

18-19 **OCTOBER KUALA LUMPUR CONVENTION CENTRE** Hybrid (Physical & Virtual) Conference

FINAL ANNOUNCEMENT

BOOSTING THE POTENTIAL of Oil Palm and Its Products

MODULE 1: ECONOMICS & SUSTAINABILITY MODULE 2: FOOD APPLICATIONS MODULE 3: PRODUCTIVITY ENHANCEMENT: MECHANISATION, DIGITISATION & GENOMICS MODULE 4: NON-FOOD APPLICATIONS MODULE 5: PHYTONUTRIENTS

HYTONUTRIENTS

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™MOMG Malaysian Oil Scientists' and Technologists' Association (MOSTA)

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WELCOME MESSAGE

We would like to welcome you again to OFIC 2022 with the theme: **BOOSTING THE POTENTIAL OF OIL PALM AND ITS PRODUCTS.**

The Oil Palm is Nature's Gift to the world for many reasons and it has the potential to meet the needs of mankind in many aspects. Oil Palm is a remarkable highest oil yielding TREE CROP, capable of sequestering carbon dioxide and contributes significantly to Climate Change mitigation.

Theoretically it has been projected that the oil palm has a maximum yield potential of 18 tonnes oil per hectare per year. However, this predicted yield remains a target for the researchers and the industry using the latest advances in breeding and selection technologies and management tools and skills. In the meantime, the best palm oil yields in some estates have been reported to be 6 or 8 tonnes per hectare per year and this gives much hope to mankind that oil palm can double current yields achieved to meet the needs of our world population using significantly less land area and be more environmentally friendly than any of the competing oil crops

Oil palm proves to be efficient producer of biomass which will be an important source of carbon for conversion to high valued products. However, in the meantime palm oil and not forgetting palm kernel oil are mainly used for foods (80%) and non-foods (20%). Development of renewal energy in terms of biofuel for vehicles and aviation could reverse the ratio.

Unique to palm oil, several phytonutrients including tocotrienols, carotenoids, polyphenols have the potential to provide wellness benefits to people on the global scale.

The Congress will include an Evening Forum aptly titled: **Environmental Impacts of the Palm Oil Industry: Addressing Sustainability Gaps on the Road to Net Zero Carbon**

With all these exciting possibilities, do take the opportunity to exchange ideas with participants and exhibitors, learn about the practical and innovative development and forge new commercial ventures.

Hope to see you at OFIC 2022!

Best wishes

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Academician Tan Sri Emeritus Prof Datuk Dr Augustine S H Ong President, MOSTA Chairman, OFIC 2022 Organising Committee

ABOUT OFIC 2022



Oils and Fats International Congress was launched by MOSTA in 1994 concurrently with an exhibition of latest technologies for the oils and fats industry. Over the past 18 months, COVID-19 pandemic has shaken the world and the conference organisation industry to the core. In today's world everything in life goes virtual, therefore MOSTA will go for a hybrid conference platform with the **15th OFIC 2022 and Exhibition** to take place on **18-19 October 2022**. MOSTA is proud to bring you the 15th Oils and Fats International Congress and Exhibition in hybrid form from 18-19 October 2022 so that you can participate in this exciting event wherever you are.

OFIC has been organised since 2004 with the following themes for the last ten years:

YEAR	ТНЕМЕ
201 <mark>0</mark>	Oils and Fats Industry: Challenges and Innovative Solutions
2012	Future of Oils and Fats – Is Smart Partnership the Way Forward?
2014	Global Oils & Fats: Addressing Major Challenges
2016	Global Trends in Oils & Fats: Pathways to 2025
2018	Trends that will Shape The Future of the Oils & Fats Industry – Tools, Techniques & Technologies
20 <mark>2</mark> 1	Oils & Fats Industry: Managing Change Through Transformation (Virtual)
2022	Boosting the Potential of Oil Palm and Its Products (Hybrid Platform)

The programme will include three Foundations Lectures as follows:

- 1. Tan Sri B. Bek-Nielsen Foundation Lecture
- 2. Tun Tan Sri Raja Alias Foundation Lecture
- 3. Tun Dr Lim Keng Yaik Foundation Lecture

Who Should Attend **OFIC 2022**

OFIC 2022 is designed for those involved in the oils and fats industry including the following:

- Manufacturers of Oils & Fats, in particular palm based products
- Industry Captains and CEOs
- Scientists and Technologists
- Planters, Mill Engineers & Refiners
- Financiers, Analysts, Investors
- Processors & Traders
- Consumer Goods Manufacturers
- Oleochemical and Biofuel Producers
 Economists and Policy Makers
- Quality Assurance Personnel and Process Engineers
- Environmental and Social NGOs
- Academics and R & D Personnel
- Government Agencies

OFIC 2022 PROGRAMME

TUESDAY, 18 OCTOBER 2022 (Day 1)

0830 - 1700	Congress Registration Hall 1, Level 3, Kuala Lumpur Convention Centre
0900 - 0920	Welcome Address Academician Emeritus Prof. Tan Sri Datuk Dr. Augustine S. H. Ong <i>President, MOSTA, Malaysia</i>
0920 – 0940	Opening Address and Official Opening of OFIC 2022 YB Datuk Hajah Zuraida Kamaruddin <i>Minister of Plantation Industries and Commodities, Malaysia</i>
0940 - 1020	Official Opening of Exhibition, Viewing of POSTERS & Tea /Coffee Break

KEYNOTE ADDRESS

Chairperson:

1020 - 1100	KEYNOTE ADDRESS: RECENT ADVANCES IN ROBOTICS
	Prof SangBae Kim, Massachusetts Institute of Technology,
	United States of America

MODULE 1: SUSTAINABILITY & CLIMATE CHANGE

- Chairperson: Mr MR Chandran, KMN, FMOSTA, Vice President, MOSTA
- 1100 1140The 19th Tan Sri Dato' Seri B. Bek-Nielsen Foundation Lecture
An Economist's Perspective on the Future of the Oil Palm
Dr Julian McGill, LMC International Limited, United Kingdom
- 1140 1205ESG & Sustainability Challenges and Opportunities in the Palm SectorMr Jeremy Goon Kan Wai, Wilmar International Limited, Singapore
- 1205 1230 **Economics of Commodities in the Post-pandemic World** Mr Ahmad Nazmi Idrus, *Head of Economics, CGS-CIMB Securities Sdn Bhd, Malaysia*
- 1230 1300 **Q&A**
- 1300 1400 Lunch Break/Touring of Exhibition /Viewing of POSTERS



MODULE 2: FOOD APPLICATIONS

Chairperson:	Prof Dr Tan Chin Ping, University Putra Malaysia
1400 - 1440	The 6 th Tun Dr Lim Keng Yaik Foundation Lecture Emerging Trends in Quality, Authenticity and Safety in Edible Oils and Fats Dr Bertrand Matthäus, <i>Max-Rubner Institute, Germany</i>
1440 - 1500	Fats and Oils Innovation Moving Beyond Functionality Dr Xuebing Xu, <i>Wilmar International Limited, Shanghai, China</i>
1500 - 1520	Latest Development on Specialty Fats Ms Farhana June Jamil, <i>Cargill (Malaysia) Sdn Bhd, Malaysia</i>
1520 - 1550	Q&A
1550 - 1630	Tea/Coffee Break/Touring of Exhibition/Viewing of POSTERS

EVENING FORUM

Moderator:	Mr MR Chandran, KMN, FMOSTA
1630 - 1830	Environmental Impacts of the Palm Oil Industry: Addressing Sustainability Gaps on the Road to Net Zero Carbon
1830 - 2000	Pre-Dinner Drinks & Networking
2000 - 2200	Congress Dinner & Awards Presentation



WEDNESDAY, 19 OCTOBER 2022 (Day 2)

MODULE 3:	PRODUCTIVITY ENHANCEMENT: MECHANISATION, DIGITIZATION & GENOMICS
Chairperson:	Dr Harikrishna Kulaveerasingam, FASc Chief Research & Development Officer, Sime Darby Plantation, Malaysia
0900 - 0940	The 6 th Tun Tan Sri Raja Alias Foundation Lecture A Journey Towards Plantation 4.0. A CEO's Perspective Mr Helmy Othman Basha, <i>Sime Darby Plantation Bhd, Malaysia</i>
0940 - 1000	Current Status of Mechanisation of Oil Palm in Malaysia Prof Wan Zuha, <i>University Putra Malaysia, Malaysia</i>
1000 - 1030	Tea/Coffee Break/Touring of Exhibition/Viewing of POSTERS
1030 – 1050	Chromosome Level Assembly of Oil Palm Further Unlocks the Potential of the Oil Palm Genome Dr Leslie Low Eng Ti, <i>Malaysian Palm Oil Board, Malaysia</i>
1050 – 1110	Oil Palm Genomics, A Commercial Experience Dr David Appleton, <i>Sime Darby Plantation Technology Centre, Malaysia</i>
1110 – 1140	Q&A
Presentation: Tan Sr	i Emeritus Professor Augustine Ong International Special Award
1140 – 1230	Presentation by Winner of Tan Sri Emeritus Professor Augustine Ong International Special Award
1230 - 1400	Lunch/Touring of Exhibition/Viewing of POSTERS
MODULE 4:	NON-FOOD APPLICATIONS
Chairnersons:	Ir Qua Kiat Seng Senior lecturer Monash University Malaysia

Chairpersons: Ir Qua Kiat Seng, Senior lecturer, Monash University Malaysia Mr Willy Sutanto, Wilmar International, Singapore



1400 – 1420	The Future of Surfactants – What it Means for the Palm Oil? Mr Neil Burns, <i>P2 Science New York, USA</i>
1420 – 1440	Palm Oil Waste Co-Digestion – Closing the Carbon and Nutrient Cycle Mr Thomas Wagner, <i>Envitec Biogas AG, Germany</i>
1440 – 1500	Sustainable Aviation Fuel from Oil Palm Biomass Dr Harrison Lau Lik Nang, <i>Malaysian Palm Oil Board, Malaysia</i>
1500 – 1520	From Palm Oil Mill Effluent to Sustainable Aviation Fuel via Hydrotreated Vegetable Oil Process Mr Gao Zhiqiang, Beijing Sanju Environmental Protection & New Materials Co Ltd, China
1520 – 1550	Q&A
1550 - 1625	Tea/Coffee Break/Touring of Exhibition/Viewing of POSTERS

MODULE 5: PHYTONUTRIENTS

Chairperson:	Dr Fu Ju Yen, Research Officer, Nutrition Unit
	Malaysian Palm Oil Board, Malaysia

- 1625 1700The Use and Benefit of Phytonutrients in Functional Food and
Dietary Supplements: Case Study of Carotenoids and Tocotrienol
Dr Kevin Gellenback & Dr Charles Hu, Nutrilite/Amway, California,
United States of America
- 1700 1725 **Towards a Circular Economy: Palm Phenolics for Health and Wealth** Dr Raviga Sambanthamurthi & Dr Leow Soon Sen, *Malaysian Palm Oil Board, Malaysia*
- 1725 1755 **Q&A**
- 1755 1810CLOSING REMARKS
Academician Emeritus Prof Tan Sri Datuk Dr Augustine S H Ong
Chairperson, Organising Committee OFIC 2022



MODULE 1: ECONOMICS & SUSTAINABILITY

Chairperson: M R Chandran, KMN, FMOSTA, FISP

We are mired in a global health and economic crisis that is showing no signs of receding as waves of the virus outbreak and lockdowns continue to devastate lives and livelihoods. If there is a lesson to be learnt by all of us during this global health emergency, it is that natural catastrophies, epidemics and pandemics all have one thing in common – we humans abuse *Mother Earth*, and the repercussions are increasing in complexity and severity. The pandemic has, in fact, opened a window of opportunity for businesses and governments to reset and reshape the world in a more sustainable way. It has often been highlighted that while Covid-19 has vaccines, there is no vaccine for *Climate Change*!

This shared trauma serves to remind us just how fragile we are as a community, as a global economy and as the stewards of the earth's climate. The difficult work of improving environmental, social and governance (ESG) norms is taking place at all levels of society and the resulting changes will have profound implications for investors. Only inclusive societies can get the climate change equation right. Politicians must therefore reset their agenda and move away from divisive and exclusionary policies. Environmental groups have warned against efforts by countries and corporations at the forthcoming UN COP26 climate conference in Glasgow to "greenwash' their ongoing pollution of the planet. The summit has been described as *"the world's last best chance"* to prevent global warming from reaching dangerous levels and is expected to see an ambitious deal that would ensure the world stands a chance of capping global warming at 1.5 degree centigrade as agreed in Paris in 2015.

The oil palm has played a major role in reducing hunger and poverty while improving food security and nutrition. It has also helped to meet demand for fuel and fibre. However, the significance of the oil palm as an economic driver has placed it in direct competition with other international oilseed crops and made it a target for criticism and smear campaigns. The industry has been associated with deforestation and consequent loss of biodiversity, climate change and GHG emissions. Therefore, despite its track record, the industry can no longer operate on a "business as usual" mode, and has no choice but to create transformative pathways to stay relevant and ahead of the market. It must tap into the power of Science & Technology to create sustainable solutions which drive growth.

The *Oil Palm Industry* is the lifeblood of the two major global producers – Indonesia & Malaysia, and needs to reinvent itself to remain sustainable and competitive. Thus, the following central economic sustainability challenges and questions will be addressed in this Module in order to future-proof the industry:

• Biodiversity and Forest Issues

The 15th Conference of Parties to the Convention on Biological Diversity and the 26th Conference

of the Parties (COP26) to the United Nations Framework Convention on Climate Change (UNFCCC), are all taking place in 2021. Biodiversity and deforestation issues are likely to be high in the EU, UK and global agenda in the months and years to come. The oil palm industry should anticipate heightened pressure to reduce its rainforest and carbon footprint.

• Nature-based financing

There is increasing pressure worldwide to integrate nature-related risks into financial policies. How will the oil palm industry address the coming green economic revolution where there is a movement aimed at moving from a nature-negative economy towards a more circular and nature-positive economy?

• The Farm to Fork Strategy

The F2F strategy forms the core of the European Green Deal. It aims to expedite the transformation to a sustainable food system that ensures a neutral or positive environmental impact, helps mitigate climate change and reverses biodiversity loss. The industry has to constantly evolve to meet these challenges instead of labelling all such initiatives as protectionist measures.

• Mosaic landscapes

Recent studies have indicated that enriching oil palm plantations with trees and natural landscape elements could significantly improve biodiversity without adversely affecting yield. Such mosaic landscapes could help to reconcile economic, social and environmental objectives. There is a need for more research to design mosaic landscapes and develop policies to implement them on a larger scale.

• Water footprint

Water footprint is an important indicator of environmental sustainability. It is vital to ensure water-use efficiency and avoid irrigation. Palm oil mills have a significant impact on water footprint and it is important to reduce/avoid dilution in the mills.

• Agriculture 4.0 – Mechanisation and Automation for sustainable crop production

Covid-19 has highlighted the transformative power of digital technology as a means of continuing commercial and economic activity. It has also emphasised the urgent need for automation in the Malaysian oil palm industry as the industry is struggling with serious labour shortages caused by the pandemic. Mechanisation is an important component of sustainability as it reduces reliance on hard labour, relieves labour shortages, improves productivity and efficient use of resources. The oil palm industry must intensify mechanisation efforts to address the technological, economic, social and environmental dimensions of sustainable development of the industry.

• Human rights and labour issues

There is growing momentum worldwide among governments to require companies to conduct their due diligence in the area of human rights. Civil society groups all across the globe are calling for more robust requirements on companies. Major investors and companies are also expressing backing for such legislation. The EU initiative on mandatary corporate due diligence throughout the supply chain aims to address business operations' impact on human rights and the environment. The industry has to address these issues instead of constantly denying and playing the "victim". In fact, Covid-19 has highlighted migrant workers as a vulnerable group and taught us that untenable living conditions and poor access to health care had contributed significantly to the transmission of the disease. The Oil Palm industry should set its sights on becoming a shining example of a truly sustainable industry by sticking scrupulously to set standards of conduct and compliance without resorting to all manners of ifs and buts.

• From rhetoric to reality: The serious issue about productivity.

The industry needs to move from rhetoric to reality. Increasing oil palm yields should be the highest priority in the sustainability agenda. There are currently significant gaps between actual and potential palm oil yields. Planting the suitable high yielding material is of paramount importance, given the 25-year economic cycle of the oil palm. Adoption of advanced technology for yield increase cannot be over-emphasised.

• Palm oil's reputation problem

There is no denying that no other oil crop can replace oil palm to meet the growing global demand for edible oil because of its superior productivity. However, palm oil has a reputation problem which must be skilfully addressed with facts and figures and not mere rhetoric and unsubstantiated claims. Education and international collaboration are critical.

• Branding of palm oil (MyPalm Oil?)

To meet the increasing market competition by other palm oil producing nations, the Malaysian oil palm industry must differentiate itself in terms of quality and sustainability. Certification and traceability are of key importance. There are also opportunities in the "halal" space.

• Downstream value addition

Domestically, Malaysia is only beginning to plumb the true depth of the opportunities the industry can deliver, most notably in the area of renewable liquid fuel, biomass and biogas, non-tree fibre and high-value oleochemicals. The oil palm industry and Malaysia must escape from the commodity dependence trap and intensify efforts at downstream value-addition.



MODULE 2: FOOD APPLICATIONS

Chairperson: Prof. Tan Chin Ping

A series of unexpected and unprecedented events during Covid-19 pandemic have greatly impacted the supply and demand of vegetable oils worldwide. The over demand of vegetable oils for food applications grew exponentially; thus, overburdening the industry which resulted in a price surge in 2021. However, this phenomenon is not expected to last and is predicted to stabilise in 2022.

Although the total vegetable oil produced used in food applications had experienced tremendous growth, the pandemic has just amplified the importance of vegetable oils. The growth is prominent in the Asia-Pacific region, which contributes to the global market growth. The hike in global consumption is an outcome of the booming population, transposing diets and higher standards of living. Out of the total vegetable oil consumption, palm oil largely influences the global vegetable oil market.

Vegetable oils are obtained from various sources such as seeds, nuts and fruits rich in various macro- and micronutrients. They are often used in various food preparations as a substitute for animal fats. Vegetable oils are suitable for human consumption as they are found to be essential for health and wellbeing, particularly supporting cell growth and cardiovascular health. Vegetable oils also provide high density of energy and play a major role in absorbing many other lipid nutrients. In the food industry, vegetable oils increase the variety of processed foods by enhancing texture, extending the shelf-life of products and adding flavour. Per capita food use of vegetable oils continues to grow both in developed and developing countries. At a micro-level, food industry and household consumers use a wide range of vegetable oils and fats for deep frying, baking, roasting, searing and seasoning, as well as making sauces, dips and dressings. Palm oil – as the most versatile of all vegetable oils – is used widely in the production of infant formula and specialty fats.

Quality and safety of vegetable oils continue to evoke great interest among government agencies, consumer bodies, academics and the food industry around the world today. Among the area of focus is the advancement of instrumental analysis which has improved the detection limit of various process contaminants in vegetable oils. In addition, the constant need to modify and improve existing extraction and refining of vegetable oils as a mitigation approach in reducing the formation of process contaminants in vegetable oils is proven to be an ever important part of food safety.



MODULE 3: PRODUCTIVITY ENHANCEMENT: MECHANISATION, DIGITISATION & GENOMICS

Chairperson: Dr. Harikrishna Kulaveerasingam, FASc

he high yields of oil palm together with the high productivity of the industry have enabled Oil Palm to be the most productive vegetable oil crop globally. However, the productivity of the industry has stagnated for many years and labour disruptions due to the Pandemic have resulted in a decline in productivity. Is this what the future entails for the industry? Can advanced technology play a role in enhancing productivity and if so, how? This session will introduce some technologies namely robotics, mechanisation, digitalisation and genomics that could positively enhance productivity of the industry.

Agriculture being a cost sensitive industry has been slow to adopt or innovate using new technologies and as a result there has been little interest by technology providers to innovate for this industry. However, with the pandemic and climate change there is a realisation that the world's food supplies are at great risk offering opportunities for technology companies to address this by providing cost effective solutions. Drones are extensively used in China and now globally for crop spraying and for other agricultural purposes.

Recent advances in robotics also offer autonomous solutions for skilled labour dependent agricultural operations such as ploughing, planting, fertilising, weeding and harvesting of fruits (strawberries, apples) and vegetables. There is an opportunity for less sophisticated automated or semi-automated modifications of existing machines to provide bridging solutions before these fully automated or robotised solutions can be commercially deployed. However, this would require digitisation of the industry, to support connectivity of the machinery, sensors, drones and allow capture of robust data for its further analysis and use.

The Malaysian government's 5G implementation commitment bodes well, as it provides a supporting platform to enhance digital connectivity and enhanced bandwidth. Improvements in planting materials is also another platform to enhance yields and productivity despite climate challenges. These areas will be covered by eminent speakers in this session and would provide a glimpse of an exciting future for the industry.



MODULE 4: NON-FOOD APPLICATIONS

Chairpersons: Qua Kiat Seng Willy Sutanto

As we enter 2022 we will carry with us living with the coronavirus pandemic and the urgency of mitigating climate change. In the act of adjusting to the new normal will we make changes to our lifestyles or will technology decide for us or will it be both?

OLEOCHEMICALS

Indonesian oleochemical exports continue to increase for a third consecutive year on higher demand for cleaning and healthcare products during the pandemic. In 2019 exports were 3.2 million tonnes, in 2020 3.8 million tonnes and expected to top 4.0 million tonnes in 2021. On the other hand Malaysia's oleochemical exports dropped from 3.3 million tonnes in 2019 to 3.1 million tonnes in 2020. Overall exports from these two top producers increased 6% in 2020. The value of the exports in 2021 increased at least 40% reflecting the record vegetable oil prices where problems in the global production of key oilseeds coupled with rising biodiesel use have fueled the global vegoil rally. As economies started to reopen, demand for crude oil started rising and Brent crude has risen beyond the US\$80 a barrel in October 2021 as we still remember a below zero price in April 2020.

Surfactants will continue to be in demand as oleochemicals keep their hold as climate change concerns minimise the use of fossil fuels. Interesting to note however is that oleochemicals are associated with petrochemicals eg methanol and ethylene oxide. Will new surfactants or the dormant alpha methyl ester sulfonate come into the picture with the soaring interest? In 2011 to 2015 when Brent crude was at a high of US\$110 there was a flurry of activity to make petrochemicals from oleochemicals but the bottom fell out quickly after 2017 when the high Brent crude prices were not sustainable.

BIOMASS

The rising biodiesel use is to reduce the fossil-fuel emission as a number of oil and gas refineries in the US are switching to biofuel production. Much of the feedstock is first generation except for used cooking oil. ExxonMobil has introduced a new 2 stage technology to convert feedstocks into renewable diesel that could lead to the production of jet fuel as a secondary product. The sixth IPCC (Intergovernmental Panel on Climate Change) report published in August 2021 has led António Guterres, the UN secretary general to warn: "[This report] is a code red for humanity. The alarm bells are deafening, and the evidence is irrefutable: greenhouse gas emissions from fossil fuel burning and deforestation are choking our planet and putting billions of people at immediate risk."

More than 100 national governments have set or are considering net-zero emission targets. High on their renewable list is solar, wind and hydro. In the UK biomass is its second largest source of renewable electricity. Elsewhere eg Indonesia and Malaysia, biomass is a potential that remains largely untapped. For every kg of palm oil produced, approximately 4 kg of solid biomass are generated. In Malaysia for example less than 1% of its energy is from biodiesel, biogas and biomass yet it has the potential to provide a quarter of its energy needs. This will be mainly from second generation biomass bioenergy.

Biomass energy may have some shortcomings being not as efficient as fossil fuels, can contribute to PM2.5 levels and need a lot of space for plant and storage. Nonetheless it is renewable and an important bridge to net-zero emission that needs to be valued and not to be treated as waste. Will the governments of Indonesia and Malaysia incorporate, on their journey to reducing fossil-fuel emission, the greater use of renewable biomass energy?



MODULE 5: PHYTONUTRIENTS

Chairperson: Dr. Fu Ju Yen

I he global wellness market is estimated at more than USD 1.5 trillion due to the rapid rise in consumer awareness. COVID-19 is changing the wellness industry, induced by months of social distancing and considerable readjustments to new normal. There is a prominent shift in consumers' perception from "sick-care" to "well-care". In the post-pandemic era, taking care and control of one's own health is even more critical than before. In a survey conducted by McKinsey, up to 79% of consumers believe in the importance of wellness, and 42% consider it a top priority. The future of the wellness market is fueled by the concept of proactive and preventative health.

In the space of nutraceuticals, the demand for plant-based extracts is increasing, resonating with the shifting preference towards natural-derived products. Further driven by ageing population, growing opportunities continue to emerge. The annual growth rate of global phytonutrients market was estimated at 7.6%. Phytonutrients derived from vegetable oils, namely vitamin E, carotenes and polyphenols are among the ingredients with highest growth rates. Are we on the right track to capitalise on this global trend?

In the latest report from Ministry of Health Malaysia, prevalence of non-communicable diseases is on the rise. Approximately 39% of adults are overweight; up to 15% increase in cases of diabetes mellitus in the past 5 years; cancer is the 4th leading cause of death. Dietary supplements and functional foods that provide anti-oxidant and anti-inflammatory properties come into play. Maintenance of good nutrition and wellness involves products with targeted nutritional benefits, catering to the needs of specific populations. This requires close collaboration between manufacturers and formulators. One major advantage of phytonutrients derived from vegetable oils is their multiple health benefits, allowing multiple end applications catered towards consumer needs. Increase in research and scientific evidence has continuously shown benefits. Data from high quality clinical trials is fundamental to substantiate strong health claims, adding significant value to the industry. Besides, developing advanced extraction technologies and innovative delivery systems is the key to improve product quality.

To sustain the fast growing market, concerted effort in addressing ingredient quality, nutritional benefits, clinical data, health claims and consumer education is pivotal. Rigorous assessments and recognition by regulatory authorities and complying with quality standards is the need of the hour. This will ensure quality products in the market with superior nutritional benefits.

1) VIRTUAL PRESENTATION – The participant is required to submit an abstract and a recorded video of about five[5] minutes in the form of power-point presentation of their research finding. The video will be uploaded in the poster gallery during the OFIC 2022 Oils and Fats International Congress.

2) PHYSICAL PRESENTATION

The 2022 Oils and Fats International Congress (OFIC) will include a poster session to provide a platform for sharing of the latest research findings related to oils and fats in line with the theme **"Boosting the Potential of Oil Palm and Its Products"**. The poster session enables presenters to share their research findings and innovations in order to obtain feedback through interaction with international audiences.

The Organising Committee invites scientists, researchers and post graduate students to submit their abstracts in English with the following format:

- Title of paper
- Author(s), Affiliation(s), Address, Country
- Email address and contact information of corresponding author
- Abstract
- References

Abstract of the posters submitted to: mosta.secretariat@gmail.com or secretariat@mosta.org.my

will be reviewed by the Organising Committee and notification of acceptance will be sent to corresponding author. Template of the abstract and poster can be obtained from OFIC2022 website at: **www.mosta.org.my**

BEST POSTER AWARDS

Best Poster Awards with attractive cash prizes will be given to poster papers that show high scientific quality and new inventions, concepts and innovations in addressing current issues and challenges in the oils and fats industry.

TAN SRI EMERITUS PROF. AUGUSTINE SH ONG INTERNATIONAL SPECIAL AWARD ON INVENTIONS AND INNOVATION IN PALM OIL

There will be 3 categories – Lifetime Achievement Award, Young Scientist Award and Postgraduate Award.

GUIDELINES FOR POSTER PAPERS

- 1. The poster should be of A1 (59.4 cm x 84.1 cm) in size.
- 2. The poster can be clearly read from a distance of around 1 meter.
- 3. At the top of poster, indicate the title and names of authors and organisations.
- 4. Include the following items on your display; objectives of the study, key results, discussion, acknowledgements and references.
- 5. Graphic illustration such as figures, concise tables and photographs are considered essential by the authors could be included.
- 6. Use tack-and-stick reusable adhesive, mounting tabs or tape to attach your poster onto the board provided.
- 7. Authors are required to be present at their poster board during the scheduled times to respond to questions by the judges.
- 8. Each poster will be displayed for the whole two days of the programme. Poster viewing and informal discussion will take place during morning and afternoon breaks as well as the lunch break.



IMPORTANT DATES

- Abstract submission deadline: 18 September 2022
- Acceptance notification: 3 October 2022
- Poster setting up: 17 October 2022

REGISTRATION FORM

Please complete in Block letters/attach Business Card. This form may be duplicated for additional delegates.

1. DELEGATE'S INFORMATION

Full Name	:	(Please underline last name)	MOSTA Membership No:
Title	:	Designa	tion :
Organisation	:		
Address	:		
Email	:		
Tel	:	Fax	:

2. REGISTRATION FEES

	VIRTUAL REGISTRATION		PHYSICAL REGISTRATION		Total Amount
	Local	Overseas	Local	Overseas	(RM/USD)
Members	RM500	USD125	RM1,500	USD375	
Non-Members	RM1,000	USD250	RM1,800	USD450	
Students with Posters Presentation	RM 300	USD75	RM600	USD150	
Working Adults with Posters Presentation	RM500	USD125	RM800	USD200	
Additional Congress Dinner Ticket	RM300 (USD75)				

Registration Fee for delegate covers the following:

Attendance at all OFIC 2022 sessions and admission to Exhibition 2022:

- · Lunches and refreshments and Congress Dinner for physical registration
- OFIC 2022 materials and documents
- Evening Forum

3. MODE OF PAYMENT Please tick (\checkmark):



Cheque / Banker's Draft made payable to "MOSTA" (Cheque No:)

Payment by Telegraph Transfer to "MOSTA" Account (Please attach the advice slip of the remittance if paid by telegraphic transfer)

Registration online www.mosta.org.my

Name of Account: **MOSTA** Account No.: **512530-155068** Swift Code: MBBEMYKL ID: 4859/91

Name of Bank: Malayan Banking Berhad Address of Bank: 50-52, Jalan Sultan 46200 Petaling Jaya, Selangor, Malaysia

OFIC 2022 Secretariat c/o MOSTA

C-3A-10, 4th Floor, Block C, Damansara Intan 47400 Petaling Jaya, Selangor, Malaysia Tel: +603-7118 2064 / 2066 E-mail: mosta.secretariat@gmail.com Website: www.mosta.org.my (Contact Person: Ms. Michelle Lim)

REGISTRATION AND CANCELLATION CONDITIONS

- Use a separate form for each delegate. Photocopies of this Form can also be used. Payments can be combined for more than one delegate when forms are sent in together.
- Registration is not official and complete until full payment is received by the OFIC 2022 Secretariat. Confirmation of registration will be issued upon receipt of full payment.
- 3. Cancellation received prior to 30 June 2022, will be refunded in full less the Secretariat expenses of USD100/- for overseas participant and RM100/- for local participant. Cancellation received between 1 July 2022 and 15 September 2022 will receive a 50% refund. Cancellation received after 15 September 2022 will not be refunded except in the event of force majeure decided upon at the discretion of the OFIC 2022 Organising Committee. All requests for refund must be submitted to the OFIC 2022 Secretariat in writing. No REFUND will be issued until after the congress.

For office use only:				

Oils and Fats International Congress was launched by MOSTA in 1994 concurrently with an exhibition. Over the past 14 OFIC Conferences and Exhibitions we managed to attract both international and local exhibitors. The event is designed to offer oils and fats players both within and outside Malaysia a platform to promote business development by showcasing the latest technological products and process equipment and services to industry decision makers.

Our database indicates that most of the visitors to the exhibition section are from the upstream sector at 65% and the balance 35% representing mid and downstream players.

WHO SHOULD VISIT OUR EXHIBITION?

- > Top Management and Decision Makers of Oil Palm Plantation Companies, Scientists, Engineers, Chemists and Technologists involved in Oils & Fats Industry
- > Palm Oil Mill Owners
- Top Management of Palm Oil Refineries, Oleochemical, Speciality Fats & Biodiesel Plants
- > Palm Oil Regulatory Bodies
- > Palm Oil Traders, Importers and Exporters
- > Bankers & Financial Institutions
- > Researchers



Overlooking the iconic PETRONAS Twin Towers and the 50-acre KLCC Park, Kuala Lumpur Convention Centre is strategically located in the heart of Kuala Lumpur City Centre (KLCC) Precinct with a wide and varied range of recreational, entertainment, restaurants and accommodation options, with 4 onsite hotels and over 25,000 hotel rooms within walking distance.

The Centre is a purpose-built centre that provides 33,659 sqm of flexible space over 5 levels, with two auditoria; 3,000seat Plenary Hall and Plenary Theatre for 470; a Grand Ballroom which seats 2,000 diners, Banquet Hall for 500, three



Conference Halls, eight Exhibition Halls and 20 meeting rooms, and support facilities ranging from VIP suites, hospitality suites, business centre, registration counters, organiser's office suites, food and beverage outlets, medical room, disability friendly, medical room, concierge to parenting room.

COST OF EXHIBITING

A)	Standard Shell Scheme	(9sqm)
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CATEGORY	VIRTUAL EXHIBITION		PHYSICAL REGISTRATION	
	Local	Overseas	Local	Overseas
Member	RM4,000	USD1,000	RM8,000	USD2,000
Non-Member	RM5,000	USD1,250	RM10,000	USD2,500

BOOTH PACKAGE INCLUDES:

- One (1) ticket to OFIC Conference
 - One (1) lunch and refreshments
- One (1) Dinner Card

SHELL SCHEME PACKAGE INCLUDES:

- 1 Unit Information Counter
- 2 Units Folding Chairs
- 1 Set Company Name and Booth Number
- 1 Unit Waste Basket
- 2 Units Florescent Lights
- 1 Unit 13 amp Power Point

EXHIBITION BOOKING FORM

KUALA LUMPUR CONVENTION CENTREConference Hall 1, Level 3 | 18 – 19 OCTOBER 2022

Please complete in Block letters. This form may be duplicated.

We hereby make application for exhibit booth(s) in order of preference as follows:

	1st Choice	2nd Choice	3rd Choice
Booths No.:			

Full Name	:
Designation/ Title	:
Company	:
Address	:
Email	
Tel/ Mobile No.	:

EXHIBITOR VIRTUAL PRESENTATION

The company is required to submit one page of the company profile and a recorded video of company profile. The video will be uploaded in the exhibitor gallery during OFIC 2022.

LINK TO APPLY FOR MATRADE MARKET DEVELOPMENT GRANT

https://www.matrade.gov.my/en/malaysian-exporters/services-for-exporters/ exporters-development/market-development-grant-mdg

Approval is subject to availability of funds and application is within MATRADE's guidelines.

KUALA LUMPUR CONVENTION CENTREConference Hall 1, Level 318 – 19 OCTOBER 2022

