DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

MONTHLY NEWS BULLETIN

*Better Life through Technology;* ISSUE NO 38, JANUARY 2022




*(Principal Secretary, State Department of University Education and Research Amb. Simon Nabukwesi and Vice Chancellor, Dedan Kimathi University of Technology, Prof. Ndirangu Kioni, visit the Korea Advanced Institute of Science and Technology (KAIST). )*

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## Swearing in the new Dedan Kimathi University of Technology Alumni Association (DeKUTAA) Executive Council.

University Alumni Associations across the world play an integral role in not only supporting Universities but also supporting their members through their professional and entrepreneurial journeys. Dedan Kimathi University of Technology Alumni Association (DeKUTAA) brings together graduates of the University to participate in governance and development of their alma mater as they socialize and network. The University has been supporting the establishment of the Alumni Association to help ensure a well-connected alumni community which will go a long way to boost the growth of the University. On 31st of January 2022, we held an AGM and swearing in ceremony for the new DeKUTAA Executive Council.

The Vice Chancellor, in attendance, encouraged the new executive board to explore opportunities for its members by hosting career fairs social events like dinners to encourage professional development and networking among members. He also encouraged them to seek complementary partnerships in order to grow their members.

We congratulate the new executive council and wish them all the best as they start this journey.



## 75TH IAESTE Annual General Conference




Every year 500+ participants from 80+ countries worldwide gather in one place to exchange internships, share knowledge, provide and build international relations & friendships. One of the main aims of the International Association for the Exchange of Students for Technical Experience (IAESTE) Annual Conference is to ensure that the core IAESTE activity of providing students with practical experiences takes place. It's the time to exchange offers and to meet exchange partners. This year, we were privileged to participate in the 75th IAESTE Annual General Conference that took place from 21st to 27th January 2022 virtually.

## Prof. Thomas Carolus, from the University of Siegen, pays a courtesy visit to the Vice Chancellor Prof. Ndirangu Kioni




Dedan Kimathi University of Technology (DeKUT) and the University of Siegen signed a Memorandum of Understanding (MoU) to promote shared educational interests, research, and scholarships. This Memorandum of Understanding enables the exchange of undergraduate, graduate, and research students and participation in seminars and academic meetings, research collaboration, the exchange of publications, academic materials, and other information, along with joint quality assurance and benchmarking.

The collaboration also enables students to exchange programs through the Erasmus program. The program provides an enlarged variety and flexibility to students planning to pursue educational objectives and also enhances the international compatibility of studies and thus global mobility. Staff from the University have also benefited immensely from this program as they have had the opportunity to visit several enterprises that deal with, among other things, the renewal of materials for boat building, waste-to-energy plants, jet engines, maintenance, and coffee processing.

Through this collaboration, the University established the Green Institute under which we have the Centre for Biomass Energy Studies. The Center for Biomass Energy Studies (CBES) is an autonomous, self-sustaining body under Dedan Kimathi University of Technology, GREEN Institute, established in October 2019. As far as research is concerned, CBES specializes in research and development (R & R&D) in biomass biochemical conversion technologies, biomass thermal-chemical conversion technologies, biomass-based chemical production technologies, waste treatment technologies/circular production/economy, and bioenergy with carbon capture and storage (BECCS) technologies. Key research focus areas include biodiesel, fuel ethanol, biomass pyrolysis and gasification, biomass gasification and power generation, synthesized fuels, municipal solid waste (MSW) treatment, and utilization.

On January 24th, 2022, Prof. Thomas Carolus paid a courtesy visit to the Vice Chancellor, Prof. Ndirangu Kioni, to discuss future collaborations and partnerships. We look forward to these collaborations as we continue to better lives through technology.



## Dedan Kimathi Science and Technology Park (DeST-Park) is now on the world map after being admitted as a member of the International Association of Science Parks and Areas of Innovation (IASP)-a significant milestone for the park



Dedan Kimathi University of Technology (DeKUT) aims to enter into the league of Entrepreneurial Universities, which leverages on research and innovation to create intellectual property (IP) rights, spin-off companies, and entrepreneurship to promote sustainable economic growth of the University and the Nation. In line with this, we are spearheading the establishment of a Science and Technology Park (STP), which will be an engine for innovation, incubation, development, and commercialization of technology. This will stimulate the growth of entrepreneurship, which will drive job creation in the country and develop self-reliant youths.

DeST-Park covers three thematic areas, which are: Agri-tech (Food bio-resources and natural products value-addition), Information and Communication Technology (ICT), and Design, Materials and Manufacturing (DMM). So far, DeST-Park has attracted anchor clients; Snowcap Development Limited, Asytec, and Semiconductor Technologies Limited. DeST-Park is now on the world map after being admitted as a member of the International Association of Science Parks and Areas of Innovation (IASP)-a significant milestone for the park. DeST-Park now becomes the second member from Kenya after Konza Technopolis Development Authority.

IASP is a global network of science parks and innovation zones that brings together professionals who manage Science, Technology, and Research Parks (STPs) and other areas of innovation to provide services that help members grow and succeed. They also connect members to a one-of-a-kind software called Strategigram, allowing users to examine the park's strategic profile.



*Principal Secretary, State Department for University Education Amb. Simon Nabukwesi, during the Design, Materials and Manufacturing (DMM) ground breaking ceremony at the Dedan Kimathi University of Technology Science and Technology Park (DeST-Park)*

## DeKUT partners with Konza Technopolis Limited to equip its graduates with the requisite skills for the job market

As part of the vision 2030 and being a Technological University, we have partnered with Konza Technopolis Limited to equip our graduates with the requisite skills for the job market. Recently, Kenya and Korea signed an agreement to establish the Kenya Advanced Institute of Science and Technology (KAIST), which is being constructed at the Konza Technopolis. The Institute, which is a replica of the Korean Institute of Science and Technology, will provide specialized research and training in various leading-edge engineering technologies and advanced science fields to our students. This will help the country proceed with fast-track modernization.

Speaking during the signing of the MoU, Principal Secretary (PS) for University Education and Research in the Ministry of Education, Amb. Simon Nabukwesi said the Ministry is determined to nurture Kenyans from the youngest possible age to pursue careers in Science, Technology, and Innovation (STI) and develop capacities and competencies in technology management as reflected in the new competency-based curriculum being rolled out.

"We will want to leverage on the skilled graduates from KAIST-Kenya to make the most of the potential of Science and Technology," Amb. Nabukwesi said, adding, "This model worked in South Korea, and we believe, with the right procedures and strategies, Kenya will benefit and transform the region's narrative." He said the completion of the Institute will make it a masterpiece exemplifying the Centre of Excellence in science and engineering as envisioned in the second and third medium-term plans of Vision 2030.




***Principal Secretary, State Department of University Education and Research Amb. Simon Nabukwesi and Vice Chancellor, Dedan Kimathi University of Technology, Prof. Ndirangu Kioni, visit the Korea Advanced Institute of Science and Technology (KAIST).***

## Dedan Kimathi University students invent virtual reality app for CBC learners






At DeKUT, we remain at the forefront to provide solutions and make life better. Dorothy Orina, a fifth-year student pursuing a Bachelor's degree in Mechanical Engineering, and Eric Mwenda, Computer Science finalist, have invented an app to help digitize CBC and make learning more interactive. The two have developed an application dubbed 'AR Edu'that helps learners study using virtual reality experience.

They were driven towards coming up with the innovation after they realized that students in primary school failed their national exams because of low-quality teaching processes. "UNICEF identifies poor quality content and poor-quality teaching processes as some of the most significant barriers to education in developing countries," Orina stated. Adding that, "A more-educated workforce would make poverty eradication and economic growth easier to achieve and for something that important, it would only make sense if it were done right."

The two advocate for gamification in the education sector to make it even more enjoyable and interesting for the young students exposed to video games during their free time away from school. AR Edu presents the learners with an interactive learning platform where 3D models of learning materials in their curriculum are projected in their environment through smartphones or tablets. The learners can then zoom, rotate and bisect the models to have different views. They can also enable labels to study the names of the different parts.

It also has a virtual lab feature, which enables students to conduct lab experiments and get the same results as they would in a physical lab. They can continue to perform the same experiment repetitively as opposed to a physical lab which would limit the frequency owing to the inadequacy of resources.