

RESEARCH AND INNOVATION NEWS

The Newsletter of the **DVC: Research, Innovation and Engagement**



AUGUST ISSUE

HAPPY Womens MONTH

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Editor's Note



"As the Director of Research and Postgraduate Support at the Durban University of Technology, it is my great honour to celebrate Women's Month by recognising the invaluable contributions of the women within our academic and research community. Their dedication, passion, and innovative spirit are the driving forces behind our university's success and the advancement of knowledge in countless fields.

This month, we not only celebrate the achievements of these phenomenal women but also reflect on the progress made toward gender equity in academia and research. We remain committed to creating a supportive and empowering environment where all women can excel, contribute meaningfully, and lead the charge in shaping a brighter future for all.

Let us also acknowledge the vital role that male allies play in fostering an inclusive and equitable academic space, where collaboration and mutual respect are the norms. Together, we are stronger, and together, we can achieve a future where everyone has the opportunity to thrive.

Happy Women's Month to all! Let's continue to honour, support, and elevate the incredible women who inspire us every day."

DUT WINS THE PRESTIGIOUS FOCUS RESEARCH ADVANCEMENT AWARD FROM THE NATIONAL RESEARCH FOUNDATION



The Durban University of Technology (DUT) garnered significant acclaim after securing the prestigious Focus Research Advancement award from the National Research Foundation. The awards ceremony was held at the illustrious Sun City on 22 August 2024, a night that will be etched in the annals of the university's history. This accolade recognises DUT's commitment to pioneering research and its continuous efforts to push the boundaries of innovation. The award highlights the university's dynamic

research environment, which fosters creativity and encourages scholars to pursue groundbreaking discoveries. Acceptance of this honour underscores DUT's reputation as a hub of academic excellence and its vital role in contributing to the national and global research landscape. The celebration at Sun City was not just about the award but also about acknowledging the collective hard work, dedication, and visionary leadership that have propelled DUT to new heights. This recognition from the National Research Foundation serves as a catalyst for further research endeavours, inspiring faculty and students alike to aim higher and contribute meaningfully to solving real-world challenges through scholarly inquiry. The entire DUT community rejoices in this milestone, reflecting a shared pride in their institution's achievements and an unwavering commitment to future advancements.

DUT AND SANEDI JOIN FORCES TO PRODUCE GREEN HYDROGEN ECONOMY RESEARCH

Simangele Zuma/Waheeda Peters



Khulasande Tshayile

The Green Engineering Research Group (GERD) at the Durban University of Technology (DUT), headed by Prof Sudesh Rathilal and Dr Emmanuel Tetteh, signed a Memorandum of Understanding with the South African National Energy Development Institute to explore and strengthen their collaboration in producing hydrogen economy research. This momentous event was held at the Civic Engineering boardroom, Steve Biko campus in Durban on Tuesday, 20 August 2024.

The programme director was Mr Zwakele Ngubane, Director of Advancement and Alumni Relations at DUT. He commended SANEDI for partnering with DUT and approving funding of R2 million on the green hydrogen research that will have a significant impact on the DUT community and the society. The collaboration between SANEDI and DUT focuses on hydrogen production, catalysis, and the utilisation of renewable energy sources to support the hydrogen economy.

Welcoming the distinguished guests who had gathered to witness the MoU signing ceremony was the Deputy Vice-Chancellor: Research, Innovation and Engagement at DUT, Professor Fulufhlelo Nemavhola.

Prof Nemavhola indicated that DUT is in a process of establishing a full hydrogen research institute, which will look at hydrogen from the production, storage and usage phases.

"I have no doubt that we are going to be working together towards this vision. We are going to require a lot of capacity. That institute will be part of making sure that as DUT, we contribute towards producing research that impacts society and improves lives and livelihoods" shared Prof Nemavhola.

The guests which included the chemical engineering students at DUT were also enlightened to a robust public lecture by Professor Sampson Mamphweli, Head of Energy Secretariat at SANEDI. His lecture was titled: The Hydrogen and Energy Research, Development and innovation in South Africa. He gave insight on SANEDI's green hydrogen projects across various higher education institutions and their aspirations for the future.

The public lecture was then followed by the official signing ceremony of the MoU between DUT and SANEDI which marked the beginning of a mutually beneficial partnership.

Representing SANEDI on the signing ceremony was their Chief Executive Officer (CEO), Dr Zwanani Titus Mathe who was accompanied by his two witnesses, Professor Sampson Mampheli, Head of Energy Secretariat at SANEDI and Mr Morakanele Thipe, Manager at the office of the CEO at SANEDI. Signing on behalf of DUT was the Vice-Chancellor and Principal, Professor Thandwa Mthembu who was accompanied by his two witnesses, the Deputy Vice-Chancellor: Research, Innovation and Engagement at DUT, Professor Fulufhelo Nemavhola and the Acting Executive Dean in the Faculty of Engineering and the Built Environment, Professor Sudesh Rathilal.

Addressing the guests, SANEDI CEO, Dr Mathe highlighted that SANEDI's legislative mandate is to direct, monitor, conduct and implement energy research and technology development in all fields of energy, other than nuclear energy. In addition, Dr Mathe mentioned that SANEDI strives to promote energy research and technology innovation.

Dr Mathe highlighted SANEDI's priorities for the forthcoming five years, speaking about energy security, universal energy access and affordability, balanced just energy transition, climate change, service delivery, and gender mainstreaming and youth unemployment.

"In terms of universal access to affordable energy and balancing energy demand and supply for example loadshedding and liquid fuel shortage; SANEDI will provide the support that is needed in balancing energy demand and supply in the broader context of the country's needs. Loadshedding and grid stability will be key focus areas for SANEDI in the coming years," he stressed.

Dr Mathe gave a snapshot in the new focus areas for SANEDI which included energy planning and modelling, consolidation of energy, research and development

energy data and modelling, electricity market design, jet and smart grids, intergovernmental forums support and scaling up the Department of Science and Innovation (DSI) to make a megascale impact. The DUT Vice-Chancellor and Principal, Professor Thandwa Mthembu expressed his appreciation to SANEDI for partnering with DUT on this exciting project and for the generous funding which will assist in the establishment of the hydrogen research institute in the university.

"We are really excited at DUT, and especially in this era whereas part of our strategy (ENVISION2030) we are really trying to put ourselves in the forefront of so many developments in this country that ultimately past tributes to drive us. There is a meeting of strategy to look at not just the outputs of research but the outcomes and the impacts that we should be making in the broader society, not only within our local environment, but to reach our national news," he said.

The ceremony concluded with the signing of the Memorandum of Understanding. The SANEDI team got an opportunity to engage with the Chemical Engineering students of DUT who will play an integral role in the green hydrogen project, going forward.

Pictured: DUT Vice-Chancellor and Principal, Professor Thandwa Mthembu and Chief Executive Officer (CEO), Dr Zwanani Titus Mathe, signing the MoU with their witnesses.

DR MEWOMO'S NRF RATING IS A TESTAMENT TO THE SIGNIFICANT IMPACT OF HER RESEARCH WITHIN DUT AND THE BROADER ACADEMIC COMMUNITY

Waheeda Peters



Pictured: Dr Modupe Cecilia Mewomo

Academic researcher, Dr Modupe Cecilia Mewomo, is a Senior Lecturer and former Acting Head of the Department of Construction Management and Quantity Surveying at the Durban University of Technology (DUT).

"Addressing this pressing concern inspired my research in the areas of green building, energy-efficient building and sustainable construction."

Dr Mewomo is proud to immerse herself actively engaging in diverse research areas within the built environment, including building information modelling, smart building, green building, and sustainable construction. Her research efforts have been fruitful, resulting in the publication of 10 book chapters, 21 scholarly papers in reputable journals, and over 40 conference papers.

The dynamic lass spoke of her immense passion for research ignited during her Master's programme in Quantity Surveying at the Federal University of Technology, Akure in Nigeria.

"It was during this time that I honed my research skills in conceptualising research ideas and grew to appreciate the pivotal role of research in advancing my profession, particularly through the lens of technology and innovation," she professed.

Driven by a deep commitment to using academic and applied research as tools for societal development, Dr Mewomo embarked on her research journey in 2014 at the University of Pretoria, focusing on alternative dispute resolution. This work led to the development of a framework for the effective application of adjudication as an alternative dispute resolution for the South African construction industry.

Dr Mewomo's specific focus on her current research keeps her focusing on various aspects of sustainable construction and energy-efficient green building.

'This is driven by my passion for creating new knowledge and providing practical solutions to the complex challenges posed by rapid urbanisation," she explained. As modern society continues to urbanise, Dr Mewomo elaborated that the growing influx of people into buildings and cities had created significant difficulties, particularly in providing sufficient, safe and affordable infrastructure. She relayed that this consequently led to a global call for a shift from traditional building approach towards more sustainable development through sustainable construction. "Addressing this pressing concern inspired my research in the areas of green building, energy-efficient building and sustainable construction," she added.

Dr Mewomo believes that one's research needs to align with the objectives as outlined in the DUT ENVISION2030 strategy.

"This accomplishment perfectly aligns with the DUT ENVISION2030 strategy on innovation, research, and excellence,"

"Within six years of joining DUT, I have mentored and supervised the successful completion of 14 Masters and three PhD students. Our research engagements spanned various aspects of green and sustainable construction, building information modelling, smart construction as well as energy-efficient building, all of which align with the value of a green ecosystem and innovative research and, curricula as enshrined in the DUT ENVISION2030," she said.

Notably, Dr Mewomo made mention that many of these graduates are now gainfully employed in South Africa's industries, while others have ventured into their construction businesses, contributing productively in the development of the region and country.

"Achieving my NRF rating is a testament to the significant impact of my research within DUT and the broader academic community. This accomplishment perfectly aligns with the DUT ENVISION2030 strategy on innovation, research, and excellence," echoed Dr Mewomo.

Dr Mewomo proudly shared that her completed research has made significant contributions to the body of knowledge in various areas. "One of the most innovative aspects of my work in dispute resolution research was the development of a framework for the effective implementation of statutory adjudication in the South African construction industry. Before the development of the statutory adjudication framework, there was a huge concern about the serious default payment challenge and unfair payment practices affecting the delivery chain in the South African Construction industry," she commented.

She highlighted that proffering real-time solutions to these formidable challenges, which usually result in poor project delivery and protracted disputes in the South African construction industry, stimulated her impassioned desire for dispute resolution matters in the construction industry. "My first completed dispute resolution research captured the experts' views on the factors influencing the effective implementation of statutory adjudication, identifying the 'enablers' and 'drivers' necessary for the successful adoption and realisation of statutory adjudication and its accrued benefits in South Africa," she relayed.

Dr Mewomo divulged that her further research work in this track filled the knowledge gap by examining critical success factors required for the effective implementation of statutory adjudication in the South African Construction industry and then developed a framework for its adoption. Besides the aforementioned, Dr Mewomo shared that the sustainable construction and green building research have contributed significantly through recommendations for implementing financing schemes, utilising advanced digital technologies, and promoting green and sustainable building curricula across the institutions and post-occupancy-related studies within the green building spectrum towards a safe and salutogenic built environment in the country.

Dr Mewomo also highlighted some significant findings from her research and their potential impact on the field or society at large.

"My recent research findings hold significant implications that resonate deeply within academia, society, and the environment. My research on energy-efficient green building, which examined strategies to promote green building practices, has contributed significantly to the field of the built environment. The findings from this research have offered a more comprehensive understanding of the economic, societal, ethical, environmental and cultural benefits associated with energy-efficient green buildings in South Africa and beyond," she stressed.

Additionally, she explained that this research had provided actionable recommendations that, if effectively implemented, could foster a thriving green building sector in South Africa, create business

opportunities, and stimulate economic growth. "The research findings also pave advances for improved indoor air quality and comfort provided by green building strategies for immediate positive effects on occupants' health and well-being, thereby enhancing their quality of life. This can lead to increased productivity, minimised sick building syndrome effect and reduced healthcare costs," said Dr Mewomo. She communicated that one prominent goal of researchers is the effective dissemination of research findings to the broader academic and professional communities for knowledge sharing, research outcome utilisation and adaptation in development projects to transform and enhance the quality of lives at all levels.

"I have profitably presented my research findings at both local and international conferences, ensuring that they reach a wide audience. Additionally, my articles have been published in Scopus and Web of Science indexed Journals by leading publishers such as Elsevier, Springer and Emerald. Notably, approximately 62% of my journal articles have been published in Q1 and Q2 Journals with high impact factors," she said proudly.

In response to the growing focus on energy-efficient and climate-resilient buildings as a means to mitigate the severe effects of global climate change, Dr Mewomo took a leading role in the research article titled "Green Building Research in South Africa: A Scoping Review and Future Roadmaps." "This article was published in a DHET-accredited, top-ranked journal in the Built Environment field. She supervised the lead author and provided correspondence to matters regarding this scientific endeavour which duly offered a prescient overview and promising blueprints for the construction engineering and management field in the country.

Reports from the reviewers' panel lauded the work done by Dr Mewomo, to grant her a holistic picture and policy suggestions for researchers and practitioners. "Consequently, the International Society of Energy and Built Environment granted me a three-year cost-free membership in recognition of my contribution," she said.

Collaboration has played a key role in her research, giving her the privilege of collaborating and networking with both local and international experts in her field. Currently, she is engaged in four dynamic international collaborative research projects. "These collaborations have fostered academic openness, facilitated knowledge transfer, and created dynamic partnerships that allow for the cross-pollination of ideas. For me, collaborating with colleagues is not only mutually beneficial but also academically enriching.

"By joining forces with other colleagues, we have been able to unlock new avenues of knowledge and make significant strides towards addressing the challenges faced by our respective research communities with more potential to generate ground-breaking discoveries and strengthen the global impact of our universities," she relayed.

Dr Mewomo confided that her research has led to significant practical applications that are beneficial to professionals, academics, industry as well as the local communities.

A sterling achievement for Dr Mewomo is her NRF rating.

"The NRF rating system is a worthy mechanism for benchmarking the quality of South African researchers against the best in the world. These ratings are awarded on a basis of researcher's current research outputs, quality and impact as evaluated by international peer reviewer," she explained. "My C3 NRF rating is a testament to the fact that I am conducting impactful, cutting-edge research in the field of construction management, both nationally and internationally, and that I am recognised by my peers as an established researcher in this field," she conveyed euphorically.

Looking ahead, Dr Mewomo's future research goals is broad in scope, with wide-ranging applications and significance in building science, quantity surveying, construction management and industry. It actively involves DUT students at all levels. She intends to continue her research in construction management within the built environment field. She is presently collaborating and having research projects' discussions with several leading experts from United States, United Kingdom, China and Ghana, among others. "I plan to maintain these collaborations and look forward to new and innovative joint research projects with these experts and colleagues, both at DUT and across South Africa. Moreover, I am open to new ideas and opportunities to further develop my research and expand my view for more groundbreaking research in the field," she said.



NDLELA AIMS TO RESOLVE THE ELECTRICITY CRISIS IN SOUTH AFRICA THROUGH HER RESEARCH

Phumeza Msongelwa



Pictured: Nomihla Ndlela

At a young age the sparkling Nomihla Ndlela was intrigued by forms of energy resulting from the existence of charged particles such as electrons and protons, either statically as an accumulation of charge as a current; simply meaning electricity.

The curious Ndlela grew up in the Esikhawini township, where she finished her matric in 2012 at the Tisand Technical High School. The bright lass is completing her Doctorate in Electrical Engineering at the Durban University of Technology (DUT) under the Grow Our Own Timber (GOOT) programme. The GOOT programme looks to advance equity objectives through promising students to serve as junior academic staff.

Ndlela spoke of her childhood where she had stayed at the Kwesakwamthethwa rural area in a period where there was no electricity and which entailed fetching water far from home.

"It was my first time taking a flight, and being outside the country. From then I told myself that this is the correct path for me."

"I always wanted to know more about electricity with the hope of bringing electricity to my village, so it is interesting for me that I am now going to be a doctor in electrical engineering," she chuckled Giving more perspective into her academic journey of learning, Ndlela had faced many challenges, the first one being that in her first year of study at DUT she had found out that she was pregnant. "It was an extremely stressful time for me, and it really felt like an end as I knew it would affect my studies, but with the help of my family and a sterling good attitude towards my academic studies.

studies, but with the help of my family and a sterling good attitude towards my academic studies, I persevered and was able to continue on my path to success. As a doctoral student who has a huge interest in the academic world I wish to encourage parents back home to support students in all challenges they face in life who are trying to achieve their goals. I also wish to encourage the youth to have a good attitude toward their studies and also maintain a good relationship with their family and relatives, I believe it makes things easier," she stressed.

After her studies were completed, Ndlela struggled to get in-service training and eventually ended up working at a supermarket as a cashier. "It was again a challenging time for me but I believe being in such a place gave me an opportunity to enhance my communication skills," she added.

For Ndlela, despite all the obstacles she had faced, she always worked hard in her studies where many opportunities had opened up for her.

"From my Diploma to my Doctorate, I have always had sponsorships. For my Diploma I was sponsored by the Dube TradePort, in my BTech and Master's I was sponsored by the South 32 Hillside Aluminium. I am now under the GOOT programme. My Master's journey has exposed me to research where you write, present, and publish your work, it is super interesting for me as I have always wanted to be an author even though I have never thought of being an electrical author," she explained.

The most interesting part for Ndlela is when she has to present her academic work and network with other people who have more experience in her field. Her best experience being when she had to go to Kigali, Rwanda to present her work as an international author.

"It was my first time taking a flight, and being outside the country. From then I told myself that this is the correct path for me," replied Ndlela.

The spirited lass has published three journals in the (Multidisciplinary Digital Publishing Institute) MDPI and five conference papers in both the South African Universities Power Engineering Conference (SAUPEC) and Power Africa, moreover she has also presented international conference papers in

Australia, Sydney in July 2024, participated in the International Conference on Electrical, Computer and Energy Technologies (ICECET) conference as a session chair, as well as Power Africa 2024 and the international Conference on Smart and Sustainable Manufacturing (ICSSM) 2024.

"I can't wait for the time when I will have countless papers and even book chapters," she relayed. Ndlela did express that she wishes to help other people who have an interest in research by supervising them with the skills that she has to achieve their goals.

"Studying requires hard work and many sleepless nights, it also requires a huge desire to achieve success," she said.

Last year, in 2023, Ndlela had the opportunity to travel to Spain for an Exchange Doctoral programme at Huelva University where she was exposed to various things such as cultural exchange, and different languages, and came back knowing five, additional subjects.

Her long-term goal is to see herself in a high position such as in management, or even owning a business that will provide her with personal and financial freedom.

"My biggest dream is to bring change to my family and make them proud of raising a woman like me. I always say when I finish my doctorate, I will be called Dr. electrical engineer, author, and lecturer and that is my everyday motivation," she added.

Doing her Master's and currently doing her Doctorate has taught Ndlela lots of skills that she believes will make her a better person in life, such as owning one's work.

"I wish to say to all students who are trying to achieve their goals that it is possible, just work hard, believe in yourself, and be patient with yourself."

Ndlela confesses that her journey is an interesting journey since she is doing electrical engineering and electricity affects and solves most of the problems daily. "My research interest is on transmission lines, whereby I'm minimising the losses occurring over long distances carrying bulk power while optimising power access. The use of High Voltage Direct current (HVDC) Line Commutated Converters is best known for minimizing losses over long distances. The use of Flexible AC Transmission Systems (FACTS) which improves the stability of the system and increases power transfer capabilities by removing some reactance power. It is an interesting project since we are facing many challenges such as the depletion of coal, and aging infrastructure which leads to power outages or load shedding preventing complete blackouts," she indicated.

Ndlela commentated that these projects include power exchange between countries with the aim of improving electricity access to those countries lacking power access. Which can be done even to the entire African continent.

Her hard work and huge interest propelled her journey into the GOOT programme which trains young people to become future professors.

"I wish to say to all students who are trying to achieve their goals that it is possible, just work hard, believe in yourself, and be patient with yourself," said Ndlela.

In terms of Ndlela's research focus area on expanding transmission lines with renewable energy introduction to the grid. She explained that she is working with Professor K Moloi as her mentor and supervisor and Prof M Kabeya as her co-supervisor, with an interest in integrating renewable energy into transmission lines, using the metaheuristic techniques that will locate the suitable location and size of the added transmission lines to minimize the losses occurring in the transmission lines and also to minimize the investment and operation cost.

"The motive behind is we already have Independent Power Producers (IPP) which use renewable energy to produce power and even feedback to the grid, we also have homes and industries which use Solar PV as renewable energy, so we want to integrate this renewable energy to transmission lines with the same aim to minimize the losses occurring along the line and improving power access. It is an interesting study since we do not have to wait until coal is completely depleted before we focus on using renewable energy," she said.

For Ndlela, her biggest wish is to see more female students become doctors in Engineering and even professors which is her next mission after finishing her doctorate.

Ndlela expressed that her research is in line with DUT's **ENVISION2030** which promotes and encourage innovation, and is adaptive to changes in the world as the world of engineering is changing so fast, influenced by 4IR, AI, renewable energy.

Speaking of some of the most innovative aspects of her research, she said that South Africa (SA) is facing so many challenges with the current power network such as aging infrastructure, power losses over a long distance, depleting coal, and poor maintenance making it hard to meet the current demand. "These challenges compromise sustainable electricity, so it is urgent that we seek optimum ways to enhance electricity and supply safe electricity with minimal losses, and to also to ensure the reliability of transmission lines as they connect the generation and distribution network," she said.

"Through an analysis of the existing and prospective renewable resources in South Africa, it is evident that the country has the capability to ensure reliable, sustainable and 100% access to power, resulting in a significant need to exploit research to mitigate.

"The challenges we have with our current power system. also with the transmission expansion planning, this introduction of research can adequately improve power access which will be beneficial to South Africa and all other countries receiving electricity from SA. These REs are intermittent causing uncertainty in the system which requires a need to develop optimum techniques that will overcome that," she explained.

Her aim with her research is for industries and academic researchers to enhance electricity and focus on renewable resources due to their benefits and also to minimize the use of this depleting coal.

In terms of Ndlela's practical applications from her research is that since there are existing wind farms and solar PV, especially in the Northern and Western sides of South Africa, they should be integrated into existing SA transmission lines, taking into consideration the grid codes.

"This renewable energy can really help to minimize the losses over a long distance especially cause nobody pays the utility all the losses occurring in the transmission lines," she said.

For Ndlela, her future research goal is to work hard to improve the South African current power system by incorporating a high penetration of renewable energy to enhance power access and to reduce the use of coal which is harmful to people and environment and depleting.

"I am glad that DUT Power department offers causes such as research project and renewable energy because it is our duty that our students are being exposed to what is happening in the real world as they are being prepared for future challenges," she indicated.





PROFESSOR NGXONGO IS JUBILANT TO BE GIVEN RECOGNITION AS A C2 RATED RESEARCHER

Waheeda Peters



Pictured: Professor Thembelihle Sylvia Patience Ngxongo

Professor Thembelihle Sylvia Patience Ngxongo, although a retiree, is all about research and academia. Today she feels honoured to find herself as an Associate Professor at the Durban University of Technology (DUT) and a C2 rated researcher, thanks to the mentoring given to her by the institution.

She was also recently honoured to be awarded the prestigious C2 rating by the National Research Foundation (NRF) with effect from January 2024.

Prof Ngxongo gave praise to the Lord the saviour for having taken her this far in her academic/research journey and accepted this prestigious rating achievement as a reward for the job well done. She also dedicated her honoured C2 NRF rating to her late mom Thabisile Pauline Mzelemu who was an inspiration in her life and had worked tirelessly to ensure that she succeeds in life.

"My career life commenced as a registered nurse and midwife which I pursued by default due to circumstances in life as I had always dreamt of becoming a school teacher. Through fate, I found myself

a nurse and I loved it particularly the midwifery component," she expressed. Her love for midwifery pushed her to specialise in advanced midwifery and neonatal nursing science and later in primary health care nursing. Prof Ngxongo has over 25 years practical experience in clinical nursing practice, health care institution management and quality assurance which were subsequently converted her into a passionate nurse educator specialising in primary health care post basic nursing programme.

"The two perspectives are inseparable because, while DUT strives to ensure that we all at DUT live our values and principles within a culture of shared responsibility and accountability."

She indicated that the beginning of her academic and research life commenced on 01 November 2011 when she had joined DUT as a specialist instructor. At the time, Prof Ngxongo could not be appointed as a lecturer because she did not have a Masters qualification which was a minimum requirement for a lecturer position. "I was still busy with Masters studies at the time. Thus, my academic journey has come from being a specialist instructor," she said.

The gates to her research journey were opened in 2012 when Prof Ngxongo successfully completed her degree in the Master of Health Sciences in Nursing at DUT. Subsequently, she was promoted to a lecturer position. "I then began the research activities including writing for publication and postgraduate student supervision. I managed through the support of Prof Sibiya who was my HoD and supervisor at the time, to publish from my masters work, three articles in DHET approved journals," she added. From this point, she began supervising master's students and as they graduated, Prof Ngxongo was able to publish several papers with them as evidenced in her research output. In 2016, she had completed a Doctor of Nursing qualification under the supervision of Prof Gwele and Prof Sibiya and got promoted to a senior lecturer position during the same year. She then managed to publish in peer reviewed DHET accredited journals, four manuscripts and one book chapter from her Doctoral work. She also presented papers at national and international conferences.

From this point onwards, Prof Ngxongo was able to supervise both Master's and Doctoral students from the Nursing department and from outside the department but within the Faculty of Health Sciences either as primary, a co or a sole supervisor. As her postgraduate students had completed their Master's and Doctoral programmes, she co-authored some papers with them which were published in peer reviewed DHET accredited journals. To date, Prof Ngxongo has successfully graduated five Doctoral students and 24 Master's students and has two Doctoral and one Master's student who have recently passed their examinations and are awaiting graduation.

Despite such a busy academic work load, Prof Ngxongo continues publishing on her own, with her students and with colleagues from work. "Today my research output incudes two book chapters, 26 papers, and one paper published in conference proceedings. I get invited to examine thesises and

dissertations from other universities and to review papers for publications by several journals.," she explained. Adding to her academic folder, Prof Ngxongo has also been involved in individual and collaborative research projects with colleagues from the Nursing Department and the Faculty of Health Sciences

Speaking of her collaborative research engagements, Prof Ngxongo said they have been both at a small scale (within the departmental level) and a larger scale (within the faculty level). Being part of the research team in the faculty research project funded by the Medical Research Council (MRC) afforded her the opportunity to network with people from other disciplines within the faculty and the setting where the project was based.

"It sends a vital message to me that my retirement does not mark the end of the road of her research life but the beginning of a new life ahead"

"This was a flagship project entitled 'A multi-staged multi-disciplinary health care approach in reducing maternal morbidity and mortality rates in a selected district in KwaZulu-Natal'. In this project, I was involved in working with the Faculty of Health Sciences research team that drafted the proposal for funding for this project from the MRC, during 2013 and 2014," she stressed.

Prof Ngxongo continued working on the project after funding was received till completion, coauthoring five papers published in peer reviewed accredited journals all of which were the outputs from the project.

The opportunity to collaborate with a small team within the nursing department, said Prof Ngxongo, was also a tremendous learning curve for her. "It afforded me the opportunity to get to know my colleagues much better, promoted teamwork and collegiality," she said.

For Prof Ngxongo, being a member of the Forum for University Nurse Educators in South Africa (FUNDISA) for five years; had enabled her to take part in nursing education matters such as policy and guideline review, nursing education strategies and the nursing curriculum.

Her research niche area is primary health care. Her passion as a nurse which has always been midwifery, steered her research focus towards maternal and child health component of primary health care. Nonetheless, being a nurse educator has inspired her to expand her niche area to include nursing education. "My focus in nursing education research is evidenced by a book chapter recently published as a sole author in 2022 entitled 'Explorative Insights into Lecturer Participation for Students with Increased Learning Support Needs in Extended Curriculum Programmes: Challenges and Opportunities'. I have several current Master's and Doctoral students whose research projects are on nursing education," she commented.

In terms of her research Prof Ngxongo shares that it aligns with the objectives as outlined in the DUT ENVISION2030 strategy.

The two DUT **ENVISION2030** perspectives with which her research aligns well are stewardship and sustainability. "The two perspectives are inseparable because, while DUT strives to ensure that we all at DUT live our values and principles within a culture of shared responsibility and accountability, and embrace creativity as part of stewardship, the institution strives for sustainability which is hoped to result in the delivery of a distinctively DUT experience," said Prof Ngxongo.

The charismatic Prof Ngxongo said that she has always ensured an enabling environment that supports dynamic curricula that inspire innovation and entrepreneurship as she continues to work with students at both undergraduate and postgraduate levels.

Prof Ngxongo gave more insight into some of the most innovative aspects of her research with her niche areas being matenal and childcare. Her Doctoral research work which was a follow on from her Master's research work is one piece of work that she strongly believes was the best contribution in South Africa as a country considering the state of maternal and child deaths in the country.

"My contribution to research was the development of a tailored practice framework to facilitate implementation of the Basic Antenatal Care (BANC) approach in eThekwini District, KwaZulu-Natal. For me, this was my best contribution to the society because the model could benefit not just the local communities but the country at large if implemented," she replied.

She further explained that this framework was developed following realisation that South Africa had a constant burden of high maternal and perinatal mortality rates despite several strategies to curb this.

The results from her Doctoral research work were also presented at local and international conferences.

"My research work is being recognised by readers and is cited in their research work. This is evidenced by a steadily increasing H-indexes, sum of citations, number of publications reads and research interest scores as reflected in the Web of Science, Scopus, Google Scholar Profile and Research Gate," highlighted Prof Ngxongo.

Currently, Prof Ngxongo's research focus is on postgraduate student supervision, and she still wishes to continue doing so to see as many nurses as possible graduating with Master's and Doctoral degrees.

Prof Ngxongo delved into her NRF C2 rating which tells a story that has not been appreciated by many about her contribution to research. "It sends a vital message to me that my retirement does not mark the end of the road of her research life but the beginning of a new life ahead. Although one might think my NRF rating came at a very late time of my academic life and notwithstanding the benefit of receiving such recognition early in one's life, I believe that for me the timing is good," she said.

Looking ahead, Prof Ngxongo sees herself continuing with research and being more focused, ensuring that her research goals are aligned with DUT's **ENVISION2030** and the broader goals of sustainable development and innovation.

Prof Ngxongo went on to thank DUT for her growth, support and for helping her realise her goals in life. Her gratitude goes to Prof Thandi Gwele as her role model and supervisor, Prof Nokuthula Sibiya as her former manager and supervisor, all staff in the Faculty of Health Sciences and her colleagues in the Nursing department. "The colleagues in the postgraduate Nursing department have been a pillar of my strength throughout my academic journey. I also want to thank the team that mentored me through the process of applying for my NRF rating and all the reviewers for my NRF rating application," she said.

DR BIYELA'S WATER RESEARCH GIVES INSIGHT INTO WASTEWATER MICROBIOLOGY

Waheeda Peters



Pictured: Dr Thobela Biyela

The dynamic Dr Thobela Biyela spoke on her recently receiving her Doctor of Philosophy (PhD) at the Durban University of Technology (DUT) in Biotechnology which focused on Wastewater Microbiology. The 35-year-old, who hails from the Section C of the Umlazi Township, began her journey with DUT began in 2008 when she had enrolled in the Faculty of Applied Sciences' National Diploma in Biotechnology and immediately became enamoured with all things scientific.

"I was awarded a scholarship by the Indian Consulate to study a Bachelor of Science degree in Biotechnology, Chemistry, and Botany at Bangalore University in India during my first semester of study at DUT. After giving it some consideration, I seized the opportunity and headed east. Upon completion, my desire was to pursue my postgraduate studies and climb up the academic ladder. With my passion for science reinforced, I made the decision to return to DUT and pursue a master's degree," she professed.

Dr Biyela conducted her research projects at the Institute for Water and Wastewater Technology under the guidance of Professors Faizal Bux, Thor Stenström, and Sheena Kumari. Her Master's degree in Biotechnology was completed in 2016, followed by her PhD career which began shortly after, and it was successfully completed in 2022.

"Be prepared to unlearn and relearn. Be humble, everything and everyone can teach you a lesson. Best of all be willing to begin, you might just be the best piece of the puzzle as your contribution counts."

"My journey at DUT became a full circle tale, and I'm appreciative that I was able to accomplish what I began, graduating in the DUT Autumn Graduation ceremony in 2023.

When asked the thought-provoking question on whether studying towards science was her first choice of study, she answered with an absolutely yes.

"I have always loved science; it dates back to my primary school years. It was truly a dream come true to be able to enrol and pursue my passion for science. Since water is a scarce resource and essential to the survival of all life forms, it requires scientific management to maintain its quality. Consequently, working in the field of Water Research gives me the opportunity to contribute to a significant area of study that directly affects the environment, animal health, and human health," she shared.

In terms of her innovative research, Dr Biyela expressed that her PhD study focused on the employment of metagenomic and met transcriptomic approaches for monitoring of pathogenic bacteria and antibiotic resistance genes (ARG's) which have been declared by the World Health Organisation (WHO) as emerging contaminants. "The scope of the study documented the fate of bacterial pathogens, ARG's and mobile genetic elements (MGE's) across the treatment train of three differently configured wastewater treatment plants (WWTP's) in and around Durban, that treat domestic and hospital effluents. Observations made in the study showcased the impact of pathogens, ARGs and MGEs released with treated final effluents on environment and human health. "The work conducted under

the research has proven to have significant influence on the development of risk assessments strategies for monitoring water quality," she explained fervently.

Dr Biyela indicated that wastewater treatment is a critical component of sustainable urban development, ensuring that water is sufficiently cleaned and reusable, reducing environmental impact, and protecting water resources. "However, traditional wastewater treatment and monitoring methods often fall short in terms of efficacy and environmental sustainability. The advent of data-driven technologies, such as next generation sequencing (NGS), which includes metagenomics and metatranscriptomics, has marked a significant turning point in the approach to addressing these issues," she commented.

She explained that the NGS leverages microbiome science to optimise the analysis of microbial communities found in wastewater and offers additional insights into the most efficient treatment strategies, customised to particular microbial compositions. "Therefore, decreasing the influence on the environment and increasing the effectiveness of wastewater treatment. Thus, the novelty of my research focused on combining wastewater surveillance (WS) with cutting-edge molecular techniques to enable near-real-time monitoring of transmissions across a community and facilitate the assessment and mitigation of outbreaks by analysing the entire microbial community in a community," she said.

As custodians of knowledge, especially scientific knowledge, Dr Biyela explained that researchers are obligated to uphold ethical standards that guarantee that animals, humans, and the environment incur little to no harm. "This calls for transparency, honesty, accountability, and a high standard of integrity in our work. As a biotechnologist, the respect for the environment and the communities that inhabit it is at the core of my research because I love science and I firmly believe that one cannot succeed in loving something and not respect it," she replied.

For Dr Biyela, the essence of expanding her knowledge is always key to her. She indicated that she plans to study further.

"A close friend once said a PhD is the highest qualification on land, both nationally and globally. However, one must answer this question does studying ever come to an end? Science never sleeps because there is always a flood of innovative knowledge and techniques to acquire and apply. As a result, one can never stop learning new things," she explained.

Dr Biyela shared that her objectives in her career path are to get to a point where her science can be translated into tangible/applicable solutions; and passing on the baton to upcoming younger scientists.

Her advice to a first-year student who wants to embark in the same career as herself, is to dare to believe, dream, probe and search, which are some of her tangents that have been great points of investigation.

"Be prepared to unlearn and relearn. Be humble, everything and everyone can teach you a lesson. Best of all be willing to begin, you might just be the best piece of the puzzle as your contribution counts," she conveyed.

DR SIPOKAZI MABUWA MAKES HER MARK AS A PIONEERING ENGINEER AND ACADEMIC LEADER

Phumeza Msongelwa



Pictured: Dr Sipokazi Mabuwa

Dr Sipokazi Mabuwa, a trailblazer in Mechanical Engineering, embodies a commitment to excellence and innovation. At 34 years old, she has already left an indelible mark on her field through a distinguished academic journey and impactful research endeavours.

Dr Mabuwa's academic journey began at the Cape Peninsula University of Technology (CPUT), where she pursued her National Diploma, Bachelor's, Master's, and eventually her Doctor of Engineering (DEng) in Mechanical Engineering.

Her graduation in April 2022 from CPUT marked a significant milestone in the institution's history. Her doctoral research focused on pioneering a new friction stir processing method aimed at enhancing the mechanical properties of dissimilar aluminium alloy joints, specifically AA6082-T651 and AA8011-H14, funded by an NRF-Thuthuka grant. Notably, she completed her doctoral studies within an unprecedented two years, a first for the Department of Mechanical Engineering at CPUT.

Dr Mabuwa's achievements included the publication of a comprehensive thesis and 17 articles in esteemed Q1 and Q2 journals, excluding additional collaborative works. As the first South African female to graduate with a DEng in Mechanical Engineering at CPUT, her impact extended globally through the establishment of the annual International Conference on Applied Research and Engineering (ICARAE), attracting participants from over 12 countries annually.

She further distinguished herself by presenting at multiple international conferences, receiving accolades

"Embrace hands-on experience, seek mentorship, and maintain a strong academic focus."

such as the Best Paper Presentation Award, and mentoring a fellow female student who graduated with Summa Cum Laude in MEng Mechanical Engineering. Dr Mabuwa's international recognition also encompassed roles as a respected journal reviewer and advisory board member at prestigious conferences, underscoring her influential presence in the field of Mechanical Engineering Research.

Dr Mabuwa's research focuses on advancing Additive Manufacturing and Friction Stir Technologies, encompassing friction stir welding, processing, intra-layer friction stir additive manufacturing, and metal matrix composites. These technologies promise to transform the manufacturing sector by enhancing efficiency, reducing costs, and enabling the creation of intricate, high-performance materials and structures.

Through rigorous Material Characterisation, Dr Mabuwa aims to deepen the understanding and optimise the properties of materials crucial to these processes, ensuring their reliability across diverse industrial applications. What distinguishes her research at DUT is the innovative fusion of these advanced manufacturing methods. By synergising Additive Manufacturing with Friction Stir Technologies, her work explores novel avenues for developing materials with superior mechanical properties and performance.

This interdisciplinary approach not only expands the boundaries of achievable manufacturing capabilities but also resonates with DUT's commitment to pioneering research and development. The anticipated outcomes of her research hold substantial potential to make significant impacts across industries such as Aerospace, Automotive, and Biomedical Engineering, thereby reinforcing DUT's standing as a vanguard of technological innovation.

In January 2024, Dr Mabuwa commenced her role as a Senior Lecturer at the DUT, Steve Biko Campus, Department of Mechanical Engineering. She brings expertise in Design Engineering, Fluid Mechanics, and will soon lecture Thermodynamics - a testament to her comprehensive grasp of the field's core disciplines.

Beyond teaching, Dr Mabuwa plays a pivotal role in research governance, serving on DUT's Departmental Research Committee (DRC), Faculty Research Committee (FRC), and Faculty Research Ethics Committee. Her leadership extends internationally, where she has served as a reviewer for prestigious journals and as an advisory board member for international conferences.

Looking forward, Dr Mabuwa remains committed to her professional development. Her ambition is to attain the rank of full professor, leveraging her technical expertise and managerial skills, possibly enhanced by pursuing an MBA. She envisions leading transformative research initiatives and mentoring the next generation of engineers, while also aiming to establish an NGO to promote STEM education among South African youth.

To aspiring engineers, Dr Mabuwa emphasises the importance of passion, curiosity, and persistence. She advises students to "Embrace hands-on experience, seek mentorship, and maintain a strong academic focus." Her journey from a rural town to academic distinction serves as an inspiration, highlighting the transformative power of education and determination.

Dr Mabuwa's journey exemplifies resilience, innovation, and a steadfast commitment to advancing the frontiers of Mechanical Engineering. As she continues to shape the future of her field, her contributions are poised to leave a lasting legacy in academia, industry, and beyond.



ALUMNUS DR MAZIBUKO SHARES HIS ACADEMIC JOURNEY FROM AUTHOR TO AN ACADEMIC DOCTOR

Waheeda Peters



Pictured: Dr Thabani Mazibuko

Dr Thabani Mazibuko is a space enthusiast and an acclaimed author of Mangwe the Space Boy children's book. Dr Mazibuko was born in Ulundi but is now based in KwaDukuza. He recently graduated with his PhD in Management Sciences from the Durban University of Technology (DUT) funded by the Space Science Centre and housed under the Faculty of Engineering and the Built Environment. His doctoral thesis focused on exploring space technology for sustainable tourism development in KwaZulu-Natal.

"This platform is a strong foundation for collaborations and partnerships linking South Africa and international innovators, inventors, funders, and markets."

Dr Mazibuko is a Chairperson of the South African Space Technology for Sustainable Development Foundation, which facilitates various space programmes that inspire young people to participate in space science technology and thus become directly involved in creating solutions to this rapidly changing world. The SA Space Technology for Sustainable Development Foundation is a 'group on earth observation' finalist and a partner to various institutions including the DUT Space Science and Communication Navigation Surveillance (CNS) Centre and has collaborated with numerous organisations like Aerospace Systems and Research Institute (ASRI), STEC@UKZN, eThekwini Municipality, KCAP, Zodwa Khoza Foundation, Moses Kotane Institute, KZN Sharks board, Vodacom, Office of the Premier and others.

Dr Mazibuko explained that the programme focuses on robotics and coding, rockets, satellites, space applications, and virtual reality. He is an alumnus of the Indian NIMSME Exchange programme when he visited India and several Asian countries where his passion for science and technology was stimulated. He is a US International Visitor Leadership Programme (IVLP) Exchange alumni. In August 2023, he was appointed by the KZN Premier to serve in the KwaZulu-Natal 4IR Commission. Recently, Dr Mazibuko has initiated an international space information-sharing platform called Space Science Technology Roundtable that has attracted global panelists and audiences who participate meaningfully in sharing their experiences on different themes and topics. "This platform is a strong foundation for collaborations and partnerships linking South Africa and international innovators, inventors, funders, and markets," added Dr Mazibuko.

For him, becoming an author was not on his cards. "However, as I gained knowledge about space and visited several schools in KwaZulu-Natal through the Foundation I am chairing (South African Space Technology for Sustainable Development Foundation), I realised that many children in rural areas and townships believed space technology was just a myth," he added. He felt compelled to show them that space technology is real and that they can be involved in space science to address the socio-economic challenges they face. "I began creating cut-outs of astronauts, pictures of spacecraft, and space probes. This eventually led to the creation of a book authored by myself. The book became a source of motivation, especially for those from disadvantaged backgrounds who never thought they could be part of the space industry and innovation," explained Dr Mazibuko.

He further elaborated that the book did not only excite young people in rural areas but also urban youth, and within one month it was approved to be sold at Exclusive Books and Van Schaik bookstores countrywide. This led to invitations to various provinces and cities, including Pretoria, Mbombela, Johannesburg, Cape Town, Washington DC, and Chicago in the US.

The character in Dr Mazibuko's book is called Mangwe, and he had mentioned that his goal was to help children understand their inner strength, regardless of their background. "To achieve this, I created an African character who grew up in rural areas, just like me, so that children could easily relate to the character. I wanted the character to authentically represent them and to inspire them to believe in their own abilities. That's why I chose to base the character on my son, Mangwe. The name 'Mangwe' is derived from the Mazibuko clan, from our family roots in eMangweni," he explained.

Further into his book, Dr Mazibuko showcased that Mangwe the Space Boy children's book responds to the technological awakening mission derived from the Leading United Nations Educational, Scientific and Cultural Organisation (UNESCO) Sustainable Development Goal 4 (SDG 4) of the 2030 Agenda

which aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".

He had indicated that this inspiring book has made a significant impact in numerous libraries and schools by inspiring children to engage in science, technology, engineering, and mathematics (STEM). "It tells the story of a young boy named Mangwe who dreams of becoming an astronaut to explore space, learn about space science and technology, and use its potential to address socio-economic challenges and achieve Sustainable Development Goals. The graphic novel, Mangwe (The Space Boy), features detailed illustrations by a local artist and is currently being redesigned to be adapted into an animated film," he expressed.

Dr Mazibuko relayed that it is his first book, and he had wanted to share his childhood dream of being involved in science and innovation. "I also aimed to provide insight into my background to generate interest, as I recognise the potential of this sector to offer solutions and inventions. Writing this book has boosted my confidence and inspired me to explore the development of applications and prototypes to maximise impact," he professed.

In his whole academic career, the DUT had played a pivotal role in his journey in space technology. "I received financial support from the Space Science Communication Navigation, and Surveillance Centre. This centre continued to be instrumental in shaping my vision, as all my efforts are closely monitored and influenced by it. Throughout my PhD, my supervisors provided valuable advice and guidance, ensuring that my priorities remained aligned and allowing me to fulfil my space-related responsibilities without compromising my academic and professional endeavours," added Dr Mazibuko.

He commented that DUT had also offered him opportunities to participate in high-level panels, such as their Brics think tank academic platforms. "Additionally, they provided support and guidance for writing papers and journals, helping me align my thinking with the global status," said Dr Mazibuko.

In terms of the way forward for Dr Mazibuko, he explained that he is currently collaborating with his stakeholder Kcap to adapt this book into an animated film. "Additionally, I am working with various stakeholders to distribute it throughout Africa and translate it into indigenous languages. Also, it is going very well as we are finalising the layout, translations, and intellectual property issues. The launch is scheduled for the end of July 2024 at Richards Bay (University of Zululand Science Centre)," he said.

For the space-enthused Dr Mazibuko, his space role models in life include inventors and astronauts such as Mark Shuttleworth, Elon Musk, Victor Glover, Yuri Gagarin, and Neil Armstrong, and Dr Sian Proctor, to name a few.

Dr Mazibuko expressed that the world is his oyster and going forward into the future, he aims to study a few satellite prototypes and earth observation-based applications, but has not decided on the year. "It must happen in less than two years from now," indicated Dr Mazibuko. Chairing a large foundation such as the SA Space Technology for Sustainable Development with a focus on STEM Education and expanding into space-based applications and software development has been challenging, especially with minimal external funding. However, it had exposed him to different platforms and connected him with people who think big. "Some have told me that I am in outer space, so the sky is not the limit, but my dreams are. This experience has significantly impacted my personal development and has influenced my future. Now, I find myself thinking about space and watching space-related content every day. However, I need more partners, funders and collaborators to realise the vision that I have about this foundation in responding to our societal challenges," he confessed.

This year, 2024, Thabani became an academic doctor at DUT, which has exceeded his expectations beyond what he could have imagined before he had started as chairman of the space foundation. "It has shown me that I can overcome any challenge. Through writing books, publishing papers, presenting to different audiences, and showcasing the work of my foundation to the world, I have gained a deeper understanding of many things. However, this doesn't mean I know everything. It has also expanded my network of advisors in academia, the private sector, and the public sector because all these sectors are crucial in bringing about change. Space products and services are meant to influence policies, programmes, and projects, so decision-makers and all other sectors are vital in my journey," he explained.

As an alumnus of DUT, he had explained that it was his responsibility to collaborate with the centre to improve understanding and make a positive impact. "I believe that the centre should be well-equipped to make a significant impact on other students and youth in rural areas and townships. We should create platforms and solutions that enable students to gain experience and be employed using the concepts we develop as alumni," commented Dr Mazibuko.



PHD AN ACCOMPLISHMENT FOR DR THEOPHILUS ADEDOKUN

Phumeza Msongelwa



Pictured: Dr Theophilus Adedokun

Dr Theophilus Adedokun, a recent graduate from the Department of Media, Language, and Communication at DUT, shares insights into his academic journey as he graduated with his PhD in Language Practice from the DUT 2024 Autumn Graduation ceremony.

"Integrity is essential in life generally, as well as in academia and professional practice as it signifies a commitment to ethical conduct, honesty, and moral principles."

Born in the city of Ogbomosho, Oyo State, South-west Nigeria, Dr Adedokun's academic voyage at DUT has been enriching and fulfilling. Having completed both his Master's and Doctorate in the Department of Media, Language, and Communication, he acknowledges the comprehensive knowledge and practical skills gained during his tenure. Engaging in state-of-the-art research, attending conferences locally and internationally, and networking with fellow researchers have been pivotal in shaping his academic trajectory.

Dr. Adedokun's doctoral study examined the intersection of social context, technology, and language education in South African higher education. His research provided valuable insights into unique challenges and opportunities by exploring how technology could be leveraged for massification, particularly in scaling up language instruction for an increasingly diverse student population. This approach is relevant for expanding access to higher education, potentially overcoming resource constraints to reach a wider student audience. By focusing on African languages, his study addresses an often-overlooked area in educational technology research, contributing to linguistic diversity preservation in the digital age. His Research Focus Area (RFA) could significantly impact the development of culturally responsive, technologically enhanced pedagogies that support both language learning and digital literacy in the evolving landscape of higher education.

Dr Adedokun expressed his excitement in receiving the prestigious Doctorate Degree, "graduating this Autumn filled me with a sense of accomplishment and excitement for the future. It marks the culmination of years of dedication, hard work, and passion for my area of study/researcher. I am eager to apply the acquired skills and knowledge to make meaningful contributions in my field," he said.

The pursuit of postgraduate studies in languages/linguistics was a natural choice for Dr Adedokun, driven by his enduring fascination with language and its practical applications. His studies at DUT allowed him to explore various facets of language use, social and communication theories, and media discourse, aligning perfectly with his academic interests and career aspirations.

Integrity, a core value in DUT's **ENVISION2030** Living Values Framework, holds significant importance for Dr Adedokun. "Integrity is essential in life generally, as well as in academia and professional practice as it signifies a commitment to ethical conduct, honesty, and moral principles. To uphold integrity means to fosters trust, credibility, and excellence in all aspects of human endeavours."

Looking ahead, Dr Adedokun plans to continue his academic journey, emphasising the importance of continuous learning and professional development. His career aims revolve around establishing himself as a reputable scholar, researcher, and educator in language and communication studies. Through innovative research, mentorship, and curriculum development, he aims to contribute to advancements in his field.

For aspiring scholars, Dr Adedokun offers valuable advice. He encourages them to fully immerse themselves in their studies, seek diverse learning opportunities, and actively engage with peers and senior colleagues. Cultivating strong communication skills, critical thinking abilities, and a passion for lifelong learning are crucial for success in academia and beyond.

Furthermore, Dr Adedokun stresses the importance of fostering a supportive academic community and seeking mentorship from experienced scholars. He highlights the invaluable guidance, support, and networking opportunities that strong relationships with mentors, colleagues, collaborators, and peers can provide throughout one's academic and professional journey.

In navigating the challenges and joys of pursuing a career, Dr Adedokun emphasises the power of resilience, perseverance, and self-care. These qualities, coupled with a relentless pursuit of knowledge, serve as pillars for success in academia and life.

Dr Adedokun's journey exemplifies the transformative power of education and the unwavering commitment to excellence. As he embarks on the next chapter of his career, his dedication to language practice and integrity continues to inspire those around him.

DR OKEWU IS ECSTATIC UPON BEING RECOGNISED BY COMMON GROUND RESEARCH NETWORK AS AN EMERGING SCHOLAR IN 2024

Waheeda Peters



Pictured: Dr Jonathan Okewu

Dr Jonathan Okewu cannot contain his excitement after he was officially recognised by Common Ground Research Network as an Emerging Scholar in 2024. Common Ground Research Networks are meeting places for people, ideas, and dialogue. He is currently a Postdoctoral Research Fellow with the Durban University of Technology (DUT). Prior to this time, he was an Honorary Research Associate with the same institution.

"It has shown here that engaging in research and creative output is rewarding."

"The Emerging Scholar award is a milestone and significant achievement for me. This signifies that my research efforts are being recognised at international level to merit such an award by the Common Ground Research Network," he professed jubilantly.

Dr Okewu is no stranger to the field of academics, especially in the dynamic ceramic art field, having completed his BA, MA and PhD in ceramic art. His style of ceramics is largely conceptual and he adopts an innovative approach that transcends traditional methods of ceramic production, thus opening new horizons through clay. Through his pieces, he revives African cultural values, exploring everything from folkloric masks to the representation of social behaviours and representations.

Recently, he took part in the Nineteenth International Conference on the Arts in Society which took place at the Hanyang University, Seoul, South Korea. He explained that the process that led to this award is usually a call for entry which is annually, prior to the Arts in society research network conference, which also holds annually in different higher institutions of different countries.

"Entries are made by different scholars in the field of arts from all over the world. In shortlisting the recipients, consideration is given to academic qualification, research efforts, research output and international research exposure. Positively, I think my engagement with DUT as a Postdoctoral Research Fellow contributed to this feat," he said.

"DUT stands to gain from this also. Locally, it is going to be a motivation to colleagues in the Faculty of Arts and Design towards upping their game in terms of research output, networking and recognition," he explained.

Dr Okewu indicated that he earnestly desires that DUT will be given the hosting right of Common Ground research network conference. He commented that in this regard, conversations are ongoing for the possibility of DUT hosting the international community of Arts in society research network conference in the nearest future, since the annual conference hosting right is rotational. Dr Okewu conveyed that the Common Ground Research Network platform is one that provides substantial international exposure for the institution in which the conference is held.

In the area of research and publications, Dr Jonathan Okewu is actively engaged in making contributions in his area of specialisation. He is the author of the book: "Clay iron fillings", available on amazon.com. He has won awards, prizes, residences and grants as a result of his active participation in researches and art exhibitions. His unique style of ceramics fetched him an originality prize at the 2018 national Life in my City Art Festival (LIMCAF). Dr Jonathan Okewu is a recipient of DUT recognition for creative output of the year (2022) award. He is a member of Common Grounds Research Network (CGScholars), Art POWA network, Rhodes University South Africa, Ceramics Researchers Association of Nigeria (CerAN), and the Arts Council of the African Studies Association (ACASA).

In regard to DUT's ENVISION2030 strategy, Dr Okewu's win as an Emerging Scholar by the international research network points to the fact that arts especially fine arts have endless possibilities in the area of research and creative output and colleagues should not shy away from. "It has shown here that engaging in research and creative output is rewarding. Additionally, upon resumption as a Postdoctoral Research Fellow in DUT, I got engaged with the Department of Fine Arts. Currently, conversations and efforts are on going to boast the ceramics practice in the department which has the potential of boosting the creative output of DUT," he shared. In this regard, Dr Okewu is willing to robustly contribute to the training of students at both undergraduate and postgraduate levels that will transcend into contributing to ENVISION2030.

Dr Okweu has expressed that professionally, he would like to see to and accomplish a more robust ceramics unit of the Department of Fine Arts in Faculty of Arts and Design, so that students at both undergraduate and postgraduate levels can be more professionally trained in this respect and by implication contribute to the rising profile of DUT's creative output.

