

# NANOTECHNOLOGY: FRONTIERS IN RESEARCH AND COMMERCIALIZATION



Over the past 20 years, Nanotechnology has emerged as an exciting frontier in science, engineering and medicine. Nanotechnology presents a new way of creating and controlling nanometer-sized features in materials and devices, thereby opening new possibilities to harness size-dependent properties in an unprecedented manner. Nanotechnology is being rapidly developed and adopted by various industries to create the latest products and technologies that offer major advantages over the conventional products and technologies. It is poised to make major breakthroughs and impacts in the medical technology, pharmaceutical, chemical, energy, electronic, personal care, food and nutritional industries. This talk describes the design and synthesis/fabrication of nanostructured materials and devices for specific applications, and their commercialization through working with spin-offs and multinational companies.

**22<sup>ND</sup> DECEMBER 2016**

**UNIVERSITI TEKNOLOGI MALAYSIA  
KUALA LUMPUR**



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Bioproduct Development



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Innovation and  
Commercialization  
Centre  
(ICC)

## OBJECTIVES:

- Review the latest advancement of bio-nanotechnology in research and commercialization.
- Relate the platform of bio-nanotechnology in research sustainability.
- Provide know-how on bio-nanotechnology towards commercialization.

## PROGRAMME:

0830 – 0900	Registration
0900 – 0930	Welcoming Remarks <b>Prof. Dr. Zainuddin Abdul Manan</b> Dean of FCEE, UTM
0930 – 1100	<b>Nanotechnology: Frontiers in Research and Commercialization</b> <b>Prof. Dr. Jackie Ying</b> CEO, Institute of Bioengineering and Nanotechnology, Agency for Science, Technology and Research, Singapore
1100 – 1200	Q&A Session
1200	Refreshment & End of Program

## HOW TO REGISTER:

### RM50

Inclusive of refreshment &  
UTM goodie bag  
*\*Price inclusive of 6% GST*

### FREE admission for UTM staff and students (Registration is required)

Registration Deadline: 19<sup>th</sup> December 2016

#### PAYMENT ONLY VIA BANK TRANSFER

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## SPEAKER PROFILE:

**J**ackie Y. Ying received her B.E. and Ph.D. from The Cooper Union and Princeton University, respectively. She joined the faculty at Massachusetts Institute of Technology in 1992, where she was Professor of Chemical Engineering until 2005. She has been the Founding Executive Director of the Institute of Bioengineering and Nanotechnology in Singapore since 2003. For her research on nanostructured materials, Prof. Ying has been recognized with the American Ceramic Society Ross C. Purdy Award, David and Lucile Packard Fellowship, Office of Naval Research Young Investigator Award, National Science Foundation Young Investigator Award, Camille Dreyfus Teacher-Scholar Award, American Chemical Society Faculty Fellowship Award in Solid-State Chemistry, Technology Review's Inaugural TR100 Young Innovator Award, American Institute of Chemical Engineers (AIChE) Allan P. Colburn Award, Singapore National Institute of Chemistry-BASF Award in Materials Chemistry, Wall Street Journal Asia's Asian Innovation Silver Award, International Union of Biochemistry and Molecular Biology Jubilee Medal, Materials Research Society Fellowship, Royal Society of Chemistry Fellowship, Crown Prince Grand Prize in the Brunei Creative, Innovative Product and Technological Advancement (CIPTA) Award, American Institute for Medical and Biological Engineering Fellowship, Academy of Sciences of Iran Medal of Honor, American Association for the Advancement of Science Fellowship, Singapore National Academy of Science Fellowship, and The Cooper Union Alumni Association Gano Dunn Award.



Prof. Ying was elected a World Economic Forum Young Global Leader, and a member of the German National Academy of Sciences, Leopoldina. She was named one of the “One Hundred Engineers of the Modern Era” by AIChE in its Centennial Celebration. She was selected by The Muslim 500 in 2012, 2013, 2014, 2015 and 2016 to be one of the world’s 500 most influential Muslims. She was selected as an Inaugural Inductee for the Singapore Women’s Hall of Fame in 2014. She was the inaugural winner of the Mustafa Prize “Top Scientific Achievement Award” in 2015 for her research in bio-nanotechnology. The laureate of this science and technology award receives a certificate, an engraved medal and US\$500,000 in prize money. She is the Editor-in-Chief of *Nano Today*, which has an impact factor of 13.157.