail

MATLOU Maihlohlo Raesibe MLAMBO Nokuthula Nobuhle MNISI Neliswa Peaceful MOKONO Bontle MOYANE Thebelani Wisani Soniah

MTHAMBEKA Jamkela MUKHARI Shonani Brilliant

MYENI Thabiso

NGOBENI Hlulani Alliance **NKUNA** Lungile Hlengiwe **NTLATSENG** Reatlegile Ofentse

NTLEKO Mzuvukile

QACHA Reitumetse Sylvia **SEGALWE** Paballo Angelica **SHOKOE** Itumeleng Regina

SITHOLE Alex SITOE Jacob Kgopolo SOOMO Kagiso Lazaros

t In recognition of Vutlhari Baloyi, awarded posthumously for Diploma: Analytical Chemistry, 2025

DIPLOMA IN **BIOTECHNOLOGY**

BOSIU Maserobatse Tshegofatso

CHELANE Thuto
DAYIMANI Pumeza
HADEBE Yonela

KHAZAMULA Miehleketo

KHESWA Maria

KHOSA Tintswalo Cheryl KUMALO Caboyise Giallanela MABENA Nokuthula Angel MAHLANGU Vincent Thokozani MAKAMU Muhluri Marvel

MAKGAPIETSA Lebogang Adeline MALEKA Keithlen Mokgohloe MALULEKE Nicole Rulani MASEKO Sanah Rosemary

MASHABA Richard

MATORO Luvhengo Charmaine

MBULI Noluthando

MDLULI Ishmael Sibusiso

MKHABELA Nocolo Mariyeta

MNGUNI Monicah Boitumelo

MONGWE Lungile

NETSHIVHAZWAULU Aluwani Rhandzu

NHLEKO Sinenjabulo Sinethemba

PHAHLANE Minor Pontsho

POOE Mapitsi Relebogile Precious

RASMENI Nolubabalo

SKHEFILE Ayanda Angela

TANTSI Mpho Lyfred

THEKO Princess Mathabang

THOMO Nobuhle Lauret Hope

XULU Mhlengeni







DIPLOMA IN INFORMATION TECHNOLOGY		M+3
BALOYI Nhlamulo Susan KABI Karabo Amy LEHOKO Kamohelo LUBISI Ekson MABASO James Teboho MAFAHLA Matome Meuriel MAHLALELA Thabiso MAHLANGU Given MALAMBE Lethukuthula Fortune MALAPILE Tlou Raphaposha MNGOMEZULU Aubrey Mduduzi MOFOKENG Thato MOKWATLO Lethabo Emission MOLOI Eric Kgotso	MOLOTSI Mathapelo Stephan MORWATSHEHLA Makoma Veronica MOTAU Cedrick Phuti MPHAHLELE Thakgathatso MTHETHWA Fortunate Ntokozo NDLALA Gift Lawrence NGUBANE Velemseni Sibongakonke NTAKA Ndumiso Fikile NTLENG Hlengiwe Percevierence RADEBE Sinenhlanhla SEKGOBELA Ashley Dikeledi THABETHE Tshwarelo Ntando THENJWAYO Bonginhlanhla Patience	
NATIONAL DIPLOMA: ANALYTICAL CHEMISTRY		M+4
DLOWU Sipho Present		
ADVANCED DIPLOMA IN BIOMEDICAL TECHNOLOGY		M+4
MAKATU Ndalamo Rachel	RAMATSEBE Ntombizodwa Lydia	
ADVANCED DIPLOMA IN BIOTECHNOLOGY		M+4
MKHULISA Mbali		
ADVANCED DIPLOMA IN CHEMISTRY		M+4

NKOSI Mxolisi Sibusiso



ADVANCED DIPLOMA IN INFORMATION TECHNOLOGY		M+4
MUHALI Arenaho Juska NEPFUMEMBE Murangi Terrance	TANGWENI Sinekhaya Zolile	
BACHELOR OF NURSING		M+4
MOTITMI Palesa Girlmore		
POSTGRADUATE DIPLOMA IN BIOMEDICAL TECHNOLOGY		M+5
MAHOSI Hlulani Victoria MALEKA Nthabiseng Patricia	NTAMANE Halalisile Nondumiso TSOTETSI Thato Brendon	
POSTGRADUATE DIPLOMA IN CHEMISTRY		M+5
MOHLALA Mmagadima Ikageng		





DOCTOR OF PHILOSOPHY (PHD) IN CHEMISTRY

(M+7)

ONKANI Shirley Priscilla

THESIS: GRAPHENE OXIDE-BASED SPONGE HYBRIDIZED WITH AG-DOPED TIO2 AND ZNO PHOTO-CATALYSTS FOR THE PHOTO-DEGRADATION OF SELECTED ANTIBIOTICS IN WATER.

PROMOTER: Prof FM Mtunzi CO-PROMOTER: Dr P Diagboya Prof MJ Klink

BIOGRAPHY:

Shirley.P Onkani, originally from the south-east of Gabon, was born and raised in Libreville (Gabon'capital city), and proudly identifies as a French speaker. She is the fifth child of her father and the only girl child of her mother followed by two boys, and she is the first among her siblings to earn a doctorate. Her academic journey is a powerful reflection of courage, vision, and perseverance. Coming from a family where her father worked in finance and her mother in communication, she was the first child to pursue scientific studies. After completing her matric at Lycée National Léon Mba in 2008, she began studying biomedical sciences at the University Of Health Sciences in Owendo, Gabon. However, during her studies, she realized her true passion lay in chemistry a field that better aligned with her curiosity and desire to impact the world through science.

Driven by this calling, she made the bold decision to switch from biomedical to analytical chemistry. This shift, though challenging, financially supported by her father, and later a university bursary during her MTech studies as recognition of her academic Contribution.

In 2010, she moved to South Africa after completing eight months of English language training a necessary and courageous step for a French-speaking student starting anew. In 2011, she enrolled at the Vaal University of Technology (VUT), where she earned a National Diploma, BTech, and MTech in Analytical Chemistry. Her MTech research led to her first peer-reviewed article, which has now accumulated over 140 citations, a remarkable feat for a young scholar.

Her PhD journey, though marked by periods of self-doubt, tears, and emotional exhaustion, also became a testimony to her inner strength. She published two additional journal articles, has a third under review, and a fourth manuscript under preparation. Her efforts were recognized with an award for outstanding intellectual rigor and academic achievement through conference presentations, community engagement, and publications by the Faculty of Applied and Computer Sciences on 1 November 2024. Beyond her academic achievements, she served as a lab assistant and tutor, and mentored numerous third-year students from Chemistry and Chemical Engineering departments and beyond VUT. She has shared her knowledge and inspired many students from diverse backgrounds, building a legacy of academic service and leadership.

Her story is not only one of academic excellence but of overcoming barriers linguistic, cultural, financial, and personal challenges. Today, she looks ahead with a clear goal: to become a professor of chemistry and to inscribe her name among the leading Black African women in science. She aims to inspire, empower, and elevate the next generation of scholars, especially young African women, to dream boldly and break barriers of their own.



ABSTRACT:

The alarmingly high amounts of pharmaceutical pollutants, particularly antibiotics present in water sources, pose serious threats to human health and the environment. Conventional treatment approaches have proven to be inadequate in removing these pollutants, prompting the development of specialized techniques and/or materials such as photocatalysts. Traditional metal oxide semiconductor photocatalysts, like TiO2 and ZnO, are of importance in wastewater remediation due to their unique features such as non-toxicity, low cost, high photo-sensitivity, catalytic activity, stability towards photo-generated actives oxygen species in agueous media. However, TiO2 and ZnO, are limited by their inability to remain stable while absorbing light; hence, this study investigated the efficacy of incorporating Ag metal doped TiO2/ZnO nanoparticles onto graphene oxide-sponge (GOS) for the photo-degradation of some selected pharmaceuticals (ciprofloxacin-CPF, tetracycline-TC, and chloramphenicol- CHP) from wastewater under 24 W white visible LED light irradiation. The Ag doping was carried out in 2.5, 5, or 7,5 wt% prior to incorporating onto GOS, known for its exceptional chemical, electrical and physical conductivity properties, facilitating the efficient transfer of photo-induced electrons. Silver metal was employed due to its anti- bacterial activity and ability to enhance the semiconductors' photocatalytic activity in the visible region. The synthesized materials were characterized using Fourier transform infrared (FTIR) and ultraviolet-visible diffuse reflectance spectroscopy (UV-DRS), micrometric analysis, Raman spectroscopy, thermo-gravimetric analysis, scanning electron microscopy (SEM), and energy dispersive x-ray. An analysis of these characterizations results confirmed the successful formation of the doped Ag-TiO2/Ag-ZnO-GOS with enhanced thermal stability over the pristine components, while morphological images showed well dispersed Ag-TiO2 and Ag-ZnO nanoparticles on the GOS composites which also exhibited reduced band gaps compared to the pristine nanoparticles and their Ag-doped derivatives. Raman spectra showed that the anatase and wurtize phases of TiO2 and ZnO, respectively, were present, and confirmed the successful incorporation of Ag and TiO2/ZnO onto GOS sheets. The effects of various operating parameters in the photocatalytic degradation processes such as time, amount of catalyst, solution pH, and initial antibiotics concentrations were examined and optimized. Degradation of the antibiotics under visible light irradiation showed that the semiconductors' photocatalytic activities improved upon Ag doping.

The TiO2 nanoparticles with 5 wt% and ZnO nanoparticles with 2.5 wt% exhibited the highest photocatalytic activity of ≥20% and ≥50 % degradation for all antibiotics, and these were incorporated into GO sponges. These photocatalytic activities were further enhanced in the ternary composites: notably, 5 wt% Ag-TiO2/GOS nano-composite achieved degradation efficiencies of 76% for CPF, 100% for TC, and 54.3% for CHP, while 2.5 wt% Ag-ZnO/GOS nanocomposites exhibited degradation efficiencies of 84% for CPF, 100% for TC, and 62.3% for CHP. The enhanced degradation performances of the ternary composites for these antibiotics were ascribed to the synergistic actions of the composites: nanocatalysts, Ag ions, and GOS sponge which significantly improved antibiotics adsorption, increased visible light absorption, and inhibited charge carrier recombination. Optimal degradations of these antibiotics were observed at around neutral pH while higher degradations were recorded at lower initial antibiotic concentrations. The Ag-doped GO sponges maintained greater than 90% stability after 4 reuse cycles, confirming their efficient recyclability. Supporting these doped photocatalysts on GO sponges enhanced their antibiotics' photocatalytic degradation potential, especially for CPF, TC, and CHP in water.





DOCTOR OF PHILOSOPHY (PHD) IN CHEMISTRY

(M+7)

PHELE Mokete John

THESIS: UTILISING MAGNETIC MORINGA OLEIFERA PODS-FELDSPAR CLAY COMPOSITES FOR SELECTED POLLUTANT REMOVAL FROM WATER

PROMOTER: Prof FM Mtunzi CO-PROMOTER: Dr P Diagboya Prof MJ Klink

BIOGRAPHY:

Mokete Phele is the first and last born of Mamorena Phele, a husband to Nana and also a father to 2 boys. He was born in Tumahole Parys in 1985, he's an analytical chemist and completed all his undergraduate to postgraduate in Vaal University of Technology, he boosts 10 publications in a peer review accredited journals. He started working as a Lab analyst for PetroSA (Mossel Bay) for period of 2 years and proceeded to Richards Bay Minerals where he resigned 3 months later, to Omnia holdings as a Lab technician. He then worked for Denel Ammunition (Potchefstroom) as a senior chemist, for a period of 3 years and joined Maluti a Phofung Water, state owned company (Phuthaditjhaba) as a Technical manager for 3 years and later he moved to Ngwathe Local Municipality, were he's currently the Water and Sanitation manager (8 years). He recently won the top research award 1st position from the faculty of applied and computer sciences, research excellence awards 2025.

ABSTRACT:

Water is regarded as the most vital of natural resources for the sustainability of life, yet freshwater systems are directly threatened by pollution. Among the many harmful pollutants are organic emerging pollutants such as ciprofloxacin (CIP) and heavy metals. Numerous approaches have been studied for the development of cheaper and more effective adsorbents for the removal of both organic and inorganic pollutants from wastewater. New magnetic moringa-clay composite adsorbents derived from feldspar clay and moringa oleifera pods have been developed for the efficient removal of both organic (CIP) and inorganic (Cd2+, Pb2+ & Cu2+) pollutants from aqueous solutions. The magnetic moringa-clay (MMC) composite and moringa-clay (MFC) composite were characterized by sophisticated analytical instruments such as scanning electron microscopy (SEM), X-ray powder diffraction (XRD), thermogravimetric analyser (TGA), Brunauer Emmett and Teller (BET) and Fourier transform infrared spectroscopy (FTIR).

The efficiency of these adsorbents in the aqueous solution adsorption of Pb2+, Cu2+, Cd2+ and CIP was investigated as a function of pH, time, dose, initial concentration and temperature. The optimum value for pH of the sample was found at pH 4-6 for heavy metal ions, also 5 - 6.1 for CIP and for the contact time an optimum of 120 min was found. The adsorption maximum capacities of Cu2+, Cd2+, Pb2+ and CIP by MMC was 54.42 mg·g-1, 41.26 mg·g-1, 35.16 mg·g-1 and 304.10 mg.g-1, respectively. The surface area decreased from 111.48 to 59.34 m2.g-1 after the adsorbent became magnetic. IR spectra study suggested that the positions of active interactions between the cations and the adsorbents involved surface functional groups such as the -OH, -COO-, and -C-N groups.

Magnetic-moringa-clay composite (MMC) exhibited higher cation exchange capacity (CEC) than any of the starting adsorbents. The rates of removal of CIP were faster than for Pb2+, Cu2+ and Cd2+ ions in both composites, and consequently, faster equi-



librium (30 and 120min, respectively). The pseudo-second-order kinetic model described the adsorption data better suggesting that the removal mechanism involved electrostatic interactions. The equilibrium data for heavy metal ions and CIP adsorption onto MMC fitted the Langmuir-type adsorption isotherm implying that adsorption of both cations occurred on adsorption sites having equal affinity for these cations and with the formation of only monolayer cations on adsorbent surfaces at equilibrium. Heavy metal ions were more adsorbed than CIP on the adsorbents while increase in temperature enhanced adsorption to an extent: 298 > 313 > 343 K. The values for the enthalpy of the adsorption ΔH° for heavy metal ions were found to be in the range of 4.35 - 10.84 J. K-1. mol-1 and were all positive. The enthalpy of the adsorption ΔH° for CIP onto MMC appeared to be physisorption. The antibacterial assays indicated that the materials are effective in preventing the growth of microbes. The incorporation of MMC onto the fennel seeds improved their antimicrobial activity. The minimum concentration required to inhibit the microbial growth of Escherichia coli for MOP and MNP was 1.75 mg.mL-1. MMC is more effective as an antimicrobial agent because it requires a lower concentration of 0.875 mg.mL-1 to inhibit the growth of Escherichia coli. Furthermore, composites were more effective against S.aureus than E.coli.

This work also, compared two catalysts in the Photo-Fenton method for breaking down CIP in aqueous solution. The photo-generated electrons from MMC enhance the separation of electron-hole pairs and accelerate the reduction of Fe3+ to Fe2+ on MMC, leading to high degradation efficiency of CIP. Under simulated sunlight irradiation, the much higher content of Fe2+ was determined on MMC than on TiO2 via a common method in the iron ore, and the consumption of H2O2 and the production of *OH were more significant in the MMC system than those in the TiO2 system.

The composite adsorbents could be reused more than three times without significantly losing the cation adsorption efficiency. Thus, magnetic moringa-clay composite is a promising adsorbent for the removal of organic and inorganic pollutants from aqueous solutions.



VUT Shield Icon Breakdown: Images and Descriptions.



The icon breakdown is unique as the V represents the word Vaal, and indicates the graduation hood as a symbol of achievement.





The U represents the word University





and the Centre is filled with water waves that signify a source of life and our location.



VUT BRAND MARKS/LOGOS

Faculty Brand Marks are differentiated by the colors of the V that symbolizes the faculty colour hood during graduations.



Mark is the purest form of the VUT brand

The blue waves in the center represent the Vaal River and the university's

The gold represents academic excellence, achievement. success, and wealth.

The academic brand is only used in academic ceremonies and by the office of the Vice-Chancellor and VUT Council



The Marketing **Brand Mark**

Applied &

Computer

Yellow represents

Happiness & Joy.

Sciences

communicates the brand voice as a person. which is Curious. Ambitious and Flexible.

Dandelion represents warmth and optimism.

Sapphire represents integrity, knowledge, power, and seriousness.



Engineering & Technology

Beatle Gree represents Nature. Environment, Health & Renewal



Human Sciences Union Jack Red

represents Energy, Passion, and Heat.



Management Sciences

Adonis Blue represents Harmony, Unity & Truth

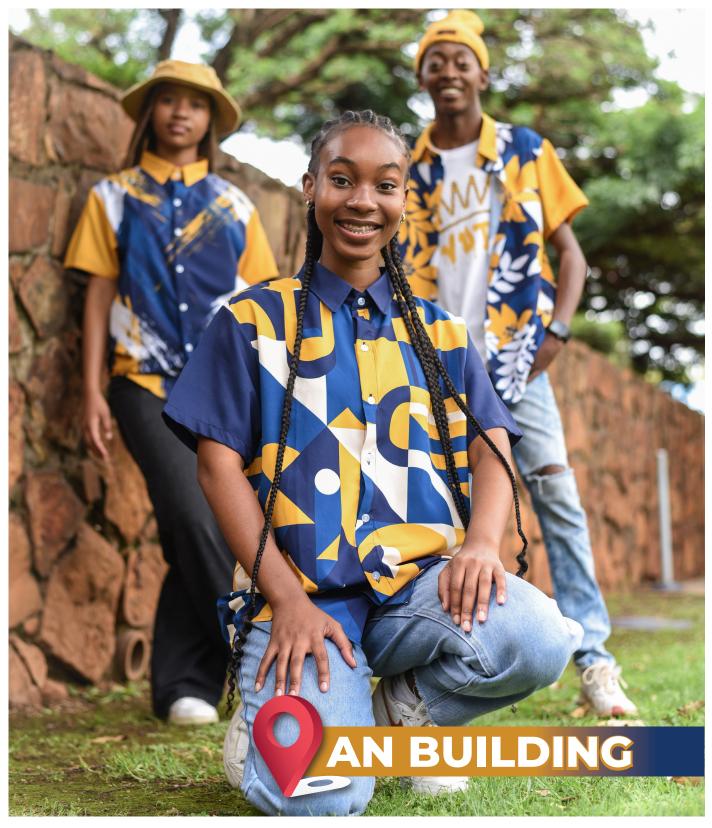


The Culture mark is the MaVUTi Mark, a fingerprint modified in the

shape of a U, symbolizing the uniqueness of VUT staff and students.









WELCOME TO CONVOCATION / ALUMNI NETWORK



Mr Makhosonke Sangweni
President of the Convocation
makhosonkes@vut.ac.za
Mobile 071 3501477

The Convocation of Vaal University of Technology (VUT) is a statutory body that serves as the university's largest constituency, comprising its alumni and key academic stakeholders. This body plays a pivotal role in the governance and strategic direction of the institution by facilitating alumni engagement and contributing to the preservation and enhancement of the university's academic reputation.

Membership to Convocation is automatic upon the conferral of a diploma, or credit-bearing certificate. Additionally, academic staff and selected emeritus professors are included, ensuring a broad and representative body that upholds the interests of both past and present members of the university.

Roles and Responsibilities

Convocation is entrusted with the responsibility of deliberating on and providing input into matters concerning the university's development as stated in Chapter 10 (5.3) of the VUT Government framework. Its key functions include

- · Electing the President of Convocation.
- Electing three Executive Committee of Convocation (Exco).



Mr David Matsaung Deputy President of the Convocation

davidm3@vut.ac.za Telephone +27 (0)16 950 7687 Mobile 066 543 5638

- Discussing and expressing opinions on issues affecting the university, including matters which may be referred to it by the council.
- Convocation ensures that alumni have a voice in shaping institutional policies, thereby safeguarding the credibility and value of a VUT qualification.
- Through its structured engagement, Convocation strengthens networks with donors and stakeholders to secure funding opportunities for alumni and convocants in need of financial support to fostering a collaborative and progressive academic environment.

Eligibility for Membership in VUT Convocation

The Convocation of VUT comprises the following members:

- All graduates and holders of diplomas or credit-bearing certificates from the university.
- The Vice-Chancellor, Deputy Vice-Chancellors, and all academic staff.
- Former professors and associate professors who have been granted emeritus status by the Senate.





Mr Peter Masombuka
Alumni Relations

Marketing and Communications
Telephone +27 (0)16 950 9973
peterm@vut.ac.za

©khaya alumni



Mr Comfort Madalane
Pre-Alumni Relations

Marketing and Communications
Telephone +27 (0)16 950 9591
comfortm@vut.ac.za

The role of alumni relations in any institution is to manage the relationship between an institution and all its former students and graduates. VUT, like other institutions, is committed to enhance its relationship with its former students and graduates through formal and informal programs that are mutually beneficial in nature.

Each year we strive to reconnect more former students and graduates with the current students in their respective groups of interests and academic fields that helped them most in their careers / extramural activities. We affirm all segmented Networks; be it the Vaal College for Technical Advancement, Vaal Triangle Technikon or Vaal University of Technology indiscriminately.

We would like to invite all former students and graduates to share their success stories, job opportunities, career milestones, internships, bursaries, challenges faced and mostly inputs on the current development(s) of the university. With your participation, we support VUT in its endeavors to make sustainable impact in the immediate community and the broader society. On a collaborative effort with diverse stakeholders, Convocation

& Alumni Association, students and friends of VUT, we continue to promote the VUT brand through improved marketing and communications, meaningful alumni engagements guided by the Vaal University of Technology's 2033+ Strategy.

Like a unique puzzle piece, you are an ambassador of VUT, your participation to attract and hold interests of Alumni is valued.

Welcome..., you are a now part of VUT Alumni Network; more than 100k VUT graduates since its inception in 1966.

Welcome to a variety of interest groups and networking chapters; regionally, provincially, nationally and internationally. Check us on social media and meet your peers, former Ma-Vallies / MaVuti (classmates, Res mates, Sports mates, mentors, Lecturers, etc.)

Your meaningful participation or engagement is appreciated. Thank you for choosing VUT.



Nurse's Pledge of Service

I solemnly pledge myself to the service of humanity and will endeavour to practise my profession with conscience and with dignity.

I will maintain, by all the means in my power, the honour and noble tradition of my profession.

The total health of my patients will be my first consideration.

I will hold in confidence all personal matters coming to my knowledge.

I will not permit consideration of religion, nationality, race or social standing to intervene between my duty and my patient.

I will maintain the utmost respect for human life.

I make these promises solemnly, freely and upon my honour.