

ORDER OF PROCEEDINGS

(virtual graduation ceremony)

The Chancellor will constitute the Congregation.

The Vice-Chancellor will welcome the Congregation.

The Chancellor will confer degrees and award diplomas *in absentia*.

Honorary Doctorate **Ms Maria Macdiarmid Ingouville Burton**
Degree of Doctor of Laws, *Honoris Causa*.

Vice-Chancellor's Distinguished Achievement Award
Professor Justin Jonas

Vice-Chancellor's Distinguished Senior Teaching Award
Mr Christopher Upfold

The National Anthem.

The Chancellor will dissolve the Congregation.

INKQUBO

(Uthweso-zidanga lwamajelo asemoyeni)

UNgqonyela umisela iNgqungquthela.

USEkelangqonyela wamkela iNgqungquthela.

UNgqonyela unikezela ngezidanga neediploma kubaninizo
abangekhoyo phambi kwakhe.

UMaria Macdiarmid Ingouville Burton uwongwa ngesiDanga
sobuGqirhalwazi kwezoMthetho, *Honoris Causa.*

INdwe yokuba ngoGqwesileyo ngokuPheleleyo.
Njingalwazi Justin Jonas

IMbasa kaSekelangqonyela yokuba nguMhlohli ogqwesileyo nosele
enamava.
Mnumzana Christopher Upfold

UMhobe weSizwe.

UNgqonyela uvala iNgqungquthela.

VOLGORDE VAN VERRIGTINGE

(*virtuele gradeplegtigheid*)

Die Kanselier sal die vergadering tot orde roep.

Die vise-Kanselier sal die vergadering verwelkom.

Die Kanselier sal grade en diplomas *in absentia* toeken.

Eredoktoraat **Me. Maria Macdiarmid Ingouville Burton**
Doktorsgraad in die Regte, *Honoris Causa*.

Vise-Kansellierstoekenning vir Uitstaande Prestasie
Professor Justin Jonas

Vise-Kanselier se Senior Uitnemende Onderrigtoekenning
Professor Christopher Upfold

Die Volkslied.

Die Kanselier sal die vergadering verdaag.

FACULTY OF PHARMACY

DEGREE OF BACHELOR OF PHARMACY

ADELEKE, Titilayo Deborah
ALLMARK, Shannay Kelsey
ARINEITWE, Charles
BASSA, Azraa
BHAGOO, Imraan Ashraff
BRAMDAW, Nishmita
CHIBANDA, Amanda Panashe, **with distinction**
COHEN, Samuel, **with distinction**
DUBE, Mohau Lucky
DYWILI, Luvo
FLEPU, Tina
FOURIE, Danielle Hope, **with distinction**
FRANCIS, Gladys Mermoritha Gretchen
GOBINAMBA, Lungisa
GOUNDEN, Kaelene
HAFFEJEE, Zahraa Suleman
IPUMBU, Saara Mwatsheka
KAKONO, Chiedza
KANYOWA, Ruvimbo Noreen
KHALA, Sibongile Michael
KHAN, Naseem
KHAN, Zaakirah
KHUMALO, Nosihle
KHUNOU, Kebone Charity Pauline Ekende
KIA-KIA, Zisanda Karen
KING, Carina, **with distinction**
KOLIA, Nabeela Yacoob
KOMO, Nompilo Precious
KOTOLANE, Mpho
KWINDA, Mutshidzi Maria
LANGA, Kgabo Alphina
LOPES, Charlotte
MACLARTY, Natalie Jean, **with distinction**

MADYIWA, Sandra Belinda
MAGER, Nicole Kelk, **with distinction**
MAGUIRE, Kelly Ann
MAHADEO, Shanise
MAHARAJ, Arisna
MAHLANGU, Nonkululeko Pamela
MAHLANZA, Ruvimbo Ruvarashe
MAHLOBO, Nomonde Mbali
MAHOLE, Morobeni Anastacia
MAKEN, Sonal
MAKWARA, Audrey Taonga
MANIDUTT, Shannon
MARANJANA, Zizipho
MARATA, Anthony
MASHABELA, Koketso Fortune
MAVUSO, Ayanda Faith, **with distinction**
MAZIKO, Zandile
MBHELE, Nombulelo Busisiwe
MGUNI, Nobuhle
MHLONGO, Lucky Thabo
MKHIZE, Nomfundo Penelope
MKHOSANA, Londiwe Nana
MKIVA, Odwa
MLAMBO, Mathabo Prisca
MOFOKENG, Tekanyo Lester
MOKHELE, Sipati Yvonne
MOODLEY, Mikashnee
MOODLEY, Riantha
MOOLA, Imraan
MOTALA, Riyaadh
MOTALA, Yunus
MOTSWEGE, Suprise Nhlanhla
MOYO, Lubelihle
MPHAPHULI, Mashudu Theodore
MSIMANG, Asante
MTSHALI, Nokwanda
MTYOBILE, Qaqamba Zama

MUNDALAMO, Denga Ndivho
MUNEMO, Wayne Panashe
MUSHAYAVANHU, Chiedza Juliana Yvette
MUSHIYANA, Zwirera
MUTSAMBA, Micheline Chido
MUZA, Yolanda Ekias
MWALE, Thabiso Pertunia
NAIDOO, Pavesan
NCETANI, Sisanda
NDIMANDE, Nonhlanhla Promise
NENE, Nombali Desiree
NGALEKA, Andile
NGWAWI, Michelle Grace Rutendo
NOMBEKELA, Gift
NUNDLAL, Reshana
NXUMALO, Awakhiwe
NYEMBEZI, Lulama
OKEYO, Sam Juma
ONYEKWULUJE, Chiamaka Mary-Ann
PADAYACHEE, Dhiresh
PANYA, Wanda
PARAG, Yashmika
PARBULALL, Yavini
PERUMAL, Lizzelle
RADEBE, Sinenhlanhla Nelly
RAGHOONANAN, Vishan
RAGHOONANAN, Vishen
RAGHUNANDAN, Nikhail
RAYA, Vuyolwetu
ROHITH, Kiara
RUKWEZA, Kudakwashe Gerald
SEFOKA, Hunadi Lebogang Petunia
SIFUBA, Qhayiya
SIFUBA, Yonela
SIHLANGU, Stanford Sibusiso
SIKHONDZE, Simise Sipehelele
SINGARAM, Priyanka

SINGH, Pyush Keval
SINGH, Shivesh, **with distinction**
SOWETO, Samantha Nontokozo
STONI, Luyanda
TANJIVELU, Chantal
TANJIVELU, Delrease
THENE, Omphile Nthati
TSHEKELA, Inam
VENTER, Ashleigh Kate
VOXEKA, Kuzekwande Mila
WADIWALA, Ameera
WONG, Angeline
ZULU, Sphesihle

FACULTY OF LAW

DEGREE OF BACHELOR OF LAWS

BANDA, Daudi
BASSINGTHWAIGHTE, Kristy
BENTLEY, Stuart
BEZUIDENHOUT, Zandri Elizabeth Adriana
BIRKNER, Ryan Richard
BOTHHA, Nicole
BRABANT, Lauren Ashleigh
BRISTOW, Ashley
CHEKERA, Agnes Chipso
CHIGWEDERE, Samantha Paidamwoyo
CHIGWERE, Charity
CHIKWEZVERO, Candy Tinotenda
CHOKUWENGA, Mugove
CLARK, Matthew Duncan
COERTZE, Clarize
COETZER, Daniel Geoffrey
DE BEER, Jeremy Kenneth, **with distinction**
DLADLA, Thokozani Benedict
DLAMINI, Thandolwakhe

DUBE, Ayanda Nina Rose
FOX, Bryony Elizabeth
GAMA, Senzo Clifford
GAMA, Sifiso Clive
GARDNER, Georgina Louise
GOTO, Tendai Susan
GUNUNDU, Aphiwe
HACKETT, Kelvin Peter
HANJAHANJA, Shalom
HARLEY, Ryan Douglas
HAUSIKU, Cornelia Rokkelin
HEATON, Erika Ingrid
HIBBERT, Shayne Stanley
HLONGWANE, Terry
HOUSTON, Larissa-Jane Hedwige
HWACHA, Matiparuva
JARRETT, Mark David
KAMATI, Ndinela Hilya Fidelita
KUTUKWA, Gamuchirai Sharon
MACINGWANE, Yanga Tandile
MAFA, Tariro
MAHLOBO, Gugulethu Khethiwe
MAKONI, Kudzai Reginald
MAKOWE, Natasha
MALINGA, Zodwa Precious
MATAMBA, Rumbidzai
MATEBESE, Siphosetu, **with distinction**
MATSIMBI, Rhulani Shaun
MATTHEWS, Ian Antony
MBAMBO, Velenkosini Thokozani
MEYER, Ockert
MOERANE, Omphile Kelebogile
MOTSHEPE, Mojalefa Clifton
MOYO, Wisdom Ntandoyenkosi
MPATI, Ludi Sango
MPOFU, Ayanda Nontokozo
MSANE, Andile Nomvelo

MUKHARI, Sbusiso
MURONDA, Natalie Tatenda
MUTSEYEKWA, Matifadza
NCAMA, Silungile Jessica
NCUBE, Natasha
NGORIMA, Geanette Rufaro
NGWILA, Sibusiso Roderick
NKASANA, Nyameka
NKONYANA, Sibuthe
OCHIENG-OMOLO, Daniella Sempeiyo
OUANDJI, Lydia Laure Kuize
PATHER, Micaela Catherine, **with distinction**
PETTY, Candice
PUWAAI, Prosper Anesu
QUINN, Simon Richard
SAUNGWEME, Arnold Simbarashe
SCHAEFER, Marcus Friedrich
SHADI, Amogelang Tsitsana
SHOKO, Kudzaishe Carolyn
SIBANDA, Mbonisi Thembelihle
SINGO, Bertha Hloniphile
SKIRVING, Blake Gordon
SKOSANA, Siyabonga Blessing
SNYDERS, Micaella Kennethea
SOMANDI, Mfundoluntu
STEPHENS, Dylan Roy
STROUD, Christopher, **with distinction**
WEYERS, Ferdinand Terblanche
WHITFIELD, Kyle Lionel
WRIGHT, Bradley Jason
WRIGHT, Nicholas James
ZONDI, Nokwanda Bathabile
ZUNGU, Mthokozisi

FACULTY OF COMMERCE

POSTGRADUATE DIPLOMA IN TAXATION

HO, Dau-Ming
MAZWI, Likho Athule
SHIMANENI, Jones Kollah Shanyengana
TSIKIRA, Joseph Ngoni, **with distinction**

POSTGRADUATE DIPLOMA IN ACCOUNTANCY

AMAKALI, Magdalena
AMALWA, Elizabeth
BANA, Sinovuyo Tandolwethu
BOFFA, Kristin
CHASI, Gershom
CHIKUKWA, Rutendo Shelter
DLAMINI, Sivuyile
GOSA, Sinesipho
HLONGWANE, Philile
JALI, Lucky Freedom
LANGASIKI, Lusanda Amaza
LUSOBO, Yanela
LUZIPHO, Siviwe Koliswa
MANNGO, Idani
MAPOSA, Simbarashe
MGEDEZI, Anita
MKOYO, Anesipo
MOTALANE, Bogosi
MTESHANE, Thabiso Theophilus
MTSHINI, Sisa
NDOU, Tshilidzi
NGEDLE, Andisiwe
NTAPANE, Nico Cwenga
NTSOBOTHU, Philani
PACHAI, Cassandra
PARADZA, Bevlyn Tendai

PETER, Siyolise
PETZER, Michelle Christen
QASHANI, Tabisa
RAUBENHEIMER, Jayden Martin
SEPHELANE, Matseliso Precious
SEWCHARRAN, Mishael Jordan
SHANGE, Thamsanqa Ntandoyenkosi
SINTHUMULE, Londotani
SNYMAN, Justin William
SOKUPA, Ayabulela Ndikumbule
TENDAYI, Anesu Chido
TSAWE, Nkosikhona
TYALI, Siyanda
VAPI, Liyabona
YAWA, Kanyisa

DEGREE OF BACHELOR OF COMMERCE WITH HONOURS

BARNARD, Nicholas Paul, in Economics
CHINGONO, Leslie Panashe, in Information Systems
CHIREMBA, Robin Mutsa Hazvi, in Information Systems
CRICHTON, Stephen James, in Economics
DE JAGER, Christie, in Accounting
DEAN, James Edward, in Economics
FALTENI, Babalwa, in Mathematical Statistics
GUMBO, Danai Davidzo, in Economics
HARPER, Matthew Blayne, in Economics
HIGGS, James, in Information Systems, **with distinction**
HOPA, Busisiwe Sibulele, in Economics, **with distinction**
KANGANGA, Rufaro Joylyn, in Information Systems, **with distinction**
KARSON, Priyal, in Information Systems
KHALANE, Pontso Violet, in Financial Management, **with distinction**
KUBHAYI, Vusi, in Economics
MADHUKU, Tendai Adumbela, in Economics, **with distinction**
MADZIWANYIKA, Thandeka Mudiwa, in Organisational Psychology

MANELI, Sihle, in Management
MAPHALA, Munyadziwa Natasha, in Information Systems
MASWENA, Kaelo, in Financial Management, **with distinction**
MATSHABA, Lebogang, in Information Systems
MBHELE, Vuyokazi, in Information Systems
MBIBA, Nqobani Kudzwaishe, in Economics
MDLETSHE, Halala Nombuso, in Economics
METHULA, Mpumelelo, in Economics
MKOLO, Owethu Eduardo, in Economics
MOGANO, Rakgoadi Precious, in Financial Management
MORALLANE, Tiego Tebele, in Economics
MOSTERT, Anton Cornelius, in Economics
MOTALA, Husain Mahomed, in Financial Management
MOTHOA, Ntina Pheladi, in Financial Management
MPOFU, Mthandazo Mark, in Information Systems
MPOGENG, Lehlogonolo Christina, in Information Systems
MUREVESI, Ivainesu, in Management
MUSONZA, Chaka Junior Munesu, in Information Systems
MUTETWA, Shaloam, in Information Systems
MUZONDO, Wadzanai Lorraine, in Information Systems
NDLOVU, Phumlile Charmaine, in Economics
NHLABATHI, Nande, in Financial Management
NKABINDE, Luthando Luanda Mamane, in Information Systems
NOMPOZOLO, Hlobolwasekhaya Xolela, in Financial Management
PATEL, Nikitha, in Information Systems
RAKOSA, Lebogang Itumeleng, in Economics
RAMAFOKO, Odirile, in Management
RAMALOPE, Thabiso Calvin, in Economics
RAMCHANDRA, Nadia, in Information Systems
RUNYOWA, Simon Simbarashe, in Economics
SAUNDERS, Lwando Myles, in Economics
SIBANDA, Sehlule, in Economics
SITHOLE, Thabiso Kwazi, in Management
SPENCER, Jurie Michael, in Management
TADEPALLY, Sai Adi Swarag, in Economics, **with distinction**
TARR, Dillon, in Economics, **with distinction**
TCHANGOUM, Jeff Britson Tienkeu, in Financial Management

WILLIAMS, Alyssa Shawntay, in Information Systems, **with distinction**

ZENDA, Preside Tivakudzeshe Jojokwaye, in Financial Management

ZWANE, Zamangwe Zanele, in Economics

DEGREE OF BACHELOR OF ECONOMICS WITH HONOURS

FERNANDO JUNIOR, Augusto De Sousa, in Economics

JACK, Siphokazi Buhle, in Economics

KOMU, Lewis Mailu, in Financial Management

MARRINER, James Derek, in Environmental Science

MORAPEDI, Daisy Kutloano, in Economics

SHIKESHO, Gideon Sunny, in Economics

FACULTY OF PHARMACY

DEGREE OF MASTER OF SCIENCE (PHARMACY)

MAKONI, Kudzai Gabriella, BPharm (Rhodes), in Pharmaceutics, in the Faculty of Pharmacy. Degree by thesis. Thesis: Preparation, characterization and optimization of carbamazepine-based pellets prepared by extrusion-spheronization.

MANDA, Arthur, BPharm (Rhodes), in Pharmaceutics, **with distinction**, in the Faculty of Pharmacy. Degree by thesis. Thesis: Application of Quality by Design to the manufacture of a multi-particulate prednisone dosage form.

MUNGOSHI, Fadzai Naomi, BPharm (Rhodes), in Pharmaceutics, in the Faculty of Pharmacy. Degree by thesis. Thesis: The development, manufacture and characterization of tenofovir encapsulated liposomes.

NQOWANA, Thandiswa, BScHons (Rhodes), in Pharmaceutical Chemistry, in the Faculty of Pharmacy. Degree by thesis. Thesis: Science engagement with school learners for microbial quality testing of water in Makhanda.

VUMAZONKE, Sesethu, BSc (UFH), BScHons (UFS), in Pharmaceutical Chemistry, **with distinction**, in the Faculty of Pharmacy. Degree by thesis. Thesis: Environmental effects of pharmaceutical active compounds in freshwater.

DEGREE OF MASTER OF PHARMACY

AGBOR AMBANG, Oscar Mbi, BPharm (Rhodes), in the Faculty of Pharmacy. Degree by thesis. Thesis: Knowledge paradigms and their implications for environmental bio-ethics.

MAPFUMO, Charlotte, BPharm (Rhodes), in Pharmacology, in the Faculty of Pharmacy. Degree by thesis. Thesis: A drug utilisation review of lithium at a public sector psychiatric hospital.

MUKOKO, Vimbisai Millicent, BPharm (Rhodes), in Pharmacology, in the Faculty of Pharmacy. Degree by thesis. Thesis: An evaluation of the prescribing and monitoring of clozapine at a public sector psychiatric hospital.

NAIDU, Bavika, BPharm (Rhodes), in Pharmacology, in the Faculty of Pharmacy. Degree by thesis. Thesis: Evaluating the prescribing and management practices of venlafaxine at a public sector psychiatric hospital.

FACULTY OF SCIENCE

DEGREE OF MASTER OF SCIENCE

ANDERSON, Maurice Bruce, BScHons (Rhodes), in Botany, in the Department of Botany. Degree by thesis. Thesis: Growth and photosynthetic responses of Acacia seedlings to atmospheric CO₂ increased from glacial to current concentrations: Underlying mechanisms and ecological implications.

ARKERT, Nicola Kate, BScHons (Rhodes), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Evaluating the effects of catch-and-release angling on *Argyrosomus japonicus* in South African estuaries.

BAROZI, Victor, BScHons (Uganda), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Understanding of the underlying resistance mechanism of the Kat-G protein against isoniazid in *Mycobacterium tuberculosis* using bioinformatics approaches.

BASO, Nompumelelo Catherine, BScHons (Rhodes), in Botany, **with distinction**, in the Department of Botany. Degree by thesis. Thesis: The effects of elevated atmospheric CO₂ on the biological control of invasive aquatic weeds in South Africa.

BAYE, Bertha Cinthia, BSc (Limpopo), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Identification of SANCDDB Compounds against G2019S and I2020T variants of Leucine-rich repeat kinase 2 (LRRK2) for the development of drugs against Parkinson's disease.

BENNETT, Chloe Kayla, BAHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: The workload of flight attendants during short-haul flight operations: A Systems analysis.

BENNETT, Cleo Taylor, BAHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: System analysis of the workload of pilots and co-pilots executing short-haul flight operations.

BOKOSI, Fostino Raphael Bentry, BEdSci (Malawi), BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Synthesis and in vitro biological evaluation of 2,3-substituted Quinoline derivatives.

CALLOW, Gavin, BAHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: An explorative study of Makana Local Football Association Coaches' characteristics, experiences and needs.

CARLISLE, Tayna-Leigh, BScHons (Rhodes), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Molecular simulations of potential agents and targets of Alzheimer's disease.

CHEGE, James Kariuki, BSc (Kenya), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: A 150 MHz all sky survey with the Precision Array to probe the epoch of reionization.

CHINDEKA, Tapiwa Chrispina, BScHons (Rhodes), in Computer Science, in the Department of Computer Science. Degree by thesis. Thesis: An investigation into the readiness of open source software to build a telco cloud for virtualising network functions.

COBBING, Kathleen Margaret, BScHons, PGCES (Rhodes), in Physics, **with distinction**, in the Department of Physics and Electronics. Degree by thesis. Thesis: A study of why some physics concepts in the South African physical sciences curriculum are poorly understood in order to develop a targeted action-research intervention for Newton's second law.

DE BEER, Ashley Clifford, BScHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: The effect of age and maturation on anthropometric characteristics and physical abilities of young South African footballers.

DENDERA, Washington, BScHons (Zimbabwe), in Bioinformatics, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Generation of a virtual library of terpenes using graph theory, and its application in exploration of the mechanisms of terpene biosynthesis.

DEVONPORT, Robin Sean, BScHons (Rhodes), in Computer Science, **with distinction**, in the Department of Computer Science. Degree by thesis. Thesis: An investigation into the application of distributed endpoint processing to 3D immersive audio rendering.

FLAX, Lili Marie, BPharm (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Investigating the relationship between heat shock proteins and HIV transactivator of transcription.

GCAKASI, Lulama Nontsikelelo, BScHons (Rhodes), in Mathematical Statistics, in the Department of Statistics. Degree by thesis. Thesis: Default in payment, an application of statistical learning techniques.

HENDRICKS, Wadeegh, BComHons (UCT), in Computer Science, in the Department of Computer Science. Degree by coursework and thesis. Thesis: An Analysis of Internet Background Radiation within an African IPv4 Block.

HERD-HOARE, Sean Edward, BScHons (Rhodes), in Geography, in the Department of Geography. Degree by thesis. Thesis: Seasonal trends of rainfall intensity, ground cover and sediment dynamics in the Little Pot River and Gqukunqa River catchments, South Africa.

HILL, Kyle Baridon, BScHons (Rhodes), in Information Systems, in the Department of Information Systems. Degree by thesis. Thesis: The determination of whether a Unified Communication System can be effective in supporting informal communication and collaboration in virtual teams.

HOLM, Nathan Christopher, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Analysis of the regulation of HSP90 α expression upon differentiation of C2C12 cells.

JAMES, Katherine Margaret Frances, BScHons (Rhodes), in Computer Science, **with distinction**, in the Department of Computer Science.

Degree by thesis. Thesis: Technology in conservation: drone control of alien invasive plant species.

JARVIE, Rachel Anne, BScHons (Rhodes), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Unravelling the replication biology of Providence virus in a cell culture-based model system.

JOJI, Luxolo, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Molecular Simulations of Potential Agents and Targets of Alzheimer's disease.

KANKOMBA, Nkulu Robert, BScHons (DRC), in Exploration Geology, in the Department of Geology. Degree by coursework and thesis. Thesis: Petrographic and geochemical characterisation of the hangingwall and the footwall rocks (the Dipeta and R.A.T. stratigraphic units) of the Kinsevere and Nambulwa copper ore deposits of the Lufilian Arc, southern Democratic Republic of Congo.

KHAMBULE, Nondumiso Venessia, BScHons (UFS), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Orchid mycorrhizal and endophytic fungal diversity of three co-occurring terrestrial orchids in the large African genus *Disa* (Orchidaceae).

LEBECHI, Augustus Kelechi, BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: BODIPY dyes for application in the photo-oxidation of pollutants, photodynamic antimicrobial chemotherapy, and nonlinear optics.

MAGADLA, Aviwe, BScHons (WSU), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Effect of nature of nanoparticles on the photophysicochemical properties and photodynamic antimicrobial chemotherapy of phthalocyanines.

MAGENGELELE, Nwabisa Laurencia, BScHons (UFH), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: An initial investigation into biological control options for *Schinus terebinthifolia* in South Africa.

MAGWENZI, Tinashe, BEngHons (Malaysia Multimedia University), in Computer Science, in the Department of Computer Science. Degree by thesis. Thesis: Building a flexible and inexpensive multi-layer switch for software-defined networks.

MAINA, Eric Kamau, BSc (Kenya), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: A Bayesian approach to tilted-ring modelling of galaxies.

MASUDI, Wiya Leon, BScHons (DRC), in Environmental Biotechnology, in the Institute for Environmental Biotechnology. Degree by thesis. Thesis: Towards the development of a bio-fertiliser using mixed liquor from high rate algal oxidation ponds.

MATHIBE, Brian Nkanyiso, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Production, purification and characterization of a multifunctional, thermostable and acido/alkaline stable putative xylanase from the psychrotrophic bacterium, *Sphingomonas aerolata*.

MATOMELA, Nonjabulo Happy, BScHons, in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Assessing community structure and trophic interrelationships in three differently impacted headwater streams in the Amathole-Winterberg ecoregion

MAZENGERA, Hassan, BScHons (Zimbabwe), in Mathematical Statistics, in the Department of Statistics. Degree by coursework and thesis. Thesis: Stochastic models in finance.

MAZUNGULA, Daniel Nkosinathi, BSc (UFH), BScHons (Rhodes), in Ichthyology, **with distinction**, in the Department of Ichthyology and

Fisheries Science. Degree by thesis. Thesis: Taxonomic revision of the Natal mountain catfish, *Amphillius natalensis* (Siluriformes, Amphiliidae) in southern Africa.

MCEWAN, Kayla, BScHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: Get sleep or get stumped: sleep behaviour in elite South African cricket players during competition.

MMETHI, Mpho Audrey, BScHons (Limpopo), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: An assessment of temporal changes in selective biological characteristics of chokka squid (*Loligo reynaudii* D'Orbigny, 1845)

MTSHARE, Thanduxolo Elihle, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Exploring of quinolinyl-thiazolidinedione hybrid compounds as potential anti-tubercular agents.

MUNGWARIRI, Clemence Tafadzwa, BScHons (UCT), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: Observations of diffuse radio emission in the Perseus galaxy cluster.

MURONZI, Tendai, BScHons (Zimbabwe), in Bioinformatics, **with distinction**, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Cyclooxygenase-1 as an anti-stroke target: Potential inhibitor identification and non-synonymous single nucleotide polymorphism analysis.

MUTIZWA, Tadiwa Isaac, BScHons (Zimbabwe), in Ichthyology, **with distinction**, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Molecular and morphological approaches reveal hidden diversity in the genus *Hippopotamyrus pappernheim*, 1906 (Teleostei: Mormyridae) in southern Africa.

MWANANGOMBE, Collette Habani, BScHons (UNISA), in Ichthyology, in the Department of Ichthyology and Fisheries Science.

Degree by thesis. Thesis: Effectiveness of the closed season in protecting chokka squid, *Loligo reynaudii* D'Orbigny, 1845 off South Africa, investigated by using age distribution data.

MYBURGH, Talon, BScHons (Rhodes), in Physics & Electronics, **with distinction**, in the Department of Physics and Electronics. Degree by thesis. Thesis: Finite precision arithmetic in polyphase filterbank implementations.

NENE, Lindokuhle Cindy, BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Photo-physicochemical characterization and in vitro photodynamic therapy activity of phthalocyanine-graphene quantum dots conjugates.

NGQINAMBI, Akhona, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: The influence of the integration of local knowledge on Grade 8/9 learners' attitudes towards science.

NKHAHLE, Reitumetse Precious, BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Symmetry and asymmetry in electrocatalysis: Enhancing the electrocatalytic activity of phthalocyanines through synergy with doped graphene quantum dots.

OKAFOR, Nnamdi Ikemefuna, BScHons (Nigeria), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Formulation and evaluation of liposomal films for buccal delivery of antiretroviral drugs.

ONGERS, Grant Tyron, in Computer Science, in the Department of Computer Science. Degree by coursework and thesis. Thesis: Securing software development using developer access control.

PEARSON, Deon Turner, BScHons (Rhodes), in Computer Science, **with distinction**, in the Department of Computer Science. Degree by

thesis. Thesis: An evaluation of the overlap between open source threat intelligence and active internet background radiation.

PIENAAR, Robert Daniel, BScHons (Rhodes), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Understanding the role of pioneer plant species in the development of microbiomes in sub-Antarctic ecosystems.

RAMAILA, Athanaseus Johannes Tishetso, BScHons (UFS), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: A practical survey of novel and legacy radio interferometry imaging algorithms and packages.

REDELINGHUYS, Suzanne, BScHons (Rhodes), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Temporal variability in microplastics and consumption by selected filter feeders along the Eastern Cape coastline of South Africa.

REID, Megan Kim, BScHons (Rhodes), in Entomology, **with distinction**, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Initiating biological control for *Nymphaea mexicana* Zuccarini (Nymphaeaceae) in South Africa.

SCHMIDTKE, Nadia Jasmine, BAHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: A comparison between the responsiveness of selected physiological and subjective mental workload indicators during real-world driving scenarios.

SIBELO, Linda, BScHons (Zimbabwe), in Environmental Biotechnology, in the Institute for Environmental Biotechnology. Degree by thesis. Thesis: Nutrient removal and biofuel potential of MaB-floc biomass from an integrated algal pond system treating domestic sewage.

SICHONE, Gift Lingozi, MEng (Harbin Institute of Technology), in Physics, in the Department of Physics and Electronics. Degree by

thesis. Thesis: Observations of diffuse radio emission in the galaxy cluster Abell 773.

SIFUNDZA, Delsy Sindy, BScHons (Rhodes), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Distribution, habitat associations and conservation of the Eastern Cape rocky *Sandelia bainsii* (Perciformes: Anabantidae) in the Great Fish River system.

SILBERNAGL, Ryan, BScHons (Rhodes), in Geography, in the Department of Geography. Degree by thesis. Thesis: An assessment of the effectiveness of the Crossways Farm Village constructed wetlands in the treatment of domestic wastewater.

SKEELES, Michael Richard, BScHons (Rhodes), in Fisheries Science, **with distinction**, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Towards understanding the effects of exploitation on the wild energetic response of marine fish to temperature variability.

SNYMAN, Gareth Wayne, BScHons (Rhodes), in Geography, in the Department of Geography. Degree by thesis. Thesis: An investigation into the fire regimes of the upper Tsitsa River catchment.

SOMANA, Zinzi Sinazo, BScHons (WSU), in Zoology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Combining DNA barcoding and morphology to identify larval fishes from the nearshore environment off the south-east coast of South Africa.

SORO, Ali, BScHons (Côte d'Ivoire), in Exploration Geology, in the Department of Geology. Degree by coursework and thesis. Thesis: The role of northwest striking structures in controlling high-grade ore shoots at the Syama Gold Mine, Mali, West Africa.

TLAKEDI, Thato, BSc (UKZN), BScHons (Rhodes), in Fisheries Science, in the Department of Ichthyology and Fisheries Science.

Degree by thesis. Thesis: The effect of alginate supplementation on the growth, feed utilization, digestive enzyme activity levels, and intestinal morphology of juvenile South African abalone (*Haliotis midae*) fed formulated feeds.

TRICAM, Shayla, BScHons (NMU), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: A social-ecological investigation into urban domestic gardens and avifauna in medium-sized towns in the Eastern Cape, South Africa.

UPFOLD, Jennifer Kate, BScHons (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Sexual attraction and mating compatibility between *Thaumatotibia leucotreta* populations and implications for semiochemical dependent technologies.

VAN STEENDEREN, Clarke Julian Mignon, BScHons (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: A genetic analysis of the species and intraspecific lineages of *Dactylopius costa* (Hemiptera: Dactylopiidae).

VAN WYK, Angus John, BScHons (Rhodes), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Evaluation of Baited Remote Underwater Video Systems (BRUVS) for monitoring fish communities in Lake Malawi/Niassa.

VAN ZEEVENTER, Ryan Matthew, BSc (UJ), BScHons (Rhodes), in Zoology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: The taxonomy of the Topminnows (Teleostei: Cyprinodontiformes) (Procatopodidae: Procatopodinae) of Southern Africa.

VEMBO, Glen Muchengeti, BScHons (Zimbabwe), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Livelihood implications of a possible RAMSAR declaration in the Swartkops estuary, Eastern Cape, South Africa.

WEBBER, Judith Tracy, BSc (Rhodes), BScHons (UP), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Development of a protocol for extracting and quantifying the concentration of thiafentanil in Blesbok (*Damaliscus pygargus phillipsi*) matrices 72-74 hours post administration.

WOOLF, Gregory Jay, BScHons (Rhodes), in Bioinformatics, **with distinction**, in the Department of Biochemistry and Microbiology. Degree by coursework and thesis. Thesis: Identification of inhibitory compounds against survivin protein a contributor of cancer proliferation.

FACULTY OF PHARMACY

DEGREE OF DOCTOR OF PHARMACY

WANG, Ya-Ying

DEGREE OF DOCTOR OF PHILOSOPHY

CHIKUKWA, Mellisa Tafadzwa Ruramai, MSP (Rhodes), in Pharmacy, in the Faculty of Pharmacy. Degree by thesis. Thesis: Formulation and characterization of a combin captopril and hydrochlorothiazide microparticulate dosage form. Supervisor: Professor SM Khamanga. Co-supervisor: Professor RB Walker.

RATH, Seeprarani, BPharm, MPharm (India), in Pharmacy, in the Faculty of Pharmacy. Degree by thesis. Thesis: Application of In Vitro Release Testing (IVRT) and dermatopharmacokinetic methods to assess the bioequivalence of topical drug products. Supervisor: Professor I Kanfer.

WITIKA, Bwalya Angel, MSP (Rhodes), in Pharmacy, in the Faculty of Pharmacy. Degree by thesis. Thesis: Formulation development, manufacture and evaluation of a lamivudine-zidovudine nano co-crystal

thermo-responsive suspension. Supervisor: Professor RB Walker. Co-supervisor: Dr V Smith.

FACULTY OF LAW

DEGREE OF DOCTOR OF PHILOSOPHY

CHIGOWE, Lloyd Tonderai, LL.M (Rhodes), in Law, in the Faculty of Law. Degree by thesis. Thesis: The Malabo Protocol and the principle of complementarity: towards establishing a complementarity regime governing the relationship between regional and international criminal courts. Supervisor: Professor L Juma.

What is graduation?

Graduation is a time of enormous celebration for students and their families. It is a time to revel in a sense of achievement, to take photographs and store memories, to applaud and, of course, to dress up with the dignity that the ceremony deserves.

Graduating students traditionally wear an academic gown that marks them as 'special' and different to others attending the ceremonies. They walk across the stage, kneel before the Chancellor, who then taps them on the head with a ceremonial hat, before proceeding to the Registrar who 'hoods' them according to the degree they have earned.

For many attending the graduation ceremonies, a key question is what all this ceremony and procedure, much of which originated in Europe hundreds of years ago, actually mean in contemporary South Africa. One way to answer this question is to focus on the graduates themselves. As students walk across the stage today, they are not the same people they were who enrolled in the University three, four or more years ago. If the University has done its job well, they are completely different people.

The graduate looks at the world with an entirely different set of eyes. They now look for evidence for what is stated and to contest anything that does not appear to them to be valid or fair on the basis of the evidence presented.

At a university like Rhodes, graduates have also been trained to look through the lenses of theory. Theory is exactly like the lenses in a pair of spectacles. It allows us to see things we would not see without the spectacles, or to see things differently. Because theory allows us to see things we would not normally see, it allows us to imagine a world which does not yet exist, a world transformed from the one we currently inhabit. These are valuable attributes in the workplace and this is why graduates are highly sought after. They are especially important, however, in a fledgling democracy like ours.

As graduates walk across the stage today and participate in rituals which do not have their roots in African soil, one way to understand the proceedings is to see them as signifying an identity shift. Much as the way young men in some cultures, for example, may wear new clothes after an initiation ceremony, the wearing of an academic gown symbolises a shift in who the graduates have become. This shift is recognised by the Chancellor who taps them on the head and by the Registrar who places the hood over their shoulders. The Deans, academics, together with the entire University community, look on - celebrating and acknowledging our students' achievements.

Enjoy the ceremony today, but, more importantly, remember its significance in the lives of our young graduates and, indeed, in the history of our country.

Amended: A contribution by Dr Chrissie Boughey – Deputy Vice Chancellor Academic and Student Affairs - Rhodes University.

Yintoni uthweso-zidanga?

Uthweso-zidanga lixesha lobhiyozo elikhulu kubafundi neentsapho zabo. Lixesha lokugcoloda nokuchulumancela impumelelo, ukuthatha imifanekiso nokugcina iinkumbulo, ukuqhwabela izandla, yaye ngokuqinisekileyo, lixesha lokunxiba ngesizotha esifanele lo mnyhadala.

Kulisiko ukuba abafundi abathweswa izidanga banxibe izidanga zabo ezibaphawula ‘njengabakhethekileyo’ nabohlukileyo kwabanye abantu abazimase umnyhadala. Bahamba eqongeni, baguqe phambi kweNgqonyela, iye ibathwese indwe, phambi kokuba badlulele kuMabhalane-jikelele weYunivesithi oye ‘abafake umxwayo’, ohambelana nesidanga abasithwesiweyo.

Kuninzi lwabo bazimase iminyhadala yothweso-zidanga, umbuzo ophambili ngowokuba lo mnyhadala, inkoliso yawo esusela eYurophu kumakhulu ngamakhulu eminyaka eyadlulayo, ingaba uthetha ntoni kuMzantsi Afrika wale mihla. Enye indlela yokuphendula lo mbuzo kukugxila kwabathweswa izidanga. Njengoko abafundi behamba kwiqonga namhlanje, abasengabo aba bantu babengabo mhla babebhalisela ukufunda kule Yunivesithi kwiminyaka emithathu, emine okanye engaphezulu eyadlulayo. Ukuba iYunivesithi iwenze ngokuphume izandla umsebenzi wayo, bangabantu abohlukileyo kwaphela.

Lowo uthweswa isidanga ulibona ihlabathi ngamehlo ohlukileyo. Ngoku ukhangelela ubungqina boko kuthethwayo aze aphikise nayiphi na into ebonakala ingenasihlahla kuye okanye enetyheneba ngokuphathelele kubungqina obunikezelweyo.

Kwiyunivesithi efana neRhodes, abo bathweswa izidanga bakwaqeqeshwe ukuba bajonge izinto ngamehlo enkcazo-bungcali(theory). Inkcazo-bungcali ifana nqwa neelensi kwiintanyongo. Isinceda ukuba sibone izinto ebesingenakho ukukwazi ukuzibona ngaphandle kweentanyongo, okanye sibone izinto ngendlela eyahlukileyo. Kuba inkcazo-bungcali isincedisa ukuba sibone izinto ebesingenakho ukukwazi ukuzibona, isinceda ukuba sibe nomfanekiso-ngqondweni wehlabathi elingekabikho, ihlabathi eliguquke kakhulu kwelo siphila kulo ngoku. Ezi zizidingo ezixabisekileyo kwindawo yokuxelengela yaye kungoko abo bathweswa izidanga belangazelelwa. Babaluleke ngokukhethekileyo, ingakumbi kulawulo lwentando yesininzi efana neyethu esakhulayo.

Njengoko abo bathweswa izidanga behamba kwiqonga namhlanje yaye bethatha inxaxheba kwizithethe ezingenangcambu ezikumhlaba waseAfrika, enye yeendlela zokubona ukuqhutywa kwalo mnyhadala kukubonisa inguqu ngokobuni. Oku kuyafana nokuba kwezinye iinkcubeko, umzekelo, amatyendyana anganxiba iimpahla ezintsha emva kolwaluko. Ukunxitywa kwesidanga kuphawula inguqu ekubeni lowo uthweswa isidanga uye abe ngubani na. Le nguqu iye iqinisekiswe yiNgqonyela eye ibabethe entloko noMabhala-jikelele weYunivesithi oye abaxakathise. Iintloko zamasebe, iimfundimanekunye nalo lonke uluntu lweYunivesithi, bayabukela – bebhiyozela bekwaqaphela impumelelo yabafundi bethu.

Yonwabela umnyhadala namhlanje, kodwa ngokubaluleke ngakumbi, khumbula ukubaluleka kwawo kumlisela nomthinjana wethu othweswa izidanga, yaye nangokwenene, ukubaluleka kwawo kwimbali yelizwe lethu.

Ilungiselelwe nguNjingalwazi uChrissie Boughey – Owayesakuba nguSekela Ngqonyela weMicimbi yezeMfundo neyaBafundi – eRhodes University.

Wat is 'n gradeplegtigheid?

'n Gradeplegtigheid is 'n tyd van feesvieringe vir studente en hulle families. Dit is 'n tyd waarin prestasie gevier, foto's geneem en herinneringe gemaak word. Dis 'n tyd vir applous en natuurlik om aan te trek na gelang van die waardigheid wat die seremonie verdien.

Studente wat gradueer dra tradisioneel 'n akademiese toga wat hulle uitwys as 'spesiaal' en anders as ander mense wat die seremonie bywoon. Hulle loop oor die verhoog, kniel voor die Kanselier, wat hulle dan met 'n seremoniële hoed op die kop tik voor hulle aanbeweeg na die Registrateur wat vir hulle 'n 'kap opsit' volgens die graad wat hulle verwerf het.

Vir baie mense wat die gradeplegtigheid bywoon, is daar 'n sleutelvraag rondom wat al hierdie seremonie en prosedures, waarvan die oorsprong honderde jare gelede meerendeels in Europa ontstaan het, in kontemporêre Suid-Afrika sou beteken. Een manier om die vraag te beantwoord is om te fokus op die gegradueerde self. Soos studente vandag oor die verhoog stap, is hulle nie dieselfde mense wat drie of vier jaar gelede by die Universiteit ingeskryf het nie. As die Universiteit hulle werk goed gedoen het, is hulle geheel en al ander mense.

Die gegradueerde kyk met 'n nuwe paar oë na die wêreld. Hulle soek nou vir bewyse vir dit wat gestel word en bestry enige iets wat nie vir hulle geldig of regverdigbaar is volgens die bewyse wat aangebied word nie.

By 'n universiteit soos Rhodes, is gegradueerdes ook opgelei om deur die lens van teorie te kyk. Teorie werk presies soos die lense van 'n bril. Dit skep die geleentheid om dinge te sien wat ons nie sonder die bril sou kon sien nie; of om dinge anders te sien. Aangesien teorie ons die kans gun om dinge te sien wat ons andersins nie sou kon sien nie, gee dit ons ook die geleentheid om 'n wêreld te verbeeld wat nog nie bestaan nie, 'n wêreld wat getransformeer het van die een waarin ons op die oomblik woon. Dit is waardevolle eienskappe in die werkplek en dit is waarom gegradueerdes gesog is. Hulle is veral belangrik in 'n jong demokrasie soos ons eie.

Soos wat gegradueerdes vandag oor die verhoog stap en deelneem aan rituele wat nie hulle wortels in Afrika-grond het nie, is een manier om hierdie verrigtinge te begryp om dit te sien as 'n verskuiwing in identiteit. Op dieselfde manier waarop jong mans in sommige kulture nuwe klere ná 'n inisiasie-seremonie sou dra, simboliseer die dra van 'n toga 'n verskuiwing in die persoon wat die gegradueerde nou geword het. Hierdie verskuiwing word erken deur die Kanselier wat hulle op die kop tik en die Registrateur wat die kap oor hulle skouers plaas. Die Dekane en akademici, saam met die hele Universiteitsgemeenskap, aanskou dit – ter viering en erkenning van ons studente se prestasies.

Geniet vandag se seremonie, maar – belangriker nog – erken die uitsonderlike belang daarvan in die lewens van ons jong gegradueerdes en, inderdaad, in die geskiedenis van ons land.

Gewysig: 'n Bydra deur Emeritus Professor Chrissie Boughey – Voormalige Adjunk Visiekanselier van Akademie- en Studentesake – Rhodes Universiteit.