



UNIVERSITI
TEKNOLOGI
MARA

Universiti Melaka

V-MIEX

28 JUNE
06 JULY

2022

VIRTUAL-MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION

ROAD TO COMMERCIALISATION

V-MIEX BOOK



V - MIIEX BOOK

'ROAD TO COMMERCIALISATION'

EDITORS AND COMPILERS:

Dr. Nur Hayati Abd Rahman
Dr Syukri Abdullah
Wan Hasmat Wan Hasan
Aini Qamariah Mohd Yusof
Norazlan Anual
Dr. Khairunnisa Abd Samad
Nordianah Jusoh @ Hussain
Rozana Othman
Norlela Abas
Azira Rahim

COVER DESIGN:

Adi Hakim Talib

PUBLISHED BY:

Division of Research and Industrial Linkages
UiTM Cawangan Melaka
KM26 Jalan Lendu,
78000 Alor Gajah, Melaka
Tel: +606-5582094 / +0606-5582190 / +606-5582113
Email: miixuitm@gmail.com
Website: <https://www.miiex.my/>
ISBN: 978-967-2846-04-8

All right reserved. No parts of this publication may be produces, stored in retrieval system or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise without permission of the copyright holder.

FOREWORD

ASSOC. PROF TS. DR MOHD RASDI ZAINI
Rector
Universiti Teknologi MARA (UiTM) Cawangan Melaka



Welcome to Virtual-Melaka International Intellectual Exposition 2022 (V-MIIEEX 2022). It is an honour for me on behalf of UiTM Melaka Branch to thank all of you for joining the programme and we are proud to inform you that this is the 12th year consecutively, UiTM Melaka Branch is organizing this exposition.

V-MIIEEX 2022 is a platform to improve the commercialization collaboration among industries and communities and at the same time, we also give the opportunity to academicians and students to share ideas and increase their potential innovation products with the industries and communities through their projects. This exposition also serves as a platform to cultivate and upload the nation's innovation culture by presenting new ideas and research by young people, especially from academia, universities, college, high schools, and primary school students.

The economy and development of the country faced a challenging phase in 2021 due to the Covid-19 pandemic. We faced changes in business, education, society, and lifestyle. However, the pandemic proved to be a blessing in disguise as it somehow gave people ideas which would be beneficial to improve their lifestyle and solve problems that might occur in the future. Besides, the new digital landscape also inspires more innovation and new ideas that contribute to various activities such as business and industries. As a university that encourages the "Research, Innovation and Commercialization", this exhibition is organized to encourage more commercialization of products that are beneficial to scholars, industries, and communities to tackle such issues to improve our present and future life.

Since 2009, UiTM Melaka Branch has successfully become the organizer for this innovation exposition. We are not only successful in organizing the exposition, but I would proudly say that we have also successfully embarked on commercialized products. With the number of participants for this year's exhibition, we believe that more commercialized products will be produced in line with the theme for this year, "Road to Commercialisation".

This exposition would never happen without dedication, teamwork, and commitment. A round of applause should be given to the committee teams as the backbone of this exposition. Their hard work, effort, and time made this exposition possible.

Finally, I would like to conclude this brief remark by thanking all the participants and stakeholders for joining the exposition, we hope that this collaboration never ends here.

Thank you.



DR. NUR HAYATI BINTI ABD RAHMAN
Deputy Rector Research & Industrial Linkages
Universiti Teknologi MARA (UiTM) Cawangan Melaka

It is a great pleasure to welcome all the participants and presenters to the Virtual Melaka International Intellectual Exposition (VMIIEX 22). I am delighted that through this periodic event, we managed to bring together scholars and professionals from various fields to engage through this virtual platform where ideas and breakthrough are discovered and leveraged for commercialization potential.

Since 2009 UiTM Cawangan Melaka has held twelve Invention and Innovation Design competitions and this year we are very honoured to have the second year of VMIIEX organized in digital platform. This has proven that despite the global challenges due to the recent pandemic, it is never an issue for UiTM Melaka to continuously organize this yearly prestigious event and to support the ministry's aspiration in leveraging creativity and innovation in the new norm.

VMIIEX 22 is organized with no sole objectives of accomplishing the University's KPI but instead we are determined to make this programme as the place to help heighten commercialization collaboration in research and innovation with the industry and community through joint exhibitions from various external organizations.

Our aspiration is to also provide exposure and opportunities to academic staff as well as students from public and private universities to engage in direct excellent scholarly activities with the industry and community through activities that can be measured and assessed. As for the Research and Industrial Linkages Office of UiTM Melaka, this exhibition is seen as the platform that can encourage active collaboration and knowledge transfer with industries; objectively to support various activities that will benefit all stakeholders from the various government agencies, local and international universities, industries and communities.

Through the theme of "Road to Commercialization" this year, V-MIIEX 22 is committed to have this event as a boulevard to inspire and cultivate creativity and innovation to the numerous levels of inventors through exposure on latest technologies, astonishing ideas and creative designs with great potential to be commercialized. For this year, we proudly introduce a special category which is the "Endemic Challenge" as the provision to the government of Malaysia's goal of moving towards the endemic.

To ensure that the competing products in this exhibition is not exclusively for the purpose of competition, V-MIIEX 22 is dedicated for the commercialization of highly potential innovation products, which is attained through its active collaboration with tailored needs industries. The commercialization effort was not for income generation purpose only but it aimed to spearhead the development of quality products in line with industrial needs and community benefit.

Therefore, it is a great honour for me on behalf of the Research and Industrial Linkages Office as well as the organizing committee to have all participants in this competition and I would like to express my highest gratitude especially to the Rector of UiTM Melaka and all strategic partners and sponsors for supporting the event.

To finish, I sincerely wish VMIIEX 22 a remarkable success. I believe that this will not be the only collaboration between UiTM Melaka and the respective partners and linkages, but a beginning of a long and fruitful cooperation in future.

Thank you very much.

road to commercialisation...

WAN HASMAT WAN HASAN
Project Director V-MIIEEX 2022
Universiti Teknologi MARA (UiTM) Cawangan Melaka



Assalamualaikum and Warmest Greetings.

It gives me an enormous pleasure, on behalf of the organizing committee to welcome all participants and presenters to the Virtual -Melaka International Intellectual Exposition 2022 (VMIIEX '22) with the theme "Road to Commercialisation". We are honoured and glad to welcome all participants to this biennial event.

This is the second time that we have organized this biennial event virtually. V-MIIEEX 22 is an innovation competition, in which, innovation products, ideas and systems related to various science and technological fields are exhibited as a solution for the presented problems.

V-MIIEEX22 expectantly will be a platform that gathers experts from academies, scientists, and researchers, locally and internationally, to contribute towards the growth of scientific and technological knowledge in each participant's specialisation and expertise.

The competition also serves as a platform to give fresh exposure to the various level of inventors, as well as to encourage the culture of innovation design focused on latest technologies and related to new norms technologies and inventions due to COVID-19.

V-MIIEEX 22 is also hoped to be an avenue for gathering and disseminating the latest knowledge on ideas and acquisition of innovation among the participants. It is hoped that the competition will be able to open the mind of the participants towards latest technologies and design. It is also in line with the government's aspiration to encourage innovation activities in Malaysia.

As a final note, I would like to congratulate my fellow committee members for their tremendous effort, which have been critical to the event's success. In addition, I would like to thank our co-organizer, event sponsors and supporters. Optimistically, we wish that all new knowledge that is discovered, invented, or innovated will drive towards our future sustainability.

Thank you.

ABOUT V-MIIEEX

The world after COVID-19 is unlikely to return to the world that was. Despite the challenging pace during the pandemic, the strong rebound is expecting in this exciting year 2022. Malaysia is welcoming the great prospects ahead with positive impact on the country's economy and development. Hence, the hope for greater opportunities motivates for more creative thinkers to come up with innovative ideas that can be put forward to be harnessed to overcome similar problems in the future. V-MIIEEx 2022 is one of these platforms which contribute relevant ideas that could help communities of all walks of life cope with this pandemic.

UiTM has identified research, innovation, and commercialization to be among the core components and strategic effort towards becoming a well-known and prominent university. Aside from realizing this goal, with these components and efforts, fostering the development of knowledge, generating financial stability of the university, and producing knowledgeable academicians are also potentially achievable.

By having invention and innovation competition yearly, UiTM Cawangan Melaka is confident that it could further enhance creative and innovative abilities among staff and students. In support of the government notion which upholds the importance of innovation, UiTM Cawangan Melaka has taken the initiative of organising the Virtual Melaka International Intellectual Exposition (V-MIIEEx).

In instigating and nurturing the continuous culture of inventing and innovating, this event is an ideal platform for lecturers, administrative staff, students, and the public to showcase and commercialize their products or prototypes as well as novel ideas. The first IID which was held nationally in UiTM Cawangan Melaka in 2009, has successfully gathered and displayed more than 37 inventions and innovations. Accordingly, to continue this strong passion towards inventing and innovating, the IID competition should be continued and celebrated.

With that, the Division of Research and Industrial Linkages will be organising its 12th IID competition, the Virtual - Melaka International Intellectual Exposition (V-MIIEEx 2022) with the theme, 'Road To Commercialisation'. V-MIIEEx 2022 hopes to welcome 200 competing products to be showcased and commercialized, at the same time, attract attention of related and matching industry.

Objectives

1. Encourage and instill passion towards inventing and innovating among UiTM Cawangan Melaka staff, students and academicians of local and international higher education institutions;
2. Highlight distinguished talents of skillful inventors and exhibit intellectual products, inventions and innovations among local and private tertiary institutions, government and private agencies, including international participants;
3. Become an effective Business Matching platform for participating research products, matching industries and partnering government agencies;
4. Recognise, inspire and promote invention and innovation products to be patented and commercialized;
5. Increase passion towards inventing and innovating through research and boost interests of government and non-government agencies to obtain consultancy services from a line up experts of higher education institutions and UiTM Cawangan Melaka.

Aromatherapy Roller Pen

Muhammad Zahrul Hafiz Bin Ahmad¹, Muhammad Danish Bin Mamat Rapi², Atiqah Wahidah Binti Azeher³, Nur Aina Ezatie Binti Nor Azha⁴, Norshiba Binti Norhisham⁵

Faculty of Hotel and Tourism Management

UiTM Cawangan Melaka, Kampus Bandaraya Melaka,

zahrulhafiz19@gmail.com

Abstract

Studying and working often make one feel sleepy and tired, especially after a long day in class or at work, when your brain feels ready to shut down. Sometimes, when you have to work overtime or study for long hours at night to prepare for an exam, sleep comes as the biggest hurdle in your way. It seems like pulling you back from reaching your goal. When you work or study with a fresh mind in the morning, it becomes quite easy to grab things, but at certain periods like in the afternoon and at late night, sleep becomes inevitable as you try to stretch your work or study hours. Actually, it happens when you are restless. At such times, you are left with two options; the first is keeping the books aside and lying down to take a rest and the second is fighting against the drowsiness to keep yourself awake. But sleeping while studying is too easy, the real deal is to ditch sleep and stay awake. But fret not, there are ways to increase your concentration when working or studying. All you need is an Aromatherapy Roller Pen. This Aromatherapy Roller Pen is inspired when observed from the angle of someone who is often sleepy while working or studying. The main objective of this innovation is to eliminate drowsiness, headaches, nervousness that frequently occurs to students, office workers, and others while doing their work. The scent of our product will help consumers to stay focused, and calm, for those who smell it. Aromatherapy Roller pen is a product that is affordable, practical, very beneficial to the consumer as it is light, compact, and can be used anywhere at any time. This innovation can also improve the physical and emotional well-being of consumers as the smell of our products can give soothing and freshness to those who smell it. In terms of commercialization potential, Aromatherapy Roller Pen is highly commercialized as it is one of the solutions for people who often experience drowsiness at work or study. In conclusion, Aromatherapy Roller Pen is very useful to use because it is very helpful for us to stay focused in everything we do, as well as give extra energy, especially while doing work in the office and also studying.

Keywords: Focus, Innovation, Beneficial, Drowsiness, Students.

1. INTRODUCTION

Aromatherapy Roller Pen was inspired by a pen. The reason why we choose a pen is because it is an essential thing for everyone to keep either in their pocket or in their bag. The idea of combining the pen and the aromatherapy oil as a 2-in-1 pen is to make it easier for users to carry it. Most of the people usually left their aromatherapy oil at home because of they are lazy to bring it in terms of their size or maybe too many things to bring. Now, with the new designed of Aromatherapy Roller Pen people can bring the pen everywhere without bringing the huge size of aromatherapy oil. It provides a pen with the aromatherapy oil on top of it. It is a light

and compact product that are easy to bring everywhere. Some people loved to smell the aromatherapy oil as it calms them in any situation. For example, student who will sit for their exam or maybe someone who is having an important day. The use of Aromatherapy roller pen is to help people with drowsiness, headache, or nervousness. Just smell the pen and all the problems disappear. The price is around RM 15 each.

2. OBJECTIVE

There are some main objectives of this product whereby this invention is to help those who encounter with problems such as severe headache problems so it can help reduce the pain. Next, this invention also will help students in class to prevent they are getting drowsy and weak while studying. Other than that, with this invention, it is also can help those who experienced nervousness so it can help to relieve their nervousness with its function.

3. NOVELTY & INVENTIVENESS

The idea of this invention was actually never be seen in our market up to these days. This idea is formed through the idea of how to make something way more useful for a certain user. We created an idea of two products and combined it to be one invention of a product and offer a better experience for the users whereby this invention helps facilitate students, office workers, and many more. They can use the product when they are studying or working with ease as this product is very accessible for the users.

4. PRACTICALITY & USEFULNESS

This innovation is essential because it serves as a savior for students when they feel tired or sleepy while attending lectures and classes. It also can help with drowsy, weak and nervousness. It is designed in pen form to make it light and compact also it will be easier for students to bring it anywhere they want.

5. CONCLUSION

In conclusion, our proposed innovation is an ideal alternative for students to not get sleepy and sleep in classes. It can helps students to be more focus in class and can bring many other benefits for not only students but also to people who in need for this innovation.