

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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UNIVERSITI TEKNOLOGI MARA
MALAYSIA

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

RESEARCH BOOK

iiindex2014

AN INTERNATIONAL EXPOSITION ON RESEARCH AND INNOVATION

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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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ADAPTIVE CLOTHING FOR PARAPLEGIC INDIVIDUALS

Muhammad Ershad Bin Kamari, Prinses Saliang, Hasma Ahmad, Asliza Aris
Faculty of Art & Design, UiTM Shah Alam, Selangor.
Email: ershadkamari90@gmail.com

Adaptive clothing for paraplegic individuals is actually a set of outfit specially designed for those who are paraplegic or in other words, a condition where their lower body is paralysed. Even though the main target is paraplegic person, it can also be worn by anyone who suffers from lower body disability. Besides fulfilling the needs in dressing, the design is hoped to provide some sense of style and fashion to the outfit. Some cumbersome aspects faced by the disabled are, some of the opening and closure are found to be difficult to be handled by a paraplegic person. Hooks and buttons are often found to be the problem. For this adaptive outfit, a jacket and trousers was designed. The jacket is loose fitted so that it will provide comfort and be able to fit most of body type. The back of the jacket is shorter than the front so that it will not bother when sitting. In front are two spacious pockets for users to keep their personal stuff instead of carrying a bag with them since they need to utilize both their hands. The hoodie was added to style up the outfit so it will not look too boring. The hoodie is transformable in which it will lie flat on the back when it is not in use. As for the trousers, it has shorter crotch in the front and longer crotch in the back. The main problem about trousers is when you sit; the back waistline will drop thus exposing the back. Having longer crotch at the back will secure the position of the trousers when sitting. Darts at the knees will ensure the hemline of the trousers so it will not lift up when sitting. The opening is designed overlapped at the back in order to ease the burden when in toilet. In term of the production cost, it's about RM200++ to produce. The cost is a bit high due to some experimentation during the making of it. The cost could go much lower than the initial production cost if produced in bulk. This outfit is hoped to be useful to the society and help paraplegic people in their daily life in particular. It is only a prototype and has the potential to be developed further in order to achieve the standards in dressing.