

Two successful PhD defences on same day



Dr. Lydia Mazzi Kayondo

On Wednesday 7th November 2012, two members of Staff from the College of Engineering, Design, Art and Technology, Mr. Charles Otine and Ms. Lydia Mazzi Kayondo successfully defended their PhD research theses.

Dr. Kayondo defended her PhD research thesis, entitled Geographical Information Technologies – Decision Support for Road Maintenance in Uganda at 9:00 am in the CEDAT conference hall while Dr. Otine defended his research Thesis entitled HIV Patient Monitoring Framework through Knowledge Engineering HIV Patient Monitoring Framework through Knowledge Engineering at 2:00 pm at the same venue.



Dr. Charles Otine

The Management and Staff of the College of

Engineering, Design, Art and Technology would like to extend their congratulations to both members of staff on this great achievement and wishes them the very best in their careers as well.

Kudos to you, Dr. Lydia Mazzi Kayondo and Dr. Charles Otine!

Promotions!

Dr. Charles Niwagaba, the Chair, Department of Civil and Environmental Engineering was on November 29th 2012 promoted to the rank of senior lecturer.

The CEDAT community Congratulates Dr. Niwagaba upon his promotion.

The success you have achieved, is the success you truly deserved. May you meet more glory in your life a head. Congratulations on your Promotion.



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Memoirs from the Students Open Day

Touring over 15 exhibition stalls, the Minister of Education and Sports, Hon. Jessica Alupo commended the students in the College of Engineering, Design, Art and Technology (CEDAT) for organizing the 2nd Annual CEDAT open day 2012 under the theme, "Promoting Youth Innovation to boost Job Creation and Employment."

"I am impressed by the quality of innovations and research exhibited by students. I encourage everybody to take off time to witness the student's innovations and projects. The young generation of scientists has a role to play in the industrialization of Uganda. I have observed that the students in CEDAT constitute the generation of students to change Uganda. And the Government of Uganda shall continue to offer full support to the field of research and innovations," remarked the Minister of Education and Sports.

The Dean, School of Built Environment- Dr. Henry



Alinaitwe represented the Ag. Principal, Eng.

Barnabas Nawangwe at the function. Eng. Dr. Barnabas Nawangwe was representing the college on special mission-to forge collaboration with universities in Russia.

In his speech, the Ag. Principal, Assoc. Prof. Barnabas Nawangwe thanked the students for organizing the Open Day aimed at disseminating research and innovations in the college. Eng. Dr. Nawangwe informed the congregation that through the two day exhibition, 5th and 6th October 2012, the students will share the knowledge and skills they have acquired as well as their plans to contribute to the technological advancement in this country and beyond. He paid tribute to the Government of Uganda for supporting the innovations in CEDAT

through the Presidential Science Initiative.

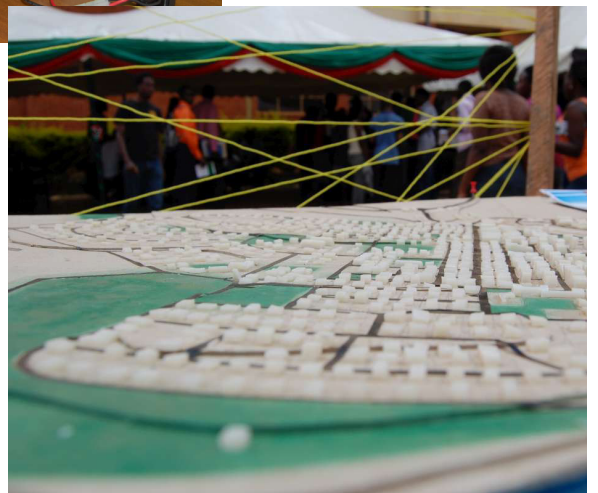
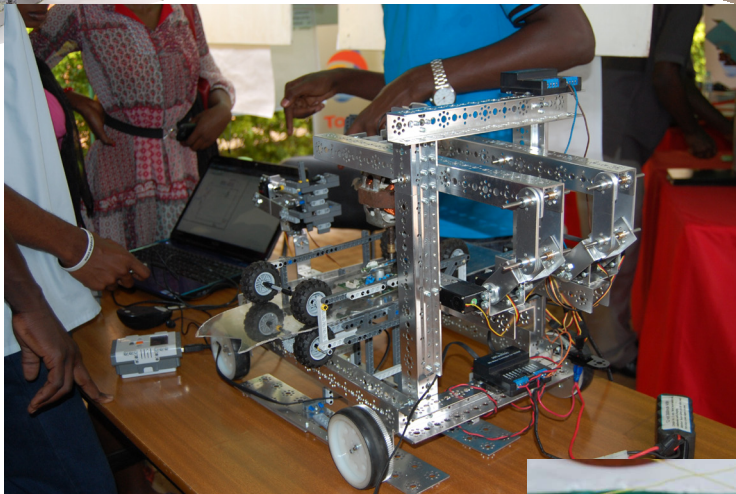
The students also used the same occasion to welcome and congratulate Professor John Ddumba-Ssentamu upon his appointment as Vice Chancellor of Makerere University. The students were happy to see the Vice Chancellor touring the exhibition stalls and nodding in appreciation.

In his speech the Vice Chancellor, Prof. Ddumba-Ssentamu emphasized the need to write proposals to attract the private sector to partner with Makerere University in the areas of research and innovations.

The Minister of Education and Sports, Honourable Jessica Alupo represented the Guest of Honour-the Prime Minister of the Republic of Uganda, Rt. Hon. Amama Mbabazi at the function.

In his speech, the Prime Minister, reiterated the Government's commitment to supporting science, innovations and industrialization. Reflecting on the theme for the Open day, Rt. Hon. Amama Mbabazi said that the Government of Uganda will address unemployment among the youth by engaging young people in the industry and those in the academia in decision making. He also appealed to the students to utilize the Venture Capital Fund (UGX. 25billion) to enable them access capital to support their projects and enterprises.







The Annual Presidential Initiative workshop a success

September 7, 2012

Researchers and policy makers on September 7, 2012 converged at Royal Suites Bugolobi to share and disseminate research findings from projects supported under the Presidential Initiative Fund.

The workshop brought together researchers, Management of Makerere University, leaders of higher institutions of learning, civil servants from the Ministry of Finance, Ministry of Education and Ministry of Trade, industry and Cooperatives. The guest of honour was the Minister

of Trade Industry and cooperatives, Hon Amelia Kyambadde. She commended the college for her continued efforts in underrating ground breaking research and called for partnerships between the Ministry and the college.

“The focus of the Ministry of Trade, Industry and Cooperatives is to further expand the industry and trading opportunities in Uganda and we believe that it is you the academics who can enable us achieve this goal through extensive research on different sectors of our economy,” she said.

“We hope that what we are about to hear will inform part of the Ministry’s course of action for a better economy. The government supports science and technology because it is the gateway to reducing poverty levels through job creation”.

The projects that presented research findings included the Solar Laboratory, the MakaPads Project, The Centre for Research in Transport Technologies, the Centre of Technology Design and Development, iLabs, ARMS among others.



ILabs@MAK project holds Science and Technology Innovations Challenge

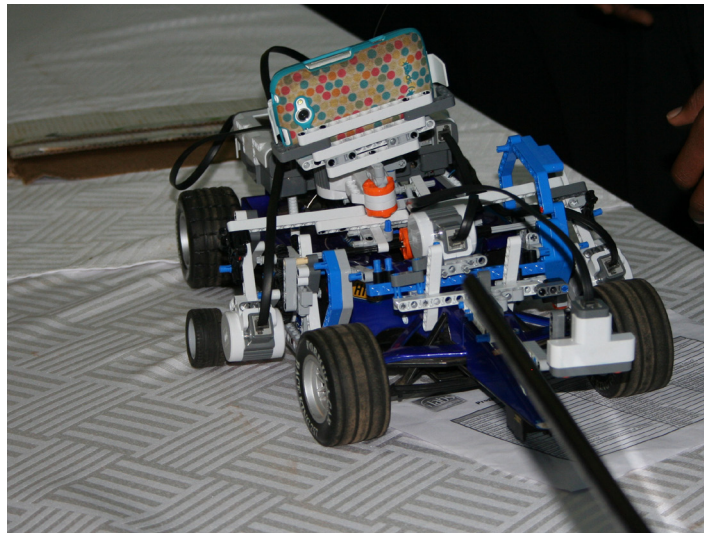
The iLabs@MAK Project was busy again this year (September 8th - 22nd) with the Science and Technology Innovations Challenge. After successfully holding the first Robotics challenge in 2011, the team thought it fit to scale up the contest. This time round, students were tasked not only with assembling and programming of robots but they had to have knowledge of mobile phone applications and well as assembling and disassembling. The contest was this year widened to cover 10 schools from 2 last year.

The final Science and Technology Innovations Challenge saw St. Mary's College Kisubi beat 10 schools to take the day. Inspired by the Kiira EV, the SMACK Science Club embarked on assembling a smart hybrid car.

The Science Club president, Ivan Karugaba, explains, "We introduced our club to everyone at the school assembly and invited ideas and a few came forward so we could discuss them."

Karugaba eventually came up with the idea of a smart hybrid vehicle that could park itself and it was universally accepted.

"I had seen what [Makerere's] Kiira EV could do and while I was impressed, I also paid attention to the criticism at its defects – such as the likelihood of getting stuck



somewhere if you don't have power to charge the car as well as how long it takes to recharge," Karugaba explained.

They resolved this by involving multiple power sources; in this case a combustion engine and solar power. "We also incorporated an automatic switching system that would enable the car to move seamlessly from one energy system to another," he explains.

The automatic switching system also has the ability to use maximum energy when going uphill and shut down the engine when rolling downhill so that the solar batteries can recharge, a process called regeneration.

Other schools in the challenge included Makerere College School, which designed a table rover that cleans surfaces. However, the judges faulted the school for underselling their invention - it has applications

that clean floors, streets and other flat surfaces. The application is designed in a way that as it moves forward, it cleans its rear and detects its position on the surface before changing direction.

After they were questioned about human intervention in putting water in its tank, they pledged to provide for automatic pump that would mix detergent and spray the floor before the rear rug cleans. Maryhill High School, the only girls' school in the finals, finished third ahead of Dr Obote College Boroboro, Ntare School, Lango College and King's College Budo.

Others in the contest, who did not make it to the finals included Gayaza High School, Mt St Mary's College Namagunga (central); St Joseph's Vocational College in Mbarara (west) and Lira Town College (northern region).

NCC successfully held

The Second National Conference on Communication was held on 10th- 11th September 2012 at Serena Hotel Kampala, under the theme “Exploring Technology for National Development”. The conference was hosted by the Department of Electrical and Computer Engineering, at the College of Engineering, Design, Art and Technology (CEDAT), Makerere University together with the Uganda Communications Commission (UCC). The 2nd NCC, was building on the success of the 1st NCC, which was held in September 2011 under the theme “Advancing locally relevant solutions”. The NCC is now an eagerly anticipated annual event.

The NCC provides an avenue to build capacity and strengthen academic and industry in communications to explore technology for national development with a resounding focus on locally developed solutions.

This year,



NCC boasts of a successful event that drew participants from a wide range of stake holders. The conference pooled representatives from Government, regulatory bodies, the academia and the private sector to discuss issues pertaining to policy, research and market opportunities/ challenges in Uganda’s communications sector.

Hon. Nyombi Thembo, the minister of ICT presided over the opening session, while Mr. Godfrey Mutabazi, the Executive Director of the Uganda Communications Commission

(UCC), was present at the closure. Also present were: the Principal, College of Engineering, Design, Art and Technology (CEDAT), Makerere University, Prof. Barnabas Nawangwe, Prof. John Ddumba Ssentamu, the Vice Chancellor of Makerere University. On average there were about 200 delegates for each day of the conference.

About 28 technical papers were presented at the NCC in five out of seven tracks.



Networking conference for sustainable renewable energy businesses

A Networking Event was organized by Makerere University and Norges Vel September 13th, as part of the Nordic Climate Facility project "Sustainable Renewable Energy Businesses in Uganda", and arranged in cooperation with the NOMA-MSc within Renewable Energy at Makerere.

New and existing renewable energy companies can utilize renewable energy in a sustainable and financial beneficial manner. To support the efforts of such local renewable energy companies, there is a need for cooperation between entrepreneurs, SMEs, financing institutions, authorities, universities and others.

The networking event focused on renewable energy business development in Uganda and aimed to link relevant stakeholders; seeking synergies between on-going activities. During the event there were presentations about governmental policy and incentives for renewable energy, renewable energy development and entrepreneurship in Uganda, experiences from the renewable energy companies Trønder Energi, Husk Power Systems and Ultra Tec, some institutions on the financing side presented their strategies and conditions, before the entrepreneurs finally presented their business plans.

Financing institutions and other stakeholders interested in learning more about the Entrepreneurs and the Renewable Energy Incubator are welcome to contact the project team. Also presentations from the event are available on request.

Solar lab construction completed

The building, furnishing and procurement of testing equipment for CREEC's solar PV laboratory has successfully been completed. This is part of the five year solar technologies project awarded to CREEC under the Presidential Initiative Program of the College. Initial construction works began in July 2010 where the team refurbished space in the old building of CEDAT and this was completed in 2011.

The laboratory has been furnished with equipment like PV module analyser, battery charge professional, data acquisition station and light measurement equipment among others that enable the centre to test, label and certify a variety of solar PV products. This equipment was procured under the Presidential Initiative Fund with additional support from the Swedish International Development Agency (SIDA).

Since 2011, the solar department has developed test procedures and protocols, it has carried out tests of kerosene lamps to determine their fuel consumption, light output and articulate concentration of emission as baseline studies and an online publication site; www.lightinguganda.ug for the Solar Lamps for Health and Wealth campaign aimed at promoting the use of solar lamps among households.

Currently, students are doing projects, final year dissertations, industrial training and practical sessions for the Renewable Energy using the lab facility.

Photojournalism exhibition

The Makerere Art Gallery hosted an exhibition on photojournalism Friday, 9th November to Wednesday, 28th November, 2012. Photographers from all over Uganda participated in the Uganda Press Photo Award competition organized by the Foreign Correspondents' Association of Uganda and Friedrich Ebert Stiftung. Like the acclaimed World Press Photo, their exhibited submissions gave a snapshot of life in Uganda in various categories.



Makerere delegation visits Russian University



In an effort to grow the relationship cultivated between Makerere University and Belgorod State Technological University of Russia, a delegation of 10 people from Makerere University, on invitation, visited Belgorod State Technological University on October 2-8, 2012. The Makerere delegation, was led by the Vice Chancellor F&A, Prof. Sandy Stevens Tickodri Togboa and Assoc. Prof. Barnabas Nawangwe. The team, which was received by the Rector of Belgorod State Technological University Prof. Sergey N. Glagolev, laid flowers at the monument of Shukhov, in whose memory the university was named. The Ugandan team also met with the Governor of Belgorod, Mr Yevgeny Savchenko to strategize on more areas of collaboration.

Several meetings were held between the Makerere Delegation and the academic board of Belgorod State Technological University

during which information was shared between the two sides regarding major directions of scientific researches and way forward for the collaboration.

The highlight of the visit was the award of an honorary degree to Prof. Tom Oti of the Department of Physics. The Honorary Doctorate was in honour of his work in the field of climate change.

Prof. Oti presented a paper from his research titled; 'Contribution to Greenhouse Gas Emissions from the Transport Sector in Uganda'. Prof. Sandy Stevens Tickodri Tigboa later gave a presentation on the

KiiraEV (Kiira Electronic Vehicle), calling on the students at Belgorod State University to come to Uganda to collaborate in areas of transportation.

Makerere University early in the year signed a Memorandum of understanding with Belgorod State Technological University to collaborate in the areas of research and innovation, student exchange, staff exchange.

Under this collaboration, the College of Engineering, Design, Art and Technology (CEDAT) and the College of Business and Management Sciences (CoBAMS) will teach students on behalf of Belgorod State Technological University. The students will take on their first year of study at Makerere before continuing with the rest of the years at Belgorod.

NOTE: Students have already been admitted and are undertaking studies.



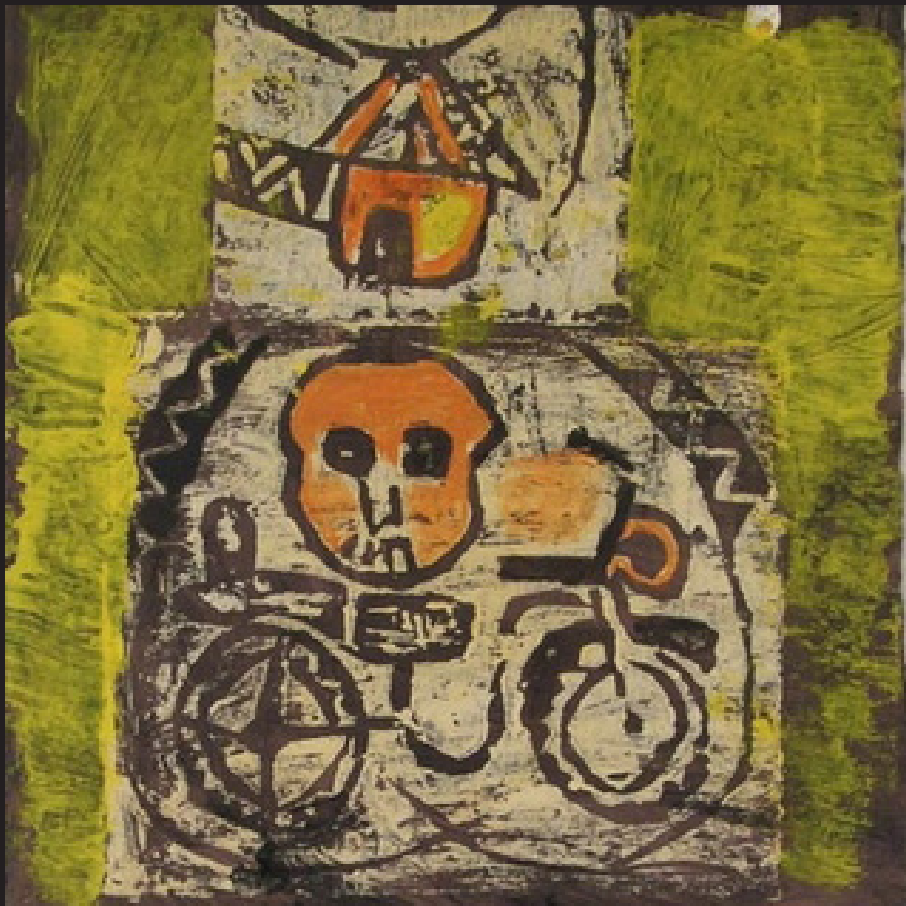
PROFILE: Who is Mathias Tusiime?



Mathias Tusiime is a self - taught artist who paints with oil and acrylics on his own hand made paper, as well as on commercially produced paper and canvas. Born in 1975 Bushenyi district.

Tusiime's day job is being a Grounds man at Makerere Art School in this creativity charged Environment. Tusiime's keen and observant eye has earned him a place of respect in the art community and he has exhibited in Uganda, Kenya, Denmark and the USA. He converts waste that he cleans up like discarded paints, paper and sugar cane pulp into bright joyous artworks. His subjects are often children with large bright eyed stares. He can be compared to Jack Katarikawe a self taught Ugandan artist based in Nairobi, Kenya, whose artistic career started at the Makerere Art School when he too was not a student, but rather a driver.

Tusiime is a good example of careful time management, genuine environmental awareness and protection as well as careful of limited resources to make profound artistic statements.



*Merry Christmas
&
A happy new year*

