

# FACULTY NEWSLETTER

ENGINEERING & THE BUILT ENVIRONMENT

## MESSAGE FROM THE ACTING DEAN



We have reached the end of another challenging academic year, and I extend my appreciation to all staff who have navigated the many challenges, including numerous protests, admissions, registrations, and FEC challenges throughout the year. Despite the challenges faced, we are heading in a positive direction for 2024.

I am pleased to announce several leadership changes within the faculty for 2024, as the terms for both the Deputy Dean of Undergraduate Studies and the Deputy Dean of Postgraduate Studies come to an end on 31 December.

Associate Professor Malibongwe Manono has been appointed Deputy Dean for Undergraduate Studies. While Professor Jochen Petersen has been appointed as Deputy Dean for Postgraduate Studies. Both positions had the full support of the Faculty Board and DAC and will take up their respective positions from 1 January 2024 to 31 December 2026.

I am also delighted to announce that Professor Niyi Isafiade will be the new HOD of Chemical Engineering from 1 January 2024 to 31 December 2028, and Professor Azeem Khan has been appointed HOD of Electrical Engineering.

Thank you to everyone for your contribution during this year. I wish you all a restful and peaceful break over the festive season.



## DEANERY UPDATE



**Associate Professor Kathy Michell's** term as Deputy Dean for Undergraduate Studies ends on 31 December 2023.



**Professor Abimbola Windapo's** term as Deputy Dean for Postgraduate Studies ends on 31 December 2023.



**Associate Professor Malibongwe Manono** is the newly appointed Deputy Dean for Undergraduate Studies.



**Professor Jochen Petersen** is the newly appointed Deputy Dean for Postgraduate Studies.

## HEAD OF DEPARTMENT UPDATE



**Professor Aubrey Mainza's** term as HOD of Chemical Engineering ends on 31 December 2023.



**Associate Professor Fred Nicolls'** term as HOD of Electrical Engineering ends on 31 December 2023.



**Professor Niyi Isafiade** is the newly appointed HOD in Department of Chemical Engineering.



**Professor Azeem Khan** is the newly appointed HOD in Department of Electrical Engineering.



## EBE TRANSFORMATION COMMITTEE CHAIR



- **Associate Professor Malibongwe Manono's** term as Chair of Transformation Committee ends in December 2023.
- **Dr Daniel Ramotsoela** is the newly appointed TC Chair from 2024 – 2026.

## STAFF WELCOME & FAREWELL

- **Lindeka Nyembani** joined the Dean's Office as Assistant Finance Officer.
- **Shihaam Peplouw** joined the Department of Civil Engineering as Assistant Finance Officer.
- **Nita Hendrickse**, the Dean's Personal Assistant, will be leaving the Dean's Office in December.
- **Tracey van Heerden**, a lecturer from the Department of Chemical Engineering, will be leaving in December.
- **Tichaona Samkange**, Lab Manager from the Department of Chemical Engineering, will be leaving in December.
- **Nqobile Dingilizwe**, Research Assistant from the Department of Chemical Engineering has left in November.



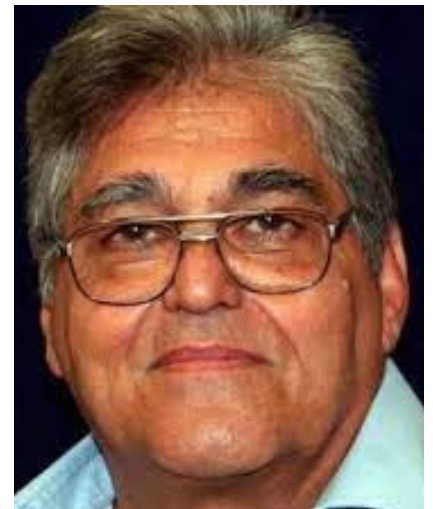
## RETIREES

- **Professor Jack Fletcher**, Director, Catalysis Institute
- **Professor Rob Knutsen**, Director, Electron Microscope Unit
- **Professor Neil Armitage**, Department of Chemical Engineering
- **Mrs Rosalind Maree**, Undergraduate Administrative Officer, Department of Mechanical Engineering
- **Mr Nooredien Hassen**, Lab Manager, Department of Civil Engineering
- **Ms Nanette Pickover**, Administrative Assistant, School of Architecture, Planning and Geomatics
- **Mr Francis Carter**, Senior Lecturer, School of Architecture, Planning and Geomatics

## OBITUARIES

### **Emeritus Professor Jasson Gryzagoridis**

Emeritus Professor Jasson Gryzagoridis passed away on Thursday, 7 December at the age of 84. Jasson had a significant tenure at UCT's Department of Mechanical Engineering and served as the Head of Department from 1994 to 1999 and again from 2003 to 2004, which marked the year of his retirement after a remarkable 39-year career. After receiving a bachelor's degree in mechanical engineering from Lamar University in Texas, he completed his master's degree at Texas A&M University in 1965.



He was then appointed as an academic at UCT's Department of Mechanical Engineering where he completed his PhD – being one of the early researchers using a polariscope for non-destructive evaluation (NDE). Jasson kept his research focus in the area of NDE and in the development of novel approaches to digital Shearography, particularly as it related to the testing of aircraft materials.

He was both a supervisor and a mentor to many students and staff during his long career at UCT. His selfless dedication to academic excellence in the faculty will not be forgotten. Our thoughts and prayers are with the Gryzagoridis family and friends.

## AWARDS AND HONOURS

### Greenovation Triumphs: The Standout Achievements at the Annual Greenovate Awards

CEM's Property Studies students excell at the annual Growthpoint Properties and the Green Building Council of South Africa's Greenovate awards. The awards aim to encourage, enable, and reward innovative solutions for a more sustainable built environment.



#### First Prize:

Aiden van Wyk and Isobella Van der Merwe (BSc Honours Property Studies)

Topic: An Investigation into the Benefits of EDGE Residential Estates in terms of Real-World Savings



#### Second Prize:

Hannah Volker and Sindisiwe Kalumba (BSc Honours Property Studies)

Topic: An examination of the uptake of Net Zero buildings in the South African commercial property market

To have your news featured in our EBE Newsletter, please send it through to [Justin.Marthinus@uct.ac.za](mailto:Justin.Marthinus@uct.ac.za)

## AWARDS AND HONOURS

### A/Prof Nic Coetzer launches his book 'An Architecture of Care in South Africa: from Arts and Crafts to Other Progeny'



Associate Professor Nicholas Coetzer from APG launched his book *'An Architecture of Care in South Africa: from Arts and Crafts to Other Progeny'*

Architects care. It is foundational and germane to the discipline and practice of architecture. This book charts the way the Arts and Crafts Movement established the moral ethos of 'an architecture of care' that not only remains embedded in current discourse and practice but also is being given a more vocal presence in our climate crisis and social justice world.

### Master in City and Regional Planning programme receives successful accreditation from SACPLAN



Congratulations to the Master in City and Regional Planning (MCRP) programme in the School of Architecture, Planning & Geomatics on a successful accreditation visit by the South African Council for Planners. The planning degree programme received full accreditation.



## AWARDS AND HONOURS

### New Academic Practitioners' Programme (NAPP)

NAPP is a holistic programme of professional development for new academics at UCT, with less than five years' experience in higher education. As an induction programme, its key focus is to strengthen resources and practices necessary for new academics to develop as educators, researchers and members of the UCT community.

This year five EBE academics successfully completed the programme.



**Dr Kyle Abrahams**

Department of Chemical Engineering



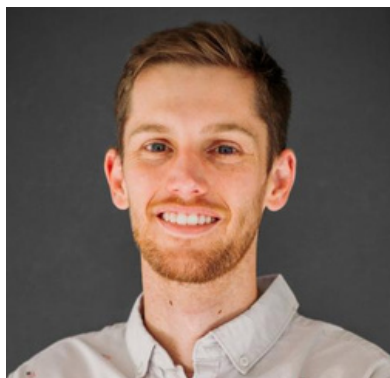
**Dr Caitlin Courtney**

Department of Chemical Engineering



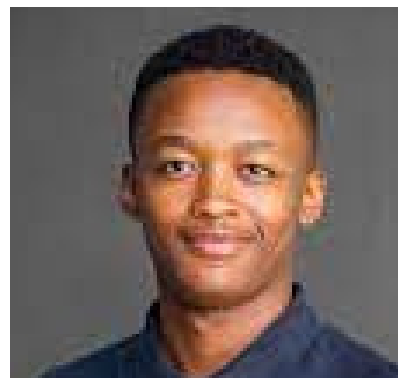
**Mr Boitumelo Dikoko**

Department of Electrical Engineering



**Mr James Hepworth**

Department of Mechanical Engineering



**Mr Obakeng Jona**

Department of Chemical Engineering

## FACULTY NEWS



### Blue skies: UCT SARChI Chair leading in the global aviation industry

Professor Arnaud Malan and his team use computational fluid dynamics (CFD) to support Airbus in their aircraft design. But CFD has wide applications and potential to grow the manufacturing industry in South Africa and decarbonise the aviation industry. If you find yourself traveling on an aircraft built by Airbus, chances are good that the airplane was designed using software from the University of Cape Town (UCT).

[Read more](#)



### UCT's groundbreaking mechanical engineering isiXhosa glossary

The University of Cape Town (UCT) has introduced the Mechanical Engineering isiXhosa Glossary, which was launched by the Centre for Higher Education Development's (CHED) Multilingualism Education Project (MEP) on 2 November. This glossary of terms is "groundbreaking" and is in keeping with enhancing student success not only at UCT, but at universities across the country, said the director of the MEP, Professor Lolie Makhubu-Badenhorst.

[Read more](#)



### From cleaning cold rooms to master's degree in arch dam construction

Growing up in Lesotho, two things loomed large in determining young Malefetsane Letsika's future. One was the strength and dedication of a mother committed to her children's education, no matter the personal cost. The other was the Mountain Kingdom's massive concrete Katse Dam, Africa's second largest double-curvature arch dam.

[Read more](#)



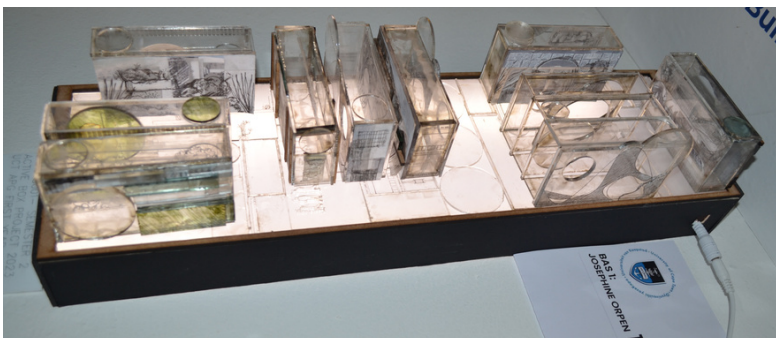
## FACULTY NEWS

### CifA Joint Schools Architecture Exhibition



The 2023 Joint Schools Architecture Exhibition took place in November. This exhibition was a collaboration between the first-year and second-year design studios across three architectural schools, the Cape Peninsula University of Technology (CPUT), the School of Exploratory Architecture (SEA), and the University of Cape Town (UCT).

In 2023, the BAS I studio at UCT engaged with Long Street in a manner that informed how to read Long Street beyond its first impressions as a place. Through the lens of active process words, the BAS I studio used drawing (hand, 2D, 3D, CAD) to develop a dialogue between thinking, process, ideation, representations, and sometimes among multiple authors over time.





## FACULTY NEWS

### Old Mutual Property Group partners with CEM

The Department of Construction Economics & Management hosted Old Mutual South Africa Properties: Mr. Ahmed Kazi, Mr. Bjorn Samuels, and Mrs. Faizah Behardien, to thank them for their generous donation of the following prize and bursary:

**Old Mutual Property Prize:** R10 000 for the best student project in the CON4055S (Advanced Property Development) course on the BSc Honours Property Degree.

#### Bursary description:

Old Mutual Property Bursary for Honours Study: R90 000 for the best third year student registered in the BSc Property Studies Degree. The student must have achieved the highest weighted grade point average on a full curriculum load and fall within the previously disadvantaged designated groups.



## FACULTY NEWS

### Inaugural Presidential Science, Technology and Innovation Plenary

HySA Catalysis and the Catalysis Institute within the Department of Chemical Engineering attended the Inaugural Presidential Science, Technology, and Innovation Plenary in December.

The team was given the opportunity to showcase their progress on the production of green fuels/diesel from CO<sub>2</sub> and green hydrogen under the national CoalCO<sub>2</sub>-to-X flagship Programme. During this event, they were able to interact with President Cyril Ramaphosa and the Minister of Higher Education, Science, and Innovation, Dr. Blade Nzimande.





## FACULTY EVENTS

### EBE Academic Incubator

The final EBE Academic Incubator event took place in November.

Talks at the event were presented by Prof Alison Lewis, Prof Marianne Vanderschuren, Dr Saul Nurick, and NAPP participants. The theme for the session focused on the balance of work, studies, and home life





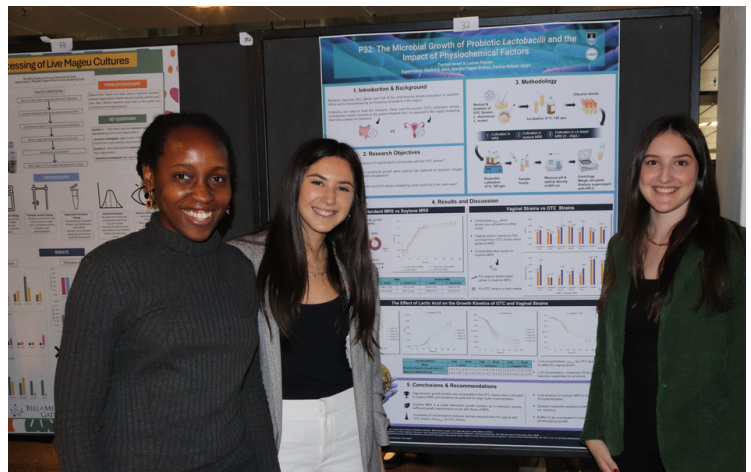
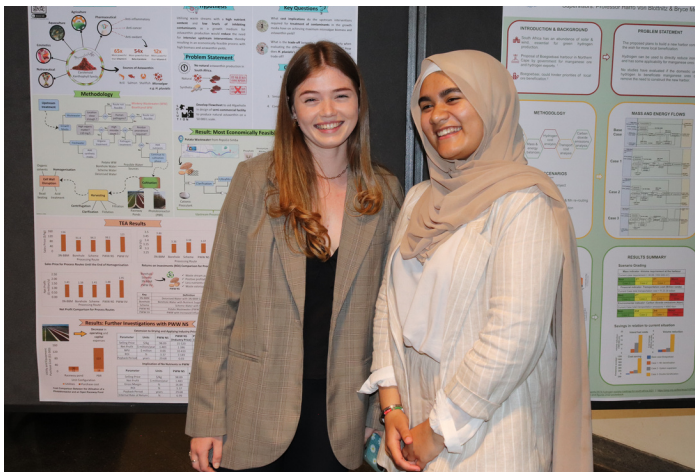
## STUDENT NEWS

### Google PhD Fellowship Award



Vincent Punabantu, a Mechanical Engineering student, has recently been awarded a Google PhD fellowship to pursue his PhD studies at UCT and Google. His research project will focus on using Machine learning to enhance the extraction of patient measurements from ultrasound images that are used to calibrate a computational model that is used to simulate a type of cardiovascular disease that affects children and infants. He will be supervised by Associate Professor Malebogo Ngoepe, and co-supervised by Professor Amit Kumar Mishra in Electrical Engineering.

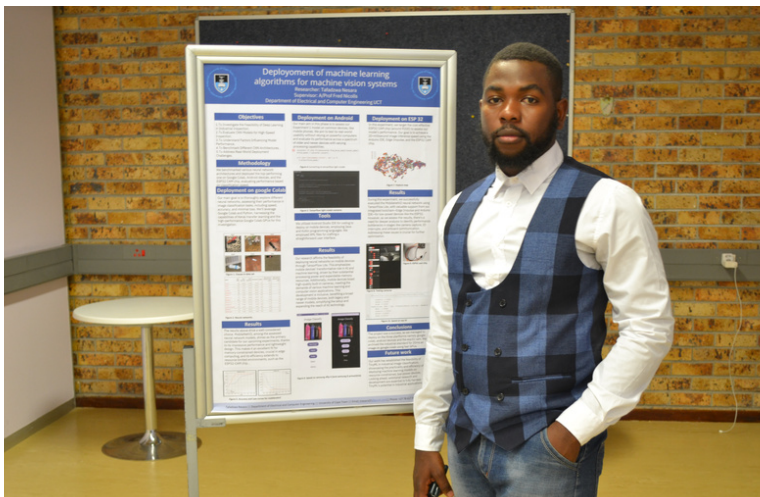
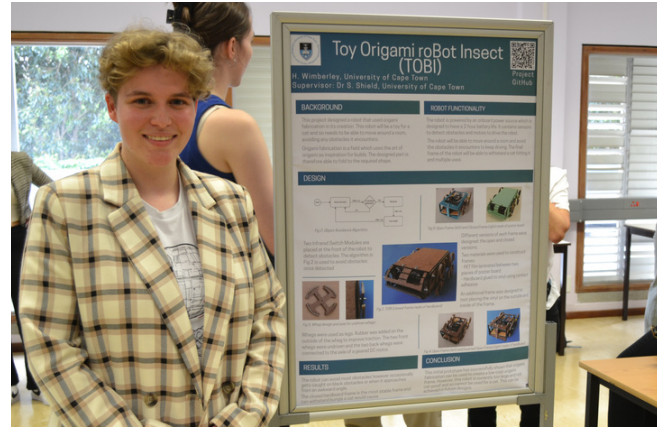
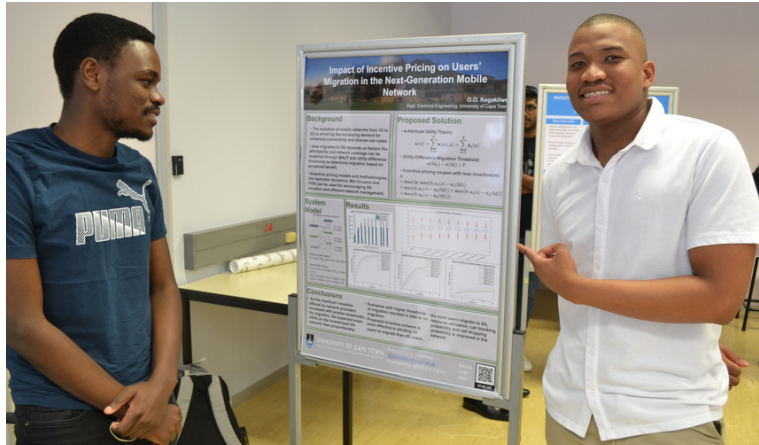
### Chemical Engineering Poster Day





## STUDENT NEWS

### Electrical Engineering Final Year open day





## DECEMBER GRADUATION

### EBE Staff Complete Their PhD Degrees



**Kenny Mudenda**, Senior lecturer in the Department of Civil Engineering was awarded his PhD.

**Thesis title:**

*Lateral-torsional buckling behaviour of monosymmetric steel sections formed with flange upstands*

He was supervised by Professor Alphose Zingoni (Civil Engineering).



**Arnold Pretorius**, Lecturer in the Department of Mechanical Engineering was awarded his PhD.

**Thesis title:**

*Contributions to quantitative feedback theory design and preliminary application to a variable pitch quadcopter*

He was supervised by Professor Ed Boje (Electrical Engineering).



## DECEMBER GRADUATION

The December graduation ceremony featured the successful completion of 14 PhDs, 142 master's degrees, 14 honours, 2 postgraduate diplomas, and 93 undergraduate degrees.





## ALUMNI NEWS

### Bridging the Decades: A 40-Year Reunion with the Civil Engineering Class of '83/'84

The Department of Civil Engineering's Class of 1983 and 1984 recently celebrated their 40-year reunion at UCT.

During the reunion, they attended a talk by Professor Alison Lewis, Professor Mark Zuidgeest, and Nomcebo Msweli from the Development and Alumni Department. The programme was facilitated by Emeritus Professor Mark Alexander.

As part of the reunion activities, the cohort took a tour of the department, visiting the Main Lab, SANRAL Digital Transport Lab, and the Water Quality Lab.

