

ORDER OF PROCEEDINGS

(virtual graduation ceremony)

The Chancellor will constitute the Congregation.

The Vice-Chancellor will welcome the Congregation.

The Chancellor will confer degrees *in absentia*.

Honorary Doctorate **Dr Phumzile Mlambo-Ngcuka**
Degree of Doctor of Laws, *Honoris Causa*.

The National Anthem.

The Chancellor will dissolve the Congregation.

INKQUBO

(Uthweso-zidanga lwamajelo asemoyeni)

UNgqonyela umisela iNgqungquthela.

USEkelangqonyela wamkela iNgqungquthela.

UNgqonyela unikezela ngezidanga kubaninizo *abangekhoyo* phambi kwakhe.

UGqr Phumzile Mlambo-Ngcuka uwongwa ngesiDanga sobuGqirhalwazi kwezoMthetho, *Honoris Causa*.

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 *in absentia* toeken.

Eredoktoraat **Dr. Phumzile Mlambo-Ngcuka**
Doktorsgraad in die Regte, *Honoris Causa*.

Die Volkslied.

Die Kanselier sal die vergadering verdaag.

FACULTY OF PHARMACY

DEGREE OF MASTER OF SCIENCE (PHARMACY)

MANDAVA, Tavonga Tyomai, BPharm (Rhodes), in Pharmaceutics, **with distinction**, in the Faculty of Pharmacy. Degree by thesis. Thesis: Development and assessment of a fixed dose combination of perindopril arginine and indapamide loaded microparticles.

FACULTY OF COMMERCE

DEGREE OF MASTER OF BUSINESS ADMINISTRATION

HAMUSONDE, Collins, BBA (West Coast Institute), in Business Administration, in the Rhodes Business School. Degree by coursework and thesis. Thesis: The effect of technology acceptance model and trust on online banking in Zambia.

KING, Matthew Sebastian, BSocSci (Rhodes), PG Dip (Enterprise Management) (Rhodes), in Business Administration, in the Rhodes Business School. Degree by coursework and thesis. Thesis: An Archetypal Analysis of CEOs in the Mining Sector According to their Remuneration and Company Performance: A Resource-Based View.

LEBUSA, Libuseng Mampolokeng Emelia, BEd (NUL), PG Dip (Bus Admin) (UFS), in Business Administration, in the Rhodes Business School. Degree by coursework and thesis. Thesis: How Relational and Strategic Leadership Shape Organizational Culture.

MALILA, Brett Arthur, MA (Rhodes), in Business Administration, in the Rhodes Business School. Degree by coursework and thesis. Thesis: A Critical Analysis of Social Enterprise in Slovenia.

NYAMUJARA, Tinashe, BScHons (Rhodes), in Business Administration, in the Rhodes Business School. Degree by coursework and thesis. Thesis: The role of flexible working in achieving a work-life

balance: A case study of information technology consultants of Kestrel Business Solutions - London, UK.

WHITING, Christopher, BSocSciHons (Rhodes), in Business Administration, in the Rhodes Business School. Degree by coursework and thesis. Thesis: Critical Success Factors in Implementing Projects on Restituted Parcels of Land.

DEGREE OF MASTER OF COMMERCE

ANDANGNUI, Quintabella, BScHons (Rhodes), in Financial Management, **with distinction**, in the Department of Management. Degree by thesis. Thesis: Macro-locational determinants and motives of Chinese FDI in Cameroon.

CHIROMO, Samuel John, MCom (Unisa), in Taxation, in the Department of Accounting. Degree by coursework and thesis. Thesis: A critical analysis of the South African turnover tax system.

CHIZANGA, Tinotenda Tariro, BA, LLB (Rhodes), in Taxation, in the Department of Accounting. Degree by coursework and thesis. Thesis: Tax revolts: an international perspective.

HITCHCOCK, Siobhan Caitlin, BComHons (Rhodes), in Economics, in the Department of Economics and Economic History. Degree by thesis. Thesis: Gender bias in the field of economics: an analysis of South African Academia.

NZIMANDE, Nqobile Sindiswa, BComHons (Rhodes), in Economics, **with distinction**, in the Department of Economics and Economic History. Degree by thesis. Thesis: The political ecological economics of coal mining and water resources: focusing on a participatory economic valuation approach in Carolina, Mpumalanga.

VUZANE, Rolihlahla, BAcc (WSU), PG Dip (Accounting), PG Dip (Tax) (Unisa), BComHons (Rhodes), in Accounting, in the Department of Accounting. Degree by thesis. Thesis: An analysis of carbon tax and

other environmental levies: a South African and international perspective.

WILLIAM, Anna Martha Tandakos, BComHons (Rhodes), in Financial Markets, **with distinction**, in the Department of Economics and Economic History. Degree by coursework and thesis. Thesis: The impact of South Africa monetary policy on output and price stability in Namibia.

FACULTY OF EDUCATION

DEGREE OF MASTER OF EDUCATION

DA SILVA, Juliana Schmidt, BSc (Education) (UFRGS, Brazil), in Environmental Education, in the Department of Education. Degree by thesis. Thesis: Use of eco-art education in supporting the establishment of sustainability competencies in basic education: an interventionist case study.

HAMBAZE, Nozipiwo Abegail, Dip (Algoa College), BEdHons (Rhodes), in Science Education, **with distinction**, in the Department of Education. Degree by thesis. Thesis: Exploring the influence of marine science camps influence on learners' motivation and dispositions towards scientific inquiry.

MAGWENTSHU, Thando, BEdHons (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: Exploring an intervention on the development of model lessons on the phases of the moon that integrate indigenous knowledge in Grade 4.

MTATI, Nosiseko, BScHons (WSU), MSc (Rhodes), in Environmental Education, in the Department of Education. Degree by thesis. Thesis: Towards realising the benefits of citizen participation in environmental monitoring: a case study in an Eastern Cape Natural Resource Management Programme.

MUDAU, Vhutshilo, BEnvSciHons (Venda), in Education, in the Department of Education. Degree by thesis. Thesis: A study on reporting and learning in three natural resource management programmes in South Africa.

SSENNYOMO, Bernard John, BEdHons (Rhodes), in Mathematics Education, **with distinction**, in the Department of Education. Degree by thesis. Thesis: Investigating conceptual teaching of word problems through visualization processes: a case of selected Grade 9 mathematics teachers.

THUPANA, Mabora, BSc (Limpopo), BScHons (Unisa), in Environmental Education, in the Department of Education. Degree by coursework and thesis. Thesis: Entrepreneurship Education in the Agrobiodiversity sector: a case of G-Tech PLA Roll Planter Value Creation for a youth Community of Practice.

FACULTY OF SCIENCE

DEGREE OF MASTER OF SCIENCE

ANDATI, Lexy Acherwa Livoyi, BSc (Nairobi), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: A Systematic Visualisation Framework for Radio-Imaging Pipelines

ASCHMANN, Michael Joseph, in Computer Science, **with distinction**, in the Department of Computer Science. Degree by thesis. Thesis: Towards a capability maturity model for a cyber range.

BAPOLISI, Alain Murhimalika, BPharm (Bokavu, DRC), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Design, formulation and evaluation of liposomes co-loaded with human serum albumin and rifampicin.

CHAMBOKO, Chiratidzo Respina, BScHons (Rhodes), in Bioinformatics, **with distinction**, in the Department of Biochemistry & Microbiology. Degree by coursework and thesis. Thesis: Analysis of

bacterial Mur amide ligase enzymes for the identification of inhibitory compounds by in silico methods.

CHILEKWA, Mwango, BMinSci (Zambia), in Exploration Geology, in the Department of Geology. Degree by coursework and thesis. Thesis: Petrography, metamorphism, deformation and P-T conditions in the western arm of the lufilian Arc-Zambezi, North-western Zambia.

CHINDEKA, Francis, Cert (Electrical Engineering) (Bulawayo Polytechnic), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Development of graphene materials and phthalocyanines for applications in dye sensitized solar cells.

DE VILLIERS, Nina Melissa, BScHons (Rhodes), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Ecological engineering: an assessment of the ecological impact of Reno mattress structures used in erosion control in the Keurbooms Estuary, South Africa.

DUBAZANA, Nadine Phiwokuhle Yabongeka, BSc (UKZN), BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: Azadipyrromethenes for applications in photodynamic antimicrobial chemotherapy, photodynamic therapy and optical limiting.

DUBE, Anele, BScHons (NUST, Zimbabwe), in Environmental Biotechnology, in the Institute for Environmental Biotechnology. Degree by thesis. Thesis: Performance of an integrated algal pond for treatment of domestic sewage: a process audit.

FANUCCI, Sidne, BScHons (Rhodes), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: Development of a low-cost bioprinting system for engineering of human tumour models.

HARDISTY, Shannon Enid, BScHons (Rhodes), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Understanding how spatial resilience thinking can help address scale mismatches in marine protected areas: South Africa as a case study.

JONES, Benjamin, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Photocatalysis of 4-chloro- and 4-nonylphenols using novel symmetrical phthalocyanines and an asymmetrical porphyrin functionalized polyacrylonitrile nanofibers.

KIRKALDY, Benjamin Puleng, BScHons (Rhodes), in Entomology, **with distinction**, in the Department of Zoology and Entomology. Degree by thesis. Thesis: The past meets the present: exploring the biogeography and phylogeny of extant Plecoptera of South Africa with reference to ancient middle Permian fossil forms from the Onder Karoo locality.

KOTANE, Masego, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Cysteine protease inhibitors: synthesis and evaluation of 2-pyrimidinecarbonitrile derivatives and hybrids against protozoan parasites.

LEBUSA, Motebang Peter, BSc (NUL), BScHons (Rhodes), in Computer Science, **with distinction**, in the Department of Computer Science. Degree by thesis. Thesis: Determination of speaker configuration for an immersive audio content creation system.

MAFANYA, Sandisiwe, BScHons (WSU), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Combining ecosystem green engineering and early life history processes to enhance the intertidal biodiversity in the port of East London, South Africa.

MALESA, Thato Khathotshelo, BScHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics.

Degree by thesis. Thesis: Effectiveness of different interventions to reduce occupational sitting among office administrators.

MARWARWA, Sinobomi Zamachi, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Investigating cannabinoids and endocannabinoid receptors as drug targets for pain and inflammation.

MONAMA, Mokgerwa Zacharia, BScHons (Limpopo), in Bioinformatics, **with distinction**, in the Department of Biochemistry & Microbiology. Degree by coursework and thesis. Thesis: Understanding the underlying resistance mechanism of Mycobacterium tuberculosis against Rifampicin by analyzing mutant DNA-directed RNA polymerase proteins via bioinformatics approaches.

MOTLOUNG, Banele Mike, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Synthesis, photophysicochemical properties and photodynamic therapy activities of indium and zinc phthalocyanines when incorporated into pluronic micelles.

MTINI, Onke, BScHons (Rhodes), in Bioinformatics, in the Department of Biochemistry & Microbiology. Degree by coursework and thesis. Thesis: Structure and interaction studies of beta-amyloid in the search for new lead compounds for the treatment of Alzheimer's disease.

NDLOVU, Mpilonhle Sinothando, BSc (Pretoria), BScHons (Unisa), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Managing the invasive aquatic plant Sagittaria platyphylla (Engelm.) J.G. Sm (Alismataceae): problems and prospects.

NEDUVHULEDZA, Matodzi Zelda Renda, BScHons (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Synthesis, characterisation and nonlinear optical properties of positional isomers of cobalt, nickel and copper 4-(4 tert-butylphenoxy) phthalocyanine.

NGCONGCO, Khanyisile Selina, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: Developing a Salmonella enterica DOXP reductoisomerase assay for drug screening.

NOVOKOZA, Yolanda, BScHons (WSU), in Bioinformatics, **with distinction**, in the Department of Biochemistry & Microbiology. Degree by coursework and thesis. Thesis: Prediction of mass spectra for natural products using an AB initio approach.

NTANTISO, Mawande, BScHons (Rhodes), in Geology, in the Department of Geology. Degree by thesis. Thesis: Mineralogy, geochemistry and origin of the Neoproterozoic Xaudum iron-formation in Botswana.

NTLANTSANA, Apelele, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: The exploration of ARF1 screening assays to determine the drug status of ARF1 in cancer and malaria.

NYAWO, Mpilonhle Aura June-Rose, BScHons (UKZN), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Do submarine canyons influence the structure and diversity of benthic fish assemblages on the continental shelf edge?

REDMAN, Caitlyn Wendy, BMedSci (UKZN), BScHons (Rhodes), in Human Kinetics & Ergonomics, **with distinction**, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: Stakeholder identification in the Makana Municipal Solid Waste Management System and stakeholder perceptions of waste pickers and their inclusion into the System: an ergonomics approach.

REID, Wesson Kyle, BScHons (Rhodes), in Geology, in the Department of Geology. Degree by thesis. Thesis: Fluid characteristics in hydrothermal veins of the Twangiza-Namoya Gold Belt, South Kivu and Maniema Provinces, DRC.

SEARLE, Hayden Stuart, BAHons (Rhodes), in Human Kinetics & Ergonomics, in the Department of Human Kinetics and Ergonomics. Degree by thesis. Thesis: Understanding transdisciplinary research at Rhodes University: embedding ergonomics.

SHABANGU, Samuel Malewa, BSc (Limpopo), BScHons (Rhodes), in Chemistry, **with distinction**, in the Department of Chemistry. Degree by thesis. Thesis: In vitro susceptibility of Staphylococcus aureus to porphyrin-silver mediated photodynamic antimicrobial chemotherapy.

STOFFELS, Mihlali, BSc (UFH), BScHons (Rhodes), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: Investigating cell culture models for improved understanding of adipose tissue and co-morbidities in vitro.

THOKOA, Mamello Maria, BScHons (Rhodes), in Geology, **with distinction**, in the Department of Geology. Degree by thesis. Thesis: A comparative mineralogical and geochemical study of manganese deposits in the Postmasburg manganese field, South Africa.

TSHITHUKHE, Getrude, BScHons (Venda), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Assessing invasive alien aquatic plant species' phytoremediation success using biological indicators.

FACULTY OF HUMANITIES

DEGREE OF MASTER OF ARTS

AWUOR, Nicholas Amol, BEd (Kenyatta), in English, **with distinction**, in the Department of Literary Studies in English. Degree by thesis. Thesis: Between Past and Future: Memory and Mourning in the Works of Okwiri Oduor and Ndinda Kioko.

BENAYO, Xolela, BAHons (Rhodes), in African Language Studies, in the School of Languages and Literatures. Degree by thesis. Thesis:

Satire in J. J. R. Jolobe's Works: A Critique in relation to Contemporary South Africa.

BUTHELEZI, Stella Mbalenhle Nomfundo, BAHons (Rhodes), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by coursework and thesis. Thesis: Exploring how mobile phones mediate bonding, bridging and linking social capital in a South African rural area: The case of Dwesa.

CHIDI, Tsosheletso, Cert (Law) (Unisa), in Creative Writing, in the School of Languages and Literatures. Degree by coursework and thesis. Thesis: Maremereme.

HEYDENRYCH, Ellen Frances, BJourn (Rhodes), in Journalism & Media Studies, **with distinction**, in the School of Journalism and Media Studies. Degree by coursework and thesis. Thesis: A multimodal analysis of the representations of gender in contemporary South African children's picture books produced by Book Dash.

JOHNSON, Samantha-Sue, BAHons (Rhodes), in Psychology, in the Department of Psychology. Degree by thesis. Thesis: Separation Assault in South African Heterosexual Relationships.

JOHNSON, Stembele Siobhan, BAHons (Rhodes), in African Language Studies, in the School of Languages and Literatures. Degree by thesis. Thesis: A socio-political analysis of the adoption of certain amaXhosa surnames.

KELLY, Megan Marie, BJourn (Rhodes), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by coursework and thesis. Thesis: Whiteness under Threat: Farmlands and the construction of whiteness in its YouTube comment space.

KIDIA, Nitasha Jaina, BAHons (Rhodes), in Psychology, in the Department of Psychology. Degree by thesis. Thesis: Using HIV/AIDS interventionist research in a university context to improve women's sexual and reproductive health awareness.

LENAHAN, Helen Margaret, BAHons (Rhodes) in Ancient Greek, in the School of Languages and Literatures. Degree by thesis. Thesis: Vain Labour: The Significance of Defeat in Theocritus' Fifth Idyll.

LILA, Philiswa, Nat Dip (Fine Art), BTech (TUT), BAHons (Curatorship) (UCT), in Art History, in the Department of Fine Art. Degree by thesis. Thesis: The use of ritual as a physical and spiritual medium and its documentation in Buhlebezwe Siwani's contemporary visual arts performance.

LLOYD, Dylan Reuben, BAHons (Rhodes), in English, **with distinction**, in the Department of Literary Studies in English. Degree by thesis. Thesis: Enabling Violence: The Ethics of Writing and Reading Rape in South Africa.

MLANGENI, Ntombikayise Lina, BJourn (Rhodes), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by coursework and thesis. Thesis: Age is nothing but a number: Ben-10s, sugar mummies, and the South African gender order in the Daily Sun's Facebook page.

MSUTHU, Simela Thuleka, BA, BAHons (Rhodes), in Sociology, in the Department of Sociology. Degree by coursework and thesis. Thesis: Now that we have the land: Analysing the experiences of land beneficiaries in the Makana Municipal District of the Eastern Cape, South Africa.

NTSUMPA, Siyanda, in Creative Writing, in the School of Languages and Literatures. Degree by coursework and thesis. Thesis: The catch-up games.

SCOTT, Dylan Joshua, BAHons (Rhodes), in History, in the Department of History. Degree by thesis. Thesis: "Evolution and not transformation": A critical analysis of narratives of whiteness in Makhanda/Grahamstown.

SILO, Tolakele Talitha, BA, PG Dip (Enterprise Management) (Rhodes), in African Language Studies, in the School of Languages and Literatures. Degree by thesis. Thesis: “Ntombazana, ugayela bani?”: uBunzululwazi beentsimbi.

TLADI, Oboitshepo, BAHons (Rhodes), in Linguistics & Applied Language Studies, in the Department of English Language and Linguistics. Degree by thesis. Thesis: The Sementics of Bantu Noun Classes: A Focus on Setswana.

VAN DER MERWE, Cara, BAHons (Rhodes), in Classics, in the School of Languages and Literatures. Degree by thesis. Thesis: Hecate: Representations of the Goddess in the Greek Magical Papyri.

WHITEHEAD, Tracey Lee, BAHons (Rhodes), in Counselling Psychology, in the Department of Psychology. Degree by coursework and thesis. Thesis: Relevant knowledge: Content analysis of research conducted by South African Psychology Masters students (2008-2012).

ZIZI, Ralph Tinotenda, BSocSciHons (Rhodes), in Industrial & Economic Sociology, in the Department of Sociology. Degree by coursework and thesis. Thesis: A critical analysis of employee voice at Rhodes University, Grahamstown.

DEGREE OF MASTER OF MUSIC

VAN SCHOOR, Nina, BAHons (Rhodes), in Music, in the Department of Music and Musicology. Degree by thesis. Thesis: A reconceptualization of music performance anxiety.

DEGREE OF MASTER OF SOCIAL SCIENCE

HEALD, Arisa Oka, BSocSciHons (Rhodes), in Industrial & Economic Sociology, **with distinction**, in the Department of Sociology. Degree by thesis. Thesis: South Africa’s mohair value chain: Institutional framework, governance, and the perceptions of management and labour.

MORTLOCK, Matthew Michael McCune, BSocSciHons (Rhodes), in Industrial & Economic Sociology, in the Department of Sociology. Degree by coursework and thesis. Thesis: Assessing state asset restructuring in post-apartheid South Africa: the impact of Telkom internet infrastructure since privatisation.

FACULTY OF PHARMACY

DEGREE OF DOCTOR OF PHILOSOPHY

NTEMI, Pascal Vitalis, BPharm (Rajiv Gandhi), MSc (Pharmacy) (Rhodes), in Pharmaceutics, in the Faculty of Pharmacy. Degree by thesis. Thesis: Formulation, development and assessment of devil's claw loaded phyto-elastosomes in thermo-responsive hydrogels. Supervisor: Professor SM Khamanga. Co-supervisor: Professor RB Walker.

FACULTY OF COMMERCE

DEGREE OF DOCTOR OF PHILOSOPHY

JORDAAN, Leandra, Nat Dip, BTech, MTech (Information Technology) (CUT), in Information Systems, in the Department of Information Systems. Degree by thesis. Thesis: Using phronesis to enact design ethnography: Methodological considerations for rebalancing socio-technical phenomena in CMS performativity. Supervisor: Professor K Krauss.

FACULTY OF EDUCATION

DEGREE OF DOCTOR OF PHILOSOPHY

CHIKIWA, Samukeliso, BEd (Midlands), MEd (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: exploring pre-service teachers' reflective practice in the context of video-based lesson analysis. Supervisor: Professor M Graven.

KULUDU-BOLUS, Injairu Magdalene, BA, PGDip (International Studies), MA (Rhodes), in Education, in the Department of Education. Degree by thesis. Thesis: Not Yet Uhuru! Attuning to, re-imagining and regenerating transgressive decolonial pedagogical praxis across times. Khapa (ring) the rising cultures of change drivers in contemporary South Africa. Supervisor: Distinguished Professor H Lotz-Sisitka.

MPHEPO, Gibson Yadunda Andrew, BSc (Agric) (Malawi), MSc (Swansea), in Education, in the Department of Education. Degree by thesis. Thesis: Informal learning in local farming practices by rural women in the Lake Chilwa Basin, Malawi: Towards coping and adaptation to climate variability and climate change. Supervisor: Distinguished Professor H Lotz-Sisitka. Co-supervisors: Professor S Shackleton (UCT) and Professor S Chiota (Malawi).

FACULTY OF LAW

DEGREE OF DOCTOR OF PHILOSOPHY

AKINLOYE, Idowu Adelana, LLB, LLM (Nigeria), in Law, in the Faculty of Law. Degree by thesis. Thesis: Examining the efficacy of church internal governance mechanisms in reducing legal disputes within South African and Nigerian churches. Supervisor: Professor EH van Coller.

FACULTY OF SCIENCE

DEGREE OF DOCTOR OF PHILOSOPHY

ANSAH-NARH, Theophilus, MPhil (Ghana), in Physics, in the Department of Physics and Electronics. Degree by thesis. Thesis: Exploring intensity mapping techniques via simulations. Supervisor: Professor O Smirnov. Co-supervisors: Dr F Abdalla (UCL) and Dr K Asad.

DINGLE, Laura Margaret Kirkpatrick, MSc (Rhodes), in Biochemistry, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: Elucidation of a novel role for HSP70/HSP90 organising protein (Hop) in mRNA processing. Supervisor: Professor AL Edkins.

GAREKAE, Hesekia, MPhil (Botswana), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Urbanisation, foraging and household food security in urban South Africa. Supervisor: Professor C Shackleton.

GWEDLA, Nanamhla, MSc (Rhodes), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Barriers to, and enablers of urban tree planting in low-cost housing areas: Lessons from participatory learning processes in South Africa. Supervisor: Professor C Shackleton. Co-supervisor: Dr L Olvitt.

KHOSA, Dumisani, MSc (Venda), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Invasion status and impact potential of Florida Bass *Micropterus floridanus* in South Africa. Supervisor: Professor OLF Weyl. CO-supervisors: Dr R Wassermann and Dr S Marr (SAIAB).

KUBHEKA, Gugu Patience, MSc (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: BODIPY dyes for use in nonlinear optics and optical sensing. Supervisor: Professor J Mack. Co-supervisor: Distinguished Professor T Nyokong.

KUJIRAKWINJA, Deo Kalyongo, MSc (UCT), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Conserving land for people: transformative adaptive co-

management of sustainable protected areas in the eastern Democratic Republic of Congo. Supervisor: Professor S Shackleton (UCT). Co-supervisor: Dr A De Vos.

LOUZADA, Marcel Severiano, MSc (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Determination of the nonlinear optical properties of phthalocyanine regioisomers using computational models. Supervisor: Professor MS Khene.

MAHARAJ, Shantal, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: The role of the Hop co-chaperone in the formation of Hsp90 complexes: chaperone link to glycolysis. Supervisor: Professor AL Edkins.

MAKHUBU, Matodzi Portia, MSc (UWC), in Biochemistry, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: Comparative analysis of the known Hop1a and the novel Hop1b isoforms of the Hop gene. Supervisor: Professor AL Edkins. Co-supervisor: Dr J De La Mare.

MATLOU, Gauta Gold, BScHons (Limpopo), MSc (UJ), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Metallophthalocyanines linked to metal nanoparticles and folic acid for use photodynamic therapy of cancer and photoinactivation of bacterial microorganism. Supervisor: Distinguished Professor T Nyokong. Co-supervisor: Dr J Britton.

MAUDA, Evans Vusani, MSc (Venda), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Investigations into biological control options for *Lycium ferocissimum* Miers, African boxthorn (Solanaceae) for Australia. Supervisor: Dr DG Martin. Co-supervisor: Distinguished Professor MP Hill.

MKILE, Zolani, MSc (UFH), in Microbiology, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: Nutrient impacts on grasses and legumes growing in communal pasture soil in

relation to mycorrhizal activity. Supervisor: Professor JF Dames. Co-supervisor: Dr MP Maqubela.

MOFU, Lubabalo, MSc (Rhodes), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Understanding biotic interactions in invaded pond communities in the Sunday's River irrigation network, South Africa. Supervisor: Professor OLF Weyl. Co-supervisor: Dr R Wassermann and Dr D Woodford (SAIAB).

MOTITSOE, Samuel Nkopane, MSc (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Quantifying ecosystem recovery and restoration practice following the biological control of invasive alien macrophytes in Southern Africa. Supervisor: Distinguished Professor MP Hill. Co-supervisor: Professor JA Coetzee and Dr JM Hill.

MURINZI, Tafadzwa Wendy, MSc (Midlands), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Synthesis, characterisation and electrocatalytic behaviour of three series of Metal Organic Frameworks. Supervisor: Professor GM Watkins.

NYAMAI, Dorothy Wavinya, MSc (Kenya), in Bioinformatics, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: Bioinformatic analysis of aminoacyl tRNA synthetases as potential antimalarial drug targets. Supervisor: Professor O Tastan Bishop.

OGUNMOLASUYI, Adewoyin Martin, MTech (Nigeria), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: Development of paper-based aptasensor for detection of Plasmodium falciparum lactate dehydrogenase in malaria. Supervisor: Professor J Limson. Co-supervisor: Dr R Fogel.

RAUBENHEIMER, Sarah Lynn, BScHons (Rhodes), in Botany, in the Department of Botany. Degree by thesis. Thesis: CO₂-induced woody thickening depends strongly on interacting abiotic and biotic factors. Supervisor: Professor BS Ripley.

SANYANGA, Taremekedzwa Allan, BScHons (Rhodes), MPhil (UCT), in Bioinformatics, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: Mechanism of action of non-synonymous single nucleotide variations associated with a-carbonic anhydrases II, IV and VIII. Supervisor: Professor O Tastan Bishop.

SARDESHPANDE, Mallika, MSc (United Kingdom), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Foraging for fruits: natural resource use and its conservation potential in urban environments. Supervisor: Professor C Shackleton.

SHAW, Lauren, BSc, BScHons, MSc (NMMU), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: Antibodies and aptamers in SELEX: selecting specific DNA aptamers against a specific hCG epitope using a targeted SELEX strategy. Supervisor: Dr R Fogel. Co-supervisor: Professor J Limson.

TWALA, Busisiwe Victoria, BScHons (Wits), MSc (UCT), in Biochemistry, in the Department of Biochemistry & Microbiology. Degree by thesis. Thesis: Multiplexed Mass Spectrometry: Single, On-Bead, Detection Analysis Using MALDI-TOF MS. Supervisor: Dr J Jordaan (Resyn Biosciences). Co-supervisor: Professor AL Edkins and Dr S Stoychev (SCIR).

VORSATZ, Lyle Dennis, MSc (UWC), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: The role of microhabitats within mangroves: an invertebrate and fish larval perspective. Supervisor: Dr F Porri (SAIAB). Co-supervisor: Dr P Patrick (SAEON).

WU, Yu, MSc (Rhodes), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: A holistic approach in understanding the effects of dietary protein sources on the growth and reproductive development of farmed abalone, *Haliotis*

midae. Supervisor: Professor CLW Jones. Co-supervisor: Professor H Kaiser.

FACULTY OF HUMANITIES

DEGREE OF DOCTOR OF PHILOSOPHY

AKINGBADE, Olutobi Elijah, MA (Rhodes), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by thesis. Thesis: Digital media marketing and the consumption of sugar-sweetened beverages in Africa: A reception analysis of the multi-channel marketing of Coca-Cola among young Africans from the University of Lagos, Nigeria and Rhodes University, South Africa. Supervisor: Professor H Dugmore.

CHIMUKA, Loveness, BScSocHons (Zimbabwe), MA (Rhodes), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: A critical analysis of Christian Care in countering food insecurity in the communal areas of Zimbabwe: The case of Gutu, Masvingo. Supervisor: Professor KD Helliker.

CHITOMBI, Rumbidzai, BScSocHons, MSc (Zimbabwe), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: A gendered analysis of conditional Cash Based Transfers: a case study of Puntland Technical Vocational Skills Training Programme, Somalia. Supervisor: Professor KD Helliker.

KARA, Reeshabhen Ashok, MPopStudies (UKZN), in Social Policy and Labour Studies, in the Institute of Social and Economic Research. Degree by thesis. Thesis: Non-marital fertility in South Africa: trends, determinants and implications. Supervisor: Professor M Rogan.

KATSINDE, Tapfuiwa James, MEd (Zimbabwe), in Sociology, in the Department of Sociology. Degree by thesis. Thesis: The effects of economic and political instability on decentralised Secondary schools in Mashonaland Central Province, Zimbabwe: a case study. Supervisor: Professor MD Drewett.

KORIR, Geoffrey Kiplimo, MSc (Kenya), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by thesis. Thesis: Conceptualising community radio: from global histories to the Kenyan example. Supervisor: Professor JE Du Toit.

MASOLA, Athambile, MEd (Rhodes), in African Language Studies, in the School of Languages and Literatures. Degree by thesis. Thesis: Journeying home, exile and Transnationalism in Noni Jabavu and Sisonke Msimang's memoirs. Supervisor: Dr L Spencer. Co-supervisor: Professor P Maseko.

MBANJE, Bowden Bolt Chengetai, MSc (Zimbabwe), in Political & International Studies, in the Department of Political and International Studies. Degree by thesis. Thesis: A comparative analysis of the use of participatory practices by indigenous trusts and mainstream development NGOs in Zvimba Communal Area Zimbabwe. Supervisor: Professor S Matthews. Co-supervisor: Professor KD Helliker.

MC GARVIE, Susan Louise, MPhil (UCT), in Psychology, in the Department of Psychology. Degree by thesis. Thesis: Attentive Amelioration: developing and evaluating an applied mindfulness programme for psychologists. Supervisor: Professor JE Akhurst.

NAGDEE, Mohammed, MSc (Wits), in Psychology, in the Department of Psychology. Degree by thesis. Thesis: The forensic mental health profile of women offenders in the Eastern Cape, South Africa. Supervisor: Professor C Young.

NGULUBE, Innocent Akilimale Chinoko, MA (Malawi), in English, in the Department of Literary Studies in English. Degree by thesis. Thesis: Localising the global: The use of a postmodernist aesthetic in the fiction of Alain Mabanckou. Supervisor: Professor M Marais. Co-supervisor: Dr A Phiri.

NSELE, Busisiwe Nsikakazi Zamansele, MA (Rhodes), in Art History, in the Department of Fine Art. Degree by thesis. Thesis: Post-apartheid nostalgia and the future of the black visual archive. Supervisor: Professor R Simbao.

NTABA, Jolly Maxwell, MA (Rhodes), in Journalism & Media Studies, in the School of Journalism and Media Studies. Degree by thesis. Thesis: Negotiating family planning messages among Malawian men: a case study of vasectomy messages aimed at men in the Dedza and Karonga districts of Malawian. Supervisor: Professor H Dugmore. Co-Supervisor: Professor L Strelitz.

ORTNER, Gwyndolen Jeanie, MA (Rhodes), in German Studies, in the School of Languages and Literatures. Degree by thesis. Thesis: Exploring teaching and learning German as a foreign language at a South African institution of higher education: blended learning and collocations. Supervisor: Dr US Weber.

ZAKAZA, Nompucuko, BAHons, MA (Rhodes), in African Language Studies, in the School of Languages and Literatures. Degree by thesis. Thesis: Mazibuyel' ekhaya iintsomi zesiXhosa: ezikaNoplani Gxavu noNongenile Masithathu Zenani (ku-Scheub: 1969; 1975; 1977; 1996). Supervisor: Professor R Kaschula. Co-Supervisor: Dr MW Jadezwi.

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 ukhangela 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 isincedisela 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 ezingenancambu 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 iqinisekise yiNgqonyela eye ibabathe entloko noMabhalane-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 verbeel 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.