



**SKILLS AND
KNOWLEDGE FOR LIFE**

TU-K AND SAFARICOM PARTNERSHIP BOOSTS INNOVATION

THE dream of the Technical University of Kenya (TU-K) becoming the “MIT” of Africa is nearer than earlier imagined. Safaricom Ltd will sponsor the innovation laboratory dubbed “TechAvenue” which will be used by engineering students at TU-K, to a tune of 2.5 Million dollars, the equivalent of Ksh. 225 million at current exchange rates. The money will be inform of equipment to be purchased and installed by Safaricom Ltd. This was recently revealed by Mr. Bob Collymore, the Chief Executive Officer (CEO)

of Safaricom Ltd during his visit to the university.

Mr. Collymore noted that his company has interest in working with young innovative people and will nurture their talents as much as is practically possible. “Innovations and enterprise development are considered to be the engine of economic growth of any country. Therefore as young innovators, we will step up and offer whatever assistance you require,” he said.

The CEO who had a session with students from the Faculty of Engineering Sciences and Technol-

ogy (FEST), responded to their questions. Earlier on, he had visited the exhibition stand where he was impressed with the innovations on display. He urged the students to explore areas they are good at, develop passion on what they do, work hard and improve on their projects at whatever cost. This, he explained, will help in creating jobs and wealth in the country. “Safaricom has been an active partner of learning institution. Where-

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LEFT: The Chair of the Sub-committee on Technical Vocation and Education Training (TVET) Hon. Cecilia Ng'etich, addressing Members of Parliament and top university staff at the breakfast meeting. RIGHT: Vihiga Member of Parliament Hon. Yusuf Chanzu exchanging pleasantries with the VC, Prof. Francis Aduol

The University in conjunction with the Institution of Engineering Technologists and Technicians (IET), recently hosted Members of Parliament to a breakfast meeting at a Nairobi Hotel to lobby for the enactment of the proposed Kenya Engineering Technologists and Technicians Board (KETT) Bill. TU-K invited Parliamentary Committee on Education, Research and Technology, to deliberate on the Bill.

The Bill seeks to establish KETT a statutory body which will regulate four carders of people: Engineering Technologists, Engineering Technicians, Engineering Craft Persons and Artisans. During the meeting, the Chairman of the Sub-committee on Technical Vocation and Education Training (TVET) Hon. Cecilia Ng'etich assured those in attendance that she was committed to pushing the agenda of TVET forward and would therefore lobby her colleagues to ensure that the Bill is enacted.

Hon. Ng'etich said, "This bill is good for Kenyans since matters of TVET remain so dear to our hearts. We will therefore ensure that Engineering Technologists get recognition they deserve." She pleaded with other parliamentarians to consider supporting the motion when it gets to the floor of the house.

TU-K Vice-Chancellor Prof. Francis Aduol noted that the meeting was an important occasion since it marked a new beginning of strong partnership between the university and Members of Parliament. He explained that IET has been championing for their formal recognition for four years and therefore he hoped that parliamentarians will help the body and other TVET institutions champion their course.

He also made a presentation on, "Focus Training of Technicians and Technologists," which defined the training and education in engineering from the Certificate level to PhD

and the role of an engineer. The VC noted that for a country to achieve Vision 2030, there should be a deliberate effort aimed at improving education system and training in engineering. He outlined the engineering programmes that TU-K has implemented including Bachelor of Engineering which is designed for an Engineer; Bachelor of Engineering Technology which is meant for Engineering Technologist; Diploma targets an Engineering Assistant/Technical Assistant; and Certificate which targets a Technician/Artisan.

Vihiga Member of Parliament (MP) Hon. Yusuf Chanzu echoed the VC's statements saying that the country needs to invest more in training of young people. "It is high time the country recognised a technologist and his role, and strive to promote technical education in order to advance technologically," he said adding that parliamentarians will support TU-K and it's role in providing leadership in TVET education.

WE HAVE STRENGTHENED OUR MEMBERSHIP IN THE GLOBAL STAGE

TU-K Becomes a member of the Association of Commonwealth Universities

The Technical University of Kenya has been admitted as a full member of the Association of Commonwealth Universities (ACU). This was announced by the Vice-Chancellor during the celebration that marked the institution's first anniversary as a fully fledged University, early in the year. ACU has membership of institutions of higher learning accredited by their respective national accreditation boards in all the 54 Commonwealth member countries. The Association provides avenues for collaboration and cooperation among members. ACU member universities share Commonwealth values of democracy, freedom, peace, the rule of law, and opportunity for all.

Joining the ACU has placed TU-K in a network of like-minded organizations whose aim is to build and forge sustainable, mu-

tually beneficial international partnerships. ACU has programmes and events that offer benchmarking activities designed collaboratively with member institutions in specific areas of governance and administration. TU-K will be participating in these programmes.

CAPA Executive Board visits TU-K

TU-K is also a member of the Commonwealth Association of Polytechnics in Africa (CAPA). TU-K has hosted the CAPA secretariat since it was established, following a resolution of the 7th Commonwealth Conference of Education Ministers held in Accra, Ghana in March 1977. The Chairman of CAPA Executive Board Mr. Tsietsi Jacob Lebakae, who is also the Rector of Lerotholi Polytechnic, Maseru, Lesotho, lauded the central role that TU-K has played in the development of Technical and Vocational Education and Training (TVET) education in Kenya and Africa.

Executive Board members visited CAPA's Secretariat situated at TU-K recently and later on paid a courtesy call on the Vice-Chancellor.

TU-K joins IUCEA

TU-K has formally subscribed to the Inter-University Council for East Africa (IUCEA), based in Kampala, Uganda. IUCEA aims at fostering collaboration between Universities in Kenya, Tanzania, Uganda, Rwanda and Burundi. The council has a mandate of; facilitating networking among universities in East Africa, and with Universities outside the Region, providing a forum for discussion on a wide range of academic and other matters relating to higher Education in East Africa; and facilitating maintenance of internationally comparable education standards so as to promote the region's competitiveness in higher education.



THEY say dare to dream and dream big! We dream of becoming an "MIT" of Africa, we are determined to produce practically oriented engineers and other scientists who will technologically change this country. And yes, we are on the right path of creating opportunities for employment and entrepreneurship. Many thanks to our partners, Safaricom Ltd, Samsung among others who have helped us nurture this dream and soon than later, it will become a reality.

The Safaricom sponsored laboratory dubbed, "TechAvenue" will be used by engineering students. On the other hand, we have partnered with Samsung Electronics East Africa to launch an electronics engineering academy at TU-K main Campus. The academy will equip students with hands-on skills in the repair and maintenance of air conditioning and refrigeration units. Read much and more of these stories.

Perhaps you have noticed students driving an Off-Road Buggy vehicle around the compound. This is a project designed, developed and fabricated from scratch by the fourth year mechanical students during their 12 weeks Industry Based Learning (IBL). We lay more emphasis on the competency training through IBL module, where students gain practical skills as well as internal and external internship. We also wish to mention that we are proud of our students who continue to capture news headlines by their innovations and projects and we say spread your wings and fly.

We rank among few universities that have installed a bio-metric system with Radio Frequency Identification (RFID) technology. This is the latest technology used in library security systems to control access. The machine restricts entry into the library to only registered users. During the launch, the VC who was in jovial mood, challenged students and staff to develop passion for reading and encouraged them to utilise the library. Read more on how RFID works.

We firmly take our position in providing leadership in Technical, Vocational and Education Training (TVET). It is for this reason that we lobby for the enactment of the proposed Kenya Engineering Technologists and Technicians Board (KETT) Bill which recognises the role of Engineering Technologists, Engineering Technicians, Engineering Craft Persons and Artisans. Recently we hosted Members of Parliament to a breakfast meeting to deliberate on the matter. It is our desire that the bill gets enacted as soon as it can.

Finally, congratulations to all our sports teams which continue to dominate in various disciplines and carry high, the flag of TU-K. Our men handball team "Ingwe," you represented Kenya well during the just concluded All African Games. You have put us on the map of the world and indeed we are proud of you!

Anaya

INSIDE TUNews

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TU-K AND SAFARICOM PARTNERSHIP BOOSTS INNOVATION

We share of the Technical University of Kenya (TU-K) and Safaricom Ltd. The partnership will see the establishment of a laboratory for engineering students to gain hands-on experience in the repair and maintenance of air conditioning and refrigeration units. The laboratory will be used by engineering students to gain practical skills in the repair and maintenance of air conditioning and refrigeration units. The laboratory will be used by engineering students to gain practical skills in the repair and maintenance of air conditioning and refrigeration units.

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Our industry partnerships and international networks have continued to grow in leaps and bounds. Our collaboration with Samsung Electronics has led to the establishment of an academy within the institution. The Academy is meant to boost the practical training of not only our students, but those from other universities, in the areas of refrigeration and electronic appliances for home use.

Prof. Aduol

FOREWORD

From the Vice-Chancellor

The Technical University of Kenya has been established as the first technical university of the country as envisaged in the new laws governing higher education and in line with Vision 2030. This is a new frontier in university education in our country and the region at large, and the university is expected to provide leadership for this effort. The Government and other stakeholders expect that this University will provide the necessary human capital with world class technical skills to address the development challenges of the nation. Other than this, the institution is also required to mentor other technical institutions and develop benchmarks that would establish international quality standards for technical education in Kenya. These are not enviable responsibilities for an institution that has just joined the league of universities and now expected to operate in the competitive and elitist environment of global giants like the MIT.

In pursuit of its mandate, the university has recorded a number of enviable achievements since the award of the charter even as it faced some challenges. Late last year, Council approved the new structure as envisaged in the Charter and management embarked on its implementation immediately in January. The structure is designed to reflect the mandate of the university and the desire of the Government to create an institution of higher education that nurture a special and new breed of graduates with practical skills to join the market as doers of things and providers of solutions to employers.

Our industry partnerships and international networks have continued to grow in leaps and bounds. The collaboration between the University and Samsung Electronics has eventually led to the establishment of an academy within the institution. The Samsung Academy is meant to boost the practical training of not only our students, but those from other universities, in the areas of refrigeration and electronic appliances for home use. In August, Safaricom CEO, Mr. Bob Collimore paid a visit to the university. After engaging with the faculty and students, he pledged his organisation's support for the construction of a multi-million-dollar modern telecommunication laboratory. Earlier on the university enhanced its long standing partnership with Toyota Kenya by establishing the Toyota Academy in South B to increase our capacity in the industrial training of our students in the School of Mechanical and Production Engineering. All these industry partnerships are geared towards fulfilling our goal of producing hands-on graduates who hit the job market running.

We have just received our first year students in September, and like in the previous year, we again received the highest number of students for our engineering programmes. While this may be an enviable position comparatively, it should be noted that it is putting considerable strain on the institutions infrastructure and facilities. We continue to grapple with the challenge of accommodation facilities for our students even as the numbers continue to grow. However, of greater concern is the pressure that this growth has brought to bear on the learning facilities. The Senate has responded to this challenge effectively and all our students have been accommodated within the current academic year schedules. We intend to keep the tradition of not staggering our academic calendar as happens elsewhere and for this I appeal to the students to give Senate the necessary support.

I wish to take this opportunity to thank the student leadership, Council, Senate and University Management Board for working tirelessly to ensure the stability of the institution in its first year as a fully fledged university. Our stakeholders and especially our partners in the industry who spared their premises to offer invaluable practical training and share their experiences deserve praise. I wish to assure our stakeholders and especially the students, that the University Management is equal to its mandate and will deliver on its obligations. We are confident that our vision is attainable; TU-K will be a top rated university of technology!

Prof. Aduol

CONGRATULATIONS ON YOUR ADMISSION TO TU-K, VC TELLS NEW STUDENTS



Prof. Aduol addressing new students during the September orientation. Right: new students keenly following the proceedings

Vice-Chancellor Prof. Francis Aduol congratulated first year students for acquiring good grades that enabled them join TU-K terming it a great achievement and a rare opportunity. He welcomed them to the university and asked them to make use of the available resources. "This will be your home for the next few years. TU-K has remained a distinctive player in academic and technical education. The institution attracts bright students and we hope you will support us achieve this dream," he said.

The VC reminded them that joining the university is an important day in one's life. "Once you get a chance to join university, the system believes you are capable of studying. Such opportunity is unique and you should thus consider yourself lucky and work like you will never work before. Use your time wisely since you have lecturers who will be there to guide you. Take part in co curricular activities," advised the VC while urging them to work closely with the Director Student Affairs and Sports.

For students to familiarise themselves with the university organisation, Prof. Aduol explained the history and structure of TU-K and gave a brief profile of senior academic staff. "To ensure that you excel in your academics, we have hired competent members of staff who will look after you. You will meet some of these professors in your various departments," he added.

The VC reminded students to stick to their core business of joining the university which is to learn. He explained that presently the industry is looking for graduates with skills. TU-K is well aware of this and has taken a strategic role of training on hands on skills. "Our mandate is to train and give you practical exposure so that when you go out there, you meet the requirements of the industry. Be prepared for that experience," said he while explaining that they will learn after graduating that it was worthwhile joining TU-K.

He further explained that the University has made it mandatory for students to undergo 12 weeks of internal Industry Based Learning under the supervision of

the lecturers and 12 weeks of external Industry Based Learning.

He emphasised on lecture attendance noting that it is the tradition of TU-K for a student to attend lectures for atleast 75% of the course failure to which he/she is not allowed to sit for examination. He further cautioned them against exam cheating.

Prof. Aduol advised students to maintain high standard of discipline. "Reputation is very important, when you leave this institution to look for employment, you will notice that the employer is looking for discipline. You need to have the correct attitude and maintain high level of integrity anywhere in the world," said he.

He further advised them to take charge of their social life, choose the right friends and be aware of conmen. He reminded them to seek advice from staff or trustworthy friends while in need of services like shopping and banking. "This is a big and complicated city. It has got so many challenges. I will plead with you to be watchful of people you live with," he added. **TU**

VC RECEIVES UNIVERSITY OF TWENTE DELEGATION

A team of Professors and Geospatial experts from the University of Twente, in the Netherlands recently visited TU-K with the objective of exploring opportunities for academic collaboration in the fields of water, environment and engineering. The team was led by the President of the Executive Board of the University of Twente, Mr. Victor van der Chijis. Other members of the delegation included; Prof.-Dr. Ir. Tom Veldkamp, the Dean of the Faculty of Geoinformation Science and Earth Observation, Prof.-Dr. Geert Dewulf, the Dean of Engineering Technology and Robert Becht,

who was the meeting organizer.

Apart from collaboration agenda, the team wanted to get exposed to the working environment in Kenya, form networking opportunities, capacity building and academic exchange. The team chose TU-K because the two institutions are both technical universities. TU-K is one of the few institutions in Kenya with academic Department in Geoinformation with the Vice Chancellor, Prof Aduol who is himself professor of Surveying with specialization in Geodesy.

During the meeting, VC explained the

historical background of the institution from its humble beginning in 1961 as a middle level college of technology, through the University College status and subsequent award of charter in January 2013 to be the premier Technical University in Kenya. The team later visited the School of Surveying and Geospatial Sciences where they were introduced to the Geoinformation Laboratory. The students in the School made an excellent presentation to the delegation on the use of the Social Tenure Domain Model (STDm) in mapping of informal settlements and urban agriculture in Kenya. **TU**

TU-K SETS BLUEPRINT TOWARDS VISION

TU-K has kept her promise of training for the real world. This is recognized as one of the enablers in achievement of the industrialization vision. TU-K conducts the training of her students with a difference; aiming to impact the industry by empowering students with hands on skills that adapt the graduates to the work place environment on day one.

Our students are trained through sustained partnership with industry in a variety of ways. For one, industry stakeholders are given opportunity to participate in the development and review of curricula. This strategy assures the university that content delivered to students are current with respect to industry needs. The university encourages participation of industry experts in the classroom teaching. We draw our sessional lecturers from a pool of industry experts with long years of experience. The university give Industry Based Learning (IBL) for both students and faculties very great importance. Through sessions of IBL students and faculties come to relate theory to practical and identify issues that should be interrogated

with zeal and has exceeded expectations. Within the first three years of Prof. Aduol's leadership at the institution, the university college developed 36 degree programmes which started admitting students in January 2009 through the Joint

Admissions Board (JAB). The number of students admitted by JAB rose sharply from 130 in 2009 to 1,780 in 2013. Alongside the JAB admissions, the University College launched two year Bachelor of Technology in Engineering and Bachelor



Hands-on: TU-K Mechanical Engineering students get a feel of the new engineering equipment during a practical session

DEEPENING TVET AT THE

The award of a charter to the Technical University of Kenya in January, 2013 was the culmination of a series of processes to upgrade the then Kenya Polytechnic to a degree awarding status. This was pursuant to government policy on Technical and Vocational Education and Training (TVET) as promulgated in sessional Paper No.1 of 2005 on A Policy Framework on Education, Training and Research.

The policy, among other things, required the government to: Provide an alternative path for TVET graduates to access higher education and training up to degree level, create opportunities for National Polytechnics to offer degree level qualifications while retaining their present mandates, establish a mechanism for the accreditation of National Polytechnics to offer degrees beginning with Kenya Polytechnic (Nairobi) and Mombasa Polytechnic.

As part of the process of implementing the above policy directions, the defunct Kenya and Mombasa Polytechnics, under the guidance of a Steering Committee on the upgrading of National Polytechnics to Degree Awarding status, developed syllabuses for Diploma in Technology (3 years) and Bachelor of Technology (2 years) for

Electrical Engineering. The Bachelor of Technology was conceived as a composite degree with a (3 years) Diploma as the foundation.

The Diploma in Technology programme was introduced at the two institutions prior to their upgrading to University status in August 2007. Given that the composite degree of Bachelor of Technology was introduced at the behest of the government through the steering committee, it was naturally expected that the composite B.Tech degree programme would be the mainstream programme of the upgraded institutions.

The Kenya Polytechnic University College, now Technical University of Kenya, made a concerted effort to implement the Dip. Tech./B.Tech. Programme by treating the pioneer Dip.Tech. Students as government sponsored (regular students) and admitted them to continue to B.Tech. for two years. Kenya Polytechnic University College at the same time introduced a four (4) years B.Tech. degree course for graduates of KCSE.

Intervention measures for TVET at TU-K

The Technical University of Kenya is established as a University and a TVET institution at the same time. As its predecessor, the

2030 THROUGH TEACHING AND LEARNING

of Philosophy in Engineering Technology programmes to upgrade diploma and higher diploma holders respectively to bachelor's degree qualification. The latter group of students were the first to graduate with Bachelors qualification.

The number of students graduating with bachelor's qualification is set to increase several folds both in numbers and fields of specialization. Employers are advised to liaise with the Office of Convocation and Alumni Relations to initiate

recruitment of engineers and graduates in various fields. When our graduates excel, return them to us for postgraduate training and return on your investment will be assured. We are forever grateful to our stakeholders in supporting the realization of our motto of education and training for the real world.

ACADEMIC PROGRAMMES AT TU-K

TU-K has positioned herself as a center of excellence where theoretical knowledge meets practice to incubate innovation. We believe in fostering skills in technological innovation to catapult Kenya into the industrialization edge. Innovation demands heavy research and development capital for the many hours spent towards realization of new products and the multi skills required of the innovators. Some sectors have tried to contain the cost of innovation through open innovation where ideas are collated from within and outside the institution.

At TU-K, we believe that the environment in which students are trained help shape their thinking and orientation. TU-K has developed curricula in many disciplines partly to create an environment that is conducive for collaboration towards knowledge development and innovation. We have launched 67 degree programmes distributed in engineering, science and social sciences.

Faculty members regularly assess the ever changing directions and interests of industry and identify new programmes that suit technologies. Long before oil exploration in Kenya had started giving hope for commercial exploitation, TU-K had seen the need and initiated the process of developing appropriate programmes to equip Kenyans with skills in the area. The programme was launched in 2013 when it admitted the first 24 students. It is clear that many changes are expected in societies as part of the changes accompanying wealth re-distribution and work habits. We found it necessary to introduce programmes in science and social sciences to address pertinent issues.

As we always reach out to our stakeholders in developing programmes, we invite sectors that believe we can partner with us in developing new programmes. On our part, we are now developing curricula for postgraduate studies to continue furthering knowledge of our graduates and at the same time improve productivity in the industries. ■

By **Hesbon O. Nyagowa (Ph.D.)** – Registrar (Academic) and **Akumu Owuor, Director, TVET Programmes and Partnerships**



TU-K recently signed an MOU with the Kenya Association of Technical Training Institutions (KATTI). VC Prof. Aduol (L) and KATTI Chairman Mr. Edward Tarno led other officials during the ceremony

TECHNICAL UNIVERSITY OF KENYA

Kenya Polytechnic, it is the leading TVET institution in Kenya and therefore being looked upon to provide professional leadership in TVET. The University has embraced this role whole heartedly and has maintained all programmes offered by the defunct Kenya Polytechnic from Certificate, Diploma to Higher Diploma levels. Technical University of Kenya has further introduced the Two years Bachelor of Technology Degree programs for Diploma graduates as per government policy and also the One year Bachelor of Philosophy in Technology for graduates of Higher Diploma to enhance efficient vertical articulation for this cadre of Technologists.

Training of Technologists and Technicians

Technical University of Kenya aims at spearheading the production of Technicians and Technologists in sufficient numbers with appropriate skills and attitudes to provide industry and commerce with manpower to drive the Kenya Vision 2030. To this end, The University plans admission of students to TVET programmes as follows: Diploma in Technology and Bachelor of Technology.

Students admitted to the B.Tech degree programs shall be those who shall have

passed the Dip.Tech. courses with credit or 40% of the top performers. Provision is also being made for admission of students from other TVET institutions with Kenya National Examinations Council (KNEC) Diplomas into the B.Tech degree programs.

TUK has taken measures to enhance partnership with industry and TVET institutions through the establishment of a Directorate of Industry and Professional Partnerships and a Directorate of TVET Programs and Partnerships. These initiatives are meant to ensure effective and meaningful participation of industry practitioners, professionals and TVET practitioners in the development and implementation of TUK programs. In this way, TUK is confident to produce the manpower that Kenya needs.

A process to establish a working relationship between TU-K and TVET institutions through Kenya Association of Technical Training Institutions (KATTI) for purposes of enhancing quality of training in TVET and creating opportunities for vertical articulation of graduates of Technical Training Institutes, Institutes of Technology and National Polytechnics is already underway.

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for increasing knowledge development.

The Steering Committee on the upgrading of National Polytechnics to Degree awarding institutions, developed syllabuses for Diploma in Technology (3 years) and Bachelor of Technology (2 years) for Electrical Engineering. The Bachelor of Technology was conceived as a composite degree with a (3 years) Diploma as the foundation. The first Principal of Kenya Polytechnic University College, presently the Vice-Chancellor of the Technical University of Kenya, Prof. Dr.-Ing. Francis Aduol implemented the government's policy

Extending to society

FACULTY TRAINS WOMEN GROUPS IN SOAP MAKING

Global and Community Engagement in the new TU-K structure, is themed, "New Frontiers." Two activities have taken place so far. The Extension and Outreach Department has trained two Women groups the art of soap making, while the School and Youth Programmes Department piloted Science and Career Teachers Seminar.

Under the leadership of the then Director Campus Outreach Programmes (COP) Prof. Dorcas Yole, Women groups were selected from Migori and Kwale Counties. Two members from (COP); Mwanza Kimei and Catherine Wamuyu, were given the responsibility of formulating quality liquid soap. They were the main trainers while four other members of the team assisted the women during practical session.

For each of the two groups, reagents

and equipment were bought for making 200 litres of soap. The team demonstrated to the women on how to make 20litres of soap in one bucket, one step at a time. Prof. Yole ensured that the training went on well. Today, these women groups are able to sell the soap in order to uplift their financial status as well as use it for home consumption.

At the end of the exercise, Prof. Yole explained to women groups that TU-K was out to empower youth and women as well as extend goodwill to the community as part of her Corporate Social Responsibility. She told them that the COP team would ensure that their contact person get reagents from Nairobi whenever they need new supplies. The university donated them materials and equipment for making soap as their capital.

Prof. Yole further informed the women that, unlike other Universities, TU-K emphasized on both academic and hands on skills. She explained the multi-entry and multi-exit concept. "If a student scores a mean grade of D +, instead of looking after cattle for instance, he could join TU-K at the certificate level, that is if he has the right cluster then progress through to Diploma and later to a Degree level," she said while presenting them with TU-K



Catherine Wamuyu demonstrates how to make soap. Looking on are Kwale Women's Group and their representative, Mrs Joyce Gakesho



Prof. Dorcas Yole presenting prospectus to Mrs Joyce Gakesho over buckets of soap - Kwale



Sam Njuki distributing soap to members of the Women groups in Migori



Teachers paying keen attention to presenter at the Science & Career Teachers Seminar



Prof. Dorcas Yole presenting a certificate to a teacher from Mbaikini High School at the Science & Careers Seminar

prospectus and brochures. Both women groups were later on invited to TU-K.

Science and Career Teachers Seminar

During their visits to secondary schools to give the students presentations on, "Demystifying Science, Careers and Courses offered at TU-K", the COP team felt that there was a need to help science teachers teach the subject in a manner that would make the students enjoy it and expose Career Teachers to courses offered in the universities. Several consultative meetings led to formulation of two questionnaires, one for Science teachers and one for Career teachers.

A one day seminar was held in Nairobi. In attendance were Schools which

TU-K had interacted with previously. These included; Maranda High School (Siaya), Karima Girls (Nyandarua), Muthale Girls (Kitui), Enoomatasiani Girls (Kajiado), Ruthimitu Girls (Nairobi), Kiandu Mixed (Othaya), Mbaikini High School (Machakos), Kamunyaka Mixed (Nyandarua) and Ngwata Mixed (Makueni). Six teachers were invited from each school for the following subjects; Mathematics, Physics, Chemistry, Biology, Computer and Career Masters.

Prof. Dorcas Yole gave the first Key note speech. She discussed on the following topics, Importance of training the "Teacher," point of influence, model, resource; Sciences are the basis of innovation and technology; Avenues of making a student to fail, society, child and teacher. She gave

them the quote "You excel in what you enjoy" and emphasized on the need for career teachers to know current courses offered in various universities in order to help students make right choices.

Teachers were divided into their respective disciplines under the supervision of COP team members. The questionnaire for Science teachers helped them identify areas that made students not to enjoy sciences while the other one for Career Masters/Mistresses helped them get an idea on how they could help children make right choices in their careers.

The teachers shared what they had learnt from various discussions groups. The DVC-TIP gave a Keynote Speech on, "What makes a good Teacher." She shared her experience and what is gained when a teacher comes to the level of a student. The Teachers were taken through courses offered at TU-K and responded to questions during "Question and Answer Session". At the end, the teachers were given certificates of participation. After the meeting, the teachers who were so excited interacted with the COP team freely promising to practice what they had learnt. **TU**

If a student scores a mean grade of D+ (plus), instead of looking after cattle for instance, he could join TU-K at the certificate level, that is if he has the right cluster subjects, then progress through to Diploma and later to Degree level.

Prof. Yole

By Prof. Dorcas Yole, former Director, Campus Outreach Programmes

DVC's PROPOSAL TO INCORPORATE PACKAGING IN CURRICULUM DEVELOPMENT



Prof. Mwendwa making a Presentation at the Packaging technologies stakeholders' forum

Technical University of Kenya's Deputy Vice-Chancellor in-charge of Technology, Innovations and Partnership (TIP), Associate Prof. Suki Mwendwa recently addressed the East Afripack, 2014 Exhibition themed, "Food Processing and Packaging Innovation for a Sustainable Development," which was organized by Ipack-Ima, (Italy), in partnership with East African Community Secretariat and the Ministry of Industrialization and Enterprise Development, among others, held at Kenyatta International Convention Centre, Nairobi.

The three day conference, from 9th to 12th September, 2014, brought together 135 exhibitors from different countries from around the world, who showcased their entire production chains including processing, packaging and converting technology and materials in the marketing of food industry.

Prof. Mwendwa tackled the topic, 'Back to basics; Synergizing Packaging within Curriculum Development' and defined packaging as "a complex coordinated system preparing goods for transport, distribution, storage, retailing, and use." She examined the framework that is required in teaching and training on Packaging, highlighting the fact that it involves; science, design, engineering, research and development and entrepreneurship and therefore these areas need to be innovatively integrated and cross fertilized to provide the skills and knowledge to tackle the issues concerning food processing and packaging.

Prof. Mwendwa noted that packaging changes and evolves based on societal needs and goes hand in hand with the development of societies and civilizations at large. Inadequate concern and

detail in packaging has the potential to lead to considerable waste. "Today due to a global consumer culture on one hand, and global sustainable issues on the other hand, packaging and what it involves, is at the heart of a lot of activities, and as a result has been perceived to contribute as a major consumer of natural resources, as well as a culprit to a large percentage of world waste," said the DVC. But it can also be a solution to adding value to food production and feeding the fast growing population in Africa which will reach two billion of the 9.3 billion people in 2050. Africa can be a global bread basket, if we explore the potential of food production, processing and packaging equitably. Our challenge is to internally build capacity and strengthen our environmental policies.

She emphasized the need to provide a relevant education integrating industry, academia and the community which would participate in innovative food processing and packaging. The assumption behind such an approach is that, through cross consultation graduates would be enabled to resolve real issues in the region, as well as become industry compliant or self-employed with the ability to respond to community needs. As a result, societal problems such as poverty and unemployment will be addressed, and in this case of packaging, it may contribute to sustainable livelihoods.

Prof Mwendwa concluded by challenging education institutions to explore

innovative ways of teaching and training in packaging through integrating the multiplicity of skills and programs that are part and parcel of the value chain. "Food processing and packaging requires understanding and entrepreneurship among other sensitivities towards global sustainable issues and life-styles," such as the environment. She also emphasized strategically partnering and collaborating with like minded institutions and industries, as being an important part of exploring packaging potential and imparting packaging knowledge and skills.

Last and not the least it's important to note that packaging is known to be an index of industrialization. Monitoring of such a unique, technological discipline would put most education institutions in good stead, to play their role in contribution towards Vision 2030.

Offering Packaging Technology Courses

TU-K has recognized the critical packaging technologies aimed at contributing towards food security and safety the world over hence the need for training personnel to handle this. In line with the vision of the University 'Education and training for the real world,' TU-K is coming up with unique and innovative technological disciplines. The university is training in printing and packaging with courses at Diploma level, and will soon start offering other programmes in Packaging Science and Technology beginning with Certifi-

Today due to a global consumer culture on one hand, and global sustainable issues on the other hand, packaging and what it involves, is at the heart of a lot of activities, and as a result has been perceived to contribute to consumption of natural resources and large percentage of worldly waste.

Prof. Mwendwa

cate, Diploma, B.Tech. M.Tech and PhD.

The focus on such a discipline is mainly to expand knowledge and deepen understanding of the packaging environment as well as create careers. Therefore the courses will play a pivotal role in food preservation, security and safety. DVC challenged various stakeholders to forge strong partnerships in packaging, processing and other industrial activities. **TN**

CHANCELLOR HOSTS NEW STUDENT LEADERS

The Students Association of the Technical University of Kenya (SATUK) ushered in new student leaders after a peaceful election. The elections were organized and supervised by TU-K Electoral Board Returning Officer Mr. Mishael Motuka, lecturer Department of Geospatial Science and Engineering, assisted by four other board members and the Director Student Support Affairs, Rev .Fr. Dr. Ndikaru Wa Teresia together with Rev. Charlton Ochola and Sheikh Mohamed Jama.

The process started at 8.00 am and ended at exactly 5.00pm quite a good number of students took part. The elections involved: ten executive posts, ten congressmen/women and representatives of men/women hostels.

The following students were elected to the executive office and subsequently sworn in.

1. Papa Ragot Rapheal – *Chairman*
2. Opaa David – *Secretary General*
3. Karisa Japheth Jeff – *Deputy Chairman*
4. Kinoti Paul Mutugi – *Finance Secretary*
5. Atieli John Atieli – *Academic Secretary*
6. Roba Duba – *Social Welfare Secretary*
7. Nyabola Johnderrik Odour – *Sports Secretary*
8. Jepkosgei Charlyne – *Gender Affairs Secretary*
9. Museke Perez Peter – *Special Interest Secretary*

Leaders of tomorrow

It was a rare opportunity to be witnessed in recent times. The student leaders paid a courtesy call to the University Chancellor Dr. Manilal "Manu" Chandaria.



He congratulated the officials on their election and reminded them that they have more responsibility and will therefore be needed to carry out their mandate with integrity.

He reminded them that they are leaders of tomorrow and urged them to embrace virtues such as honesty and hard work. Dr. Chandaria talked passionately about professionalism in education. He advised the students to be proud of their institution noting that it is the best place to be in an individual's life and therefore they should consider themselves privileged to joining TU-K.

The Chancellor asked them to use the opportunity wisely, engage in productive activities and work hard. "Universities create and nurture leaders. Be true to yourself and understand your capacities which you should use for productivity and for making a difference." he said.

Dr. Chandaria was very particular with the name and image of the institution telling students that it will remain with them

forever even after leaving TU-K. He advised them to stick to their core business of being in the university and that is, to study.

"Leaders speak with courage and honesty. Always remember that you have a duty to the university, the nation and beyond. You must protect the name of the institution at all costs. The responsibility of building TU-K and the nation lies squarely on you," emphasised The Chancellor.

He shared his biography, rising from obscurity, to arguably one of Africa's most respected business leader. He noted that his hard work, passion, humble demeanour among other attributes propelled him to where he is today.

Dr. Chandaria interacted with students, responded to their questions and assured them of his unwavering support and availability for consultation and advice. He asked them to avoid incidents that might lead to disruption of learning, saying such acts have consequences. He noted that challenges will always be there, but must be handled tactfully. **TN**

UNIVERSITY INTRODUCES FULL TIME STAFF EQUIVALENT FORMULA TO MANAGE TEACHING AND LEARNING

A lecturer teaching five students carries less load than one teaching 50 students because the one with more students has to spend more time supervising and marking examination scripts. However, in the traditional university set-ups, lecturer's pay is only pegged on their grades. It therefore became imperative to formulate a way of compensating the lecturer teaching more students for the extra work. It is on this backdrop that the Vice Chancellor Prof Francis Aduol, developed Full Time Staff Equivalent (FTSE) formula to rationalize the anomaly.

The institution launched the FTSE for-

mula for implementation at the beginning of this Semester. Among the things that this formula will help achieve is that it will help in determining how many lectures are required in every department. It will also be useful in the distribution of teaching loads for lecturers at the beginning of each semester. Lecturers that are able to take more load than the nominal load that every lecturer is obligated to take (which is approximately 20% of their time) will also be compensated for the extra load. In the past, part-time lecturers were paid a flat rate per hour for diploma classes and a flat rate for degree classes irrespective of their qualifications. With this formula, those with higher grades will earn more per hour thereby

encouraging more qualified part-time lecturers to come and teach in the institution. There are some disciplines that require smaller number of students per lecturer ratio due to the very nature of the discipline. This has also been factored in this formula.

With this, lecturers will have a peace of mind since once they fill in their various loads at the beginning of every semester, they will receive their payments at the end of every month as opposed to the end of the semester as has been the case. While launching the implementation of this formula, the Vice-Chancellor reiterated that this formula is not cast on stone and any suggestions that would help improve it is greatly welcome. **TN**



CHANCELLOR MANU CHANDARIA CONFERRED DOCTORATE DEGREE

JUBILATION, pomp and pageantry marked the first graduation ceremony of the Technical University of Kenya. It was the first one of its kind under the new status as a fully fledged university where more than 2,000 graduands were conferred with Degrees and awarded Diplomas and Certificates. The academic procession, chancellor's fan-

was conferred the honorary Doctorate Degree of Doctor of Science. The Vice-Chancellor read the citation on Dr. Chandaria, indicating his background, education, entrepreneurship among other attributes. He noted that Dr. Chandaria stands out as a global nationalist whose vision has and continues to contribute enormously to the development of education, industrial entrepreneurship, economic, and social welfare of the country.

He has been the definitive mobiliser and team builder among the nation's investors and industrialists. The Kenya Association of Manufacturers has immensely benefitted from his networks both locally and internationally.

"His love and respect for professionalism and academia is manifested in the heavy investment in innovation and entrepreneurship among young people by supporting business incubation centres and industrial parks in institutions of higher learning across the country," said the VC adding that Dr. Chandaria has demonstrated passion for the infusion of innovation, integration of technology and entrepreneurship spirit in the conduct business.

The Chairman of the Council Prof. George Eshiwani noted that the appoint-

ment of Dr. Chandaria was a great honour to the university. "As a community of academics and especially The Technical University of Kenya we are proud to be associated with the qualities and achievement of Dr. Chandaria.

In his acceptance speech, Dr. Chandaria said he felt privileged to have been appointed the first Chancellor of the Technical University of Kenya.

"I cherish institutions which focus on producing manpower skilled in technology and I assure the Ministry that I will do all within my powers to support it."

He expressed his passion for technological development saying he believed that TU-K was going to make a major contribution particularly through production of requisite manpower that can be relied upon in the technological and industrial sectors of the country in pursuit of vision 2030.

The Chancellor said that he expected TU-K to play a significant role in the success of the mega projects within the country. "I am aware that the institution already has quite some excellent equipment for learning and production in the School of Engineering. I implore the Council and the Management to ensure the modern equipment are put to best use in the teaching of modern technology and support of industrial production," he said.

During the ceremony, Prof. Francis Aduol was also installed as the first Vice-Chancellor of the university.

ABOUT DR. MANU CHANDARIA, OBE, EBS

Dr. Manu Chandaria is a leading Kenyan industrialist and businessman. Along with being the Chairman and CEO of the Comcraft Group of Companies, a billion dollar enterprise that has a presence in over 40 countries, he is also on the boards of several prominent East African companies. He has won several awards in East Africa and internationally in recognition of his entrepreneurial endeavors and is also a noted philanthropist. In 1997, he was awarded honorary degree of Doctor of Science by the UoN in recognition of outstanding achievements in the industrial manufacturing and business sector.

In 2003, Dr. Chandaria was awarded the Order of the British Empire (OBE) by Queen Elizabeth II. In December of the same year, he was awarded the Elder of the Order of the Burning Spear by President Mwai Kibaki, in recognition of his outstanding and distinguished service rendered to the country.

fare, speeches among other things defined the occasion. Indeed it was history for the young institution gearing up to become the global University of Technology.

It was on this day that the Chancellor Dr. Premchand Manilal (Manu) Chandaria



A section of the 2013 Graduands



Prof. Suda addressing the congregation on the graduation day

GO OUT AND SEEK OPPORTUNITIES WITH CONFIDENCE, PROF. SUDA TELLS GRADUANDS

WHILE reading a speech by the Cabinet Secretary Ministry of Education, Science and Technology, Prof. Jacob Kaimenyi, the Principal Secretary Prof. Colleta Suda congratulated graduands and challenged them to pursue their dreams with passion while those who wish to start their own enterprises, to explore the option seriously bearing in mind that they could provide employment for others. "I wish to congratulate you on your achievement, and encourage you to seek out opportunities in the job market with confidence, knowing that you have been well equipped with unique skills from the first Technical University in Kenya," she said. Prof. Suda reminded them to go in the job market with an open mind and with an understanding that all big things start small.

The Technical University of Kenya has been established chiefly with the objective to provide leadership, alongside other technical universities, in the development of technical manpower that this country needs. She noted that the Ministry is looking to the institution to offer education and training that will produce personnel that can be relied upon to provide innovative ways of solving problems of development so as to be able to effectively contribute to the attainment of Vision 2030.

"I am pleased to note that you have defined for yourselves a clear niche to produce in the first instance graduates

well prepared in the technologies as to be able to tackle technical problems with the mind of producing practical results. This country badly needs persons with practical skills in virtually all areas of technological endeavour," she said while challenging TU-K to provide leadership in the production of technicians and technologists as well as professionals in the respective fields

The PS reminded Technical Universities to put in place deliberate strategies to bridge the wide gender gap saying the universities should structure their programmes and admissions in order to provide equal opportunities for students of both gender.

She assured the gathering of the Ministry's support to the university to enable her fulfil her mandate in the most effective way possible. "I am aware that the institution has serious need in many areas including space, facilities and equipment. The Ministry will continue to work closely with you to find most innovative ways of tackling these challenges.

On his part, the Chairman of the Council Prof. Eshiwani noted that the application of research to spur innovation and the use of technology to create wealth are cornerstone pillars of the vision of The

Technical University of Kenya.

He expressed the Council's committed to the principles of equity and justice and therefore has established an environment where women and men are treated equally and with dignity. He explained that the Council has entrenched the affirmative action for women, persons with special needs and people from the marginalized regions in the employment processes. "We also actively promote the increased enrolment of female students into engineering and science courses. Council, in

Technical universities should put in place deliberate strategies to bridge the wide gender gap and structure their programmes and admissions to provide equal opportunities for students of both gender.

Prof. Suda

light of this has set aside some funds to support female students by award of bursaries to needy and deserving cases," he said.

The Chairman commended students for maintaining peace in their study environment and noted that the success of the education sector in contributing to manpower development require prudent use of time available. He urged them to remain good examples to their peers in other institutions of higher learning. **TN**

>> Continued from Page 1

Skills and knowledge for life

TU-K PARTNERSHIP WITH INDUSTRY STAKEHOLDERS BOOSTS INNOVATION

as TU-K focuses on practical orientation of students, the industry needs this calibre of manpower," he said.

The two institutions identified key areas of partnership which include; innovation, securing the input of industry practitioners and professionals into the training, and academic exchange programmes where students and staff will be attached at Safaricom Ltd for a certain period. This means that they will receive hands-on training at the facilities of the company and students will be allowed to go for academic tours of the facilities.

Vice-Chancellor Prof. Francis Aduol thanked Safaricom Ltd saying that the company will help accelerate the university's capacity in teaching and learning and improve on what is already available. He welcomed the partnership saying that the training will impart on the job experience of the trainees for the real world of work. He observed that innovation will solve problems of unemployment, industry as well as the community.

Prof. Aduol is optimistic that this will ensure that skills of the graduates meet the new challenges of the job market. He explained that the university has made it mandatory for students to undergo 12 weeks of internal attachment commonly known as Internal Industry

The journey that led to funding by Safaricom Ltd, started after a presentation on innovation capabilities of TU-K and the need to fund an innovation laboratory. This was done by the Director, Centre for Engineering Innovation and Production Dr. Eric Ogur, in October 2013 to Safaricom.

Dr. Ogur, exudes confidence that "Tech-venue" will provide a platform for students to develop and sharpen their skills. This in turn will enable them innovate and develop products and services that are required by industry and have a direct impact in improving lives in the community at large. The innovation laboratory will transform the way people perceive engineering education in the country and make a positive contribution to the entire region. "This is an exciting opportunity for me because we will soon become the most advanced Technical University in Africa with equipment to rival any leading university in the continent," he says.

STUDENTS' INNOVATIONS

Four Mechanical engineering students, John Wambugu, Peter Mbugua, Shadrack Maina and Amos Mwangi are the brains behind a 150-cc Off-Road Buggy Vehicle. The engine of the car is located at the rear part and the shell has no cover. Wambugu explains that this helps in air cooling and easy troubleshooting in case of a breakdown unlike a normal car where one has to open all parts to repair.

The car is cheap to produce and can be used to pull a cart with an extension at the front. It uses petrol for its operations. It is fast for it can cover a distance of 180 Kilometres per hour. The exhaust system is that of a motorbike. The stability of the car and its wheels are one of a kind making it perfect to manoeuvre in areas where large scale farming is practised.

This is rarely produced in the Kenyan market since most cars are conventional and their production is large compared to off road cars. The idea came up after visiting the Numerical Machining Complex (NMC). Having looked at the pioneer car, the Quadra decided to try and make it. The engineering students now target large scale farmers, companies and individuals who like social activities such as golfing or long drives.

Safaricom has been an active partner of learning institution. Whereas TU-K focuses on practical orientation of students, the industry needs this calibre of manpower.

Bob Collymore

Based Learning (IBL) under the supervision of the lecturers and 12 weeks of External Industry Based Learning.

Mr. Collymore was impressed that the students could handle systems and machinery while still on campus. He was particularly interested with the Off-Road Buggy vehicle, designed, developed and fabricated from scratch by the fourth year mechanical engineering students during their 12 weeks Industry Based Learning. He caused a stir at the university when he drove the buggy vehicle. The students have now set their sights on competing in the prestigious Formula Student competition organized by the Institution of Mechanical Engineers, U.K.

SAMSUNG ACADEMY OPENS AT TU-K



Industrialization and Enterprise Development Cabinet Secretary Mr. Adan Mohamed (in striped suit), Samsung's Vice President for East and Central Africa, Mr. Robert Ngeru (L) and VC Prof. Aduol witness the demonstration during the official launch of Samsung Academy at TU-K.

In a move geared towards improving the level of skill-sets in the country's engineering sector, The Technical University of Kenya and Samsung Electronics East Africa have partnered to launch an electronics engineering academy. The academy would equip students with hands-on skills in the repair and maintenance of air conditioning and refrigeration units.

During the launch, Industrialization Cabinet Secretary Adan Mohamed lauded Samsung's efforts in actively participating in skills-sharing programmes, which he said are critical to Kenya's economic and social development. He asked other industry players to form such linkages with learning institutions to correct technical skill-gaps. "The manufacturing sector is critical in elevating Kenya to a middle-income economy by 2030, hence the need to ramp up technical skills," he said.

He challenged learning institutions to make

use of partnership with the industry. "As we position ourselves for greater sustained economic growth, we foresee a need for specialized technical skills, which will not only ensure that we have trained labour and entrepreneurs, but also ensure that consumers who require repair and maintenance services can acquire them from professionally trained personnel," said Mohamed disclosing that the Government seeks to construct 60 more Technical Institutions in the country.

According to Samsung's Vice President for East and Central Africa, Mr. Robert Ngeru, the academy is part of the company's broader goal to train more than 10,000 Elec-

CS Adan Mohamed

tronics Engineers across Africa by the year 2015. The facility is an extension of the Samsung Engineering Academy that was set-up in 2012 at the Woodvale Centre in Westlands to address the technical and engineering skills shortage in Kenya and the rest of sub-Saharan Africa.



Mr. Mohamed signing visitor's book

The academy will equip students with hands-on skills in the repair and maintenance of air conditioning and refrigeration units by offering practical training and therefore creating opportunities for employment and entrepreneurship. Mr. Ngeru affirmed his company's commitment in training students on hands on skills that will enable them become competitive in a growing economy.

He further said that the training will address skill shortage given that the country currently imports electronics and other home appliances that need electronic specialists. "The number of electronics we are shipping into the country is increasing everyday, thus the need for these skills," Mr. Ngeru explained adding that the specialists would offer consumers a ready hand in fixing broken refrigerators and air-conditioners. "Samsung realized there was a gap in getting engineers who possess the right practical skills, hence the decision to establish the engineering academy. Our investment in this training centre is an additional initiative aimed at bridging this skills gap in the country, while at the same time giving youth a chance at entrepreneurship," he added.

TU-K Vice Chancellor Prof. Francis Aduol thanked the company saying that the facility was unique and offered the best opportunity for training young people. "We are glad to partner with Samsung, we are passionate about nurturing talents by exposing them to the necessary vocational training." He said and added that such programmes impart practical skills to students who have already learnt theory and therefore enable them to earn a living through capability of their hands. More than 120 TU-K students have graduated from the Samsung academy since it's

inception two years ago. TU-K lays more emphasis on the competency training through its renowned Industry Based Learning module, where students gain practical skills, internship and employment.

The VC also noted that such programmes give the university opportunity to interact at high level with the industry and the impact is useful. He said that a large pool of technicians would help support economic growth of the country and that he was optimistic that the course will help put in place mechanisms to spur industrialisation and economic Development. Some of the students who gave their testimonies said that the course had given them requisite knowledge to meet the challenges of the job market.

Since its launch in Kenya, the Engineering Academy has trained over 250 students in technical fields in line with its different business segments: Internet and Mobile which covers mobile phones and tablets, and Consumer Electronics which covers home appliances such as televisions, home theatres and sound systems, microwaves, refrigerators and washing machines among others.

TU-K Engineering students joined the Samsung Electronics Engineering Academy two years ago. They went through orientation and are still going on with their classes under the guidance of staff from the academy, who are impressed with the students' performance. They urged the students to keep up the momentum stressing that whatever they are learning will be of mutual benefit to them in their careers. Samsung Electronics has promised to equip all successful graduates of the programme with a tool kit, to help them reap the benefits of their training as soon as they complete their course. **TN**

TUK gets registered as a workplace

STAFF TRAINED IN OCCUPATIONAL SAFETY AND HEALTH

In one of the most colourful graduation ceremonies presided over by the Vice Chancellor of Technical University of Kenya, over one hundred and fifty (150) members of staff graduated as First Aiders and Fire Marshalls and were awarded certificates respectively. The Occupational Safety and Health (OSH) Committee members graduated with the statutory certificates in line with OSH Act, 2007. This was to boost the human resource capacity in the University which has to handle the growing student population.

The training was organized by TU-K's Occupational Safety and Health Committee (TUKOSHC) chaired by Director University Industry Partnerships Prof. Wilson Ogola. In August of this year, the committee surpassed TU-K performance contract appraisal to clinch over 100%.

In his remarks during the event, Prof. Ogola thanked the Vice Chancellor for appointing him and giving the team enough support to enable them achieve the attained targets and go beyond. He further hailed team spirit among members.

TUKOSHC accomplished eleven tasks including three outlined in the 2012/2013 Performance Contract. Amongst them is the official registration of TU-K as workplace by the Directorate of Occupational Safety and Health Services. TU-K main Campus, Men and Women hostels have been officially registered as workplaces.

Among the achievements the committee has made include; drafting TU-K's Occupational Safety and Health Policy, accomplishing Internal Risk (Safety and Health) assessment, training eleven (11) OSH Committee members as a legal requirement, facilitating External Safety and Health Audit by Howard Humphreys (East Africa) Limited, erecting signage at the Main Campus gate, Men's and Women's hostels, visiting industries for bench marking, training 100 students on First Aid and a further 100 on fire fighting.

In his remarks while welcoming the Vice Chancellor, the Deputy Vice-Chancellor Administration, Planning and Infrastructure (DVC-API), Prof. Joseph Kiplang'at underscored the importance of safety and health as well as fire training and asked if more staff and students could be trained on the important aspects in life. He thanked the committee for their commitment which made the University score highly in performance appraisal.

The Vice Chancellor congratulated members of staff for acquiring new certificates and asked them to make use of the skills acquired to improve safety and health matters in the institution. "The con-



VC hands over the First Aid Certificate to Ms. Hellen Kabue-one of the participants.



Fire Fighting Practical Sessions at the Women's Hostel in May 2014.



TUKOSHC members during an Industrial visit at the Bamburi Grinding Plant in March 2014.

vised space we work in requires all of us to be aware of the dangers we live in, which include fire," he said and asked the committee to organize fire-drills and regular trainings as well as assigning first aiders

safety and health duties within campus. He said that this will make workplace friendly and safe. He wished them well in their undertakings. The committee has published its activities on the TU-K-website. **TN**

SECURITY SERVICES AT THE UNIVERSITY

Our responsibility includes providing and maintaining a protected and secure environment for all persons in the University, to protect University assets from theft, damage or destruction, to respond to emergencies and to ensure that all University statutes and senate directives are adhered to. These responsibilities however must be undertaken within the legal parameters of the law of the land and standards set must be consistent with the general national standards.

The department has developed very

cordial working relations with the national security organs. A secure organisation's environment may not come out as what really drives the business but it is the silent force upon which a business draws stability. Presence of security may not necessarily propel a business forward but in its absence, all other business operations are badly exposed. We are a friendly but firm team out to create a conducive environment in order to fulfil our motto, "Education and Training for the real world."

FEE PAYMENT MADE EASIER

Once students pay their fees at the bank, they are required to avail the bank slips to the accounts office for receipting within 24hrs. This is one of the control measures put in place by the management to evade excess cash handling. An official receipt is then issued to the student therefore he/she is advised to confirm that the registration number appearing on the receipt is correct. The online fees statements are constantly updated. Students should regularly confirm this by checking updates of their statement and also compare the receipt numbers and amounts indicated in the fee statement with the physical receipts issued by the accounts office. Any discrepancy noticed should be reported to the Faculty Accountants for verification and correction. Students are also advised to pay their fees in good time to avoid any inconvenience attributed to last minute rush during examination period.

NAIVASHA POST SECONDARY EDUCATION EXPO

Deputy President William Ruto has urged TU-K to continue offering high quality education and training that is associated with the history of the institution. This follows a visit to TU-K stand during the recent Naivasha Post-Secondary Education Expo which took place at Naivasha Studium recently. The Expo whose main objective was to expose school leavers and other interested persons to existing training and career opportunities in the country, was organized by the Member of Parliament for Naivasha Constituency, Hon. John Karanja Kihagi.

The DP was taken through the exhibits by TU-K Chairperson of Image and Communication Committee Dr. Omondi Okech. It is worth noting that upon being briefed that the Technical University of Kenya is continuing with the mandate of training personnel in the TVET programmes, in addition to offering technology related degree programmes, the DP was impressed and reiterated his strong belief in the programmes. Dignitaries accompanying DP among them Nakuru County Governor, Hon. Kinuthia Mbugua and the area MP, Hon. Kihagi, expressed the desire to collaborate with TU-K on matters of techni-

The organizers attributed this to the desire to work in partnership with the University to produce hands on human resource for the Constituency.

cal education. Mr. Kihagi promised to pay a courtesy call to the Vice Chancellor and explore the matter further.

The Expo attracted mainly Secondary School students, Kenya Certificate of Secondary Education graduates waiting to join universities, middle-level college students, teachers, parents and guardians within Nakuru County. On the average, TU-K stand was the most visited given that it was the main University invited to the Expo. The organizers attributed this to the desire to work in partnership with the University to produce hands on human resource for the Constituency. Other visitors included; Nakuru County Deputy Governor, Hon. Joseph Ruto and County Cabinet Secretaries.

The University has embarked on strengthening the outreach programme to offer and reiterate the mandate of training both TVET and bachelors programmes.

TU-K SHINES AT THE 2014 UNIVERSITIES EXHIBITION



Education Science and Technology Cabinet Secretary Prof. Jacob Kaimenyi being taken through exhibits at TU-K stand by Chairperson of Image and Communication Committee Dr. Omondi Oketch



Principal Secretary in the Ministry of Education Dr. Richard Belio Kipsang' talking to DVC-ARS Prof. Paul Shiundu, DVC- API Prof. Joseph Kiplang'at and other team members

Meanwhile, 2014 exhibition by Kenyan Universities was held in Eldoret in March this year. This was the first time the exhibition was carried out under the devolved county structure in line with the devolution agenda, Uasin Gishu County was privileged to play the host. TU-K exhibition team benefitted from the leadership and presence of DVC's and Executive Deans.

The team exhibited existing programmes to prospective students. It was an opportunity for the university to market and showcase flagship programmes as well as persuade prospective students and other stakeholders to consider joining our programmes or partnering with us. All the three faculties were represented by members of staff who were available to engage prospective students with indepth explanations of what each programme in the faculty entailed. The academic representatives of the faculties also offered career guidance to the students. The TU-K stand received visitors who included parents, guardians and potential students.

Dignitaries who visited out stand included Cabinet Secretary, Prof. Jacob Kaimenyi, the Principal Secretary, Dr. Belio Kipsang and the Deputy Governor, Uasin Gishu County, Hon. Daniel Kiprotich Chemno. They were hosted in the Vice-Chancellor's lounge by the Deputy Vice-Chancellor ARS, the Deputy Vice-Chancellor API, the Executive Deans of FEST, FAST and FSST and the Chairman of the Image and Communications Committee. Besides the VIPs our stand was also visited by primary school pupils, secondary school students, KCSE graduates waiting for university admission, middle-level college students, teachers, parents and guardians.

The guest of honour Prof. Kaimenyi was particularly happy with the new Centre for Innovation, Science and Technology. He emphasized on the need to support, strengthen and foreground the innovations from this centre in future exhibitions arguing that as a technical University the institution should strive to project innovations in engineering and technology as its core mandate. **TN**

DIRECTORATE OF POSTGRADUATE STUDIES ORGANISES SECOND SCIENTIFIC RESEARCH CONFERENCE

This year's conference took place at the Kenya Institute of Curriculum Development (KICD), Nairobi. The theme of the conference was, "Technologies and Socio-Economic Development achievements for realization of Kenya's Vision 2030."

The call which was sent out in January 2014 addressed seven sub-themes which was covered in the conference, that is, engineering and manufacturing; food science, agricultural development and biotechnology; wildlife, environment and climate change; ICT, energy, tourism and financial services; health, biomedical sciences development, water and sanitation; education, housing, gender, youth and vulnerable groups and law, electoral and political process, democracy and public services delivery, transparency and accountability, security and peace.

The response was good and the quality of presentations was equally high. Among the parastatals represented in the conference were; Vision 2030 Chief Executive Officer (CEO) Prof. Wainaina Gituro, National Commission for Science and Technology (NACOSTI) CEO was represented by Mr. Said Hussein. Others were Kenya Bureau of Standards (KEBS), Kenya Industrial Property Institute (KIPI) and Kenya Medical Research Institute (KEMRI). The parastatals gave interesting keynote addresses on their respective areas of jurisdiction.

The participants appreciated the presentations made by the CEO's and their representatives and found them informa-



Participants in a group photo at KICD. Right: Prof. Francis Gatheri, Director, School of Mathematics and Actuarial Sciences, making his presentation at the conference

tive as they clarified major issues that directly influenced their researches. Other interesting keynote addresses were given by TU-K academic staff Dr. David Otwoma (on Energy), Dr Patrisio Njiru (on Biotechnology) and Dr Vijay Adolkar (on Silk production).

Many platform power point presentations were made mainly in the areas of microbiology, agriculture, pharmacy and drugs, engineering, environmental contamination, climate change and biotechnology. It was suggested that in future, more focus be made on latter subthemes such as education, housing, gender,



youth, vulnerable groups and law, electoral and political process, democracy and public services delivery, transparency and accountability, security and peace. The conference also attracted postgraduate students from University of Eldoret, University of Nairobi, Kenyatta University and Jomo Kenyatta University of Agriculture and Technology. **TN**

FIRST EAST AFRICAN GEOSCIENCES



Kenya has in recent times made significant progress in discoveries of large deposits of Coal, Oil and gas, both offshore and onshore and industry players are currently looking for experts for instance technicians, engineers and exploration geophysicists. The Technical University of Kenya has been identified by stakeholders as the right institution to provide training in this area and the School of Physical Sciences and Technology has been taken up the challenge to come up with curricula in geosciences, starting from Certificate, Diploma, Post graduate diploma and Degree

UNIVERSITY IMAM WEIGHS IN ON SPIRITUAL DEVELOPMENT IN EDUCATION AND TRAINING



From the Muslim Chaplaincy

In order to provide a conducive learning environment and address diverse multi cultural and multi religious needs and interests, TU-K has a fully functional Directorate of Student Support Services. The Directorate houses the Department of Student Life and Development which consist of the Muslim, Catholic and Protestant Chaplaincies. The inclusion of Muslim raises the profile as well as creates awareness of the status, role and aspirations of the Muslim Community in the university.

The appointment of Sheikh. Mohamud J. Ali as Muslim chaplain has further strengthened the Muslim Community which comprises students and staff. Membership has been growing steadily. The objective role of Sheikh Ali is to cater for the religious and spiritual needs of the Mus-

lim community while at the same time engaging the university management on issues affecting Muslims in various ways. His presence enhances an environment of mutual cohesion, support and cooperation among members of all faiths, who have their respective chaplains.

Chaplaincy provides Spiritual Growth to University Community

The core role of the islamic chaplaincy is to address the spiritual and pastoral needs of the students and staff irrespective of their religious orientation. Other duties include; offering guiding and counselling, dissemination and facilitation of islamic education for Muslims in the university and beyond. Such activities are crucial in promotion of peace and co-existence among various denominations within the university.

The establishment of the Muslim Students Association of TUK (MSATUK) enabled the members to participate actively during Muslim Sports Day held at Kenyatta University in February of this year and marked a big milestone for the group.

The chaplain has cautioned that the best avenue of mitigating an extremist thinking is by meaningful engagement of the youth, and a robust program of mentoring and orientation based on acceptable islamic teachings and doctrines. It is a considered opinion of the University Muslim Imam, as other Muslim leaders, that Muslim youth be oriented through proper guidance and mentoring while availing them opportunities for spiritual nourishment.

Sheikh Mohamud Jama Ali, the University Imam **TN**

STUDENTS CONFERENCE

levels.

TU-K students' chapter of the Society of Exploration Geophysicists (TU-K-SEG) and the Kenyan Chapter of the Society of Exploration Geophysics (KSEG) organized a conference which was held at TU-K Main Hall and officially opened by the Vice Chancellor Prof. Francis Aduol. The meeting was organized by Prof. Paul Baki (Patron- TU-K- SEG) and Mr. Charles Ochola Osango (President -KSEG).

This conference was the first initiative towards achieving this objective. Towards this end, the Society of Exploration geophysicists based in the United States of America donated books to TUK-SEG for

use in training exploration geophysicists. The books have been handed over to the university library.

Participants to this meeting comprised of students drawn from TU-K, Kenyatta and Masinde Muliro Universities. Resource persons included academicians, practicing lawyers, consulting geologists, and postgraduate students.

The presentation touched on legal issues in Oil and gas exploration, mining and revenue sharing, Techniques in geophysical prospecting, overview of regulatory framework in exploration and mining, as well as historical development on mineral resources exploration and mining in

Kenya in particular and Africa in general. The future looks bright for TU-K in this arena and we are determined to scale the heights. **TN**

The presentation touched on legal issues in Oil and gas exploration, mining and revenue sharing,

UNIVERSITY LIBRARY GOES DIGITAL



Installation of access control system

TU-K has installed a new biometric system with Radio Frequency Identification (RFID) technology. This ranks the institution among the few universities which have acquired the latest technology used in library security systems to control access. The machine restricts entry into the library to only registered users. The thumb

Our aim is to go electronic as much as possible. However, the university is still committed to buying more books in hard copies.

Prof. Aduol

prints are uploaded into the system for confirmation purposes. While launching the facility, Vice-Chancellor Prof. Francis Aduol said that this marked a milestone for the university in moving from manual to digital catalogue.

RFID-based technology is a versatile system, enabling users to access books and journals wherever they are. The sys-

tem combines security with more efficient tracking capacity of materials throughout the library, including easier and faster charge and discharge, inventory, and material handling.

TU-K library has witnessed a great transformation in recent years both in collection development and in the service delivery. It has subscribed to Electronic-books and journals. The VC noted that electronic resources are invaluable research tools that complement the print-based resources in a traditional library setting. He said that he was pleased the library currently works in a modern way.

Prof. Aduol challenged students and staff to develop passion for reading and encouraged them to utilise the library. "I believe this will make an impact in the lives of many library users mostly students and teaching staff," he noted.

The VC directed executive Deans to take charge of their Departments, appoint a library representative whose role will be specifically to give titles of the books required to the librarian, and ensure that they are purchased. This he emphasised, will promote the culture of reading hence move the university to higher academic standards.

He noted that he was keen on seeing how the equipment works and asked staff at the library, to remain vigilant, utilise

the system and ensure that the books are not tampered with. He also asked them to bring on board major publishers. The VC disclosed that the university has a long term plan of establishing a bigger library so that the current one remains a special one. "Our aim is to go electronic as much as possible. However, the university is still committed to buying more books in hard copies," he said. He was accompanied by DVC-ARS, Prof. Paul Shiundu, DVC-API, Prof. Joseph Kiplang'at, Executive Deans and Director, Library and Learning Resources, Ms. Sarah Kibugi.

The E-resources Week

Last year the library organized an E-resources week for the University community. It was meant to create awareness on the available scholarly information not held locally. TU-K partnered with various publishers such as Elsevier, Springer, Emerald and Project Muse. The sponsorship was in form of branded pens, mouse pads, flash disks and book marks.

E-resources can be accessed from any computer on campus, any time. Each electronic resource can be searched quickly and easily through the complete full text of articles and via online index and appear online before printed version is available at high speeds.

AS UN-HABITAT DONATES BOOKS



The UN-Habitat recently donated books to the Technical University of Kenya (TU-K). While presenting the gift, the organization's Human Settlement Officer Dr. Kibe Muigai said that they were keen on working with TU-K in pursuit of her dream of offering quality education and training. The books he said, will be useful in the teaching of programmes such as architecture, urban planning, among others.



Hypertext format should be exploited and links to related articles, information on other web sites, stable URLs for individual articles and email alerts when any latest issue is loaded. The library organized a one day workshop for writers and was attended by members of staff and students.

Digital Institutional Repository

It is an online system used for collecting, preserving, and disseminating digital copies of the intellectual output of an institution. One can easily refer to projects that had been presented earlier by the students.

American Reference Centre Rotating Collection

The library has received the second consignment of the American collection in various subjects, this is very popular with users.

TU-K Vice-Chancellor Prof. Aduol received the donation and expressed his gratitude saying that the books are expensive materials in any part of the world and should therefore be highly valued. He added that the donation comes to the university at the right time when the institution is upgrading her learning resources as well as working on mechanisms that would see expansion of the library conform to the new status. The move will boost learning and research at the university and therefore ensure that students have a competitive edge over the rest. Presently, TU-K library has brought in a lot of books and journals and installed a new system that enables the user access all services electronically.

Prof. Aduol challenged staff to instil in students the culture of reading, saying it helps in shaping their thinking, character and approach to issues. "If you train students the habit of reading, they become inquisitive and end up loving books," he

emphasized.

The university is also collaborating with UN-Habitat in other areas, a move that will ensure that TU-K benefits from other academic resources. TU-K library will establish 'UN corner' where books and other resources from UN will be kept. Currently the books are stocked in the Special Collection of the Library.

Dr. Muigai further said that he was looking forward to working with the university and will be ready to support in any way. "I appreciate your thoughts and sentiments, the best way of imparting knowledge and right skills in young people is to train them to read. As an institution, you have a responsibility and as your partner, we are equal to the task," he said. Dr. Muigai was accompanied by a Consultant, Urban Governance and Local Government Decentralization Unit, Ms. Jane Lumumba and UN Habitat Production Assistant Mr. Jacob Ojwan'g. **TN**

Students challenged to champion their course intelligently

STUDENTS' FIRST ANNUAL LEADERSHIP FORUM



The immediate former Chairman on the Students Association of The Technical University of Kenya, Mr. Ngugi wa Thiong'o, addressing students at the forum

The First Annual Students Leadership Forum was held at the Assembly Hall in the month of July this year. It addressed topics on; fighting tribalism, transformation, youth leadership, entrepreneurship, empowerment, character and role modelling. The event which was organized by the outgoing leadership of the Student Association of the Technical University of Kenya (SATUK) in conjunction with the university administration took place at the main hall. Lecturers, students and invited guests listened as speaker after speaker addressed them.

Academic Division was represented by Rev. Chalton Ocholla and Dr. Ong'ong'a Achien'g of School of Business and Management Studies. The Chief Guest Prof. Patrick Loch Otieno 'PLO' Lumumba was represented by Dr. George Washington Mwiti. Other invited guests were; Prof. Julius Bitok, Financial Director, Office of the President, Miss Pauline Njoroge, Communications Officer NEPAD-Kenya Mr. Meshack Ian Kimutai Chair, National Youth Alliance among others.

The program's moderator, Citizen TV news anchor Kirigo Ng'arua, started by thanking the event organizers saying it provided opportunities for students to learn a lot. The outgoing SATUK Chairman Ngugi wa Thiong'o welcomed everyone and urged students to put into practice, whatever will be said. His sentiments were echoed by outgoing Secretary General, Meshack Ian Acholla who added that

students needed to embrace transformation.

The chief guest Dr. Mwiti, an alumnus of the institution at a time it was Kenya Polytechnic advised students that one should achieve his/her highest expectation, which according to him is between the age of 25 and 35 years. He defined leadership as the capacity to have obedience. "It is impossible to rightly govern a nation without God and the Bible," said Dr. Mwiti, adding that one of the greatest enemies is laziness of the body, mind and spirit. He noted that strong leadership is measured by two things, capacity to reject anything that is evil.

His speech was inspiring. This was visible from the patience and high levels of concentration demonstrated throughout the forum. "The ball is now in everyone's court. It is the duty of everyone to take up the challenge and put everything learnt into practice. Surely, a bright future looms if all these are to be considered utmost," added Dr. Mwiti.

Dr. Achien'g welcomed the move to hold the conference since it ensured progress in building the institution's image. He urged the youth to take up leadership, which is not only inclined to political but also other areas. He said that he was liaising with other mentors with the aim of taking the initiative to a higher level. His sentiments were echoed by Rev. Ocholla who noted that the youth have got so many opportunities. He therefore urged them to take their right position in the development of the nation. While giving

an example of Mr. Duncan Kihara, former SATUK Chairman who is currently a Member of County Assembly (MCA) Kabaru Ward Nyeri County. He noted that leadership starts at an early age.

Mr. Kimutai urged students to remain focused, nurture their ambition and champion their course with passion if they have to remain relevant in this competitive world. He challenged the youth to take up initiatives and avenues that will ensure they are economically, socially and politically empowered. To achieve their dreams, he said that they will need to have the will, believe in themselves and make use of available opportunities from the government such as the Youth Enterprise Development Fund and Uwezo Fund.

Tribalism being a subject of concern in the country at the moment was also discussed. Mr. Mike Rotich urged young people to stand, think and act beyond their surnames. Prof. Julius Bitok addressed the issue of Role Modelling, highlighting that the university is the seedbed for training a leader. He mentioned five C's that are key in any youth's development. These include; Character which has to be beyond reproach, Confidence, Creativity for the sake of innovativeness, Connectivity of the mind and the people anyone wants to lead and Creed or religion which is the opium of the mind as well as what one believes and stands for.

By Willis Ojwang



SPORTS DISCIPLINE AND RECREATION ACTIVITIES

THE TU-K Sports and Recreation Department offers many different sports, games and recreational activities. The Department is headed by the Senior Assistant Dean of Students in charge of Sports and Recreation, Mr. Maurice Ochien'g Onyango.

Last year, the teams participated in various competitions such as; TU-K Inter Schools Sports Day championships and tournaments. Inter Universities and Colleges Leagues and Tournaments (UCL), Kenya Universities Sports Association (KUSA) Championships at conference (zonal) level and National level, East African Universities Sports Federation (EAUSF) championships involving Kenya, Uganda, Rwanda, Tanzania, Southern Sudan, Somalia and Burundi, Federation of African Universities Sports (FASU) Championships, International Federation of Universities Sports (FISU) championships, National Sports Federations leagues and championships.

Soccer Men

This was the first team to bring trophy to the university immediately after the award of the charter in January last year.

The team won the Nairobi Region Mayoral cup and was awarded sh. 100,000/=. The team was also the overall Kenya Universities Sports Association (KUSA) Champions of 2012-2013 season.

The team currently enjoys a good run in the Kenya Universities Sports Association and Universities and Colleges Football Leagues Nairobi Zone. It is the current Nairobi (conference) Zone champion and are going to represent the (conference) Zone in the KUSA inter-conference play offs.

Soccer Ladies

TU-K ladies soccer team is currently placed in position two at the Kenya Universities Sports Association and Universities and Colleges Football Leagues. The team has so far won two trophies i.e Karatina University Open and St. Paul's University Open Championships. The team is breathing fire and expects a trophy during the fourth coming KUSA National Championships.

Rugby

The team participated in the Universities League and also the Kenya Rugby Union National both Sevens and Fifteens in

2013. It emerged the national universities champions, Christie Sevens Champions in Mombasa and Mount Kenya Sevens Champions in Nyeri.

The Rugby team "the Mustangz" has qualified for National semi finals play offs after finishing the winners in the nationwide league. They walloped Egerton University 27-13 in the quarter finals at Egerton Njoro grounds.

Indoor Games

TU-K Chess team plays both in the KUSA League and the Chess Kenya national league, where we are currently placed fourth in the chess Kenya league. Table Tennis and Badminton are equally doing well in their National Federation's league and KUSA leagues.

Our ladies scrabble team is the current KUSA National Women Champions. Ms Evelyn Njogu is the overall Universities Champion and is also a member of the Kenya National Team -Scrabble Kenya.

She represented the country in Kampala Uganda, for the East African Championships in 2013.

All the indoor teams participate in the National Federation Leagues, KUSA Leagues and tournaments



PERFORMING ARTS AT

AST year's graduation marked the climax of performing arts at the university. Music, song and dance was the heart beat driving the event. Another grand display took the form of the culinary presentations and the decoration of the refreshment venues, courtesy of

School of Hospitality and Tourism Studies. Whereas the latter involved University administrative personnel, staff and students involved in hospitality and event management as areas of academic pursuit, the former saw a mixture of music educators and students, as well as many student artists, drawn from all the facul-

ties, collaborate in a programme that earned the teams the praise of many graduands and guests.

The two-part programme consisted of music and dance performed before and after the academic procession. The first session included staff performance where Prof. Maina Maringa, Executive Dean, Faculty of Engineering Science and Technology (FEST) presented a well-received sacred solo song, his own composition, that displayed an even baritone voice with clearly articulated message delivered through a pleasant, singable melody with easy and accessible harmony. Similarly, Ms Mumbua Kioko of the Department of Music and Performing Arts gave a splendid recital of the first movement of Clementi's piano sonata in G. She was joined by students and renowned instrumentalist, Maasai Mwata, in a mixed ensemble rendition of 'Can't Help Falling in Love with You', aptly narrated, sang and played on flute, saxophone, piano, keyboard, mabumbumbu and uteu. The Seventh Day Adventist (SDA), Young Christian Students



TU-K GOING STRONG

(YCS) and Christian Union (CU) choirs led the audience in expressing great appreciation to the Almighty for His goodness that endures forever as each team sang a song of praise, in their distinctive styles, from hymns to contemporary gospel.

In the second session, the staff choir, boosted by music students, gave an item adapted from a Nandi folk song, Lelo, a celebratory piece. In a display of high levels of technical skill and coordination, the team of music students and staff performed 'Don't get around anymore', a jazz arrangement by Duke Ellington, to a resounding applause. In a departure from previous years, the drama club's presentations were confined to two dances, a Gikuyu dance for women and a Maasai dance for men, each focused on celebrating the success of the academic year that made the graduation ceremony possible. Ornatly attired in relevant costume, the two teams presented authentic song and dance, with performers so immersed in the performance that it was hard to believe that not all were native speakers of the language

represented by the cultural item.

The ceremony provided opportunity for the premier of a song that could well become the TU-K Anthem. The prayerful, jubilant anthem, composed by Dr. Gabriel Musungu, was an instant hit with both the singers and the graduation committee. Scored for a four-part mixed chorus

and piano, the song's Kiswahili text lends itself to a rhythmic, melodious tune, to which Musungu supplied a booming bass, vibrant tenor and warm alto. The song is majestic and works well with a large ensemble, with each of its stanzas extolling a marked aspect of TU-K while praying for guidance and blessings. TU



TIM THE SMOKER

STEVE: How many cigars do you smoke a day?
 TIM: About ten."
 STEVE: What do they cost you?"
 TIM: Twenty cents a piece."
 STEVE: My, that's two dollars a day. How long have you been smoking?"
 TIM: Thirty years."
 STEVE: Two dollars a day for thirty years is a lot of money."
 TIM: Yes, it is."
 STEVE: Do you see that office building on the corner?"
 TIM: Yes."
 STEVE: If you had never smoked in your life you might own that fine building. Do you smoke?"
 TIM: No, never did."
 STEVE: Do you own that building?"
 TIM: No."

THE TEACHER AND THE PUPIL

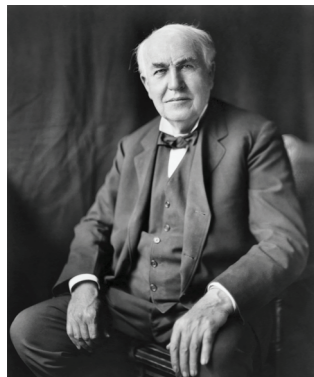
TEACHER: I told you to stand at the end of the line?
 PUPIL: I tried, but there was someone already there!

THE SCHOOL GIRL

The new family in the neighborhood overslept and their six-year-old daughter missed her school bus. The father, though late for work himself, had to drive her. Since he did not know the way, he said that she would have to direct him to the school. They rode several blocks before she told him to turn the first time, several more before she indicated another turn. This went on for 20 minutes – but when they finally reached the school, it proved to be only a short distance from their home. The father, much annoyed, asked his daughter why she'd led him around in such a circle. The child explained, "That's the way the school bus goes, Daddy. It's the only way I know."

"Genius is one percent inspiration, ninety-nine percent perspiration."

– Thomas Alva Edison, Harper's Monthly (September 1932 edition)



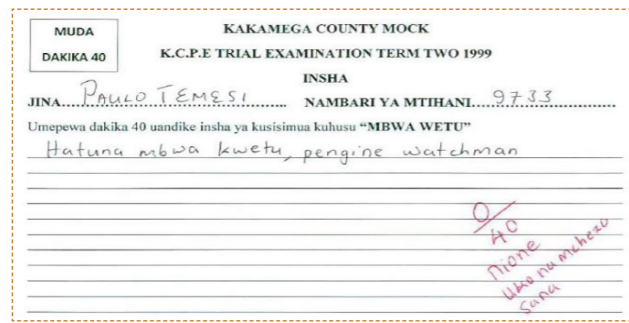
Thomas Alva Edison (February 11, 1847 – October 18, 1931) was an American inventor and businessman. He developed many devices that greatly influenced life around the world, including the phonograph, the motion picture camera, and a long-lasting, practical electric light bulb. Dubbed "The Wizard of Menlo Park", he was one of the first inventors to apply the principles of mass production and large-scale teamwork to the process of invention, and because of that, he is often credited with the creation of the first industrial research laboratory.

Edison was a prolific inventor, holding 1,093 US patents in his name, as well as many patents in the United Kingdom, France, and Germany. More significant than the number of Edison's patents was the widespread impact of his inventions: electric light and power utilities, sound recording, and motion pictures all established major new industries world-wide. Edison's inventions contributed to mass communication and, in particular, telecommunications. These included a stock ticker, a mechanical vote recorder, a battery for an electric car, electrical power, recorded music and motion pictures.

His advanced work in these fields was an outgrowth of his early career as a telegraph operator. Edison developed a system of electric-power generation and distribution[5] to homes, businesses, and factories – a crucial development in the modern industrialized world. His first power station was on Pearl Street in Manhattan, New York.

Source: Wikipedia

IN AN EXAMINATION ROOM:



WHY MEN SHOULD NOT WRITE ADVICE COLUMNS:

Dear John,
 I hope you can help me. The other day, I set off for work, leaving my husband in the house watching TV. My car stalled, and then it broke down about a mile down the road, and I had to walk back to get my husband's help. When I got home, I couldn't believe my eyes. He was in our bedroom with the neighbor's daughter! I am 32, my husband is 34 and the neighbor's daughter is 19. We have been married for 10 years. When I confronted him, he broke down and admitted they had been having an affair for the past six months. He won't go to counseling, and I'm afraid I am a wreck and need advice urgently. Can you please help?
 Sincerely, Sheila

Dear Sheila,
 A car stalling after being driven a short distance can be caused by a variety of faults with the engine. Start by checking that there is no debris in the fuel line. If it is clear, check the vacuum pipes and hoses on the intake manifold and also check all grounding wires. If none of these approaches solves the problem, it could be that the fuel pump itself is faulty, causing low delivery pressure to the injectors.
 I hope this helps,
 John

MEAN BUT FAIR

Describing his teacher to his mother, Jimmy called her "mean but fair."
 "Just what do you mean by that?" – his mother asked.
 "She is mean to everybody." – Jimmy replied.

THE KEYBOARD VS. THE MOUSE

CALLER: Oh, no, it's just the stupid, stupid design of this computer. Every time I want to click something, I have to unplug the keyboard to plug in the mouse. And then every time I want to use the keyboard again, I have to unplug the mouse. Because there's only one jack.

AGENT: Ma'am, you do realize that there's a jack on the keyboard itself? You're supposed to plug the mouse into the keyboard, and the keyboard into the computer.

CALLER: Are you kidding me!? Oh, wait a minute—yes, I see it now! Oh, holy cow. That's going to be so much easier!

AGENT: Just out of curiosity, how long have you been using your computer that way?

CALLER: Six weeks!

TECH-SAWY HELP

Once upon a time, a computer programmer drowned at sea. Many were on the beach and heard him cry out, "F1! F1!", but no one understood.

(F1! = Help!)

DID YOU KNOW...?



The human eye can distinguish about 10 million different colors.

In the border between Egypt and Sudan, there are 795 sq miles (2,060 km²) of land unclaimed by neither

In 1962, the U.S. blew up a hydrogen bomb in space that was 100 times more powerful than Hiroshima

An adult produces enough hydrogen in their urine each year to drive a car 1,677 miles (2,698 KM)

There is a gene that can cause you to be negative most of the time.

Most people cannot watch TV with an odd volume level

2,520 is the smallest number that can be exactly divided by all the numbers 1 to 10.

DEGREE, DIPLOMA AND CERTIFICATE PROGRAMMES

FACULTY OF ENGINEERING SCIENCES AND TECHNOLOGY
Bachelor of Philosophy in Technology (Construction Management)
Bachelor of Built Environment (Real Estate and Property Management)
Bachelor of Technology (Architecture)
Bachelor of Built Environment (Urban and Regional Planning)
Diploma in Technology (Building Construction)
Diploma in Technology (Architecture)
Diploma in Technology (Quantity Surveying)
Diploma in Technology (Real Estate and Property Management)
Bachelor of Engineering in Geospatial Engineering
Bachelor of Technology (Btech): • Geoinformation Technology • Surveying Technology
Bachelor of Philosophy in Technology: • Geoinformation Technology • Surveying Technology
Diploma in Technology: • Geoinformation • Surveying
Bachelor of Philosophy (Electrical and Electronic Engineering Technology)
Bachelor of Engineering in Electrical and Electronic Engineering
Bachelor of Technology in Electrical and Electronic Engineering Technology
Bachelor of Technology in Electrical and Electronic Engineering Technology
Diploma in Technology (Electrical and Electronic Engineering)
Bachelor of Engineering in Civil Engineering
Bachelor of Technology in Civil Engineering
Bachelor of Philosophy in Civil Engineering
Dip-Tech – Civil Engineering
Bachelor of Engineering in Aeronautical Engineering
Bachelor of Engineering in Chemical Engineering
Bachelor of Technology in Chemical Engineering
Bachelor of Philosophy in Mechanical Engineering Technology
Bachelor of Engineering in Mechanical Engineering
Bachelor of Technology in Mechanical Engineering Technology
Certificate in Technology Module I – Options: • Manufacturing Engineering • Industrial Plant and Energy Engineering • Automotive and Autotronic Engineering • Structural Fabrication and Metallurgical Engineering • Refrigeration and Air Conditioning Engineering: • Mechatronic Engineering
Motor Vehicle Mechanic I
Mechanical Engineering Technician Part II (Production Option)
Mechanical Engineering Technician II (Plant)
Certificate in Aircraft Maintenance Engineering
FACULTY OF APPLIED SCIENCES AND TECHNOLOGY
Bachelor of Science in Mathematics
Bachelor of Technology in Applied Statistics
Bachelor of Philosophy in Technology (Applied Statistics)
Diploma in Technology: (Options) • Applied Statistics • Actuarial Science

Bachelor of Technology In: (Options) • Computer Technology • Information Technology • Communication and Computer Networks.
Certificate in Computer Technology
Certificate in Information Technology
Certificate in Computer Hardware, Software and Network Support Technology
Bachelor of Philosophy in Technology in Applied Chemistry (Analytical Option)
Bachelor of in Technology in Applied Chemistry (Industrial Chemistry)
Bachelor of Technology in Technical and Applied Physics
Diploma in Technology in Analytical Chemistry
Diploma in Technology in Industrial Chemistry
Bachelor of Technology in Environmental Resource Management
Bachelor of Technology in Environmental Science
Bachelor of Technology In: (Options) • Applied Biology • Biochemistry (Industrial, Nutritional and Medical Options) • Biotechnology (Industrial and Medical) • Food Science and Technology • Environmental Resource Management
Bachelor of Philosophy In: (Options) • Applied Biology • Biotechnology (Industrial and Medical Options)
Diploma in Technology in Environmental Resource Management
Diploma in Technology In: • Industrial and Applied Biology • Biotechnology • Biochemistry • Food Science and Technology
Bachelor of Technology In: Community and Public Health
Bachelor of Technology In: Community and Public Health
Bachelor of Technology in Medical Laboratory Technology
Bachelor of Philosophy in Medical Laboratory Technology
Bachelor of Technology in Medical Laboratory Technology
Bachelor of Technology in Nutrition and Dietetics
Bachelor of Technology in Nutrition and Dietetics
Diploma in Community and Public Health
Diploma in Pharmaceutical Technology
Diploma in Technology (Health Records and Information Technology)
Diploma in Medical Laboratory Technology
Diploma in Technology Nutrition and Dietetics
Certificate in Nutrition and Dietetics
Certificate in Health Records and Information Technology
FACULTY OF SOCIAL SCIENCES AND TECHNOLOGY
Bachelor of Commerce (Options): • Accounting • Finance • Business Management • Human Resource Management • Marketing Management • Logistics and Supply Chain Management • Entrepreneurship • Insurance
Bachelor of Science in Accountancy
Bachelor of Business Information Technology
Bachelor of Technology in Office Administration and Technology

Diploma in Business Information Technology
Diploma in Business Studies Options: • Business Administration • Human Resource Management • Sales and Marketing Management • Procurement and Supply Chain Management
Diploma in Accountancy
Diploma in Office Administration: • Legal Secretarial • Medical Secretarial • Business Secretarial • Foreign Language Secretarial
Certificate in Fleet Management and Transport Logistics. Module I
Certificate in Fleet Management and Transport Logistics. Module II
Bachelor of Science in Information Studies
Bachelor of Technology in Information Studies
Bachelor of Technology in Journalism and Mass Communication
Diploma In: (Option) • Archives and Records Management • Library and Information Science
Diploma of Technology in Journalism and Mass Communication
Bachelor of Economics
Bachelor in International Relations and Diplomacy
Bachelor of Science Counseling Psychology
Bachelor of Technology in Counseling Psychology
Diploma in Legal Studies
Diploma in Counseling Psychology
Diploma in International Relations and Diplomacy
Certificate in Disaster Management
Bachelor of Technology in Design
Bachelor of Music
Bachelor of Technology in Music
Bachelor of Philosophy in Technology (Printing)
Diploma in Music
Diploma of Technology in Printing
Diploma in Technology in Design
Diploma in Technology (Fashion Design)
Certificate in Technology (Communication Design/Product Design)
Cert. in Fashion Design and Garment Making
Certificate in Hair Dressing and Beauty Therapy
Certificate in Music
Bachelor of Science in Tourism and Travel Management
Bachelor of Technology in Tourism and Travel Management
Bachelor of Science in Hospitality Management
Bachelor of Technology in Hotel and Restaurant Management
Bachelor of Technology in Institutional Catering and Accommodation Management
Bachelor of Science in Event and Convention Management
Diploma of Technology (Dip-Tech) in Hotel and Restaurant Management
Diploma of Technology (Dip-Tech) in Institutional Catering and Accommodation Management
Diploma in Housekeeping and Front Office Management
Diploma of Technology in Tourism and Travel Management
Diploma in Technology in Events and Convention Management



TU-K ACQUIRES A **BRAND NEW BUS**

The Technical University of Kenya has acquired a new luxury bus. In a move aimed at easing the long distance constraints to the existing fleet, the 67-seater bus was purchased from SCANIA's Kenya Grange dealership in Nairobi. On hand to receive the bus from the Kenya Grange and Master Fabricators officials, was the Vice-Chancellor, Prof. Francis W. O. Aduol, accompanied by the University Executive Management team.

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