Acceptance Speech for Honorary Doctor of Engineering from Multimedia University by HT Chuah

Yang Amat Berbahagia Tun Dato' Seri Zaki Tun Azmi, Canselor, Universiti Multimedia,

Yang Berbahagia Tan Sri Dato' Ir. Muhammad Radzi Hj Mansor, Pro-Canselor, MMU,

Yang Berbahagia Dato Sri Dr Halim Shafie, Pengerusi Lembaga Pengarah, MMU,

Yang Berbahagia Prof Dato Dr. Muhamad Rasat bin Muhamad, Presiden MMU,

Para Graduan, Para Ibubapa yang dikasihi,

Pensyarah-pensyarah dan Kakitangan MMU,

Tuan-tuan and Puan-puan yang saya hormati sekalian,

Selamat Pagi.

Majlis konvokesyen yang gilang-gemilang ini memberi makna yang besar kepada warga universiti, para ibu bapa dan para graduan kerana ia merupakan petanda sejarah bagi sebuah universiti yang melahirkan graduan ke arah membina masa depan negara yang lebih cemerlang. Saya ingin mengambil kesempatan ini mengucapkan setinggi-tinggi tahniah kepada para ibu bapa dan graduan MMU di atas kejayaan para gradúan di konvokesyen ini. Para graduan, ingatilah pengorbanan ibu bapa dan tanggungjawab anda terhadap keluarga, universiti, masyarakat dan negara.

Saya memohon keizinan Majlis meneruskan ucapan saya dalam Bahasa Inggeris.

Distinguished Guests, Ladies and Gentlemen,

Thank you very much, Prof Ong Duu Sheng for delivering such a meaningful and touching citation.

This is truly a memorable occasion for me to have this single honour, double privilege and triple pleasure of accepting this honorary doctorate in engineering from Multimedia University. For this distinguished award and for your warm hospitality, I would like to thank Multimedia University, all the faculty, staff, and friends here. I am truly grateful for and humbled by this recognition.

Multimedia University holds a special place in my heart, for it is here that I was given the opportunity to start a new Faculty of Engineering and lay the foundation from which growth and expansion flourish. I was also given the privilege of leading the Centre of Research and Postgraduate Programmes. I feel truly fortunate to have gained the full support of the university management, academic and administration staff, as well as the graduates and students throughout the period. Therefore, I would like to share this honour with all those

staff, students and graduates who ventured and explored with me during those years. I would also like to dedicate this honour to my late parents, my siblings, my nephews and nieces, as well as my teachers in schools and lecturers and professors in Universiti Malaya where I received my tertiary education and postgraduate studies.

Distinguished Guests, Ladies and Gentlemen,

As an engineer by training and an engineer in education by profession, my passion is of course in engineering. James A Michener, a US novelist says that "Scientists dream about doing great things. Engineers do them." And according to James Kip Finch, "The engineer has been, and is, also a maker of history". Indeed engineering feats have created history – from the first glider plane by Otto Lilienthal and the Great Wall of China to modern day lasers and fibre optics, underground tunnels and highways - engineers have been silently contributing to history and making the world easier for us to live in.

In 2011, the world population reached 7 billion. Two additional billion people are estimated to populate the earth by 2050. This will create unprecedented demands for energy, food, land, water, transportation, materials, waste disposal, health care, environmental clean-up, telecommunication and other infrastructure. The role of engineers will be critical in meeting these demands especially in developing nations. There is a growing recognition that we humans are altering the earth's natural systems from local to global. It is therefore essential to note that while satisfying the needs of the growing population, as engineers, we should preserve our ecosystems and biological and cultural diversity. There are still abundant opportunities for growth and development and engineers will continue to play an integral role in nation building. However, engineers for the future must be trained to make intelligent decisions that protect and enhance the quality of life on earth rather than endangering it. We must apply scientific analysis and holistic synthesis to develop sustainable solutions to emerging problems of food sufficiency and security, energy, global warming, pollution, water and waste management. Technical knowledge alone will not suffice. A holistic approach to decision making and problem solving is crucial.

With globalisation invading the world and the opening of emerging services in the region, we need another 200,000 engineers for Vision 2020 of Malaysia if we want to achieve the ratio of 1 engineer to 100 population. While the future is bright for engineers, engineering students must be prepared to enter the real world where you will be called upon to make decisions in a socio-geo-political environment where you will be required to complement

your technical and analytical capabilities with a broad understanding of the 'soft' issues that are nontechnical. Therefore, the engineering profession must revisit its mindset and adopt a new mission statement - to contribute to the building of a more sustainable, stable and equitable world.

Dear Graduands, Distinguished Guests, Ladies and Gentlemen,

As in the words of Charles Darwin, "it is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change". Indeed, as knowledge workers, our ability to respond to change is the key to our survival. Therefore, we must engineer our own profession. We must be pro-active and creative. We must come up with new or alternative and yet cost effective solutions.

In my Presidential Speech at the Annual General Assembly of the Institution of Engineers Malaysia in April 2009, I advised that all engineers need to carry three ICs, in addition to our national IC, in order to thrive in this fast advancing global market.

The First IC is Integrity and Competency:

The value of a person is defined by the knowledge in the mind, the worth of the character and the principles upon which we build our life. Handling ethical dilemmas and making ethical decisions are important parts of being a professional. We have to be equipped with the highest standards of technical skills, keep abreast with global technological trends, be strategic thinkers and planners and develop market driven services and high-tech products/systems.

The 2nd IC is Integration and Communication:

The world is becoming increasingly integrated by information systems, economic markets and political social issues. These pose challenges that are growing in complexity and transcend specific disciplines and are driving the emergence of multidisciplinary and interdisciplinary thinking. Innovations and technological breakthroughs are the product of convergence and integration of multi-disciplines. To operate successfully in a multidisciplinary environment, it requires a broad intellectual perspective. Equally important is the ability to manipulate information into knowledge as well as understand and communicate across disciplines.

Finally the 3rd IC is Internationalisation and Cooperation:

Globalization, characterised by the increase in international trade, mobility of labour and capital, as well as borderless communications, presents new opportunities and challenges. This borderless world will give participating economies the capacity for boundless prosperity. Trends such as the increasing transfer of technology, global mobility of professionals and trade liberalization have given rise to many issues that require co-operation and co-ordination.

I hope that these 3 IC's will be the guiding principles throughout our professional career.

Dear Graduands,

Today, you have the baton in your hands. Please embrace the esprit de corps as you continue the marathon with courage and determination to rise to the challenges that lie ahead of you. I shall end my speech with a quote from Sir Henry Royce (a prominent British engineer in the 1930s). He said, "Strive for perfection in everything you do. Take the best that exists and make it better. When it does not exist, then design it."

Sebelum saya mengundurkan diri, saya merakamkan setinggi-tinggi penghargaan sekali lagi kepada MMU kerana sudi menganugerahkan Kedoktoran Kejuruteraan Kehormat ini kepada saya. Sekian ribuan terima kasih.