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**SPEECH BY VICE CHANCELLOR, PROF. OTLOGETSWE TOTOLO**

**AT THE**

**OFFICIAL OPENING OF THE STEM FEST 2016**

**AT BOTSWANA COLLEGE OF ENGINEERING AND TECHNOLOGY**

**ON JUNE 8<sup>TH</sup> 2016**

**GABORONE**

Director of Ceremonies;  
The Permanent Secretary - MOESD - Dr T. Mooko;  
The Permanent Secretary - MIST - Mr D. Mokotedi;  
Vice Chancellor - UB - Prof. T. Fako;  
Chief Executive Officer - BITRI - Prof. N. Torto;  
Chief Executive Officer - BIH - Mr A. Boswaen;  
BIUST Deputy Vice Chancellors - Distinguished Prof. D. Siginer; Prof. D. Norris; Mr. B. Katzke;  
Professor Medupi from North West University;  
Dignitaries from other Government ministries, parastatals, universities and private organizations;  
BIUST Management team present;  
Ladies and gentlemen here present;  
Members of the media;

I greet you ALL. Dumelang Bagaetsho

We are gathered here today for a unique event entitled STEM Festival. In simple terms, STEM means Science, Technology, Engineering and Mathematics. The Theme for this festival is “STEM for Development, Creating a Sustainable Future for Botswana”. You will remember that last year, the Botswana International University of Science & Technology (BIUST) embarked on a country-wide campaign entitled “Demystifying Science”, this is a continuation of the Demystifying Science campaign, but the STEM Festival is more elaborate as we have invited government departments, parastatals and private sector to showcase their utilisation of STEM in their respective operations.

Invited Guests! Let me just highlight the mandate of BIUST, it is a University set in a national strategic initiative that is intended to serve as one of the key platforms for transforming Botswana’s economy from being resource-based to knowledge-based through skills capacity building in Engineering, Science and Technology. Because of its research emphasis, BIUST will work closely with the private sector to meet emerging skills needs of the industry, as well as to identify challenges that can be solved through applied research. The University’s curriculum takes into account the needs of the private sector and is driven by the mission of BIUST to contribute to the development of the economy towards a knowledge-based economy through research.

BIUST provide the best teaching and learning environment for students, professors and researchers. The University hopes to develop a Science, Engineering and Technology Research Park that would attract local, regional and international researchers to its campus. At full capacity, BIUST will enrol approximately 6,000 (six thousand) full-time equivalent (FTE) students, including Undergraduate, MSc and PhD Students.

That is why we adopted a slogan of “Driving Change”. Indeed, we are “Driving Change” through several means including our efforts to demystify science. We live, breathe and eat science on daily basis. That is why; we have embarked on this journey of organising STEM Festival to achieve the following objectives:

- a) To showcase STEM and its role towards national economic transformation and demonstrate socio-economic advancement espoused through our organizations;
- b) To showcase peculiar STEM niches businesses are leveraging on in contributing to the national development;
- c) To provide a platform for students at all levels and researchers to celebrate their achievements and dreams;

The STEM festival is an initiative of BIUST, which is meant to stir a process of strengthening mathematics and science student pipeline leading to the tertiary education landscape by stimulating interest in mathematics and science across the tertiary and pre-tertiary education sector through and linking

learning science with technology that is used in real life including business.

Director of ceremonies, colleagues, ladies and gentlemen our focus here is on the STEM festival which is characterised by;

- a) STEM Exhibits;
- b) Talks/ presentations on issues critical to the advancement of socio-economic development of the county leveraging on STEM;
- c) Science shows to demonstrate that science is doable, science is fun, science is amazing and amusing;

My expectation ladies and gentlemen is that all will have a fruitful time and be motivated to move Botswana forward with STEM initiatives.

One will wonder why BIUST is undertaking the events of these nature, and why not government departments. We have witnessed a low performance in mathematics and science in Botswana. A strong mathematics and science student base is therefore crucial if science and technology should be embraced on as drivers of the national economic transformation. A critical mass of science and mathematics inclined students ready and willing to take up science, technology, engineering and mathematics oriented programmes is necessary. Performance in

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mathematics and science as indicated by our national school leaving examinations (PSLE, JCE and BGCSE) has proven to be consistently wanting. In the last ten years there has been a downward trend of performance in these subjects. As BIUST, we are part of the Ministry of Education & Skills Development and we embrace Education & Training Sector Education Strategy (ESSTP) which is aimed at ensuring a sector wide approach to the re-focusing of the education and training system to ensure alignment with the Botswana's social and economic agenda.

This presents a challenge in leveraging on science and technology for national economic development and therefore need for confidence building in the public and in our learners to appreciate science and mathematics as integral to everybody's life which we effortlessly live.

Ladies and gentlemen, in line with various policies that highlight this very notion such as; The Revised National Policy on Education of 1994; The National Human Resource Development Strategy 2009-2022; The Revised National Policy on Research, Science, Technology and Innovation to mention but a few. BIUST has taken a deliberate step to undertake these initiatives to promote interest in science and mathematics.

- a) To nourish and nurture the learners talents and creativity in science;
- b) To present science and technology as an integral part of life;

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- c) To develop quality hands-on experience through participation in science circus;
  - d) To provide educational experience through participation in science circus;
  - e) To make science and technology popular among the public;
  - f) To generate awareness regarding the socio-economic impact of science and technology on development;
  - g) To instil the scientific spirit in young science learners;
  - h) To promote excellence in science performance among young learners;
  - i) To encourage young learners in Botswana to pursue careers in the field of science;

One of our positioning statements is that, BIUST has a key leadership role to play in Botswana's Knowledge Economy at the apex of the Tertiary Education and National Innovation Systems through its focus on academic excellence and the creation of new ideas and their interpretation and readiness for adoption by the market.

Therefore, this calls for a best performance of STEM subjects at pre-tertiary levels to create an awareness, understanding and acceptance of the STEM stream. This call for a collective effort to align national needs and priorities and up our games in STEM student output, which will in the long-run create pool of research engineers and scientists, to undertake

research application and conversation of such vital research initiatives in innovative products and services. Thus fully utilising the collaborative, partnership, linkages and engagement efforts with organisations such as UB; BITRI; HIB; BOBS; DRTS; private sector and other research centres.

Ladies & Gentlemen, BIUST with other tertiary and research based institutions have the responsibility of driving Botswana's knowledge economy ambitions, this requires a strengthened collaboration and linkages from a national innovation culture, but this will not be achieved without a pool of trained engineers and scientists, competent in the areas of Science & Technology; Research and Development that are needed in this economy.

Invited Guests, as mentioned earlier various activities have been planned to showcase STEM across various economic sectors. You are invited to view exhibits; and attend symposia and presentations.

BIUST is also working with the Ministry of Infrastructure, Science & Technology (MIST) to arrange the Science Week which will be held at BIUST in Palapye from 15<sup>th</sup> to 19<sup>th</sup> August 2016. You are invited to attend.

**PULA BAGAETSHO**