



**UNIVERSITY OF  
KWAZULU-NATAL**

**GRADUATION CEREMONY**

**FACULTY OF SCIENCE AND AGRICULTURE**

**TUESDAY, 20 APRIL 2010**

**14h30**

**SPORTS CENTRE  
(WESTVILLE CAMPUS)**

## THE UKZN PACT

We, the staff and students  
of the University of Kwa-Zulu Natal  
agree to treat each other with respect,  
to abide by the rules and regulations of the institution  
and to commit ourselves to excellence in research-led  
teaching and learning



## Isivumelwano seNyuvesi yaKwaZulu-Natali

Thina, singabasebenzi nabafundi  
baseNyuvesi yaKwaZulu-Natali  
sivumelana ngokuthi siphathane ngenhlonipho,  
silandele yonke imithetho nemigomo yesikhungo  
futhi sizibophezela ekufundeni nasekufundiseni  
okuholwa ucwaningo nokunobunyoningco

## OFFICERS

**Chancellor**      **Dr ZL Mkhize**  
MBChB(Natal)

**Vice-Chancellor and Principal**      **Professor MW Makgoba**  
MBChB(Natal) DPhil(Oxon) FRCP(Lond)  
FRSSAf MASSAf AMP(INSEAD)

**Chairman of Council**      **Mr M Mia**

**Deputy Vice-Chancellor (*Research*)**      **Professor NM Ijumba**  
PrEng BSc(Eng)(Hon)(Dar-es-Salaam) MSc  
(Salford) PhD(Strathclyde) CEng MIET  
MIEEE Reg Eng(T) Reg Eng(K)

**Deputy Vice-Chancellor (*Teaching and Learning*)**      **Professor R Vithal**  
BA(Hons) UHDE(UDW) BEd(Natal) MPhil  
(Cantab) DrScient(AaU)

**Deputy Vice-Chancellor and Head of College (*Agriculture, Engineering and Science*)**      **Professor R Slotow**  
BScHons(Rhodes) MSc(Natal) PhD(California)

**Acting Deputy Vice-Chancellor and Head of College (*Health Sciences*)**      **Professor SY Essack**  
BPharm MPharm PhD(UDW) MPS

**Deputy Vice-Chancellor and Head of College (*Humanities*)**      **Professor JRA Ayee**  
BAHons MPA(Ghana) PhD(Hebrew  
University of Jerusalem)

**Deputy Vice-Chancellor and Head of College (*Law and Management Studies*)**      **Professor JC Mubangizi**  
Dip.Ed LLB(Makerere) Dip.L.P(LDC)  
LLM(Cape Town) LLD(UDW)

**Registrar**      **Professor JJ Meyerowitz**  
BScCompSc MSc(Natal)

**President of Convocation**      **Mr SC Ngcobo**  
BAdmin BCom(Hons)(UDW)

## **OFFICE BEARERS – FACULTY OF SCIENCE AND AGRICULTURE**

**Dean     Professor D Jaganyi**  
BScHons(Rhodes) MSc(Nairobi)  
PhD(London) DIC(Imperial College)

**Acting Deputy Dean (Westville)     Professor A Kindness**  
BScHons MSc PhD(Aberdeen)

**Deputy Dean (Pietermaritzburg)     Professor KP Kirkman**  
BScAgric MScAgric PhD (Natal)

---



# **ORDER OF PROCEEDINGS**

The Academic Procession enters the Hall

*University Anthem – Ihele*

## **The Chancellor constitutes the Congregation**

### **Welcome to Guests**

Professor R Slotow

*Deputy Vice-Chancellor and Head of College: Agriculture, Engineering  
and Science*

### **Congratulatory Remarks**

Students' Representative Council

### **Presentation of Doctoral Graduands**

Dean of the Faculty

### **Musical Interlude**

### **Presentation of Graduands**

Dean and Deputy Deans of the Faculty

## **The Chancellor dissolves the Congregation**

### **National Anthem**

The Congregation is invited to join in the singing of the National Anthem

The Academic Procession leaves the Hall

*Gaudeamus Igitur*

#### Key to symbols

- + Passes with distinction in major subject / programme
- \* Degree awarded *cum laude*
- α Degree awarded *summa cum laude*
- # Diploma awarded with distinction
- Posthumous

# Award of Degrees in the Faculty of Science and Agriculture

## DOCTORAL DEGREES

---

### Doctor of Philosophy

**Ansell, William Philip**, *BSc, BScHons(EnvEngGeol)* ..... *Geology*

Thesis: The Mineability of Richards Bay Minerals Dune Sands

Supervisor: Professor CA Jermy

**Balme, Guy Andrew**, *BSc(CapeTown), BScHons(CapeTown)* ..... *Biology*

Thesis: The Conservation Biology of a Nominally Protected Leopard Population

Supervisor: Professor RH Slotow and Dr LTB Hunter

**Boyle, Grant Alexander**, *BSc, BScHons(Chem), MSc* ..... *Chemistry*

Thesis: Synthesis of Camphor Derived Ligands for Applications in Asymmetric Catalysis

Supervisors: Professor HG Kruger, Dr GEM Maguire and Dr T Govender

**Chunilall, Viren**, *BSc, BScHons, MSc* ..... *Chemistry*

Thesis: Structure, Accessibility and 'Reactivity' of Cellulose I as revealed by CP/MAS <sup>13</sup>C-NMR Spectroscopy and Atomic Force Microscopy

Supervisors: Professor A Kindness, Dr TLD Bush and Dr PT Larsson

**Hamdouni, Yamen**, *MSc(Mentouri University)* ..... *Physics*

Thesis: Exactly Solvable Models for Qubits Coupled to Spin Environments: Decoherence and Entanglement

Supervisor: Professor F Petruccione

**Lazarus, Ian Joseph**, *BSc(UKZN), BScHons(CapeTown), MSc* ..... *Physics*

Thesis: Linear and Non-Linear Fluctuations in Electron-Positron Plasmas

Supervisors: Professor SR Pillay, Professor MA Hellberg and Professor R Bharuthram

**Lyambila, Waudo**, *BSc(Nairobi), MSc(Calgary)* ..... *Chemistry*

Thesis: A Study of Photoinduced Transformations of Sunscreen Chemical Absorbers

Supervisor: Professor BS Martincigh

**Magnus, Lindsay Gerald**, *BSc(Rhodes), BScHons(Rhodes), MSc(Rhodes)* ..... *Physics*

Thesis: An Analysis of Pc5 Pulsations Observed in the SuperDARN Radar Data

Supervisors: Professor JPS Rash and Professor ADM Walker

- Maharaj**, Adhir, *BSc, BScHons(ApplMath), MSc* ..... *Applied Mathematics*  
 Thesis: Singularity and Symmetry Analysis of Differential Sequences  
 Supervisors: Professor PG Leach and Professor M Euler
- Mohammed**, Abdelhafeez Mohammed Abdelhafeez, *BSc(University of Khartoum), MSc(University of Science And Technology)* ..... *Chemistry*  
 Thesis: Extractives from Species of the Myrtaceae and Rubiaceae of Southern Africa  
 Supervisors: Professor DA Mulholland and Dr PH Coombes
- Moodley**, Deshendran, *BSc, BScHons, MSc* ..... *Computer Science*  
 Thesis: Ontology Driven Multi-Agent Systems: An Architecture for Sensor Web Applications  
 Supervisors: Professor J Tapamo and Professor JDM Kinyua
- Nnadozie**, Remigius Chidozie, *BScHons(Maths)(Imo State University), MSc* ..... *Applied Mathematics*  
 Thesis: Mathematical Modelling of Social Parameters and their Interaction: The Case of Water Delivery/Access and Household Dynamics in South Africa  
 Supervisor: Professor PG Leach
- O'Donoghue**, Sean Henry, *MSc* ..... *Biology*  
 Thesis: The Sardine Run: Investigating Sardine and Predator Distribution in Relation to Environmental Conditions using GIS and Remotely Sensed Products  
 Supervisors: Professor VM Peddemors and Dr AJ Smit
- Oyedeeji**, Opeoluwa Oyehan, *PGDip(Chem)(Lagos State University, Nigeria), MSc Chem(Lagos State University, Nigeria)* ..... *Chemistry*  
 Thesis: Chemical Prospecting of Medicinal Plants for Drug Discovery  
 Supervisor: Professor FO Shode
- Pillay**, Bavani, *BSc, BScHons(Chem), MSc* ..... *Chemistry*  
 Thesis: A Study of Nickel Molybdenum Oxide Catalysts for the Oxidative Dehydrogenation of *n*-Hexane  
 Supervisor: Professor HB Friedrich
- Roberts**, Jonathan Wesley, *BA, BAHons, MSc(CapeTown)* ..... *Environmental Science*  
 Thesis: Image Fusion for Enhanced Forest Structure Assessment  
 Supervisors: Professor FB Ahmed and Dr JAN Van Aardt
- Viljoen**, Audrey Marie, *M-Tech(WITTEK)* ..... *Biology*  
 Thesis: House Dust Mites (*Acari: Pyroglyphidae*) in South Africa with Specific Reference to Hospitals in the Coastal Cities  
 Supervisors: Professor CC Appleton and Professor EA Ueckermann



# MASTERS DEGREES

---

## Master of Science

- Abed, Rohaida, BSc, BScHons** ..... *Environmental Science*  
Dissertation: An Investigation into the Suspended Sediment Flux and Dynamics of the Mgeni Estuary, Durban  
Supervisor: Dr S Pillay
- \* **Balgobind, Adhika, BSc, BScHons** ..... *Microbiology*  
Dissertation: The Impact of Heavy Metals on the Aerobic Biodegradation of 1, 2-Dichloroethane in Soil  
Supervisors: Dr AO Olaniran and Professor BJ Pillay
- \* **Banda, Adson, BSc Educ(Zambia), PGDip(MathSci)(Stell)** ..... *Mathematics*  
Dissertation: "What is an Algebraic Structure" (An Exposition of Beck's Monadicity Theorem)  
Supervisor: Dr PP Ghosh
- Botes, Warren Mark, BSc, BScHons(EnvSc)** ..... *Environmental Science*  
Dissertation: Measuring the Success of Individual Wetland Rehabilitation Projects in South Africa  
Supervisor: Professor WN Ellery
- Bremner, Sherry, BScHons(CapeTown)** ..... *Physics*  
Dissertation: Analysing Transient Effects in the Ionosphere using Narrowband VLF Data  
Supervisor: Dr AB Collier
- Chama, Abdoukadi, BSc(Abdou University), PGDip(MathSci)(CapeTown)** ..... *Applied Mathematics*  
Dissertation: Study and Implementation of Two-Dimensional Moving Finite Elements Method  
Supervisor: Dr S Shindin
- Chetty, Estelle Colette, BSc, BScHons** ..... *Chemistry*  
Dissertation: Ozone Initiated Oxidation of 1, 2-Dichlorobenzene in Aqueous Systems  
Supervisors: Professor SB Jonnalagadda and Dr C Southway
- Cockcroft, Struan Vivian, BScHons(UOVS)** ..... *Physics*  
Dissertation: A Conjugate Study of Lightning and Whistlers  
Supervisor: Professor ARW Hughes
- Colenbrander, Darryl Rard, BScHons** ..... *Environmental Science*  
Dissertation: Exploring Coastal Spaces: Towards Linking Social and Ecological Systems  
Supervisors: Dr L Celliers and Ms CG Sutherland



- Cwele**, Thandanani, *BSc(UZ), BScHons(CapeTown)* ..... *Chemistry*  
Dissertation: Supramolecularly Capped Metalloporphyrins  
Supervisor: Professors HB Friedrich and Dr GEM Maguire
- Daniels**, Graham Clinton, *BSc, BScHons* ..... *Physics*  
Dissertation: Violation of the Bell Inequality using a Neutrino Model  
Supervisor: Professor F Petruccione
- Degama**, Mapule Pertunia, *BSc(UNIN), BScHons(UNIN)* ..... *Physics*  
Dissertation: Wavelength Independent Laser Beam Shaping  
Supervisor: Professor A Forbes
- Delport**, Brett, *BSc, BScHons* ..... *Physics*  
Dissertation: Study of Some Unusual VLF Emissions  
Supervisor: Dr AB Collier
- Edwards**, Ryan John, *BSc, BScHons* ..... *Environmental Science*  
Dissertation: The Origin and Evolution of Dartmoor Vlei in the KwaZulu-Natal Midlands, South Africa  
Supervisors: Professor RD Diab and Professor JN Dunlevey
- α **Essay**, Ahmed Rashid, *BSc, BScHons* ..... *Financial Mathematics*  
Dissertation: Applications of Lévy Processes in Finance  
Supervisor: Professor JG O'Hara
- Ganesh**, Atheesha, *BSc, BScHons* ..... *Microbiology*  
Dissertation: A Study on the Protein Expression of Diesel Degrading Gram-Positive Bacteria  
Supervisor: Professor J Lin
- \* **Govender**, Deshnidevi, *BSc, BScHons* ..... *Biology*  
Dissertation: Analysis of Membrane Lipid Composition of Recalcitrant Seeds of Various Species  
Supervisors: Professor NW Pammenter, Professor P Berjak and Dr J Wesley-Smith
- Govender**, Krivashni, *BSc, BScHons* ..... *Biology*  
Dissertation: Towards the Cryopreservation of *Cordyla africana* Lour. using Explants Alternate to Seed-Derivative Axes  
Supervisors: Professor P Berjak, Professor NW Pammenter and Dr JI Kioko
- Govender**, Natasha, *BSc, BScHons* ..... *Biology*  
Dissertation: Aspects of the Ecology of Sandy Beaches Along Durban's Urbanised Coastline  
Supervisor: Dr AJ Smit
- Govender**, Srinivasen, *BSc, BScHons* ..... *Environmental Science*  
Dissertation: An Investigation of the Natural and Human Induced Impacts on the Umdloti Catchment  
Supervisor: Dr S Pillay

- Graf, Jan Andreas, BSc, BScHons(Stell)** ..... *Biology*  
Dissertation: The Spatial Ecology of Lion (*Panthera leo*) and Spotted Hyaena (*Crocuta crocuta*) in Hluhluwe-iMfolozi Park: Implications for the African Wild Dog (*Lycaon pictus*)  
Supervisors: Professor RH Slotow and Dr MJ Somers
- Harichund, Charlene, BSc, BScHons** ..... *Microbiology*  
Dissertation: Characterization and Industrial Application of Heavy Metal Removing Bacterial Biofloculants  
Supervisor: Professor J Lin
- Hawksworth, David James, BSc, BScHons** ..... *Biology*  
Dissertation: Detecting Parasite Loads in Urine Diversion Toilets  
Supervisors: Professor MT Smith, Professor CA Buckley and Dr NH Rodda
- Hlongwane, Zanele, BTech(MLST)** ..... *Environmental Science*  
Dissertation: The Origin and Morphological Significance of Earth Mounds in Mkuze Wetlands, KwaZulu-Natal  
Supervisor: Professor A Kindness
- Hoosen, Nikhat, BSc, BScHons** ..... *Biology*  
Dissertation: Patterns of Genetic Variation in *Mops leucostigma* (Molossidae) from Madagascar and the Comores  
Supervisors: Professor JM Lamb and Dr PJ Taylor
- Howison, Owen Erik, BSc(Stell), BScHons(Stell)** ..... *Biology*  
Dissertation: How do Alien Plants Invade: An Analysis of the Historical Spread and Potential Distribution of the Invasive Alien Plant *Chromolaena odorata* in and Around Hluhluwe Game Reserve  
Supervisors: Professor RH Slotow and Professor H Olff
- Howison, Ruth Alison, BSc(Unisa)** ..... *Biology*  
Dissertation: Food Preferences and Feeding Interactions Among Browsers and the Effect of an Exotic Invasive Weed *Chromolaena odorata* on the Black Rhino (*Diceros bicornis*), in an African Savanna  
Supervisors: Professor RH Slotow and Professor H Olff
- Huang, Chun-Sung, BSc, BScHons** ..... *Financial Mathematics*  
Dissertation: Relative Indifference Pricing and Hedging under the Assumption of Stochastic Volatility and Exponential Utility  
Supervisor: Professor JG O'Hara
- Jaganath, Charissa, BSc, BScHons** ..... *Environmental Science*  
Dissertation: The Cumulative effect of Wetland Degradation on Water Quality at a Landscape Scale  
Supervisors: Professor FB Ahmed, Dr DC Kotze and Dr HL Malan



- Joubert, Rebecca Tamsin, BSc, BScHons** ..... *Environmental Science*  
Dissertation: The Origin and Dynamics of Wakkerstroom Vlei, Mpumalanga Province, South Africa  
Supervisors: Dr MS Proches and Professor WN Ellery
- Kabeya, Mpinda, BScHons(Higher Institute of Pedagogy, Drc)** ..... *Physics*  
Dissertation: Experimental Realization of Quantum Key Distribution  
Supervisors: Professor F Petruccione and Dr M Moodley
- \* **Koch, Aimee Catherine, BSc, BScHons** ..... *Biology*  
Dissertation: Pursuing Imazapyr Herbicide Tolerance in Sugarcane: Screening Natural Populations and Plants Produced *in vitro* through Somaclonal Variation and Mutagenesis  
Supervisors: Professor MPMD Watt, Dr SJ Snyman and Dr SR Ramgareeb
- \* **Koen, Etienne Johannes, BSc(Stell), BScHons(CapeTown)** ..... *Physics*  
Dissertation: Ionospheric Signatures of Solar Flares  
Supervisor: Dr AB Collier
- Laas, Anèl, BSc, BScHons(PUCHO)** ..... *Biology*  
Dissertation: Biomarkers of Oxidative Stress in Cultured South African Abalone (*Haliotis midae*)  
Supervisor: Dr A Vosloo and Dr D Vosloo
- α **Loufouma Makala, Narcisse Roland, BSc(Marien Ngouabi University), PGDip (CapeTown)** ...  
..... *Mathematics*  
Dissertation: Michael's Selection Theorem and its Applications  
Supervisor: Professor VG Gutev
- M'pika Massoukou, Rodrigue Yves, BSc(Marien Ngouabi University), PGDip(MathSci)(UWC)**  
..... *Applied Mathematics*  
Dissertation: Dynamical Systems Analysis of an Epidemiological Model  
Supervisor: Professor KS Govinder
- α **Mackenzie, Natalie Dawn, BSc, BScHons** ..... *Financial Mathematics*  
Dissertation: Real Options: Duopoly Dynamics with More than One Source of Randomness  
Supervisor: Professor JG O'Hara
- α **Marais, Adriana Rose, BScHons(CapeTown)** ..... *Physics*  
Dissertation: Security and Entanglement in Differential-Phase-Shift Quantum Key Distribution  
Supervisor: Professor F Petruccione
- Mkhize, Thembisile Gloria, BSc, BScHons** ..... *Financial Mathematics*  
Dissertation: Stochastic Volatility Effects on Defaultable Bonds  
Supervisor: Professor JG O'Hara

- Mncwabe**, Zibuyile, *BSc, BScHons* ..... *Chemistry*  
Dissertation: A Comparative Study of Molybdenum and Iron Phosphate-Based Catalysts in *n*-Hexane Activation  
Supervisor: Professor HB Friedrich
- \* **Mokhele**, Tholang Alfred, *BSc(NUL), BScHons* ..... *Environmental Science*  
Dissertation: An Investigation into the Detection of Sugarcane African Stalk Borer (*Eldana saccharina* Walker (Lepidoptera: Pyralidae)) using Hyperspectral Data (Spectroradiometry)  
Supervisor: Professor FB Ahmed
- Mudedede**, Elmah Zvanyadza, *BSc Educ(Bindura University)* ..... *Environmental Science*  
Dissertation: Identifying Optimal Locations for Large Scale *Jatropha* Cultivation for Biodiesel Production in Tanzania's Semi Arid Regions  
Supervisor: Dr HK Watson
- Munien**, Suveshnee, *BSc, BScHons* ..... *Environmental Science*  
Dissertation: Assessment of the Potential of the Xanthophyll Bands for Foliar Chemistry Characterisation: The Case of *Eucalyptus grandis*  
Supervisor: Professor FB Ahmed
- Musumpuka**, Remmy, *BSc(Zambia)* ..... *Physics*  
Dissertation: The Association Between ELF and VLF Chorus and Electron Precipitation  
Supervisors: Professor ARW Hughes and Dr AB Collier
- Naicker**, Kovashnee, *BSc, BScHons* ..... *Microbiology*  
Dissertation: Microbial and Physio-Chemical Quality of Surface Water Resources in Durban, South Africa  
Supervisor: Professor B Pillay and Dr AO Olaniran
- \* **Naidoo**, Wayne Chelliah, *BSc, BScHons* ..... *Computer Science*  
Dissertation: A Model of an Intelligent Video-Based Security Surveillance System  
Supervisor: Professor J Tapamo
- Namayanja**, Proscovia, *BSc Educ(University of Makerere), PGDip(MathSci)(UWC)* ..... *Applied Mathematics*  
Dissertation: Long Time Behaviour of Population Models  
Supervisors: Professor J Banasiak and Dr R Willie
- \* **Narainpersad**, Nicolisha, *BSc, BMedScHons* ..... *Biochemistry*  
Dissertation: Cationic Liposome Mediated Targeted Gene Delivery With and Without Pegylated Accessories  
Supervisors: Dr M Singh, Professor I Mackraj and Professor M Ariatti



- Ndlovu, Gugulethu Ntokozo, BSc, BScHons** ..... *Chemistry*  
Dissertation: The Phytochemistry of *Melanthus comosus* and *Clerodendrum glabrum*  
Supervisor: Dr NA Koorbanally
- Ndlovu, Nombuso Immaculate, BSc, BScHons** ..... *Chemistry*  
Dissertation: Design, Synthesis and Screening of Novel Pentacycloundecane Lactam Derivatives as Potential HIV-1 Protease Inhibitors  
Supervisors: Dr T Govender, Professor HG Kruger and Dr P Govender
- Niemann, Sophie, BScHons(Wales)** ..... *Biology*  
Dissertation: Feeding Ecology and Sustainability of Re-introduced Pack of African Wild Dogs in a Relatively Small, Fenced Reserve  
Supervisor: Professor RH Slotow
- \* Nkwanyana, Phumla Degratia, BSc, BScHons** ..... *Biology*  
Dissertation: Micropropagation of Sugarcane (*Saccharum* SPP. Hybrids) *In Vitro*: A Comparison Between Semi-Solid and Liquid RITA® Temporary Immersion Culture Systems with Respect to Plant Production and Genotypic and Phenotypic Fidelity  
Supervisors: Professor MPMD Watt and Dr SJ Snyman
- Nwaneri, Chika Felicitas, BSc(Imo State University), BScHons** ..... *Biology*  
Dissertation: Physico-Chemical Characteristics and Biodegradability of Contents of Ventilated Improved Pit Latrines (VIPs) in eThekweni Municipality  
Supervisors: Dr NH Rodda and Dr KM Foxon
- Nzuzi Mbenza, Lucien, BSc(Kinshasa University), PGDip(UWC)** ..... *Physics*  
Dissertation: Development and Testing of an Interferometer for the Characterisation of Single Photon Emitters  
Supervisor: Professor F Petruccione
- \* Parbhoo, Chetna, BSc(Witwatersrand), BScHons(Witwatersrand)** ..... *Computer Science*  
Dissertation: An Ontology Driven Sensor Web Application for Detecting and Classifying Informal Settlements  
Supervisor: Mr D Moodley
- \* Pillay, Evashun, BSc, BScHons** ..... *Financial Mathematics*  
Dissertation: FFT Based Option Pricing under Mean Reversion, Jumps and Stochastic Volatility  
Supervisor: Professor JG O'Hara
- Poona, Nitesh Keshavelal, BSc, BScHons** ..... *Environmental Science*  
Dissertation: Detection and Mapping of Selected Invasive Alien Plant Species in KwaZulu-Natal, using Medium Resolution Satellite Imagery  
Supervisor: Professor FB Ahmed



- Premasagar**, Varsha, *BSc, BScHons* ..... *Biology*  
Dissertation: Optimising Methods for Embryonic Axis Fixation and Micropropagation of *Syzygium cordatum* Hochst.  
Supervisors: Professor P Berjak, Dr JI Kioko and Professor NW Pammenter
- \* **Price**, Catherine Susan, *BSc, BScHons(Witwatersrand)* ..... *Computer Science*  
Dissertation: Specifying a Forest Harvest Scheduling System which Includes Wood Properties  
Supervisors: Professor J Tapamo and Miss FC Blakeway
- Ramadhin**, Charlotte, *BSc, BScHons* ..... *Biochemistry*  
Dissertation: Controlled Expression of the Dominant Flocculation FLO9 and FLO10 Genes in *Saccharomyces cerevisia*  
Supervisors: Dr P Govender, Professor B Pillay and Dr T Govender
- Ramjith**, Jordache, *BSc, BScHons* ..... *Statistics*  
Dissertation: Modelling Survival Data  
Supervisor: Professor GB Matthews
- Sabela**, Anele Thinasonke, *BSc, BScHons* ..... *Biology*  
Dissertation: The Development of a Root-Specific Promoter for the Transgenic Improvement of Sugarcane and Other Crop Species  
Supervisors: Dr DA Watt, Professor JM Lamb and Dr BAM Potier
- \* **Sebata**, Edith, *BScHons(Midlands State University)* ..... *Chemistry*  
Dissertation: Alkaloids from South African Amaryllidaceae Species  
Supervisors: Dr NA Koorbanally and Dr B Moodley
- Semonyo**, Malehlohonolo Rebecca, *BSc, BScHons* ..... *Physics*  
Dissertation: An Experimental Study of Diamond and the Nitrogen Vacancy Center as a Source of Single Photons  
Supervisors: Dr K Govender and Professor F Petruccione
- Singh**, Urisha, *BSc, BMedScHons* ..... *Biology*  
Dissertation: The Health-Related Microbial Quality of Drinking Water from Ground Tanks, Standpipes and Community Tankers at Source and Point-of-Use in e-Thekwini Municipality  
Supervisors: Dr NH Rodda, Dr KM Foxon and Dr D Vosloo
- Sunzu**, Jefta Mvukaye, *BSc Educ(University of Dar Es Salaam)* ..... *Applied Mathematics*  
Dissertation: Option Prices on South African Bonds under Different Interest Rate Models  
Supervisor: Dr K Arunakirinathar

- \* **Tinmouth**, Neil, *BSc, BScHons* ..... *Geology*  
 Dissertation: The Mgeni Estuary – Post-Inanda Dam Sedimentology and Estuarine Dynamics  
 Supervisor: Dr R Uken
- Tshibangu**, Damien Sha-Tshibey, *BSc(Kinshasa University)* ..... *Chemistry*  
 Dissertation: Phytochemical and Anti-Drepanocytosis Studies of *Cajanus Cajan*, *Callistemon Viminalis* Var. *Revolution Gold*, and *Syzygium Guineese*  
 Supervisors: Professor FO Shode and Dr NA Koorbanally
- \* **Will**, Chantal Louise, *BSc, BScHons(GeogEnvMgt)* ..... *Environmental Science*  
 Dissertation: State of the Environment (SOE) Reporting in South Africa: What is Missing for Effective Use in the South African Policy Process  
 Supervisor: Mrs C Sutherland
- Young**, Paul Michael, *Nat Dip: Engineering(Cape Technikon)* ..... *Geology*  
 Dissertation: An Integrated Marine GIS Bathymetric Dataset for KwaZulu-Natal  
 Supervisor: Dr R Uken

## Master of Environmental Management

- Barnwell**, Liesl Ann, *BTech Enviro Health(NATTEK)*  
 Dissertation: Industrial Perspectives on the Implementation of the Air Quality Act (Act No. 39 of 2004)  
 Supervisor: Professor RD Diab
- Ramajake**, Felleng Elsie, *BEd(NUL), BSocScHons*  
 Dissertation: Assessment of the Impact (Significance) of Public Participation in Environmental Decision-making in Environmental Impact Assessment: A Case of the Sani Pass Road Upgrade Project (Phase I)  
 Supervisor: Ms F Ahmed
- Zwane**, Joy Nokusa, *BEd(UNISWA), M-Env Studies(University of New South Wales)*  
 Dissertation: An Analysis of the Vulnerability of Informal Settlements to Urban Environmental Risks: A case of Mangwaneni in Swaziland  
 Supervisor: Mrs C Sutherland

## Master of Marine and Coastal Management

**Deale, Maria, BSc(PUCHO)**

Dissertation: Recovery Dynamics of Zooplankton Following a Mouth-Breaching Event in the Temporarily-Open Mdloti Estuary

Supervisor: Professor R Perissinotto

**Massé, Lola Mélody, BSc(Universite De La Reunion)**

Dissertation: Sexual Reproduction of *Pocillopora damicornis* (Cnidaria: Hexacorallia) at High Latitude off Durban, KwaZulu-Natal South Africa

Supervisor: Dr AJ Smit, Professor MH Schleyer and Ms A Kruger

**Séré, Mathieu Gérard Henri, BSc(Universite De La Reunion), BScHons(Universite De La Reunion)**

Dissertation: Influence of Heterotrophic Feeding on the Sexual Reproduction of *Pocillopora verrucosa* (Scleratinian Pocilloporidae) in Aquaria

Supervisors: Professor R Perissinotto, Professor MH Schleyer and Ms A Kruger

**Singh, Sarika, BSc, BScHons**

Dissertation: The Zooplankton of the St Lucia Estuary During the 2005 Drought Year

Supervisor: Professor R Perissinotto

---

## HONOURS DEGREES

### Bachelor of Science Honours

α Abell, Richard John, BSc .....	Computer Science
α Adam, Bibi Ayesha, BSc .....	Statistics
Arumugam, Preyan, BSc .....	Biological Sciences
Bagwandeem, Juhina, BSc .....	Microbiology
α Balcomb, Blake Howard, BSc .....	Biochemistry
α Bassa, Humairah, BSc .....	Physics
* Borain, Justine, BSc .....	Biochemistry
Brijraj, Sahil, BSc .....	Physics
Chadwick, Nicholas John, BSc .....	Microbiology
Chelopo, Madichaba Phuti Mokerong, BSc .....	Chemistry
Chetty, Leeven, BSc .....	Chemistry
Chetty, Vereshnie, BSc .....	Microbiology



Chewparsad, Juanita, <i>BSc</i> .....	Cell Biology
Chinniah, Romona, <i>BSc</i> .....	Microbiology
Chowthee, Yatish Ramprakash, <i>BSc</i> .....	Geology
Cooper, Michael Dirk, <i>BSc</i> .....	Geology
α Crichton, Devin Thomas, <i>BSc</i> .....	Physics
Cronje, Nicholas James, <i>BSc</i> .....	Biological Sciences
Daniels, Aliscia Nicole, <i>BSc</i> .....	Biochemistry
Driemeyer, Gareth, <i>BSc</i> .....	Geology
Dukhi, Veresha, <i>BSc</i> .....	Chemistry
Duma, Sphumelele Thuledu, <i>BSc</i> .....	Microbiology
Fadlalla, Mohamed Islam, <i>BSc</i> .....	Chemistry
* Futerman, Daniel Ivor, <i>BSc</i> .....	Computer Science
Ganesh, Rupa, <i>BSc</i> .....	Microbiology
Girdherlal, Kunal, <i>BSc</i> .....	Computer Science
Govender, Dhineshree, <i>BSc</i> .....	Biochemistry
Govender, Jacqueline, <i>BSc</i> .....	Biochemistry
Govender, Natasha, <i>BSc</i> .....	Ecological Science
Govender, Rachael, <i>BSc</i> .....	Geology
Gravelet-Blondin, Kent Royston, <i>BSc</i> .....	Geology
Hussain, Zaffar, <i>BSc</i> .....	Biological Sciences
Isaac, Ashley, <i>BSc</i> .....	Microbiology
α Ittmann, Philip George, <i>BSc</i> .....	Applied Mathematics
Jaganath, Sunil, <i>BSc</i> .....	Applied Physics
Jainarain, Kaminee Devi, <i>BSc</i> .....	Biochemistry
* Jones, Amanda Lyn, <i>BSc(Unisa)</i> .....	Biological Sciences
Kadwa, Ebrahim, <i>BSc</i> .....	Chemistry
Kaplan, Haylee, <i>BSc</i> .....	Ecological Science
Kgotlhane, Mompoloki, <i>BSc</i> .....	Geology
Khan, Nasreen, <i>BSc</i> .....	Marine Biology
Khan, Yaseen, <i>BSc</i> .....	Statistics
Khanyile, Nombuso Zamangwane, <i>BSc</i> .....	Geology
Khomo, Sphelele Goodlord, <i>BSc</i> .....	Statistics
Khumalo, Mbhekiseni Phikelamangwe, <i>BSc</i> .....	Biological Sciences
* Komarsamy, Lynette, <i>BSc</i> .....	Chemistry
Kunnen, Travis Hank, <i>BSc</i> .....	Ecological Science
Le Roux, Kendyl Andrea, <i>BSc</i> .....	Marine Biology
Maharaj, Akira, <i>BMedSc</i> .....	Microbiology
Makatini, Thokekile Charitney, <i>BSc</i> .....	Chemistry
* Mangar, Rishaan, <i>BSc</i> .....	Computer Science
Mbedu, Nyameka Pamela, <i>BSc</i> .....	Microbiology
McKenna, Fraser Craig, <i>BSc</i> .....	Environmental Science
Mcroy, Nontsikelelo Cecilia, <i>BSc</i> .....	Geology
Mkhize, Dennis Sanele, <i>BSc</i> .....	Chemistry
Mkhize, Nontando Thembekile, <i>BSc</i> .....	Chemistry
Mohamed, Ziyaad, <i>BSc</i> .....	Biochemistry
Moodley, Levania, <i>BSc</i> .....	Environmental Science

<b>Moodley, Verusha, BSc</b> .....	<i>Environmental Science</i>
<b>* Moolla, Yaseen, BSc</b> .....	<i>Computer Science</i>
<b>* Moonaisur, Nishanie, BSc</b> .....	<i>Microbiology</i>
<b>Moosa, Fahima, BSc</b> .....	<i>Microbiology</i>
<b>Musingadi, Khathutshelo, BSc</b> .....	<i>Statistics</i>
<b>Myeza, Bonga Sibusiso, BSc</b> .....	<i>Geology</i>
<b>Naicker, Dunesha, BSc</b> .....	<i>Chemistry</i>
<b>Naidoo, Cassandra, BSc</b> .....	<i>Biological Sciences</i>
<b>Naidoo, Livashlin Praglin, BSc</b> .....	<i>Geology</i>
<b>Naidoo, Pragalathan, BSc</b> .....	<i>Biochemistry</i>
<b>Naidoo, Shaline, BSc</b> .....	<i>Microbiology</i>
<b>Ndlela, Thandeka Beloveth, BSc</b> .....	<i>Statistics</i>
<b>Ngcongco, Nkululeko, BSc</b> .....	<i>Statistics</i>
<b>Ngema, Ntuthuko Blessing, BSc</b> .....	<i>Physics</i>
<b>Ngobese, Nomali Ziphorah, BSc</b> .....	<i>Biological Sciences</i>
<b>Ngodwane, Jongikhaya, BSc</b> .....	<i>Statistics</i>
<b>Noor-Mahomed, Naema, BSc</b> .....	<i>Biochemistry</i>
<b>Ntuli, Nomthandazo, BSc</b> .....	<i>Geology</i>
<b>Nyathi, Syabonga Victor, BSc</b> .....	<i>Geology</i>
<b>* Nyawo, Thamsanqa Lethukuthula Blessing, BSc</b> .....	<i>Statistics</i>
<b>Nyuswa, Thembeke Lynnette Trudy, BSc</b> .....	<i>Biochemistry</i>
<b>Omarjee, Aadila, BSc</b> .....	<i>Marine Biology</i>
<b>Osman, Aaisha Bibi, BSc</b> .....	<i>Statistics</i>
<b>Padayachee, Pervashni, BSc</b> .....	<i>Microbiology</i>
<b>Padayachi, Yerdashin Rajendran, BSc</b> .....	<i>Environmental Science</i>
<b>Paijmans, Dane Matthew, BSc</b> .....	<i>Biological Sciences</i>
<b>Panizzolo, Dillon Marc, BSc</b> .....	<i>Environmental Science</i>
<b>Pathar, Dasagen, BSc</b> .....	<i>Environmental Science</i>
<b>Perumal, Denzil, BSc</b> .....	<i>Biochemistry</i>
<b>* Perumal, Sarisha, BSc</b> .....	<i>Environmental Science</i>
<b>Phatela, Limpho Alphonse, BSc</b> .....	<i>Geology</i>
<b>Pillay, Michael Nivendran, BSc</b> .....	<i>Chemistry</i>
<b>Pillay, Prathiva, BSc</b> .....	<i>Biological Sciences</i>
<b>Pillay, Urissa, BSc</b> .....	<i>Biological Sciences</i>
<b>* Pretorius, Karyn Leigh, BSc</b> .....	<i>Microbiology</i>
<b>Rajah, Candice, BSc</b> .....	<i>Applied Physics</i>
<b>Rajoo, Jashin, BSc</b> .....	<i>Biological Sciences</i>
<b>Ramdayal, Nithesh, BSc</b> .....	<i>Geology</i>
<b>Ramlucken, Uraisha, BSc</b> .....	<i>Biochemistry</i>
<b>Rautenbach, Anita, BSc(Unisa)</b> .....	<i>Biological Sciences</i>
<b>Reddy, Mageshni, BSc</b> .....	<i>Chemistry</i>
<b>α Saeed, Khwaja Zaid, BSc</b> .....	<i>Financial Mathematics</i>
<b>Sam, Caitlin, BSc</b> .....	<i>Microbiology</i>
<b>Shandu, Bhekizwi Mthobisi Erasmus, BSc</b> .....	<i>Geology</i>
<b>Shriram, Rahul, BSc</b> .....	<i>Geology</i>
<b>Singh, Ashona, BSc</b> .....	<i>Chemistry</i>



Singh, Reshreen, <i>BSc</i> .....	<i>Microbiology</i>
Sithole, Sibusiso Lindelani, <i>BSc</i> .....	<i>Geology</i>
Skenjana, Onke Knowledge, <i>BSc</i> .....	<i>Geology</i>
α Vawda, Nadeem, <i>BSc</i> .....	<i>Computer Science</i>
Vayej, Suhayl Muhammed, <i>BSc</i> .....	<i>Statistics</i>
Waddington, Kirby Joyce, <i>BSc</i> .....	<i>Ecological Science</i>
Wiles, Errol Avern, <i>BSc</i> .....	<i>Geology</i>
Worlock, Keren Anne, <i>BSc</i> .....	<i>Marine Biology</i>
Xaba, Minenhle Nomthandazo, <i>BSc</i> .....	<i>Geology</i>
Xulu, Vukani Cosmos, <i>BSc</i> .....	<i>Computer Science</i>

---

## BACHELORS DEGREES

---

### Bachelor of Science

Abdul, Reginald Francis .....	<i>Computer Science, Physics</i>
Agjee, Na'eem Hoosen .....	<i>Environmental Science</i>
Ali, Aminath .....	<i>Marine Biology</i>
Allan, Kent Thomas .....	<i>Environmental Science</i>
Arbuthnot, Lauren Kathleen .....	<i>Actuarial Science</i>
Arnold, Maxine Bernadette .....	<i>Environmental Science</i>
Bagratee, Kiran .....	<i>Computer Sc &amp; Information Technology</i>
Banyini, Nkiyasi Dolette .....	<i>Geological Sciences</i>
Bell, Dustin .....	<i>Environmental Science</i>
α Bennimahadeo, Shiroma .....	<i>Biomedical Sciences</i>
Bhengu, Mcebiseni .....	<i>Geography and Environmental Management</i>
Biyela, Mbalenhle Portia Naomi .....	<i>Microbiology</i>
Booval, Shaun .....	<i>Biological Sciences</i>
Boshoff, Nathan Michael .....	<i>Computer Sc &amp; Information Technology</i>
Bowden, Lisa .....	<i>Chemistry, Microbiology</i>
Buthlezi, Nelisiwe Goodness .....	<i>Applied Chemistry</i>
Cebekhulu, Thokozani .....	<i>Geological Sciences</i>
Cele, Kwazikwakhe Wiseman .....	<i>Applied Chemistry</i>
Cele, Sandile Victor .....	<i>Biomedical Sciences</i>
Cele, Sipho Zimisele .....	<i>Applied Chemistry</i>
Cele, Zamani Eugene Doctor .....	<i>Applied Chemistry</i>
Chauca, Celiwe Precious .....	<i>Geological Sciences</i>
Chetty, Avarshan .....	<i>Computer Sc &amp; Information Technology</i>
Chetty, Prenton Saigul .....	<i>Economics, Statistics</i>

Chetty, Shaeen .....	<i>Applied Chemistry</i>
Chibi, Buyisile .....	<i>Biochemistry, Chemistry</i>
Christian, Murray Brian .....	<i>Applied Mathematics, Mathematics</i>
Cibane, Sindiswa .....	<i>Environmental Science</i>
Coertzen, Marietjie .....	<i>Environmental Science</i>
Constantinou, Michael .....	<i>Actuarial Science</i>
Dass, Logandrie .....	<i>Biochemistry, Microbiology</i>
α Dawood, Nadeem .....	<i>Actuarial Science</i>
α De Maudave Bestel, Charles .....	<i>Computer Science, Mathematics</i>
Dingile, Xolani Sifiso .....	<i>Applied Mathematics, Statistics</i>
Dlamini, Muyalo Glen .....	<i>Biomedical Sciences</i>
Dlamini, Sanele Goodenough .....	<i>Applied Physics</i>
Dlamini, Sicelo .....	<i>Geological Sciences</i>
Dlamini, Snenkosi Welcome .....	<i>Applied Mathematics, Physics</i>
Dlanjwa, Ntobeko Alfred .....	<i>Computer Sc &amp; Information Technology</i>
Dludla, Thembalakhe Chicco .....	<i>Computer Sc &amp; Information Technology</i>
Du Preez, Brett Schorn .....	<i>Actuarial Science</i>
Dube, Sdongeleni .....	<i>Applied Mathematics, Computer Science</i>
Duwayo, Nkosikhona Suprise .....	<i>Applied Chemistry</i>
Elias, Naseema Ahmed .....	<i>Environmental Science</i>
Elliott, Tamzin Cindy .....	<i>Biological Sciences</i>
Essop, Muhammad Irfan .....	<i>Environmental Science</i>
Gaffar, Kyle Adam .....	<i>Applied Chemistry</i>
Gandilall, Santosh .....	<i>Computer Sc &amp; Information Technology</i>
Goonoa, Rishab .....	<i>Computer Sc &amp; Information Technology</i>
Gopal, Kameel .....	<i>Computer Sc &amp; Information Technology</i>
Goris, Marguerite Louise .....	<i>Geography and Environmental Management</i>
Gosai, Asha .....	<i>Computer Sc &amp; Information Technology</i>
Gounden, Kribashnee .....	<i>Biochemistry, Chemistry</i>
Gounden, Marchia .....	<i>Environmental Biology, Microbiology</i>
Gounden, Verosha .....	<i>Biochemistry, Microbiology</i>
Govender, Analicia .....	<i>Environmental Science</i>
Govender, Aveshnee .....	<i>Applied Chemistry</i>
Govender, Dayalan .....	<i>Computer Sc &amp; Information Technology</i>
Govender, Deshnee .....	<i>Microbiology</i>
Govender, Dhevan .....	<i>Computer Sc &amp; Information Technology</i>
Govender, Nishen .....	<i>Geological Sciences</i>
Govender, Paulene .....	<i>Applied Mathematics, Physics</i>
Govender, Preshnee .....	<i>Applied Mathematics, Statistics</i>
Govender, Seshni .....	<i>Environmental Science</i>
Govender, Shivani .....	<i>Biochemistry, Microbiology</i>
Govender, Vevanderan .....	<i>Microbiology</i>
Govender, Viloshnie .....	<i>Biochemistry, Microbiology</i>
Govindsamy, Miresha .....	<i>Computer Sc &amp; Information Technology</i>
Greet, Andrew John .....	<i>Geological Sciences</i>
Gumbi, Bhukumuzi Prince .....	<i>Applied Chemistry</i>



Gumbi, Sifiso Bongumusa Dominic .....	<i>Computer Sc &amp; Information Technology</i>
Gumede, Mbaliyethu Nomonde .....	<i>Geography and Environmental Management</i>
Gumede, Mlungisi .....	<i>Geological Sciences</i>
Gumede, Nombuso Cynthia .....	<i>Environmental Science</i>
Gumede, Nombuyiselo Nontobeko .....	<i>Geological Sciences</i>
α Gurayah, Shivaan Anand .....	<i>Actuarial Science</i>
Gwala, Busisani Brightwell .....	<i>Computer Sc &amp; Information Technology</i>
α Habib, Saffiya .....	<i>Biochemistry, Microbiology</i>
Hadebe, Silindile Innocentia .....	<i>Biomedical Sciences</i>
Harripersadh, Amanda .....	<i>Environmental Science</i>
Harrysharan, Nirasha .....	<i>Computer Sc &amp; Information Technology</i>
Heilgendorff, Heiko Martin .....	<i>Applied Mathematics, Physics</i>
Hlajoane, Sentle Augustinus .....	<i>Geological Sciences</i>
Houston, Kerry Marilyn .....	<i>Biomedical Sciences</i>
Hulley, Clarissa Jody .....	<i>Biological Sciences</i>
Imrith, Navishka .....	<i>Microbial Biotechnology</i>
Ismail, Aneesa .....	<i>Biochemistry, Microbiology</i>
Jakalase, Thuthuza .....	<i>Biochemistry, Microbiology</i>
Jhilmeet, Saisha .....	<i>Chemistry, Microbiology</i>
Jones, Brendon Ronald .....	<i>Geological Sciences</i>
Joseph, Lavania .....	<i>Biochemistry, Microbiology</i>
Kadwa, Ismail Yusuf .....	<i>Computer Sc &amp; Information Technology</i>
Kaino, Lucius Muchunguzi .....	<i>Actuarial Science</i>
Kalawan, Helashini .....	<i>Environmental Science</i>
Karim, Naeem .....	<i>Computer Sc &amp; Information Technology</i>
Kast, Nazley Rochel Violet .....	<i>Biochemistry, Microbiology</i>
Khan, Farha .....	<i>Biological Sciences</i>
Khan, Farisha .....	<i>Cell Biology, Microbiology</i>
Khan, Sumaya .....	<i>Geological Sciences</i>
Khanyile, Nontokoza Portia .....	<i>Computer Science, Statistics</i>
Kheswa, Mbongeni Protus .....	<i>Chemistry, Geology</i>
Khomo, S'Busiso Blessing .....	<i>Applied Mathematics, Chemistry, Economics</i>
Khosa, Fumani Emmanuel .....	<i>Geological Sciences</i>
Khowa, Nondumiso Sbusisiwe .....	<i>Biochemistry, Microbiology</i>
Khumalo, Nduduzo Lungisani .....	<i>Applied Chemistry</i>
Khumalo, Thuthukile Bongiwe .....	<i>Environmental Science</i>
Kisten, Yanasivan .....	<i>Marine Biology</i>
Kubeka, Fihliwe .....	<i>Biological Sciences</i>
Kubheka, Sihle Basil .....	<i>Actuarial Science</i>
Kumalo, Hezekiel Mathambo .....	<i>Applied Chemistry</i>
Lekhuleni, Nkosana Wellington .....	<i>Geological Sciences</i>
Lembethe, Thembisa Clarah .....	<i>Biochemistry, Microbiology</i>
Lester, Ryan Paul .....	<i>Computer Sc &amp; Information Technology</i>
Loot, Mohsina .....	<i>Economics, Statistics</i>
Lukele, Nontobeko Phumlile .....	<i>Geography</i>
Luthuli, Khumbuzile Cherol .....	<i>Biomedical Sciences</i>

<b>Luthuli, Siphathesonke</b> .....	<i>Geological Sciences</i>
<b>MacHale, Catherine Anne</b> .....	<i>Biological Sciences</i>
<b>Macoba, Zoleka Veronica</b> .....	<i>Biochemistry, Microbiology</i>
<b>Madamalala, Ndiafhi</b> .....	<i>Mathematics, Statistics</i>
<b>Madiya, Sihle</b> .....	<i>Biochemistry, Chemistry</i>
<b>Madlala, Nhlakanipho Suprise</b> .....	<i>Geological Sciences</i>
<b>Magubane, Sebenzile Innocentia</b> .....	<i>Applied Chemistry</i>
<b>Mahabel, Kishan Shamrith</b> .....	<i>Biochemistry, Microbiology</i>
<b>Mahadeo, Nikara</b> .....	<i>Environmental Science</i>
<b>Maharaj, Sahil Santosh</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Maharaj, Sharnell</b> .....	<i>Applied Mathematics</i>
<b>Maharajh, Yashna</b> .....	<i>Environmental Science</i>
<b>Mahaye, Ntombikayise</b> .....	<i>Biochemistry, Microbiology</i>
<b>Mahlangeni, Nomfundo Thobeka</b> .....	<i>Applied Chemistry</i>
<b>Makatu, Rendani Sandra</b> .....	<i>Applied Chemistry</i>
<b>Makhathini, Galelekile Cecilia</b> .....	<i>Geological Sciences</i>
<b>Mangenda, Anis Sabri</b> .....	<i>Applied Chemistry</i>
<b>Manyokole, Mathadira Paul</b> .....	<i>Applied Physics</i>
<b>Maphalala, Sizwe Emmanuel</b> .....	<i>Applied Chemistry</i>
<b>Maphanga, Siphesihle Sonto</b> .....	<i>Geological Sciences</i>
<b>Marobela, Uwo</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Maseko, Mduduzi</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Maseme, Brian Nkululeko</b> .....	<i>Geological Sciences</i>
<b>Masikane, Siphamandla Cecil</b> .....	<i>Applied Chemistry</i>
<b>Masondo, Sphamandla Patrick</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Masthan, Ahmad Siddeeq Iqbal</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Matadin, Riona</b> .....	<i>Microbiology</i>
<b>Mathadeen, Prilene</b> .....	<i>Applied Chemistry</i>
<b>Matshazi, Cedric</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Mbambo, Seluleko Hopewell</b> .....	<i>Applied Mathematics, Statistics</i>
<b>Mbatha, Lucky Sandile Brian</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Mbele, Zandile</b> .....	<i>Geological Sciences</i>
<b>Mbonane, Cebolenkosi</b> .....	<i>Applied Physics</i>
<b>Mbutho, Sphiwe Lucky</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Mchunu, Siyathokoza</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>*Mcineka, Siphesihle Bright</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Mfukuli, Phumlile</b> .....	<i>Geological Sciences</i>
<b>Mgabhi, Nkululeko Vusumuzi</b> .....	<i>Biochemistry, Chemistry</i>
<b>Mgaga, Zinhle Thandokuhle Immaculate</b> .....	<i>Microbiology</i>
<b>Mhlongo, Anele Petunia</b> .....	<i>Biological Sciences</i>
<b>Mhlongo, Sizwe Innocent</b> .....	<i>Biochemistry, Microbiology</i>
<b>Mhlongo, Thabani Hopewell</b> .....	<i>Mathematics, Statistics</i>
<b>Mkhabela, Nkosinathi Goodman</b> .....	<i>Applied Chemistry</i>
<b>Mkhize, Bongumusa Absolom</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Mkhize, Clive Sakhile</b> .....	<i>Applied Mathematics, Statistics</i>
<b>Mkhize, Menzi Howard</b> .....	<i>Computer Sc &amp; Information Technology</i>



<b>Mkhize, Nokwanda Evidence</b> .....	<i>Geological Sciences</i>
<b>Mkhize, Nomvelo Pumla</b> .....	<i>Geological Sciences</i>
<b>Mkhwanazi, Sihle Eric</b> .....	<i>Physics</i>
<b>Mlotshwa, Simphiwe Gift</b> .....	<i>Geological Sciences</i>
<b>Mmola, Rosemary Refelwe</b> .....	<i>Applied Chemistry</i>
<b>Mncube, Philani Anderson</b> .....	<i>Applied Mathematics, Statistics</i>
<b>Mngadi, Praise-God Dumisani</b> .....	<i>Applied Physics</i>
<b>Moakamela, Laurence</b> .....	<i>Biological Sciences</i>
<b>Mohanlal, Rakesh</b> .....	<i>Applied Mathematics, Physics</i>
<b>Molabe, Mogoshadi Pontsho</b> .....	<i>Geological Sciences</i>
<b>Moodley, Desika</b> .....	<i>Environmental Science</i>
<b>Moodley, Kavandren</b> .....	<i>Environmental Science</i>
<b>Moodley, Lavani</b> .....	<i>Biochemistry, Microbiology</i>
<b>Moodley, Oren</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Moodley, Preston</b> .....	<i>Information Systems &amp; Technology, Statistics</i>
<b>Moodley, Shirantha</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Moodley, Yoshen</b> .....	<i>Geological Sciences</i>
<b>Moses, Odette</b> .....	<i>Biochemistry, Microbiology</i>
<b>Moshoeshoe, Makadi Agnes</b> .....	<i>Applied Chemistry</i>
<b>Mosina, Ntsoaki Leticia</b> .....	<i>Biochemistry, Microbiology</i>
<b>Motala, Aysha</b> .....	<i>Applied Chemistry</i>
<b>Mote, Nonkululeko Nthabiseng</b> .....	<i>Applied Chemistry</i>
<b>* Moyes, Ashley</b> .....	<i>Biomedical Sciences</i>
<b>Mpungose, Philani Perfect</b> .....	<i>Applied Chemistry</i>
<b>Msane, Bongani Cedrick</b> .....	<i>Geological Sciences</i>
<b>Mthembu, Zwelithini Goodman</b> .....	<i>Geological Sciences</i>
<b>Mthethwa, Melisa Thobeka</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Mthethwa, Nokulunga Ruth</b> .....	<i>Biochemistry, Microbiology</i>
<b>Mthethwa, Precious Ngithule</b> .....	<i>Biomedical Sciences</i>
<b>Mthiyane, Dumisani Boysie</b> .....	<i>Applied Chemistry</i>
<b>Muditambi, Anzatsihlidzi Cathrene</b> .....	<i>Geological Sciences</i>
<b>Mukundwa, Andrew</b> .....	<i>Biochemistry, Microbiology</i>
<b>Munenge, Collins</b> .....	<i>Information Systems &amp; Technology, Mathematics</i>
<b>Munsamy, Ashlin</b> .....	<i>Biomedical Sciences</i>
<b>Munsamy, Karushan</b> .....	<i>Biological Sciences</i>
<b>Munsamy, Thavani</b> .....	<i>Microbiology</i>
<b>Murray, Neil Drewan</b> .....	<i>Applied Mathematics, Mathematics</i>
<b>Mvuyane, Sinenhlanhla Accurate</b> .....	<i>Chemistry, Microbiology</i>
<b>α Mwisi, Sabelo</b> .....	<i>Actuarial Science</i>
<b>Myende, Nompumelelo Mirriam</b> .....	<i>Environmental Science</i>
<b>Myende, Ntokozo</b> .....	<i>Geological Sciences</i>
<b>Myeza, Nonhlanhla Precious</b> .....	<i>Applied Chemistry</i>
<b>Nadasan, Havandren</b> .....	<i>Biological Sciences</i>
<b>Naicker, Elisha</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Naicker, Sharlene-Asia</b> .....	<i>Applied Physics</i>
<b>Naicker, Yegeshni</b> .....	<i>Computer Sc &amp; Information Technology</i>



<b>Naidoo, Ashen</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Naidoo, Charissa Camille</b> .....	<i>Biomedical Sciences</i>
<b>Naidoo, Elvira</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Naidoo, Jarred</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Naidoo, Kamini</b> .....	<i>Biochemistry, Microbiology</i>
<b>Naidoo, Kerusha</b> .....	<i>Biochemistry, Microbiology</i>
<b>Naidoo, Keshani</b> .....	<i>Biochemistry, Microbiology</i>
<b>Naidoo, Kubeshni</b> .....	<i>Applied Chemistry</i>
<b>Naidoo, Llewellyn Reeve</b> .....	<i>Economics, Statistics</i>
<b>Naidoo, Patrina</b> .....	<i>Applied Mathematics, Statistics</i>
<b>Naidoo, Samantha Gunakanti</b> .....	<i>Geography and Environmental Management</i>
<b>Naidoo, Yegeshni</b> .....	<i>Geological Sciences</i>
<b>Naidu, Andrishu</b> .....	<i>Biochemistry, Microbiology</i>
<b>Naik, Keshnee</b> .....	<i>Chemistry, Microbiology</i>
<b>Napier, Melanie Carmel</b> .....	<i>Biological Sciences</i>
<b>Narainsamy, Nathan</b> .....	<i>Chemistry</i>
<b>Narayan, Shanil</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Nathaniel, Patricia Pearl</b> .....	<i>Geography</i>
<b>Naude, Hendrik Johannes</b> .....	<i>Geological Sciences</i>
<b>Ndlela, Nontobeko Goodness</b> .....	<i>Biochemistry, Microbiology</i>
<b>Ndlela, Ntuthuko</b> .....	<i>Geological Sciences</i>
<b>Ndlovu, Nompumelelo Sylvia</b> .....	<i>Microbial Biotechnology</i>
<b>Nel, Holly Astrid</b> .....	<i>Biological Sciences</i>
<b>Nevondo, Funanani Thelma</b> .....	<i>Applied Chemistry</i>
<b>Ngema, Nomthunzi Nomfundo</b> .....	<i>Biochemistry, Microbiology</i>
<b>Ngema, Zamangema Nokulunga</b> .....	<i>Biomedical Sciences</i>
<b>Ngubane, Nozipho Pearl</b> .....	<i>Biochemistry, Microbiology</i>
<b>Ngubane, Sanelisiwe Precious</b> .....	<i>Biological Sciences</i>
<b>Ngubelanga, Sifiso Allan</b> .....	<i>Applied Mathematics, Statistics</i>
<b>Nkabinde, Mmeli President</b> .....	<i>Applied Mathematics, Statistics</i>
<b>Nkala, Nkululeko</b> .....	<i>Geological Sciences</i>
<b>Nkosi, Sandile Bongani</b> .....	<i>Geological Sciences</i>
<b>Nkosi, Sibusiso Imanuel</b> .....	<i>Applied Chemistry</i>
<b>Nkwane, Mzikayise</b> .....	<i>Geological Sciences</i>
<b>Nkwanyana, Simphiwe Precious</b> .....	<i>Microbial Biotechnology</i>
<b>Nothard, Courtney Shauney Rayner</b> .....	<i>Biomedical Sciences</i>
<b>Nsanya, Godluck Zachary</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Ntuli, Nonhlanhla Alice</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Nunlall, Prash</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Nyathi, Njabulo</b> .....	<i>Geological Sciences</i>
<b>Nyide, Zithulele Siphesihle</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Nyundu, Phetheni Patience</b> .....	<i>Applied Chemistry</i>
<b>Nzama, Cyril Ndimiso</b> .....	<i>Chemistry</i>
<b>Nzuza, Mphiliseni Bongani</b> .....	<i>Applied Mathematics, Statistics</i>
<b>Padavattan, Jared</b> .....	<i>Marine Biology</i>
<b>Padayachee, Prien</b> .....	<i>Geological Sciences</i>

Panday, Prathisha .....	Geological Sciences
Pataka, Vutivi .....	Applied Mathematics, Statistics
Patel, Mohamed .....	Computer Science
Pather, Keshia .....	Geography and Environmental Management
Pather, Verushka .....	Biochemistry, Microbiology
Pentasaib, Shanolin .....	Geological Sciences
Phahla, Thulile Percival .....	Biochemistry, Microbiology
Phakoe, Thabang Sidney .....	Geological Sciences
Phaswana, Petersen .....	Applied Chemistry
Pillai, Jessica .....	Biochemistry, Microbiology
Pillay, Elisha .....	Biological Sciences
Pillay, Kamleshlan .....	Environmental Science
Pillay, Sharmini .....	Applied Physics
Pillay, Shivanee .....	Marine Biology
Pillay, Thesan .....	Environmental Science
Potwana, Fezile Sipiwe Wiseman .....	Applied Chemistry
Qwele, Ndumiso Nkokheli Wayne .....	Actuarial Science
Radebe, Nature Nozipho .....	Biological Sciences
Radzilani, Mueletshedzi .....	Geological Sciences
Raghu, Kashmira .....	Biological Sciences
Ramanund, Ashmika Mansingh .....	Biological Sciences
Ramharack, Kavitha .....	Microbiology
Ramowtar, Ashvir Premlal .....	Computer Sc & Information Technology
Ramsamy, Cameron .....	Microbial Biotechnology
Ramsuraj, Presha .....	Environmental Science
Rashid, Nadia .....	Biochemistry, Chemistry, Microbiology
Ratsibi, Humbelani Edzani .....	Applied Physics
Ravele, Takalani Wendy .....	Environmental Science
Razak, Azrah .....	Environmental Science
Reddy, Mageshnee Mayshree .....	Marine Biology, Microbiology
Reddy, Nivesan .....	Geography and Environmental Management
* Roberts, Danielle Jade .....	Applied Mathematics, Statistics
Rooplal, Sunera .....	Applied Chemistry
Rowell, Gareth Benjamin .....	Actuarial Science
Sahadeu, Surendra Girdharie .....	Computer Science
Sahadew, Ashveer .....	Biological Sciences
Sanderson, Hayley .....	Geological Sciences
Sankar, Sasha .....	Applied Chemistry
Sauli, Atang Calvin .....	Applied Chemistry
Sayed Usuf, Rishaan .....	Statistics
Sewpersad, Shirveen .....	Applied Chemistry
Sewsunker, Preshendra .....	Computer Sc & Information Technology
Shandu, Bheki Njabulo .....	Computer Sc & Information Technology
Sharma, Dipti .....	Biochemistry, Microbiology
Shazi, Thulasizwe Stanford .....	Economics, Statistics
Shembe, Nonhlanhla Angel .....	Applied Chemistry



<b>Shezi, Brightwell Philangezwi</b> .....	<i>Applied Mathematics, Statistics</i>
<b>Shukla, Anuj</b> .....	<i>Biochemistry, Chemistry</i>
<b>Sibanyoni, Sibusiso Jake</b> .....	<i>Applied Chemistry</i>
<b>Sibisi, Mduduzi Khethani</b> .....	<i>Applied Chemistry</i>
<b>Sibiya, Nokuphila Sindiswa</b> .....	<i>Microbiology</i>
<b>Simelane, Carol Xolile</b> .....	<i>Geological Sciences</i>
<b>Simelane, Mpumelelo Sikhumbuzo</b> .....	<i>Geological Sciences</i>
<b>Singh, Kamal</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Singh, Nicole</b> .....	<i>Biological Sciences</i>
<b>Singh, Nimisha</b> .....	<i>Biomedical Sciences</i>
<b>Singh, Prathna</b> .....	<i>Biological Sciences</i>
<b>Singh, Sameer</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Singh, Sunaina</b> .....	<i>Biological Sciences</i>
<b>Sithole, Fulufhelo Abednego</b> .....	<i>Applied Chemistry</i>
<b>Sithole, Simukeliso Sanele Goodenough</b> .....	<i>Geological Sciences</i>
<b>Sithole, Slindile Brightness</b> .....	<i>Environmental Biology</i>
<b>Sithole, Vuyisile Prudence</b> .....	<i>Applied Chemistry</i>
<b>* Smit, Kaylee Pam</b> .....	<i>Marine Biology</i>
<b>Soodhin, Kratisha</b> .....	<i>Microbiology</i>
<b>Sosibo, Sphelele Cyril</b> .....	<i>Applied Chemistry</i>
<b>Stephen, Warren Duane</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Stoffels, Marese Sherrilee Odette</b> .....	<i>Applied Chemistry</i>
<b>α Sukdeo, Ryan Jude</b> .....	<i>Actuarial Science</i>
<b>Sukdev, Shevani</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Surajpal, Samantha</b> .....	<i>Biochemistry, Microbiology</i>
<b>Thabethe, Elisha Omega</b> .....	<i>Computer Sc &amp; Information Technology</i>
<b>Thambaran, Kayrenza</b> .....	<i>Biochemistry, Microbiology</i>
<b>Thwala, Manqoba Protas</b> .....	<i>Geography and Environmental Management</i>
<b>Tootla, Safiya Adam</b> .....	<i>Biological Sciences</i>
<b>Tularam, Hasheel</b> .....	<i>Geography and Environmental Management</i>
<b>Venketiah, Heston Jeriel</b> .....	<i>Biochemistry, Microbiology</i>
<b>Venketta Ramiah, Nadine Clarissa</b> .....	<i>Biochemistry, Microbiology</i>
<b>Vilakazi, Nonkonzo Nompilo Queeneth</b> .....	<i>Biomedical Sciences</i>
<b>Vilakazi, Ntombifuthi Pretty</b> .....	<i>Environmental Science</i>
<b>Xaba, Sifiso Quentin</b> .....	<i>Applied Chemistry</i>
<b>Ximba, Velemseni Nkululeko</b> .....	<i>Geology</i>
<b>Zama, Lungisani Brian</b> .....	<i>Applied Chemistry</i>
<b>Ziqubu, Scelokuhle Mpilenhle</b> .....	<i>Environmental Science</i>
<b>Zulu, Simangele Sinegugu</b> .....	<i>Applied Chemistry</i>
<b>Zulu, Siphesihle Mcdonald</b> .....	<i>Applied Chemistry</i>
<b>Zuma, Zamokuhle Gugu</b> .....	<i>Biochemistry, Microbiology</i>



# The Graduation Ceremony

The graduation ceremony has a long history and is steeped in tradition. It dates back to the establishment of the first universities in Europe in the 12<sup>th</sup> century.

## The Chancellor

“Chancellor” is an office that goes back to Roman times: the original chancellor or *cancellarius* (as the office was known), regulated access to the Roman Tribune. In medieval times, the office became associated with the heads of writing departments of the early kings. Because so few people were literate, a chancellor was necessarily learned. This is why the heads and spokespersons of the early universities were also accorded this title. More recently the office has become largely symbolic and the executive head of a university is its Vice-Chancellor. One of the Chancellor’s primary roles is to confer degrees at the graduation ceremonies.

Dr Zwelini Mkhize is the second Chancellor of the University of KwaZulu-Natal. His predecessor is Dr Frene Ginwala (2005-2009).

## The Mace

The University of KwaZulu-Natal Mace was designed and executed by local sculptor Mr Zamokakhwe Gumede and is carved from an indigenous wood, Drakensberg bottlebrush (*umBande*), gathered from the artist’s home near Bergville.

The head of the Mace is made up of three opened book-like forms, suggestive of scholarship but also of the massive landscape forms of our province, onto each of which is placed a ruler, a pen and a pencil. These refer respectively to the scientific and computational, the text-based and the creative sides to the University’s work. Below this are an encircling set of heads, representing the diverse University community. The whole is surmounted by an alighting secretary bird (*iNtungunono*), an elegant and active bird found throughout the province and equally at home on land or in the air. At the foot of the Mace is a hoof-like shape, giving a sense of contact with the soil of Africa.

The carrying of the mace in procession symbolizes the University’s status as a degree awarding institution.

## Academic Dress

The wearing of gowns by judges, ministers, teachers and scholars is an ancient and significant custom. By wearing a gown when receiving their degrees and diplomas, the graduating student participates in this long tradition and joins hands with students past and present.

The hood conveys the most amount of information with the addition of braid or coloured linings differentiating the different qualifications. The colour of the band or hood lining represents the Faculty, each of which has its own colour.

## Convocation

After being capped by the Chancellor, each graduate moves across the stage and hands the hood to the Robing officer who represents the Convocation of the University. The Robing officer places the hood upon the graduate’s shoulders and, in so doing, symbolizes acceptance into the Convocation of the University of KwaZulu-Natal, the statutory body which links graduates of the University and through which graduates have the opportunity to play a continuing role in the affairs of the University.



## The University Logo

The University Logo is a powerful visual symbol through which the University projects an image of excellence. In addition, it emphasises the University's standing and integrity within the province of KwaZulu-Natal and within the academic and business communities, at home and abroad and provides an identity around which internal stakeholders – staff and students – unite.

The African shield symbolises the protection of our most valuable assets, namely, education, culture and, by extension, African Scholarship. The globe with multi-coloured rays epitomises a rising sun, a new beginning and acts as a symbol of enlightenment.

Further, the globe represents the University as a global player, producing world-class graduates, while the multi-coloured rays embody diversity – race, culture, language – as well as social values. The book/wave/wings, which underscore the visual, represent the foundation of knowledge, the spirit of the eastern seaboard, and soaring to new heights.

The circular format of the Centenary Logo suggests unity and simulates a globe, representing UKZN as a world class university. The entire structure mirrors a coat of arms. Coats of arms are used to identify a community/family. The University is a community and 'family' within itself.

The University logo represents a University that is rooted in and responsive to Africa's unique qualities, challenges, diversities and strengths, while, at the same time, nurturing and protecting African Scholarship.

## Celebrating 100 years of Academic Excellence

The University of KwaZulu-Natal (UKZN) will be celebrating 2010 as the centenary of academic excellence in the province of KwaZulu-Natal.

This marks the rich tapestry of varied history from the University College, Bechet College, Salisbury Island-University College, Medical School, Edgewood College, Pietermaritzburg, Howard College and later the University of Durban-Westville.

In January 1910, the Natal University College in Pietermaritzburg was established with 57 students – 49 men and 8 women operating from Maritzburg College.

Eight professors formed the staff of the College in 1910: Professors of Classics; Chemistry and Physics; Botany and Geology; English and Philosophy; Pure and Applied Mathematics; Zoology; Modern Languages and History; and Law. Undergraduates in 1910 paid R3.00 per month for tuition.

UKZN celebrates 100 years of consolidation of academia – we are celebrating a history of mergers, consolidations, reconfiguration and the present that we now enjoy – a university that stands out as one of South Africa's prominent universities and is one of three African universities ranked amongst the top 500 universities in the world.



### ***UKZN Graduation Anthem: IHELE***

*(written and composed by Phelelani Mnomiya)*

Obani labo?  
Baphi?  
Ngibona beza beyikazela  
Bathwel' ongiyane  
Bavela kuphi na?  
Obani labo?  
Ongqondongqondo, oSibakhulu  
Yibo Laba  
Yini na leyo  
Ihele, ihele lezingwazi zakithi  
Udwendwe lwezingwele zakithi  
Nant' ihele loNgqondongqondo  
Nant' ihele loSibakhulu  
Udwendwe lwezingwele zakithi  
Dedani bangene; kodwa nathi siyeza  
Dedani badlule; nathi siyalandela  
Sithi: halala, halala  
Halala maqhawe esizwe sethu  
Unwel' olude, inkonzo enhle  
Sithi: halala!

---

### ***GAUDEAMUS IGITUR***

Gaudeamus igitur, juvenes dum sumus;  
Gaudeamus igitur, juvenes dum sumus;  
Post jucundam juventutem,  
Post molestam senectutem,  
Nos habebit humus, nos habebit humus.  
Ubi sunt qui ante nos in mundo fuere?  
Ubi sunt qui ante nos in mundo fuere?  
Vadite ad superos, transite ad inferos,  
Ubi jam fuere, ubi jam fuere.  
Vita nostra brevis est, brevi finietur;  
Vita nostra brevis est, brevi finietur;  
Venit mors velociter, rapit nos atrociter,  
Nemini parcetur, nemini parcetur.  
Vivat Academia, vivant Professores,  
Vivat Academia, vivant Professores,  
Vivat membrum quodlibet,  
Vivant membra quaelibet,  
Semper sint in flore, semper sint in flore.



## *NATIONAL ANTHEM*

Nkosi sikelel' iAfrika  
Maluphakanyisw' uphondo lwayo  
Yizwa imithandazo yethu  
Nkosi sikelela  
Thina lusapholwayo.

Morena boloka  
Setjhaba saheso  
Ofedise dintwa lematshwenyeho.

O se boloke, O se boloke  
Setjhaba saheso  
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.

---











