Professor Datin Paduka Dr Khatijah Yusoff, DSIS
FASc, FIAS, FTWAS, PhD, DSc (*honoris causa*) (La Trobe)

Khatijah Yusoff has been at the forefront of science. As a researcher, her early work established the molecular biology of the Newcastle disease virus (NDV) with the determination of the first complete sequence of the L gene, epitope mapping of the haemagglutinin-neuraminidase and fusion proteins, and the molecular biology of local NDV strains including the challenge strain AF2240 and a heat stable vaccine strain V4(UPM). She has published extensively (Scopus *h*-index 21 with 1500 citations) and filed several patents and has three Malaysian patents, two USA Patents, one from Japan, and one PCT granted, including two registered trademarks in Malaysia. She has also contributed to cancer research. To illustrate, poultry virus was found to selectively kill cancer cells. In turn, this had triggered a whole new initiative to develop adjunctive therapy for cancers. This innovative initiative is now being supported by several grants. Her work receives great acclaim nationally and internationally; she was accorded UNESCO's Carlos Finlay Prize for microbiology in 2005, the second Asian scientist to receive such an honour. She was earlier honoured by the Houghton Trust to deliver the 3rd Houghton Lecture at the XIIth World Veterinary Poultry Association (WVPA) Congress in 2002 for her contributions to the poultry industry; the first Asian scientist to be bestowed such an honour. In 2008, she received the Distinguished Alumni Award from her alma mater, La Trobe University - the ninth person to receive this honour from over 120,000 of its alumni. She was recently identified as one of the top 20 most influential women in science in the Islamic World for 2014 by Muslim-Science.Com. She was elected as a Fellow of the Academy of Sciences Malaysia in 2007 and a Fellow of the Islamic World Academy of Sciences in 2008 and The World Academy of Sciences (TWAS) in 2010. She is now the Vice President for the East and Southeast Asia of TWAS.

As an exponent of science, her five year stint as the Deputy Secretary General of MOSTI gave an opportunity to promote science through policies and development of a strong framework in managing Science in the country. She was instrumental in re-activating the Office of the Science Advisor to the Prime Minister, establishing the National Science and Research Council, the Nanotechnology Directorate, the National Bioethics Council, NanoMalaysia Bhd., the National Institutes of Biotechnology and drafting of the National STI Policy, Science Act, Oceans Policy, Space Policy and Nanotechnology Policy. These have far-reaching consequences in enhancing science; which are bold moves to ensure the community well-being while contributing to national sustainable competitive advantage.

She also strongly believes in the need to translate science into tangible benefits to people around the world. This opportunity came when she was head-hunted to sit on the Board of Trustees of the international Livestock Research Institute (ILRI) based in Kenya and Ethiopia. This organisation, supported by governments and philanthropists the likes of the Melisa and Bill Gates Foundation, is dedicated to bring science to the poor farmers in Africa and beyond. She was also on the SEAMEO-BIOTROP Governing Board based in Indonesia. She is currently on the Advisory Board for La Trobe Asia in Melbourne, Australia and a member of the Technical Advisory Panel for International Technical Advisory Committee of Commission on Science and Technology for Sustainable Development in the South (COMSATS). She is elected to the Councils of Islamic Academy of Sciences (IAS) and Academy of Sciences Malaysia (ASM). She is also a member of the National Science Research Council and the National Bioethics Council. In addition to being on the Board of Directors for A-Bio Sdn Bhd, GreenTech Malaysia Sdn Bhd (Deputy Chairman), and Steinbeis Malaysia Foundation, she was previously a member of the Board of Directors for MIMOS Bhd, Malaysian Agricultural Research and Development Institute (MARDI), Multimedia Development Corporation (MDeC), National Institutes of Biotechnology (NIBM), NanoMalaysia Sdn Bhd and Atomic Energy Licensing Board (AELB). She is now the Chief Editor of the ASM Science Journal.

As an educator of science, Khatijah is a dedicated lecturer and has been acknowledged for her contributions through the Excellent Services Award on several occasions from UPM. Furthermore, she enjoys teaching students. It is through the interest instilled in them that many of her undergraduate students have continued their studies to the postgraduate level and have themselves become academicians. She has served on various committees, particularly in the development and promotion of teaching and learning as well as in scientific research. Together with her colleagues, she has supervised over 134 postgraduate students, 106 of whom have graduated. She has contributed to the growth UPM through assuming a number of posts. She was promoted to Associate Professor in 1994 and became a full Professor in 2001. She served as the Head of the Department of Biochemistry and Microbiology in 2000 at the Faculty of Science and Environmental Studies. She was instrumental in establishing the Faculty of Biotechnology and Biomolecular Sciences at UPM. She then became its first Deputy Dean for Research and Graduate Studies from 2004 till 2006 before she was promoted to Deanship. In 2007, Khatijah became the first woman to be appointed as the Deputy Vice Chancellor for Academic and International Affairs at UPM In 2015, she was recognised as Tokoh Pekerja under the Management and Professional (Academic) Category.

This Merdeka Award is very much in tune with her aspirations to explore science and to make science serve the people in explicit and tangible ways. Science is a vehicle to expedite the process to elevate the well-being and socioeconomic status of communities and nations, apart from understanding and benefiting from what nature has got to offer.

Khatijah was born in Penang. After receiving her early education there, she won a Colombo Plan Scholarship to La Trobe University, Australia for her tertiary education where she graduated with a First Class Honours in Microbiology in 1979. She then won a La Trobe University research scholarship to complete her PhD on “Genetic and molecular analysis of plasmid RP1: Interactions with prophage B3 and aspects of conjugal transmission” in 1983.

She has received a number of awards including the National Young Scientist Award in 1990 by the Ministry of Science, Technology and Environment. She has since received many prizes, medals and other recognitions, notably, the Australian Education Achievement Award 2013, Zakri Award in 2013, Mendel Lecturer in 2009 and Microbiologist of the Year Award in 2009. In 2006, HRH the Sultan of Selangor bestowed her the Royal Award “Dato’ Sultan Sharafuddin Idris Shah” (DSIS) which carries the title “Datin Paduka”. In 2010, La Trobe University awarded her DSc (*honoris causa*).

She is most thankful to her recently departed parents for their persistent trust and loving upbringing. Her husband, Senior Professor Dato’ Dr Khalid Yusoff, and her two children, Zul and Azzah, are her constant company and ever-lasting joy.