Speech of Hon (Mrs) L.D.Dookun- Luchoomun Minister of Education & Human Resources Tertiary education & Scientific Research Opening Ceremony of

Science Show and Award Ceremony of Video Contest of International Year of Light

(IYL) 2015

University of Mauritius

15th February 2016 at 9.00 a.m.

It gives me immense pleasure, as Minister of Education and Human Resources, Tertiary Education and, *especially* Scientific Research, to be with you for the opening session of the Science Show and the Award ceremony of the video contest of the International Year of Light, IYL 2015.

First of all, let me congratulate the University of Mauritius for organising this Science Show as one of its sustained and laudable

initiatives—I rather suspect that it will certainly not be the last in its genre!

If nothing else, it clearly demonstrates that the University of Mauritius is successfully distinguishing itself as an active promoter of science.

Ladies and Gentlemen,

Why is there so much interest in the promotion of science? I know this question sounds queer especially since I am in the presence of science cognoscenti.

Still, the question merits some kind of a response.

We know how important scientific literacy has turned out to be for the proper functioning of our day-to-day living. This literacy helps us in understanding and shaping our daily lives, in making several science-based choices on a daily basis and especially, it arouses the Questioning Spirit. In fact, I am always tempted to say that perhaps the most important word in a language—in ANY language—is the word "WHY?"

This seemingly innocuous word promotes the development of such fundamental skills as critical thinking, reasoning, decision-making, and communication, which all lie at the very genesis of knowledge and science. It is when we do not have any answer to the final WHY, when the response is "I DON'T KNOW" that real scientific investigation starts.

I presume that it was when scientists reached the stage of realising the noneffectiveness of existing drugs to combat Ebola that finally led to the development of ZMapp, the drug that eventually helped in mitigating, if not ending the outbreak of Ebola in West Africa. Now, the Zika virus is in the timeline and scientists are working towards the development of a Zika vaccine.

It is this sense of curiosity, of "I- don't- know -but- I- will -find- out" that we have to awaken in our learners.

For this is *the era of science*!

Science has become the powerful tool *par excellence* to address global and pressing 21st century issues such as climate change, energy challenges, and global access to food and clean drinking water, among others. Little wonder, therefore, ladies and gentlemen, that, in different parts of the world, much emphasis is being placed on science and the use of technology for increased Innovation.

STI, as we all know, have today become central to any planning for inclusive and people-centred development.

Illustratively, the OECD members place a heavy premium on Science and Technology as the drivers of change and innovation.

Closer to us on the Continent, the Common African Position that was worked out while the UN was on the verge of adopting the Sustainable Development Goals 2030 placed STI as the second of its 6 Pillars.

The African Development Bank, for its part, developed a Ten Year Strategy for the period 2013- 2022, and situated one of its operational priorities on " Skills and Technology", thus highlighting the need to invest in Science and Technology.

Again, the Continental Education Strategy for Africa (CESA 2016-2025) that has been approved at the AU Summit Meeting in end January this year contains 12 Strategic Objectives. You would certainly not be surprised to know that one of these Strategies is spelt out thus:

"Strengthen the Science and Maths Curricula in youth training and disseminate scientific knowledge and culture in society "

Distinguished Guests,

As Minister of Education and also Scientific Research, and especially as a person with a scientific background, I am more than aware of the necessity to catch our learners right from an early age and develop in them what the former President of India, HE Mr Abdul Kalam called "the scientific temper"

We know that, after Form 3, numerous students shy away from opting for sciencerelated subjects for different reasons. They can be as diverse as

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- ⊗A Science education and curriculum which focuses primarily on knowledge and facts rather than on understanding.
 ⊗A poor image of science and scientists as cloistered researchers.

Of course, the decline of positive attitudes, motivation, enjoyment, and enthusiasm for science is not specifically a national issue: the problem can be sensed in various parts of the world, be it the UK, US, or even Australia.

However, that should not make us wallow in complacency.

So, how do we get students to engage actively with science? Although there is no definitive answer, it would be worth our while to envisage a number of actions.

The "Transformation of Learning Environments and Pedagogies" is one such measure.

We have to emphasize the creation of an enabling environment to support innovative

pedagogies so that learner curiosity as well as independent learning are encouraged and ICT-mediated teaching and learning becomes the norm.

Again, students must be induced into a combination of active, hands-on/minds-on learning experiences together with research and problem-solving opportunities, based on scientific concepts.

It obviously goes without saying that the success in providing students with such type of experiences rests primarily on the shoulders of Educators, many of whom are present today and whom I welcome as well.

Ladies and Gentlemen,

The requisite is for new policy approaches and my Ministry is certainly in the process of coming up with these.

The strengthening of Science and Maths and technology is high on my Ministry's agenda.

Tertiary Institutions for their part should actively collaborate with the Private sector in the field of scientific research—and some of these areas have already been identified by virtue of their importance in national development: *Biotechnology, the Ocean economy., Renewable energy, the creation of the Bunkering Hub,* being some of these.

Also, we should push more in the direction of leveraging partnerships of an international nature—and I always love to take as example the Square Kilometre Array that is likely to be the world's largest and most sensitive telescope. And Mauritius, as you know, is one of the identified outstations for the SKA. Distinguished Guests, Ladies and Gentlemen,

The science show comes at a timely moment. It is a major means to engage the students to participate actively in science. This Show offers a powerful platform not only to entertain the students, but also to create awareness of "*simple things*" that govern science.

Hopefully, that will provide a 'declic', will act as a trigger for an increased fillip to science for some students.

I am also pleased that Dr Andrew Szydlo has spared time to come all the way from UK to Mauritius to share his experience with us. It

is a pleasure to share with you that Dr Andrew is a highly enthusiastic person who uses chemistry to deliver education, enlightenment, and entertainment to the community. He has been cited as one of the 175 Faces of Chemistry by the Royal Society of Chemistry.

I firmly believe that you, Educators and your students, will benefit from the expertise of Dr Andrew during this one week science show.

I also understand that, as part of the opening session, we will also have the award ceremony of the video contest of IYL 2015. It is gratifying to note that the videos that have been received, clearly reflect that our young Mauritians are ambitious, creative, and ready to accept challenges.

Maybe they only need the proper guidance! You, as Educators, are doing an excellent job in training the adults of tomorrow and I am sure that your presence today is an indication of how you are interested in being engaged in this paradigm shift to teach or introduce science with a new mind-set.

Let me end on this note.

Congratulations to all the participants of the video contest of IYL 2015.

Congratulations to the winners whose names will be announced shortly.

Once again, I would like to thank the University of Mauritius for hosting the Science Show and, of course, UNESCO, MCB, and other sponsors for making this event possible. I wish you all an enriching event and I now have the pleasure to declare the Science Show open.

Thank you.