

Optimizing Innovation for Global Commercialization



Optimizing Innovation for Global Commercialization



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Division of Research,
Industrial Linkages & Alumni (PJI&A)
Universiti Teknologi MARA Melaka

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Optimizing Innovation for Global Commercialization

Research, Invention, Innovation Design

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background of RESEARCH, INDUSTRIAL LINKAGES & ALUMNI

Objectives

- To promote world-class research.
- To administer, coordinate and provide service for research development, consultation and research publication.
- To provide assistance in exploring new subjects and identify niche area of interest.
- To disseminate information and provide ample training in research, consultation and publication of research.
- To ensure innovation, quality research, consultation and publication are maintained.
- To assist in research publication for high impact journals.

Vision

To become the leading administrative centre for research, development, consultation and world-class research publication.

Mision

To enrich the academia, creative ability and innovation through quality service.

Division of Research, Industrial Linkages and Alumni or known as PJI&A started as the Research Management Unit (RMU) or IRDC and was formerly known as Planning, Research and Development Centre which was established in April 1980. However in September 1987, IRDC was restructured with its heightened importance in research and consultation in UiTM and was divided into two units, Research and Consultancy Centre (RACC) and Planning and Evaluation Unit. This centre was then renamed to Research and Consultancy Bureau in 1994 and went through another name change to become Institute of Research, Development and Commercialisation (IRDC) on 15 July 2003.

With the mooted of the post of Deputy Vice Chancellor in March 2008 to take over the intellectual property and commercialisation portfolio, IRDC was given the responsibility to maximise innovation and increase the number of research which will later be published in high impact journals. Ensuing this, on 31 July 2008 IRDC was changed to Research Management Institute (RMI) to synchronise with UiTM's aspiration to become a Research University that will develop innovation activities and new research. It was only in 2011, that RMI became the Research, Industrial Linkages and Alumni Division (PJI&A), headed by its Deputy Rector, Associate Professor Dr. Roaimah Omar. Under her tutelage, Invention, Innovation and Design (IID) was born in 2009.

The different divisions or units in PJI&A are responsible to manage, monitor and conduct research in science and technology, management and social sciences, consultation, financial assistance for consultation, innovation, publication and Information for Research and Consultancy (INFORAC). PJI&A also conducts seminars, workshops and roadshows to encourage, motivate and train the academic and non-academic staffs in research and consultation, securing research grants and projects, to manage good financing and publish research in a responsible and ethical manner.

RIID2013 OBJECTIVES

General Objective

To display research, invention, and design from various institutions (IPTA/IPTS) that can be commercialised for global benefit

To culturalise research and innovation through the sharing of expertise and commercialised, creative and innovative ideas

To instill interest and encouragement to the public towards research, invention and innovation that poses as a medium for the nation's development.

Specific Objective

To identify and promote new and inventive discoveries that are commercialised, creative, and innovative from various institutions (IPTA/IPTS) all over Malaysia.

To select discoveries and new invention to be contested in the national and international level.

To uphold the reputation and image of UiTM as a well-known pioneer in innovation and invention in the national and international level.

CHRONOLOGY OF RIID

RIID Showcase

7 August 2009,
Dewan Kuliah 2,
UiTM Melaka.



1st IID LET'S IID

13 August 2009,
Dewan Bendahara,
UiTM Melaka.



2nd IID Enculturation Of Research & Innovation

5 October 2010,
Dewan Bendahara,
UiTM Melaka.



RIID 2013 Optimizing Innovation For Global Commercialization

16 - 17 December 2013,
Dewan Taming Sari,
UiTM Melaka.



RIID 2012 Innovation for Sustainable Growth

7 - 8 November 2012,
Dewan Taming Sari,
UiTM Melaka.



DERIA 2011 Sound, Image & Object

21 - 22 July 2011,
Mini Stadium Bistari,
Ayer Keroh, Melaka.

foreword message by

CHIEF MINISTER MELAKA



YAB Datuk Seri Ir. Haji Idris Haron

*Chief Minister Melaka
December 2013*

***Assalamualaikum wbk and
best greetings Salam 1Malaysia,***

And foremost, I would like to congratulate Research, Industrial
Parks and Alumni Centre (PIAC), Universiti Teknologi MARA
(UiTM) Melaka for yet another successful organisation of this
rich, Invention, Innovation and Design Exhibition 2013 (RIID

In the era of globalisation, the Malaysian government is stepping
up its efforts in developing the country and its people, be
ing by launching a holistic socioeconomic development programme.
Our Prime Minister Datuk Seri Mohd Najib Tun Abdul Razak
has introduced a massive transformation agenda in implementing the
programme with its approach and philosophy. The Prime Minister has
also outlined five-key strategic thrusts under the 10th Malaysia
Plan (10MP) to enable Malaysia to become a high-income and
developed nation by 2020.

Therefore, the National Key Results Area (NKRA) and the Key
Performance Index (KPI) were introduced towards achieving vision
2020. While moving towards achieving a developed country status,
Malaysia needs to draw up a new approach which emphasises on
quality human capital, innovation and creativity. The government in
addition has to operate as competitive corporation.

I would like to congratulate UiTM Melaka for supporting the
country's vision by hosting RIID2013 competition and exhibition.
With its theme Innovation for Sustainable Growth, this event is a
positive initiative to encourage professionals and academicians
alike to enhance their knowledge and practical skills and these are
parts of their contribution for the nation's building.

When research activities are conducted continuously, it is expected
that more innovations will be generated. UiTM Melaka's initiative
is highly commendable as it manages to attract 340 products to
be displayed and competed at this event. It is hoped that this event
will serve as a catalyst in enhancing the roles of professionals in
various industries.

***Assalamualaikum wbkt, Salam 1Malaysia
and Salam UiTM Sentiasa Di Hatiku.,***

I would like to welcome our honourable guests, professionals, and academicians from schools, colleges and universities to the 5th Research, Invention, Innovation and Design 2013 (RIID 2013) competition proudly organised by the Research, Industry Linkage and Alumni Division (PJI A) Centre Universiti Teknologi MARA (UiTM) Melaka.

In line with the government's aspiration to nurture and cultivate innovation, UiTM Melaka has taken the initiative to organise RIID 2013 Melaka Innovation Festival. One of the main objectives of the event is to raise the status of local universities globally. To achieve the status of a Research University (RU), one of the criteria is to emphasise on high impact innovation research which leads to invention of new business models, or innovative processes. This would result in an improved efficiency of the organisation and contributes towards better quality of life.

Since innovation is a vital catalyst to attain the status of developed nation in the year 2020, UiTM Melaka is heading the nation's call to attain aspiration through innovative programmes with staff and students. These creative and innovative abilities could be brought to greater heights through competitions and innovation exhibitions held annually. During this two-day event, a talk on innovation will also be held. Innovation is one of the key factors that could push the economy forward. In line with the strategic thrusts, the RIID 2013 competition will serve as a platform for researchers to expand their researches into innovations while becoming a venue for them to showcase their products, prototypes and new ideas.

This competition also serves as a platform for students, lecturer's administrative officers and the public to demonstrate their products or prototypes as well as sharing new ideas for commercial value. Therefore, PJI A decided the Optimizing Innovation for Global Commercialization as our theme for this year 5th Research, Invention, Innovation and Design 2013.

I am proud to announce that the number of participants in this event has increased to more than 300 participants compared to the previous year event. I would like to extend my sincere thanks and gratitude to the committee members who have persistently given their full commitment to this event.

I wish all the participants all the best in the competition.

foreword by
RECTOR



Associate Professor Dr. Adnan bin Hashim

*Rector
Universiti Teknologi MARA Melaka
December 2013*

LCD Projector Protection System

Izzuddin Aziz Shah bin Roduan;
Mohd Jamhari Ismail bin Md Tokit

Jabatan Kejuruteraan Elektrik, Politeknik Merlimau, Melaka

LCD projectors are used through out the world in various different applications. Common failures seen in LCD projectors are the faulty lamps. LCD Projector Protection System is one-of-a kind project that is designed to solve an intensive care problem while and after using the LCD projection. This project idea occurred in my mind after one of my lecturer was a in hurry, will not wait for the fan to stop rotating before switching off the LCD projector once finish teaching in the lecture room. A cooling fan is used to disperse the heat generated by an LCD projector and prevent it from over heating. The hot temperature is the major factor why the LCD projector is damaged if the user immediately turn off the electricity supply socket after shutting down without waiting until the LCD projector cooling fan stop rotating. LCD Projector Protection System is implemented to protect the LCD projector lamp lifespan. This device start operating when the system switch is pressed and the electricity will be supply and received at the LCD projector, at this time the indicator reads "Waiting For LCD ON" and the temperature is displayed for two minutes. If the LCD projector is not switched on, the electricity supply will be cut off automatically by the device. If the user continue using the LCD projector, during this time the indicator display reads "LCD Temp. System ON" and the current temperature for LCD projector will appear.

JACK HANG DOOR

Noraniezah Binti Narol; Nik Izni Binti Nik Zakaria; Nora Binti Ismail; Syahidah Binti Salleh; Zaidah Binti Abd. Umar

Jabatan Kejuruteraan Awam, Politeknik Merlimau, Melaka

Door installation work will be done after the super structure and after the finishing work on the building. This requires the construction process as soon as possible. It usually required more than a worker to carry it. Generally, we can see the procedure or skills applied in door installation. Works of door assembly need a lot of strength and energy to make sure the door fixed to the door frame and follows the requirement of specifications. There are several problems arise during the door installation works carried out such as the employer have to face high labor costs, injuries to employees and health implications such as backache and others. In addition, door installation works often take a long time because workers had to be careful when lifting the door to the frame, then the hinge can be installed. This product research would help to simplify work and most importantly help to reduce time and costs involved. It also shows the specific usage of Jack Hang Door which provided against difficulties and suitable for varies types of door or in furniture manufacture works. Based on Fixed Pulley System concept which the combination of non-corrosion metal (hollow metal) and bolt and nut which produce a foot-operated product which based on its foundation stability. Hence, it is perhaps that it will be inspirational to produce Jack Hang Door product thus acknowledging as a practical and economic inventory.