



UNIVERSITI
TEKNOLOGI
MARA

CELEBRATING
COMMERCIALISATION
YEAR 2014

iiindex 2014

AN INTERNATIONAL EXPOSITION ON RESEARCH AND INNOVATION

invention
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exposition 2014

INNOVATEUR
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2014

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MALAYSIA

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

RESEARCH BOOK

iiindex 2014

AN INTERNATIONAL EXPOSITION ON RESEARCH AND INNOVATION

invention innovation & design exposition 2014

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RESEARCH INNOVATION BUSINESS UNIT
UiTM-MTDC Technopreneur Centre, Universiti Teknologi MARA
40450 Shah Alam, Selangor Darul Ehsan, MALAYSIA
Tel : +603-5544 2747/2748/2750
Fax : +603-5544 2790

Web : www.iiindex.com.my
Email : iiindexuitm@gmail.com



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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AQUAOS: SPATIAL AQUACULTURE DECISION SUPPORT SYSTEM USING MULTI INTEGRATED OPEN SOURCE GIS

Abdul Rauf Abdul Rasam, Nur Atirah Ahmad Nazari, Nur Nabihah Zulkarnain,
Nurfadhilah Ruslan, Norajlin Jaini
Faculty of Architecture, Planning And Surveying, UiTM Shah Alam, Selangor.
Email: rauf@salam.uitm.edu.my

The development of the Malaysian aquaculture industry has grown rapidly in recent years. The challenges faced by the industry are the use of expertise to manage and guide aqua culturist particularly in managing database and application of communication online between the government and the fishery community. The aim of the study is to develop a prototype of a novel system for Malaysian fishery or the aqua cultural community using multi techniques, datasets and open source GIS (AQuos). The AQuos Version 1.1 was initially created based on real local problem situation which was implemented in 4 main stages. Firstly, primary and secondary data were collected in Selangor and from other related organisations. Then, geodatabase, data processing and data exploration were conducted using multi integrated open sources GIS. The potential areas for suitable sites for aquaculture were also determined using MCDM techniques. Lastly, the AQuos web based system was designed and developed using Map Guide Software. This study found that the respondents from the related organisations agreed that the system was useful for local authorities and for efficient aquaculture database management and analysis.