



MAKERERE
UNIVERSITY

CEDAT

Feb-June 2014

newsletter

COLLEGE OF ENGINEERING, DESIGN, ART & TECHNOLOGY



Semester closes with fascinating student projects

As the second semester comes to an end, the administration of the college wishes to thank all lecturers, administrative and support staff for all your respective contributions to the well being of our students and the college at large. We would also like to thank God for bringing us thus far.

This semester has been characterized by many things, some good while others have been sad events. We have lost several students and some staff have lost their loved ones, please accept our condolences. May all the souls of our dearly departed rest in peace.

As is the custom with second semester, we had our final year students make their final presentations. Some of these projects were very impressive and we call on all who can assist grow this ideas to do so. Fifth year Architecture students had a cocktail of design projects, with varying backgrounds. There were some that had a strictly architectural background while others had both architectural and planning aspects. Final year projects are to show individual skills and ability to handle design projects independently from inception stage to completion. It is a test to find out the

readiness of the students to go out and work in a job market as young architects with skills to meet the varying requirements of the client.

The student has to give a brief which includes services required, space available, use of materials, construction techniques and aesthetics of the building, cost and the context within which it is going to be developed.

A number of interesting projects were presented for examination as is seen in the pictures. Some of these designs included a Rugby club, an intercity railway station which KCCA might want to use, a forensic referral and training centre, a cultural mall, exhibition grounds and an adventure park among others.

The Department of mechanical engineering had students design and prototype an ergonomic chair, a salt crystallizer. One student designed a computerised information management system for the Uganda Police Force mechanical workshop, while another did research on the quality of aluminium products manufactured in Uganda.

At MTSIFA students started exhibiting their works on June 6, 2014. The beautiful pieces of art include drawings, photography, sculptures, fashion designs, paintings and graphic designs among others. All staff are encouraged to go view these pieces of art which will be on display until August. You might just get yourself the perfect art piece for your living room.



CEDAT celebrates success of “cycle for health” project



At a ceremony presided over by Mr Charles Opio Ewalu, who represented the Minister of Works and Transport, Hon. Abraham Byandala, CEDAT celebrated the successful use of the bicycles at

hours, all bicycles are used by bikers. She said CEDAT student cyclists now have a safe parking slot for their bikes and there was increasing demand from other colleges to have this service extended to them. Cycling is common in Europe but is looked at as a poor man's mode of transportation in Africa. Presently, only Johannesburg has a planned cycling transport system.



KCCA is working on decongesting the city using non-motorised modes of transportation. These modes include walking and cycling. Mr Charles Opio Ewalu said the government recognises the need for the provision of non-motorized transport facilities due to the economic, health and environmental significance. He noted that although unsafe, Non-Motorised Transport (walking and cycling) is the most popular means of transport in Uganda. In the central business district, most trips are done by walking. Thus the Non-Motorised Transport Policy was formulated and launched mid last year. This policy will allow for safety to all road users. He said, countries that have attained rapid socio-economic development have adopted and adapted transport modes and technologies, and accumulated sufficient quality stock of transport infrastructure.

Makerere. The bicycle project is a result of collaboration between UN-Habitat and the Dutch Cycling Embassy as well as UST-Network.

“In relation to the transport sector, by 2040, the government of Uganda envisages a multi-lane standard gauge railway system with high speed trains using the latest technology for both passenger transport and cargo freight. This will form the backbone of East Africa Regional railway system,” Mr Opio said. “By 2040, Greater

The project was introduced to CEDAT in February 2014, as a way of encouraging students and staff to cycle. The project has been a success and has registered hundreds of users especially students. The objectives of the project are to create a Free and an affordable alternative means of transport, Safe; road safety and social safety, maintain current cyclists by allowing them to park on the project rack. The project dubbed “cycle for health” allows users to take the bicycle for one hour upon leaving their identity card. If one exceeds one hour, he / she is expected to pay Shs1000 per extra hour. This money is used to maintain the bicycles and the rack.

The CEDAT Principal, Dr Henry Alinaitwe welcomed the visitors who comprised officials from various government ministries and called on the Ministry of Works and Transport to embrace Non-Motorised transport which includes walking and cycling. He called on them to pay particular attention to issues of safety of the riders while planning for this mode of transportation.

Mrs Amanda Ngabirano, a member of UST-Network encouraged people to use cycling as a mode of transportation because it is healthy, it helps reduce traffic congestion, reduce accidents and pollution. She noted that the project had been a success because at peak



Kampala Metropolitan Area (GKMA) will be one of the most attractive cities in the world, offering its citizens and visitors a safe and efficient transport system based on high quality public transport and a complementary non-motorised transport network.” As the government plans our transport system, cycling remains a sure way of going places and staying healthy, all at the same time. The function culminated into a cocktail.

Makerere Partners with UNICEF in WASH Project

Makerere University has signed a Memorandum of Understanding with UNICEF to collaborate in the area of Water, Sanitation and Hygiene (WASH) at an event held on 9th May 2014. The event also involved a launch of a three year project code-named Unicef-Academia-Private Sector Partnership (UNAPP) WASH Innovations Project, at the College of Engineering, Design, Art and Technology (CEDAT). The project partners include CEDAT, UNICEF Finland, UNICEF Uganda, Aalto University, Helsinki University and Biolan Oy. At Makerere University, CEDAT will collaborate with the College of Health Sciences (CHS) and the College of Humanities and Social Sciences (CHUSS). The project will be implemented in Acholi sub-region, Northern Uganda.

Poor sanitation and contaminated water are linked to transmission of diseases like cholera, diarrhea and dysentery among others. Mrs. Aida Girma, the UNICEF-Uganda representative emphasized that the need for such projects is dire. "I thank the Government of Finland for supporting the initiative. Access to safe water and adequate sanitation facilities is both critical to children's learning as it contributes to improved enrollment; as well as child survival. The pupil latrine ratio in Uganda is 69:1, compared to the national standard of 40:1 and access to hand washing with soap is as low as 33%," she said.

The Vice Chancellor of Makerere University, Prof. John Ddumba-Ssentamu, who was represented by the Principal of the College of Natural Sciences, Prof. J.Y.T Mugisha, was grateful for the project. "We are glad that the partners will work together with schools in Acholi-land to come up with innovative ways to solve local water, sanitation and hygiene issues among primary school children. This gives us an opportunity to contribute to the wellbeing of



Representatives from UNICEF and Makerere University Sign the MOU

the people in Acholi," he said. "It will further support the objectives of the Uganda National Development Plan that encourages innovations and adaptable technologies to address societal needs and social transformation," he added.

Eng. Nyeko from the Ministry of Water and environment was equally grateful for the project, which he referred to as a remarkable example of multi-stakeholder cooperation. He pledged full cooperation and support from the Ministry.

According to the Project Coordinator, Dr. Richard Kabiito, "The planning process for this 1.2m Euro project started in September 2012. The main activity of the pilot phase were ideas and products developed by student teams."

In her presentation, Dr. Venny Nakazibwe,

the Dean of the Margaret Trowell School of Fine Art (MTSIFA) explained that the project will have three components of Capacity building, Innovations and Distribution of lessons learned. "This project is going to impact on the local community and it has been developed with the interests and cultural inheritances of the Acholi community in mind. We are going to start small, but are hopeful that this will be rolled out to the rest of the country, in consultation with our other partners," she added.

Dr. Moses Musinguzi of the School of Build Environment, who represented the Principle, pledged that the College will ensure maximum utilization of the funds and is happy to be associated with the project. Aalto University was represented by Prof. Mikko Koria. Helsinki University was represented by Pekka Tuominen.





Geoffrey Bakkabulindi, a lecturer in the Department of Electrical and Computer Engineering has today May 9, 2014 successfully defended his PhD thesis titled "Planning Of Low-Cost

Electricity Distribution Networks for Rural Electrification".

Geoffrey Bakkabulindi

Dr. Bakkabulindi explaining his thesis during the defense

The study sought to find models for planning low cost Single Wire Earth Return (SWER) distribution networks for rural electrification. SWER lines supply single phase power by using the earth itself as the current return path, as opposed to a neutral return conductor. This results into considerable cost savings on conductors, poles and pole-top hardware.

SWER, however, has challenges in regard to voltage regulation and safety. It is these challenges that the research set out to address. The proposed models are based on both heuristic and exact optimization methods. The research is applicable to the planning of low cost grid-extension to rural areas, the electrification of isolated mini-grids and the upgrade of existing SWER lines.

Congratulations to Dr Bakkabulindi.



"Ebifananyi I" by Deo Kyakulagira



History In Progress Uganda and Makerere Art Gallery / IHCR present:

Exhibition and Book Presentation of Ebifananyi I:

The Photographer; Deo Kyakulagira
at Makerere Art Gallery/IHCR

The opening session for the exhibition was held on Thursday 8th of May at 5 pm, with a panel discussion with Deo's son and heir Dennis Kalyango, MTSIFA photography lecturer Annette Ssebba, HIPUGanda initiator Andrea Stultiens and journalist David Tumusiime. The exhibition run from Thursday 8th May 2014 to Saturday 31st of May, 2014.

About Deo Kyakulagira:

Deo Kyakulagira (1940-2000) was devoted to his family and to photography. From the early 1970s until his untimely death in 2000 he operated several photo studios,

among them the Central Art Studio Ltd in Kampala Road. He also worked as photographer for the Ministry of

Agriculture and for the Department of Medical Illustration at Mulago Hospital. HIPUGanda initiator Andrea Stultiens edited his work presented in this book and exhibition and added some of her own contemporary photographs to create a dialogue between past and present.

The Photographer; Deo Kyakulagira is the first edition of a new book series called Ebifananyi (Likenesses) published by History In Progress Uganda. Each book of the Ebifananyi series will focus on one specific photo collection and/or photographer in Uganda.

The publication Ebifananyi I: Deo Kyakulagira and an exclusive selection of prints will be for sale.

