

CELEBRATING  
COMMERCIALISATION  
YEAR 2014

# iiindex 2014

AN INTERNATIONAL EXPOSITION ON RESEARCH AND INNOVATION

invention  
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& design  
exposition 2014

INNOVATEUR  
wannabe!  
2014

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UNIVERSITI TEKNOLOGI MARA  
MALAYSIA

*Bridging  
the valley of death :  
advancing the  
commercialisation  
of research*

RESEARCH BOOK

# iiindex2014

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innovation  
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## FOREWORD

The Honourable Minister of Science, Technology and Innovation (MOSTI) has launched 2014 as Malaysia Commercialisation Year 2014 (MCY2014) with the theme Science Technology and Innovation (STI) for Wealth Creation. In line with this theme, Invention, Innovation, Design & Exposition 2014 (iidex2014) is an annual exposition organized by UiTM and is the ultimate platform to highlight and commercialise new inventions and innovations. Researchers and inventors will exhibit their products which cater to the needs and wants of the community and the country.

The iidex2014 creates a new dimension by fusing two competitive concepts, a competition among innovative products and a competition to invite Innovateur Wannabes to perform live pitching of their products to the audience. The iidex2014 focuses on comprehensive commercialization and creating opportunities for entrepreneurs to carry out R&D as well as to provide avenue to commercialise their products. Through expositions such as iidex2014, MOSTI hopes to inculcate the culture of commercialisation of new technology designed and created by Malaysians.

I wish to congratulate all the participants of the iidex2014 and this is the opportunity for all researchers to show their ideas and exhibits their products and creativity. Apart from showcasing their products, innovators will have the opportunity to provide a window to the industry for business matching during the exposition.

Tan Sri Dato' Sri Sallehuddin Mohamed  
Pro-Chancellor, Universiti Teknologi MARA

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## SMART PENCIL CASE

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The smart pencil case was invented to help and make life more enjoyable and easier for the user. The pencil case itself is made and attached with speakers, Mp3 and recorder. All of these items are attached onto the pencil case to help people to relax while studying certain subjects by writing it down to make their own notes based on what they recorded in class few hours ago. They would not leave out or forget any information since it records what other people said during the teaching sessions, in the meeting room, interviewing, having a discussion and talking to their friends or colleague to deliver any message or information to them. The user can listen to music while studying or having a discussion with their friends using Mp3. They can listen to music using speakers or headphones. The Mp3 that is attached to the pencil case to reduce the boredom while studying or having a discussion with friends and to avoid sleepiness while perform any task or while studying alone. The Mp3 itself is covered by waterproof material to protect it from being damaged. The group interested in this product are teenagers, adults, students, lecturers and working people. The Mp3 attached to the pencil case can be recharged using a power bank or mobile phone charger to recharge the battery.

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## CORATELLA

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Coratella is an innovation from the existing fruit plucking equipment. Existing equipments used to pluck are very large. Weighing hundreds of pound and therefore expensive to purchase and maintain. Thus, it is not practical to use them in any large farming or harvesting operation. It cannot be utilised easily due to its size and cannot be manoeuvred in areas of bushes. Moreover, fruits will fall to the ground which caused obvious permanent fruit damage. Our main project is to design innovative and optimise fruit plucking. Coratella is a fruit plucking equipment which can pluck fruits easily and save time. Coratella was designed using simple components. Coratella consists of a metal rod, canvas basket, the plucker and rope. Coratella comes in different sizes to pluck fruits of different sizes and reach different heights. Canvas is used to make the basket into which the fruit will fall upon plucking. Canvas is soft and will not damage the fruit. This device is safe and can be used while standing on the ground thus avoiding the risks of climbing the trees and risk falling. Coratella also saves time and enable more fruits to be plucked safely.