www.hit.ac.zw

NOV/DEC 2016

HIT RECEIVES THE ESQR'S QUALITY CHOICE PRIZE 2016 IN BERLIN



HIT Finance Director Mr M. Rutizirira (right) recieving the ESQR's Quality Choice Prize 2016 awarded by the European Society for Quality Research in Berlin on December 12, 2016.

he Harare Institute of Technology received the ESQR's Quality Choice Prize 2016 awarded by the European Society for Quality Research (ESQR) in Berlin on December 12, 2016.

Top companies, public administrations and organizations which excel in their services/products and continue to push the limits of Quality with innovations, - received the ESQR's Quality Choice Prize 2016 for their hard work and achievements, in the presence of the international business community.

The ESQR's Quality Choice Prize recognises companies, organizations and public administrations with ethics and initiatives that demonstrate exceptional success in quality management and maximising the full potential of their services through quality-oriented practices.

Seventy-four companies, organisations, public administrations, universities, hospitals and NGOs from 62 countries, representing sectors such as public administration, automobile industry, education, aviation, energy, technology, oil and gas industries, banking and insurance, food and beverage, hotels and tourism, motor and shipping industries, real estate, construction and engineering, transportation, heavy industry and healthcare, among others, received the ESQR's Quality Choice Prize 2016.

Some of these top companies, public administrations and organizations include BMW Group (Germany), ASICS Corporation (Japan), CRH plc (Ireland), Azienda

USL di Modena (Italy), Fidelity Bank (Nigeria), Museo Historico Comunal (Argentina), Okuma Corporation (Japan), Hydra, Arc (Pty) Ltd. (South Africa), among others

The ESQR's Quality Choice Prize programme takes a comprehensive look at the initiatives and strategies that business leaders implement in their companies and organizations and recognizes the efforts of exceptional and talented employers and employees as well as providing motivation for continuous progress.



Contents

HIT Honoured at the Inaugural Harare
Metropolitan Province Corporate Social
Responsibility Awards.......2

HIT Registrar Honoured at the MEGAFEST 2016 Awards......

2016 Institutional Achievements and

HIT Choir Phenomenal 8

Obituary: Nicholas Karekwaivenani....... 8

Vice Chancellor Pays Special Tribute to Staff at Annual End of Year Luncheon.....9

INNOVATION

LEADERSHIP







HIT HONOURED AT THE INAUGURAL HARARE METROPOLITAN PROVINCE CORPORATE SOCIAL RESPONSIBILITY AWARDS

he Harare Institute of Technology was recently awarded the "COMMUNITY DEVELOPMENT AWARD" at the inaugural Harare Metropolitan Province Business Forum's Social Responsibility Excellence Awards held in the capital in recognition of organisations and individuals that have contributed to the socio-economic development of the Province.

The awards were held under the theme "Social Economic and Spiritual Transformation for Development." Speaking during the awards ceremony, the Minister of State for the Harare Metropolitan Province, Cde Miriam Chikukwa said the corporate social responsibility awards are a platform to recognise the noble efforts of various organisations and individuals as well as to encourage others to emulate outstanding initiatives.

Guest of Honour, Lafarge CEO- Mrs Amal Tantawi highlighted the important role the business sector plays in developing communities and building future generations.

Reserve Bank of Zimbabwe (RBZ) Governor, Dr John Mangudya urged stakeholders in the business sector to work together towards the revitalisation of the economy.

CBZ Holdings won the Corporate Social Responsibility Lifetime Award while Lafarge Cement Zimbabwe won the Urban Community Share Ownership Scheme Award.



Mr W. Gwarimbo (left) Dean of the the School of Business Management Sciences receiving the "COMMUNITY DEVELOPMENT AWARD" at the Harare Metropolitan Province Business Forum's Social Responsibility Excellence Awards held in Harare.







Cde Miriam Chikukwa, Minister of State for the Harare Metropolitan Province.



HIT REGISTRAR HONOURED AT THE MEGAFEST 2016 AWARDS



he Registrar of the Harare Institute of Technology, Mrs Mary Samupindi has clinched second position in Zimbabwe's Top 20 Outstanding Women of the Year Awards by Megafest.

The awards ceremony was held at the Cresta Lodge in Harare on 15 December 2016, and was attended by Deputy Registrar – Human Resources and Administration, Dr Noah Mutongoreni, Acting Director –ICTS Mrs Miriam Chahuruva, Assistant Registrar – Central Services, Ms S.Maphosa and Public Relations and Marketing Manager, Mrs Sharai Muonwa.

The event was also attended by captains of industry, entrepreneurs and the legal fraternity among others.

Chief Executive Officer of Lafarge Cement, Mrs Amal Tantawi emerged first, with Dr Evelyn Garwe of the Zimbabwe Council of Higher Education, (ZIMCHE) taking third place.

The awards ceremony is held to honour men and women who are making a positive contribution to Zimbabwe's economic growth through their professionalism and competence.



AIRFORCE OF ZIMBABWE VISIT

he Airforce of Zimbabwe Junior Staff Course Number 33 came to Harare Institute of Technology on Friday 11 November 2016 for a study visit.

Award (Second Position) by Megafest.

The visit is part of the Zimbabwe Defence College's mode of instruction on technology through visiting such institutions with a view to appreciate technology and national development in the context of national security.

Over 30 officers drawn from the various departments of the Airforce of Zimbabwe and SADC countries comprising Malawi, Tanzania,, South Africa, Tanzania and Zambia are attending the Joint Command and Staff Course Number 33 run by the Zimbabwe national Defence College in Harare.

The delegation was given an overview of the Institute's establishment, structural functions, mandate and overall contribution to the nation by members of the Senior Management before being shown some of the various Capstone Design Projects by HIT students and graduates during a tour of the campus' departments, laboratories, workshops and Centres of Excellence.





2016 INSTITUTIONAL ACHIEVEMENTS

The University earned a number of awards in recognition of its Research, Development and Innovation outputs as outlined below:

INTERNATIONAL RECOGNITION

The International Award for Excellence in Sustainability Innovation



The Harare Institute of Technology was honoured with the 'International Award for Excellence in Sustainability Innovation' for its research which delivers tangibles in the form of Patents, Utility Models, and Copyrights that are sustainable and industrially applicable. The award was bestowed on HIT at the World Sustainability Congress held in Mauritius in December 2015.

The Google Developer Community Summit Recognition



Mr Kudzai Chasinda, a second year student in Software Engineering was recognised by Google and invited to attend the Google Developer CommunitySummitinSanFrancisco in May 2016.

Association of Computing Machinery (ACM)





Harare Institute of Technology was accredited as a professional and student chapter of the Association of Computing Machinery (ACM) to become the third chapter in Sub Saharan Africa. The Chief Operating Officer for ACM officially chartered the Harare Association of Computing Machinery Special Interest Group on Security, Audit and Control (SIGSAC) Chapter and the Harare Institute of Technology Student Chapter on June 06, 2016 as the Institute joined the growing network of ACM Chapters worldwide.

The Energy Globe National Award



One of the Institute's final year students in Software Engineering, Clive Nyakapoto is this year's winner of the Energy Globe National Award which he received in July 2016 in Johannesburg, South Africa after his Vermicompost - Vermi-Aquaponics (VA) System project was honoured by Advantage Austria, the official Trade Promotion Organisation (TPO) which recognises success in green technologies and organisersofthe Energy Globe Awards.

Vice Chancellor's Award for Leadership Excellence



The Vice Chancellor, Eng. Q.C. Kanhukamwe was also honoured with the Award for Leadership Excellence in Technology Innovation in recognition of his leadership in transforming the Institute to become a university at the forefront of technology development, incubation, transfer and commercialisation in Zimbabwe.

International Socrates Awards



The Harare Institute of Technology was awarded the International Socrates award for the "THE BEST ENTERPRISE," at the Europe Business Assembly European Awards Night and Forum in Cannes, France on 7 October 2016.

This recognition is based on the Institutes' strong position on the national market, organisation's status on international ratings, modern management technologies, high staff qualification, business reputation, successful marketing strategy, positive image in region, investment rating and attractiveness,

Manager of the Year Award



At the same forum, the Vice Chancellor, Eng. Q.C Kanhukamwe was also awarded "THE MANAGER OF THE YEAR" The award acknowledges and honours individual excellence of high-level executives worldwide.

The Award for Institution **Building**

The Institute was recognised with the Award for Institutional Building at the 7th Edition of the Asia Best Employer Brand Awards 2016, which were hosted by the World Human Resource Development Congress and held at the Pan Pacific, Marina Square in Singapore on 4 August 2016. The award is in recognition of the Harare Institute of Technology's robust approach to institution building where organisational structures, highly practical curriculum, human capital development policies, international collaborations have made the institution gain national and global recognition.

European Society for Quality Research's Quality Choice Prize 2016



The Award was in recognition of HIT's ethical initiatives that demonstrate exceptional success in qualitymanagement.

2016 INSTITUTIONAL ACHIEVEMENTS (cont..

NATIONAL RECOGNITION

E-Tech Africa Expo and Conference



The Harare Institute of Technology students stole the limelight at the e-Tech Africa Conference 2016, held on 9-11 March 2016 where they showcased their e-tech applications and solutions. The Ministry of Information Communication Technology, Postal and Courier Services at the Harare International Conference Centre hosted the conference.

Below is a select list of the student projects:

- Kudzai Chasinda developed a music platform called Chase Music Player. The music application is downloadable on Google Play for free, and is designed to offer free music to android devices running on Android 4.0 or higher. The application is user friendly and can be used by all age groups and is uniquely crafted to enhance playlists.
- Tapiwanashe Matangira developed a computer-programing solution coded in Shona called the Graphical Code Explorer. The programme is designed to incorporate the Graphical Programming Interface (GPI) where programmers do not need to type words when programming. The GPI is annotated in Shona, which it runs as the coding language; - a first in the history of programming. The GPI also has the ability to visualise code execution, making it easier for programmers to layout their programming paths without too many complexities.
- Blessing Sibanda and Tatenda Vhovha codeveloped an educational system for children between the ages of 6-10 for all Windows users. The educational system has four demo games designed to enrich the minds of youngsters when mastering different subject concepts. Another exciting feature of their application is the addition of Mathematics involving addition, subtraction, division, and multiplication problems. The software also has biology and science concepts incorporating a visual learning setup with human structures that can be learned in Shona with a timed educational game based on high scoring system.

Public Sector Manager of the Year Award

Harare Institute of Technology Vice Chancellor Eng. Q.C Kanhukamwe was awarded the Best Performing Public Sector Manager of The Year Award by Stallone Consultancy in April 2016.

The Inaugural World Bank Water and Sanitation Hackathon



Harare Institute of Technology students emerged champions at the inaugural World Bank Water and Sanitation Services Hackathon held in February 2016. The students created the best viable business solution in the form of a user-friendly application that can be used by residents to interface with City Councils for solving water and sanitation problems. Codenamed Team E-Council, the group was comprised six students; Edmore Sibanda of the Information Technology Department; Marshall Takudzwa Chabanga, Tamuka Caswell Chikanyairo, Fortune Chidzikwe of the Software Engineering Department; Mazvita Chigariro and Shyline Kamponje from the Electronic Commerce Department. The team also developed a website for City Councils where customers can report faults that will be classified by Dashboard hits. The application system can also collect demographic data that can be used for development planning.



SANBio Student Ambassador for Zimbabwe



Ms Joyce Fati Masvaya, a third year student studying for a Bachelor of Technology Honours Degree in Biotechnology was crowned the SANBio Student Ambassador for Zimbabwe; at a colourful ceremony held at the HIT Campus on Thursday 21 April 2016. The event was facilitated by the National Biotechnology Authority of Zimbabwe / Southern African Network of Biosciences, (SANBio) and the African Union-New Partnership for Africa's Development (AU/NEPAD).

SANBio Student Ambassadors are expected to promote SANBio and the biosciences in their respective countries and the region, arranging events, activities, competitions and workshops for students to promote biosciences. Relaying information on current developments in the biosciences and related policies from member countries to the SANBio Secretariat, as well as engaging and collaborating with SANBio will also formpartofher portfolio.

Corporate Social Responsibility Award

Harare Institute of Technology was bestowed with the Community Development Award at the inaugural Harare Metropolitan Province Business Forum Social Responsibility Excellence Awards held on 30 November 2016, at the Crowne Plaza Monomutapa.



Research

Intellectual Property

During the period under review, the following achievements were made in Intellectual Propertygeneration and registration:

Registration of four patents

- Floor Mounted Telescopic Emergency Bus Exit Ram
- Design of a Hybrid Vapour Absoption Refrigeration System Customised for Retail Industry in Sub-Saharan Africa
- Unshelled Groundnut (arachis hypogaea) Cleaner for Small Scale Farmers and Cleaning Method;

Utility Models

- AP/U/2016/000065 An Integrated process for production of Motocharcoal briquettes
- AP/U/20166/000063 a Kraft pulping and conveyor drying technology for the production of paper from sugarcane bagasse;

Industrial Design

 AP/D/2016/001095 Motorcharcoal briquette Design:

Trademarks

- AP/M/2016/002589 Motorcharcoal
- AP/M/2016/002589 Instichem;

Copyrights

- Mobile Money Integration Platform
- A Web Based Livestock Information ManagementSystem
- A Web Based Application for Driving Schools (WBAADS)
- Online Agro-Customer Relationship Management
- VirtualTourGuide
- Tobacco Growers Booking and Delivery Scheduling System
- Virtual Marketing Place for Solar Renewable Energy Technology
- Electronic Visual Arts Gallery
- Small to Medium Enterprise One Stop Shop
- Abnormal Load Licensing System
- Web Based Integrated Payment System: A case of ZINARA, ZBC and Insurance companies

Item	Registered	Pending Registration Filed with ARIPO	Total
Patents	4	3	7
Utility Models	2	4	6
Industrial Designs	1	3	4
Copyrights	15	23	38

Research Outputs

Solar generator



Publications

 140 papers were presented at local, regional and international conferences or published in refereed journals. Smart meters



Institute Partnerships and Events

 HIT hosted the first ever Global EntrepreneurshipSummitfrom 25-30January 2016. The Summit was hosted in partnership with the Handong Global University, with supportfromtheKoreanGovernmentandthe United Nations Educational Scientific and Cultural Organisation, (UNESCO).



Mobile Multi-purpose bio diesel power plant



Technovation Day

 On 22 July, the Institute opened its doors to over 3500 high school students from across Zimbabwe and over 50 local companies. HIT showcased its programmes, activities and infrastructure to the prospective students while the companies exhibited their products, services and future careers.





BIOTECH DEPT HOLDS FISH FARMING AND MUSHROOM PRODUCTIONTRAINING COURSES



Participants to the Fish Farming and Mushroom Production Training Courses.

n pursuance of promoting the awareness, application and commercial exploitation of modern biotechnologies in Zimbabwe, the Department of Biotechnology successfully conducted training workshops on fish farming and mushroom (oyster) production in collaboration with the Southern Africa Network for Biosciences (SANBio) and Fresh Harvest.

The fish farming and mushroom (oyster) production courses were held on the 1st and 2nd of December respectively. The courses comprised a theoretical lecture session followed by a handson demonstration and practice session for the participants.

Participants to the training workshops were drawn from Harare, Chegutu, Norton, Marondera, Bindura and Bikita, as well as HIT staff and students.

The trainees for the fish farming course were equipped with knowledge and techniques on how to start up a fish production facility, and were conscientised on the need to promote fish farming as an adjunct to currently available protein sources. Trainees were also able to critique current farming practices, with the view to improving these systems.

The mushroom (oyster) production course covered both small and large-scale production.

Chairperson of the Biotechnology Department, Dr A. Musengi, said the Department was able to forge a working and symbiotic relationship with entry-level and seasoned producers of mushroom. He added that the Department has been able to offer post-training, advisory and educational services to its trainees via the creation of a WhatsApp platform that is administered by the Department.





HIT CHOIR PHENOMENAL





he phenomenal HIT Choir was honoured by the Vice Chancellor, Eng. Q.C. Kanhukamwe at a banquet held at the Meikles Hotel in Harare. The Choir was recognized for its sterling performance at the Institute's 7th Graduation Ceremony where they were commended by the President of the Republic of Zimbabwe and Chancellor of the Harare Institute of Technology, His Excellency Cde R.G. Mugabe.

Speaking at the banquet, the Vice Chancellor expressed his appreciation to the Choir for their excellent performances and for their work in upholding the HIT brand. The Choir sings a unique blend of acapella and rap, accompanied by instrumentation, and have been credited for their unique compositions.

"The excellency that we want to exude is encapsulated in our theme song. You believe it because you sing it with passion and you understand the great task that lies ahead of us and what it takes to accomplish that task" said the ViceChancellor.

He also said that HIT had been endorsed as the leading institution of technology development, transfer and commercialisation by His Excellency and Chancellor. "If Zimbabwe is going to rapidly industrialise, that task is going to be a burden that HIT is going to bear, and this is because of the belief that His Excellency has in us," he said.

The Vice Chancellor urged the students to engage in disruptive innovation. "To everything, there is an alternative and Isee the potential in all of you," he said.

The banquet was attended by the Dean of Students, Mr J. Chandauka, HIT Chaplain Commissioner S. Mungate, the Librarian, Mr J. Maenzanise, Dean in the School of Business and Management Sciences, Mr W. Gwarimboamong others.

The night was punctuated by the choir performances and tributes by the Choir leaders.





OBITUARY: NICHOLAS KAREKWAIVENANI



he Vice Chancellor, Engineer Q.C.
Kanhukamwe joins the entire HIT
community in mourning the
passing of Nicholas Karekwaivenani, a
lecturer in the School of Information
Sciences and Technology who
succumbed to haemophilia on 15
December 2016.

Nicholas Karekwaivenani, (32) is survived by his wife and two children.

He enrolled for a B.Tech Honours Degree in Computer Science at HIT in 2006 and his computer wizardry and skills inspired HIT to send him on an international student exchange programme to Daejeon University in South Korea during his final year. He graduated in 2010 with a First class Degree.

After his graduation, Karekwaivenani joined the School of Information Sciences and Technology as a Teaching Assistant in 2011. Subsequently, he was sent on a staff development fellowship programme at the Jawaharlal Nehru Technological University in India where he undertook a Master of Technology (M.Tech) degree in Computer Science from 2012-14. Again, he graduated with a First class Degree with distinction.

Upon his return from India, Karekwaivenani joined the Information Technology Department and was consequently appointed Chairperson in 2014.

He became one of Zimbabwe's top Oracle Certified Java 5.0 Programmers and contributed immensely to the setting up of HIT'S Moodle Virtual Learning Environment (VLE); conducting awareness campaigns for its adoption. He was also widening his computer skills by embarking on studies to become a Cisco Certified Internetworking Expert (CCIE).

Colleagues described him as a team player, hardworking and always striving for excellence in all assigned tasks and activities.

His family's eulogy was centred on his great sense of responsibility and his enduring nature that saw him working hard to assist and provide for the family. He placed his family before himself and diligently carried this responsibility. Nicholas was a pillar of strength and support to both workmates and his family and he will be greatly missed.

Nicholas was interred on Saturday 17 December 2015 at Warren Hills Cemetery in Harare.

May his soul rest in eternal peace.

VICE CHANCELLOR PAYS SPECIAL TRIBUTE TO STAFF AT ANNUAL END OF YEAR LUNCHEON





Acting Vice Chancellor Eng. P. Muredzi (left) presenting the Vice Chancellor's speech during the Annual Vice Chancellor's End of Year Luncheon while the Institute's Chaplin Commissioner S. Mungate gives a short sermon.

IT Vice Chancellor, Eng. Q.C. Kanhukamwe paid a special tribute to staff during the annual Vice Chancellor's End of Year Luncheon held on Wednesday 21 December 2016.

In a speech read on his behalf, Eng. Q.C Kanhukamwe expressed his gratitude to all HIT Staff members for their sterling work and contributions to the Institute's success.

"You are our most valuable asset and we treasure and recognise all that you do. As we look towards 2017, let us remain mindful of the fact that we need to continue to raise the profile of the Institute through research and publications. Academics should endeavour to publish their work in refereed journals and to also patent their work. We need to secure grants and projects which are able to transform our fortunes as an Institute," he said.

In his 2016 reflections, the Vice Chancellor said it was a year of tremendous achievements for the Institute in the core areas of the University mandate which are development, incubation, transfer and commercialisation of technology for Zimbabwe's rapid industrialisation as the Institute was recognised locally and internationally for excellence in research, quality management systems and innovation.

"Our students were also recognised for their innovative research output at various fora in Zimbabwe and across the world. Additionally, the Institute continues in its endeavours towards knowledge generation and intellectual property registration with progress made in this regard through the registration of patents, utility models and trademarks," he said.









