

CONGRATULATORY MESSAGE

Graduation is a milestone event deserving of celebration. It is the culmination of an academic journey over many years in which you worked hard, persevered and no doubt overcame many challenges. You and your loved ones have made many sacrifices in pursuit of your qualification. You have acquired new knowledge in your chosen field, and grappled with matters deserving of our collective attention, like sustainability, poverty and social injustice.

Yes, such a crowning moment in your life must be acknowledged and celebrated with pride and joy.

This joy is ours too, for graduation is the highlight of our University calendar as we witness successful students cross the stage to be capped and enter a new chapter of their lives. Each of you has a unique story to tell and an exciting journey ahead.

While we are confident that Mandela University has equipped you with an excellent academic qualification for the challenges of life and work to come, we are equally hopeful that you will live the legacy of our namesake.

With the honour of being the only University in the world to bear the name of one of the world's greatest icons, Nelson Mandela, comes huge responsibilities. Nothing less than adhering and advancing the efforts of our former President will suffice. You are encouraged to continue his and our quest towards a more just, healthy and equal society.

Regardless of your chosen career, use your new-found qualification as a force for good, strive to serve a cause larger than yourself and endeavour to change the world for the better. As in the words of Nelson Rolihlahla Mandela himself "education is the most powerful weapon which you can use to change the world".

We thank you for entrusting your dreams with us. It's you who make us want to do better, for it's you, our students, who give our institution a human face. It's you who will live his and our legacy.

We applaud and salute your achievement and wish you all the best in your future endeavours. As Nelson Mandela University alumni, we look forward to watching your story unfold.

Congratulations!

Dr Geraldine Fraser-Moleketi
Chancellor



Prof Sibongile Muthwa
Vice-Chancellor



ABOUT NELSON MANDELA UNIVERSITY

Nelson Mandela University is a new generation university, distinguished by a wide range of study options and access routes open to students. With 470 programmes from certificate through to doctoral level across 200 different career fields, Nelson Mandela University truly is a comprehensive university.

Founded on more than a century of quality higher education, Nelson Mandela University nurtures innovation, fosters creativity, embraces technology and develops people towards changing the world for the better. The University was previously known as Nelson Mandela Metropolitan University (NMMU), but on 20 July 2017 it was officially re-launched as Nelson Mandela University – the only university in the world to have been given this privilege. Our alumni also come from the University of Port Elizabeth, the PE Technikon and Port Elizabeth campus of Vista University, as these three institutions were combined to form NMMU in 2005.

The University has a strong record of research, working extensively in partnership with business and industry, and has an even more exciting future ahead of it, especially in terms of its contribution to the socio-economic development of the metro, region, country and continent of Africa.

This is due, among other new and growing ventures, to Nelson Mandela University's bold journey towards becoming the leading destination for all Ocean Sciences postgraduate teaching, learning, research and engagement in Africa with the launch of its dedicated campus in September 2017.

Our campuses

The launch of the Ocean Sciences Campus means Nelson Mandela University now has seven campuses and about 27 000 students.

Six of Nelson Mandela University's campuses are in Nelson Mandela Bay and one is in George on the Garden Route. The seven campuses are:

- South Campus in Summerstrand (within a 720-hectare private nature reserve)
- North Campus in Summerstrand
- Ocean Sciences Campus, adjacent to North and South campuses in Summerstrand
- Second Avenue Campus, home to our "green" Business School, in Summerstrand
- Bird Street Campus, a growing postgraduate arts hub in Central
- Missionvale Campus in Missionvale
- George Campus in George

Facilities and supportive teaching and learning environment

Nelson Mandela University is privileged to have outstanding facilities. All students have access to well-equipped laboratories, some of which are open 24/7, and free Wi-Fi throughout all its campuses. All lecture halls are equipped with the latest technology and students have the opportunity of using additional e-learning tools online. The campus libraries and information services network offers a state-of-the-art integrated online system. There are cafeterias, food courts and coffee shops.

A range of opportunities is provided to enhance the academic success of students. These include a first-year orientation programme, peer-facilitated learning opportunities (eg, Supplemental Instruction, e-PAL, tutorials, practicals, mentor programmes, 'Keys to Success' workshops and online resources). The University also promotes learning and development beyond the classroom towards enhancing holistic student development. To recognise this learning, Nelson Mandela University has developed an innovative, electronic co-curricular record system. This record complements the students' academic record.

The University also offers the finest sporting facilities in the Eastern Cape and numerous venues for conferences, meetings and other special events.

Faculties

Nelson Mandela University has seven faculties. They are:

- Arts
- Business and Economic Sciences
- Education
- Engineering, the Built Environment and Information Technology
- Health Sciences
- Law
- Science

Academic focus areas

Though the University prides itself on its vast range of programme offerings, it has a number of strategic areas in terms of its core business of teaching and learning, research and engagement. These are:

- Health and wellness
- Economic and business development with a focus on job creation and entrepreneurship
- Materials and process development for industry and manufacturing
- Emerging information and communications technology for development
- Environmental and natural resource management
- Culture, communication and language
- Leadership, governance, democracy and justice
- Educational development in support of excellence in teaching, learning and curriculum
- Infrastructure and human settlement development

Strategic research areas

- Biodiversity conservation and restoration
- Coastal marine and shallow water ecosystems
- Cyber citizenship
- Democratisation, conflict and poverty
- Earth Stewardship Science
- Health and wellbeing
- Humanising pedagogies
- Manufacturing technology and engineering
- Nanoscale characterisation and development of strategic materials
- Science, Mathematics and Technology Education for Society
- Strategic energy technologies
- Sustainable human settlement development and management
- Sustainable local economic development

Research and Engagement entities

Nelson Mandela University has more than 30 focused institutes, centres and units that exist over and above the formal academic structures. These are aimed at promoting research, technology transfer and innovation. They include the likes of InnoVenton, the University's go-getting Institute for Chemical Technology and Downstream Chemicals; eNtsa, an institute that focuses on seeking solutions through engineering; Earth Stewardship Science Research Institute (ESSRI); and the Institute for Coastal and Marine Research. Many are award-winning entities. The University also has many more engagement institutes, centres and units and two clinics serving society in various initiatives. Its mobile Zanemphilo health platform, for example, serves both indigent communities and its Health Sciences students with practical experience. The latter forms part of the growing Interprofessional Education (IPE) that will undergird the University's Health Science qualifications as it moves towards the formalisation of its Medical School.

'Green' endeavours

In line with its value of respect for the natural environment, Nelson Mandela University is involved in a large number of "green" initiatives that will not only reduce its own carbon footprint but is also assisting others in seeking renewable energy resource solutions. The University's Business School, for example, was the first in the country to be awarded four-star "green" accreditation for a public and education building by the Green Building Council of South Africa in 2013. The "green" agenda is supported by the Centre for Renewable Energy, which is recognised as a research leader in the field, and the University's overriding strategic priority towards all-round environmental economic and environmental sustainability.

International links

About 8% of the University's student body comes from 84 different countries outside of South Africa. The Office for International Education fosters relationships and manages inter-institutional linkages to enrich both Nelson Mandela University staff and students. These partnerships also foster our growing research.

Reasons to be proud:

- Nelson Mandela University is the only University in the world to be named after the global icon Nelson Mandela.
- Nelson Mandela University's diversity and multiculturalism. Our African students come from 32 countries on the continent.
- The Centre for High Resolution Transmission Electron Microscopy (CHRTEM) is the only place in Africa where scientists can view atoms in line with the University's growing prominence for nanoscience.
- The University was chosen to host the country's 10th Medical School, and hopes to welcome its first cohort of medical students from 2020.
- 43% of our academic staff have doctoral degrees, which is above the national average.
- New infrastructure like the second iconic Engineering block on North Campus, the High Performance Complex complete with a 100m research sprint track, and the Science building on South Campus.
- The University has the only dedicated Ocean Sciences campus in South Africa and is working together across disciplines – from the Arts through to Zoology – to find innovative, sustainably solutions in growing the country's blue economy.
- Nelson Mandela University has excellent links with industry and business, particularly within the pharmacy, tourism, the automotive industries and now with all Ocean Sciences-related partners.
- Nelson Mandela University's ongoing education partnership of ten years with Fifa, as one of only two presenters in Africa of an international sports management programme through the Centre International d'Etude du Sport (CIES).
- In 2012 the University was selected to facilitate the country's first electric e-mobility programme and technical centre, called the uYilo e-mobility programme.
- The University has extensive expertise within the field of friction processing which has resulted in numerous national awards for the patented technology, WeldCore®. This technology has saved industry vast sums of money.
- Nelson Mandela University's accounting and pharmacy students who continue to produce top results in their national external examinations.
- The University's international award-winning choir which continues to perform around the globe to wide acclaim.

ACADEMIC DRESS

Special academic attire was designed for office bearers at Nelson Mandela University to be worn at prestigious academic events like graduation.

Each outfit – from that of the Chancellor and Vice-Chancellor to those of the Executive Deans – has been meticulously selected to signify a particular office; this is a tradition that is consistent with leading universities throughout the world.

The gowns, caps and hoods of Nelson Mandela University graduates were similarly inspired and are explained in detail below.

Academic dress for graduates at Nelson Mandela University is as follows:

Doctoral degrees

- Gown:** Cardinal red polyester cashmere gown with long pointed sleeves pleated up with blue cord and button and lined with blue satin with 125mm facings and a blue collar.
- Hood:** Full shape hood in cardinal red polyester cashmere lined with faculty colour satin and edged around the cowl with 75mm faculty colour ribbon with 15mm blue ribbon overlaid central. 50mm wide straight neckband in cardinal red polyester cashmere, 25mm faculty colour ribbon in centre of neckband with 15mm blue ribbon overlaid central to faculty ribbon.
- Cap:** Round doctor's bonnet in black velvet with faculty colour cord and tassel.

Master's degrees

- Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail is used.
- Hood:** Full shape blue hood lined faculty colour satin and edged around the outside of the cowl with 75mm faculty colour with ribbon. 50mm straight neckband in blue with 25mm faculty colour ribbon centred.
- Cap:** Black mortarboard with blue tassel.

Postgraduate diplomas

- Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.
- Hood:** Blue simple shape hood lined silver grey satin. Straight neckband with 15mm faculty ribbon on top edge of neckband and around cowl. 15mm silver grey ribbon on bottom edge of neckband and around cowl spaced 20mm away from the faculty colour.
- Cap:** Black mortarboard with blue tassel.

Bachelor honours degrees

- Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.
- Hood:** Blue simple shape hood lined silver grey satin with 50mm wide straight neckband in faculty colour. Cowl edged 75mm faculty colour ribbon on the outside. 15mm silver grey ribbon runs along the outer edge of the cowl, overlaid on faculty ribbon and on top edge of neckband.
- Cap:** Black mortarboard with blue tassel.

Four-year bachelor's degrees (including Bachelor of Technology degrees)

- Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.
- Hood:** Blue simple shape hood lined silver grey satin with 50mm wide straight neckband in faculty colour. Cowl edged 75mm faculty colour ribbon on the outside. Silver grey cord runs along the outer edge of the cowl, overlaid on faculty ribbon and on top edge of neckband.
- Cap:** Black mortarboard with blue tassel.

Three-year bachelor's degrees

- Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.
- Hood:** Blue simple shape hood lined with silver grey satin with 50mm wide straight neckband in faculty colour. Cowl edged 75mm faculty colour ribbon on the outside.
- Cap:** Black mortarboard with blue tassel.

Advanced diploma

- Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.
- Hood:** Blue simple shape hood lined with silver grey satin with 50mm wide straight neckband. 15mm faculty colour ribbon on top and bottom of neckband around cowl.
- Cap:** Black mortarboard with blue tassel.

Diploma

- Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.
- Hood:** Blue simple shape hood with 50mm wide straight neckband. 25mm faculty colour ribbon on centre of neckband.
- Cap:** Black mortarboard with blue tassel.

Faculty colours

Arts:	Yellow
Business & Economic Sciences:	Plum
Health Sciences:	Apple green
Law:	Grey blue
Education:	Orange
Science:	Dark green
Engineering, the Built Environment and Information Technology:	Light blue
Business School:	Black and magenta

Messrs T. Birch & Co (Pty) Ltd and its subsidiary, Croft Magill & Watson (Pty) Ltd, have been appointed as official robe-maker to the University and as contracted suppliers of choice to students for graduation academic attire.

The Image Factor has been appointed as the official photographer of the University.

RE-IMAGINING GRADUATION AT NELSON MANDELA UNIVERSITY

Our new name, evolving identity and institutional vision offers us an ideal opportunity to collectively explore how we would like to celebrate graduation at Nelson Mandela University.

What should an African university graduation associated with one of the world's most iconic leaders, the late Nelson Mandela, look and feel like?

It is this question that is presently being asked of Nelson Mandela University alumni, staff and students via surveys, focus groups and informal discussions.

We want our graduation ceremonies to offer an authentic expression of who we are ... one that embraces our rich multi-cultural diversity.

Examining all parts

To do so, the focus groups and surveys have examined our new identity, why we celebrate and how we should celebrate – particularly graduation, which is the apex of the academic journey of commitment, sacrifice and an affirmation of our intellectual ability.

What is the best format of our ceremonies? How do we visually express our success? How do we celebrate within socially acceptable norms – norms that embrace all cultures with dignity and pride? How should we dress?

Feedback

The input received to date from the university's key stakeholders in painting a picture of our future graduation ceremonies, has been consistently shared, in a parallel process, with a design team which won a tender to design new academic gowns for office bearers. This does not include gowns worn by graduates, but rather those worn by the likes of our Chancellor, Vice-Chancellor and Chairperson of Council, our deans, the Registrar and other key academic staff.

Interestingly, there has been overwhelming support to retain the academic gowns but in a manner befitting of our vision as a “dynamic African” university.

The new gowns, along with other agreed-upon aspects of our graduation ceremonies – from their size through to the supporting cultural performances – will hopefully be finalised in time for our 2018 Summer Graduation

AUTUMN GRADUATION CEREMONIES APRIL 2018

Friday, 13 April 2018	
Ceremony 1	10:00 George Campus All Programmes
Wednesday, 18 April 2018	
Ceremony 2	09:30 Faculty of Business and Economic Sciences (School of Industrial Psychology & Human Resources, Graduate School and others) Faculty of Law Two Honorary doctoral degrees
Ceremony 3	14:30 Faculty of Business and Economic Sciences (School of Management Sciences) One Honorary doctoral degree
Thursday, 19 April 2018	
Ceremony 4	09:30 Faculty of Science (School of Computing Sciences, Mathematics, Physics & Statistics and School of Biomolecular & Chemical Sciences)
Ceremony 5	14:30 Faculty of Science (School of Environmental Sciences)
Friday, 20 April 2018	
Ceremony 6	09:30 Faculty of Engineering, the Built Environment and Information Technology (School of the Built Environment and School of Information & Communication Technology)
Ceremony 7	14:30 Faculty of Engineering, the Built Environment and Information Technology (School of Engineering)
Saturday, 21 April 2018	
Ceremony 8	09:30 Faculty of Arts (School of Architecture; School of Music, Art & Design and School of Language, Media & Culture)
Ceremony 9	14:30 Faculty of Arts (School of Governmental & Social Sciences) Faculty of Education
Monday, 23 April 2018	
Ceremony 10	09:30 Faculty of Business and Economic Sciences (School of Accounting)
Ceremony 11	14:30 Faculty of Business and Economic Sciences (School of Economics, Development & Tourism)
Tuesday, 24 April 2018	
Ceremony 12	09:30 Faculty of Health Sciences (School of Clinical Care Sciences and School of Medicinal Sciences)
Ceremony 13	14:30 Faculty of Health Sciences (School of Behavioural Sciences and School of Lifestyle Sciences)

OFFICE-BEARERS OF THE UNIVERSITY

CHANCELLOR

DR GJ FRASER-MOLEKETI: MAdmin (UP), DPhil (hc) (NMMU)

CHAIRPERSON OF COUNCIL

MS NP JANUARY-BARDILL: Cert in Ed (UBL), Dip HR Mgt (Damelin), BA (UBL), MA (Essex, UK)

VICE-CHANCELLOR

PROF SW MUTHWA: BA(SW)(Fort Hare), BA(SW)Hons(Wits), MSc, PhD(London University, UK)

DEPUTY VICE-CHANCELLOR: INSTITUTIONAL SUPPORT

MR LE HASHATSE (ACTING): B (Journ & Media Studies), BAHons (RU), MA (Edith Cowan, Australia)

DEPUTY VICE-CHANCELLOR: RESEARCH AND ENGAGEMENT

PROF AWR LEITCH: BSc, BScHons, MSc, PhD(UPE)

DEPUTY VICE-CHANCELLOR: TEACHING AND LEARNING

PROF DM ZINN: BA, BAHons, HDE(UCT), MEd, DEd(Harvard University, USA)

EXECUTIVE DIRECTOR: FINANCE

MR MR MONAGHAN: BCom(UPE), BComHons(UNISA), Professional Accountant(SA)

EXECUTIVE DIRECTOR: HUMAN RESOURCES

MS VN BAM: BSocSc(UCT), PGDip(UFH), MBL(UNISA)

REGISTRAR

DR F GOOLAM: BSc, HDE, BEd, MEd(UDW), PhD(UP)

PRESIDENT OF ALUMNI ASSOCIATION

DR R JONAS: BA(UWC), HDE, BAHons(Unisa), MA(UPE), PhD(NMMU)

EXECUTIVE DEANS OF FACULTIES:

ARTS

PROF MJR BOSWELL: BSocSc, BSocScHons, MSocSc(UCT), PhD(Vrije Universiteit, Netherlands)

BUSINESS AND ECONOMIC SCIENCES

PROF HR LLOYD (ACTING): Bcom, BcomHons, Mcom, DCom (UPE)

EDUCATION

DR SF MOENG: BA, HDE, BEdHons(UPE), MSc(St Cloud State University, USA), DEd(NMMU)

ENGINEERING, THE BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

DR OSW FRANKS: BSc MechEng, MInd Admin(UCT), Hons (B&A)(US), PhD (Engineering Science)(USF - USA), Pr Eng

HEALTH SCIENCES

PROF L PEPETA: MBChB (Unitra), FCPAED(SA), DCH(SA), MMed (Wits)

LAW

PROF A GOVINDJEE: BA, LLB(RU), LLM(UPE), LLD(NMMU)

SCIENCE

PROF A MURONGA: BSc, UED(UNIVEN), BScHons, MSc(UCT), PhD (University of Minnesota, USA)

DEAN OF TEACHING AND LEARNING

PROF CD FOXCROFT: BA, BAHons, MA, DPhil(UPE)

DEAN OF STUDENTS

MR LP JACK: NDip(PMA)(EC Technikon), BTech(PM)(PET), BPhil(US), MCom(UKZN)

ORDER OF PROCEEDINGS

ENTRANCE OF ACADEMIC PROCESSION

(The congregation is requested to rise while the academic procession enters the hall)

MOMENT OF SILENCE

(The congregation is requested to remain standing)

CONSTITUTION OF CONGREGATION AND WELCOME

Chancellor

(The congregation is requested to be seated)

AWARDING OF QUALIFICATIONS

Chancellor

DISSOLUTION OF CONGREGATION

Chancellor

NATIONAL ANTHEM

(The congregation is requested to stand for the singing of the National Anthem)

DEPARTURE OF ACADEMIC PROCESSION

(The congregation is requested to remain standing until the academic procession has left the hall)

INFORMATION TO MEMBERS OF THE CONGREGATION

Members of the congregation are requested:

- *To rise and remain standing while the academic procession enters and leaves the hall.*
- *Not to leave the hall before the end of the ceremony.*
- *To switch off cellular phones or turn them on silent mode.*
- *Not to move around in the hall.*
- *Not to eat and drink in the hall.*
- *Not to get up and take photographs during the ceremony.*
- *To keep cheering and ululating to a minimum.*

The words *Cum Laude* indicates in the text below that the diploma or degree is awarded with distinction to the candidate/s listed.

DIPLOMA IN CHEMICAL PROCESS TECHNOLOGY

AGULHAS, Marcio Jade
BLEWETT, Connor Peter
CEZA, Loyiso Innocent
FATA, Sisanda
GQWARU, Lindiwe
JALI, Nobuhle
JEKELS, Al Jurreau Dillon
KONAITE, Chai Charles
LAMANI, Asithandile
MAHLANGABEZA, Khanyisa
MAMPANE, Sibongile
MBETE, Zimkita
MDOKO, Luxolo
MOLOSE, Hlumela
MQHELE, Yamkela
NTSHONA, Bathabile
PANDELA, Bongani
ROBIYANA, Vuyina Joy
SHINGANGE, Nkateko

CUM LAUDE

BULO, Ntandokazi
DLABOM, Asanda
JOKANI, Nosibusiso
KONDLO, Sibahle
KWINI, Thembela Vanessa
MOLAO, Refiloe
MULLER, Michael
NKQAYI, Asavela

NATIONAL DIPLOMA: ANALYTICAL CHEMISTRY

AUGUST, Shadey Calsey
BOTH A, Asivile Athandile
BOTH A, Santino Mikaylah
DAMONS, Monica Patricia
GCAZA, Nolusindiso
GORA, Sivuyisiwe
LETUKA, Lereko Rorisang
MADZIDZELA, Sandisiwe
MAJAVU, Zikhona
MAJEZI, Lindokuhle Musa
MAKA, Zoxolo Nokuthula
MANENE, Olwethu
MATHIDALA, Sinazo
MBATYOTI, Somelele
MDINGI, Mzukisi
MPULU, Zintle
MTAMBEKA, Qaqamba
MZONGWANA, Sibonokuhle Marven
NAIDOO, Nicole Mary- Anne
NCAMISO, Sandiswa
NDONGENI, Amanda
NDUKWANA, Asanda
NGOBENI, Floyd Thulani
NGQAMBA, Andile Zwelibanzi
NGWEVELA, Ntombizodwa Carol
NKQAYINI, Mongezi
NORUSHU, Thabisa
NWEBA, Banathi
PILLAY, Sanushka

RAMUHASHI, Takalani Euraciah
SESINYI, Palesa
SITUNGU, Azola
STOKWE, Khanyiswa
TARENTAAL, Kurtley Chad
TSHAYISA, Sikhunge Sikhumbule
WITBOOI, Cecile
YOKWE, Kwanele
YONGA, Sifiso
ZULU, Minenhle Mandisa

NATIONAL DIPLOMA: POLYMER TECHNOLOGY

DOKWANA, Siphokazi Hope
HORN, Nosiphiwo
KHOSA, Timu Tricia
MANDITA, Nkululeko
NCERA, Siyanda
NODA, Lelethu
NYAKAZA, Sihle
SONTALA, Odwa Nkulukazi
ZITSHU, Mzingaye

ADVANCED DIPLOMA IN ANALYTICAL CHEMISTRY

BARENDSE, Adam Jason
MAJIKIJELA, Vuyolwethu
MDUNYELWA, Zimkhitha

BACHELOR OF COMMERCE (FINANCIAL MODELLING)

NGABAYENA, Thobeka

BACHELOR OF SCIENCE

ANGELBECK, Rowan Lesley
BEAUZEC, Michael
BERNARDO, Schalk
BESELE, Kagiso Francis
BOTH A, Susanna Gertruida
CACISO, Thandekile
CHANDLER, Katharine Elizabeth
DAVIS, Devereux
DE MENEZES, Lyle
DIX-PEEK, Tayla Jane
DU TOIT, Hendrik Daniel
DUGMORE, Travis Henry
DWYER, Rebecca Ann
DYALVANE, Siphosethu
FILMER, James Richmond-Wilmot
FOURIE, Daniel Liam
GCINA, Sinenjongo
GILCHRIST, Robynne Claire
GORDON, Dale Bradley
GOVENDER, Keshlin
GROENER, Lyndon Enslin
HAMLA, Lissa Nombulelo
HENNING, Nicole Jo-Ann
HIBBERS, Ilze

IMPEY, Justin George
JAMES, Bridan George
JENYA, Livingstone
JOHNSON, Megan Elizabeth
JONAS, Tristan Ian
JONES, Chad Stephen
KALIRANE, Mbali
KHASIPO, Agnes Zvinaiye
KHAU, Kananelo Adele
KIJEWSKI, Agnes
KIVEDO, Tatum Fiona
KOEKEMOER, Christo
KRUGER, Joan Beryl
KUBHEKA, Nobangoma Roseline
KWENDA, Tendai Edwin
LAYINI, Anela
LE ROUX, Jason Garth
LINGENFELDER, Eleesha
LUPUWANA, Vuyisa Luvuyo Richard
MABECE, Nandipha Caroline
MAHANJANA, Nomakhaya
MANELI, Lungelwa
MARELE, Chulumanco
MARTIN, Ashrine-Dee
MATSHIQI, Nazi
MAZOMBA, Athenkosi
MC CARLIE, Samantha Jayne
MDINGANE, Sikelelwa Sibalwethu
MEIRING, Carl
MHLONGO, Lethukuthula Khayelihle
MOKGOHLOA, Mathule Collen
MPALALA, Anele
MSONGELWA, Elihle Alizwa
MWANZA, Michael Ngonidzashe
MYBURG, Kierra Ashleigh
MYBURGH, Marna
NAIDOO, Sharnay
NDALENI, Vuyolwethu Khwezikazi
NELSON, Ashleigh
NKOHLA, Yanga
NKUKWANA, Yamkela Nasiphi
NTOMBELA, Nompilo Princess
OLDHAM, Luke Steven
ORPEN, Kayla Joy
PERAL, Christopher Michael
PEREIRA, Ashleigh Marcelle
POTGIETER, Luzaan Mari
REDDY, Nireshini
REID, Emma Louise
ROBERTS, James Dixon
ROCKMAN, Lyle Ethan
SCHOLTZ, Jan-Stephan
SEBYBO, Jason Donovan
SHOKO, Angela
SINGATA, Mzuvukile
SIWAK, Andrea Martha
SOBUWA, Zusiphe Ukhoyena
STRYDOM, Louis
TANYANYIWA, Joalin Ngonidzashe
TANYI, Sam Tambi
TAUYA, Alice Rudo
URBAN, Simon James
VAN DER VEEN, Floor
VAN ECK, Arno
VAN NIEKERK, Tanna Mae
VAN VUUREN, Jason Grant
VORSTER, Susanna Adriana Cornelia

WILLIAMS, Arushan
WINFIELD, Philip John
YEKO, Siqamo
ZIMUNHU, Faith Tatenda

CUM LAUDE

BEAUZEC, Deon
LATEGAN, Klara
OLIVIER, Ruan
PHILLIPS, Antin
WATT, Nathan
WESTRAADT, Edward James

BACHELOR OF SCIENCE INFORMATION SYSTEMS

BERGESEN, Nicholas Frederick
DE VILLIERS, John Ethan
HEYNES, Patrick Jnr
HUMAN, Vernon
JOOSTE, Nicolaas Jacobus
MAPUNDU, Lundi
MBELE, Siviwe Precious
OLVER, Kevin
SCHOLTZ, F-Jay
STRYDOM, Dean

CUM LAUDE

KEEN, Charne

BACHELOR OF TECHNOLOGY: CHEMISTRY

APRIL, Lulama Thandokazi
GQOKOMA, Zizo

BACHELOR OF COMMERCE HONOURS

KAMANA, Nomakhosazana
(Information Systems and Business Management)
MAPONYANE, Oitsile - Mongeloa
(Information Systems and Business Management)

BACHELOR OF COMMERCE HONOURS IN MATHEMATICAL STATISTICS

KILANI, Yonela Sisipho

CUM LAUDE

DUNDERDALE, Christopher Wade
MBONAMBI, Siyabonga

BACHELOR OF SCIENCE HONOURS

SERFONTEIN, Curtley Luke
(Applied Mathematics)

**BACHELOR OF SCIENCE HONOURS IN COMPUTER
SCIENCE AND INFORMATION SYSTEMS**

STEYN, Matthew Stephen

**BACHELOR OF SCIENCE HONOURS IN
FORMULATION SCIENCE**

NGAYEKA, Mbokazi
NGWENYA, Sandiso
RUPAPA, Harold Takunda

CUM LAUDE

SHOBA, Siyabonga

**BACHELOR OF SCIENCE HONOURS IN
MATHEMATICS**

MZULWINI, Sboniso Paul

**BACHELOR OF SCIENCE HONOURS IN
MATHEMATICAL STATISTICS**

LUNDALL, Chanéle Anne
MAHOYA, Alpheus Shingirirai
MUDZIMU, Justin

MASTER OF COMMERCE (RESEARCH)

STINDT, Carmen - **Cum Laude**
(Statistics)

Title of dissertation:
INDEX OPTIMISATION FOR STRUCTURAL EQUATION MODELS (SEM)

Supervisor: Prof GD Sharp
Co-supervisor: Prof MR Mey

MASTER OF SCIENCE (RESEARCH)

ADAMS, Inge Alison - **Cum Laude**
(Biological Oceanography)

Title of dissertation:
INVESTIGATIONS INTO LONG-TERM HOST-PARASITE DYNAMICS IN ODONTOCETES IN SOUTHERN AFRICA

Supervisor: Dr S Plön
Co-supervisor: Dr C Reed

AGBAKOKA, Victor Chike - **Cum Laude**
(Chemistry)

Title of dissertation:
POTENTIAL USE OF CARBON NANOTUBES AS A NANOFILLER FOR NATURAL RUBBER LATEX CONDOMS

Supervisor: Dr SP Hlangothi
Co-supervisors: Prof G Simate and Dr C Yah

ANNEAR, Dale John
(Microbiology)

Title of dissertation:
INCIDENCE OF BACTERIAL INFECTIONS AND COLONISATION IN PATIENTS ADMITTED TO A TUBERCULOSIS HOSPITAL

Supervisor: Dr S Govender
Co-supervisor: Dr C Bramford

BARFKNECHT, Nicholas Christopher
(Computer Science and Information Systems)

Title of dissertation:
DEEP LEARNING APPLIED TO THE SEMANTIC SEGMENTATION OF TYRE STOCKPILES

Supervisor: Prof CB Cilliers

BATTISON, Aidan Leigh
(Chemistry)

Title of dissertation:
SYNTHESIS AND APPLICATION OF NOVEL COUMARIN-TRIAZOLE-BASED POLYMERIC SENSORS TOWARDS METAL ION SENSING

Supervisor: Dr N Mama

DALHAT, Yusuf Mu'Azu
(Textile Science)

Title of dissertation:
THE USE OF NATURAL FIBRES IN AUTOMOTIVE INDUSTRY

Supervisor: Prof RD Anandjiwala
Co-supervisor: Dr MJ John

DEMBAREMBA, Tendai Olsen - **Cum Laude**

(Chemistry)

Title of dissertation:

VANADIUM-BASED CATALYSTS FOR OXIDATION OF ORGANOSULFUR COMPOUNDS: SYNTHESIS, CATALYSIS AND MECHANISTIC STUDIES

Supervisor: Prof ZR Tshentu
Co-supervisor: Dr A Ogunlaja

DIDLOFF, Jenke - **Cum Laude**

(Microbiology)

Title of dissertation:

BIOLOGICAL ACTIVITY OF MACROFUNGI IN SOUTH AFRICA AGAINST RESPIRATORY AND LUNG DISEASE

Supervisor: Dr S Govender
Co-supervisor: Dr GJ Boukes

DIX-PEEK, Ross Michael - **Cum Laude**

(Physics)

Title of dissertation:

ON THE CHARACTERISATION OF SOLAR CELLS USING ADVANCED IMAGING TECHNIQUES

Supervisor: Prof EE Van Dyk
Co-supervisor: Dr FJ Vorster and Mr C Pretorius

DU PLESSIS, Jacolien - **Cum Laude**

(Chemistry)

Title of dissertation:

THE SYNTHESIS OF FUNCTIONALIZED CARBON NANOMATERIAL FROM WASTE TYRE SOURCED CARBON FOR CHEMOSENSING DURING PURIFICATION PROCESSES

Supervisor: Dr N Mama
Co-supervisor: Prof VO Nyamori

IROEGBU, Austine Ofondu

(Chemistry)

Title of dissertation:

EFFECTS OF POLYMERISATION CONDITIONS ON THE MECHANISM AND PROPERTIES OF FUFURYL ALCOHOL RESIN

Supervisor: Dr N Mama
Co-supervisors: Dr D Grooff and Dr SP Hlangothi

MANGWIRO, Ruvimbo - **Cum Laude**

(Chemistry)

Title of dissertation:

NEW SYNTHETIC APPROACH TO SYNTHESIS OF TB DRUGS: ISONIAZID

Supervisor: Prof P Watts

NNOLUM-ORJI, Ngozi Francisca

(Biochemistry)

Title of dissertation:

LIPID PATHWAY REGULATION IN HIGH FAT DIET INDUCED INSULIN RESISTANCE AND PREVENTION BY SUTHERLANDIA FRUTESCENS

Supervisor: Prof S Roux

POSWAYO, Sihle Cebisa - **Cum Laude**

(Mathematical Statistics)

Title of dissertation:

SUBJECTIVE MEASUREMENTS OF PERSISTENCE OF TIME SERIES

Supervisor: Prof IN Litvine

STRYDOM, Martin - **Cum Laude**

(Chemistry)

Title of dissertation:

MANUFACTURING OF CONTINUOUS FLOW EQUIPMENT

Supervisor: Prof P Watts

TSIPA, Phuti Cedrick

(Chemistry)

Title of dissertation:

METHOD DEVELOPMENT FOR CHEMOLYSIS OF WASTE TYRES AND CHARACTERIZATION OF THE COMPONENTS

Supervisor: Dr SP Hlangothi

Co-supervisor: Dr N Mama and Dr MJ Phiri

TYALANA, Nommiselo

(Textile Science)

Title of dissertation:

A COMPARISON OF CONVENTIONAL AND ULTRASONIC SEAMS IN SWIMWEAR

Supervisor: Prof L Hunter

Co-supervisor: Dr EM Hovgaard

VAN NIEKERK, Bracken - **Cum Laude**

(Mathematical Statistics)

Title of dissertation:

APPLICATION OF HIDDEN MARKOV MODELS AND THEIR EXTENSIONS TO ANIMAL MOVEMENT DATA

Supervisor: Dr VL Goodall

VENTER, Danielle Ahlers - **Cum Laude**

(Physics)

Title of dissertation:

CAPACITANCE SPECTROSCOPY OF GAAS P-I-N SOLAR CELLS EMBEDDED WITH GANAS QUANTUM WELLS

Supervisor: Prof A Venter

Co-supervisor: Prof JR Botha

ZIEGLER, Lisa

(Biological Oceanography)

Title of dissertation:

TESTING THE APPLICATION OF COASTAL ALTIMETRY IN TWO SOUTH-EASTERN AFRICAN BIGHTS: UNDERSTANDING THE RELATIONSHIP BETWEEN MESOSCALE FEATURES AND CHLOROPHYLL-A

Supervisor: Prof MJ Roberts

Co-supervisor: Dr DR Du Preez

MASTER OF SCIENCE IN NANOSCIENCE (COURSEWORK)

MADIKANE, Zipporah Kayakazi

Title of treatise:

ELECTROSPINNING OF CARBON NANOFIBERS FOR INVESTIGATING THE BEHAVIOUR OF LEAD ELECTRODEPOSITS ON THE CARBON SURFACE

Supervisor: Prof EE Ferg

MASTER OF SCIENCE IN TEXTILE SCIENCE (RESEARCH)

BALA, Sandisiwe

Title of dissertation:

THE USE OF A SILICA BASED COATING TO REDUCE MOISTURE ABSORPTION OF FLAX FIBRE REINFORCED COMPOSITES

Supervisor: Dr MJ John
Co-supervisor: Dr S Chapple

HARILAL, Shantha

Title of dissertation:

IMPROVING THE EXHAUST PIGMENT DYEING OF COTTON GARMENTS

Supervisor: Prof L Hunter
Co-supervisor: Dr AA Fassih

JANSEN VAN RENSBURG, Joané

Title of dissertation:

THE IMPACT, ON FIBRE QUALITY, OF CHANGING FROM CONVENTIONAL COTTON TO GENITICALLY MODIFIED COTTON

Supervisor: Prof L Hunter
Co-supervisor: Dr AF Botha

MUFEBBA, Musikwa

Title of dissertation:

THE DEVELOPMENT OF NATURAL FIBRES REINFORCED COMPOSITES ROOF SHEET

Supervisor: Dr MJ John
Co-supervisor: Prof RD Anandjiwala

MASTER OF TECHNOLOGY: CHEMISTRY

MNGOMA, Mondeli

Title of dissertation:

PHYTOCHEMICAL ANALYSIS AND BIOLOGICAL ACTIVITY STUDIES OF AN EASTERN CAPE MEDICINAL PLANT, STRYCHNOS HENNINGSII

Supervisor: Dr BG Hlangothi

SONTI, Thembela Celia

Title of dissertation:

EXTRACTION OF DIALLYL SULPHIDES AND OTHER SIMILAR COMPOUNDS FROM TULBAGHIA VIOLACEA, A SOUTH AFRICAN PLANT, FOR POTENTIAL USE AS DEVULCANIZING AGENT

Supervisor: Dr BG Hlangothi
Co-supervisor: Prof C Woolard

DOCTOR OF PHILOSOPHY

ADEWALE, Olusola Bolaji

(Biochemistry)

Title of thesis:

IN VIVO TOXICOLOGICAL EVALUATION OF PEPTIDE CONJUGATED GOLD NANOPARTICLES FOR POTENTIAL APPLICATION IN COLORECTAL CANCER DIAGNOSIS

Supervisor: Prof S Roux
Co-supervisor: Dr H Davids

BEZUIDENHOUT, Lucian John-Ross

(Physics)

Title of thesis:

USING AMBIENT NOISE TOMOGRAPHY TO IMAGE THE EASTERN CAPE-KAROO AND KAROO REGION, SOUTH AFRICA

Supervisor: Prof CM Doucoure
Co-supervisor: Prof TB Gibbon

BURGER, Kirstin

(Chemistry)

Title of thesis:

SYNTHESIS AND CHARACTERISATION OF NOVEL ACETALS DERIVED FROM EUCALYPTUS OIL

Supervisor: Prof P Watts
Co-supervisor: Dr NM Vorster

DAS, Sweta

(Textile Science)

Title of thesis:

THE FAST FABRIC OBJECTIVE MEASUREMENT PROPERTIES OF COMMERCIAL WORSTED APPAREL FABRICS AVAILABLE IN SOUTH AFRICA

Supervisor: Prof L Hunter
Co-supervisor: Dr AF Botha

DORFLING, Sasha-Lee

(Chemistry)

Title of thesis:

ASSESSMENT OF THE HOST POTENTIAL OF TETROL [(+)-(2R,3R)-1,1,4,4-TETRAPHENYLBUTANE -1,2,3,4-TETRAOL] FOR THE SEPARATION OF ISOMERS AND RELATED COMPOUNDS

Supervisor: Dr B Barton

ISOE, George Mosoti

(Physics)

Title of thesis:

ADVANCED HIGH SPEED DATA AND CLOCK TRANSMISSION OVER OPTICAL FIBRE FOR SQUARE KILOMETRE TELESCOPE ARRAY

Supervisor: Prof TB Gibbon
Co-supervisors: Prof AWR Leitch and Dr RRG Gamatham

KYAZZE, Michael

(Computer Science)

Title of thesis:

A FRAMEWORK FOR DESIGNING AMBIENT ASSISTED LIVING SERVICES FOR DISABLED INDIVIDUALS

Supervisor: Prof JL Wesson
Co-supervisor: Dr KA Naude

POHL, Pieter Lourens

(Chemistry)

Title of thesis:

INVESTIGATION OF THE POTENTIAL SEPARATION OF ISOMERS AND RELATED COMPOUNDS USING HOST COMPOUND (2R,3R-(-)-2,3-DIMETHOXY-1,1,4,4-TETRAPHENYLBUTANE-1,4-DIOL

Supervisor: Dr B Barton

POSTMA-BOTHA, Martha Leona

(Chemistry)

Title of thesis:

THE EXTRACTION, QUANTIFICATION AND APPLICATION OF HIGH-VALUE BIOLOGICAL COMPOUNDS FROM OLIVE OIL PROCESSING WASTE

Supervisor: Dr NM Vorster

Co-supervisor: Prof S Roux

TANKIO DJIOKAP, Stive Roussel

(Physics)

Title of thesis:

ON THE DEVELOPMENT OF ZNO NANORODS ON SILICON SUBSTRATES FOR LIGHT EMITTING DIODE APPLICATIONS

Supervisor: Prof JR Botha

Co-supervisor: Dr ZN Urgessa

WASSIN, Shukree

(Physics)

Title of thesis:

COMPENSATION FOR DISTRIBUTION OF TIMING AND REFERENCE SIGNALS OVER OPTICAL FIBRE NETWORKS FOR TELESCOPE ARRAYS

Supervisor: Prof TB Gibbon

Co-supervisor: Prof AWR Leitch and Dr RRG Gamatham

DOCTORAL DEGREE CITATIONS

THE DEGREE OF DOCTOR OF PHILOSOPHY (BIOCHEMISTRY)

OLUSOLA BOLAJI ADEWALE

Previous qualifications:

2005 BSc Hons Biochemistry
2009 MSc Biochemistry

University of Ado-Ekiti, Nigeria
University of Ibadan, Nigeria

Thesis:

IN VIVO TOXICOLOGICAL EVALUATION OF PEPTIDE CONJUGATED GOLD NANOPARTICLES FOR POTENTIAL APPLICATION IN COLORECTAL CANCER DIAGNOSIS

The development of non-invasive and readily available diagnostic tools for colorectal cancer (CRC), which can be performed on a regular basis is of urgent importance. Short- and long-term toxicological effects of peptides (p.C, p.L, and p.14) conjugated to gold nanoparticles (AuNPs) were investigated in a healthy rat model as it is hypothesised to allow CRC screening at shorter intervals through imaging techniques. The toxicity results indicate that citrate-AuNPs (14 nm, 100 µg/kg body weight) is a suitable carrier for diagnostic molecules; the combination polyethylene glycol (PEG)-OH and PEG-biotin is an appropriate option for stabilising AuNPs in the biological environment, and diagnostic biomolecules can be conjugated to citrate-AuNPs for *in vivo* use. With no measured toxicity, this study concluded that these peptide-PEG-AuNPs can potentially be developed as a diagnostic tool for the early detection of CRC.

THE DEGREE OF DOCTOR OF PHILOSOPHY (PHYSICS)

LUCIAN JOHN-ROSS BEZUIDENHOUT

Previous qualifications:

2010 BSc (Physics and Applied Mathematics)
2011 BSc Hons (Physics)
2013 MSc Physics (Applied Physics)

Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University

Thesis:

USING AMBIENT NOISE TOMOGRAPHY TO IMAGE THE EASTERN CAPE-KAROO AND KAROO REGION, SOUTH AFRICA

Seismic ambient noise tomography is implemented in this study to image velocity variations down to 5-7 kilometres (km) below the eastern Karoo surface as part of Africa Earth Observatory Network's (AEON) baseline research. The study entailed the continuous triaxial recording of wavefields in three different spatial arrays, the inversion of the frequency-dependent group travel times to map Rayleigh surface-wave group velocity variations, development of a seismic source location technique applied to the Karoo ambient noise, and interpretation in terms of lithological boundaries of major Karoo shale formations. The study paves the way for further ambient noise tomography imaging in the Karoo and elsewhere in South Africa.

THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

KIRSTIN BURGER

Previous qualifications:

2010	BSc (Biochemistry, Chemistry & Microbiology)	Nelson Mandela Metropolitan University
2011	BSc Hons (Chemistry)	Nelson Mandela Metropolitan University
2013	MSc (Chemistry)	Nelson Mandela Metropolitan University

Thesis:

SYNTHESIS AND CHARACTERISATION OF NOVEL ACETALS DERIVED FROM EUCALYPTUS OIL

Phthalate plasticizers are widely used in plastics and have negative health implications, hence there is substantial interest worldwide to develop greener and safer alternatives. This project developed new bio-plasticizer compounds from natural oils including Eucalyptus citriodora, an oil found abundantly in the South African environment. Eight new bio-plasticizers were synthesized using flow processing, and it was concluded that these compounds were comparable to industrial standards in all tests. Furthermore, unlike current plasticizers, it was demonstrated that these new compounds possessed anti-bacterial properties. The vision is to produce these compounds locally within South Africa.

THE DEGREE OF DOCTOR OF PHILOSOPHY (TEXTILE SCIENCE)

SWETA DAS

Previous qualifications:

2007	BTech	College of Engineering and Technology (India)
2010	MFashion Management	National Institute of Fashion Technology (India)
2013	MSc (Textile Science)	Nelson Mandela Metropolitan University (South Africa)

Thesis:

THE FAST FABRIC OBJECTIVE MEASUREMENT PROPERTIES OF COMMERCIAL WORSTED APPAREL FABRICS AVAILABLE IN SOUTH AFRICA

In this study, the advanced Fabric Assurance by Simple Testing (FAST) fabric objective measurement system was used, to measure and evaluate the quality of close to 400 commercial worsted apparel fabrics available in South Africa, and to statistically relate the measured quality to the various fabric structural parameters. In the process, a unique database was created which can be used by textile researchers and industry as a basis of reference and benchmark for quality assurance and improvement purposes.

THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

SASHA-LEE DORFLING

Previous qualifications:

2012	BSc (Chemistry and Biochemistry)	Nelson Mandela Metropolitan University
2013	BSc Hons (Chemistry) (<i>Cum Laude</i>)	Nelson Mandela Metropolitan University
2014	MSc (Chemistry)	Nelson Mandela Metropolitan University

Thesis:

ASSESSMENT OF THE HOST POTENTIAL OF TETROL [(+)-(2R,3R)-1,1,4,4-TETRAPHENYLBUTANE-1,2,3,4-TETRAOL] FOR THE SEPARATION OF ISOMERS AND RELATED COMPOUNDS

The candidate investigated the potential use of TETROL as a host material for the separation of industrially-relevant isomers. These compounds require purification owing to similarities in their physical properties that render the more usual distillations and crystallizations ineffective. The candidate showed that TETROL behaves highly selectively when recrystallized from such mixtures, resulting in tangible and convenient alternative separation strategies for these compounds. This work contributed significantly to the supramolecular chemistry field: the results obtained were entirely novel and, as such, were submitted and published in international peer-reviewed journals, and also communicated at the Tetrahedron Symposium in Australia in 2017.

THE DEGREE OF DOCTOR OF PHILOSOPHY (PHYSICS)

GEORGE MOSOTI ISOE

Previous qualifications:

2010	BSc	Moi University (Kenya)
2014	MSc Physics	University of Eldoret (Kenya)

Thesis:

ADVANCED HIGH SPEED DATA AND CLOCK TRANSMISSION OVER OPTICAL FIBRE FOR SQUARE KILOMETRE TELESCOPE ARRAY

This study focuses low cost, power efficient techniques for spectral efficient upgrade of optical communication links. Simultaneous transmission of data, frequency reference clock tones and pulse-per-second (PPS) timing signals over shared optical fibre network infrastructure demonstrated. This is achieved using high bandwidth vertical surface emitting laser (VCSEL) transmitters that are experimentally optimised in a laboratory environment for adoption in next-generation networks. Applications include the Square Kilometre Array (SKA), time keeping systems such as Coordinated Universal Time (UTC), as well as high capacity spectral efficient short reach optical fibre networks such as data centres.

THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

MICHAEL KYAZZE

Previous qualifications:

2011	BSc (Computer Science)	Makerere University
2013	BSc Hons (Computer Science)	Nelson Mandela Metropolitan University
2015	MSc (Computer Science & Information Systems)	Nelson Mandela Metropolitan University

Thesis:

A FRAMEWORK FOR DESIGNING AMBIENT ASSISTED LIVING SERVICES FOR DISABLED INDIVIDUALS

Disabled individuals face a number of challenges when carrying out their everyday activities such as moving around, communicating with others, and their personal care. One way of overcoming these challenges is by using personal assistants. An alternative is to enable independence through assistive technology. A framework for designing assisted living software services was developed. The framework allows disability researchers and solution developers to understand the needs of a given disability group, and design relevant solutions. The framework was validated by using it to successfully develop and evaluate a prototype that addressed a unique set of challenges experienced by disabled individuals.

THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

PIETER POHL

Previous qualifications:

2012	BSc (Chemistry and Biochemistry)	Nelson Mandela Metropolitan University
2013	BSc Hons (Chemistry)	Nelson Mandela Metropolitan University
2014	MSc (Chemistry)	Nelson Mandela Metropolitan University

Thesis:

INVESTIGATION OF THE POTENTIAL SEPARATION OF ISOMERS AND RELATED COMPOUNDS USING HOST COMPOUND (2R,3R)-(-)-2,3-DIMETHOXY-1,1,4,4-TETRAPHENYLBUTANE-1,4-DIOL

Isomers and related compounds are difficult to separate from one another owing to their similar physical properties. In this work, the candidate demonstrated that supramolecular chemistry and, more specifically, host-guest chemistry, is an alternative technology that may be employed for separations of such compounds. Using the title host compound, the candidate successfully demonstrated that many industrially-relevant chemicals (e.g., xylenes, cresols) may be purified using this realm of chemistry, thus obviating the need for tedious and costly physical methods. This work has been published in international peer-reviewed journals, and has also been presented at The Tetrahedron Symposium in Australia in 2017.

THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

MARTHA LEONA POSTMA-BOTHA

Previous qualifications:

1990 BPharm

Potchefstroom University

2011 MTech (Chemistry -Product & Process Dev)

Nelson Mandela Metropolitan University

Thesis:

THE EXTRACTION, QUANTIFICATION AND APPLICATION OF HIGH-VALUE BIOLOGICAL COMPOUNDS FROM OLIVE OIL PROCESSING WASTE

This thesis involves the development and optimisation of a novel integrated extraction method for simultaneous extraction of water-soluble and oil-soluble bioactive compounds from olive oil processing waste. These compounds are of interest in anti-ageing cosmetic products due to their antioxidant properties. The candidate has provided an extensive piece of research that has made a significant contribution to reducing the potential risk to the environment by providing a well-studied and validated method of the extraction and analysis of these bioactive compounds from olive oil processing waste and therefore providing a value-adding alternative to the dumping of this waste into the environment.

THE DEGREE OF DOCTOR OF PHILOSOPHY (PHYSICS)

STIVE ROUSSEL TANKIO DJIOKAP

Previous qualifications:

2006 BSc (Physics)

University of Yaounde I, Cameroon

2007 BSc Hons (Physics, Material Science)

University of Yaounde I, Cameroon

2009 MSc (Physics, Material Science)

University of Yaounde I, Cameroon

2011 Secondary & High School Diploma

University of Yaounde I, Cameroon

2012 MSc (Maths Sc, & Theoretical Physics)

African Institute for Mathematical
Science, Senegal

Thesis:

ON THE DEVELOPMENT OF ZnO NANORODS ON SILICON SUBSTRATES FOR LIGHT-EMITTING DIODE APPLICATIONS

Nanostructured zinc oxide (ZnO) on silicon substrate is a promising material combination for ultraviolet (UV) - visible light emission. To date, all attempts to produce efficient solid state lighting devices from this type of structure have failed, however. This thesis focused on the effect of an electron blocking layer between the substrate and ZnO on the charge transport, an understanding of which is essential for tailoring and optimising the properties of light emitting devices. The work has highlighted the importance of minimising the concentration of defects at the interface between silicon and ZnO and has made a significant contribution to this field of study.

THE DEGREE OF DOCTOR OF PHILOSOPHY (PHYSICS)

SHUKREE WASSIN

Previous qualifications:

2012 BSc Physics & Statistics
2013 BSc Honours Physics
2015 MSc Physics

Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University
Nelson Mandela Metropolitan University

Thesis:

COMPENSATION FOR DISTRIBUTION OF TIMING AND REFERENCE SIGNALS OVER OPTICAL FIBRE NETWORKS FOR TELESCOPE ARRAYS

Synchronous optical networks are used in various applications such as telecommunication systems, radio astronomy and global positioning system (GPS). Optical fibre links have become an attractive solution for distributing accurate and stable frequency signals due to phase noise active compensation techniques. This thesis presents a novel technique that corrects phase fluctuations along the length of optical fibre. The frequency reference dissemination and synchronisation scheme demonstrated in this thesis utilises a vertical-cavity surface-emitting laser (VCSEL), as an optical source as well as the phase correction actuator. The stability performance was evaluated and verified through Allan-Variance measurements of the distributed signals.

VISION, MISSION, VALUES, EDUCATIONAL PURPOSE AND PHILOSOPHY

VISION

To be a dynamic African university, recognised for its leadership in generating cutting-edge knowledge for a sustainable future.

MISSION

To offer a diverse range of life-changing educational experiences for a better world.

To achieve our vision and mission, we will ensure that:

- Our values inform and define our institutional ethos and distinctive educational purpose and philosophy.
- We are committed to promoting equity of access and opportunities so as to give students the best chance of success in their pursuit of lifelong learning and diverse educational goals.
- We provide a vibrant, stimulating and richly diverse environment that enables staff and students to reach their full potential.
- We develop graduates and diplomates to be responsible global citizens capable of critical reasoning, innovation, and adaptability.
- We create and sustain an environment that encourages and supports a vibrant research, scholarship and innovation culture.
- We engage in mutually beneficial partnerships locally, nationally and globally to enhance social, economic, and ecological sustainability.

VALUES

- Diversity
- Excellence
- Ubuntu
- Social justice and equality
- Integrity
- Environmental stewardship

EDUCATIONAL PURPOSE AND PHILOSOPHY

- We provide transformational leadership in the service of society through our teaching and learning, research and engagement activities.
To achieve this we are committed to developing the human potential of our staff and students in the full spectrum of its cognitive, economic, social, cultural, aesthetic and personal dimensions in the pursuit of democratic citizenship.
- We adopt a humanising pedagogical approach that respects and acknowledges diverse knowledge traditions and engages them in critical dialogue in order to nurture a participative approach to problem-posing and -solving, and the ability to contribute to a multi-cultural society.
- We inspire our stakeholders to be passionate about and respectful of an ecologically diverse and sustainable natural environment.
- We will be known for our people-centred, caring, values-driven organisational culture that will allow all members of the university community to contribute optimally to its life.

CONGRATULATORY MESSAGE FROM THE ALUMNI ASSOCIATION

Congratulations on your academic achievement! Welcome to the Nelson Mandela University family. You are now a Nelson Mandela University alumnus.

We would like to take this opportunity to introduce you to the Nelson Mandela University Alumni Association. Once you have obtained your Nelson Mandela University certificate, diploma or degree you become an alumnus of the University and a member of the Nelson Mandela University Alumni Association. The Association is recognised by the University Council as a structure of the University. The Association supports and enhances the realisation of the University's vision and mission through maintaining and expanding positive relationships with its members.

The role of the Alumni Association Office

The Alumni Association Office is a public relations and projects department responsible for the day-to-day management and running of the Alumni Association, the University Shop and all matters related to alumni engagement. Primarily, we build relationships and maintain strong links with graduates, parents, friends and supporters of the University through events, networks, services, communications and community engagement.

The role of Nelson Mandela University Graduate

We encourage you to attend the alumni engagement events, be an active alumni ambassador, support your alma mater in a variety of ways including sharing news, expertise, skills, and contributions in cash and kind. We encourage a culture of giving back especially for student bursaries, which can be accessed on our alumni website.

University Shop

Visit the University Shop situated at the Sanlam Student Village on University Way, Summerstrand, for all Nelson Mandela University branded clothing, corporate gifts, bags and memorabilia!

More info,  041 504 4371  www.shop.mandela.ac.za  shop@mandela.ac.za

Lifetime connection with Nelson Mandela University

We are proud of our alumni and value your connection.

We encourage you to stay in touch by updating your graduate profile. We will keep you informed with University developments and graduate news through our event invitations, project and campaign updates, regular e-newsletters via our website and social media channels.

Your Graduate profile link <https://mandela.devman.co.za/Devman/alumni/findme/>

We welcome your visit to the Alumni Associates Centre on the North Campus in Port Elizabeth.

More info,  041 504 3935  www.alumni.mandela.ac.za  alumni@mandela.ac.za

Join us,  Nelson Mandela University Alumni  Nelson Mandela University Alumni  @MandelaUni

Stay connected to your *alma mater!*

NATIONAL ANTHEM

**Nkosi Sikelel'i-Afrika,
Maluphakanyisw'uphondo lwayo,
Yizwa imithandazo yethu,
Nkosi Sikelela, thina lusapho lwayo.**

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

South Africa.

**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.**