



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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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
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A GENERALIZED FAULT LOCATION METHOD BASED ON VOLTAGE SAGS FOR DISTRIBUTION NETWORK

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The aim of this project is to develop an enhanced fault location method based on voltage sag profiles for distribution system. In previous studies; only a single measurement has been used. The proposed method can be used with any number of measurements in the network, making it more general. A new ranking approach that addresses multiple possibilities of the faulted section is proposed. Different case studies with various numbers of measurements are performed on a large 11kV network with the main feeder consisting of 42 buses to validate the method. The test results show that there is an improvement in terms of accuracy in detecting the faulted section in the first attempt for each additional measurement. Therefore, by utilizing the average value of each measurement, a better accuracy of fault location can be achieved.

CMS: CONFERENCE MANAGEMENT SYSTEM

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Academic conferences provide a professional platform for participants to present, learn and discuss new and interesting findings regarding their research. Management of these conferences typically utilize Conference Management Systems (CMS) to simplify its management. We describe modifications to the popular OpenConf CMS to include participant registrations, payment processing, and preparation of financial documents and scheduling of papers. Conference management is a concept of planning and delivery of a conference and post-conference review [2]. Organization of an academic conference is divided into several processes, namely submission, review, decision, and camera-ready paper [3]. These processes involve much correspondence between the organizer, participant and reviewers. Because of this, many Conference Management Systems (CMSs) offer online software packages to simplify the management of these conferences. This project describes modifications of the popular OpenConf™ CMS to include participant registrations, payments processing, preparation of financial documents and scheduling of papers. This is done by expanding on the original CMS and including extra tables and codes to perform additional operations on the data.