

# CEDAI



COLLEGE OF ENGINEERING, DESIGN, ART & TECHNOLOGY

Vol. 3 Issue No. 4

# Open Day: Kadaga praises innovations

October 18-19, 2013

Touring the various exhibition stalls, the Speaker of Parliament Rebecca Kadaga commended the students of the College of Engineering, Design, Art and Technology for the innovations exhibited.

She observed that Uganda's transformation would rely on cutting edge technologies such as those exhibited during the two-day event (Oct 18-19).

"A tour of the exhibition tents tells of a generation of students that is going to change Uganda. It is these innovations that the government wants to grow. Developed countries are where they are because of innovations in science and technology. We need to industrialize the economy and this is the role of you the young generation of scientists," Hon. Kadaga said.

"I strongly commend Makerere University and all other research led academic institutions for their great contribution to curbing unemployment levels by equipping the youth with knowledge and skills relevant to Uganda's development."

She said the country needs to industrialise and that the role of seeing this happen lies with young innovators.

"With all this growing technological innovation by Ugandan youth



The Speaker Of Parliament, Hon. Rebecca Kadaga tours the stalls

and the academia, the country's unemployment rate is projected to drastically decrease in the nearby future."

She pledged government's continued support to science and technology innovation.

This followed a request by the students, through their leader Andrew Kiyonga, for government to set up an incubation centre in Makerere, one that would be used to commercialise the various innovations.

Hon. Kadaga pledged to ask Parliament's committee on Science and Technology and the Committee on Education to visit the college and discuss with management the prospect of having an incubation centre at Makerere University.

She also invited CEDAT students to exhibit their innovations at Parliament.

The Speaker was received by the Deputy Vice Chancellor (Finance & Administration), Dr Barnabas Nawangwe; the Ag. Principal CEDAT, Dr Henry Alinaitwe; Dean MTSIFA, Dr Venny Nakazibwe; Prof. Tickodri Togboa, Dr Dorothy Okello and student leaders.

Dr Nwangwe and the Principal reaffirmed the need for an incubation centre at Makerere, arguing that the students have got many innovative ideas which are never commercialised because of limited resources.

The Speaker called on industries to utilise the innovations from Makerere.

Some of the innovations on display included a machine that makes 'milk' out of soy beans, a water treatment machine,

#### INSIDE



After winning an Independance Day Medal from the government, Dr Moses Kiiza Musasazi has continued to win big.

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iLabs concluded the search for best innovators with Dr Obote College Boroboro beating 17 other schools PAGE 4





Various members of staff have been promoted, confirmed into university service and appointed to various positions. Congratulations to all

## Memoirs of the Open Day 2013

a maize shredding machine, a gasifier, architectural drawings, artistic drawings, wall hangings, bags, robots, artistic impressions of bridges among other things.

The Open Day was concluded with a fashion show where students from the Margaret Trowell School of Industrial and Fine Arts showcased their designs and catwalk.













## Makerere students win Microsoft Imagine Cup

For the first time in the history of the Microsoft Imagine Cup, two teams from Africa won prizes at the worldwide finals.

Team Code8 from Makerere University that represented East Africa in the just concluded 11th annual Microsoft Imagine Cup competitions in Russia received the Women's Empowerment Award presented in partnership with UN Women.

While Team Masked Ninjas from Egypt received an AFT Excellence Award.

The Code8 team consisting of Brian Gitta, Joshua Businge (both vear Computer Science students) Simon Lubambo, a fourth year Electrical Engineering student and Josiah Kavuma a third year Information Technology student. developed a Windows phone application named Matibabu that diagnoses malaria without pricking the body to draw blood. Instead, a custom piece of hardware (matiscope) is connected to the windows phone, then a light sensor is passed over a finger to diagnose malaria in the shortest time possible.

After diagnosis, the results are displayed on the phone screen. These results are then sent to the user's skydrive for medical record keeping and sharing with their personal doctors.

The UN Women Award that comes with a cash prize of \$12,000 (sh30m) recognizes two student teams that created projects that best address issues impacting women globally.

According to an excited Josiah Kavuma, the funds will enable them do more research on the feasibility and scalability of their application.

"We are extremely happy to be the first

African team to secure a prize at the finals and we shall now focus towards competing for the Imagine Cup Grant," he added.

"It feels good to see our dreams come true especially after the hard work, sleepless nights, the team spirit and motivation from our lecturers and staff of the MIC-Uganda," Kavuma noted.

Team Code8 is one of the fruits of the Microsoft Innovation Center-Uganda, currently hosted at the College of Computing and Information Sciences.

MIC-Uganda, are proud of the progress the program has made on the ICT sector in Uganda terms of supporting software developments and start-ups. the second win after the application winsenga that got \$50,000 from Microsoft last year," said Drake Patrick Mirembe the MIC-Uganda manager.

#### The Achievers!!



Dr. Lydia Mazzi Kayondo-Ndandiko were appointed to the rank of Lecturer.
Mr. Edmund Tumusiime was appointment to the rank of Assistant Lecturer.
Dr Richard Okou was appointed to he rank of Associate Professor
Ms Betty Kyakuwa and Dr. Amin Tamale
Kiggundu were confirmed into the University service.

Dr. Norbert Mukasa and

Congratulations to all.

#### **Awarded**

Dr John Baptist Kirabira and Dr Samuel Baker Kucel on Friday 30th October 2013 received awards for their contribution to the social and economic growth of the country and attainment of the Millennium Development Goals. The two received the Pearl of Africa Lifetime Achievements Awards (PALITA) Award at a ceremony presided over by the Prime Minister Amama Mbabazi. Congratulations to both.

### Ilabs@Mak concludes search for best innovators



Students of Dr Obote College with the Education and Sports Minister, University management and Huawei management

Dr Obote College Boroboro had edged 7 other schools to win this year's Science and Technology Innovations Challenge, hosted by iLabs@Mak Project, one of the research projects at the College of Engineering, Design, Art and Technology.

The colourful ceremony, presided over by the Minister of Education and Sports, Hon. Jessica Alupo saw Dr Obote College Boroboro winning the grand science and Technology Innovations Challenge 2013 beating seven other school that earlier qualified for the final completion. This year's Science and Technology Innovations Challenge, organised by the iLabs@Mak project saw 18 schools taking part. The regional competitions were won by Ntare School and Mary Hill (Western Region); Lira Town College and Dr

Obote College Boroboro (Northern region); Makerere College School, Mt. St. Mary's College Namagunga, St. Mary's College Kisubi and Kings College Budo (Central Region).

The competition involves building robots that address society problems, disassembling and assembling of mobile phones and a question and answer session, testing their understanding of the world of science.

The winning school built a robot that demarcates pitches. The robot is programmed to demarcate a football pitch, a cricket march, and a basketball pitch etc. Name it and the robot will do a perfect job.

Dr Obote College Boroboro, Lira walked away with 20 computers for the school's e-learning and 8 smart phones all courtesy of Huawei, the biggest sponsors and supporters of the science and technology

innovations challenge. This year, the iLabs@Mak project also got support from Airtel Uganda who gave way 3 smart phones to the best presenters from the 3 regions.

The First, second and third runnersup also walked away with smart phones from Huawei Technologies Uganda.

The guest of honour, Hon. Jessica Alupo, who was visibly impressed by the student presentations, pledged government's continued support to science and technology. She called on more secondary schools to engage in the Science and Technology Innovations challenge.

"As the Minister of Education and Sports, I am proud of Makerere University, the fact that I am a humble alumnus, notwithstanding," Hon. Alupo said.

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# Dr Obote College Boroboro emerges as best innovator

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The Principal Investigator of the iLabs@Mak Project, Prof. Tickodri Togboa said the project will this year extend to more schools including the eastern region.

"Ever since we started, we have been pleasantly surprised by the level of innovation buried in these prodigies. Some of the ideas displayed at this level, rudimentary as they seem, are the envy of some of our fourth year students in engineering school," he said.

The Vice Chancellor, who was represented by the University Secretary, Mr David Kahundha Muhwezi, thanked CEDAT students on the ilabs@Mak project for training the secondary students and by so doing nurturing the young scientists.

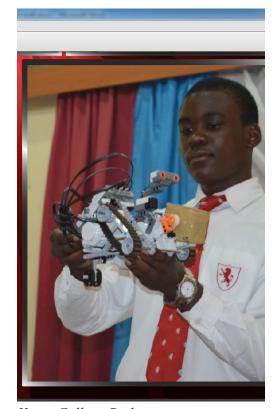
"Through these projects Makerere

University has demonstrated her relevance to society through science and technology innovations," he said.

The CEDAT Acting Principal, Dr Henry Alinaitwe, was represented by the Dean, School of the Built Environment, Dr. Moses Musinguzi. Dr Musinguzi also thanked the ilabs developers for a job well done in nurturing the young generation.

In 2010, the iLabs@MAK Project, undertook to promote science and technology incubation through institution of a project-based learning model in Ugandan secondary schools. This community outreach initiative is geared towards unearthing and supporting Uganda's young innovators before they join University.

The outreach program presently covers 18 schools from all regions of the country.



Kings College Budo presents

#### Dr Musaazi awarded for innovation



After receiving an independence medal for his research, Dr Moses Kiiza Musaazi has continued to get international recognition for his innovations. This time round, he has won the Siemens Stiftung Global Innovations Award for the MakaPads. The award ceremony took place on Wednesday October 30th, in Nairobi. Dr Musaazi came second, a position that earned him and the project Shs103 million, a prize dubbed "Empowering People Award".

Dr Musaazi has continued to shine because of his innovation of the biodegradable sanitary towels. The pads have reduced absenteeism in rural schools and created employment for many women thus improving house hold incomes.

## Witness/Témoin opens in Kampala

Sep 16, 2013

The photo exhibition "Witness / Témoin" opened at Makerere Arts Gallery on September 12, 2013 by Joachim Düster, Chargé d'Affaires at the German Embassy, together with Dr. Venny Nakazibwe, Dean of the Margaret Trowell School of Industrial and Fine Arts. Also present at the opening were the Director of the Goethe-Zentrum Kampala, Carolin Christgau, and Katrin Peters-Klaphake, curator at Makerere Art Gallery/Institute for Heritage Conservation and Restoration and lecturer in museum studies. Ms. Peters-Klaphake gave the dignitaries a tour through the exhibition.

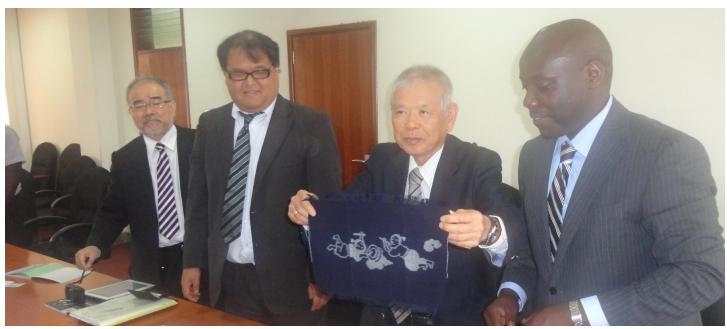
The showing of the exhibition in Kampala was a collaboration between Goethe-Zentrum Kampala/Ugandan-German Cultural Society and Makerere Art Gallery/Institute of Heritage, Conservation and Restoration. Witness/Témoin is an exhibition by participants of the "Photographers' Portfolio Meeting" which was funded by the Goethe Institute Johannesburg.

The exhibition showed the photographic work of Sammy Baloji (DRC), Calvin Dondo (Zimbabwe), Sabelo Mlangeni (South Africa), Abraham Oghobase (Nigeria), Monique Pelser (South Africa) and Michael Tsegaye (Ethiopia).

Internet Content







The delegation from Tottori University Japan

# Collaboration: Delegations from Japan, Total E&P and Tullow visit

A delegation from Tottori University in Japan was in Makerere University on a week-long visit.

The delegation comprised of the Vice President of Tottori University. Prof. Honna Toshimasa: the Director Global Human Resource, Prof. Yamamoto Sadahiro: Prof. Kurimasa Akihiro: the Director International Affairs, Prof. Takeda Hiroshi and the Coordinator Global Human Resource. Dr Kalemelawa Frank.

They were received by the Ag. Principal, Dr Henry Alinaitwe; the Dean School of Built Environment, Dr Moses Musinguzi and the head Dept. of Architecture and Physical Planning, Dr Stephen Mukiibi.

The delegation visited the university to check on the progress of the three Japanese students from Tottori University, who are on an exchange programme and to explore ways for further collaboration with Makerere University. The students are hosted CHUSS. CEDAT. and COBAMS. The student at CEDAT is in the Department of Architecture and Physical planning.

The delegation informed the meeting of the opportunities for collaboration with Tottori University, which include staff and student exchanges as well as opportunities for scholarships from the Government. Japanese The students however have to pay for the air ticket.

Another area envisaged for collaboration is a five-year project in which 1,000 Africans, including Ugandans will study at Tottori University.

#### **Tullow**

A senior official of Tullow Oil visited the Office of the Principal and discussed opportunity for collaboration in developing courses in occupational health and safety, either as part of the current programmes offered at CEDAT or as short refresher courses. Tullow also offered to sponsor CEDAT staff to take courses in this important area. They also expressed willingness to providing support in developing the courses and piloting the phenomenon at CEDAT. Tullow will return with an MOU for signing between the two parties.

#### Total E&P

A meeting between the VC and senior officials from Total E&P, attended by Heads of Department from SOE agreed to develop collaboration with the MIT in training our young engineering PhD holders in learner-centred pedagogy at MIT. The training will last one semester and a total of 10 staff could benefit from each cohort. Total E&P Uganda will soon advertise these opportunities and CEDAT Management will alert you.

On Thursday 11th July 2013, the Principal also signed an MoU between CEDAT and Seonyang Company, a subsidiary of Samsung of Korea, for collaboration in the area of infrastructure development. The Vice President of Seonyang will visit CEDAT in the near future to discuss details of the collaboration.





### Officers from Rwanda National Police College impressed

The 35 police officers from 12 African Countries including Burundi, Rwanda, Uganda, Somalia, Zambia among others visited CEDAT as part of their tour of Uganda.

The officers were on a Senior Command and Staff Course at the Rwanda National Police College.

Of interest were the Kiira EV and the MakaPads Project. The two research teams shared with the officers the technologies they use.

Dr Moses Kiiza Musaazi also shared with them the technology of making inter-locking bricks out of soil and cement.

These bricks are cost effective to use in construction and are easy to make.

The officers were greatly impressed with the technologies.

They called on Dr Musaazi to extend the innovations to their countries so that the poor can benefit.

### St. Maria Goretti Katende students inspired to join CEDAT

About 28 students of St. Maria Goretti Katende visited the college to see first hand the research and innovations being undertaken by students of the college. The students were motivated to read hard and join the college because of the scientific innovations happening in CEDAT.

We hope to see many joining the college at a later stage.



# Tusiime in foreign press: Passion lifts Ugandan from janitor to artist

mathias Gusiime has continued to grow his passion for Art.

He recently travelled to the University of Floridaforanexhibition of his art works. Below is a review of his work from the Media in the US.

By Rachel Crosby

Water trickles down a trench outside Mathias Tusiime's community in Uganda. But follow the stream and soon it stops.

Piles of plastic bottles impede proper flow, and the water doesn't get to where it needs to go.

Tusiime gathers these obstacles, and from those recycled plastics he will create sculptures — works of art that cry out to his community to practice sustainability and protect the environment.

But his work doesn't stop there. This week, a selection of Tusiime's vibrant paintings lined the walls of the University Gallery.

He watched as strangers gazed at his handcrafted images.

"I'm a self-trained artist," Tusiime said. "I want to share what I've learned with people."

Tusiime's story is a humble one. Just three weeks ago, his visitation visa to the U.S. was granted, and his trip to Gainesville was the first time he'd ever been on a plane.

Though his latest moments have been a whirlwind, Tusiime's arts career started more than a decade ago while working as a janitor at one of the oldest and most renowned art schools in East Africa, Uganda's Margaret Trowell School of Industrial and Fine Arts at Makerere University.





After hours, when only abandoned canvases and paint palettes manned the university's art studios, Tusiime's pastime turned into a passion.

When students left after finishing their projects, Tusiime gathered leftover materials — meager at first, but slowly they accumulated into useable supplies.

Canvases weren't easy to get, so Tusiime again turned to his environment.

He created canvases using grass, sugar cane husks and cornhusks, explaining that it was "not simple."

The steps took time, but when his canvases were ready, he slathered them with swirls of rich colors and



electric hues.

In a vibrant sea of abstract strokes, piercing bright, white eyes anchor the humans he depicts. Layers of thick, goopy textures let patrons retrace Tusiime's artistic process.

As he continued to paint, he began selling his artwork within his community. The school's Chair, Department of Visual Communication, Design and Multimedia, Dr Philip Kwesiga, soon took notice.

"He has such a passion to share his images," Kwesiga said.

In 1999, Kwesiga opted to display a selection of Tusiime's work at a staff

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### Tusiime in foreign press



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showing for the university. The move formed a support system for Tusiime, and he slowly gained more fans.

"I encouraged him," Kwesiga said. "He would want to bring one piece of art to a show, and I would say, 'Bring four.' "

Global patrons visited the school and admired his work, later purchasing his pieces and funding supplies for him to use in Uganda.

A father of five children, the help allowed him to support his family with his day job and feed his passion in his free time.

Tusiime began volunteering at hospitals and hosting community workshops, educating adults and children alike on the environment and encouraging them to practice sustainability.

Tusiime will spend about a month in the U.S. before returning home to Uganda. But his trip was planned on hope.

Because his visa was granted just three weeks ago, his plane tickets were

purchased without knowing whether he could legally use them.

He had been denied a visa twice before, and Jill Sonke, director of the Center of Arts in Medicine at UF, said scheduling his show had been three years in the making.

Two weeks before his planned trip, he got the green light, and everyone involved was emotional.

"When he got his visa, he couldn't sleep for two days," Kwesiga said.

Sonke said Tusiime cried on the phone.



"I was so happy," Tusiime said. "So happy."

After his last week in Gainesville — in which he, Kwesiga and five other guests from Uganda are participating in this year's Arts in Healthcare Summer Intensive at UF — Tusiime and his guests will travel to Oakland, Calif., and later to Boston to continue showing his work.

There, Tusiime said he has other generous patrons willing to host him, for which he said he is thankful.

While in Gainesville, Tusiime's art will be displayed in the University Gallery until Tuesday.

From noon to 5 p.m. on the remaining weekdays, the public can view his collection. At 5:30 p.m. on Tuesday, patrons can pay \$20 to take an exclusive grass-canvas-making course with Tusiime.

"He's an extraordinary artist," Sonke said. "His work itself is beautiful and powerful, but his story — who he is — is so valuable in the service of our field."