

Graduation Programme

The Future. Reimagined.





Dear UJ Graduate

At the University of Johannesburg (UJ), graduation not only signifies an academic milestone but also represents the emergence of a new cohort of leaders. Our objective has been to empower you as leaders who are primed to face the challenges of an ever-changing world defined by a plethora of challenges and opportunities. As you navigate these great societal shifts, we hope that your time at UJ will serve as a constant source of reference and inspiration. As we have sought to demonstrate, the Fourth Industrial Revolution (4IR) presents the

opportunity for the exploration of new and exciting spheres, and you are uniquely poised to navigate this terrain. Our focus at UJ has been to create graduates who are agile, curious, and able to be active participants against this backdrop.

Your graduation today serves as a celebration of this momentous achievement! I want to take this opportunity to remind you that you now represent the privileged few in our country. You are uniquely poised to address some of the serious challenges we face and a qualification from UJ will stand you in good stead!

At UJ, you have encountered the finest academic minds from diverse backgrounds, spanning across the world as well as innovative technology-rich approaches to teaching and learning. As a result, UJ's global stature and academic robustness are recognised by the most prestigious global higher education ranking systems in the world. UJ has become a competitive player, not only in South Africa but also on the continent. You are an important part of this story.

We welcome you as a new member of our esteemed alumni community, which is making a lasting impact on society. We encourage you to join the UJ Alumni Network and become an active member of the University Convocation, which affords you an opportunity to make a significant contribution to our academic projects and beyond. Our promise in return to you is that we will continue to build UJ as an international university of choice, anchored in Africa, dynamically shaping the future.

Congratulations on this significant achievement. We look forward to witnessing you reimagine the future!

Prof Letlhokwa Mpedi Vice-Chancellor and Principal University of Johannesburg Welcome to the Graduation Ceremony of the University of Johannesburg 17 May 2023 at 13:00

Welkom by die
Gradeplegtigheid van die
Universiteit van Johannesburg
17 Mei 2023 om 13:00

Le a Amogelwa
Moletlong wa Dikapešo wa
Yunibesithi ya Johannesburg
17 Mopitlo 2023 ka 13:00

Niyamukelwa
eMcimbini wokweThweswa kweZiqu
weNyuvesi yaseJohannesburg
17 kuNhlaba 2023 ngele-13:00

UNIVERSITY OF JOHANNESBURG

CHANCELLOR

Dr P Mlambo-Ngcuka
BA Ed (Lesotho), MPhil (UCT), DTech Ed (Warwick, England)

MEMBERS OF THE MANAGEMENT EXECUTIVE COMMITTEE

VICE-CHANCELLOR AND PRINCIPAL

Prof LG Mpedi B Juris, LLB (Vista), LLM (RAU), LLD (UJ)

DEPUTY VICE-CHANCELLOR: ACADEMIC

Prof S Khan BSc, BSc Hons, MSc, PhD (UWC)

DEPUTY VICE-CHANCELLOR: RESEARCH AND INTERNATIONALISATION

Prof S Sinha BEng, MEng, PhD (UP)

REGISTRAR

Prof B van Vuuren BSc, BSc Hons, MSc, PhD (UP)

CHIEF FINANCIAL OFFICER

Ms N Mamorare BCom (Rhodes), BCom Hons (UKZN), CA (SA)

CHIEF OPERATING OFFICER

Dr M Ralephata
BSc Eng (Wits), MBA (UOVS), MSc, DBA (Heriot-Watt, UK)

SENIOR EXECUTIVE DIRECTOR

Dr N Vukuza
BA (Fort Hare), BA Hons (Rhodes), DTE (UNISA), MA (Wits),
PhD (SUN)

GENERAL COUNSEL

Mr D Pretorius BCom, LLB, LLM (NWU)

EXECUTIVE DEANS

COLLEGE OF BUSINESS AND ECONOMICS

Prof L Ntsalaze
BCom, BCom Hons (NMMU), MPhil (UCT), PhD (SUN)

FACULTY OF ART, DESIGN AND ARCHITECTURE

Prof D Smal (Acting)

NDip, NHDip Clothing (TP), MTech Fashion (TUT),

DTech Design (CPUT)

FACULTY OF EDUCATION

Prof N Petersen
BA Ed (UNISA), BEd Hons, MEd (RAU), DEd (UJ)

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

Prof DJ Mashao
BSc Eng, MSc Eng (UCT), MSc AM, PhD (Brown, USA)

FACULTY OF HEALTH SCIENCES

Prof A Temane (Acting)
BNSc (UNW), MCur (RAU), PhD (UJ)

FACULTY OF HUMANITIES

Prof K Naidoo BA, BA Hons, MA (UDW), DTE (Unisa), PhD (Manchester, UK)

FACULTY OF LAW

Prof W Domingo
B SoSc (UCT), LLB (UWC), LLM (Columbia, USA),
SJD (Wisconsin-Madison, USA)

FACULTY OF SCIENCE

Prof R Meijboom (Acting)
M (Groningen, Netherlands), PhD (UCT)

DEAN

JOHANNESBURG BUSINESS SCHOOL

Dr R Carolissen
BSc, BSc Hons, MSc (UWC), BBA Hons,
MBA (SUN), MCom (NWU), PhD (UWC)

MEMBERS OF COUNCIL

CHAIRPERSON

Ms X Kakana

DEPUTY CHAIRPERSON

Dr Y Ndema

MEMBERS

Prof H Abrahamse

Mr FM Baleni

Ms K Gugushe

Prof D Hildebrandt

Prof S Khan

Ms K Khumalo

Ms B Madikizela

Mr M Mahlasela

Mr M Manana

Ms L Mateza

Dr A Mokoena

Ms N Molope

Prof LG Mpedi

Mr LM Mpunzi

Ms NP Mvubu

Dr WP Rowland

Ms JA Schreiner

Prof A Strydom

Mr T Thobejane

PRESIDENT OF CONVOCATION

Mr LM Mpunzi

GAUDEAMUS IGITUR

Gaudeamus igitur,
Juvenes dum sumus;
Post iucundum iuventutem,
Post molestam senectutem
Nos habebit humus.
Vivat academia,
Vivant professores,
Vivat membrum quodlibet,
Vivat membra quaelibet;
Semper sint in flore!

English

Let us rejoice, therefore,
While we are young.
After a pleasant youth
After a troubling old age
The earth will have us.
Long live the academy!
Long live the professors!
Long live each student;
Long live the whole fraternity;
For ever may they flourish!

Afrikaans

Laat ons dan vrolik wees,
Terwyl ons jonk is;
Na 'n aangename jeug.
Na 'n onaangename oudag,
Sal die aarde ons hou.
Lank lewe die universiteit,
Lank lewe die professore,
Lank lewe elke student,
Lank lewe al die studente,
Mag hulle vir ewig hul jeug behou!

Sesotho sa Leboa

Ka gona, a re thabeng,
Re sa le ba bafsa.
Ka morago ga bofsa bjo bo bose
Ka morago ga go tšofala mo go nago
le mathata
Lefase le tla ba le rena.
Phela thuto phela!
Phelang diprofesa phelang!
Phelang baithuti phelang;
Phela kagišano ka botlalo phela;
O ka re ba ka phela gabotse
goyagoile!

Zulu

Ngakho, masithokoze
Sisebasha nje.
Emva kobumnandi bobusha
Emva kwezinkinga zobudala
Umhlaba uzosithatha.
Phambili ngemfundo!
Phambili boSolwazi!
Phambili nakuwe mfundi;
Phambili ngenhlangano yonke;
Maziqhubeke ngonaphakade!

JOHANNESBURG BUSINESS SCHOOL QUALIFICATIONS

1. Post Graduate Diploma in Business Administration

Allie, Raeesa Amina Baptist, Kayla Ann Da Silva, Pedro Neel Dlamini, Nobantu Thando Doboro, Tshifhiwa Valetia Du Plessis, Hugo Galane, Reginald Henderson, Jemma Chloe Kambula, Simon Lerato Kekana, Modupe Kevin Kgoale, Malerotho Tshephisho Khoza, Bheki Khumalo, Khensane Aletta Kula, Pumela Mabizela, Sanele Sakhile Makgoba, Mumcy Malakoane, Nhlanhla Maluga, Ndikundisani Lesley Mamorare, Tebogo Elijah Mapaila, Tebogo Forster Maroga, Thato Elias Masiagwala, Ndivhuwo

Mathebula, Eunice Maphefo

Matheolane, Omphile Kagiso

Matshebele, Vongani Derrick

Mazibuko, Maggie

Mbambo, Kwanele

Mbatha, Siphamandla Nkosingiphile Knowledge

Mhlongo, Tsakani Archibold

Miyambo, Dunisani

Mkhonza, Nokuthula Zandile

Mngomezulu, Thobani

Modikoane, Kgotso Naledi Mmamosa

Modise, Akanyang Naomi

Moeng, Thando

Mohumapele, Thabang Darlington

Mokakale, Renaleone

Mokoena, Karabo Realeboga

Mokoena, Lungile Thabang

Monama, Hugo Tebogo

Monyamane, Thabang Tshepo

Moodley, Ruvern

Mostert, Claudette

Motjamela, Mamello Patience

Motlhomi, Nokuthula Pearl

Moyo, Edward

Mukansi, Lea

Mulaudzi, Xolisa

Naidoo, Dashendra Dayanandh

Ndinisa, Masixole

Ndlovu, Singobile Rudo

Ndwandwe, Ntokozo Shannon

Nemangaya, Dakalo
Ngobeni, Mukhathutshelwa
Nkalanga, Sikhulile Malcom
Peters, Kurt Carl
Phala, Segopane Freddy
Sebei, Malesela Lucas
Sekwaila, Tshehla Zanelle
Skosana, Cindy Nompumelelo
Takalo, Mathuhloe Victor
Tshivhangani, Rendani Saltiel
Zaca, Achmat Nduduzo Brian
Zulu, Khanyisile Nokuthula
Zulu, Zanele Audrey

2. Post Graduate Diploma in Public Policy and African Studies

Keleku, Mandlakazi
Kubeka, Zamaswazi Nolwazi
Lubbe, Thembi Portia
Mabhena, Thamsanqa Bhekokwakhe
Makata, Thembani Zimasa
Makhetha, Mlamli Alfred
Managa, Lilian
Manyathi, Bright
Matibidi, Mogale David
Mbonyana, Sigqibokazi Sweetness
Modise, Mpho Gift
Myeza, Hlengekile
Seshoka, Jetrick

Sibomana, Adrien

3. Master of Business Administration

Abrahams, Naidene Christine

Capstone Project: To improve the scalability of Legends Barbers' training and development entity to become self-

supporting

Supervisor: Ms S Bosa

Adu, Nicholas Kwadwo

Capstone Project: Investigating the effects of customer

experience on business performance in Kalapeng

Pharmacies

Supervisor: Dr S McCoy

Bozo, Manelisi

Supervisor: Mr D Zidel

Capstone Project: Should the Eastern Cape Department of

Economic Development automate the creation of the

financial statements

Campbell, Renado Llewellyn **Supervisor:** Mr T Erasmus

Capstone Project: A digital medical claim submission and benefit confirmation solution for healthcare providers

Da Silva, Talya Micaela (with disctinction)

Capstone Project: A review of Waste and Stock Losses

within a Johannesburg SME **Supervisor:** Dr U Ferndale

Du Plessis, Merike

Capstone Project: The impact and effectiveness of social media on growing SMEs: An evaluation of Salvador Dahlia

Floristry

Supervisor: Dr S McCoy

Edmonds Bekker, Samantha

Capstone Project: Approaches to better managing working

capital of a Small to Medium enterprise

Supervisor: Dr A Oosthuizen

Fredericks, Shaun George

Capstone Project: Optimising the inventory replenishment

system of a supplier to the hospitality industry

Supervisor: Dr H van der Westhuizen

Govender, Tirendran

Minor dissertation: Estimating expected losses for purposes

of pricing premiums in Marine Insurance

Supervisor: Mr T Erasmus

Halbisch, Johan Trino

Capstone Project: Intended use of digital health technology

by patients: A case of Halbisch Physiotherapists

Supervisor: Mr P Sokhela

Hlatshwayo, Makungu Freedom

Capstone Project: How to grow Hlatshwayo Gaz' Business in

line with government's LPG plan

Supervisor: Ms B Shongwe

Jopson, Rebecca Lee

Capstone Project: Monitoring cultural change and employee

satisfaction in Coastland Sales (Pty) Ltd

Supervisor: Prof Carolina Henn

Leepile, Omphile

Capstone Project: Automating the IT service desk in a SaaS

SME company

Supervisor: Dr H van der Westhuizen

Majeng, Matshidiso Carol

Capstone Project: Banking the unbanked South African

market through a simplified savings product

Supervisor: Prof C Henn

Makhutla, Mefane William

Capstone Project: Evaluating ways to minimize overtime

costs at a South African explosives company.

Supervisor: Mr E Drotskie

Makubung, Sethwape Saneta

Capstone Project: A Framework for managing critical

research reator skills in south Africa

Supervisor: Mrs C Conidaris

Malebye, Boitumelo

Capstone Project: Evaluating potential benefits of

implementing innovative building technologies for delivery

of low-income housing in City of Johannesburg

Supervisor: Dr K Mohamed-Padayachee

Malik, Mohammad Hassan

Capstone Project: Digitising the operations of SFP to enable

digital transformation **Supervisor:** Mr M Peters

Marangoh, Jacqueline Sakheleni Mabaso

Capstone Project: Analysing Strategies of Reducing Fresh

Produce Waste: Case of Joburg Market (SOC) Ltd

Supervisor: Prof Carolina Henn

Matebane, Mamaeke Samuel

Capstone Project: Revenue diversification strategies. A case

study for Tshwane Rapid Transit Pty (Ltd) (TRT)

Supervisor: Prof S Singh

Mchunu, Lorato Mmetja

Capstone Project: Exploring exit strategies for the participants of the Vukuphile learnership programme

Supervisor: Dr K Johnson

Mgolombane, Ntsika Rodwell

Capstone Project: The role of the secondary diamond market in the turnaround of West Coast Resources

Supervisor: Dr Ferndale

Mohlotsane, Pontso Bernadina

Capstone Project: Marketing strategies for recovery, a case

study of Banbury Nail Bar **Supervisor:** Prof S Singh

Motha, Zandile

Capstone Project: Enhancing brand communication

strategies using social media to maximise profitability for

Prudent shoes

Supervisor: Mr L Beder

Motsepe, Joel Manthaudi

Capstone Project: A look into the poor financial

performance of Moja Chicken Soweto

Supervisor: Ms M Makgamatho

Munyai, Muzamani Andrew

Capstone Project: How to improve customer retention for

WebuyCars

Supervisor: Dr S McCoy

Muthambi, Tendani Catherine

Capstone Project: A return-on-investment analysis of ONE Campaign Nigeria Champions working to improve grassroots

advocacy

Supervisor: Mr T Madikane

Naicker, Olisha

Capstone Project: Building a business case for coaching

through client experience

Supervisor: Prof Carolina Henn

Netshifhire, Rabelani

Capstone Project: Developing a strategy to grow Geolander

Pty Ltd and to position it for the future of EMVs

Supervisor: Mr C Cloete

Netshiozwi, Simon Thizwilondi

Capstone Project: Digitalization for increased market share

of a professional services company

Supervisor: Mrs C Conidaris

Nikiwe, Nombulelo Thandeka

Capstone Project: Developing a framework for data

management adoption for SMEs **Supervisor:** Prof A Telukdarie

Peter, Luyanda

Capstone Project: A critical evaluation of financial education

programmes at Harambee Communications

Supervisor: Dr P Thomas

Qubeka, Mawande

Capstone Project: A systematic review of Shoprite Holdings

(LTD) expansion into Africa **Supervisor:** Mr P Sokhela

Radebe, Raisibe Wendy

Capstone Project: The influence of the socio-economic

status of a township on an SME dental practice

Supervisor: Dr C Chakamera

Sekotlong, Moreila Daniel

Capstone Project: Strategies for improving the growth trajectory of the Metal Casting Technology Station (MCTS)

Supervisor: Mr M Mundy

Shelembe, Lindokuhle Mmeli Stanley

Capstone Project: Turnaround strategy for uMhlongamvula

CPA after failure of restituted farm

Supervisor: Mr E Drotskie

Smit, Gysbert Johannes

Capstone Project: Improving the profitability of Rustgold

Transport

Supervisor: Dr H van der Westhuizen

Swart, Natasha

Capstone Project: An analysis of traditional compared to

contemporary B2B sales **Supervisor:** Prof A Telukdari

Thamburan, Vishanta

Capstone Project: Growth strategies of GloQ Construction

and Projects (Pty) Ltd in the context of digital

transformation

Supervisor: Ms B Shongwe

Tshiguvho, Mulalo Kenneth

Capstone Project: An investigation of potential strategies to

address the challenges faced by AJT transport

Supervisor: Dr C Chakamera

Visser, Hendrik Gideon

Capstone Project: Investigating the need of digital platforms

for car guards

Supervisor: Prof A Telukdari

Wright, Wayne

Capstone Project: Increasing the profitability of tomatoes

through sustainable growth strategies

Supervisor: Ms B Shongwe

Zama, Siyabonga Charles

Capstone Project: Application of marketing strategies by

Shelly Beach Private Hospital to ensure growth and

sustainability.

Supervisor: Prof T Kele

Zonke, Beauty Ntombentle

Capstone Project: Improving brand awareness to increase

consumer perception and revenue in SME

Supervisor: Mrs C Conidaris

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

QUALIFICATIONS

4. Diploma

Jood, Polokego (Operations Management)

5. Advanced Diploma

Manyadze, Humbelani (Quality)
Ntshweza, Anele Tiny (Quality)
Sekoboane, Hilda Regomoditswe (Quality)
Shongwe, Doctor Nelson (Quality)
Shongwe, Njabulo (Quality)

6. Master's

Aigbavboa, Sweeta Vivian (Operation Management)

Dissertation: An assessment of informal trading operations

in Krugersdorp Central Business District, South Africa

Supervisor: Prof N Sukdeo

Baloyi, Xihlovo (Operations Management)

Dissertation: Analysing the implementation of lean six sigma

in a manufacturing company

Supervisor: Dr El Edoun

Co-supervisor: Prof A Pradhan **Co-supervisor:** Prof C Mbohwa

Ncube, Henry (Operation Management)

Dissertation: An investigation into production process challenges faced by junior coal mining companies in

Mpumalanga South Africa **Supervisor:** Prof A Pradhan

Co-supervisor: Dr TM Nemarumane

Nemadzivhanani, Mmbulahiseni Charles (Operation

Management)

Dissertation: Human capital management processes

contribution to business sustainability

Supervisor: Dr NS Madonsela **Co-supervisor:** Prof A Pradhan

Olubiyo, Oyindamola Cynthia (Operations Management) **Dissertation:** Investigating the impact of third-party logistics

outsourcing on the performance of clothing manufacturing

small and medium enterprises in Nigeria

Supervisor: Prof CO Aigbavboa

Co-supervisor: Dr K Mushavhanamadi

Shibe, Sabelo (Operation Management)

Dissertation: Analysis of automated lean manufacturing

within the South African steel industry

Supervisor: Dr NS Madonsela **Co-supervisor:** Ms S Thaba

Tau, Asser Latsatsi (Operations Management) (with distinction)

Dissertation: Continuous improvement through lean tools - An application in a coal fly ash processing plant in Sasolburg,

South Africa

Supervisor: Dr El Edoun

Co-supervisor: Prof A Pradhan **Co-supervisor:** Prof C Mbohwa

Tshibanda, Gaby Mujinga (Operation Management) **Dissertation:** Impact of information technology on supply chain of pharmaceutical departments within public hospitals of Johannesburg

Supervisor: Prof A Pradhan **Co-supervisor:** Dr Z Yahia

7. Master of Philosophy

Baloyi, Hlamalani Innocent (Mechanical Engineering)

Dissertation: Design of a flue gas (CO2) scrubbing retrofit in a coal power plant relative to solar and wind curtailment for

reliable clean energy **Supervisor**: Prof J Ren

Co-supervisor: Dr LU Okonye

Boye, Lekhoromo Joconea (Engineering Management)

Dissertation: Optimization of railway infrastructure

maintenance execution in South Africa

Supervisor: Prof JC Pretorius

Co-supervisor: Dr BBS Makhanya

Heera, Jyothika (Engineering Management)

Dissertation: Human competencies required to be an effective project manager and ensure project success

Supervisor: Dr LJ Erasmus

Co-supervisor: Prof JC Pretorius

Hlanga, Mahlatse Fortunate (Engineering Management)

Dissertation: Regulatory compliance of electric hot water

heaters: A case study

Supervisor: Prof JC Pretorius **Co-supervisor:** Mr O Akinsooto

Hlatshwayo, Kukhanyakwezwe Bonginkosi (Engineering Management)

Dissertation: Soft skills development for students and practitioners: An Engineering Management perspective

Supervisor: Dr A Malan

Co-supervisor: Prof JC Pretorius

Kasenge, Junior Matipa (Engineering Management)

Dissertation: Identifying information technology needs to

effectively manage a pavement management system

Supervisor: Dr A Maneschijn **Co-supervisor:** Prof JC Pretorius

Maleke, Mpho Bridgette (Engineering Management)

Dissertation: The adaptation of soft skills training for project managers in road design projects in response to disruptive events

Supervisor: Prof J Meyer

Co-supervisor: Prof S Von Solms

Masemola, Mamphekgo Jerry (Engineering Management)
Dissertation: Mobile welding robotics in locomotive under

frame sub-assemblies manufacturing

Supervisor: Prof JC Pretorius **Co-supervisor:** Dr PS Eboule

Masikane, Khulakahle Humphrey (Engineering Management)

Dissertation: Challenges that lead to unsatisfactory performance of fossil power plants in South Africa

Supervisor: Prof JC Pretorius **Co-supervisor:** Dr TND Mathaba

Mfenguza, Glen (Engineering Management)

Dissertation: The impact of integrating solar photovoltaic

generators on grid connected systems

Supervisor: Prof JC Pretorius **Co-supervisor:** Dr TND Mathaba

Mnukwa, Ezile Avumile Luto (Engineering Management)

Dissertation: Advancing the understanding and

management of coal power plant for sustainable energy

Supervisor: Prof JC Pretorius **Co-supervisor:** Mr PS Eboule

Molefe, Lesego (Engineering Management)

Dissertation: Barriers to project quality management in non-

destructive testing companies: A case study

Supervisor: Prof JC Pretorius **Co-supervisor:** Dr TND Mathaba

Ngamba, Ntshuxeko Difference (Engineering Management)

Dissertation: Project risk management control for

sustainable companies

Supervisor: Prof JC Pretorius **Co-supervisor:** Mr PS Eboule

Ntlhabane, Lebogang Christy (Engineering Management) **Dissertation:** Understanding perceptions on the effects of increased automation on operators in the petrochemical storage industry.

Supervisor: Prof S Von Solms

Co-supervisor: Prof AL Marnewick

Phiri, Patricia Thandeka (Engineering Management)

Dissertation: The possibility of using reliability engineering

techniques to improve supply chain reliability

Supervisor: Dr BW Botha

Ramashapa, Thabang Acculate (Engineering Management) **Dissertation:** A suitable way of working arrangement for engineers in consulting and project management industries

Supervisor: Prof JC Pretorius **Co-supervisor:** Dr TND Mathaba

Selamolela, Deno (Engineering Management)

Dissertation: Transition towards production of electric

vehicles in South Africa

Supervisor: Dr TND Mathaba

8. Master of Engineering

Madonsela, Thabo Michael (Engineering Management)

Dissertation: Effectiveness of reliability and asset lifecycle
management practices in railway traction substations

Supervisor: Prof JC Pretorius **Co-supervisor:** Dr BBS Makhanya

Maepho, Lehlohonolo (Engineering Management)

Dissertation: Challenges of implementing a project
management office in an air navigation service provider: A

case study

Supervisor: Dr SJ Benade

Co-supervisor: Prof AL Marnewick

Mupfure, Robert (Engineering Management)

Dissertation: The impact of world class manufacturing methodologies on reliability centred maintenance in the

manufacturing industry **Supervisor:** Dr SJ Benade

Co-supervisor: Prof JC Pretorius

Pillay, Shanesh (Engineering Management)

Dissertation: Industrial internet of things adoption for asset

management

Supervisor: Prof JC Pretorius

Co-supervisor: Dr G Chattopadhyay

Setshedi, Marumo Levy (Engineering Management) **Dissertation:** Physical asset management strategies in

manufacturing companies in South Africa

Supervisor: Dr TND Mathaba

9. Doctor of Philosophy (D Phil)

Baba Ahmed, Abdullahi (Engineering Management) **Thesis:** Development of a framework to improve procurement time on PPP projects in Nigeria

Supervisor: Prof I Musonda

Co-supervisor: Prof JHC Pretorius

10. Doctor Ingeneriae (DIng)

Mqoco, Bongani Dominic (Engineering Management) **Thesis:** An integrated approach to optimised energy and

power management in a 3kV DC Railway System using

hybrid regenerative energy storage systems

Supervisor: Prof JHC Pretorius **Co-supervisor:** Dr JHR Enslin

11. Doctor of Philosophy (PhD)

Agarana, Michael Chikodi (Operations Management)

Thesis: Modelling and optimization of advanced manufacturing process planning and control

Supervisor: Prof ET Akinlabi

Co-supervisor: Prof P Kholopane

Cebekhulu, Bongumusa Mansuette Bhekamalinda (Operations Management)

Thesis: The Influence of public procurement regulations on efficiency and the management of quality in Public Sector

Laboratories

Supervisor: Prof PA Ozor

Co-supervisors: Profs C Mbohwa and A Pradhan

Gama, Lungile Ziyanda (Operations Management)

Thesis: The millennial employee: A catalyst for balanced workplace methods in Local Governments in Eswatini

Supervisor: Dr El Edoun

Co-supervisor: Prof N Sukdeo

Gartner, Laurence Rudolf (Engineering Management) **Thesis:** An adaptive data analytics solution for enhanced

engineering management business insight

Supervisor: Prof JHC Pretorius **Co-supervisor:** Dr R Swanepoel

Hawkins, Nteboheng Patricia (Operations Management) **Thesis**: Framework for job satisfaction among academics in a virtual work setting at a higher education institution in the

Eastern Cape province of South Africa

Supervisor: Dr El Edoun

Co-supervisors: Prof A Pradhan

Iloy, Rama Achtar (Chemical Engineering)

Thesis: CO2 hydrogenation to liquid hydrocarbons over silica

support cobalt catalysts **Supervisor:** Dr PR Khangale **Co-supervisor:** Prof K Jalama

Mafokosi, Katleho Roland Mckenzie (Engineering Management)

Thesis: Studies and modelling of impacts of asset management and maintenance on risks, costs, and performance of the railway infrastructure using system dynamics approach.

Supervisor: Prof JHC Pretorius

Co-supervisor: Prof G Chattopadhyay

Makhanya, Nokubonga Prudence (Chemical Engineering) **Thesis**: Metal Organic Frameworks (MOFs) for adsorption thermal energy storage, methane and carbon dioxide capture and storage

Supervisor: Prof BO Oboirien

Co-supervisors: Prof J Rem and Dr N Musyoka

Mphefu, Gift (Engineering Management)

Thesis: Development of a system dynamics model for small-to-medium engineering consulting firms in South Africa

Supervisor: Prof JHC Pretorius

Co-supervisors: Prof M Sumbwanyambe

Nel, Johannes Bulterman (Engineering Management) **Thesis**: A framework for water allocation and decision

support system selection

Supervisor: Prof P Mativenga

Co-supervisors: Prof AL Marnewick

Okpuwhara, Rita Onoharigho (Chemical Engineering)

Thesis: Production of polymer nanocomposite from recycled

expanded polystyrene and recycled polyethylene

terephthalate for boat application

Supervisor: Prof OB Oboirien **Co-supervisors:** Prof ER Sadiki

Ramasu, Tlotlo Keatlaretse (Operations Management) **Thesis**: An integrated framework for the growth of food manufacturing small and medium sized enterprises in

Botswana

Supervisor: Prof CO Aigbavboa

Co-supervisors: Prof WD Thwala and Dr T Munyai

Siluthanyi, Marubini Martin (Operations Management) **Thesis**: Investigating the impact of economic and natural parameters in the supply chain management of milled grain products

Supervisor: Prof A Pradhan **Co-supervisors:** Prof Z Yahia

Tolu Akinbogun, Olubukola Ademola (Operations Management)

Thesis: A framework for sustaining traditional banking industry in Nigeria in the context of the fourth industrial revolution

Supervisor: Prof CO Aigbavboa

Baba, Abdullahi Ahmed PhD (Engineering Management)

Born in Toro Local Government Area, Bauchi State, Nigeria, Abdullahi earned his BTech Honours in Quantity Surveying with First Class honours from Abubakar Tafawa Balewa University (ATBU), Bauchi, Nigeria, and an MSc in Civil Engineering from the Universiti Teknologi PETRONA, Malaysia. He published many articles in accredited journals and conference proceedings in the area of the public-private partnerships procurement model and offshore platform decommissioning. He is a member of the Royal Institution of Chartered Surveyors (RICS), UK, and a registered Quantity Surveyor in Nigeria.

In the study, the candidate argued why procuring PPP projects in SSA and MENA countries takes longer. The study investigates the determinants of procurement time of Public-Private Partnerships (PPP). Projects from the energy and transport sectors in Sub-Sahara Africa (SSA) and the Middle East and North African (MENA) countries were selected for the study. Public data from the World Bank covering 2000 to 2019 were used. The analysis methods included linear panel-within group, non-linear panel-logistic regressions, and Delphi techniques. Previous studies employed linear regression and correlation methods examine the factors that to drive optimum procurement time. These methods are relatively weak because they cannot explain cross-sectional dependency in the presence of heterogeneity, and there is no information about nonlinearity, particularly when the response variables follow a non-Gaussian distribution pattern. Therefore, the author modified the regression method and introduced linear and non-linear

panel regression models to establish the connectivity underlying the theoretical linkage between investment in PPP projects, the number of PPP projects, project types, and procurement time. Additionally, heterogeneity was assumed to be a country-specific factor and demeaning was removed. In terms of model specification, the researcher has contributed to existing knowledge.

Supervisor: Prof I Musonda

Co-supervisor: Prof JHC Pretorius

Mqoco, Bongani Dominic Dlng (Engineering Management)

Bongani Mgoco obtained a BSc Hons (Applied Science) degree from the University of Pretoria in 2000. He thereafter obtained MBL and MEng (Electrical Engineering) degrees from the University of South Africa and the University in 2006 and 2013 respectively. He Witwatersrand experience in project and programme management of major infrastructure projects, backed by years of engineering experience as a Plant Maintenance Superintendent Engineer, Senior Technologist, Senior Engineer, Senior Manager, Chief Engineer, Project Principal, Project Manager, Engineering Manager, Rail Sector Consultant and Technical Executive in the private and public sectors.

The candidate's research focus was on developing an integrated approach in optimised energy and power management in a 3kV DC Railway System using hybridised regenerative energy storage systems. The research made use of the Analytic Hierarchy Process, interpretive structural modelling integrated with the use of the Morris screening method, Cotter sensitivity analysis method and optimisation techniques. This research has contributed to the development of an integrated method applied in 3kV DC urban rail systems to rank and identify appropriate energy savings methods in order of importance in the face of several alternatives and criteria. This integrated framework assists with ranking, selecting the most appropriate solutions amongst several alternatives and assist in decision-making by introducing an interpretive structural modelling approach. The methods proposed in this research will be useful

in various organisational contexts where multi-factor decisions, relationships, and interactions amongst alternatives are being considered at different levels.

Supervisor: Prof JHC Pretorius **Co-supervisor:** Prof JHR Enslin

Agarana, Michael Chikodi **PhD** (Quality and Operations Management)

Michael Agarana obtained his Bachelor's degree in Mathematics in 1991 from the University of Nigeria. He then obtained his dual master's degree in Mathematics and Operations Research from the University of Lagos in 2000 and 2002, respectively. He started his doctoral studies at the University of Johannesburg in 2018. His academic career at the Department of Mathematics, Covenant University, started as a lecturer in 2013 and rose to the rank of a senior lecturer in 2019. His research interests include mathematical modelling and optimisation, advanced manufacturing, operations research, and swarm intelligence.

The candidate conducted research on the modelling optimisation of advanced manufacturing process planning and control. The research focused the application on mathematical theories. models algorithms and simulation tools to the modelling and optimisation of advanced manufacturing process planning and control to improve the process planning, forecasting optimal progresses and control. The candidate generated effective solutions to complex process forecasting optimal planning, progressions and challenges, using mathematical models, operations research, and swarm intelligence algorithms. The research established the optimal models that would enhance the sustainability of manufacturing technologies, advanced including optimisation. Consequently, production is increased and both labour and machine hours are enhanced. This study is novel and beneficial to the advanced manufacturing firms. The research produced twelve articles published in reputable Scopus indexed journals and international conferences.

Supervisor: Prof ET Akinlabi

Co-supervisor: Prof P Kholopane

Cebekhulu, Bongumusa Mansuette Bhekamalinda **PhD** (Operations Management)

Bhekamalinda Cebekhulu holds Bongumusa Mansuette Analytical Chemistry (2008) Diploma National in Mangosuthu University of Technology, a B-Tech Degree (2012) in Quality Management, and an M-Tech (2017) in Operations Management from the University of Johannesburg. In March 2018, he enrolled for his doctoral program at the University of Johannesburg. He currently works as a SHEQ Manager at the National Metrology Institute of South Africa. To date, Bongumusa Cebekhulu has published one journal article in an accredited journal, and five conference papers.

The candidate's doctoral research titled 'The influence of public procurement regulations on efficiency and the management of quality in public sector laboratories' focused on the factors that impact, positively or negatively, the process of quality management and efficiency in public sector laboratories. Using Structural Equation Modelling, the research also assessed the strength of the relationship between the identified factors and revealed that strong relationships exist among Bureaucracy, Ethics, Compliance, Quality Management, and Relationship Management. Finally, the study demonstrated how implementing quality management systems can improve public sector laboratories' efficiency and assist with integration with other systems. This is achieved by exploring and developing a framework for the integration of quality management and supply chain management systems in public sector laboratories. developed supply chain quality integration The

framework provides the roadmap for harmonising systems in public entities and coordinates various activities to improve service provision.

Supervisor: Dr PA Ozor

Co-Supervisor: Prof CM Mbohwa

Gama, Lungile Ziyanda PhD (Operations Management)

Mrs Dlamini - Gama's career spanning over 12 years has focused strategy and policy development implementation, organisational development and leadership as well as talent management in the field of human capital management. Her career has afforded her opportunities to share her expertise in the following sectors in Eswatini: retail, utilities, manufacturing and most recently local government. She Magister Technologiae Organisational obtained а in Development from the Tshwane University of Technology Business School. Her areas interest in research lie in developing and/or modifying workplace systems that promote futuristic and all-inclusive workplaces.

The study examined the reengineering of operations in a predominantly traditional workplace due to the emergence of the millennial employee as a leader that is inherently dissimilar to the older generational cohorts currently dominating the world of work, to promote balanced workplace methods reflective of a multi-generational workforce. A mixed method was applied, and triangulation ascertained corroborations between the qualitative and quantitative results. The findings revealed that the relationship between progressive workplace practices, workplace culture flexibility, work requirements preferred by millennials, a balance in traditional and non-traditional workplace methods, leadership priority and the success of the millennial employee in the workplace exist. The objective of the study was met in formulating a framework to implement new approaches to engaging employees, expanded

views of collaboration and personalised recruiting to empower the LGEs in effectively managing multi-generational workplaces. Future research on the organisational preparedness to multigenerational workplaces is imperative.

Supervisor: Prof El Edoun

Co-Supervisors: Prof N Sukdeo

Gartner, Laurence Rudolf Ludwig **PhD** (Engineering Management)

Laurence Gartner studied Computer Science at Melbourne University. He obtained a Master of Business Administration degree from Heriot-Watt University in 1996, and a Master of Applied Finance degree from Macquarie University in 1999. He began his career with the Australian Commonwealth Government and worked in the Information Telecommunication and Finance sector as a specialist, manager and executive. For the last 10 years, he has been engaged as a private consultant resolving technical, management and operational issues. He is a Fellow of the Strategic Management Institute and a founding member of the *Project Management Institute* (Melbourne Branch).

The candidate's research focus was on constructing an adaptive analytics model in which technical professionals and engineering managers can maintain, enhance, and operate independent of information and communication technology infrastructure, thus enabling self-service for engineering management and technical professions with analytical and business insights creation research deployed functional capability. The constructions with a systems thinking approach. This was the key to its flexibility, adaptability and accessibility. Engineering, business managers and technical professionals are enabled with the ability to analyse with ease and efficiency any set of data to derive management insights. Flexibility is such that data sets from different industries and entities can be analysed fast and efficiently without the overheads of data preparation or thirdparty involvement. The speed of deriving these management insights is achievable within minutes of importing the data.

Supervisor: Prof JHC Pretorius **Co-supervisor:** Dr R Swanepoel

Hawkins, Nteboheng Patricia PhD (Operations Management)

Ms Mefi-Hawkins holds a Master's in Operations Management with Distinction from the University of Johannesburg. She is currently a Lecturer of Management and Information Administration for both undergraduate and postgraduate courses at Walter Sisulu University.

In her doctoral study, Ms. Mefi-Hawkins explored developing a framework for job satisfaction of academics within virtual academic environment settings. This study sought to understand the factors that affect job satisfaction as well as the impact of virtualisation among academics at a selected higher educational institution in the Eastern Cape Province in South Africa. The study employed a mixed research approach to solicit primary data from academics. The findings revealed that there was a full understanding of virtualisation and job satisfaction concepts among academics. A framework for the job satisfaction of the respondents was offered using the lens of the Social Cognitive theory.

Supervisor: Dr El Edoun

Co-Supervisor/s: Prof A Pradhan

Iloy, Rama Achtar PhD (Chemical Engineering)

Rama Achtar Iloy joined the University of Johannesburg in 2008 where he completed his National Diploma, Bachelor of Technology and Master's degree in the Department of Chemical Engineering. He later enrolled for PhD within the same department to undertake research in the field of synthetic fuels with emphasis in heterogeneous catalysis. He was a recipient of the Global Excellence Stature (GES) bursary during his PhD which has already produced one published journal paper with another one under review.

lloy's doctoral study focused on anthropogenic carbon dioxide mitigation in order to address climate change. The aim of his research was to develop catalysts capable of converting carbon dioxide to liquid fuels through hydrogenation. A number of silica-supported cobalt catalysts with various promoters, namely ruthenium, palladium, copper and potassium were prepared and evaluated in carbon dioxide hydrogenation under different conditions of temperature (180 – 300 °C) and pressure (1 – 20 bar). Potassium displayed a superior performance as compared to the other promoters, resulting in improved yield of C2+ hydrocarbons.

Supervisor: Dr PR Khangale **Co-supervisor:** Prof K Jalama

Mafokosi, Katleho Roland McKenzie **PhD** (Engineering Management)

Katleho Mafokosi obtained a National Diploma in Electrical Engineering from the Central University of Technology in 2013, then a BTech degree in Electrical Engineering from the University of South Africa in 2016, and thereafter obtained an MPhil degree in Engineering Management from the University of Johannesburg in 2019. He began his career as an electrical trainee at the Moqhaka Municipality in 2009 and is currently working as a project electrical lead at Transnet since 2013. He is registered as a professional technician (Pr. Techni) with the Engineering Council of South Africa.

The candidate's research focused on modelling the impact of asset management on railway infrastructure risks, costs, and performance. The research aimed to optimise infrastructure asset management using the system dynamics approach. His research used system dynamics modelling to predict railway infrastructure capacity, availability, safety, and also inform capital investment in the infrastructure. This research has contributed to the development of a model that predicts the impact of asset management decisions on the infrastructure. This assists with informing management decisions to avoid underutilised infrastructure, capital investment backlog, and the impact of infrastructure. Therefore, enhancing railway infrastructure performance and reducing risks and costs.

Supervisor: Prof JHC Pretorius

Makhanya, Nokubonga Prudence PhD (Chemical Engineering)

Nokubonga Makhanya obtained her B-Tech and master's degree in chemistry, Durban University of Technology in 2014 and 2017, respectively. She began her doctoral degree in the Department of Chemical Engineering at the University of Johannesburg in 2018.

Her doctoral thesis focused on the use of Metal Organic Frameworks (MOFs) for Adsorption Thermal Energy Storage, Methane and Carbon dioxide Capture Storage. Her thesis made an original contribution to the field of MOFs and demonstrated that several di-phthalate MOFs can be synthesized directly from decomposed PET plastic materials and used for energy storage. From the study, two articles were published in high-impact journals which are the Journal of Energy Storage and Journal of Porous Materials

Supervisor: Prof BO Oboirien

Co-Supervisor/s: Prof J Ren and Dr N Musyoka

Mphefu, Gift PhD (Engineering Management)

Gift Mphefu obtained a BSc in Electrical & Electronics Engineering from the University of Durban-Westville (now UKZN) in 1999. After that, he obtained a Certificate Course in Wireless Telephony and Masters in Engineering Management from the University of Pretoria in 2001 and 2009, respectively. In 2013, he received a Post Graduate Diploma in Healthcare Technology Management from the University of Cape Town. Gift is a Registered Professional Engineer with the Engineering Council of South Africa; he is a member of the South African Institute of Electrical Engineers, South African Systems Dynamics Chapter, and the International Council on Systems Engineering.

The candidate's main research focus is on assessing the behaviour of the business performance of engineering consulting firms as a result of multiple stakeholder interactions during the construction phase of public building infrastructure projects in South Africa. The research aimed to develop a system dynamics simulation model to explore the behaviour over time of the business performance of engineering consulting firms. This research has contributed to the development of the engineering consulting system dynamics model, which enables the user to simulate the effect of stakeholder interactions on the non-financial business performance of engineering consulting firms. This assists decision-makers in identifying specific problem areas within their complex operations; through scenario analysis, business leaders are empowered to create strategic intervention strategies to steer the performance in the desired direction.

Supervisor: Prof JHC Pretorius

Co-Supervisor: Prof M Sumbwanyambe

Nel, Johannes Bulterman PhD (Engineering Management)

Bultie Nel obtained a B Eng (Mechanical) degree from the University of Pretoria in 1981. Thereafter, he achieved B Eng Hons and M Eng degrees from the same university in 1983 and 1987, respectively. Bultie started his career in 1982 as a mechanical engineer at the Uranium Enrichment Corporation (now Necsa) and registered as Professional Engineer with the Engineering Council of South Africa. He moved management positions and in 1992 he obtained a Master of Business Leadership (MBL) degree from the University of South Africa. During his career, Bultie worked both in local and international organisations. Since 2016, he also lectured part-UJ Post-Graduate School of **Engineering** time the Management.

The candidate's research study focused on the challenge of balancing water demand with supply in water-scarce parts of the world. The study contributed to optimized water allocation as a modernized solution to the water supply-demand balancing challenge, by developing a process and framework to select the most appropriate water allocation and decision support scheme for any given water management situation. This process was applied to the South African (SA) water sector and based on the specific characteristics of the water management situation in the country, a generic SA water allocation and decision support scheme was derived. Through stakeholder engagement in a case study area, this scheme was further refined and specific enhancements for the case study area were proposed. This generic SA scheme now forms the basis for water allocation

enhancement that can be developed and implemented in other SA water management areas.

Supervisor: Prof P T Mativenga

Co-Supervisor/s: Prof A L Marnewick

Okpuwhara, Rita Onoharigho PhD (Chemical Engineering)

Rita Okpuwhara had her graduate, PGD and master's degrees (both distinctions) from the Department of Polymer and Textile Engineering, Ahmadu Bello University, Zaria-Nigeria in 2002, 2011 and 2013, respectively. She began her doctoral degree in the Department of Chemical Engineering at the University of Johannesburg in 2018.

Her doctoral study compasses contributions to the nanocomposite and boat industries in solving the current global problem of boat disposal issues. Her work involved the synthesis of nanofibres from recycled plastics for use as reinforcements for nanocomposites fabrication, targeted as boat construction materials. She has two peer-reviewed publications, and the first prize winner for PhD poster presentation at the 2022 University of Johannesburg postgraduate conference. Some aspects of her work are presently undergoing patenting procedures.

In her doctoral research, she focused on the development of recycled/-electrospun hybrid fibres (rEfibres) reinforced polylactide (PLA) nanocomposites for boat building. building materials nanocomposite this in study synthesised, taking environmental factors, into consideration with regards, to: its biodegradability, ease of recycling at the end-of-life usage and reduced cost, amongst others. The thesis some originality and represents significant presents contribution to the use of plastic solid wastes for practical applications such as in boat building. The study has produced one invention disclosure, one book chapter, one journal article

publication in high impact journal (*Polymer Engineering & Science*) and 1 conference presentation.

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Supervisor: Prof BO Oboirien **Co-Supervisor:** Prof R Sadiki

Ramasu, Tlotlo Keatlaretse: PhD (Operations Management)

Tlotlo K. Ramasu graduated from the University of Johannesburg with a National Diploma in Food Technology and completed her Bachelor and Master of Technology degrees in Operations Management from the University of Johannesburg. In 2018, she enrolled for her doctoral studies in Operations Management at the University of Johannesburg, with a specific focus on Small and Medium Enterprise growth.

In her study, the candidate developed an integrated framework for the growth of food manufacturing SMEs in Botswana. The framework was conceptualised through an extensive study of literature and then validated through a series of methods. The candidate first used interviews, which were analysed using content analysis, and further went on develop questionnaires, which were analysed by exploratory factor analysis (EFA) using SPSS version 27, and the results were further validated using confirmatory factor analysis (CFA). The findings revealed that Finance (FNC), Technology (ICT), Education and Training (ETF), Access to Markets (ATM), Entrepreneurial Leadership (ERL) and Intrapreneurship (IRP) attributes are relevant factors in growing food manufacturing SMEs in Botswana. Consequently, a six-factor model was developed and validated using structural equation modelling (SEM) with the use of EQuation Software (EQS) version 6.4. The major contribution of the study is the development of an integrated framework for achieving SME growth in the food manufacturing industry in Botswana, which will in turn help the nation achieve the following goals: increased GDP, poverty reduction, improvement in livelihood and human development, retention of employees, and industrial development.

Supervisor: Prof CO Aigbavboa **Co-supervisor:** Prof WD Thwala

Co-supervisor: Dr T Munyai

Siluthanyi, Marubini Martin PhD (Operations Management)

Martin obtained his undergraduate degree in Transport Management (2008) and master's degree in Operations Management (2018) from the University of Johannesburg (UJ). He is the Director of Logistics at UJ. He serves as a stakeholder for the JHB Inner City Transport Master Plan 2025 and an advisory board member for UJ Transport and Logistics Diplomas. He is a member of South African Transport Forum and Chartered Institute of Logistics & Transport. He is a proud recipient of "Service beyond the normal call of duty: UJ 2021" award. He has 19 years of experience working for top transport and logistics companies holding middle to senior positions.

The study investigated the impact of economic and natural parameters (such as ZAR/ USD exchange rate, inflation rate, international crude oil prices, climate change and natural disasters) on four components of the supply chain system of milled grain products in South Africa. The complex and integrated supply chain system covering farming, transport, milling and retail components of milled grain products was explored using system dynamics, process flows and factor analysis methodologies. The findings reinforce the need to adopt more insightful managerial tools for addressing the lack of supply chain collaboration among the supply chain components, which could compound and enhance the threat to food security. The study is beneficial to supply chain practitioners to make better decisions on planning the capacity of multi-component supply chain systems and stabilize the supply chain of milled

grain products in South Africa, especially in the highly uncertain environment faced by the global food supply chain.

Supervisor: Prof A Pradhan

Co-Supervisor/s: Prof Zakaria Yahia & Prof C Aigbavboa

Tolu-Akinbogun Olubukola Ademola **PhD** (Operations Management)

Olubukola Tolu-Akinbogun earned her Bachelor of Science degree in Food Science and Technology from Obafemi Awolowo University in 1989, a Certificate in Intensive Advertising in 1991 from the Nigerian Institute of Journalism in Ogba, Lagos, and a Master of Business Administration from the Federal University of Technology, Akure, Nigeria, in 2003. She enrolled for her doctoral studies in Operations Management at the University of Johannesburg focusing on the sustainability of the traditional banking industry in Nigeria. She joined the First Bank of Nigeria Ltd. in 1993 as a supervisor and has since risen to the management position of Group Head, South-West 2 (Retail Banking), covering Ondo, Ekiti, and Osun States.

The candidate's study developed a framework for sustaining the traditional banking industry in Nigeria in the context of the fourth industrial revolution. The candidate identified five constructs through rigorous review of extant literature that influences the sustainability of the traditional banking industry in the era of the fourth industrial revolution in Nigeria. The study thus developed an integrated holistic sustained traditional banking industry model with the use of SEM software, EQS Version 6.2. Findings from the analysis revealed that the covariation of the endogenous variable with the exogenous constructs was found to be statistically significant; hence, the five-factor model validates the assumption that the latent variables have significant influence on the overall sustained traditional banking industry. The study contributed to

knowledge by addressing the lack of a model for predicting the sustainability of the traditional banking industry in the 4IR era, especially in Nigeria.

Supervisor: Prof CO Aigbavboa



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