# innovation for sustainable growth

VESEARCH 7-8 NOVEMBER 2012 VVENTION DEWAN TAMING SARI VNOVATION & UNIVERSITI TEKNOLOGI MARA DESIGN KAMPUS ALOR GAJAH MELAKA



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Abstracts Invention Category Innovation Category Design Category Exhibition Concept Sponsorship Supported Institution Acknowledgement

## WELCOME MESSAGE



Assalamualaikum wbkt and Salam One Malaysia

First of all, I would like to congratulate the Research, Industrial Linkages and Alumni Melaka for yet another successful organization of the Research, Invention, Innovation and Design (RIID) exhibition 2012.

This competition and exhibition is the fourth effort by the Research, Industrial Linkages and Alumni in exhibiting the outcomes of research, invention and innovation by our own versatile lecturers and students and also participation from other IPTAs, IPTS and Schools. I believe that this exhibition is definitely a good avenue for them to participate actively and progress collaboratively in the field of innovation and research.

I am confident that the Research, Industrial Linkages and Alumni in the Melaka campus will continue to address the various challenges that we are constantly facing with a view towards multidisciplinary solutions. Hence, the present exhibition with the theme 'Innovation for Sustainable Growth' is appropriate, and I am certain that this exhibition will bring about more collaborative research and publication.

I therefore would like to take this opportunity to extend a big 'Thank you' to the organizing committee of Research, Invention, Innovation and Design (RIID) 2012 and each and everyone who has made this exhibition a reality. I wish all researchers, lecturers and students a meaningful and enriching experience in coming up with new and innovative inventions. I wish to end with a note of thanks to the Research, Industrial Linkages and Alumni for a job well done.

Yours sincerely, Y.Bhg.Prof Madya Dr Mohd Adnan Hashim Rector Universiti Teknologi MARA Melaka November 2012

## BACKGROUND OF PENYELIDIKAN, JARINGAN INDUSTRI & ALUMNI (PJI&A)

PJI&A established in April 1980, started as the Research Management Unit (RMU) or IRDC and was formerly known as the Planning, Research and Development Centre. 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 Research and Consultancy Bureau in 1994 and on 15 July 2003 it became Institute of Research, Development and Commercialisation (IRDC).

With the mooting of the 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 became the Research Management Institute (RMI) to synchronise with UiTM's aspiration to become a Research University that will develop innovation activities and new research. In branch campuses RMI is known as RMU. The department of PJI was officially established in 2009 headed by its Deputy Director, Associate Professor Dr. Roaimah Omar. Under her guidance, Invention, Innovation and Design (IID) started with the RIID showcase in August 2009 and this was followed by the first IID exhibition and competition in October 2009.

PJI&A is mainly responsible to manage, monitor and facilitate researchers in conducting their research in the area of science and technology, management and social sciences. It also provides consultation services to researchers and assisting them in their research claims. PJI&A also conducts seminars and workshops to encourage, motivate and train the academic and non-academic staff in research and consultation, securing research grants and projects, to manage good financing and also manages entrepreneurial and alumni activities.

## Objectives

- To promote word-class research.
- To administer, coordinate and provide service for research development, consultation and research publications.
- 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 disseminate information and provide ample training in research, consultation and publication of research.
- To provide related service through the latest technology
- To assist in research and the submatrix for the happened journals.

#### Vision

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

### Mission

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

## **INTRODUCTION TO RIID 2012**

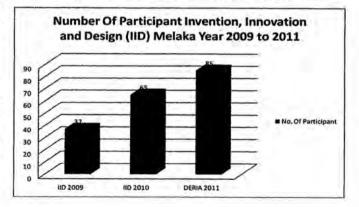
Innovation activities can be considered as an important mechanism for the nation's progress. RIID2012 Melaka anchors on the objective to produce individuals who are capable of formulating creative ideas and be highly competitive. UiTM is an institution which primarily puts emphasis on an innovative culture among its staff and students to form a critical thinking society, possessing creativity skills and elevated knowledge. Aligned with the government's aspiration to cultivate innovation, UiTM Melaka has taken the initiative to organise RIID2012 Melaka Innovation Festival.

To raise the status of local universities globally or among the KPI which has been determined by the Ministry of Higher Education (MoHE) and to achieve the status of Research University, the total number of innovation being produced by a university is of utmost importance. Innovation is a vital catalyst to attain the status of a developed nation in the year 2020. Parallel to this, UiTM Melaka is carrying the nation's aspiration through innovation programmes wherein the staff and students' creativity and innovative abilities could be brought to greater heights through competitions and innovation exhibitions held every year.

To consistently produce innovation, IID competitions can act as one of the ideal channels or medium to ensure students, lecturers, administrative officers and the public to exhibit or display their products or prototype as well as new ideas that contain commercial values. The first IID held at UiTM Melaka level took place in 2009. It successfully exhibited more than 37 products. To continue the innovation culture within the campus community, IID competitions should be maintained. The number of participation showed an encouraging response with 45 products being exhibited in the following year. The third IID known as DERIA 2011 was given a new facelift with an estimation of nearly 100 products that competed. Therefore, the Research, Industrial Linkages and Alumni Division (PJI&A) suggested organising the 4th IID in 2012. The IID competition this year is known as RIID2012 with the theme 'Innovation for Sustainable Growth'. The theme is chosen as innovation is believed to be the main impetus for growth that would spearhead the nation towards becoming a high income developed nation.

Therefore, the Research, Industrial Linkages and Alumni Division (PJI&A) has suggested to organise the 4th IID in 2012. The IID competition this year is known as RiiD2012 with the theme 'Innovation for sustainable growth'.

R= research, I = invention, I= innovation, D= design = RIID



## 1st IID: LET'S IID 2009

#### **Gold Medal**

- 1. Asmaradana (Video clip) by FSKM
- 2. Pinggan Rasmi Istana Melaka by FSSR
- Rekabentuk Maskot dan Logo SUKMA 2010 Melaka by FSSR
- 4. eXtention-C by FPN
- CD Interactive Cartoons on Sexual Education for Young Children by FSSR
- 6. Grammar Mania A Game For The Language Classroom by FPEND
- 7. Dara Pujaan (Short Film) by FKPM
- 8. Kalkulator Zakat Mudah Alih @zakatfon by IKAZ
- 9. Smart Easel by FSSR
- 10. Dhobi Wallah The Last Laundrette Mohican (Documentary) by FKPM
- 11. e-Inventori ICT System by FSKM

#### Silver Medal

- 1. Teguh 11 by FSSR
- 2. Songket Rasmi Negeri Melaka by FSSR
- 3. Workout with English by FSKM
- 4. Smart Drawing Board by FSSR
- 5. i-Masjid by IKAZ
- Photo Gallery 2009, The Good, The Bad and The Ugly:Journey of Emotions (Sweats of Heart;s Desire) by FKPM
- 7. Dulang Bekas Kuih Raya 1 by FSSR
- 8. MyPJI-Portal by FSKM
- Academic Predication Model Neural Network for Computer Sciences Students in UiTM by FSKM
- 10. Mobile Archery Scoring System by FSKM
- 11. e-Aduan ICT System by FSKM

#### **Bronze Medal**

- 1. Sistem e- GL Staf by FSKM
- 2. Postcards as Affective Image Makers for Melaka Tourism by FSSR
- Impact of Economic Growth on Air and Water Pollution in Malaysia by FPP
- 4. Snakes and Ladders (Literature) by FPEND
- Reka Bentuk Komunikasi dalam Penjenamaan Semula Identiti dan Imej Lokasi Pelancongan di Negeri Melaka (Melaka River Cruise) by FSSR
- 6. Photo Gallery 2008, The Good, The Bad, The Ugly: Journey of Emotions (Life) by FKPM
- 7. Malaysian MotoGP 2009 Booklet by FFPM
- 8. Penghasilan Functional Sculpture/Decorative Objects/Design Object (Terendak Lampu Hiasan) daripada Logam Terpakai/Terbuang dengan Teknik Kimpalan Beracuan by FSSR
- 9. The Sale and Purchase Agreement: Creating and Innovative Glossary to Make It More Comprehensive
- KOMIK: Catatan SI MAHASITUA by FSSR

Faculty with the Highest Number of Participation Category: FSSR

Best Booth Category: Asmaradana (Video Clip) by FSKM

Best Poster Category: Kalkulator Zakat Mudah Alih @zakatfon by IKAZ

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## **DERIA 2011**

Best Interactive Category: 2nd Group, Noor Suhaida binti Aziz / Nornadia binti Jonari, UiTM Melaka

Best Young Inventor Category: QI FIND (Qiblat Finder for the Blind) Mohd Alif bin Mansor (L), Sek.Men.Keb. Teknik Kuala Lumpur

Best Invention Category (Open): Welca Troly OK2011 Mohd Firhan bin Morni (L), UiTM Shah Alam

Best Invention Category (Student): Automatic Observer Vehicle Zulkarnain bin Jamak (L), Politeknik Ungku Omar

Best Innovation Category (Open): Smart Ampoule Breaker Amiruddin bin Mohd Yusuf (L), Hospital Segamat

Best Innovation Category (Student): PSC: A Public Sector Comparator (PSC) Khairizam Ismail (L), UiTM Shah Alam Bronze Medal Best Design Category (Open): Portable Stool for "Home n Garden" Zulkarnain bin Hassan (L), UiTM Perak

Best Design Category (Student): Jelajah Melaka-Muar Nasya-Nani bt Mat Isa (L), UiTM Melaka

Best Booth: Pesanan Khidmat Masyarakat 'Kawan' Muhammad Azril Izuan bin Ramlan (L), UiTM Melaka

Best Poster: QI FIND (Qiblat Finder for the Blind) Mohd Alif Mansor (L), Sek.Men.Keb. Teknik Kuala Lumpur

Diamond Award: Smart Ampoule Breaker Amiruddin bin Mohd Yusuf (L),Hospital Segam

## **PROGRAMME TENTATIVE**

#### Date: 7 November 2012 (Wednesday)

| TIME     | TENTATIVE                            |
|----------|--------------------------------------|
| 8.15am   | Registration                         |
| 9.00am   | Exhibition and Judging (Session      |
| 11.30am  | Cultural Presentation                |
| 12.00pm  | Lucky Draw I                         |
| 1.00pm   | Rehat / Makan Tengahari              |
| 2.30pm   | Pameran & Perjurian (Sesi II)        |
| 3.00pm   | Mind Challenging Game                |
| 4.00pm   | Lucky Draw II                        |
| 5.00pm   | Adjournment                          |
| 5.10pm   | Registration for Tour of Melaka City |
| 5.30pm - | Optional : River Cruise Melaka/      |
| 11.00pm  | Jonker Street/Taming Sari            |
|          |                                      |

#### Date: 8 November 2012 (Thursday)

#### TIME TENTATIVE

| 8.15am Reg | IS | tra | tion |
|------------|----|-----|------|
|------------|----|-----|------|

- 8.30am Arrival of Guest Speaker
- 8.35am Breakfast
- 9.00am Genovasi Briefing
- 10.00am RIID 2012 Exhibition
- 11.00am Lucky Draw 3
- 12.30pm Break/ Lunch
- 2.00pm Innovation Talk by Animosta Studios S/B
- 3.00pm Arrival of PM Zulkifli Abdul Majid (Director of RIBU)
- 3.20pm Welcome Prosession for VVIP, Rector and Deputy
- Rector UITM Melaka
- 3.25pm National Anthem and Wawasan Setia UiTM
- 3.30pm Doa Recital
- 3.40pm Opening Presentation

| 3.45pm | Speech by Chairperson of RIID 2012, UiTM<br>Melaka   |
|--------|--|
| 3.50pm | Speech by Rector   |
| 4.00pm | Official Opening and Closing bby PM Zulkifli Abdul<br>Majid (Repsenting Assistant Vice Chancellor<br>(Research), RMI UiTM Shah Alam) |
| 4.20pm | Launching Gimmics – Multimedia Presentation  |
| 4.25pm | Visit to Exhibition Booths   |
| 4.40pm | Press Conference   |
| 5.00pm | Award Presentation   |
| 5.35pm | Closing Ceremony   |
| 5.40pm | Photograph Session   |
|        |  |

5.45pm Tea Break

## **COMMITTEE RIID 2012**

- Certificate
  - Ustz Husnul Rita bt Aris Pn Siti Hajar Abd Aziz Noofazreen Binti Mohd Aris Mariam Farhana Adibah Binti Bahori Pn Zaiton Hasan Cik Rabiah Ibrahim
- Audio Visual and ICT Equipment Puan Rohayu Hj. Ramli
- Refreshment Ustazah Noraini Ismail Vani a/p Tanggamani Siti Anis Nadia binti Abu Bakar Puan Siti Rohana binti Daud
- Event Manager Saloma Emang Zarina Begum Ebrahim Nurul Ain Mustakim Muna Kameelah Sauid En. Mohd Hatta Mohd Yatim
- Logistic and Tour Akmal Adanan Tania Maria Tangit Noor ibtisam Abdul Karim Abu Zaireen Abu Hassan Norfaezah Khalet
- Montage YM Tengku Shahril Norzaimi Tg. Hariffazillah
- Video and Photographer Shahril Anuar Abdul Ghalim
- Innovation Talk
  Pn Ilya Yasnorizar Ilyas
  Nadia bte Abdullah
- Food Stall Prof Madya Zaihan Abd. Latif Puan Nor Hamiza Mohd Noor

#### Judges

Prof Madya Dr Maheran Katan Dr. Shafinar Ismail Pn Alisa Ibrahim Pn Suhailah Kassim Ainaa Idayu binti Iskandar Azlin Zanariah binti Bahtar Nur Hidayah binti Zaini Nurhaslinda Hashim Ahmad Syaifullizan Zulkeefly Sulaiman Mahzan

#### Facility and Equipment

Puan Norliyah Munjat En, Izwan Sham Izhar En, Saiful Hamzah Abd Rahim En. Alias Tompang En. Mohd Radzie Mohd Ramli En. Mohd Hazrie Tahar En. Mohd Nor Rajian En. Mohd Suhaimi Abdul Rahman En. Razul Sharif En. Mohd Sufian Md Ali En, Faizul Ab, Razak En. Ahmad Nasrin Mansor En. Yahya Abdul Pn. Murni Abu En. Amran Abdul Razak En, Nor Azizan Abdullah Pn. Nor Hidaya Baba Cik Siti Husnima Md Husin

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# Acknowledgement

Research Innovation And Business Unit (RIBU) UiTM Shah Alam Research Management Institute (RMI) UiTM Shah Alam Division of Administration, UiTM Melaka Division Of Academic Affairs (HEA), UiTM Melaka Division Of Student Affairs (HEP), UiTM Melaka Division Of Facility and Infrastructure Developement (BPF) UiTM Melaka Treasury Department, UiTM Melaka Corporate Office, UiTM Melaka Residence & College Management UiTM Melaka Security Unit, UiTM Melaka IPTA, IPTS, College & School All UiTM Branch Campus

Division Of Research, Industial Linkages And Alumni (PJIA) Universititi Teknologi Mara (UITM) Melaka

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# **161.** Step-by-Step: e-Guide for ICC Tyros

Dr. Anealka Aziz Hussin, Fauziah Saadah Abd Halim, Mohd Hazizi Hamdan

## Abstract

Innovative and Creative Circle (ICC) is a group of people from within and/or across departments who attended a series of meetings to ascertain, choose and analyze job-related problems, and submit a proposal for improvement. The process of ICC enhances the creativity of its members but new ICC members feel otherwise and find the process overwhelming and confusing. Step-By-Step: e-Guide for ICC Tyros can be the perfect solution. Step-By-Step: e-Guide for ICC Tyros is an interactive module that can help new ICC members to understand the concept and role of ICC, and to guide them in the preparation of documents for the ICC convention which is held annually. This interactive module is developed using LectureMAKER 2.0. The development of the module is based on Gagne's Nine Events of Instruction and supported by relevant learning theories to ensure effectiveness of the module. Step-By-Step: e-Guide for ICC Tyros enables more people to be involved in ICC and this involvement leads to better work quality. Users of are unlimited, as long as they adopt the same ICC concept.



Stock Trading 101: A Malaysian Perspective Fakulti Pengurusan Perniagaan UITM Melaka

Amirudin Bin Mohd Nor, Fahmi Bin Abdul Rahim, Mohd Zailani Bin Othman, Nur Afifah Muhamad Arifin Rafizah Irzah Binti Rahmat

## Abstract

Inovasi yang dihasilkan ini merupakan satu dokumentari mengenai asas praktikal pembrokeran saham di Malaysia. Tujuan dokumentari yang ringkas dan padat ini bangunkan adalah untuk membantu pelajar mendapat gambaran yang lebih jelas dan sekaligus memahami transkasi pembrokeran saham yang diamalkan dalam industri pembrokeran saham. Inovasi ini sesuai digunakan sebagai bahan pengajaran dalam subjek pelaburan, selaras dengan usaha meningkatkan keberkesanan dan kualiti pengajaran dan pembelajaran. Dokumentari ini adalah hasil kerjasama pensyarah dan pelajar jurusan kewangan serta dibantu oleh pegawai pelaburan OSK Investment Bank. Rakaman video amatur dilakukan di premis bank pelaburan dan diolah menjadi dokumentari menggunakan perisian Movie Maker. Ciri istimewa produk ini adalah ianya menggabungkankan aspek praktikal pembrokeran saham dan teori di dalam kelas. Dokumentari dimuatkan di dalam bentuk CD yang sangat mudah digunakan, murah, menarik dan senang dibawa ke mana-mana. Ia juga sesuai untuk dijadikan bonus sisipan kepada buku-buku pelaburan sedia ada di pasaran