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V-MIEX

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VIRTUAL-MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION

ROAD TO COMMERCIALISATION

V-MIEX BOOK



V - MIIEX BOOK

'ROAD TO COMMERCIALISATION'

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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.

SHOOKING AUTOMATIC TUMBLER

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Abstract

Nowadays variety choices of tumbler is approaching a wide range of target audiences and the selection of products always reflects the consumer lifestyle, variation function, design appearance, level of quality and range of price. Recently, the consumers had faced several problems whenever they purchased and used the products. The problems are (1) did not provide a heat absorber. Without it, the consumer not able to put any cold or hot drinks for a long period. (2) Manually use. Most tumblers available in the market nowadays is using an old-fashioned design as they come out with straw or spoon which will put the consumer on difficulty to find a spoon when they are missing and the hole of the tumbler may cause the water easily spill and causes a messy space. (3) Fragile, whereby usually the tumbler is made from glass, ceramic or plastic which is easy to be broken when the tumbler falls. Furthermore, the tumbler also is not durable for long term uses as the product easily cracks whenever the water temperature is too high. However, Shooking tumbler has come out with an innovation of multifunctioning tumbler to solve those problems and can be used for a wide range of purposes. The new Shooking automatic tumbler is different from others because this product has come out with an automatic starts button, stirring blade, heat absorber, attractive design and use of high-quality stainless-steel material that can maintain hot and cold drinks for a long hour. Since the Shooking automatic tumbler product has multifunction and convenience to bring it elsewhere, hopefully, it will receive a large potential buyer in future.

Keywords: Innovation, Tumbler, Automatic, Stirring, Heat Absorber, Multifunctioning

1. INTRODUCTION

Recently, using tumblers for bringing drinks become a new norm in the workplace. As we can see, many companies are competing, launching and selling regular drinks tumblers and also begin to search for and create a convenient and multifunction tumbler to fulfil the taste and needs of the customer. There are several problems that are always being faced by the tumbler's users while using it, such as no stirrer provided when they need to stir the drinks and maintaining the temperature of the drinks either for hot or cold drinks. Hence, Shooking automatic tumbler is being produced for the purpose of helping the users deal with those problems. The specialities of this tumbler are it comes with an automatic stir, which will be able to facilitate the users to stir their drinks elsewhere. While providing the heat absorber function to the tumbler, it manage to maintain the temperature for hot or cold drinks inside the bottle. The function of this tumbler is the consumer just needs to press the button to stir the drinks and the water temperature will stay maintained either hot or cold for long period within 6 to 12 hours inside the tumbler. The tumbler's price is also reasonable compared to the other brand which always has only one function.

2. OBJECTIVES

Shooking automatic tumbler is being designed to solve the consumers problems in bringing drinks whether hot or cold at the workplace and while travelling. The products offered to the user with 2 in 1 function; automatic stir and thermos, which be able to maintain the water temperature either hot or cold for long hours. Besides, the consumer does not have to trouble themselves to buy the items such as straw or spoon separately from the tumbler.

3. NOVELTY & INVENTIVENESS

Shooking automatic tumbler has unique features that make it different from other tumbler products in the market. The Shooking tumbler has two (2) functions (2 in 1) which are an automatic stir element to brew the drinks instantly and a heat absorber to maintain the temperature of the drinks whether hot or cold. It is made from a high- quality materials to meet the objective of the product. This tumbler has three (3) main layers, which are the first layer is the outer wall, made from stainless-steel walls that function to get the required temperature with no condensation. The second layer is the vacuum seal that is able to prevent the transfer of temperature from the liquid inside the tumbler to the outer wall so that the tumbler can store any temperature of drinks either hot or cold after several hours. The third layer which is the inner wall will follow the temperature of the water stored inside the tumbler. In addition, the tumbler also has a stirrer element inside the bottle that functioning using batteries. The cover of the tumbler is also made from a metal case cover and the area around the cover is protected by rubber, to prevent the liquid from spilt. Moreover, it is portable and easy to carry specially made for the travel lover and suitable for all age categories.

4. PRACTICALITY & USEFULNESS

The Shooking automatic tumbler was purposely designed for a working group of people and travellers. The size of the tumbler is enough to store drinks for the day which will save more money and energy. The users do not have to go for a refill or bought another drink. It is also safe from condensation which means if you bring cold water and put it on your table where there are a lot of important documents or materials, it will not ruin your work. Not only that, but it is also safe because the outer wall is not absorbing the temperature of the liquid inside the tumbler. Hence, if you stored hot water and just leave it anywhere and you have kids at home, it might have the possibility for the kids to touch the tumbler. If it is just a regular water bottle, your kids will burn. Shooking automatic tumbler promises a safe and eco-friendly product that is safe to be used by everyone and will not threaten our environment.

5. CONCLUSION

This application of the Shooking automatic tumbler could give a huge potential of opportunities in market as people are attracted to purchase multiple used of products with affordable prices. The targeting strategy of innovation stirring tumbler is creating practical and friendly products for consumers which will give advantages to them by enhancing and easing their quality of life. In conclusion, the goal of the Shooking automatic tumbler is to optimize the allocation of consumers by providing convenient, friendly, multifunctional, and minimal cost needs. We believe that the Shooking automatic tumbler has its commercial potential to be marketed locally and globally.

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