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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'

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

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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
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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.

UHS Professional Travel Kit

Najwa Arifah¹, Syamimi Redzuani², Nur Ain Natasya, Fahmie Iskandar & Pn Nurul Aida Harun³

Faculty of Fine Arts, Universiti Teknologi MARA (UiTM) Cawangan Melaka Kampus Alor Gajah, Melaka, Malaysia.

najwarifah181@gmail.com

Abstract

Hair cosmetics are an essential method of enhancing patient adherence to hair treatments. Knowing that various people have varied hair conditions has bothered and affected their everyday lives. However, many continue to struggle with selecting the appropriate hair care and finishing products, resulting in them wasting money on cosmetics that aren't ideal for them.

This article discusses how to fix customer concerns and provide them with benefits for their own benefit. As a result, we developed new inventions based on the concept of travel convenience, integrating specific crucial hair cosmetic products such as shampoo and conditioner, hair serum, and hair tonic into one body while refining formulas to match customer taste. To fulfil the demands of a multitasking formulation, new challenges for cosmetic technology are directed at the development of natural constituents, such as a real extract of *Sophora Angustifolia* Root, as well as new methodologies for cosmetic formulation that fit all different hair types and scalp conditions in shampoo, tonic, and hair serum formulations. Despite providing the finest formulas for them, more sensible strategies are being introduced to enhanced customer experience while enjoying all four products at the same time. This article highlights advancements in hair cosmetic technologies that are user-friendly while also providing alternatives to travel everywhere.

Keywords: Hair cosmetics, natural constituents, user-friendly, travel convenience.

1. INTRODUCTION

Hair is a significant aspect of the body's attractiveness, and its appearance is a signal of health. As a result, recent advancements in hair science and hair care technologies have been reported with claims of breakthroughs and methods for hair treatments and cosmetic items. Alopecia (hair loss), dandruff, dry and oily scalp are all common problems that have troubled many individuals for centuries. Many people struggle to attempt various methods to enhance and treat their hair, working until they drop merely to provide enough care to get healthy and perfect hair by spending hundreds of dollars on hair treatment. In fact, there are a lot of people struggles to choose the correct hair care and finishing products for themselves. Some products are designed for long hair, while others are designed for short hair, rough hair, or straightening hair. This is sufficient to demonstrate how critical the situation is and the necessity to take additional measures to build an ideal product that operate and provide numerous benefits to consumers.

Over the last few years, around 100,000 products have claimed to boost in hair growth and yet, it just cost the consumers expensively and some even failed to be effective towards certain sorts of users. After a long of research and tonnes of experiments, we decided to create

new innovations on hair cosmetic product with new concept of development all in one. UHS Beauty Group recognises individuals' significant difficulties in picking the best product for their hair and strives to provide essential products that will assist them in maintaining a healthy haircare lifestyle. As a result, we developed new technologies to explore the complexities and satisfaction of consumers' situations before plunging headlong into it. Our expertise has studied on hair care products, their use, and potential side effects which resulted an extend to a comprehension of cosmetic resources, allowing correct hair treatment and scalp conditions based on hair type and condition. Combining multiple hair care products into one formulation is impossible since each one serves a distinct purpose and has different affinities.

To make this concept a success, we develop new production designs with specific aspects to isolate this product, which is designated as one. Despite its fresh look, it helps our clients save space and travel more easily. Furthermore, our expertise has been concentrated on raw material research, innovative strategies, and methodologies for the creation of unique goods with a nice texture and skin feel. With the main ingredient made with real extract of Sophora Angustifolia Root, it is 100% contains a luxurious blend of conditioners, proteins, vitamins, and natural botanical ingredients with an innovative mixture of walnut shell extracts. It is widely range use despite of any genders or ages and suitable for all hair types. We focused on the development of secure products and eco-friendly packaging in a wide range of concentrations. In this evaluation, the design of our hair technology played an important role in emphasising our goal of all-in-one ease and travel usage.

2. OBJECTIVE

Our mission is to deliver the finest hair cosmetic technology that addresses all issues with positive outcomes. We wanted our product to be more widely recognised and to flourish till we reached the top of the beauty line. We provide numerous investigations and studies on a wide range of observations to come up with the greatest solution to aiding many people in the best interests.

3. NOVELTY & INVENTIVENESS

UHS Professional Travel Kit is designed to help people from this society who are dealing with a range of hair problems in their everyday lives and to prove them with the effectiveness of so called technology which assist them with satisfaction and demanding in achieving a shiny healthy hair routine.

4. PRACTICALITY & USEFULNESS

UHS Professional Travel Kit is suitable for all hair types, as well as men and women of all ages and genders. It is recommended for people who have thinning hair, scalp problems, or dandruff, and it'll make their hair a lot healthier. We effectively designed it for eco-friendly users, despite making it the perfect size for convenience purpose for all consumers to bring it anywhere.

5. CONCLUSION

Consumer demand for hair care cosmetics has risen in recent years, particularly in the field of natural products. Thus, this study concentrates on hair care and cosmetics

technology, emphasising one of our innovative products, the UHS Professional Travel Kit, which serves the objective of incorporating convenience into people's routines. It is particularly developed to satisfy all purposes by merging all four items into one. Because to the design idea established by our team, consumers no longer need to purchase hair care items separately. This article will offer an outline of our mission to create new breakthroughs that will provide thousands of individuals with the joy and satisfaction of having healthy hair. We anticipated our product to thrive until it reached the top of the rankings and our product's face was everywhere, whether in local communities, across the country, or globally. Therefore, UHS Beauty Group intends to commit itself to earning your highest rating in order to achieve this aim.

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