



FEBRUARY 2012

TC WORKSHOP IMPRESSES INDIAN AMBASSADOR



The Ambassador chats (Right) with Engineer Kanhukamwe and Ms. Ndlovhu.

The Indian Ambassador to Zimbabwe, H.E Mr Jeitendra Tripathi, recently toured the Harare Institute of Technology Tool and Die Workshop to assess production.

The Indian Ambassador was accompanied by a five member Indian business delegation led by HMT International Managing Director Mr Girish Kumar. Also in the delegation was the Permanent Secretary for the Ministry of Small and Medium Scale Enterprises Ms E. Ndlovhu, senior administrators from her ministry and the embassy of India staff.

Speaking to Engineer Kanhukamwe during the tour, Ambassador Tripathi urged HIT to continually expose

all its students to the Hi-tech equipment in the workshop. "You must also link with industry and commerce so that they benefit from an array of HIT skills and technology in the workshop", said the Ambassador.

Addressing journalists later after touring the Workshop, Ambassador Tripathi said he was impressed by the state of the equipment and the products being manufactured at the centre, and his country will continue to enhance cooperation between the government of India and Zimbabwe.

"This is one of the best workshops that I have visited out of nine and I am very impressed by the products made here and India will continue to assist in providing these machines which make these tools and products. We are looking forward to establish more of these technology centres in Zimbabwe", said the Ambassador.

He also added that India will also provide technical assistance through bringing in more technical experts and instructors from India to facilitate training in the productive use of these high precision tool making machines.

HMT International Managing Director Mr Girish Kumar hailed the good relations between India and Zimbabwe.

HMT International of India donated the computerised equipment in the workshop through a government to government agreement.

AS INDIA REAFFIRMS COMMITMENT TO HELP HIT IN TECHNOLOGY TRANSFER

The Indian Ambassador to Zimbabwe, Mr. Jeitendra Tripathi has reaffirmed his support for Harare Institute of Technology's commitment to deepen co-operation in areas of technology transfer and staff exchange with Indian institutions.

The ambassador expressed his unwavering support during a visit to the embassy by a HIT delegation. The delegation had gone to brief him on the Institute's progress on forging relations with Indian technology institutions.

Mr Tripathi said he was impressed with the outputs of the Technology Centre and was sure HIT will harness more technologies for national development. He also encouraged HIT to go ahead and implement the terms of the Memorandum of Understanding (MoU) with the Delhi Technological University.

Under the MoU, HIT plans to send some of its lecturers to study for Master of



Eng. Kanhukamwe and H.E. Ambassador Tripathi holding the MoU signed between DTU and HIT.

Technology and Doctor of Technology degrees at DTU. Delhi Technological University (Formerly Delhi College of Engineering) is India's top ranking Technological Institution, recognized worldwide for its quality education, research and innovation. With its illustrious history of Engineering Excellence spawning over 70 years, the DTU is committed to provide to the nation, and to the world at large, the vital human and intellectual capital to meet the challenges of 21st Century.

to page 2

Contents

Page

HIT pays tribute to Iranian Ambassador.....	1
Government to raise the bar.....	2
HIT collaborate with Moi University, Kenya.....	3
HIT engages Delhi Technological University.....	4
ZNCC commissions HIT to spearhead energy efficiency and optimisation drive.....	4
Tool and Die Workshop impresses Indian Ambassador.....	5
India reaffirms commitment to help HIT in technology transfer.....	5
Dr Chanakira appointed MTC Advisory Council Member.....	6
HIT photo collage.....	6



INNOVATION

LEADERSHIP

COMMITMENT

INTEGRITY

PROFESSIONALISM

GOVERNMENT TO RAISE THE BAR



Dr. Stan Mudenge: Minister of Higher and Tertiary Education

The Government has outlined plans for university lecturers to be in possession of higher degrees as the country's higher education regulator, Zimbabwe Council of Higher Education (ZIMCHE) has cracked down on state-run and foreign universities deemed to be offering sub-standard programmes.

Appearing before the parliamentary committee on education this month, Minister of Higher and Tertiary Education Dr. Stan Mudenge told lawmakers that government was planning to raise the bar in terms of lecturer qualifications.

The minister added that the Government is working hand in hand with the Zimbabwe Council of Higher Education (ZIMCHE) on ensuring that this objective is achieved by 2015.

In a separate press statement ZIMCHE, the body that regulates standards of teaching, examinations, academic qualifications and research in higher education, said it had wielded the axe on a number of local and foreign universities for failing to guarantee quality.

The regulator said that since the country's independence from Britain in 1980, the number of universities had risen from one to 14, polytechnics from just two to the current nine, and teacher colleges from eight to 15.

It said unprecedented demand for university education had prompted universities to increase enrolments without corresponding increases in appropriate facilities, infrastructure and adequate numbers of competent staff, leading to quality being compromised.

Positive public perceptions of our institutions must continue to be fostered through the observance of high quality standards in all educational operations. It becomes clear that any institution offering programmes that do not meet the standards set must be stopped from offering them," said a ZIMCHE statement.

University World News Issue No:89

HIT TO COLLABORATE WITH MOI UNIVERSITY, KENYA

The Harare Institute of Technology has signed a Memorandum of Understanding with Moi University, Eldoret, of Kenya in a bid to facilitate a collaborative programme of research, training, curriculum development, institutional development, information dissemination as well as exchange of faculty staff and students between these two Institutes.

Moi University, Eldoret, and the Harare Institute of Technology aim to strategically partner in the areas of staff exchange for the purpose of research, supervision, teaching, and continuous education, student exchange at undergraduate, graduate and PhD level as well as at Post Doctoral level, collaborative research promotion and projects taking into account intellectual property rights, as well as sharing of information resources including electronic library, electronic journals and electronic publication in areas of mutual interest.

The MoU will provide an opportunity to the faculty members of both institutions to undertake collaborative projects in research and other academic activities as well as a chance to work in an international atmosphere. The validity of the MoU is initially for five years, after which it will be renewed further on mutual consent.

Moi University is located in Eldoret, 310 kilometres northwest of Nairobi, the Capital City of Kenya. It was established as the second university in Kenya by an Act of Parliament, the Moi University Act of 1984. The first cohort of 83 students was admitted in 1984 through a transfer from the Department of Forestry, University of Nairobi. Since then, the University has experienced phenomenal growth from its initial one faculty in 1984, to a total of fifteen (15) Schools and five (5) Directorates in 2009. The University currently operates three (3) campuses, namely: Main, Town, and Eldoret West Campus. The university has three (3) constituent colleges, (Kabianga, Chepkoilel and Narok) and eight (8) Satellite Campuses, (Nairobi, Kitale, Kericho, Southern Nyanza, Central Kenya, Odera Akang'o, Coast and Northern Kenya campus).

The total student enrolment now stands at 22,364 out of whom 19,429 are undergraduates. The students are registered in 297 programmes consisting of 90 for undergraduate, 134 Master of Philosophy, 61 Doctor of Philosophy and 12 Postgraduate diploma programmes.

The number of students is envisaged to increase to 42,000 by 2014/15, taking into account the current annual student growth rate of approximately 16% per year cumulatively in all categories of Government sponsored, Privately Sponsored and student population growth at the satellite campuses. The figure could still go higher with the inception of the Open and Distance learning programmes.

There is a total of over 3,662 staff of all levels of whom 934 are academic staff.

AS INDIA REAFFIRMS COMMITMENT TO HELP HIT IN TECHNOLOGY TRANSFER

Delhi Technological University has provided the Indian nation and the world at large with some of the finest engineering and technology professionals who have spearheaded enterprises and institutions and have brought immense glory to their alma-mater while at the same time enhanced the pride of the profession of engineering by their distinguished services. It is a matter of immense satisfaction that the innovations of Delhi Technological University continue to receive high international acclaim and that of the body fabric of academic life at Delhi Technological University.

HIT ENGAGES DELHI TECHNOLOGICAL UNIVERSITY OF INDIA

The Harare Institute of Technology and Delhi Technological University (India) recently signed a Memorandum of Understanding to engage in a programme of co-operation.

The two universities agree to promote exchange and co-operation in all appropriate and agreed areas of research and teaching, the development of new areas of research and teaching, documentation, sharing and dissemination of appropriate information in areas of mutual interest.

The Harare Institute of Technology and Delhi Technological University agree to facilitate exchange of and co-operation between the staff of both universities in staff development, research, publications, teaching, supervision and examination of students, mounting of conferences and other areas of mutual interest.

The Memorandum of Agreement also seek to facilitate the provision of information support resources such as books, journals, audiovisuals and other materials in both print and electronic format.

The validity of the MoU is initially for five years, after which it will be renewed further on mutual consent.

Delhi Technological University formerly, Delhi College of Engineering and Delhi Polytechnic, came into existence in the year 1941 to cater for the needs of Indian industries for trained technical manpower with practical experience and sound theoretical knowledge. tween Science and Engineering.

The institution was set up at historic Kashmere Gate campus as a follow up of the Wood and Abott Committee of 1938. It comprised of a multi disciplinary and multi level institution offering wide ranging programmes in engineering, technology, arts and sculpture, architecture, pharmacy and commerce. The national diploma awarded by the institution was recognized as equivalent to degree level for the purposes of employment.

The national diploma awarded by the institution was recognized as equivalent to degree level for the purposes of employment. In 1952 the college was



An airial view of the DTU Main Campus in Dehli

affiliated with University of Delhi and started formal Degree level Programmes. Delhi College of Engineering is the mother institution of a number of national projects including IITD, SPA, College of Arts and even the famous FMS.

Till 1962, the college was under the direct control of Ministry of Education, Government of India. In 1963, the administration of the college was handed over to Delhi Administration. Delhi College of Engineering was under the administrative control of Department of Technical Education & Training, Govt. of NCT of Delhi. For academic purposes, the college was affiliated to University of Delhi since 1952. From July 2009, the DCE has become Delhi Technological University vide Delhi act 6 of 2009.

Delhi Technological University has provided the Indian nation and the world at large with some of the finest engineering and technology professionals who have spearheaded enterprises and institutions and have brought immense glory to their alma-mater while at the same time enhanced the

pride of the profession of engineering by their distinguished services. It is a matter of immense satisfaction that the innovations of Delhi Technological University continue to receive high international acclaim and that of the body fabric of academic life at Delhi Technological University.

Recently DTU developed a solar car with various advanced feature. The car, named 'Avenir', will be sent to participate in the World Solar Challenge being organised in Australia from Oct 16 to 23. Powered by batteries, the car is capable of generating one kw solar electricity and can attain the speed of 85km per hr.

DTU focuses on Industry-centric R&D and promotion of synergy between Science and Engineering.



ZNCC COMMISSIONS HIT TO SPEARHEAD ENERGY EFFICIENCY AND OPTIMISATION DRIVE



The Zimbabwe National Chamber of Commerce has commissioned the Harare Institute of Technology Department of Electronics in collaboration with Zimtronic to embark on a nationwide Energy Efficiency and Optimization Training Programme, in a bid to help the country save a significant amount of energy.

The move is a major drive in capacitating its entire membership by initiating energy efficiency training programmes, that are tailor made to explore various commissioning opportunities for energy efficient. This will include new construction commissioning, retro-commissioning (RCx), continuous-commissioning (CCx), and monitoring-based commissioning (MBCx), as a short to medium term measure geared towards addressing the current national energy crisis, which the national economy has been battling with, since independence.

The Zimbabwe National Chamber of Commerce estimates that on average the country's national energy grid is wasting or losing energy due to magnetic effects, Pseudo - loading and inefficiencies, as follows, 180MW- 260MW during industrial hours, 245MW- 300MW during peak hours, 350MW- 450MW during industrial hours.

In the short term, ZNCC anticipates to recover on average between 220Mw to 300Mw for industry and commerce, with an anticipated decline in energy bills of between (20%-40%) to industry and commerce

In this regard ZNCC is encouraging all its members and the business community in general to take up these training programmes.

The nation will benefit in several ways,

which include the creation of, virtual earth stations, i.e. through PEEP and AEEP, on average 270Mw (VES) can be realised, with an annual capacity of 2365Gwh and ZNCC estimates this to be valued at US\$160 million per annum.

The other benefit is of the Power factor correction which has the potential to reduce demand by another 218MW (VES), this again has an annual capacity of 1910Gwh and estimated to be valued at US\$129 million per annum. This has the capacity to do away with imports as well as stabilising energy securities outside system disturbances

On the part of industry, companies will realise low production costs due to less energy bills, possibilities for tariff slashes due to load factor and power factor improvement and improved security to energy supplies.

It can be noted also that Energy efficiency brings in some investment opportunities i.e. the American Council for an energy efficient economy, showed that energy efficiency upgrades have significant better pay backs and have low risks than many stock market investments.

Energy efficiency can also bring other benefits such as low electricity costs, delays the need for additional power stations to meet power demands, helps reduce environmental damage, using energy effectively means less coal power fired stations, more productive hours to the industry characterized by reduced intermittent power cuts due to constraints in demand, Creates demand side management response resources, introduces collaboration on market transformation and procurement of demand side technologies.

And through peak demand management, total energy consumption will be reduced thus reducing the need for large investments in power network and generating power plants.

Z.N.C.C. estimates that about 60% of the available power on the grid or demand is industrial consumption. About 1520MW is on average available and 900MW outside peak hours is consumed by the industry. According to the global market we anticipate to generate savings between 10% - 15%, regardless of capacity through passive energy efficiency programmes (PEEP), another 5%-15%, by combining (PEEP) with active energy efficiency project (AEEP), further 2%-8%, can be realised through commissioning i.e. continuous commissioning (CCx), Monitored based commissioning (MBx), and Retro-commissioning (RTx). These projects will bring on average about 30% of the 900MW, meaning about 270MW.

Energy efficiency is the cleanest and quickest solution to the energy dilemma, cleanest because the greenest unit of energy is the energy you didn't need to use. And quickest because with solutions that are available today, you can save up to 30%

The targeted market for these training programs ranges from mining, commercial, public sector, agriculture and manufacturing.

Z.N.C.C HARARE

HIT PAYS TRIBUTE TO IRANIAN AMBASSADOR



Engineer Q.C. Kanhukamwe presenting a plaque to His Excellency, the Ambassador of the Islamic Republic of Iran in Harare recently

The Harare Institute of Technology recently presented a plaque to the Iranian Ambassador to Zimbabwe, H.E. Dr. Pournajaf, in appreciation of the tremendous efforts made by the Embassy of the Islamic Republic of Iran in facilitating links between HIT and technology institutions in the Islamic Republic of Iran.

Engineer Kanhukamwe presented the plaque on behalf of HIT on a day the Embassy of the Islamic Republic of Iran was celebrating their National day.

"HIT recognises the outstanding contribution of the Islamic Republic of Iran Ambassador to Zimbabwe, His Excellency, Dr. Mohammad Pournajaf in facilitating cooperation between the Harare Institute of Technology and the Centre for Innovation and Technical Cooperation office of the Presidency of the Islamic Republic of Iran. Your Excellency, our gratitude is greater than the engraved words on this plaque", said Vice Chancellor Kanhukamwe, while presenting the plaque.

Vice Chancellor Kanhukamwe also said that the Harare Institute of Technology greatly appreciates the cordial diplomatic relations between the Government of Zimbabwe and the Islamic Republic of Iran. We join the people of the Islamic Republic of Iran in celebrating their National Day.

Receiving the plaque, the Ambassador was greatly enthused by the recognition and pledged to work towards the establishment of a Regional Technology Transfer Office at HIT.

The Iranian Consulate in Harare, in conjunction with the Vice Chancellor's Office of the Harare Institute of Technology, recently facilitated a visit to the Centre for Innovation and Technology Cooperation (CITC), Tehran, and Islamic Republic of Iran. The visiting delegation comprised of Eng. Q. C. Kanhukamwe (Acting-Vice

Chancellor & Head of Delegation), Dr. T. Padenga (A / Dean - School of Information Sciences & Technology); and Mr. P. Muredzi (Dean - School of Industrial Sciences & Technology).

The delegation visited the CITC offices, and viewed the Hi - Tech products exhibition of Iran mounted by CITC before proceeding to visit Tehran University Science & Technology Park. They also visited the Nokhbejan Institute of Technology (VC Co), the Behin Co and the Pardis Technology Park, and later had a final meeting with CITC together with the President of the CITC. The team then completed the visit by visiting Esfahan.

The visit enabled meetings with senior administrators of the various establishments involved in technology development and enabled the delegation to have first hand information on the status of the establand current standing. The delegation was able to engage the administrators regarding possible areas of cooperation, modes of engagement and modalities. As an overall outcome the delegation indicated its areas of interest and proposed activities in cooperation agreements.

The delegation stressed its desire to have the TCO establish an office at the Harare Institute of Technology though initial engagement would be through a letter of intent followed by an MOU and technology transfer in the identified areas of Biotechnology and Information Sciences.

The HIT delegation expressed interest in technology transfer of bioreactors and biometric application technologies. The two were identified as areas of excellence in technology development work by the Tehran University Science.ishments, their development profile and current

DR CHANAKIRA APPOINTED MTC ADVISORY COUNCIL MEMBER



Dr Maxwell Chanakira

The Minister of Higher and Tertiary Education has appointed Dr Maxwell Chanakira, a Lecturer with the Technopreneurship Development Centre to membership of the Msasa Industrial Training Centre Advisory Council in terms of the Manpower Planning and Development Act Chapter 28:02

(Government Teachers Colleges and Technical or Vocational Institutions) Regulations, 1999: Section 12. In his letter of appointment, the Permanent Secretary for Higher and Tertiary Education, Dr Washington T. Mbizvo took the opportunity to highlight the onerous task to which Dr Chanakira and his colleagues have been appointed.

“May I, on behalf of the Minister congratulate you on your appointment and trust that you will put your common efforts in pursuit of the vision you have of Msasa Industrial Training Centre”, read part of Dr Mbizvo’s letter.

Dr Chanakira holds several degrees from several universities and technological institutions among them a Doctor of Technology in Organisational Leadership (Tshwane University of Technology, South Africa), a Masters in Business Administration (Management College of Southern Africa, South Africa) specialising in Strategic Management, a Bachelor of Technology in Electrical Engineering (Pretoria Technikon, now Tshwane University of Technology, South Africa), a Full Technological Certificate (FTC) in Telecommunications (City & Guilds of London Institute, UK)

He also holds some other qualifications in General Telecommunications Training (Netherlands), Digital Technology (Japan), Supervisory Management (ZIM, Zimbabwe), Planning and Analysis of Development Projects

(Oslo University, Norway) and Telecommunications Management Studies (CTO, UK).

Dr Chanakira is also a Member of the Higher Degrees, Research Board and Editorial Committees of Harare Institute of Technology, Chairperson of the National Manpower Advisory Council (NAMACO) Technical Committee on Public Private Partnerships (PPPs) on the Development of Operational Guidelines for Higher and Tertiary Education Institutions in Zimbabwe, Supervisor for PhD and Masters degree students for several Southern African Institutions of Higher Learning, and a Manuscript Reviewer for the International Business Conference (IBC) organised annually by South African Business Schools.

He has presented papers at local and international conferences and published widely in peer reviewed journals.

Dr Chanakira also chairs the Harare Institute of Technology Public-Private Partnerships Committee with a mandate to engage the public and private sector and push through the development of the Institute.

HIT PHOTO COLLAGE



High School students visiting the HIT Exhibition Booth at the Manicand Schools Career Day held at Mutare Teachers Training College.



Professor Levy Nyagura, (Guest of Honour) accompanied by the Principal of Mutare Teachers Training College and an official from the Ministry of Labour and Social Welfare at the HIT Exhibition Booth in Manicand.



Food Processing Technology students doing practicals in the lab.



Engineer Kanhukamwe and Mr Chandauka, (Dean of Students Affairs) discussing the construction of recreational grounds on campus.



A Subsidiary of Insti-Tech Holdings

Insti-Foods products:

- Soy-yoghurt
- Soy-milk
- Soy-sour milk
- Ice cream
- Syrup
- Mineral water





Harare
Institute of
Technology

success through innovation

DESTINY

To be the stimulant of scholarship
in innovation.

CAUSE

To cultivate commitment towards
technopreneurial leadership.

CALLING

To commercialise technology through
professionalism rooted in integrity.

CORE VALUES

- Innovation
- Leadership
- Integrity
- Commitment
- Professionalism

The Innovation And Technopreneurial University

www.hit.ac.zw