

Postdoctoral Webinar – A First for CUT

Webinar: Introduction to Postdoctoral Research at Central University of Technology

The postdoctoral fellows of CUT made history by presenting their research at the first postdoctoral webinar on the 18th of November 2020, hosted by the Research Development and Postgraduate Studies Section.

The webinar aimed at allowing the postdoctoral fellows an engagement opportunity with not only the CUT community, but the external networks. The postdocs presented on the important outcomes of their research and elaborated on how the Covid-19 influenced their research and the direction their going in due to the pandemic.

Prof. Laetus OK Lategan, Senior Director: Research Development and Postgraduate Studies, opened the webinar by giving some background information regarding the postdoctoral fellowship as CUT.

For the past 19 years (2001 - 2020) CUT had 49 postdoctoral fellows, who are coming from different parts of the world. They have since then taken up senior research and management positions in universities and industry. It is evident to say that the programme is important to prepare the postdocs and add value to the university's research agenda. Our postdocs are representing several countries which graduated from various national and international universities.

Prof. Alfred B Ngowi, DVC: Research, Innovation and Engagement, who is a big supporter and driver of the postdoctoral programme, officially opened the webinar by highlighting how the postdoctoral fellowship programme fits into the strategic initiatives that CUT is taking to drive research and mitigate the small numbers in order to have impact.

The three strategic initiatives include:

1. Concentrating our research on applied research and linking it with innovation.
2. Establishment of the multi-disciplinary research centres.
3. Research outputs focusing on accredited and high impact outlets.

Ms Cecilé Olivier gave a brief overview of the current state of the postdoctoral fellows programme, focusing on funding, research outputs, supervision and background information. It's noted that the funding is not just awarded by the university, but also include external funding agencies such as the NRF and USAID.

The postdoctoral fellowship not only benefits the university in terms of growth and research, but also the postdocs to prepare them for an academic career. CUT provides the opportunity to the postdoctoral fellows to grow and become researchers in their own right, by doing cutting edge research, supervising masters' and doctoral students and having a mentor to guide, direct and supervise them.

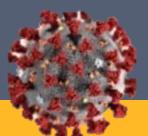
The two highlights of the event were (1) the presentations by the postdoctoral fellows and (2) the booklet that is showcasing our postdoctoral fellows and their research. The booklet also focus on the profiles of the postdoctoral fellows. Below are the topics presented during the webinar.

It is obvious that our postdocs are contributing in various ways in fulfilling the CUT mandate in becoming a leading African University of Technology shaping the future through innovation. Sustaining existing collaborations and growing future networks with especially continental and international partners will assist in making an input to the research agenda of the university.

Please visit our website on <https://www.cut.ac.za/cut-postdoctoral-fellowship-programme> for detailed information.

Research Topics

- Gifted Mathematics Education
- Girl Learner Participation and Performance in Life Sciences
- The Development of a Drought Visualisation Tool for Small Scale Farmers
- 4IR Technologies
- Therapeutic Potentials of Functional Foods
- Manufacturing and Commercialisation of Additive Manufactured Products
- Practice for Geotechnical Engineering
- Food Safety, Food Hygiene, Microbiology and Antimicrobial Resistance
- Tourism Marketing and Consumer Behaviour in Tourism
- Metal Additive Manufacturing
- Ethnobotany, Ethnoveterinary and Indigenous Knowledge Systems
- Design and Installation of a Residential Hybrid Solar Assisted Air Source Heat Pump Water Heater



SUCCESSSES OF OUR POSTDOCTORAL FELLOWS



Congratulations to our posdocs on their great achievements

Dr Gaofetoge G Lenetha, a postdoctoral fellow in the Faculty of Health and Environmental Sciences received a research award from the Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL). She also successfully published two research articles:

- M. Moloi, G.G. Lenetha & N.J. Malebo. 2021. Microbial levels on street foods and preparation surfaces at Mangaung Metropolitan Municipality in South Africa. *Journal of Health SA Gesondheid*. ISSN: 1025-9848, E-ISSN: 2071-9736.
- S.S. Ntondini, G.G. Lenetha & T.C. Dzogbewu. 2021. Inhibitory effect of essentials oil against oral pathogens. *International Journal of Dentistry and Oral Science*. ijdos.editor@scidoc.org.

Dr Omolola Adeola, a postdoctoral fellow from the Faculty of Engineering, Built Environment and IT (FEBIT) presented a 4-day training (7 – 10 December 2020) on the Introduction to Geographic Information System (GIS) as part of her capacity development. The training was widely attended by staff and students. The courses taught included What is GIS, GIS data format, Spatial analysis, Application of GIS in Climate change, Agriculture etc. Dr Adeola's latest contribution to research:

- O. M. Adisa, M. Masinde & J. O. Botai. 2021. Assessment of the Dissimilarities of EDI and SPI Measures for Drought Determination in South Africa. *Water*, 13 (1), 82. <https://doi.org/10.3390/w13010082>

Dr Thywill C Dzogbewu, also representing the Faculty of Engineering, Built Environment and IT (FEBIT) as a postdoctoral fellow, is currently supervising 10 postgraduate students and have published six research articles in the past six months, namely:

- N. Nhlapo, T.C. Dzogbewu & O. De Smidt. 2020. Review on improving the biocompatibility of titanium implants using nanoparticles. *Manufacturing Review*, 7. eISSN: 2265-4224. <https://doi.org/10.1051/mfreview/2020030>
- Dzogbewu. 2020. Manufacturing of TiAl-based alloys. *Manufacturing Review*, 7. eISSN:2265-4224. <https://doi.org/10.1051/mfreview/2020032>
- S.K. Fianko, S. Afrifa (Jnr) & T.C. Dzogbewu. 2020. Does the interpersonal dimension of Goleman's emotional intelligence model predict effective leadership? *African Journal of Business and Economic Research*, 15(4): 221-245. <https://doi.org/10.31920/1750-4562/2020/v15n4a10>
- T.C Dzogbewu. 2020. Laser Powder Bed Fusion: Evaluation of Ti15Mo single tracks. *Journal of Mechanical Engineering Research & Developments*, 43(6): 487-496. ISSN:1024-1752.
- T.C. Dzogbewu. 2020. Laser powder bed fusion of Ti15Mo. *Results in Engineering*, 100155. <https://doi.org/10.1016/j.rineng.2020.100155>.
- T.C. Dzogbewu. 2020. Laser powder bed fusion of Ti6Al4V lattice structures and their applications. *Journal of Metals, Materials and Minerals*, 30(4): 68-78. doi:10.14456/jmmm.2020.53.

NEXT MEETING

Quarterly meeting dates for 2021.

Please take note of the quarterly meeting dates for 2021:

1. 31 March 2021, 14:00 – 16:00
2. 27 May 2021, 14:00 – 16:00
3. 25 August 2021, 14:00 – 16:00
4. 21 October 2021, 14:00 – 16:00

An outlook invitation was sent to the members to reserve their calendar.

ANNUAL WEBINAR

Planned Annual Webinar for 2021.

Please take note of the date for the annual postdoctoral webinar for 2021:

25 November 2021, 14:00 – 16:00

An outlook invitation was be sent to the members to reserve their calendar.

CONTACT US

For any additional information regarding the postdoctoral fellowship, as well as the current fellows employed at CUT please contact:

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