



**UCAPAN OLEH
YB. DATUK DR. EWON EBIN
MENTERI SAINS, TEKNOLOGI DAN INOVASI
DI MAJLIS PERASMIAN
NANO MALAYSIA – CONVENTION AND EXPO 2013
RAMADA PLAZA, MELAKA
10 DECEMBER 2013**

***[DIWAKILI OLEH YB DATUK DR. ABU BAKAR MOHAMAD DIAH
TIMBALAN MENTERI SAINS, TEKNOLOGI DAN INOVASI]***

SALUTATION:

***[SILA SEMAK SENARAI TERKINI KEHADIRAN DENGAN
PENGANJUR]***

Y.BERBAHAGIA DATO' DR. MOHD AZHAR HJ YAHAYA
Timbalan Ketua Setiausaha Dasar
Kementerian Sains, Teknologi dan Inovasi

Y. BERUSAHA DR. ABDUL KADIR MASROM
Setiausaha Bahagian Direktorat Nanoteknologi Kebangsaan
Merangkap Pengerusi Jawatankuasa Penganjur
Nano Malaysia – Convention dan Ekspo 2013

Tetamu kehormat

Tuan-tuan dan Puan-puan yang saya hormati sekalian

Selamat malam and Salam 1Malaysia kepada semua.

Terlebih dahulu saya ingin mengambil kesempatan ini untuk mengucapkan ribuan terima kasih kepada Jawatankuasa Penganjur Nano Malaysia 2013, kerana sudi menjemput saya hadir ke majlis ini dan seterusnya menyampaikan sepatah dua kata.

2. Saya mengucapkan setinggi-tinggi syabas dan tahniah, terutama kepada pihak Sekretariat Nano Malaysia 2013, Direktorat Nano Teknologi Kebangsaan dan Nano Malaysia Berhad atas kejayaan menganjurkan Program 'Nano Malaysia – Convention and Expo 2013. '

3. Bagi memanfaatkan kehadiran tetamu kita daripada luar negara, izinkan saya untuk meneruskan ucapan dalam Bahasa Inggeris.

Distinguished guests, ladies and gentlemen,

4. It gives me great pleasure to speak to you this evening on the occasion of the Nano Malaysia 2013 – Convention and Expo. I would like to extend a very warm welcome to all of you, especially our overseas guests. Since its inauguration in 2010, the Nano Malaysia annual event has allowed researchers, students, policymakers and industrialists the opportunity to come together to discuss a wide range of issues. This year, this event is organised outside the Klang

Valley for the first time. I believe, it has something to offer to everyone, including the general public.

5. Nanotechnology, as we know, is fast emerging and marks the beginning of a new wave of technologies that will redefine, reshape and eventually transform economies and societies on a global scale. If we look at the Malaysian GDP, it stood at USD304.7 billion in 2012, an impressive amount generated by industries, products and services that will yet be made redundant without nanotechnological inputs by 2020. By then, all cutting edge products, materials and instruments will incorporate nanotechnology in one form or the other. In a nutshell, Malaysia needs to incorporate nanotechnology as a primary, new growth engine.

6. In making nanotechnology a strategic growth area for the country, the proposed approach is to leverage upon sectors where we already have relatively strong market positions and to be in line with the ETP and the NKEA. This is where early markets for nanotechnology will be created.

7. Unlike 20 or 30 years ago, the Malaysian public today is more educated, involved and concerned about new technologies and industrial processes, as well as their potential effect on human health and the environment. Incorporation of nanomaterials and nanoparticles in the product may raise public concern about its potential effect on health and the environment. MOSTI and its agencies in general, and the National Nanotechnology Directorate in

particular have the responsibility to provide leadership to ensure that a thorough assessment of safety and environmental effects of the new technologies as well as to communicate openly and clearly about the issues.

8. Some of the new technologies, such as genetically modified foods, are not well accepted by the public worldwide because the relevant government agencies did not involve and educate the public and policy makers from the beginning, when the technology was being developed. In this regard, policy makers and scientists need to learn from this experience and ensure that this does not happen with nanotechnology.

9. It is my hope that the awareness program and the expo that will commence tomorrow will be a good venue to disseminate information and educate the general public about the benefit of nanotechnology and to make them understand that the impacts of nanotechnology will not be confined to one sector, but will be seen across many sectors and variety of products. Given the large investments in nanotechnology, it is not unreasonable to foresee some 30 to 50 new nano-products appearing every month as more and more research bears fruit and companies drive toward commercialization. The nanotechnology products will be in our home, on our dinner table without us realizing it.

Distinguished guests, ladies and gentlemen,

10. As we recognize nanotechnology as the next new sources of growth that will generate wealth for Malaysia, we need to seize this opportunity to ride on the coming wave of technological evolution. MOSTI, through the National Nanotechnology Directorate has been given the authority and responsibility in formulating the national nanotechnology policy and blueprint aimed at providing favorable conditions for industrial innovation in nanotechnology, to ensure that research and technological development are translated into affordable and safe wealth-generating products and processes. This is to ensure that Malaysia will not be left behind in the fast moving development of nanotechnology. The draft document of the National Nanotechnology Policy is ready, and I hope to table them to the cabinet early next year for approval.

11. Future nanotechnology development needs to be comprehensively integrated into the economy as it requires high level of readiness, effective strategic planning and extensive investments involving businesses, education, labour and the government. There is a need to educate policy makers and government officials to ensure widespread understanding of the numerous benefits from the applications of nanotechnology, its strategic economic value for the nation, and its role in maintaining our global competitiveness. Comprehensive social and industry-wide adoption will lead to a positive impact on national productivity and an enhanced quality of life.

Distinguished guests, ladies and gentlemen,

12. In 2011, the National Nanotechnology Directorate identified and named five nanotechnology R&D centres as the National Centres of Excellence (COE) in Nanotechnology. The centres have been recognized for their continuous efforts in research and development (R&D) on nanotechnology and are progressing steadily to roll out their R&D programmes. I have been informed that this morning, they have reported their achievements thus far during the past two years, to the participants in the Convention. Many of their projects are scheduled for completion by the end of this year or next year, and we hope to transfer the results of their technological innovations to the industry.

13. Although there are a number of notable achievements in the research performed by the five COEs, unfortunately not many of them are given the publicity that they deserve. So let me just spend a little bit of time to take you through one or two outstanding examples.

14. Of these, UKM's Institute of Macroengineering and Nanoelectronics (IMEN) should not be a stranger to many of you. It is the COE dedicated to the development of core competencies in nanoelectronics in the area of Nanoelectromechanical Systems (NEMS) and Lab-on-Chips. One of its research products is on MEMS microspeaker - a nano enabled speaker technology, which has received interest and inquiries from multinational computer companies from China. In this regard, the National Nanotechnology

Directorate and Nano Malaysia Berhad are now working together with IMEN not only to further develop the technology but to protect the invention as well, which is an important first setp step before going into international market.

15. Another example of successful research performed by Nano COE is the Institute of Nano Electronics, UNIMAP. One of its significant research products is the Pregnancy Kit – a nano-enabled medical diagnostic kit which recently attained the award of “Anugerah Paten Negara” and has received enquiries from various companies.

Distinguished guests, ladies and gentlemen,

16. Those are two examples of success stories by Nano COEs. These are relatively small projects but well sought after by the industries because of their innovativeness. Although we have yet to reach a full-fledge commercialisation of these products, their success will enable our local manufacturers to advance the country’s nanotechnology roadmap through indigenous innovation without relying on imported technology.

17. Based on the latest statistics published on the Nano Statistics website, as at September 2013, the Malaysian global position in nanotechnology’s local share is at position no. 8 with 14.4% local share, a marked improvement from no. 15 in 2009, with only 6.9% local share. The indicator shows to what extent the scientific society of a country has accepted nanotechnology as a

priority. To improve our position globally, I believe, our scientists and researchers need more support not only from the government but from the private sector as well.

18. For infrastructural support, the Government through MOSTI and the National Nanotechnology Directorate is determined to provide state-of-the-art infrastructure and quality support for researchers and industries to accelerate innovation in the nanotechnology field. To meet future demand, we are in the process of establishing the National Nanotechnology Centre in Senai High Tech Park. In principal, the project has been approved by the government under the Public-Private–Partnership concept. I hope the project can take off in the 1st quarter of next year, and it will take 2 ½ years to be completed. Once completed, it will be one of the most advanced research centres in this region, offering modern research and testing facilities besides providing commercialisation platforms to facilitate the establishment of nanotechnology-based firms.

19. Last but not least, I would like to express my gratitude and thanks to the Asia Pacific for Commercialisation and Technology Transfer (APCTT) and the United Nations Economic Commission for Asia and the Pacific (ESCAP) officials and their delegates for organizing the National Workshop on R&D Management in the Area of Nanotechnology in collaboration with the National Nanotechnology Directorate. I have been informed that the Workshop has drawn participants and speakers from many Asia Pacific countries, namely

India, Pakistan, Philippines, Indonesia, Thailand and Korea who will also be sharing their experience with Malaysian counterparts.

20. In closing, I would like to congratulate all parties for their support, contribution and cooperation in ensuring the success of this event, To international delegates, it is my sincere hope that we shall be seeing more of you in the future when you will be coming perhaps in a private capacity, with family and friends, more so next year during the *Visit Malaysia Year*.

21. With that, I am now pleased to officially declare the *Nano Malaysia 2013 – Convention and Expo* officially open.

I wish you a productive session.

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KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI
PUTRAJAYA
10 DIS 2013

