TEKS UCAPAN PERASMIAN NANOMALAYSIA JUMPSTART SEMINAR SERIES

OLEH

YB DATUK MADIUS TANGAU MENTERI SAINS, TEKNOLOGI DAN INOVASI

[DISAMPAIKAN OLEH YBRS. DR. ZULKIFLI MOHAMED HASHIM TIMBALAN KETUA SETIAUSAHA (SAINS) KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI]

AUDOTORIUM TENGKU DATUK DR MOHD AZZAM KHAMIS, 30 JULAI 2015

Terima kasih Pengacara Majlis

Salutation.

YBhg DATUK ABDUL WAHAB ABDULLAH

Ketua Pegawai Eksekutif, MIMOS Berhad

YBrs DR. REZAL KHAIRI AHMAD

Ketua Pegawai Eksekutif, NanoMalaysia Berhad

Dif-dif Jemputan, Rakan Media

Tuan-Tuan dan Puan-Puan sekalian,

Tuan-tuan dan puan-puan yang dihormati sekalian

Salam sejahtera dan Salam 1Malaysia – "Rakyat didahulukan, Pencapaian diutamakan" Assalamualaikum Warahmatullahi Wabarakatuh. Alhamdulillah bersyukur kita ke hadrat Allah S.W.T kerana dengan limpah dan rahmatNya, diizinkan kita berhimpun di sini sebagai permulaan kepada NANOMALAYSIA JUMPSTART SEMINAR SERIES.

- 2. Terlebih dahulu, saya ingin menyampaikan permohonan maaf daripada YB Datuk Madius Tangau, Menteri Sains, Teknologi dan Inovasi yang baharu kerana tidak dapat hadir pada pagi ini dan menyampaikan ucapan sulung beliau sebagai Menteri MOSTI. Beliau telah meminta saya membaca teks ucapannya seperti berikut.
- 3. Dif-dif kehormat, tuan-tuan dan puan-puan, saya mohon izin meneruskan ucapan dalam Bahasa Inggeris.

- 4. First of all, I would like to welcome everybody to the NanoMalaysia Jumpstart Seminar Series: Electronics, Devices and Systems one of the foremost seminar series on nanotechnology development in Malaysia where executives, innovators, government officials and investors get together to network and learn about the business of emerging technologies, and how industries could adapt and benefit from embarking in nano-electronics.
- 5. I would also like to take this opportunity to congratulate the organisers; NanoMalaysia Berhad and MIMOS Berhad for providing a platform for industry key players, researchers and technology experts to connect, learn and exchange ideas from each other. I am indeed sure that our highly competent speakers and intelligent

participants will present their own unique perspectives to this seminar. As Advisor to NanoMalaysia, I applaud the hard work and efforts that has been invested in ensuring this event a successful one.

Ladies and gentlemen,

- 6. In line with **National Nanotechnology Roadmap** which was prepared in 2008 by MIMOS, the timing could not have been more perfect for us to further strengthen our presence in the nano-electronics market.
- 7. Nano-electronics as an emerging technology has been identified as a technological solution for upgrading and value adding relevant manufacturing activities in Malaysia corroborated by a healthy growing trend in electronics R&D, and an increasing number of adoptions from SMEs in their core business. The adoption of nano-electronics in manufacturing activities, however, is still at its infancy in Malaysia and this offers a huge potential economic gain if exploited strategically.
- 8. Microelectronics has changed our world drastically. Computers, smart phones, digital television, car navigation and security features, medical screening and health care equipment have all **become essential parts of our everyday lives**. Nano-electronics is just the next evolutionary step, as the number of transistors that can be integrated on a single chip reaches one billion, but it indeed represents a technological revolution marking a dramatic step forward.

- 9. While preparing papers for the Eleventh Malaysia Plan (2016-2020), we have discovered, among others, that we are lacked of the required talents to take our industries to the next level of the advanced materials market. Local industrial players lack awareness and technical know-how in integrating nanotechnology on current products and processes. This calls for a multi-disciplinary approach combining research in material design, processing, modelling, characterization and metrology.
- 10. Without the knowledge and information on how nanotechnology can add value to their products or improve their manufacturing processes, industrial players and investors are reluctant to invest and foray into the nano-electronics production or adoption. This is what the forum today intends to address. I urge all participants to make full use of the seminar today, and I hope this problem could potentially be addressed and some level of understanding could be achieved at the end of this two-day session.
- MOSTI commitment in support of the industries taking-up and exploring the benefits of nano-electronics. There are many successful set-up and operationalisation of nano-electronics related activities currently available for the manufacturing sector, to name a few, advance materials research and development, prototyping, testing and trials facilities at the Semiconductor Technology Centre for Microelectronics & Nanoelectronics at MIMOS, the Institute of Microengineering and Nanoelectronics (IMEN), Universiti

Kebangsaan Malaysia and the Institute of Nano Electronic Engineering (INEE), Universiti Malaysia Perlis. With the assistance and guidance from NanoMalaysia, I hope industry players will be able to capitalise on existing platforms within the country to boost their technological capabilities.

- 12. Nanotechnology is a dynamic field, and I have time and again read about its amazing potential. I am confident that collaborative research in this field, between MIMOS and the universities, as well as the industry, will offer golden opportunities to advance this field of technology as **new source of economic growth throughout the Eleventh Malaysia Plan period.**
- 13. I must thank MIMOS for undertaking these applied research activities, and congratulate you for the excellent outcome with NanoMalaysia as the default technology transfer outfit for nanotechnology, linking R&D outputs to the industries.
- 14. I understand that today MIMOS will officially launch the Nano Semiconductor Technology Centre, which is a complete E&E ecosystem support in the areas of nanoelectronics, graphene and semiconductor microelectronics. This facilitates resource sharing, which is a cost-effective solution for researchers and industry players. Not only will it reduce upfront costs, it will also significantly reduce the barriers to market entry for new entrants.

- 15. In 2014, total export for E&E products was RM256 billion. This figure was driven by strong global demand for new semiconductor applications as well as the rapid emergence of Internet of Things or IoT. Earlier this month, we launched the National IoT Strategic Roadmap, and we're going full force at th
- 16. With new breakthrough discoveries in nanotechnology and the rise of IoT, I dare say that we can raise the E&E sector by 20 30 percent by 2020 with **IoNT or Internet of Nano-Things** as an essential developmental step for IoT.

Ladies and gentlemen,

- 17. I am also pleased to be informed that shortly we will witness four (4) MoU exchanges afterward. This is something we can all take stock from as we are now looking at more and more collaborations happening in the nano-electronics area.
- 18. I look forward to witness more work and development taking place in this area as the **potential for nano-electronics is huge** and shouldn't be taken lightly. Therefore, I would like to urge all industry players to get their products and processes certified by the Nano Verify Programme by NanoMalaysia.
- 19. On that note, it is now my great pleasure to officiate the NANOMALAYSIA JUMPSTART SEMINAR ON ELECTRONICS, DEVICES AND SYSTEM.

Thank you.

MOU EXCHANGES

- 1. The MoU between <u>NanoMalaysia and MIMOS</u> will underpin the promotion and commercialisation of nanotechnology business activities, which will include research and development, pre-commercialization and commercialisation of nanotechnology products and products resultant of nanotechnology.
- 2. The second is a Tripartite MoU between NanoMalaysia, MIMOS, and PenChem Technologies for the research and of information & communication technology and microelectronics.
- 3. The third MOU between MIMOS and University of Malaya focuses on research for in-situ graphene on Silicon process development.
- 4. And last but not least, a Memorandum of Understanding between MIMOS and Multimedia University looks into the research in graphene process platform for power electronic devices.