

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

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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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AUTOMATIC PET FEEDER WITH 7-TIMER TECHNOLOGY (PEFED-7)

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Feeding pets at home is such a problem for pet owners who are always on the run. Moreover, the prices of pet food are increasing and this cause budgeting difficulty for pet owners who have several pets. The similar situation happens to farmers who need to raise grazing livestock. Therefore, this electronic device is designed to solve the problem by installing automatic time setting with controlled amount of food dispense, seven times per day, which provide an alternative for pet owners to feed their pets while they are away without manual monitoring. The method of the micro controller design used in the product is similar to the digital alarm clock mechanism. Digital clock can be a very small and cheap device that enhances the wide range of product designs, which are often incorporated into all kinds of end products such as cars, radios, televisions, microwave ovens, standard ovens, computers, cell phone as well as other huge industrial machineries. This device can be set to seven different timers based on the users' preference. Therefore, the pet owners need to set the feeding times manually with respect to their end objective. In this product, we are trying bring two different business products; the programming of the micro controller and the applied product of pet feeder simultaneously. Somehow, based on the programming done, many other innovative products can be produced in the near future. With respect to the pet feeder, there are many advantages of the product. This product is automatic where there is no need for manual monitoring for food dispensing. Then, it is user friendly, for example the product needs alarm setting only once. The product is light and portable, thus the product manufacturing needs only local sources. Since the product costs only RM 40, it is very affordable to be owned by every pet owner. The container of this pet feeder is huge for about 5 kilograms of food capacity for two weeks supply. In addition, the containers are air-tight in order to preserve the food freshness and insects' threats. Upon the product specifications, the container is made of hard plastic. The electric supply of this product is 100 to 240 watts. The volume of the containers is 18 inches x 18 inches x 24 inches. The weight of the product is approximately 1.5 kilograms only, with electronic life warranty for 5 years. The colours of the product varies, green, blue, red, yellow and black colours according customers' preference. The competition of this product is the existing pet feeders in the market with lower prices and copycat products. The target of this product has a wide-range which comprises of individual pet owners, pet shops, zoos, police dogs' units, farm owners as well as animal rehab centres. Last but not least, it can be concluded that the product provides an alternative for busy pet owners to feed their pets in more pleasant, clean, convenient, automatic, and cheap and a systematic way to take care of pets.