Hon (Mrs) L.D. Dookun –Luchoomun Minister of Education and Human Resources, Tertiary Education and Scientific Research Opening Ceremony EmergiTech 2016 Conference 3 August 2016

Ladies and Gentlemen,

I am deeply honoured to be amongst you all this morning for the Opening Ceremony of the EmergiTech 2016 Conference jointly organised by University of Technology, Mauritius and the Mauritius Chapter of the Institute of Electronics and Electrical Engineers, the IEEE.

Let me join the previous speakers in congratulating both the University and the IEEE for this joint effort in bringing a state-of –the- art conference on emerging technologies here in Mauritius.

In point of fact, the new economic development strategies propounded by the Government rely heavily on the adoption of emerging technologies. The development of Smart Cities, the port development and, again, the Ocean Economy, are just three such thrust areas that will pose a big human resource challenge, which challenge will inevitably give a fillip to new and novel technologies as drivers of change.

So when Universities like the UTM come forward with a Conference like the EmergiTech 2016 Conference, I can only applaud the initiative. It is undisputable that Mauritius has today to keep abreast of the major advancements, educational as well as technical that are taking place in the different domains of engineering, computer engineering, telecommunications and allied disciplines.

In fact, such is the ubiquity of technology and the ease of modern-day communication that none of us is an islander—rather, we are deeply interconnected.

It behoves us then to seek to be on the forefront of emerging technologies rather than in their far rear.

Or at best, we can be in their slipstream.

We are certainly ambitious in Mauritius and so, if we want to benchmark ourselves on the global scale, we cannot adopt emerging technologies three layers later than Europe or the United States.

Distinguished Guests, Ladies and Gentlemen,

Multilateral bodies such as UNESCO and the OECD have always placed a premium on an increased access to higher education for economic and societal reasons.

Former South African President, Mr. Thabo Mbeki, also recognised this way back at the Conference on Education for African Renaissance in the Twenty-first Century, in Johannesburg, on December 6, 1999 when he stated and I quote,

> "For nowhere in the world has sustained development been attained without a well-functioning system of education, without universal and sound primary education, without an <u>effective higher education sector</u>, without equality of educational opportunity."

That turned out to be prophetic for Africa. Today, Higher Education is expanding rapidly on the Continent. According to the UNESCO

Institute for Statistics, the number of students enrolled in tertiary education shot up from 6.1 million in 2000 to 12.2 million in 2013.

At this stage, Ladies and gentlemen, and in the context of this Conference, I would wish you to concentrate and think through a major paradox.

On the one hand, we have over the years viewed higher education as a key element for the development of innovation, especially technologybased innovation. The digital economy, seen as <u>the</u> driver for innovation and inclusive growth, has permeated practically all domains of work --- banking, education, energy, media, transportation, publishing, health—you name it.

On the other hand, though, and since quite recently, discussions have been rife about Artificial Intelligence (AI) making people, among other things, redundant at the workplace.

I am sure, as Academics, many of you have gone through the paper written by Oxford University academics Carl Frey and Michael Osborne called 'The Future of Employment: How Susceptible Are Jobs To Computerisation?'

In 2013, they predicted that nearly half of US jobs would be automatable in the next 20 years.

Interestingly, only last week, the Times Higher Education ran an article on the impact of artificial intelligence on Universities and quoted Martin Ford, a Silicon Valley entrepreneur who stated in his 2015 book *The Rise of the Robots* that it is "*becoming clear that smart software automation applications are rapidly climbing the skills ladder and threatening jobs taken by university graduates*"

What does that mean? Just that if machines are given the right parameters, many jobs can become automatable.

I am sure that, during your deliberations, you would engage yourselves in an open discussion on this interesting tug-of-war between the hightech take-over in a new machine-age and those traits that will always place the human entity above the machine, traits that are likely to remain uniquely human—like social intelligence, empathy and the capacity to think about values.

Ladies and Gentlemen,

Let me come down to less befuddling thoughts!

The international conversation about Tertiary education has been systematically centered for some time now on the classical roles of Universities as creators, depositories and disseminators of knowledge. Knowledge societies in fact depend enormously on innovation and the creation of new knowledge that will enable countries to leapfrog generations of technology.

This explains the emphasis that my Ministry places on research.

Let us face it.

Our research potential is enormous but our research output is far from our legitimate expectations. There is a deficit in research and the universities are not contributing enough to the socio-economic development of the country.

This has to change. The much-vaunted 'triple helix interaction' among Universities, Industry and Government is called upon to play its role more effectively.

Let me inform you that my Ministry will soon come up with a Higher Education bill which will not only reflect government's vision of higher education but will also make a case for enhanced higher education quality and the promotion of research. In fact, if we wish to situate ourselves in the international league tables of universities, research has to be a key performance indicator.

I hope therefore that this conference will create the space for the work of local researchers to gain greater visibility both locally and internationally as I am given to understand that accepted papers will be published in the IEEE online library.

Let me also add that I am pleased this conference is not meant exclusively for established researchers but also takes on board post graduate research students wishing to enrol for PhD studies. This is a welcome sign: the greater the number of PhD graduates we produce, the larger will be our research capacity.

And it is such capacity that can propel us from being technologyconsumers to becoming technology producers. This is only feasible if we are innovative enough and enable the transfer of knowhow.

And I strongly believe that EmergiTech is precisely such an enabling platform.

Ladies and Gentlemen

Let me at this stage acknowledge the presence of our two eminent professors Professor Latif Ladid, President of the IPv6 forum and Professor Gerald Schaefer of Loughborough University who will deliver the keynote addresses. I also recognise all other overseas participants, whom I wish to thank for their presence.

Allow me to share something with you. I took a few minutes to read a bit more about the IEEE and there was one thing that struck me forcefully. It was fascinating to note the Core Values of the IEEE. These purport to Trust, Growth, Partnership, Service to humanity and integrity in action, among others.

Now, if you scrutinise those values more deeply, you will surely be struck by the fact that they are precisely the ones that should naturally be at the core of our Universities.

University people need to get together and exchange knowledge, ideas and information. They need to build a relationship based on trust.

On the other hand, rifts and in-fighting tend to cloud judgements and it is the institutions' repute that has to bear the brunt of collateral damage.

Integrity has to be the norm and integrity is only achievable when personal and self-centered interests are subordinated to and allowed to be superseded by the higher, larger and overriding interests of the institutions.

Dear Conference delegates and participants,

I am sure that you will make the most out of these three days with the various research findings, presentations, multiple workshops and forums.

To the Conference organisers, I'll simply say, don't stop here: it would be helpful if you could submit to the Ministry the outcomes of your discussion panels. I am positive that some of the ideas would be useful in shaping future policy formulations for the sector.

Let me reiterate my appreciation to the University of Technology, Mauritius and the IEEE Mauritian Chapter for making this event a reality. A special word of thanks to the General Chair of the Conference, Associate Professor Vinaye Armoogum.

Ladies and Gentlemen,

I now have the pleasure to declare the IEEE Emergitech 2016 Conference open.