

Faculties of The Humanities, Natural and Agricultural Sciences, and Theology and Religion Certificates, Bachelor's Degrees, Master's Degrees, and Doctor of Philosophy

FRIDAY 9 DECEMBER 2022 | 14:30







CONSTITUTION OF THE CONGREGATION

OFFICIAL WELCOME

MUSICAL ITEM

PRESENTATION OF CANDIDATES

CONGRATULATORY MESSAGE

NATIONAL ANTHEM OF SOUTH AFRICA

DISSOLUTION OF THE CONGREGATION

PLEASE NOTE

List of candidates receiving degrees, diplomas, and certificates:

Degrees, diplomas, and certificates of candidates who are unable to attend the graduation ceremony will be conferred in absentia.

An* next to a name indicates that the degree, diploma, or certificate is awarded with distinction.

By attending the graduation ceremony, you agree that the UFS may use photographs taken by the official photographer in which you appear for marketing purposes.

By attending the graduation ceremony, you agree that the UFS may use video footage taken by the official videographer in which you appear for marketing purposes.

Nkosi sikelel' iAfrika

NATIONAL ANTHEM OF SOUTH AFRICA

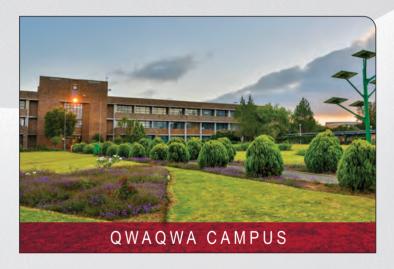
Maluphakanyisw' uphondo lwayo, Yizwa imithandazo yethu, Nkosi sikelela, thina lusapho lwayo. Morena boloka setjhaba sa heso, O fedise dintwa le matshwenyeho, O se boloke, O se boloke setjhaba sa heso, Setjhaba sa South Afrika -South Afrika. Uit die blou van onse hemel. Uit die diepte van ons see, Oor 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.

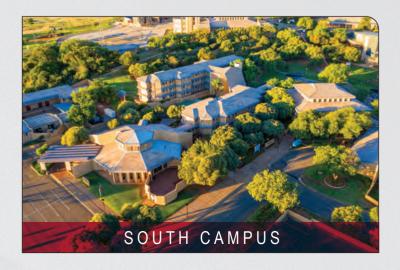
In order to maintain the dignity of the ceremony, you are requested to take note of the following:

- Please stand as the procession enters the hall
- Do not move around during the ceremony in order to take photos
- Please refrain from unacceptable actions such as whistling
- Please put your cellphone on silent so as not to disturb the proceedings
- We strive to conduct the ceremonies in a dignified manner
- Please do not leave the hall before the graduation proceedings have been concluded
- Family and friends who are unable to attend may watch the full graduation ceremonies through our livestream link at http://livestream.ufs.ac.za.

Inspiring excellence, transforming lives through quality, impact, and care.







ABOUT THE UFS

The University of the Free State (UFS) has a proud history as one of the oldest institutions of higher education in South Africa. It opened its doors in Bloemfontein in 1904 as the Grey University College, with six students in the Humanities. Today it is a multi-campus institution, with two diverse campuses in Bloemfontein and one in Qwaqwa in the scenic Eastern Free State, accommodating more than 40 000 students in its seven faculties (Economic and Management Sciences, Education, Health Sciences, the Humanities, Law, Natural and Agricultural Sciences, Theology and Religion), with an increasing number of international students and associates, and an ever-widening scope of active involvement in and contribution to its surrounding communities.

For the past 118 years, the UFS has been delivering quality graduates who have made their mark in various sectors. What sets the institution apart is its holistic student support initiatives, enabling it to achieve some of the highest success rates in the country. Delivering students who are in high demand in the global job market remains a top priority. An established network of industry partners and close collaboration with the public and private sectors, as well as a continuous process of transformation and curriculum renewal, dovetail to produce highly employable graduates.

UFS research efforts are driven by dedicated scholars, some of whom are international leaders in their fields, with industry and social impact and real-world application.

Through the principle of engaged scholarship, the UFS responds to societal needs by using its scholarly and professional expertise with an intentional public purpose and benefit.

The UFS is an institution that goes all out to provide its students and staff with an outstanding university experience. Everything the institution does is rooted in its values of excellence, innovation and impact, accountability, care, social justice, and sustainability.

The UFS aspires to be a research-led, student-centred, and regionally engaged university that contributes to development and social justice through the production of globally competitive graduates and knowledge. Our Vision 130 is an elaboration of our strategic intent to reposition the university for 2034, when we will commemorate our 130th anniversary.

DEVELOPMENT OF THE UFS CREST OVER MORE THAN A CENTURY



1904

Up to 1935, the same coat of arms was used as the Grey College School.



1935

By 1935, with the name change to University College of the Orange Free State, the coat of arms fell into disuse, especially among students.



1947

In 1947, an agreement between management and students led to the new motto *Per Fidem ad Sapientiam* (Through faith to wisdom).



1950

In 1952, it was changed to *In Deo Sapientiae Lux* (In God is the light of wisdom). The traditional orange, white and blue, linking the UFS to the South African national colours, changed in the late 1990s.

The orange was replaced by cherry red.



2011

The academic brand - the historic University of the Free State crest that has been the symbol of the university since 1952, has evolved to embrace the aesthetic expectations of the stakeholders.

The shape of the traditional academic shield has been simplified and contemporised. Much of the symbolism of the crest remains intact, acknowledging the location of the UFS brand as one of the country's premier institutions of higher education, with a proud history of academic excellence and an ever-evolving, vibrant culture.



GRADUATION CEREMONY 2022

Honorary Awards | Honorary Doctorates

					- 44
1950	GLP Moerdyk – DLitt (h.c.)		FP Retief – DMed (h.c.)		T (Karel) Schoeman – DLitt (h.c.)
1951	NC Havenga – LLD (h.c.)	4007	JA Stegmann – DCom (h.c.)		YK Seedat – DMed (h.c.)
1952	Thos Blok – DEd (h.c.)	1987	WA Joubert – LLD (h.c.)		MK Seely – DSc (h.c.)
4055	SHS Rubidge – DSc (h.c.)		B Kok – DPhil (h.c.)		C Seerveld – DPhil (h.c.)
1955	CR Swart – LLD (h.c.)	4000	WP Venter – DCom (h.c.)		F van Z Slabbert – DPhil (h.c.)
4050	CA v Niekerk – LLD (h.c.)	1988	JJN Cloete – DAdmin (h.c.)		JC Steyn – DLitt (h.c.)
1958	CPB Brink – LLD (h.c.)		FC Fensham – DLitt (h.c.)		PA Verhoef – DTh (h.c.)
4050	CF Visser – DEd (h.c.)	4000	JW vd Riet –DPhil (h.c.)		L van den Heever – LLD (h.c.)
1959	DB Bosman – DLitt (h.c.)	1989	BJ Meyer – DSc (h.c.)	0005	HA Wessels – LLD (h.c.)
	SP le Roux – DScAgric (h.c.)	1000	N van Uden – PhD (h.c.)	2005	A du P Heyns – DMed (h.c.)
	DF Malherbe – DLitt (h.c.)	1990	MG Corbett – LLD (h.c.)		JJF Durand – DPhil (h.c.)
1000	GH v Rooyen – MA (h.c.)	1001	JS Rabie – DLitt (h.c.)		JA Groenewald – DSc (h.c.)
1960	SPE Boshoff – DLitt (h.c.)	1991	SS Brand – DCom (h.c.)		WH Neuser – DTh (h.c.)
1961 1962	T Boydell – DPhil (h.c.)		JWL de Villiers – DSc (h.c.)		M Ramos – PhD (h.c.)
1902	ES Botes – DEd (h.c.)		GT Fagan – DArch (h.c.)	2006	SJ Terreblanche – DCom (h.c.) T Moss – PhD (h.c.)
1963	PE Rousseau – DSc (h.c.) EH Louw – LLD (h.c.)		JH Hofmeyer – PhD (h.c.) E v Heerden – DLitt (h.c.)	2000	PV Cox – PhD (h.c.)
1303	EN Roberts – DSc (h.c.)	1992	JP Louw – DLitt (h.c.)	2007	BJ (Bannie) Britz – DArch (h.c.)
	JGF (Kaalkop) vd Merwe - DCom (h.c.)	1332	H Olivier – DSc (h.c.)	2007	KPD Maphalla – PhD (h.c.)
	HF Verwoerd – DLitt et Phil (h.c.)	1993	JD Anderson - DMed (h.c.)	2008	D Ferreira – DSc (h.c.)
1966	PSZ Coetzee – DPhilTh (h.c.)	1333	RR Arndt – DSc (h.c.)	2009	JC Loock – PhD (h.c.)
1300	PJ du Toit – DSc (h.c.)		SJ Naudé – LLD (h.c.)	2003	LTC Harms – LLD (h.c.)
	MS Louw – DCom (h.c.)	1994	JJ Human – DPhil (h.c.)	2010	P Gordhan – PhD (h.c.)
1967	SM Naudé – DSc (h.c.)	1004	JA Myburgh – DMed (h.c.)	2010	BBS Ngubane – PhD (h.c.)
1001	LC Steyn – LLD (h.c.)		JP vd Walt – DSc (h.c.)		AH Strydom – PhD (h.c.)
	BJ Vorster – LLD (h.c.)	1995	WA Landman – DEd (h.c.)		M Jones – PhD (h.c.)
1968	SJ Naudé – DCom (h.c.)		WL Mouton – DPhil (h.c.)	2011	D Tutu – DTh (h.c.)
1969	CW (Nellie) Swart – DPhil (h.c.)	1996	WDO Marasas – DSc (h.c.)		P Fourie – DLitt (h.c.)
	AJJ Wessels – DCom (h.c.)		NE Wiehahn – LLD (h.c.)		OG Winfrey – DEd (h.c.)
1970	GS Nienaber – DLitt (h.c.)	1997	AP Brink – DLitt (h.c.)		RWM Frater – PhD (h.c.)
	HO Mönnig – DSc (h.c.)		B Hurwitz – DPhil (h.ć.)		A Sawyer – DEd (h.c.)
1971	N Diederichs – DCom (h.c.)	1998	FC Müller – DMed (h.c.)	2012	RJ Goldstone – LLD (h.c.)
	RS Verster – DPhil (h.c.)	1999	FM Claerhout – DPhil (h.c.)		ER v Heerden – DLitt (h.c.)
1972	LW Hiemstra – DPhìl (h.c.)		JJF Hefer – LLD (h.c.)		M Nussbaum – DLitt (h.c.)
	PJ Meyer – DPhil (h.c.)		S Nigam – DSc (h.c.)		OW Prozesky – MD (h.c.)
1975	PJ Nienaber – DLitt (h.c.)		WL Nkuhlu – DCom (h.c.)		FDJ Brand – LLD (h.c.)
	De la H de Villiers – DScAgric (h.c.)		MA Ramphele – DPhil (h.c.)	2013	ZKG Mda – DLitt (h.c.)
	GJ Stander – DSc (h.c.)		HJO van Heerden – LLD (h.c.)	2014	ML Blum – PhD (h c)
1976	AJA Roux – DSc (h.c.)		FJ van der Merwe – PhD (h.c.)		L Mulvey – DLitt (h c)
1978	SP Botha – DSc (h.c.)	2000	MH Daling – DCom (h.c.)	2015	L Brahimi – DPhil (h.c.)
	EM van Zinderen Bakker – DSc (h.c.)		TN Liversedge – PhD (h.c.)		JM Samuel – DEd (h.c.)
	HB Thom – DEd (h.c.)		I Mahomed – LLD (h.c.)		MA Oduyoye – DTh (h.c.)
1979	FCL Bosman – DPhil (h.c.)	2001	BP Gilbertson – DCom (h.c.)	0040	JD Sacks – DEcon (h.c.)
	G Cronjé – DSocSc (h.c.)		NR Mandela – LLD (h.c.)	2016	RJ Khoza – DEcon (h.c.)
1000	CJF Human – DCom (h.c.)	2000	EC Taglauer – DSc (h.c.)		TA Manuel – DEcon (h.c.)
1980	G Boonzaier – DPhil (h.c.)	2002	BH Meyer – PhD (h.c.)		M du Preez – PhD (h.c.)
1981	PW Botha – DPhil (h.c.)		BAK Rider – LLD (h.c.)		J Samoff – DPhil (h.c.)
	B Human – DCom (h.c.)		CF Slabber – PhD (h.c.)	2017	F Haffajee – PhD (h.c.) PH Holloway - DSc (h.c.)
1982	SG Shuttleworth – DSc (h.c.) BLS Franklin – DPhil (h.c.)	2003	JM Stetar – DEd (h.c.) EWA de Corte – DEd (h.c.)	2017	M Botha – LLD (h.c.)
1302	GvN Viljoen – DEd (h.c.)	2003	HA Serebro – DPhil (h.c.)	2019	BL Fanaroff – DSc (h.c)
1983	L Luyt – DCom (h.c.)		AG Sykes – DSc (h.c.)	2019	J Mofokeng wa Makhetha – DLitt (h.c.)
1303	SF Zaaiman – DPhil (h.c.)	2004	S Badat – DPhil (h.c.)		
1984	HS Steyn – DSc (h.c.)	2004	R Bringle – DPhil (h.c.)	2021	MB Molemela – LLD (h.c.) ZM Yacoob – LLD (h.c.)
1304	FR Tomlinson – DScAgric (h.c.)		J de Wet – DMus (h.c.)	2021	SM Pityana – DPhil (h.c.)
	JH vd Berg – DMed (h.c.)		CF Fauconnier – DSc (h.c.)		RJ van Niekerk – DLitt (h.c.)
1985	L Alberts – DSc (h.c.)		GJ Gerwel – DPhil (h.c.)	2022	WK Byanyima – PhD (h.c.)
1000	GG Cillié – DPhil (h.c.)		WD Jonker – DTh (h.c.)		DM Davis – LLD (h.c.)
	SPD le Roux – DLitt (h.c.)		A Krog – DLitt (h.c.)		DE Moseneke – LLD (h.c.)
	A Polson – DPhilMed (h.c.)		K Mokhele – DPhil (h.c.)		AL Sachs – LLD (h.c.)
	J du P Scholtz – DPhil (h.c.)		CJC Nel (Postuum) – PhD (h.c.)		MJ Wingfield – DSc (h.c.)
1986	S Grové – DMus (h.c.)		L Quayle – DMus (h.c.)		3 ()
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Shields of Honour, Council and Chancellor's Medals

1994	Prof FO Müller (Shield of Honour)	2003	Prof HC Janse van Rensburg (Council Medal)
1995	RE Schoombie (Shield of Honour) Prof FO Müller (Chancellor's Medal)	2008	Prof SA Petersen (Shield of Honour) Ludo Helsen (Shield of Honour)
	RE Schoombie (Chancellor's Medal)	2009	Prof JU Grobbelaar (Council Medal)
1996	Prof S Mittman (Shield of Honour)	2010	Mrs AM Dippenaar (Chancellor's Medal)
1997	Prof M Jansens (Shield of Honour)	2014	Dr H Verster (Chancellor's Medal)
1998	Prof CJC Nel (Chancellor's Medal)	2014	Mr JL Pretorius (Chancellor's Medal)
	Prof C Swanepoel (Chancellor's Medal)	2016	Mr AD Osler (Chancellor's Medal)
1999	WJ (Hansie) Cronje (Shield of Honour)		Ms M van der Merwe (Chancellor's Medal)
	Prof David Justice (Shield of Honour)	2017	Ms JS Isaacs (Chancellor's Medal)
2000	Prof P Rosseel (Shield of Honour)	2019	Mr JF de Villiers (Chancellor's Medal)
	Prof MJ Viljoen (Chancellor's Medal)		Ms EM Oosthuizen (Council Medal)
2001	Prof PC Potgieter (Chancellor's Medal)	2022	Dr N Pearce (Chancellor's Medal)
2002	T Moss (Shield of Honour)		Mr N Janse van Rensburg (Council Medal)
	Prof CD Roode (Chancellor's Medal)		

MESSAGE FROM THE RECTOR AND VICE-CHANCELLOR | PROF FW PETERSEN

elcome to the graduation ceremony of the University of the Free State (UFS).

Today is a special day indeed. Few events and occasions hold as much significance as your graduation. This day is just as important for those who have supported you along the way. Many of you had to overcome a lot during your journey to get here today. Many of you are the first in your families to reach this milestone. So, even in the midst of the disruptive past two years, you have earned this moment and you should be extremely proud. Always acknowledge and recognise the significance of your achievements as you transition from being a University of the Free State (UFS) student to a UFS graduate.

Graduands, you have had the honour of studying at an institution that commands a track record that is on par with well-regarded national peers, as reflected in the 2023 Times Higher Education World University and Impact Rankings. Sufficient evidence indicates that higher education has the potential to function as an agent of change and a means of serving the greater good. Although the mission of our university has always been to equip you with knowledge and skills needed to make a difference in your field of study, we are also mindful that values are as important for you to make a difference in your communities

The UFS places great emphasis on ensuring that students and staff have an outstanding university experience. In our pursuit of excellence, we are proud that our environment is conducive for intellect and knowledge to flourish. As such, our values of excellence, innovation and impact, accountability, care, social justice, and sustainability are embedded in all activities across the institution.

Graduands, irrespective of what you undertake in the future, remember to pursue your passion, and continuously have the desire to make a difference in the lives of others. Surround yourself with real people in real communities, while inculcating kindness, empathy, passion, and awareness of the real issues. If you want to tackle the unfinished goals of this country and create a better world – build bridges, remain morally astute, and grow your coalitions. Life can be challenging if you are on your own – however, great results can be achieved if you work as a collective.

It is up to you to align yourself with those who have a common cause, heal the divisions that keep us separated, and carry along those who have been left out and are struggling.

Congratulations to all our graduands. May you have continued success in all your endeavours!

elkom by die Universiteit van die Vrystaat se gradeplegtigheid.

Vandag is voorwaar 'n spesiale dag. Min gebeurtenisse en geleenthede het soveel betekenis as 'n mens se gradeplegtigheid. Hierdie dag is net so belangrik vir diegene wat julle langs die pad ondersteun het. Baie van julle moes talle uitdagings te bowe kom tydens julle reis om vandag hier te wees. Baie van julle is die eerste in julle gesinne om hierdie mylpaal te bereik. So, selfs te midde van die ontwrigting van die afgelope twee jaar, het julle hierdie oomblik verdien en kan julle baie trots wees.

Erken en herken altyd die belangrikheid van jou prestasie waar jy van 'n student van die Universiteit van die Vrystaat (UV) beweeg na 'n UV-gegradueerde.

Gegradueerdes, julle het die eer gehad om aan 'n instelling te studeer wat 'n prestasierekord het wat gelykstaande is aan welbekende nasionale eweknieë, soos weerspieël in die 2023 Times Higher Education World University en Impact-ranglys. Talle bewyse dui daarop dat hoër onderwys die potensiaal het om te dien. Alhoewel die missie van ons universiteit nog altyd was om julle toe te rus met kennis en vaardighede wat nodig is om 'n verskil in julle studieveld te maak, is ons ook bedag daarop dat waardes vir julle net so belangrik is om 'n verskil in julle gemeenskappe te maak.

Die UV plaas groot klem daarop om te verseker dat studente en personeel 'n voortreflike universiteitservaring het. In ons strewe na uitnemendheid is ons trots dat ons omgewing bevorderlik is vir intellek en kennis om te floreer. As sodanig is ons waardes van uitnemendheid, innovasie en impak, aanspreeklikheid, omgee, sosiale geregtigheid en volhoubaarheid ingebed in alle aktiwiteite oor die instelling heen.

Gegradueerdes, ongeag wat julle in die toekoms aanpak, onthou om julle passie na te streef en behou die begeerte om vootdurend 'n verskil in ander se lewens te maak. Omring julself met regte mense in regte gemeenskappe, terwyl julle welwillendheid, empatie, passie en bewustheid van werklike kwessies inskerp.



As julle die onvoltooide doelwitte van hierdie land wil aanpak en 'n beter wêreld wil skep – bou brûe, bly moreel skerpsinnig, en laat julle koalisies groei. Die lewe kan uitdagend wees as 'n mens op jou eie is – goeie resultate kan egter behaal word as julle as 'n groep saamwerk.

Dit is julle verantwoordelikheid om julself in ooreenstemming te bring met diegene wat 'n gemeenskaplike saak het, die verdeeldheid te genees wat ons verdeeld hou, en om diegene wat uitgelaat is en sukkel, met julle saam te neem.

Baie geluk aan al ons graduandi. Mag julle voortgesette sukses in al julle ondernemings behaal!

e a le amohela moketeng wa kabo ya dikgau wa University of the Free State (UFS).

Letsatsi lena ke le kgethehileng ka nnete. Ke diketsahalo tse mmalwa haholo tse bohlokwa jwalo ka ho abelwa kgau ya yunivesithi. Letsatsi lena le bohlokwa hape le ho batho ba ileng ba le tshehetsa leetong la lona. Ba bangata ba lona le ile la hlola maima a mangata leetong la lona ho fihla mona kajeno. Ba bangata ba lona ke lona ba pele malapeng a lona ho fihlella sehlohlolo sena sa katleho. Ka hoo, esita le hara dilemo tse pedi tse fetileng tse bileng le tshitiso e kgolo, le fihlile motsotsong ona mme re motlotlo ka lona haholo.

Ka dinako tsohle amohelang le ho lemoha bohlokwa ba dintlha tseo le di fihleletseng ha jwale le tloha boemong ba ho ba moithuti mona University of the Free State (UFS) ho fetela boemong ba ho ba graduate ya UFS.

Baithuti ba seng ba tla abelwa dikgau tsa yunivesithi, le bile le tlotla ya ho ithuta setheong sa thuto se nang le nalane e ntle e kgemang le bomphato ba yona ba hlomphehang naheng, jwalo ka ha ho boletswe ho 2023 Times Higher Education World University and Impact Rankings. Ho na le bopaki bo hlwellanang hodimo bo bontshang hore thuto e phahameng e na le monyetla wa ho sebetsa jwalo ka kofuto e hlahisang phetoho le mokgwa o hlahisang melemo e meholo ka ho fetisisa. Le hoja mishini ya yunivesithi ya rona ka dinako tsohle e bile ho le hlomella ka tsebo le bokgoni bo hlokahalang ho etsa phetoho dithutong, re boela re lemoha hore dintho tsa boleng di bohlokwa ho etsa phapang metseng ya lona.

UFS e kgothaletsa haholo ho etsa bonnete ba hore baithuti le moifo ba na le boiphihlelo bo hlaheletseng ka mahetla ba yunivesithi. Maikemisetsong a rona a ho hahamalla diphihlello tse ipabolang, re motlotlo hore tikoloho ya rona ke e loketseng bakeng sa fana ka bohlale le tsebo ho atleha. Ka lebaka lena, makgabane a rona bakeng sa diphihlello tse ipabolang, mehopolo e metjha le tshusumetso e ntle, boikarabelo, thokomelo, le toka e se nang leeme setjhabeng, le ho tswella ke dintho tse bopeletsweng mesebetsing yohle ya setheo sena sa thuto.

Baithuti ba seng ba tla abelwa dikgau tsa yunivesithi, ho sa natswe hore na le tla etsa eng nakong e tlang, hopolang ho phehella ditabatabelo tsa lona ka tjheseho, mme le tswele pele ho ba le takatso ya ho etsa phapang bophelong ba batho ba bang. Etsang hore le dikadiketswe ke batho ba sebele metseng ya sebele, ha le ntse le ruta le ho jala mosa, kutlwelobohloko, tjantjello, le temoho ya ditaba tsa sebele. Haeba le batla ho sebetsana le dipakane tse sa qetwang le ho theha lefatshe le betere – hahang marogo, dulang le le bohlale, le ho theha maqhama a lona a ditshebedisano. Bophelo e ka ba bo phephetsang haeba o sebetsa o le mong – le ha ho le jwalo, diphetho tse babatsehang di ka fihlellwa ka tshebedisano le ho ba ngatana-nngwe.

Dintho di mahetleng a lona ho iphaphatha le batho ba nang le dipheo tse tshwanang, ho kwala dikgeo tse re arohanyang, le ho jara batho ba ileng ba siuwa mora le ba nang le mathata a ba sitisang.

Re thoholetsa baithuti kaofela ba rona ba seng ba tla abelwa dikgau tsa bona tsa yunivesithi. E se ka le ka ba le katleho e tswelang pele mekutung ya rona kaofela!





UFS

VISION:

The UFS aspires to be a researchled, student-centred, and regionally engaged university that contributes to development and social justice through the production of globally competitive graduates and knowledge.

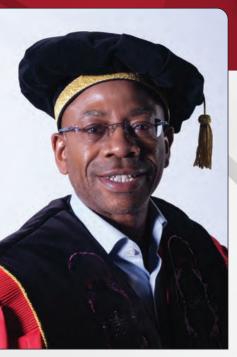
MISSION:

The university's ultimate goal is to impart and generate new knowledge that impactfully supports societal development.

VALUES:

The UFS subscribes to a set of values, explicated below, which shape and inform our culture and provide a framework for our actions and decisions. Our values are realised through the conduct of the wider university community: excellence, innovation and impact, accountability, care, social justice, and sustainability.

OFFICE-BEARERS



CHANCELLOR
Prof BF Mohale
Professor of Practice (JBS)



RECTOR AND VICE-CHANCELLOR Prof FW Petersen PhD (SU)



Mr D Noko
HND Mechanical
Engineering (UJ)



VICE-RECTOR: OPERATIONS Prof P Naidoo PhD (VISTA)



VICE-RECTOR: INSTITUTIONAL CHANGE, STRATEGIC PARTNERSHIP, AND SOCIETAL IMPACT Dr M Qhobela

PhD (KSU)



VICE-RECTOR: ACADEMIC Dr EL van Staden DPhil (UJ)



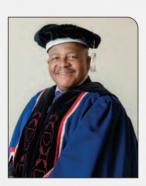
VICE-RECTOR:
RESEARCH AND
INTERNATIONALISATION
Prof RC Witthuhn
PhD (UFS)



EXECUTIVE DIRECTOR: STUDENT AFFAIRS Mr T Hlasho MPhil (NMU)



REGISTRAR: Mr NN Ntsababa MPA (NMU)



CAMPUS PRINCIPAL: QWAQWA CAMPUS Dr M Mandew PhD (UN)



PRESIDENT OF CONVOCATION Dr PD du Toit PhD (UFS)



PRESIDENT:
INSTITUTIONAL STUDENT
REPRESENTATIVE COUNCIL
Ledile Tshepang Bambo

DEANS





DEAN: ECONOMIC AND MANAGEMENT SCIENCES

Prof P Burger PhD in Economics (UFS)



(W)

DEAN: THE HUMANITIES

Prof H Hudson PhD (UFS)





DEAN: EDUCATION

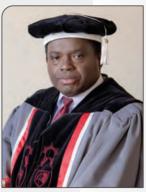
Prof LC Jita PhD (MSU)





DEAN: HEALTH SCIENCES

Prof GJ van Zyl PhD (UFS)





DEAN:

Prof JC Mubangizi LLD (UDW)





DEAN: NATURAL AND AGRICULTURAL SCIENCES

Prof PD Vermeulen PhD (UFS)





DEAN: THEOLOGY AND RELIGION

Prof RS Letšosa PhD (PU/CHE)

GUEST SPEAKER

MR RYLAND FISHER



yland Fisher has more than 40 years of experience in the media industry as an editor, journalist, columnist, author, and media executive. Early in his career, he was one of the pioneers of alternative community journalism in South Africa.

His books include The South Africa We Want To Live In (published 2019), Making the Media Work for You (2002), Race (2007), and The Atlantic Philanthropies (2018). He has contributed chapters to several other books.

Fisher was convener of the judging panel for the Vodacom Journalist of the Year Awards for five years and has served on the judging panel for the Standard Bank Sikuvile Awards since 2017.

He was appointed to the Council of the University of the Free State in 2016, and his second term expires in March 2023. He is deputy chairperson of the Council's Human Resources Committee and deputy chairperson of the Remuneration Committee.

He was also previously Head of Journalism at Peninsula Technikon (now Cape Peninsula University of Technology). He has lectured on journalism or race at, among others, the University of Cape Town, the Institute for the Advancement of Journalism in Johannesburg, Emory University in Atlanta, Morehouse College in Atlanta, Ohio University in Athens, Ohio, Rhodes University, and at the Initiatives of Change Foundation in Caux, Switzerland.

In 2003, Fisher was a Rockefeller Research Fellow at the Centre for the Study of Public Scholarship at Emory University in Atlanta, Georgia. He participated in an executive leadership course at the Harvard Business School in 1996 and an advanced journalism course at the University of Missouri in 1990. He was awarded a fellowship at the Stellenbosch Institute for Advanced Study (STIAS) in 2010 and 2013. Fisher was appointed as a Fellow of the Frederik Van Zyl Slabbert Institute for Student Leadership Development at Stellenbosch University in August 2013.



DEAN | PROF H HUDSON

CERTIFICATES

HIGHER CERTIFICATE IN HUMANITIES COMMUNICATION STUDIES AND ANTHROPOLOGY

BOLE, Motshodiemang Julia MABASO, Siyabonga MOHOKARE, Karabo Vanessa ZIQUBU, Sinethemba

HIGHER CERTIFICATE IN HUMANITIES COMMUNICATION STUDIES AND PSYCHOLOGY

BUYAMBO, Sibongiseni CHABANE, Boitumelo Sesi DAVID, Sinovuyo DHLAMINI, Thandi MASIPA, Nthabiseng

MOLELEKOA, Mamatshediso Rebecca

MSIBI, Disone Mosuwe

NGQIKANA, Thembeka

NHLAPO, Nombulelo Gloria

NTSOEU, Tshegofatso Precious

NZIMANDE, Vuyiswa

RAMPHORE, Tankiso Edmond

SEKHOTO, Pontsho Portia

SELEPE, Neo Theron

SINDANA, Cyntia Lebogang

SKHOSANA, Lesego Notemba

HIGHER CERTIFICATE IN HUMANITIES COMMUNICATION STUDIES AND SOCIOLOGY

BUTHELEZI, Sibongile Hilda

DHLAMINI, Nonkanyiso Nonkululeko

DLAMINI, Thenjiwe Vinoliya

FALLA, Melta Moleboheng

KGABELE, Katleho Constance

MAKUBALO, Sibongile

MAZIBUKO, Manelisi

MBATHA, Nelisiwe Sibongile

MHLONGO, Lungile

MOLEFE, Sophy Tiisetso

STOFILE, Kananelo Mojalefa Siphosihle

HIGHER CERTIFICATE IN HUMANITIES POLITICAL SCIENCE AND PSYCHOLOGY

MOLEFE, Thabo Lawrence

SEIPETLHO, Refiloe Katleho

HIGHER CERTIFICATE IN HUMANITIES POLITICAL SCIENCE AND SOCIOLOGY

GAMA, Nhlakanipho Xolani KAWANA, Sibahle Natasha

HIGHER CERTIFICATE IN HUMANITIES PSYCHOLOGY AND SOCIOLOGY

NTETA, Thabo Edward

DIPLOMAS

DIPLOMA IN MUSIC

BECK, Bradley Benedict DIBA, Ipeleng Karabelo*

BACHELOR'S DEGREES

BACHELOR OF ARTS

MADI, Thabang Praisegod Wandile

MAKHUBO, Sindiswa

MATHEBULA, Given

MMOLEDI. Thandeka

MOLEFE, Xiribyana Otsile

SHABALALA, Londiwe

SHABALALA, Lungelo Fortunate

TSOTETSI. Lebo

VILAKAZI, Nduduzo Request

ZWANE, Nonjabulo Thembani

BACHELOR OF ARTS IN COMMUNICATION STUDIES

KHOELE, Relebohile Precious LENONO. Tankiso Michael

MKHASAKHASA, Ayola Nombuyiselo

MZINYELWA, Lihle

NGWENYA, Tiisetso Mmabogosi Yaone

NKOSI, Sibusisiwe Neliswa Mabel



PHEME. Mankuroane Lehumo RADEBE, Bongani RAMODIKE, Karabo Masilo

SHABANGU, Vile Angel

STEYNBERG, Shandré Chantell

BACHELOR OF ARTS IN DRAMA AND THEATRE ARTS

ENSLIN, Jaco

BACHELOR OF ARTS IN GOVERNANCE AND POLITICAL TRANSFORMATION

BUELLA, Megan Nomboniso DIENG, Promise Icha DOLO, Maphutha Stephen LECHOLO, Thapelo LEOTLELA. Mpho Portia MBETHE, Nomkhosi Alucia MNGCANGCA, Kanyisile MOTSAPI, Mohato Katleho SIYALI. Lulama

BACHELOR OF ARTS IN INTEGRATED **ORGANISATIONAL** COMMUNICATION

TSHANGANA, Milani

MFEKA, Makabongwe Nhlanhla PROPHY. Rebaone Precious THEJANE, Azaniah Grace

BACHELOR OF ARTS IN JOURNALISM

KGWEDI, Michell Tebogo

MOFOKENG, Moipone Mitchell

MOHALE, Mampho Joyce

RANKHALA. Rethabile Ntshediseng

BACHELOR OF ARTS IN LANGUAGE PRACTICE

MOKOENA, Naledi Brijett

BACHELOR OF ARTS MAJORING IN COMMUNICATION SCIENCE AND PSYCHOLOGY

BUTLER. Lihet

DIKO, Vuyisani

FILLIS, Allan-Junior

HLONGWANE, Siyabonga Junior

LEMEKOANA, Mpho Ngwanamogale

LETLHOGILE. Pelonomi Precious

THOLE, Lopang Ariel

BACHELOR OF ARTS MAJORING IN HISTORY AND ENGLISH

BARA, Lulutho

MAPHALALA, Sibonisile

MAVUSO, Thembelani Makepeace

BACHELOR OF ARTS MAJORING IN PSYCHOLOGY AND ENGLISH

BUTHELEZI, Nothando Promise Simphiwe

MAZWI, Cwayita

MPHELA, Kefilwe Hilda

SKRENYA, Angelica Gcina Ziphelele

BACHELOR OF ARTS MAJORING IN PSYCHOLOGY AND SESOTHO

SENYENYANE, Karabo Bridgette

BACHELOR OF SOCIAL SCIENCE

DLADLA, Mantwa Fegi

FINGER, Palesa

KHOARAI, Khauhelo Peggy

MANZI, Tshediso Daniel

MKHIZE, Neli

MOLOI, Tlotliso Tseko

MTHIMKULU, Bonisiwe

NTHATISI, Letshego

SIBEKO, Thabo Frans

BACHELOR OF SOCIAL SCIENCE MAJORING IN BUSINESS MANAGEMENT AND POLITICAL SCIENCE

BANJATWA, Litha Lynetie

BOLSIEK, Vuyelwa Beloved

MOKOBOCHO, Thato

BACHELOR OF SOCIAL SCIENCE MAJORING IN BUSINESS MANAGEMENT AND **PSYCHOLOGY**

BOTHA, Alida Johanna

MARTINS, Ronnie Junior

MELATO, Mmusi Stephen



MJENXANE, Amanda Carol

MOLEHE, Sebongile

NORVAL, Hunter Joan

PHUTHI, Refiloe Boledi

SIDLAYI, Mbalentle

SMITH, Charise

WIJBURG, Christian Carel

BACHELOR OF SOCIAL SCIENCE MAJORING IN BUSINESS MANAGEMENT AND SOCIOLOGY

KGUTO, Daniel Tankiso

BACHELOR OF SOCIAL SCIENCE MAJORING IN CRIMINOLOGY AND PSYCHOLOGY

JELE, Sibusiso Gift Immaculate

KHAZAMULA, Orleans

KHOMOHAKA, Thabo Andrew

KULA, Tshiamo

LETSHABO, Lesley

LONAKE, Keabetswe Prudence

MAHURA, Thembu-Mdali Alexis

MAKHANYA, Rejoice

MAPONGA, Natasha

MDINGI, Hlonela

MEREKO, Moleboheng Naomi

MKHIZE, Lungelo Melde

MOFOKENG, Rehauhetswe

Preciosity

NASE. Anelisiwe

NDLOVU, Kgomotso Emily

SEBOKA, Given Tsepo

SEEKU, Binny Rosie

SEPTEMBER, Shivanni Chylonique

SHABANGU, Zamabhele Naledi

SOZOYI, Vuyokazi

TOM, Uyanda Kuselwa

BACHELOR OF SOCIAL SCIENCE MAJORING IN INDUSTRIAL PSYCHOLOGY AND POLITICAL SCIENCE

MOLALE, Sephiri

BACHELOR OF SOCIAL SCIENCE MAJORING IN INDUSTRIAL PSYCHOLOGY AND PSYCHOLOGY

LEKGARI. Olivia

LUDIDI, Lilitha

MAGUDUMANA, Azuzile

NXUMALO, Wendy

PETERSON, Danielle Caylon

WILLEMSE. Linn Lee

BACHELOR OF SOCIAL SCIENCE MAJORING IN INDUSTRIAL PSYCHOLOGY AND SOCIOLOGY

DIKGALE, Mpendulo Itumeleng
DIKGALE, Tekano Brilliance

BACHELOR OF SOCIAL SCIENCE MAJORING IN POLITICAL SCIENCE AND CRIMINOLOGY

MDLETSHE, Bheki Celumusa

MOJAKI, Ntletse Theresia SIWELO, Avanda Venessa

BACHELOR OF SOCIAL SCIENCE MAJORING IN POLITICAL SCIENCE AND SOCIOLOGY

MAJOZI, Siyanda Msawakhe Thandukulunga

BACHELOR OF SOCIAL SCIENCE MAJORING IN PSYCHOLOGY AND SOCIOLOGY

ADONIS, Aviwe

KOTZÉ, Julene Meagon

LABANS, Damian Junaid

MAHLAKU, Lihle Princes

MAKOFANE, Fortune

MELESI, Phemelo

MODUANE, Lemogang Refiloe

NAARE, Naleli

NDARA, Buyelwa Roseline

SILEVU, Luandile Yolanda

WITBOOI. Andiswa

BACHELOR OF SOCIAL SCIENCE MAJORING IN SOCIOLOGY AND CRIMINOLOGY

MASHABATHAKGA, Avril Tiisetso MOTLOUNG, Tumelo Daniel



BACHELOR OF SOCIAL SCIENCES IN HUMAN AND SOCIETAL DYNAMICS

NDUNA, Kearabetswe Matshediso

POSTGRADUATE DIPLOMAS

POSTGRADUATE DIPLOMA IN GOVERNANCE AND POLITICAL TRANSFORMATION

MTHOMBENI, Precious

BACHELOR HONOURS DEGREES

BACHELOR OF ARTS HONOURS WITH SPECIALISATION IN ANTHROPOLOGY

METTLER, Roze Shaquillean Danika

BACHELOR OF ARTS HONOURS WITH SPECIALISATION IN PHILOSOPHY

PRINS, Desireé Diane*

BACHELOR OF SOCIAL SCIENCE HONOURS WITH SPECIALISATION IN ANTHROPOLOGY

MOKETE, Manakeli Gontse

MASTER'S DEGREES

MASTER OF ARTS IN GOVERNANCE AND POLITICAL TRANSFORMATION

MAGWANDANA, Fihlekile Wilson

MASTER OF ARTS WITH SPECIALISATION IN ANTHROPOLOGY

HAUPT, Naomi Elizabeth*

Dissertation Title: THE MAKINGS OF FIELD RANGERS IN LIMPOPO PROVINCE - AN EXPLORATORY ETHNO-PERCEPTIVE STUDY

Supervisor: Prof RJ Gordon

Co-Supervisor: Dr P Esterhuyse, Prof SA Marks

MASTER OF ARTS WITH SPECIALISATION IN HISTORY

NDLOVU, Ayanda Sphelele

Dissertation Title:
THE PHILOSOPHICAL
CONTRIBUTIONS OF ROBERT
SOBUKWE AND STEVE BIKO TO
THE LIBERATION STRUGGLE IN
SOUTH AFRICA

Supervisor: Prof CM Twala

Co-Supervisor: Prof ND Roos

MASTER OF ARTS WITH SPECIALISATION IN POLITICAL SCIENCE

NGCAYISA, Lumanyano

Dissertation Title:

DEVELOPMENTAL AUTHORITARIANISM IN AFRICA: THE CASES OF ETHIOPIA, RWANDA, AND UGANDA

Supervisor: Dr PA Schoeman

MASTER OF SOCIAL SCIENCE IN CLINICAL PSYCHOLOGY

MASINGA, Tutula Zinzi

MOAKAMELA. Precious Lucille

SCHOLTZ, Elsabe

SEGAL, Megan*

MASTER OF SOCIAL SCIENCE WITH SPECIALISATION IN CRIMINOLOGY

BARNARD, Liandi

Dissertation Title: A SOCIO-LEGAL EXPLORATION OF THE APPLICATION OF THE CORRECTIONAL SUPERVISION AND PAROLE PROCESS IN SOUTH AFRICA

Supervisor: Dr M Cronje

MASTER OF SOCIAL SCIENCE WITH SPECIALISATION IN SOCIOLOGY

LANGENHOVEN, Ruben

Dissertation Title: THE
UBIQUITY OF POWER IN THE
EMERGENCE OF COMMUNITY
HEALTH WORKERS:
NARRATIVES FROM LAY
HEALTH WORKERS IN THE
FREE STATE, SOUTH AFRICA

Supervisor: Prof K De Wet



MASTER OF SOCIAL SCIENCE IN COUNSELLING PSYCHOLOGY

DUBA, Siyanqoba Charity Makhosazana

MAOELA, Lerato Angela

VAN REENEN, Karla

DOCTORAL DEGREES

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN AFRICA STUDIES

MACHINGA. Priscillah

Priscillah Machinga was born on 16 March 1977, in Zimbabwe. She completed her Ordinary Level at Holy Rosary Secondary School in 1994 and Advanced Level at St Alberts' High School in 1996. She obtained a Bachelor of Arts Honours Degree in Economic History in 2001 and Master of Arts Degree in African Economic History in 2004, at the University of Zimbabwe, thereafter, lecturing there, in the Economic History Department until 2010. In 2018, she enrolled for a PhD in 2 . Africa Studies, with the International Studies Group, at the University of the Free State, where she currently holds a Postdoctoral Fellowship post.

With her thesis, titled: 'A HISTORY OF MATERNAL AND INFANT HEALTH PRACTICES IN NORTHERN ZIMBABWE, C.1880S -1990S', the candidate makes two distinct contributions in Zimbabwe's medical historiography. Firstly, it breaks new ground as an in-depth historical study of African maternal and infant health practices, and secondly, it brings indigenous knowledge and medicine to the core of academic inquiry in Zimbabwean historical studies. It argues that, although African maternal and infant health practices underwent a complex process of transformation after colonization, the relevance of indigenous knowledge also persisted. Utilizing oral, archival and secondary sources, and a case study of present day Mashonaland Region in northern Zimbabwe (which has historically largely accommodated the indigenous Budya, Zezuru and Korekore people), and taking a social history and qualitative approach, her study spans three historical epochs (precolonial, colonial and postcolonial) exploring practices surrounding, for instance, childbirth, antenatal, neonatal and postnatal care, contraception and infant health.

Promoter: Dr C Masakure

Co-Promoters: Dr AR Amaral, Dr K Horn, Dr K Manamere

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN AFRIKAANS AND DUTCH

ELLIS, Carla

Carla Ellis was born in Port Elizabeth on 9 December 1986. She received her secondary education in George, where she matriculated at Outeniqua High School in 2005. She obtained the degree BA (Language and Culture) in 2008 at Stellenbosch University, the degree Master of Arts in General Linguistics in 2011 at Stellenbosch University and the PhD in Afrikaans and Dutch in 2022 at the University of the Free State. She started her career as lecturer in Bloemfontein in 2014 when she was appointed in the Department Afrikaans and Dutch, German and French at the University of the Free State.



With her thesis, titled: 'N SOSIOLINGUISTIESE ONDERSOEK NA DIE GEBRUIK VAN OOM EN TANNIE AS AANSPREEKVORME ONDER AFRIKAANSSPREKENDES IN BLOEMFONTEIN EN GEORGE, the candidate contributes to the research pertaining to the typically Afrikaans forms of address "oom" en "tannie" and variants thereof. This is the most comprehensive study on this topic in Afrikaans yet. Data were collected by means of questionnaires, interviews, focus groups, systematic observation as well as social media - 2 600 speakers of Afrikaans took part. An important contribution is the identification of sociolinguistic variables as determining factors in the use of "oom" and "tannie". From the data it is evident that age, respect, familiarity, social class and status serve as determining factors, followed by occupation, contextual situation and social convention. The age difference between speaker and addressee that serves as the accepted norm for the use of "oom" and "tannie" remains to be ten years and older.

Promoter: Prof HJ Bosman Co-Promoter: Dr AS de Wet

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN CLASSICAL LANGUAGES

MACHIN. Annéli

Annéli Machin was born in Durban on 24 September 1973 and matriculated in Kimberley in 1991. She obtained the following qualifications at the University of the Free State: B.A. (Human Movement Science) (1994), *Higher Education Diploma (1996), *Diploma in Specialised Education (1997), **Baccalaureus Theologiae (2006), **B.A. Honours (Language Studies: Greek) (2007) and **Magister Artium Higher Education Studies & Greek (2011) [*with distinction; **received Dean's medal]. She has been a Greek lecturer at the University of the Free State since 2009 and is currently part of the Department of Old and New Testament Studies in the Faculty of Theology and Religion.

With her thesis, titled: A TEXT-CENTRED RHETORICAL ANALYSIS OF JOHN CHRYSOSTOM'S DE INANI GLORIA ET DE EDUCANDIS LIBERIS, the candidate makes a novel contribution to the research on one of the most influential works by this Church Father. This important work by Chrysostom has been studied from various different angles, but thus far no proper rhetorical analysis of it has appeared. The candidate fills this void by means of a systematic and thorough text-centred rhetorical analysis. She offers a detailed rhetorical analysis of pericopes of the writing and uses the results as a basis for identifying and describing the principles and techniques employed by Chrysostom to achieve his rhetorical aims. She also offers a novel analysis of the overall rhetorical strategy that he followed, thereby drawing attention to important aspects overlooked by scholars thus far. All three external assessors recommended publication of the thesis or parts of it.

Promoter: Prof DF Tolmie

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN GOVERNANCE AND POLITICAL TRANSFORMATION

JANKIELSOHN, Roy

Born in Steynsrus, Dr Roy Jankielsohn completed a BA, two Honours degrees, and a Master's degree at the University of the Free State before obtaining a PhD in Political Studies at North-West University. Dr Jankielsohn was a lecturer at the UFS in the Department of Political Science between 1995 and 2000 and served as a member of Parliament between 2000 and 2006. Since 2006, he has served as a member of the Free State Legislature and is currently leader of the Official Opposition in the Free State. He continues to carry out academic work as a researcher, reviewer and postgraduate examiner.

With his thesis, titled: THE GOVERNANCE OF CUSTODIANSHIP OVER ANIMALS IN SOUTH AFRICA - AN ANALYSIS AND ALTERNATIVE FRAMEWORK, the candidate has established a new and unique field of study referred to as 'animal custodianship', developing a framework of views within which the various groups involved in animal custodianship, whether rightist, welfarist or dominionist, may be evaluated in the context of the developing discipline of governance. This study identifies the metatheoretical and theoretical aspects of the theme, investigates societal and theoretical approaches to the field of study, develops an academic model for the purpose of evaluation, and then employs this model to discuss the most prominent groups involved in animal custodianship within South Africa. The ethical and rules-based aspects of the governance



of animal custodianship are discussed through the identification of the legislation that governs human and animal relationships in South Africa within the frameworks of human, animal and environmental well-being.

Promoter: Dr T Coetzee

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN LANGUAGE PRACTICE

JANSEN VAN VUUREN, Xany

Xany Jansen van Vuuren was born in Pretoria in 1982, and received her secondary education in Ficksburg, matriculating from Ficksburg High School in 2000. She obtained her BA degree (with specialisation in Afrikaans literature and German) from Rhodes University in 2003, after which she completed a Post Graduate Certificate in Education in 2004, also at Rhodes University. She moved to Bloemfontein to obtain her MA in 2. Language Practice in 2008, and her PhD in 2022. She was appointed as full-time lecturer at the University of the Free State in 2010, and currently lectures in the fields of interpreting and translation.

With her thesis, titled: NON-PROFESSIONAL INTERPRETING IN ANIMAL WELFARE: TOWARDS AN ECOSEMIOTIC UNDERSTANDING OF INTERACTION, the candidate makes a highly original interdisciplinary contribution to the fields of translation studies broadly, interpreting studies more narrowly as well as semiotics and ecosemiotics. With data collected from an animal-welfare outreach project, this is the first study ever to include non-human animals in the interpreting process, which led assessors to praise the study for its theoretical and methodological originality as well as for its findings, among which are the demonstration that and how non-human animals are crucial participants in the interactions in animal-welfare contexts.

Promoter: Prof J Marais

Co-Promoters: Dr C Delgado Luchner, Prof J Queiroz

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN PHILOSOPHY

NAUDÉ, Charl-Pierre Therond

Charl-Pierre Naudé was born 1958 in Kokstad and matriculated in East London (1976). He has studied at the University of Stellenbosch (BA 1987 and BA Hons 1988) and the University of the Free State (MA 2017). In his career Naudé is also an accomplished and an award-winning author. He works as a freelance journalist and scholar and resides with his wife in Johannesburg

With his thesis, titled: REDE EN MITE: BLUMENBERG SE RASIONEEL VIR DIE HISTORIESE ONTVOUING VAN NARRATIEWE EN DENKE, the candidate applies the thought of Hans Blumenberg to historical and modern dilemmas. Blumenberg proposes a grid to differentiate between two modes of thought, the mythical and the rational. The rational mode is more recent and is vulnerable to the older, mythmaking mode. Both modes remain ever present. Blumenberg's model shows that concepts that survive the times do not do so with fixed essences but by their capacity to be employed in new functions. This has far-reaching implications for modernity studies and offers new avenues by which to effect decoloniality.

Promoter: Prof PNJ Duvenage **Co-Promoter:** Prof HJ Pieterse

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN POLITICAL SCIENCE

MOKOENA, Benjamin Petros Oupa

Benjamin Mokoena matriculated in 1991. He obtained his bachelor's degree in humanities from the University of Stellenbosch in 2000. In 2001 he obtained the Bachelor of Military Science with Honours in Security and Africa Studies from Stellenbosch University, and in 2006 he obtained the Master in Military Science in Security and Africa Studies, also from Stellenbosch University.



With his thesis, titled: ISLAMIST VIOLENT EXTREMISM AND THE FRAGILE AFRICAN STATE: THE CASE IN KENYA, the candidate contributes to scholarship regarding the relationship between state fragility, Islamist violent extremism, and countering Islamist violent extremism. The study finds that the properties of state fragility, inclusive of the social structures that subsist in the fragile state, have causal capacity and tendency, providing not only the context and opportunity for, but actively generating, Islamist violent extremism and barriers to countering Islamist violent extremism, and hence the failure of countering Islamist violent extremism.

Promoter: Prof H Solomon

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN SESOTHO

MASIPA, Mpho Dellynah

Mpho Dellynah Masipa was born in Bochum in Limpopo province, South Africa, on 20 August 1973. She completed her senior certificate at Mokgorokgoro High School in 1991. She obtained her Primary Teacher's Diploma at Kwena Moloto College of Education in 1995 and a BA degree at UNISA in 2002. She then graduated with an honours degree in Linguistics at UNISA in 2012, an honours degree in African Languages at Stellenbosch University in 2013, a master's degree in Education Curriculum at the University of Limpopo in 2015, a master's degree in African Languages at Stellenbosch University in 2016. She has been employed as a Language Practitioner (Sepedi) at the Parliament of the Republic of South Africa since 2010.

With her thesis, titled: THE EXTENT TO WHICH NORTHERN SOTHO LANGUAGE IS USED ON SOCIAL MEDIA BY ITS YOUNG NATIVE SPEAKERS IN POLOKWANE, the candidate contributes to the scholarship of African Languages in the field of sociolinguistics, her focus being on the use of the Northern Sotho language in social media by young people when communicating with their peers, relatives and parents. Using comprehensive statistical data analysis and participant explanations, the study explores the communicative patterns employed by young people when they use their native language on social media to determine those factors that affect their choices between their native language and English. The study presents an overall finding that most of the participants used Northern Sotho when communicating with their family members and relatives on social media, but that they code-switched between Northern Sotho and English when speaking to their peers and friends to accommodate those who could not understand Northern Sotho. It also indicates that they value and take pride in their language. The study recommends that social-media applications for indigenous languages be developed because these applications will help to simplify the facilitation of communication in both communities and learning spaces for young people.

Promoter: Dr EN Malete

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN SOCIAL WORK

VAN WYK. Carel Johannes

Carel Johannes van Wyk was born in Hoopstad on 23 March 1967. He received his secondary education in Bultfontein where he matriculated at the Bultfontein Hoërskool in 1985. He obtained the degree BSocSc in 1988. HonsBSocSc (Psv) in 1997. the degree MSocSc (SW) in 1999 and the PhD (SW) in 2022 at the University of the Free State. He started his career as a social worker (First Educational Specialist: Sociopedagogue) in Welkom at the Child Guidance Clinic in 1993. In 2006 he was appointed in the Department of Social Work and is currently a lecturer at the University of the Free State.

With his thesis, titled: SINCHRONISTIESE INSIDENTE IN PERDEONDERSTEUNDE PSIGOTERAPIE, the candidate contributes to closing a gap in the literature regarding synchronicities in equine-assisted psychotherapy. He investigates synchronicity using a classical Jungian view combined with phenomenological analysis and a quantitative survey to determine its phenomenological structure so that therapists can use it to optimum effect during EAP sessions. The study shows that horses who behave atypically and whose behaviour is consistent with the client's psyche are involved in EAP synchronicities. The horse is not "only" a horse but also the archetypal Horse or Equus. The horse and man's space-time unite on a collective unconscious level as a result of the constellation of the psychoid archetype synchronicities and appear in this phenomenal field of unconscious relationship. Synchronicities appear at the exact moment the client addresses an emotional issue. A Western research paradigm cannot always explain extraordinary phenomena such as synchronicities.

Promoter: Prof SB Ferreira



DEAN | PROF PD VERMEULEN

AGRICULTURAL SCIENCES

BACHELOR'S DEGREES

BACHELOR OF AGRICULTURE

FINGER, Kgalalelo Nomonde HADEBE, Noxolo Angel MANZI, Makabongwe Muvo Simo MASANGO, Ntethelelo Ntuthuko

BACHELOR OF AGRICULTURE MAJORING IN AGRICULTURAL ECONOMICS

MANGANYELA, Sakhumuzi Mbuso

BACHELOR OF AGRICULTURE MAJORING IN AGRICULTURAL MANAGEMENT

MANAGEMEN I
DLAKELA, Mbonisi
GAMA, Nomcebo Vinolia
LUBBE, Ju-Ané
MAINO, Thato
MAKHOBA, Mohlolo Michael
MAKWENKWE, Aluncedo
MAPOSELA, Linamandla Ndumiso
MBETHE, Thembakazi
MELLO, Mokgadi Khutso
MNQAYANA, Siphumle Luke
SEBAKO, Cynthia Mamiki

SIBISI, Mbekezeli Thobelani

Penwell

BACHELOR OF AGRICULTURE MAJORING IN CROP PRODUCTION MANAGEMENT

BEYL, Marno Thurston
EASTON, James Almon
LAMULA, Nontuthuko Ziyanda
Nomcebo

NGUBANE, Mnqobi Velemseni

BACHELOR OF AGRICULTURE MAJORING IN MIXED FARMING MANAGEMENT

DLAMINI, Sanelisiwe Cynthia

ENGELBRECHT. Remv

HUMAN, Nicolaas Johannes Botha KOEKEMOER, Magnus Johan MOLETSANE, Matshediso TAU, Phumla Cleopatra TERBLANCHE, Eben Jan VENTER, Morne

BACHELOR OF SCIENCE IN AGRICULTURE MAJORING IN ANIMAL SCIENCES

VAN SCHALKWYK, Anke

BACHELOR OF SCIENCE IN AGRICULTURE MAJORING IN PLANT PATHOLOGY

COETZEE, Estie

BACHELOR OF SCIENCE IN AGRICULTURE MAJORING IN SOIL SCIENCE WITH PLANT PATHOLOGY

SETHABELA, Karabo Moipone

BUILDING SCIENCES

BACHELOR'S DEGREES

BACHELOR OF SCIENCE IN QUANTITY SURVEYING

LOMBARD, Charlotte

NATURAL SCIENCES

BACHELOR'S DEGREES

BACHELOR OF COMPUTER INFORMATION SYSTEMS

BAYETT, Reuben Tshepo
DAVIDS, Paul Neville
MAEMA, Nthakoana
MOKOBANE, Karabo Maputla
Donald

SEHLAKO, Keneiloe Alika

BACHELOR OF SCIENCE

BODENSTEIN, Charl

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY MAJORING IN COMPUTER SCIENCE AND BUSINESS MANAGEMENT

HENDERSON, Jaymee Chelsea

KATSHIWE, Chulumanco

MALAPANE, Patrick

MATHLORE, Tshepiso



MOKWENA, Tshifhiwa Laurence MPATANE, Kamohelo Tshepang SHIKWAMBANA, Nyiko

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY **MAJORING IN COMPUTER** SCIENCE AND CHEMISTRY

NTSELE. Shaun

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY **MAJORING IN COMPUTER** SCIENCE AND MANAGEMENT

DHLAMINI, Mfanafuthi MADONDO, Lungile Phiwe TSOTETSI, Sandile Gift

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY **MAJORING IN COMPUTER SCIENCE AND MATHEMATICS**

JONKERS, Llewellyn MOTSAMAI, Luckyboy Teboho

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY **MAJORING IN COMPUTER SCIENCE AND PHYSICS**

MASIKO, Sithabile Promise

BACHELOR OF SCIENCE MAJORING IN BEHAVIOURAL GENETICS

LIKHOELE, Tankiso LITHEKO, Relebogile MASEKO, Tsebeletso MOFOKENG. Setsoto Patience STRAUSS, Nicole

BACHELOR OF SCIENCE MAJORING IN BIOCHEMISTRY AND FOOD SCIENCE

MOJAPELO, Kopea Frank MOKWENA, Morobela

BACHELOR OF SCIENCE MAJORING IN BIOCHEMISTRY AND PHYSIOLOGY

BALUTI. Julia Mafuta

NEKHUDZHIGA, Rabelani Angelina

BACHELOR OF SCIENCE MAJORING IN BIOCHEMISTRY AND ZOOLOGY

ZUMA, Ntandoyenkosi

BACHELOR OF SCIENCE MAJORING IN BIOLOGICAL **SCIENCES**

APRIL, Tylo Maledi CARLSON, Niël MASEHLA, Modiegi Kgaakge PULE, Karabo Simphiwe

BACHELOR OF SCIENCE MAJORING IN BOTANY AND GENETICS

BINTO, Amahle MAREE, Franco Casparus RAMMOKO, Mpho Caroline BACHELOR OF SCIENCE MAJORING IN BOTANY AND ZOOLOGY

MOTSHEGWA, Gaopalelwe Samuel

BACHELOR OF SCIENCE MAJORING IN CHEMISTRY AND PHYSICS

SHANGE, Sabelo Alpha

BACHELOR OF SCIENCE MAJORING IN ECONOMETRICS

CHIKOZHO, Esther Tatenda DUBE. Neliswa Sweetness

BACHELOR OF SCIENCE MAJORING IN FORENSIC SCIENCE

MASHAMBA, Muelekanyi NGCABA, Lynette Lerato RIKHOTSO. Vutivi Joe SHAKWANE, Karabo Masoti Hope SHIBA, Seluliwe Simile

BACHELOR OF SCIENCE MAJORING IN GENETICS AND MICROBIOLOGY

MAREE, Carla MOKOENA, Jakobo

BACHELOR OF SCIENCE MAJORING IN GENETICS AND **PHYSIOLOGY**

GUMEDE, Nelisa Ntandovenkosi MABASO, Nthabiseng Nonhlanhla



MHLONYANE, Ntsikelelo Edward

NKUNA, Mpho Faith

SHANNON, René

BACHELOR OF SCIENCE MAJORING IN GENETICS AND ZOOLOGY

BOSMAN. Petrus Jacobus

MOLEFI, Motsehoa Maggy

BACHELOR OF SCIENCE MAJORING IN GEOGRAPHY

MANGOKWANA, Beauty Macheba

BACHELOR OF SCIENCE MAJORING IN GEOGRAPHY AND ENVIRONMENTAL SCIENCE

HOHO. Lindelwe

MAKABOLANE, Tebatso

MOLAWA, Khomotjo Medina

MOLELEKENG, Mothusi Kingsley

MPHALE, Tumisang Michael

YEKANE, Zovuyo

BACHELOR OF SCIENCE MAJORING IN GEOGRAPHY AND TOURISM

NYOKA, Siphesihle Xola Blessing

BACHELOR OF SCIENCE MAJORING IN LIFE SCIENCE

MOTAUNG, Puleng Portia

BACHELOR OF SCIENCE MAJORING IN MATHEMATICS AND APPLIED MATHEMATICS

SEPEESA, Versace

BACHELOR OF SCIENCE MAJORING IN MATHEMATICS AND PHYSICS

WITBOOI, Shanaaz Gaya

BACHELOR OF SCIENCE MAJORING IN PHYSICS AND ASTROPHYSICS

DUMA, Sifiso

LETSELE, Thulo

BACHELOR OF SCIENCE MAJORING IN STATISTICS AND ECONOMICS

MAKARINGE, Mfumo Junior Clinton

MATOTI, Aviwe

TSOTETSI, Tsidi Hendrieta

BACHELOR OF SCIENCE MAJORING IN STATISTICS AND PSYCHOLOGY

JALI, Sizwe Gladman

DIPLOMAS

POSTGRADUATE DIPLOMA IN DISASTER MANAGEMENT

NZIMANDE, Sibusiso Zwelakhe Justice

POSTGRADUATE DIPLOMA IN INTEGRATED WATER MANAGEMENT

KGOPA, Maninana Mercia

BACHELOR HONOURS DEGREES

BACHELOR OF AGRICULTURE HONOURS MAJORING IN AGRICULTURAL ECONOMICS

SHAI, Rethabile

BACHELOR OF AGRICULTURE HONOURS MAJORING IN ANIMAL PRODUCTION MANAGEMENT

NEMAEMBENI, Murendeni Jessica

BACHELOR OF SCIENCE HONOURS IN AGRICULTURE MAJORING IN SOIL SCIENCE

BOQWANA, Nompumelelo

BACHELOR OF SCIENCE HONOURS MAJORING IN ENTOMOLOGY

TSHABALALA, Pontsho

BACHELOR OF SCIENCE HONOURS MAJORING IN GEOHYDROLOGY

PHASHA, Mildred Mokgadi

BACHELOR OF SCIENCE HONOURS MAJORING IN APPLIED STATISTICS

MOLEFE, Boemo



BACHELOR OF SCIENCE HONOURS MAJORING IN COMPUTER SCIENCE AND INFORMATICS

DYANTYI, Thamsanga

BACHELOR OF COMPUTER INFORMATION SYSTEMS **HONOURS**

SAMHEMBERE, Dudley Shane Tinotenda

TSEPHE, Tau Edwin

AGRICULTURAL SCIENCES

MASTER'S DEGREES

MASTER OF DISASTER **MANAGEMENT**

SEHLOHO, Puleng Edith

MASTER OF ENVIRONMENTAL **MANAGEMENT**

GININDZA, Hlelile Winile

MAMABOLO, Kamogelo Motsanalo Florence

MOROENYANE, Ntja Mahlo-A-Mmutla David

MPHAFUDI. Lesailane Antoinette

MASTER OF SCIENCE MAJORING IN AGRICULTURAL ECONOMICS

MONTEIRO, Markus Arlindo

Dissertation Title: THE **ECONOMIC ANALYSIS** OF ALTERNATIVE MAISE MARKETING STRATEGIES BASED ON TECHNICAL MARKET ANALYSIS

Supervisor: Prof N Matthews

Co-Supervisor: Prof B Grové

OKOLIE. Collins Chimaobi*

Dissertation Title: PERCEIVED IMPACT. RISK MANAGEMENT AND VULNERABILITY TO DROUGHT: THE EXPERIENCES OF FARMING HOUSEHOLDS IN THE FREE STATE PROVINCE. SOUTH AFRICA

Supervisor: Prof AA Ogundeji

Co-Supervisor: Dr G Danso-

Abbeam

MASTER OF SCIENCE IN AGRICULTURE MAJORING IN ANIMAL SCIENCE

BHIKA KOOVERJEE, Bhaveni

Dissertation Title:

COMPARATIVE ANALYSIS OF STRUCTURAL VARIATION IN NGUNI AND BONSMARA CROSSBRED CATTLE **POPULATION**

Supervisor: Dr P Soma

Co-Supervisor: Dr MM Scholtz

MASTER OF SCIENCE **MAJORING IN SOIL SCIENCES**

BAASI, Lineo Elizabeth

Dissertation Title:

CHARACTERISING THE SOIL AND VEGETATION OF WETLANDS IN SEHLABATHEBE. LESOTHO

Supervisor: Prof JJ Van Tol

Co-Supervisor: Dr AC Van Aardt

MASTER OF SCIENCE MAJORING IN SOIL SCIENCES INTERDISCIPLINARY

MALULEKE, Shereen

MASTER OF SCIENCE MAJORING IN WILDLIFE

VAN ROOYEN, Karin-Louise

MASTER OF SCIENCE MAJORING IN WILDLIFE SCIENCE

DE VILLIERS. Mari-Su

Dissertation Title: FREE-ROAMING LEOPARDS (PANTHERA PARDUS) IN AN AGRICULTURAL DOMINATED, MOUNTAINOUS LANDSCAPE. WESTERN CAPE

Supervisor: Dr BB Janecke

Co-Supervisor: Ms L Müller

MASTER OF SUSTAINABLE AGRICULTURE

KUNENE, Hlobsile Patricia

MACHE, Diketso Samuel

MTSHALI, Silindile Mayibongwe

Ntombizandile



BUILDING SCIENCES

MASTER'S DEGREES

MASTER OF SCIENCE MAJORING IN QUANTITY SURVEYING

TRUTER, Samantha*

Dissertation Title: CORE COMPETENCES OF QUANTITY SURVEYORS IN VALUING WORKS WITHIN THE ENGINEERING SECTOR OF SOUTH AFRICA

Supervisor: Prof K Kajimo-

Shakantu

MASTER OF SCIENCE MAJORING IN RISK ANALYSIS

CHIDA, Tapiwa Edward*

Dissertation Title: AN ANALYSIS OF RISK IN THE SOUTH AFRICAN NON-LIFE INSURANCE MARKET

Supervisor: Prof D Chikobvu

MASTER OF URBAN AND REGIONAL PLANNING

MINNIE, Stephanus*

Dissertation Title: AN
INSTITUTIONAL POLYCENTRIC
GOVERNANCE FRAMEWORK
TO ASSESS THE ACTION
SITUATIONS EMANATING FROM
SECTION 12 SPATIAL PLANNING
AND LAND USE MANAGEMENT
ACT, WITHIN FREE STATE
PROVINCE

Supervisor: Prof D Atkinson

NATURAL SCIENCES

MASTER'S DEGREES

MASTER OF SCIENCE IN NANOSCIENCE

GAWE, Sokhana Yoliswa

RAMOLAHLOANE, Hope Thabo

MASTER OF SCIENCE MAJORING IN APPLIED STATISTICS

SITHOLE, Charles*

Dissertation Title: MODELLING THE EXTREME RISK OF INVESTING IN THE JOHANNESBURG STOCK EXCHANGE ALL-SHARE INDEX

Supervisor: Prof D Chikobvu

TALANYANE, Maseli Simon

MASTER OF SCIENCE MAJORING IN ASTROPHYSICS

DU PLOOY, Drikus Cornelus

MASTER OF SCIENCE MAJORING IN BEHAVIOURAL GENETICS

BURGER, San-Mari

Dissertation Title: THE
DEVELOPMENT AND
MANAGEMENT OF
AGGRESSION IN MALE
JUVENILE DELINQUENTS:
A GENE-ENVIRONMENT
CORRELATIVE STUDY

Supervisor: Mr S Burger

MASTER OF SCIENCE MAJORING IN BOTANY

GROBLER. Hanlie*

Dissertation Title: NEMESIA (SCROPHULARIACEAE) NECTAR SPUR DEVELOPMENT AND FUNCTION IN A PHYLOGENETIC CONTEXT

Supervisor: Dr L Joubert

Co-supervisor: Dr M Jackson

MOLOI, Karabo Thato*

Dissertation Title:

REPRODUCTIVE ECOLOGY OF AN INVASIVE COTONEASTER SPECIES IN AFROMONTANE GRASSLANDS OF THE EASTERN FREE STATE, SOUTH

AFRICA

Supervisor: Dr S Steenhuisen

Co-Supervisor: Dr G Martin, Dr

VR Clark

MASTER OF SCIENCE MAJORING IN CHEMISTRY

BLIGNAUT, Janine*

Dissertation Title: GOLD(I)
COMPLEXES BEARING
PHOSPHINE PINCER LIGANDS;
CHARACTERIZATION,
LUMINESCENCE, AND
ANTICANCER PROPERTIES

Supervisor: Prof HG Visser

Co-Supervisor: Dr M Schutte-

Smith

BOSMAN, Lerato Azania*

Dissertation Title:HALOGENATED SALICYLIDENE RHODIUM(I) COMPLEXES



AS MODEL HOMOGENEOUS **CATALYSTS**

Supervisor: Prof A Brink

Co-Supervisor: Dr DV Kama

MNCWANGI. Sibusiso Nicko

Dissertation Title: SYNTHESIS OF ATROMATIC MONOPYRROLO-**TETRATHIAFULVALENE DERIVATIVES WITH VARIABLE DEGREE OF CONJUGATION**

Supervisor: Prof V Azov

NZHADZHABA. Nonhlanhla Naledi

Dissertation Title: SYNTHESIS, CHARACTERISATION, **LUMINESCENCE AND** CYTOTOXICITY OF RHENIUM(I) COMPLEXES BEARING N,N'-**BIDENTATE LIGANDS**

Supervisor: Dr M Schutte-Smith

Co-Supervisor: Prof HG Visser

SWART. Glendin*

Dissertation Title:

FERROCENYL-CONTAINING DODECYL PHTHALOCYANINES: SYNTHESIS, SPECTROSCOPY AND MESOPHASE BEHAVIOUR

Supervisor: Dr E Müller

Co-Supervisor: Prof JC Swarts

MASTER OF SCIENCE MAJORING IN CONSUMER SCIENCE

MAHLANZA, Zamancwane Pretty

Dissertation Title:

NUTRITIONAL. PHYSICOCHEMICAL AND SENSORY ANALYSIS OF PROCESSED SPEKBOOM (PORTULACARIA AFRA) PRODUCTS.

Supervisor: Dr A Du Toit

Co-Supervisors: Prof M De Wit,

Prof A Hugo

MASTER OF SCIENCE **MAJORING IN ENVIRONMENTAL GEOGRAPHY**

MNCUBE. Zandile

Dissertation Title: USING NIGHT-TIME LIGHT REMOTE SENSING DATA TO STUDY LIGHT POLLUTION IN ETHEKWINI METROPOLITAN MUNICIPALITY

Supervisor: Prof SA Adelabu

Co-Supervisor: Dr EG Adagbasa

MASTER OF SCIENCE **MAJORING IN ENVIRONMENTAL MANAGEMENT**

CEBEKHULU, Pinky Sanele*

MASTER OF SCIENCE MAJORING IN FORENSIC **GENETICS**

DE BRUYN, Marli

SITHOLE, Nosipho Charmaine

SWANEPOEL, David Nicolas

MASTER OF SCIENCE MAJORING IN GENETICS

STRAUSS, Dominique

MASTER OF SCIENCE MAJORING IN GEOGRAPHY

BOSMAN, Bernardus Lambertus*

MUKWEVHO. Rinae

MASTER OF SCIENCE MAJORING IN GEOHYDROLOGY

DEN BOOGERT. Lorainmari

Dissertation Title: WATER BALANCE AND AQUATIC BIOTA OF A DEFUNCT MINE IN THE MPUMALANGA COAL FIELDS

Supervisor: Dr E Lukas

Co-Supervisor: Dr MF Avenant

JORDAAN. Lincoln Wimbles*

Dissertation Title: USING NUMERICAL MODEL TO EVALUATE ANALYTICAL METHOD USED TO ESIMATE TRANSMISSIVITY AND STORATIVITY IN A CONFINED AQUIFER.

Supervisor: Prof M Gomo

KOKO, Hangwani Jaqueline

Dissertation Title: AN INVESTIGATION OF HYDRAULIC PROPERTIES OF AN ALLUVIAL CHANNEL AQUIFER

Supervisor: Prof M Gomo



MADANDA, Tsumbedzo

Dissertation Title:
HYDROGEOLOGICAL
INVESTIGATION OF SOURCES
OF WATER WITHIN CULLINAN
DIAMOND UNDERGROUND
MINE WORKINGS

Supervisor: Dr SS de Lange

MAFIKA, Mpho Ignacious

Dissertation Title:
GROUNDWATER QUALITY
ASSESSMENT OF PUBLIC
WATER COLLECTION SITES
USING AN INTEGRATED
GEOSPATIAL ANALYSIS
AND WATER CHEMISTRY
APPROACH: QWA-QWA, SOUTH
AFRICA

Supervisor: Dr SS de Lange

MASTER OF SCIENCE MAJORING IN POLYMER SCIENCE

SEROMO, Lebohang

MASTER OF SCIENCE MAJORING IN ZOOLOGY

LEWIS, Chanel*

Dissertation Title: INTEGRATING TROPHIC LEVEL WITH THE NICHE VARIATION HYPOTHESIS: A COMPARISON OF INDIVIDUAL NICHE VARIATION BETWEEN MAMMAL HERBIVORE AND CARNIVORE POPULATIONS

Supervisor: Prof DM Codron

VAN DER MERWE, Runè*

Dissertation Title: THE ROLE OF BODY SIZE AS A LIFE HISTORY TRAIT INFLUENCING WITHIN-POPULATION NICHE VARIATION IN MAMMALS

Supervisor: **Prof DM Codron**

DOCTORAL DEGREES

DOCTOR OF PHILOSOPHY

MOLOMO, Karabo Peter

Karabo Molomo was born on 10 February 1983 in Mokuruanyane Village, Lephalale, Limpopo, South Africa. He matriculated at Majadibodu High School in 1999 and graduated with a National Diploma in Agricultural Management from the Tshwane University of Technology in 2004. He earned a B-Tech in Agricultural Management from Unisa in 2008 and a Magister in Sustainable Agriculture from the University of the Free State in 2011. He started his career as a Research Technician at the Agricultural Research Council in 2006. He was appointed as a Lecturer in Animal Production at the Mangosuthu University of Technology in 2012, and he ascended through the ranks to become a Senior Lecturer in 2021.

With his thesis titled: FACTORS INFLUENCING THE COMMERCIALISATION OF EMERGING DAIRY FARMERS IN SOUTH AFRICA: A CASE STUDY OF THE FREE STATE PROVINCE, the candidate contributes new knowledge which will assist in developing sound strategies for commercialising emerging dairy farmers in South Africa. Multiple cases of emerging dairy farmers, farming under diverse conditions, provided a deep insight into the lived experiences of a typical emerging dairy farmer. Another perspective on these farmers' situation was obtained from dairy specialists from the industry, who have worked with these farmers. The study identified the main constraints impacting 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 and lack of appropriate management skills. Good prospects for commercialising these farmers were, however, highlighted by the study. It was also found that, provided they are correctly implemented, dairy business hub models can pave the way for achieving such commercialisation.

Promoter: Prof C Banga

Promoter: Dr J Van Der Westhuizen

DOCTOR OF PHILOSOPHY IN ARCHITECTURE WITH SPECIALISATION IN DESIGN

DODD. Heather Margaret

Heather Dodd was born in Harare on 5 June 1968. She received her secondary education in Johannesburg where she matriculated at Greenside High school in 1985. She obtained the degree of Bachelor of Architecture (Cum Laude) in 1991 at the University of the Witwatersrand and the degree Master of Architecture in 1997 at the University of Cape Town. She practices as a professional Architect in Johannesburg in the practice, Savage + Dodd Architects.

With her thesis titled, **SMALL MOVES SPATIAL TACTICS FOR TRANSFORMATION**, the candidate makes a contribution to an architectural spatial practice embedded within the specific challenges of the post-Apartheid city, through the work of Savage + Dodd Architects. With this contribution, she attempts to identify a tactical practice of 'small moves' employing a series of spatial tactics, used to adapt and transform buildings and thus the urban fabric in pursuit of a practice of spatial transformation. The outcomes of this investigation illustrate a 'mode of practice' that enables a flexible, adaptable and tactical approach to architectural design, and specifically housing and inner-city hybrid prototypes, of value in resolving an ongoing engagement with spatial transformation in the post-Apartheid city.

Promoter: Prof J Noble

DOCTOR OF PHILOSOPHY MAJORING IN AGRICULTURAL ECONOMICS

OOSTHUIZEN, Phillipus Lodewikus

Phillip Oosthuizen was born on 6 September 1991 in Bethlehem, Free State (South Africa). He matriculated at Bethlehem Voortrekker High School in 2009. He obtained a Bachelor of Science (BSc) degree in Animal Science and Agricultural Economics in 2013, a Bachelor of Science (Hons) degree in Agricultural Economics in 2014, a Master of Science (MSc) degree in Agricultural Economics (cum laude) in 2016, and a Doctor of Philosophy (PhD) degree in 2022 from the University of the Free State. He started his career as a business manager at Nedbank Agricultural Business Banking in 2016 and joined the Sernick group in 2017, where he is still employed as the Head of Research: Innovation and Economics.

With his thesis titled: THE EFFECT OF GROWTH PROMOTERS ON BEEF PROFITABILITY, QUALITY, AND CONSUMER PREFERENCES: A VALUE CHAIN APPROACH, the candidate makes a contribution to the red meat value chain by addressing profitability and beef quality. Mr Oosthuizen quantified the impact of growth promoters on the cattle feedlot industry's profitability and found that growth promoters increase feedlot profitability but decrease beef quality. A unique sensory beef quality quantification methodology from Australia was adopted and reconfigured for the South African consumer market. A decision support framework was compiled to recommend growth promoter strategies to enhance financial feasibility throughout the value chain, which includes the feedlot, abattoir, and consumers. Mr Oosthuizen found that better than everyday quality beef can be produced by using less growth promoters and that consumers are willing to pay a premium, which can compensate for the decreased feedlot financial margin.

Supervisor: Prof. F.A. Maré

Co-Promoter: Prof. P.E. Strydom



DOCTOR OF PHILOSOPHY MAJORING IN CHEMISTRY

MOGALE, Refilwe

Refilwe Mogale was born on 20 March 1993 in Parys, Free State. She matriculated at Sasolburg High School in 2011. She pursued her post school education at the University of the Free State where she obtained her bachelors, honours, masters and Phd degree in Chemistry. In 2022, she worked as a part-time lecturer in physical chemistry and is currently appointed as a post-doctoral fellow. Refilwe has multiple articles published in international journals on topics of environmental chemistry and wastewater treatment.

With her thesis titled: ALUMINIUM- AND ZIRCONIUM-BASED METAL ORGANIC FRAMEWORKS WITH AZOBENZENE AND STILBENE DICARBOXYLATE LIGANDS FOR USE IN WASTEWATER TREATMENT, the candidate contributes to the field of metal-organic frameworks and their potential usage in industrial wastewater treatment. The research systematically investigated three main properties of these framework materials when used as adsorbents in wastewater treatment, resulting in three published journal articles. She found that these MOFs, containing photoresponsive moieties, are highly efficient and reusable materials for dye-waste adsorption. She demonstrated that nitrogen functionalization of the MOF structure influenced the framework's physical properties and pollutant adsorption capacity. Lastly, she showed how tuning the MOFs' pore sizes with different-sized organic linkers affects adsorption capacity, with larger pore sizes having a higher adsorption capacity.

Promoter: Dr EHG Langner

MORERWA, Zanele Gift

Zanele Gift Morerwa was born on 18 March 1990 in the township of Mamelodi in Pretoria. She completed her matric in 2008 at the International Deutsche Schule of Pretoria. Being one of six children with limited funding she spent 2 years in self-employment before being able to enrol for the extended program (BSc. Degree in Chemistry/Physics and Biology) at the University of the Free State in 2011. She obtained her undergraduate BSc degree in 2015; completed her BSc Honours in 2016 and then her MSc. in Chemistry in 2019.

With her thesis titled: **WATER-SOLUBLE RHODIUM(I) MODEL CATALYSTS**, the candidate makes an important contribution to the knowledge base for the development of water-soluble rhodium complexes in the industrial specialization of homogenous catalysis. This is imperative for the potential development of future agents which focuses on "green" practices for environmentally friendly industrial processes. A range of novel organometallic compounds were synthesized and characterized by various techniques, including single crystal X-ray diffraction and NMR spectroscopy. A kinetic study based in halogenated and alcohol solvents as well as in water was investigated and indicated an excellent correlation to establish the intimate reaction mechanism of the oxidative addition process which takes place in water.

Promoter: Prof A Brink

Co-Promoter: Prof A Roodt

MPHUTHI, Lehlohonolo Ernest

Lehlohonolo Ernest Mphuthi was born in QwaQwa, Free State, on 10 June 1992. He completed his high school education at Mampoi High School in 2010 with four distinctions. He attained a B.Sc. in Chemistry and Physics in 2015 and an Honours in Polymer Chemistry in 2016 at University of the Free state. As the first Nano-chemistry student at the University of the Free state, he completed his master's degree in Nanoscience in 2018.

With his thesis titled: **SYNTHESIS, CHARACTERIZATION AND METAL EXCHANGE OF ZIF-8 AND ZIF-67 NANOPARTICLES FOR CATALYTIC APPLICATIONS**, the candidate contributes to the development of nano-sized bimetallic metal-organic framework catalysts for various catalytic applications, including CO2 reduction. The candidate effectively synthesized nano-



sized ZIF-8 and ZIF-67 crystallites isothermally in either water or methanol under ambient conditions. The metal centres of these materials were partially exchanged with iron(II), Titanium(IV), Manganese(II) or Nickel(II) to form microporous, bimetallic ZIFs, leading to the enhancement of the materials' catalytic activity. This was achieved without altering the structural integrity, topology and metal oxidation state of the parent ZIFs. Compared to their parent ZIFs, the metal-exchanged ZIFs significantly demonstrated higher catalytic efficiency in all applications. Moreover, these catalysts are stable and can be regenerated and re-used without substantial loss in catalytic activity. Two papers have already been published from this study.

Promoter: Dr EHG Langner

DOCTOR OF PHILOSOPHY MAJORING IN CONSUMER SCIENCE

MAFU, Thobekile

Thobekile Mafu was born on 21 May 1977. She received her secondary education in Bulawayo, Zimbabwe, where she matriculated at the Solusi Secondary school in 1992. In 1996, she obtained a Bachelor of Science (BSc) in Home Economics at Andrews University, Michigan in the USA and completed a Bachelor of Science (BSc) in Home Economics with Honours at Stellenbosch University in 1998. Thereafter she completed her Master of Technology (MTech) in Food and Nutrition in Pretoria in 2015. She started her career as Food Selector at Woolworths Head Office in Cape Town in 2000. Currently, she is a lecturer at the Walter Sisulu University in East London, Eastern Cape.

With her thesis titled: THE RELATIONSHIP BETWEEN FOOD-INSECURE HOUSEHOLDS AND THE PREVALENCE OF ACUTE MALNUTRITION IN CHILDREN RESIDING IN THE INFORMAL URBAN SETTLEMENT OF GOMPO VILLAGE, SOUTH AFRICA, the candidate makes a contribution to existing body of knowledge concerning food insecure households and its impact on children. Using a quantitative approach, 500 households participated in the survey, in addition to secondary anthropometric data from six clinics in Gompo Village. The results highlighted the reliance of food insecure households on social grants as their main source of income, poor household dietary diversity with regard to food and a propensity for children to be overweight or obese. With this contribution, she developed guidelines for possible future intervention programmes to address these challenges attempting to reduce household food insecurity in her community.

Promoter: Dr Natasha Cronjé

Co-Promoter: Dr I van der Merwe, Prof W Oldewage-Theron

DOCTOR OF PHILOSOPHY MAJORING IN ENVIRONMENTAL MANAGEMENT

OTUNOLA, Beatrice Omonike

Beatrice Omonike Otunola was born on the 15th of December 1992 in Ilorin, Nigeria. She attended Smith Baptist Academy, Ogbomoso and Anglican Grammar School, Ilorin for her Secondary School Education. Between 2011-2018, Beatrice attended the University of Fort Hare, South Africa, where she obtained the following degrees: BSc Geology (2015), BSc (Hons) Geology (2016) and MSc Geology (2018). In August 2019, Beatrice enrolled for her PhD degree in Environmental Management at the University of the Free State (UFS) South Africa, which she has just completed. Her research interest is on eco-friendly, economical and feasible environmental remediation options.

With her thesis titled: ATTAPULGITE AND BENTONITE ASSISTED PHYTOREMEDIATION OF HEAVY METAL POLLUTED SOIL AND WATER: CASE STUDY OF A POST-MINING AREA IN THE FREE STATE PROVINCE, SOUTH AFRICA, the candidate contributes to scholarship on the quest for sustainable solutions to environmental problems and remediation of polluted soil and water. The study combined Attapulgite/Bentonite with Vetiver grass or Indian mustard plants for the remediation of polluted soil and water from Sasol mining area of the Free State Province, South Africa. Results showed that Attapulgite combined with Vetiver grass is most suitable for heavy metals polluted soil, while bentonite combined with Vetiver grass is best for heavy metals contaminated water. Beatrice showed that attapulgite added at 2.5% (w/w) improved



phytostabilization properties of Vetiver for chromium, cobalt, copper and zinc in soil and that bentonite added at 2.5% (w/v) was best for aluminium and manganese removal in contaminated water.

Promoter: Prof O Ololade

Co-Promoters: Dr M Thwala, Dr MP Aghoghovwia

SCHOEMAN, Yolandi

Yolandi Schoeman was born on 10 March 1982 in Barberton, Mpumalanga. She matriculated at Barberton High School in 1999 and later attained a Master of Environmental Management at the University of the Free State in 2011. She also graduated with a MPhil degree at Monash University in 2017. Her career in environmental sciences include entrepreneurial innovations, various research outputs and contributing to world-class sustainability and planetary health-related innovations and solutions specifically in the USA, Europe, Russia, Australia, and Africa.

With her thesis titled: A ZERO-WASTE MULTI-CRITERIA DECISION-SUPPORT MODEL FOR THE IRON AND STEEL INDUSTRY IN DEVELOPING COUNTRIES IN SOUTHERN AFRICA, the candidate contributes to the understanding of manufacturing wastes and eliminating unnecessary waste creation at the initial phases of iron and steel production through green production and system-engineering principles. The results of this investigation include an alternative approach as the industrial zero waste tiered analysis model (i-ZEWATA) in managing iron and steel waste that not only addresses environmental contamination but also limiting the impact on human health and unlocking value in iron and steel waste that can contribute to the triple bottom line of iron and steel manufacturing facilities. The investigation demonstrated that iron and steel waste can be identified, visualized, prioritized and managed to promote zero waste by applying a hybrid systems-engineered approach.

Promoter: Prof PJ Oberholster **Co-Promoter:** Prof V Somerset

DOCTOR OF PHILOSOPHY MAJORING IN FORENSIC GENETICS

LUCASSEN, Anton

Anton Lucassen was born on 8 April 1967 in Klerksdorp, North West Province, South Africa. He matriculated at Schoonspruit High School in 1985 and attained a B.Med.Sci and B.Sc (Hons) degree at the University of Pretoria from 1990 to 1994. He further attained an M.Tech degree from the Tshwane University of Technology in 2006. His career in the South African Police Service began in 1991 where he is currently employed as a Chief Forensic Analyst. He is also an affiliated lecturer at the University of the Free State.

With his thesis titled: ALLELE FREQUENCIES AND DNA MIXTURES IN THE HUMAN FORENSIC ENVIRONMENT IN SOUTH AFRICA, the candidate established an allele frequency database for criminal cases in South Africa. The Combined Probability of Inclusion (CPI)-method and DNAIVIEW® Mixture SolutionTM, a fully continuous probabilistic method, were compared to interpret Low-Template DNA mixtures. Further, a protocol for the implementation of the probabilistic genotyping method for the interpretation of mixtures at the Forensic Science Laboratory of the South African Police Service was presented. The protocol will guide the laboratory and ensure a smooth, rapid and accountable implementation of the new method. The probabilistic software will assist in analysing complex Low-Template-DNA mixtures which will finalise mixtures faster and reduce the backlog in the analysis of DNA cases.

Promoter: Dr K Ehlers

Co-Promoter: Prof JP Grobler



DOCTOR OF PHILOSOPHY MAJORING IN GENETICS

ACHILONU, Conrad Chibunna

Conrad Chibunna Achilonu was born in Nigeria where he completed his primary and secondary education. He obtained his Bachelor of Science in Biochemistry, Bachelor of Science (Honours) in Botany, Master of Science in Genetics and PhD in Genetics, in collaboration with the Plant Pathology division, all at the University of the Free State. He is an emerging research scientist with publications in peer-reviewed journals. He has special interest in microbial interactions in infectious diseases, fungal biology, mycology, molecular biology, green synthetic nanoparticles leading to novel drug discoveries and the amelioration of diseases caused by microbial pathogens. He is a registered member of the Southern African Society for Plant Pathology (SASPP), American Phytopathological Society (APS), Mycology Society of America (MSA), and the Genetics Society of America (GSA). He is currently appointed as a post-doctoral fellow at the department of Plant Sciences, UFS.

With his thesis titled: ALTERNARIA ALTERNATA ASSOCIATED WITH BLACK SPOT DISEASE ON PECANS (CARYA ILLINOINENSIS) IN SOUTH AFRICA, the candidate appraised the occurrence and risk of Alternaria black spot (ABS) disease caused by Alternaria alternata on pecans in South Africa. The outcome of this study established that ABS disease on pecans is caused by the important and cosmopolitan fungus A. alternata. In addition, the candidate gathered knowledge on the exact distribution of the pathogen in South Africa and unravelled its population structure to ultimately facilitate disease management practices, which is crucial for the development of a disease control plan. Fungicides and pecan plant extracts also proved useful in controlling the pathogen. His study provided a strong foundation on which further studies on the ecology, disease-causing abilities, and antifungal applications can develop towards an integrated pathogen management program by the South African pecan industry.

Supervisor: Dr M Gryzenhout

Co-Promoters: Dr GJ Marais, Dr S Ghosh

DOCTOR OF PHILOSOPHY MAJORING IN GEOHYDROLOGY

BUDELI, Tshanduko

Tshanduko Budeli was born in Tshilamba on 21 September 1995. She matriculated at Thengwe High School in 2013. She obtained a BSc degree in Geology specialisation in 2016 at the UFS. She continued her studies at the UFS and completed her BScHons majoring in Geohydrology in 2017, and MSc majoring in Geohydrology with distinction in 2018, and was awarded the Dean's Medal and the Senate Medal for outstanding performance in 2018 by the UFS.

With her thesis titled: MODELLING THE UP FLOW OF LEAKAGE FROM CARBON DIOXIDE REPOSITORY IN SALINE AQUIFERS ALONG FRACTURED ROCK MEDIA, the candidate contributes to the simulation of fracture-conducted free phase CO_2 leakage; brine leakage; multiphase CO_2 and brine leakage; simultaneous CO_2 and brine leakage; and reactive brine leakage from a CO_2 storage aquifer. With this contribution, she attempts to advance the fluid leakage simulation in the context of geologic CO_2 storage by attaining the effects of fracture morphology, non-locality, and memory on leakage flow. Fluid flow models were improved by the application of random walk theory, fractional, fractal, and fractal-fractional differentiation; more accurate and proficient numerical solutions were obtained. The study confirmed the use of random walk theory, fractional, fractal, and fractal-fractional derivatives in improving the precision of modelling outcomes; the improved models can be applied to address leakage of possible groundwater contaminants from subsurface depositories.

Promoter: Prof A Atangana

MORAKALADI, Makosha Ishmaeline Charlotte

Makosha Ishmaeline Charlotte Morakaladi was born on 15 April 1996 in Motong wa Perekisi in Limpopo, South Africa. She matriculated at Motse Maria Secondary School in 2014. She obtained a BSc Degree in Geology in 2018 and a BSc Honours in



Mining Geology in 2019 at the University of Limpopo. She later attained her Master of Science in Geohydrology with distinction in 2020 at the University of the Free State.

With her thesis titled, PIECEWISE AND STOCHASTIC APPROACHES TO MODELLING A CONVERSION OF FLOW FROM CONFINED TO UNCONFINED, the candidate improves the existing model that depicts the conversion of flow from confined to unconfined aquifers. The solution that depicts such behaviour is developed upon the concept of rate of change, moreover, the model is based upon one aquitard setting. This kind of mathematical model cannot be used for accurate prediction. Thus, in her work, the candidate developed new models that consider groundwater movement in heterogeneous systems. The concept of nonlocal operators was employed to include in the mathematical model processes such as a power law, fading memory and crossover behaviours, and to make use of piecewise and stochastic approaches. The results of this study from simulations obtained depict crossover behaviours from a fast to slow decline in the water level, long-tailed behaviours and lastly a rise in the water level due to recharge or water trapping released due to the force induced during abstraction.

Promoter: Prof A Atangana

DOCTOR OF PHILOSOPHY MAJORING IN AGROMETEOROLOGY

THARAGA, Phumudzo Charles

Phumudzo Charles Tharaga was born on 15 May 1984 in Raliphaswa village, Limpopo Province, South Africa. He started his primary education at Raliphaswa Primary School in 1990 to 1995 and matriculated from Patrick Ramaano Secondary School in 2001. Aided by a bursary from the Landbank, he obtained a B.Sc. Agric. and Hons degree majoring in Agrometeorology from the UFS in 2012. He completed his M.Sc. Agric. degree majoring in Agrometeorology in 2014. He started his career in 2012 at ABSA Bank Agri-Insurance division as an Agrometeorologist. In 2013 he also worked as a Senior Scientist in Climate Information for the South African Weather Service (SAWS) until April 2015. The candidate also served as a Research Technologist at CSIR, where his Ph.D. idea emerged. In 2016 he joined the University of the Free State as a Lecturer.

With his thesis, titled: QUANTIFYING WATER USE AND PRODUCTIVITY OF RAINFED SWEET CHERRY (PRUNUS AVIUM L.) ORCHARDS IN THE EASTERN FREE STATE OF SOUTH AFRICA USING MICROMETEOROLOGICAL TECHNIQUES, the candidate quantified the water use of sweet cherry trees under rainfed conditions using Eddy Covariance and stem Sap flow measurements. The candidate contributes to the knowledge of sweet cherry trees' water requirements for specific growth stages. The candidate also established the basal crop coefficient (Kcb) and stress coefficient factor (Ks) for sweet cherries under rainfed conditions. In the study, the diurnal patterns of carbon dioxide flux density (Fc), evaporation (E), gross primary production (GPP), and ecosystem water-use efficiency (EWUE) were determined. As the country often faces water scarcity and an evident increase in sweet cherry production, it is crucial to raise the knowledge and understanding of trees' water consumption to enhance water use efficiency. Therefore, based on the study's findings, producers need to take precautions during the beginning of flowering and fruit development to reduce vulnerability to water stress. Part of the study has been presented at various local and international conferences, and two papers have been published in peer reviewed journals.

Promoter: Dr W.A. Tesfuhuney

Co-Promoters: Dr G.M. Coetzer, Prof M.J. Savage

DOCTOR OF PHILOSOPHY MAJORING IN MICROBIOLOGY

COETSEE, Elke

Elke Coetsee was born in Boksburg, Gauteng, on 18 January 1986. She received her secondary education in Boksburg, Gauteng, where she matriculated at Hoërskool Dr. E.G Jansen in 2004. She obtained her B.Sc. degree in Microbiology in 2009 from the University of Pretoria. She then continued with post graduate studies at the University of the Free State where she obtained a B.Sc. Microbiology Hons degree in 2010, a M.Sc. degree in Microbiology in 2013 and a PhD in Microbiology



in 2022. She started her career in the Clinical Research Industry in 2018 and is currently working at Parexel International as a Project Specialist.

With her thesis titled: INVESTIGATION INTO THE PRESENCE OF HP2-LIKE AND MU-LIKE PROPHAGES WITHIN THE GENOMES OF THE MOST PREVALENT SEROVARS OF AVIBACTERIUM PARAGALLINARUM IN SOUTH AFRICA, the candidate investigated the presence of lysogenic bacteriophages in the genome of the four common South African serovars of Avibacterium paragallinarum, which causes the disease infectious coryza in layer chickens. The main focus of her research was to attempt to relate the presence or absence of bacteriophage sequences to virulence difference which has been seen in the different serovars of the bacterium. Attempts were made to induce the bacteriophages into the lytic state to isolate the bacteriophages. The methodology included, long range PCR to screen for the presence of complete HP2-like and Mu-like bacteriophages within the genome of Av. paragallinarum reference isolates 221 (A-1); 2671 (B-1); Modesto (C-2) and SA-3 (C-3) where complete HP-2-like and Mu-like prophages were amplified. All phage fragments were sequenced on the Ilumina® MiSeq sequencing platform and assembled and analysed by the use of various available bioinformatics tool.

Promoter: Prof RR Bragg

Co-Promoter: Dr. CE Boucher

MOKOENA, Nthabiseng Zelda

Nthabiseng Zelda Mokoena (28) was born in Sebokeng, Qwaqwa on 25 September 1994. She received her secondary education at Thokoana Makaota Secondary School in Qwaqwa and matriculated in 2011. After this, she obtained her BSc degree in 2014 at the University of the Free State and pursued her postgraduate studies in Microbiology with a BSc Hons in 2015 and Masters in 2018 at the same institution. She then furthered her passion for research at the University of the Free State through obtaining her PhD in Microbiology this year (2022) and started a postdoctoral fellowship at the University of Pretoria.

PSEUDOMONAS AERUGINOSA INFECTIONS OF CAENORHABDITIS ELEGANS, the candidate contributes to knowledge regarding the effect of polyunsaturated fatty acids, especially eicosapentaenoic acid, in the response of the non-vertebrate host, the nematode Caenorhabditis elegans, to infection. She found that eicosapentaenoic acid, primes the host's the immune response to Candida albicans. In addition, the host can convert this fatty acid to an oxidized metabolite (17,18 -eicosatetraenoic acid) via cytochrome P450 enzymes. This metabolite is able to inhibit the formation of tissue penetrative hyphae by Candida albicans, both in vitro and in vivo. Since humans are also able to produce 17,18 -eicosatetraenoic acid this work may contribute to the search for novel compounds that can inhibit the pathogenicity of Candida albicans in human hosts. The candidate has already published one paper from her thesis, with another currently under review.

Promoter: Prof CH Pohl-Albertyn

Co-Promoter: Prof J Albertyn

DOCTOR OF PHILOSOPHY MAJORING IN PLANT BREEDING

ENGIDA. Bitew Tilahun

Bitew Tilahun Engida was born in a small village in the Amhara region, Ethiopia, in September 1986. He obtained a BSc degree in Crop Production from Ambo University in 2008 and an MSc in Plant Breeding from Haramaya University, Ethiopia, in 2016. He worked in crop production at the Amhara Agriculture and Rural Development Office from December 2008 to August 2011. In September 2011, he joined the Ethiopian Institute of Agricultural Research (EIAR) based at the Bako National Maize Research Center as a breeder and he has been actively participating in the national maize breeding programme team.

With his thesis titled: ABIOTIC STRESS TOLERANCE AND NUTRITIONAL VALUES OF NEWLY DEVELOPED QUALITY PROTEIN MAIZE HYBRIDS IN SUB-SAHARAN AFRICA, the candidate determined the performance, variability and stability of newly developed quality protein maize (QPM) hybrids for grain yield, tryptophan, zinc and iron concentrations, and bioavailability of zinc and iron under optimal, drought and low nitrogen conditions. Anthesis silking interval had a relatively high genetic coefficient of variation and genetic advance value, indicating that synchronisation, and consequently yield, can be improved through selection. Some QPM hybrids showed better or comparable performance for grain yield and nutritional value with the best QPM and normal maize checks, indicating the genetic gain that has been made in QPM breeding. The importance of secondary traits in developing high yielding and early maturing genotypes was emphasised. Grain yield and nutritional traits were inherited independently, indicating the possibility of their simultaneous improvement.

Promoter: Prof MT Labuschagne

Co-Promoters: Dr A van Biljon, Dr A Tarekegne

MATONGERA, Nakai

Nakai Matongera was born in Masvingo, Zimbabwe, in June 1985. She obtained a BSc Honours degree (Crop Science) from the University of Zimbabwe in 2008 and an MSc (Plant Breeding and Genetic Resources) from Wageningen University in the Netherlands, in 2013. She was a plant breeder at the Crop Breeding Institute in the Department of Research and Specialist Services in Zimbabwe from 2009-2021 after which she joined the Scientific and Industrial Research and Development Centre (Zimbabwe) as a plant breeder. Development of climate-resilient crop varieties is among her top breeding priorities.

With her thesis titled: GENETIC IMPROVEMENT OF ZINC CONTENT IN GRAIN OF NORMAL, PROVITAMIN A AND QUALITY PROTEIN MAIZE the candidate developed multi-nutrient biofortified maize through the introduction of genes for increased zinc concentration into three groups of maize genotypes. These were maize already biofortified with the essential amino acids lysine and tryptophan (quality protein maize or QPM), orange maize with high levels of provitamin A, and normal (non-biofortified) maize. Hybrids were tested for yield potential and stability, and nutritional value, under optimal and abiotic stress conditions. Iron and zinc content were highly correlated, and sufficient variability for the anti-nutrient, phytic acid, was available to select for improved bioavailability of these minerals. High zinc levels lead to a moderate yield penalty, which should be addressed by breeders. The QPM background accumulated higher levels of zinc than other backgrounds. Results from this study will contribute towards alleviating malnutrition in the southern African region.

Promoter: Prof MT Labuschagne

Co-Promoters: Dr A van Biljon, Dr T Ndhlela

SENGWAYO, Sphamandla

Sphamandla Sengwayo was born on 2 March 1988 near Pongola in KwaZulu-Natal. He matriculated at Intonga High School in 2007. He started his tertiary education in 2010 at the University of Zululand where he obtained a BSc Agronomy and BSc Honours degree with distinctions in 2014 and 2015, respectively. He attained his MSc degree with distinction at the University of the Free State in 2017. Sphamandla's career started in 2017 as a Research Intern at Monsanto where after he joined Omnia Fertilizer as an Agronomic Research Technician. He is currently employed as an Extension Officer at McCain Foods.

With his thesis titled: **GENETIC IMPROVEMENT OF DROUGHT TOLERANT MAIZE HYBRIDS UNDER A COMBINATION OF BIOTIC AND ABIOTIC STRESS CONDITIONS**, the candidate evaluated grain yield performance of currently available drought-tolerant, early-maturing maize hybrids under optimal, managed drought stress, random stress, low-nitrogen stress and maize streak virus conditions in order to identify multiple-stress tolerant hybrids for future use by smallholder farmers in eastern and southern Africa. Grain yield data on 44 pre-commercial hybrids were collected across five different stress management conditions in 28 test locations. Using various statistical analyses, specific hybrids showing above average grain



yield and stability for each of the five stress management conditions were identified. One hybrid, CZH16094, was identified as a multiple-stress tolerant hybrid. Five locations were identified as the most discriminative and representative environments and should be considered as ideal sites for selecting hybrids with improved grain yield under different biotic and abiotic stress conditions.

Promoter: Dr R van der Merwe

Co-Promoters: Prof MT Labuschagne, Dr AT Tarekegne, Dr NG Shargie

DOCTOR OF PHILOSOPHY MAJORING IN PLANT PATHOLOGY

MEIRING, Marlese Christine

Marlese Christine Meiring was born in Bloemfontein, Free State on 22 July 1992. She received her secondary education in Bloemfontein, where she matriculated at Jim Fouche High School in 2010. She obtained her undergraduate and Honours degrees in Genetics, in 2014 and 2015, respectively, at the University of the Free State. Marlese graduated with her MSc Plant Health Ecology degree, with distinction, in 2018 also at the University of the Free State. She started her career as a Quality Assurance Auditor in Bloemfontein in July of 2022.

With her thesis titled, SCLEROTINIA SCLEROTIORUM DISEASE POTENTIAL AND MANAGEMENT RESPONSES IN SOYBEAN AND SUNFLOWER, the candidate contributes to understanding management practices associated with sclerotinia stem and head rot. Using a bibliographical analysis approach, she explored the most frequently researched management practices and identified future research opportunities within the Sclerotinia research community. Through multi-season and locality field trials, producers were provided with information on the escape resistance of soybean and sunflower cultivars. The efficacy of several diverse fungicides was investigated during field experiments, illustrating the potential to register these active ingredients for use against soybean stem rot. Furthermore, the use of both stubble burning and cattle grazing on reducing the viability of the sclerotial population and ultimately reducing disease potential for future seasons was determined. This research directly serves South African producer plant health inquiries and engages with the needs of the oilseed- and protein crop industry.

Supervisor: Dr L Rothmann

Co-Promoter: Prof NW McLaren

DOCTOR OF PHILOSOPHY MAJORING IN SUSTAINABLE AGRICULTURE

NTSHANGASE, Zamokwakhe Maureen

Zamokwakhe Maureen Ntshangase was born on 06 September 1974 in Pongola area, Zululand, KwaZulu-Natal. She matriculated at Dingukwazi high school in 1993, thereafter did her first Diploma in Agriculture at Owen Sithole College of Agriculture in 2002. She graduated with a BTech in Agricultural Management at University of South Africa in 2012 and Masters in Sustainable Agriculture at the University of Free State in 2016. She began her career as a training officer and became a lecturer from 2004, she advanced in her career and became Head of department: Agriculture at Mthashana TVET college. In 2018, she joined Fort Cox Agriculture and Forestry Training Institute as the Head of department for Crop Production and Agricultural Engineering.

With her thesis titled: SUSTAINABLE COMMERCIALIZATION OF GOAT PRODUCTION IN THE ZULULAND AREA OF KWA-ZULU NATAL IN SOUTH AFRICA, the candidate contributes to scholarship on policies related to government support programmes on goat farming and integration of all role players, to achieve commercialization and realize the social and economic value of goats, thereby contributing to food security, poverty alleviation and economic development. Ntshangase sampled 170 respondents, including goat farmers, customers, extension officers, and retail / butcheries to understand the



production, marketing, and demand for goat products and government support to farmers. Among the challenges faced by goat producers; the lack of access to abattoirs and the butcheries that are willing to slaughter and sell goat meat are at the top of the list. On the other hand, the findings suggest that if goat meat is made available in retail stores, consumers are more inclined to buy it. The study presents the argument that poor goat marketing structure, culture, lack of information on goat's nutritional attributes and perceptions affects the commercialization of goat production regardless of its economic potential.

Promoter: Prof JA Van Niekerk

Co-Promoter: Dr MM Skwela

DOCTOR OF PHILOSOPHY MAJORING IN URBAN AND REGIONAL PLANNING

SEKYI-AMPAH, Thomas Eric

Thomas Eric Sekyi-Ampah was born on 26 December 1948 in Kumasi Ghana. He obtained the Teachers Certificate in 1969, BA Hons degree from the University of Ghana in 1979 and the University of South Africa in 2000, and the degree of Masters in Urban and Regional Planning from the University of Free State in 2007. He started his career as an educator in Ghana, continued in Nigeria and South Africa, a senior town planner in a consultancy and a local municipality, and finally as a Deputy Director with the Department of Public Works and Infrastructure from 2016-2019.

With her thesis titled, TOWARDS A SUSTAINABLE AND TRANSFORMATIVE SPATIAL GOVERNANCE SYSTEM FOR MUNICIPALITIES WITH TRADITIONAL LEADERS: A CASE STUDY OF ALFRED NZO DISTRICT MUNICIPALITY, EASTERN CAPE, the candidate examined the potential for inclusive and sustainable spatial governance in the Alfred Nzo District, a poor rural area. Interviews were conducted with municipal officials, traditional leaders, local businesses and planners knowledgeable about the region. Although the traditional leaders are suspicious of SPLUMA, there is sufficient goodwill for cooperation with the local governments in the district. While the necessary plans and policies are in place, the main obstacles effective spatial governance are the constraints experiences by the municipalities – staff, finances and unstable political environment. Addressing these constraints and including traditional leaders in spatial planning and land use management processes will improve the area's sustainability.

Promoter: Prof V Nel

DOCTOR OF PHILOSOPHY MAJORING IN ZOOLOGY

BOTHA, Alexander Edward

Alexander Botha matriculated at St Andrews School in 2010 and later obtained his B.Sc in Zoology in 2013. He furthered his education by obtaining his Honours degree in 2014 and was additionally awarded the IMP and ZSSA prizes for best honours student. He completed his M.Sc in 2017 through the National Museum, Bloemfontein, and his PhD in 2022. During his PhD he first-authored three scientific publications and a book chapter and co-authored an additional scientific publication. He is currently employed as a field technician at Panthera as part of the Arabian Leopard Initiative.

With his thesis titled: BLACK-BACKED JACKAL (CANIS MESOMELAS) ECOLOGY IN THE EASTERN FREE STATE AFROMONTANE GRASSLANDS, WITH SPECIFIC REFERENCE TO DIET AND BEHAVIOUR, the candidate contributes towards an improved understanding of mesopredator ecology by focusing on the impact of multiple environmental conditions and human pressures on black-backed jackal diet, behaviour, and control. His findings highlight the application of isotopic analysis in dietary investigations of mesopredators, and suggest that jackal diet varies between seasons, and along a human pressure gradient. His findings also highlight inter-individual variation in movement that is further influenced by fluctuating environmental conditions, including moon phase, season, and human pressure. Furthermore, his findings reiterate the



significant impact of lethal control on the environmental perceptions of jackals. His research provides novel techniques to study mesopredators and provides previously undocumented information that can be incorporated into agricultural and wildlife management practices.

Promoter: Prof A le Roux

BUTLER, Hendrikus Johannes Beukes

Hendrikus Johannes Beukes Butler was born in Harrismith on 19 March 1966. He received his secondary education in Dewetsdorp, where he matriculated at Hoërskool Christiaan de Wet in 1984. He obtained the degree B.Sc. Zoology in 1995, B.Sc. Zoology Hons in 1996 and the degree M.Sc. Zoology in 2004 at the University of the Free State. In 1989, he was appointed as Technician in the Department of Zoology and Entomology, University of the Free State; later, he was appointed as professional officer (1996) and then Lecturer (2005), teaching various undergraduate and postgraduate modules in Zoology, supervising postgraduate research projects, and conducting research that has already culminated in 15 peer-reviewed publications, three peer-reviewed book chapters, 22 contributions to local and international conferences, an oration as invited guest speaker at the University of Wageningen, Netherlands, and the graduation of 11 Masters students.

With his thesis titled: **BEHAVIOURAL ASPECTS OF ENZOOTIC GEOPHAGY AMONGST LARGE MAMMAL HERBIVORES**, the candidate contributes towards our understanding of geophagy, the deliberate ingestion of soil. He determined the physical, chemical, and mineralogical properties of ingested soils in habitats ranging from the southern Kalahari to the Highveld savanna. He then explored spatial and temporal variations in soil utilization by a variety of species, recording visitation rates to geophagic sites, activity times, and sex differences. Finally, based on analysis of the soil content and geochemical properties of animal dung, he demonstrated that i) herbivores are able to assimilate minerals from ingested soils, and ii) parasitic egg loads are reduced through geophagy. These findings demonstrate that soil ingestion proffers benefits to herbivores that outweigh costs such as tooth wear and gut impaction, creating new opportunities for understanding macroevolutionary trends in herbivore tooth and gut morphology, and their ecological interactions with the environment.

Promoter: Prof D Codron

Co-Promoter: Prof WA van der Westhuizen

KAMDEM, Michel Mathurin

Michel Mathurin Kamdem was born on the 11th of February 1987 in Babong in the Loum Subdivision of Cameroon. He received his secondary education in Ngaoundere, where in 2000, he matriculated at the "Lycée Classique et Moderne de Ngaoundéré" and later obtained a Baccalauréat de l'enseignement sécondaire in mathematics and earth and life sciences. At the University of Ngaoundéré he graduated with a Bachelor's Degree in Science and a Masters in Ecology (with distinction) in 2011 and 2015, respectively. In early 2018, he moved to South Africa to take up a PhD position in Environmental Toxicology in the Department of Zoology and Entomology at the University of the Free State (QwaQwa campus).

With his thesis titled: **DNA BARCODING INVESTIGATION OF SOUTH AFRICAN HOVERFLY SPECIES AND THEIR USE IN ENVIRONMENTAL TOXICOLOGY,** DNA barcoding to ascertain the taxonomy and diversity of hoverfly species (Diptera: Syrphidae) from the eastern Free State, South Africa. He further assessed larval requirements for mass rearing of the widely distributed hoverfly species Eristalis tenax and examined its survival and biomarker responses after exposure to the agrochemical imidacloprid. The occurrence of 15 hoverfly species from 9 genera was confirmed in the study area. Using simple and affordable methods, the candidate optimised ways for field larval collection and mass rearing of E. tenax, thereby providing useful information for the captive breeding of this cosmopolitan pollinator. Imidacloprid was found to be highly toxic to E. tenax, hampering its larval development and causing both neurotoxic and oxidative stresses. Although banned in



Europe and North America, imidacloprid, which is still commercially available in South Africa, is a threat to hoverflies and other pollinators.

Promoter: Dr P Voua Otomo

SWANEPOEL, Pieter Johannes

Pieter Johannes Swanepoel was born in Bloemfontein on 10 March 1990. He received his secondary education in Zastron, where he matriculated at the Hoërskool Zastron in 2008. He obtained the degree B.Sc. Zoology in 2011, B.Sc. Zoology Hons in 2012 and the degree M.Sc. Zoology with distinction in 2015 at the University of the Free State. In 2016, he was appointed as an Aquaculture Specialist in the Free State Department of Agriculture and Rural Development, working at the Aquaculture Technology Demonstration Centre, Gariepdam where he conducts research in the fields of inland fisheries and aquaculture.

With his thesis titled, ASSESSING SMALL-SCALE FISHERIES POTENTIAL OF GARIEP DAM, SOUTH AFRICA'S LARGEST IMPOUNDMENT, the candidate contributes towards the development of inland fisheries in South Africa in light of the recent approval of the National Freshwater (Inland) Wild Capture Fisheries Policy. Using a multifaceted approach, subsistence and recreational fisheries at Gariep Dam were quantified and described. The relative abundance, population structure, biology and ecology of potential fisheries species, with a specific focus on the sharptooth catfish, were investigated in order to set sustainable harvesting levels for the fishery species in Gariep Dam. The effectiveness and suitability of different gear types for use in inland fisheries were investigated, while economic models were proposed and tested to ensure the economic viability of small-scale fisheries. The study concluded with the development of a detailed small-scale fisheries management plan for Gariep Dam, a first for an impoundment in the Orange Vaal River System.

Promoter: Dr LM Barkhuizen

Co-Promoters: Prof LL van As, Dr B Ellender

FACULTY OF THEOLOGY AND RELIGION



DEAN | PROF RS LETŠOSA

CERTIFICATES

HIGHER CERTIFICATE IN **THEOLOGY**

DLAMINI, Nkosingiphile Samukeliswe

DYOLOANE, Abulela Jill

GASA, Nkosinathi Melusi

LEBUSHO, Boitumelo Promise

LUWI, Ashley Soletu

MATSHOBA, Sihle

MOAGI, Tokelo Dawn

NKOSI. Philile Zama

NYAMBI, Shirley Zinhle

ZULU, Siyabonga Mphathiwezwe

BACHELOR'S DEGREES

BACHELOR OF DIVINITY

GALANT, Angelo Cavin KHULU, Thandeka Zandile

DIPLOMAS

ADVANCED DIPLOMA IN **THEOLOGY**

DUMA, Matsietso Josephine TAKANG, Tshiamo Ronald*

HONOURS DEGREES

BACHELOR OF THEOLOGY **HONOURS WITH SPECIALISATION IN RELIGION STUDIES**

MOTAUNG, Sejake Petrus*

MASTER'S DEGREES

MASTER OF ARTS IN BIBLE **TRANSLATION**

DIRADITSILE, Pholoso Victor LEFEBO, Mulugeta Hailu



FACULTY OF THEOLOGY AND RELIGION

DOCTORAL DEGREES

DOCTOR OF PHILOSOPHY WITH SPECIALISATION IN MISSIOLOGY

BADE, Bakande Michee

Michée was born in Man, Côte d'Ivoire (Ivory Coast) on 19 January 1971. He obtained his GED from Griggs University in 1992, a BA Theology from Andrews University in 2001 and a MA Theology in Missiology in 2015 with merit from the University of the Free State. Michée is an ordained minister of the Seventh-day Adventist Church and has worked as district pastor, associate chaplain, departmental director in Ivory Coast and Burkina Faso from 1996 to 2005. He worked in North-East Benin for 10 years as a church planter and he is currently serving in the Maghreb.

With his thesis titled, THE CONTRIBUTION OF PAUL HIEBERT TO FOLK RELIGION: A MISSIOLOGICAL STUDY AMONG THE DENDIS OF NORTH-EAST BENIN, the candidate examined key missiological insights of well-known missiologist and anthropologist, Paul Hiebert, and applied them to the folk religion of the Dendis of North-East Benin. Suggesting that early attempts at mission to folk Islam were mostly dialectic with very little success, the candidate gave a special attention to Paul Hibert's concepts of the "excluded middle" and three-tiered view of the universe. With a descriptive and evaluative approach, the candidate combined literature study with ethnographic study among the Dendis. The candidate's qualitative analysis of the field work with Atlasti.9 led to a specific set of innovative recommendations for missional efforts to the Dendi people of Northeast Benin. According to the candidate's conclusions, life crises or special events in the life of the Dendi people call for radical shifts or paradigm shifts, and a mission strategy that focuses on their felt needs would be most efficient.

Promoter: Prof P Verster

DOCTOR OF THEOLOGY WITH SPECIALISATION IN SPIRITUALITY

VAN WYK, Carel Petrus

Carel van Wyk was born in Keimoes, North-Western Cape province, on 8 June 1957. He received his secondary education in Keimoes, where he matriculated at the Keimoes High School in 1975. He obtained the degree BA (Admissie) in 1979 at the University of the Free State, the degree BTh in 1982 at the University of Stellenbosch, the Diploma of Theology in 1983 at the University of Stellenbosch, and the MTh degree with distinction in 2017 at the University of the Free State.

With his thesis titled: **DIE MIGRASIE VAN TRADISIONELE GODSDIENSBEOEFENING NA SPIRITUALITEIT: BEDIENINGS-PRAKTYKE AAN POST-KERKLIKES** (The migration from traditional religious practice to spirituality: Ministries to post-ecclesiastics), the candidate indicates that Mainline Christian Churches in the Western world experience a decline in membership numbers and attendance of public worship services. In a world where globalisation, postmodernism, secularisation, and The Fourth Industrial Revolution excessively influence people, alienation from themselves, their fellow human beings, and the Deity occurs. Simultaneously, however, there is a growth and interest in the concept of spirituality, especially among the Millennial and Generation Z generations. The study design was conducted from a practical theological orientation, engaging with and reflecting on important new empirical research perspectives from different contexts. The thesis is an attempt to revisit Christian spirituality, mysticism, and spiritual disciplines, and to suggest possible ministries for post-ecclesiastics. The thesis wants to offer direction to searching people in disruptive times, and to suggest possible ministries to church leaders.

Promoter: Prof JA Van den Berg



The Main Procession Graduation Gowns

embroidered with rich diversity

outh Africa, and the Free State in particular, has a long-standing friendship with our neighbouring country, Lesotho.

Through a shared history, we have become co-creators of our futures. For this reason, the UFS decided to incorporate our tradition with that of the Basotho in the design of our Main Procession graduation gowns.

The gowns are inspired by the Seanamarena – the traditional Basotho blanket. The different patterns on the Seanamarena indicate the status one holds in the Basotho nation or reflect the occasion being celebrated. Keeping the Seanamarena pattern in mind, we combined our traditional academic designs with that of the Basotho nation.

YOKE PATTERNS



Yoke pattern for the Chancellor and Vice-Chancellor

This Seanamarena pattern is an interpretation of a design used exclusively for the king and chiefs – which means 'to swear by the king'. This blanket has the highest status of all Basotho blankets.



Yoke pattern for the Chairperson of the Council

This Seanamarena Victorian crest motif appeared after the visit of the Prince of Wales to Lesotho in 1925, which made a profound impression on the local people. Customers refer to this blanket as 'lesiba' – meaning feathers – when buying it.



Yoke pattern for the Vice-Rector

This Seanamarena Poone design symbolises good crops, wealth, and fertility. The Poone is given as a present to honour an important visitor.



Yoke pattern for Registrar

The same Seanamarena Poone design used for the Vice-Rector applies to the Registrar, with some slight design and colour alterations.

The Deans wear gowns made in the colours of the faculties, or others which indicate the office they hold.



CONGRATULATIONS CLASS OF 2022

Congratulations on your graduation! This officially makes you an alumnus of the University of the Free State. We are very proud of your achievements, excited to see what your future holds, and to connect with you in the bright future ahead of you!

KEEPING YOU INFORMED

Alumni are a real measure of a university's brand, and we strive to keep you informed of the latest news, campaigns, events, reunions, and projects emerging from the UFS. Stay connected by keeping an eye on our website, Facebook and LinkedIn pages, and email.

Through us, you are not just staying connected with the UFS, but also with other alumni. Let us connect you with alumni globally and reconnect with former peers.

KEEPING YOU CONNECTED

Not only do we want to keep you connected with what is happening at your alma mater, we want to keep on celebrating you too!

Make sure that you update your details every year in one of the following ways:

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