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Official weekly newsletter of NUST 24 September 2021

Farm !Kharoxas harnesses energy from the Namibian sun

NUST, in collaboration with the Technical University of Munich (TUM) in Germany, recently set up a solar power plant on Farm !Kharoxas, which is located approximately seven kilometres south of Groot Aub in the Khomas Region.

The solar power plant forms part of the living laboratory concept adopted by TUM's Sustainable Energy and Entrepreneurship Development (SEED) Center, in collaboration with eight partner institutions, including NUST. The purpose of the project, funded by the German Academic Exchange (DAAD), is to provide practical training to postgraduate students in the solar energy field.

A living lab is a physical area in which various stakeholders collaborate new technologies, services, products and systems in real-life contexts.

The Lab's 20 kilowatts peak solar power was designed and specified by the Department of Electrical and Computer Engineering (DECE) in the Faculty of Engineering at NUST and constructed by the Namibian Engineering Corporation (NEC).

"In line with the available funds, we chose a location with a few homes, but which has the potential for agricultural and other entrepreneurial activities," Prof James Katende from the DECE said. The Lab will serve as a lighthouse project for the next ten to 25 years for teaching and research related to energy transition, rural electrification, and the entrepreneurial productive use of electricity.

"The Living Lab will be a bedrock for teaching and research on concepts of sustainable energy and entrepreneurship. We foresee the development of new curricula and research theses incorporating the activities of the Living Lab are expected to happen soon," Prof Katende explained.

Gaos Juliane Gawa-!Nas, Chief of /Khomanin Traditional Community, said that her community is mostly impoverished, and will now have to be creative in utilising the solar plant through employment opportunities by means of aquaculture and hydroponics projects.

The aim of the project i is to exploit Namibia's abundant renewable energy resources such as solar, wind and biomass. In addition, the project envisions a complete socio-economic transformation of the community by 2024.



From left to right: Prof James Katende, NUST Professor of Renewable Energy Systems; Gaos Juliane Gawa-!Nas, Chief of /Khomanin Traditional Community; Hon.Piet Adams, Regional Councilor Windhoek Rural Constituency; Josef Eiseb, Chief Justice of the Hagos Traditional Court.



Liina Mutilifa

NUST student gets recognition at international water conference

A Master of Environmental Engineering student from NUST, Liina Mutilifa, brought Namibia to the world when she claimed the third prize at the 2021 Virtual Universities Council on Water Resources (UCOWR)/The National Institute for Water Resources (NIWR) Annual Water Resources Conference.

The competition was hosted by UCOWR, which is an international council that hosts water resources conferences to bring together professionals in the industry.

The competition entailed presenting the findings of individual research which was pre-recorded on Zoom.

UCOWR then arranged a panel of judges to engage with all the presenters during a live session.

"During the interaction with the panel of judges, one had to defend their thesis and answer questions posed by the panelists. I had to defend my presentation to a panel of judges consisting of a Professor from the University of Columbia and a Research Specialist from Oklahoma State University" Mutilifa said.

Her presentation is titled "An investigation of contaminants sources

and groundwater quality evaluation at Groot Aub, Namibia" and says her interest in this field stems from the ongoing droughts experienced in Namibia.

"I want to be part of the solutions that combat the water crisis and I want Namibia to be better prepared for natural disasters such as droughts," Mutilifa explained.

She is of the opinion that through research, new practices are developed to take the world to a new level and make it a better place. "It was a pleasure to learn about what other students are researching at their different universities across the world," she added.

Mutilifa's supervisor and Senior Lecturer in NUST's Department of Civil Engineering, Dr Kedir Bushira said "I would just like to congratulate Liina on a presentation well done."

Evidence based policing is the future

The future of policing is reliant on the strengthening of professionalism of the Police Service, if one is to improve effectiveness and built community trust. This was the focus of discussion at a recent joint webinar between NUST's Department of Social Sciences and STADIO, previously known as the Southern Business School.

Evidence Based Policing is a method of policing that recognises that experience and intuition are crucial, while officers should be equipped with reliable and recent scientific knowledge relevant to their work. "In other words, it is the outcome of scientific testing of clinical experience" Dr Stefan Schulz, Deputy Director at the Department of Social Sciences, said. Dr Andrew Faull, a Senior Researcher from the Institute for Security Studies in South Africa also remarked that "evidence-based policing supports and complements discretion and experience – but never replaces it".

This is because police operations are often guided by a degree of somewhat refined everyday knowledge held by an officer. Thus, professional experience and intuition are crucial. However, without careful study it is not clear if it is coherent, logical, or based on a scientific understanding of empirical data. "The professionalisation of the police is obviously a high-ranking strategic objective," Dr Schulz explained.

Deliberations on hosting quarterly webinars are ongoing, while the next webinar can be expected at the end of October 2021.

NUST, under the Faculty of Human Sciences, offers various programmes in criminal justice. For more information, scan the QR Code below.



