



Initiatives to Improve Palm Oil Traceability and Compliance to Required Quality Standards

7th December 2021, from 10-11 a.m. MYT (UTC +8)

December 6, 2021, from 8-9 p.m. CDT (Chicago, USA; UTC-5)

Registration: <https://register.gotowebinar.com/register/1160112728530126864>

Overview

Versatile analytical tools and processing innovations allow the palm oil industry to implement local and international certification standards more effectively and can support the branding of palm oil as sustainable, safe, and of high quality in compliance with stringent trade requirements and consumer expectations. Umi Salamah Ramli, head of the proteomics and metabolomics unit at the Malaysian Palm Oil Board, will highlight alternatives to the traditional 'paper trail' to ensure traceability, safety and authenticity of palm oil across the supply chain. Ir Shyam Lakshmanan, the general manager of an edible oil refining complex in Sandakan, Malaysia, will share his own experience and expertise as he describes the proactive measures industry players have taken combating the presence of 3-MCPDE and GE in processed palm oil in light of new European Commission (EC) limits.

Moderator and Chair: Dr. Ahmad Parveez Ghulam Kadir

All registrants will receive the webinar recording and a Certificate of Participation will be given to attendees of the live broadcast.

Presentation 1: Efforts being undertaken towards achieving palm oil traceability and authenticity to monitor compliance to sustainability standards

Speaker: Dr. Umi Salamah Ramli, Head Proteomics and Metabolomics Unit, Malaysian Palm Oil Board (MPOB), Malaysia

Palm oil brings economic advantages to millions of people, and the oil palm industry endeavors to be truly sustainable by ensuring traceability across the supply chain. Equal emphasis is also placed on meeting all safety and quality standards for palm oil across the value chain. In this respect, the Malaysian Palm Oil Board (MPOB), as the custodian of the oil palm sector, has been in the forefront of driving radical transformation to

ensure long-term sustainability. Currently, monitoring the traceability, safety and authenticity of palm oil across the supply chain is achieved through a combination of tools that includes certification and reporting mechanisms, which mostly involve paper trails. However, to complement these efforts and ensure that palm oil is free of adulterants and can be easily tracked and followed in the supply chain, especially to its geographical origin, versatile and robust chemical based analytical tools are also being developed. This will allow the industry to more effectively implement local and international certification standards to brand Malaysian palm oil as sustainable, safe and of high quality in complying with stringent trade requirement and consumer expectations. The efforts carried out by MPOB towards achieving these goals will be described.

Dr Umi Salamah Ramli is the Head of Proteomics and Metabolomics Unit at Advanced Biotechnology and Breeding Centre Malaysian Palm Oil Board (MPOB). Dr Umi Ramli has worked on a diverse range of projects, ranging from the classical plant lipid biochemistry, flux control analysis to more recent biomarker discovery in the area of oil palm research related to yield improvement. She also conceptualized and developed MPOB's proteomics and metabolomics (PROMET) shared resources, which has grown into a reference laboratory for oil palm protein and metabolite studies. The PROMET facility at MPOB under Dr. Umi's leadership is helping to meet the increasing need for a range of technical services using mass spectrometry, including identification and relative quantification of proteins and small molecules. She was also instrumental in initiating research on palm oil traceability, in line with the oil palm industry requirements to establish a *traceable* supply chain of crude palm oil.



Presentation 2: Initiatives undertaken by Commercial Refinery in Malaysia to reduce 3-monochloropropane-1,2-diol Esters (3-MCPDE) and Glycidyl Esters (GE) in Processed Palm Oil

Speaker: Ir Shyam Lakshmanan, IOI Edible Oils Sdn Bhd, Sandakan Sabah, Malaysia

The fatty acid esters of 3-monochloropropane-1,2-diol (3-MCPDE) and glycidol (GE) which are found in a wide variety of vegetable oils have been a concern for the edible oils industry for more than a decade. In demonstrating its commitment to ensure safety of oils and fats used for food applications, the European Commission (EC) has implemented the maximum limits for these contaminants starting from 1st January 2021 for 3-MCPDE and 19th March 2018 for GE. As a trading nation, it is imperative that Malaysian palm oil conforms with the safety and quality standards of the importing countries, and therefore gain international recognition for its efforts. In line with market demand, the Malaysian industry players have taken proactive measures to combat the presence of 3-MCPDE and GE in processed palm oil. As such, this presentation will share the experience of a palm oil refinery in lowering the levels of these contaminants at a commercial scale. It is hoped this will encourage and motivate other oils and fats producers, particularly the palm oil sector, to strategize their processing practices to meet the food safety standards related to 3-MCPDE and GE.



Ir Shyam the General Manager, IOI Edible Oils Sdn Bhd, Sandakan Sabah, Malaysia is a Fellow of IChemE, and is a Chartered Engineer and Chartered Scientist. He is also a First Grade Steam Engineer, and a Registered Electrical Energy Manager. He has served as Industrial Advisory Panel member of various universities in Malaysia such as UTP, UTAR and Nottingham. He has also served as Industrial Supervisor for MEng students for their design projects. A results-oriented hands on professional with a successful record of technical and commercial accomplishments in industrial chemicals, mineral processing, and edible oil processing plants. Ir Shyam also has strong technical and commercial experience, with a track record of more than 30 years in improving plants and their profitability, developing new products, converting wastes into products, business development, marketing, and procurement. He has designed and installed mineral processing plants in China and Indonesia. He has also presented and published several research articles on reducing 3-MCPDE and GE in palm oil, which is one of his current areas of focus.

