

IChemE in Malaysia

Introduction to POPSIG



The patron of IChemE Malaysia



Her Royal Highness Queen of Perak Darul Ridzuan, Tuanku Zara Salim



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Advancing chemical engineering worldwide

- More than 37,000 members based in 100 countries
- offices in Australia, New Zealand, Singapore, Malaysia and the UK
- leading accrediting body for university courses and company training
- publisher of The Chemical Engineer
- international events and training provider
- Award Chartered Chemical Engineer status
- Award Professional Process Safety Engineer status



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IChemE

Palm Oil Processing Special Interest Group



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Our sponsors



Palm Oil Processing Special Interest Group (POPSIG)

- POPSIG was formed on 3rd August 2015 in Kuala Lumpur, Malaysia to provide a forum for the exchange of ideas, the sharing of experiences and encouraging innovation in the palm oil processing industry.
- Volunteers passionate about the palm oil industry & process engineering
- Not limited to chemical engineers



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	19 Colombia, a country to watch



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POPSIG objectives & activities

Objectives

- share and promote best practices
- encourage innovation in processing oil palm products
- promote professional aspects of the palm oil industry
- act as a focal point for all those interested in the process aspects of oil palm processing.

Activities

- technical seminars, workshops, site visits, webinars and physical evening talks
- quarterly newsletter
- yearly forum
- support for the annual IChemE Malaysia Palm Oil Industry Award



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IChemE Palm Oil Industry Award

2018

Year 2015 (Sponsored by KLK Oleo):



'Palm oil olein yield improvement project'
Mr. Toh Seong Hin - Asst VP, Plantation Advisory – Refinery from Sime Darby Plantation Sdn Bhd. receiving the 1st Palm Oil Industry Award from Mr. Siew Fook Ming, Project Director of KLK Oleo.

Year 2016 (Sponsored by POPSIG):



'Re-engineering current palm oil degumming process'
Muhammad Saiful Nidzam Ismail of Sime Darby Research Sdn Bhd - Senior chemical engineer in Oils & Fats Refinery Technical Advisory Services Units receiving the Palm Oil Industry Award from Hong Wai Onn, Chair of POPSIG.

Year 2017 (Sponsored by Sime Darby):



'Novel integrated process for the extraction of phytonutrients and production of biodiesel from crude palm oil'

Chin Hui Ling and Lim Ching Yee from Excel-Vite Sdn. Bhd. receiving the Palm Oil Industry Award from Tuan Syed Said Syed Saggaf - Head of Sime Darby Biodiesel Sdn Bhd, Head of Sime Darby Kernel Crushing Plant, Head of Health & Wellness Business.



'The Young Industrialist Award'
Her Royal Highness Queen of Perak Darul Ridzuan, Tuanku Zara Salim, Royal Patron of IChemE in Malaysia presenting the award to Chew Chien Lye of Sime Darby Plantations. Looking on is Ir Dr Christina Phang.



The IChemE Palm Oil Industry Award 2018 sponsored for the second time by KLK Oleo. *'Heat Recovery Using Vent Economisers'* Mr Siew Fook Ming, Project Director at KLK Oleo presented the certificate and trophy to Chong Tze Haw & Hassan Abas, IOI Edible Oils.



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IChemE Palm Oil Industry Award 2019



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Evening talks cum webinars



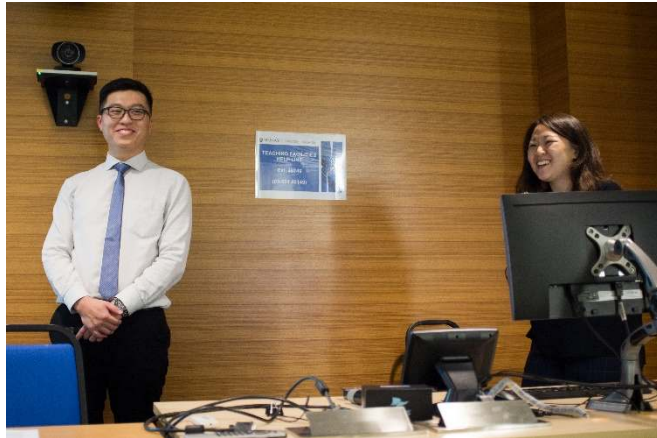
‘Introduction to oleochemicals’ by Ir K S Qua of AOMG. Participants included 30 auditors from Certifying Bodies of RSPO from 14 countries



‘Revolution X.0 in the Palm Oil Industry’ by Ir K S Qua of POPSIG at UMS in Kota Kinabalu, Sabah.



Evening talks cum webinars



'Oil Deodorising: New Technologies and Solutions to Improve Final Edible Oil Quality' by Mr Chia Ing Chuk of Desmet Ballestra (M) Sdn. Bhd.



'Extending Oleochemistry – Glycerin to Propylene Glycol and how Industry 4.0 enters Oleochemical Industry' by Mr. Fredrik Pomrehn, JJ-Lurgi Engineering Sdn. Bhd.



Regional Palm Oil Processing Seminar



Forum members discussing the theme.



Speakers and committee members

2017 : 100 Years Palm Oil Industry Seminar – “Can Malaysia continue to be the global technology leader in processing its Golden Crop?”

2018 : 2nd RPOPS – “Value addition in the Downstream Palm Oil sector.”



Outreach



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Field visits



Jomalina Refinery



Emery Oleochemicals



Ulu Kanchong Palm Oil Mill



Quarterly Newsletters



Best Final Year Design Award

- Each year, POPSIG awards Best Final Year Design Award to a group of final year students, whose final year project design revolves around palm oil processing
- The main objective of this award is to encourage the universities to introduce palm oil processing design for their final year students.
- The selection of Best Final Year Design Award is based upon a palm oil processing design which reflects on efficiency, values inherent safety and mitigates environmental impacts, and demonstrates project viability to the palm oil industry.
- The annual award is RM2000



2019 Best Final Year Design Award
Malaysia - Japan International Institute
of Technology (MJIIT), Universiti
Teknologi Malaysia (UTM) *"Biodiesel
Production using Subcritical Water and
Supercritical Methanol Treatment"*



Student Bursaries

- Financial assistance in a form of student bursaries to undergraduate and postgraduate students to attend scientific conferences, workshops or forums which are related to palm oil processing
- The main objectives of such assistance are to spur the students' motivation and support their research in palm oil processing
- The student bursaries contribute towards the registration, travel and accommodation costs to help make the palm oil processing conferences or events more accessible to the students.
- Each bursary is worth RM1000



Zhang Hao is a third year chemical engineering undergraduate at Xiamen University Malaysia. Zhang Hao is from China. In 2018 China imported almost 2 million tonnes of palm oil making it the #3 country Malaysia exported to.

Zhang Hao is the first recipient of the POPSIG Student Bursary. He attended the Malaysian Oil Scientists' & Technologists' Association (MOSTA) practice workshop "Managing the Downstream Sector (including refining, quality control and eliminate undesired contaminants)" from 11-12th June 2019



Roadshow 2019/20

- 24 universities with chemical engineering
- Understanding palm oil



- Opportunities in the palm oil industry
- Involvement of Ministry of Primary Industries and palm oil industry employers



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Roadshow 2019/20: 1st stop UTAR

ARE THE ORANG UTANS KILLED?
University Roadshow
 by
IChemE Palm Oil Processing Special Interest Group
 Forums & Series of Talks
 Venue: UTAR Sg. Long Campus
 Date: 16 August 2019 Multipurpose Hall Time: 9am-12pm

SPEAKERS

 Dr. Ruslan Abdullah -Current Director, Science & Technology, Malaysian Rubber Council Past Experiences: -Director, Sustainability Research & Development, Malaysian Palm Oil Association -Senior Vice President Site Duty, Plantations Sdn Bhd. -Partner, biotechnologist and Director, Research & Development, Kumpulan Gubeh Berhad -Associate Professor, Universiti Kuala Lumpur Malaysia	 Mr. Hong Wai Onn -Secretary of IChemE in Malaysia Board -Chair of IChemE POPSIQ -Industry Advisory Panel for Chemical Engineering at two universities -Technical Service Manager of Novozymes -Professional Engineer, a Chartered Chemical Engineer and a Professional Process Safety Engineer	 Ir. Qua Kiat Seng -EXCO of IChemE POPSIQ -IChemE's Learned Society Committee Past Experiences: -Part time Advisor to the ASEAN Oilseed Chemical Manufacturers Group for 12 years and now its representative in the RSPO SC TAT as well as multi group Oilseed Chemical and its Division -Worked for Unilever, ICI and KUK in Malaysia and overseas -GM for Uniqene Malaysia Sdn Bhd.	 Mr. Mohan Balasingam -Treasurer of IChemE POPSIQ -Regional Business Development Manager South East Asia for IChemE Malaysia Past Experiences: -Director at Global Solutions Asia Pte Ltd -Responsible for membership development, training and events, accreditation of universities and companies as well as corporate engagement for in IChemE Malaysia
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 Refreshments Provided!
 Public Visitors Welcome for Walk-in!

UTAR STUDENTS:
 CL & MM Stamps Provided!





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Roadshow 2019/20: 2nd stop MUM

Discover the Truth about Palm Oil

- Sustainability of the Industry
- Roles of Chemical Engineers in Palm Oil Industry
- Palm Oil Student Ambassador Programme

AT
IChemE Palm Oil Processing
Special Interest Group
University Roadshow!

*limited spaces available!

30 SEP 2019 • 9AM TO 12:30PM • MONASH UNIVERSITY

Mr. Michael Ng
 Assistant Manager, Science & Environment Division of MPOC
 Past: over 15 years of experience in managing environment & sustainability programs related to petrochemicals and palm oil industry including LCA, waste management, renewable energy and wildlife conservation

Assoc. Prof. Dr. Wu Ta Yeong
 Secretary of IChemE POPSIG, One of MPOC's Founding Members
 Current Research Topics: Sustainable Solid Waste Management, Biorefinery, Biofuel production, Wastewater treatment. Recipient of Malaysia's Research Star Award 2017; named as Frontier Researcher in the Area of Engineering by Ministry of Higher Education, Malaysia.

Ir. Qua Kiat Seng
 Founder of IChemE POPSIG; IChemE's Learned Society Committee
 Part: 32 year career in operations in the Palm Oil Industry; GM of Uniqema Malaysia Sdn Berhad; Part-time Advisor to the ASEAN Oleochemical Manufacturers Group for 12 years; Worked in Unilever, ICI, KLK.

Dr. Jaybalan Tamahrajah
 Senior Research Technologist for KLK OLEOMAS
 Conducts studies & investigations for Oleochemical Process and Product Improvements. Conducted research in chemical thermodynamics, zeolite synthesis & application of clay minerals in water treatment.

FREE ENTRY
 - FREE MORNING TEA
 - FREE SITE VISIT*
 - CERTIFICATE OF ATTENDANCE PROVIDED!

For more details:

 Michiko Pang
 012 243 3378



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Roadshow 2019/20: 3rd stop UM

IChemE
Student Chapter
University of Malaya

**POPSIG
UNIVERSITY
ROADSHOW**

9 October 2019
2-5pm | AUDI BLOCK Y, FACULTY OF ENGINEERING

Speakers:

- DR. RUSLAN ABDULLAH**
Director of Science & Environment of MPOC
- ASSOC. PROF. DR. WU**
Secretary of IChemE POPSIG, One of MPOC's Founding Members
- IR. QUA KIAT SENG**
Founder of IChemE POPSIG, IChemE's Learned Society Committee
- MR. MERVIN CHEW**
Professional Engineer and Use Chief Engineer at Sime Darby Research

Discover the truth of palm oil
Discover the role of chemical engineers in the palm oil industry
Palm Oil Student Ambassador Programme

f IChemE - UM SC
in IChemE - UM SC
ichemeumsc@um.edu.my

MPOC
LOVE MY PALM OIL
A BMRB Initiative
IChemE
Palm Oil Processing Special Interest Group
UNIVERSITY OF MALAYA
FACULTY OF ENGINEERING
KLK OLEO
CEUC



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Roadshow 2019/20: 4th stop XMUM

POPSIG University Roadshow

Date: 6th November 2019
Time: 1330 - 1700
Venue: Block A4 #G01, XMUM

Speakers

- Prof. Ir. Dr. Chong Mei Fong**
EXCO member of POPSIG
- Mr. Mohan Balasingam**
Regional Manager of IChemE
- Ir. Hong Wai Onn**
Technical Service Manager of Novozyme
- Mr. Mohd Muslimin Bin Hashim**
Manager Science & Environment Division

Topics

- Introduction of IChemE POPSIG and MPOC
- The truth about palm oil
- The role of chemical engineers in the palm oil industry
- Why get chartered?
- Panel discussion

For more information, please contact:
Dr. Kua Yin Leng (012-3063075)
Lai Wing Lam (0316-3420942)

XMUM IChemE Student Chapter
xmum_icheme_student_chapter

MPOC IChemE KLK OLEO XMUMChemE MAHSA UNIVERSITY MALAYSIA



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Roadshow 2019/20: 5th stop UNM



University of Nottingham
UK | CHINA | MALAYSIA



Students' Association
UNIVERSITY OF NOTTINGHAM
MALAYSIA



I LOVE MY PALM OIL CAMPAIGN UNIVERSITY ROADSHOW



Series of talks by representative from MPOC and POPSIG



THE SECRET OF PALM OIL YOU DIDN'T KNOW

POPSIG X MPOC

**4 DEC 2019
2PM-4.30PM
F3A04**

FREE for member
RM5 for non-member



IChemE
Student Chapter
University of Nottingham Malaysia



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Field visit during Roadshow 2019/20

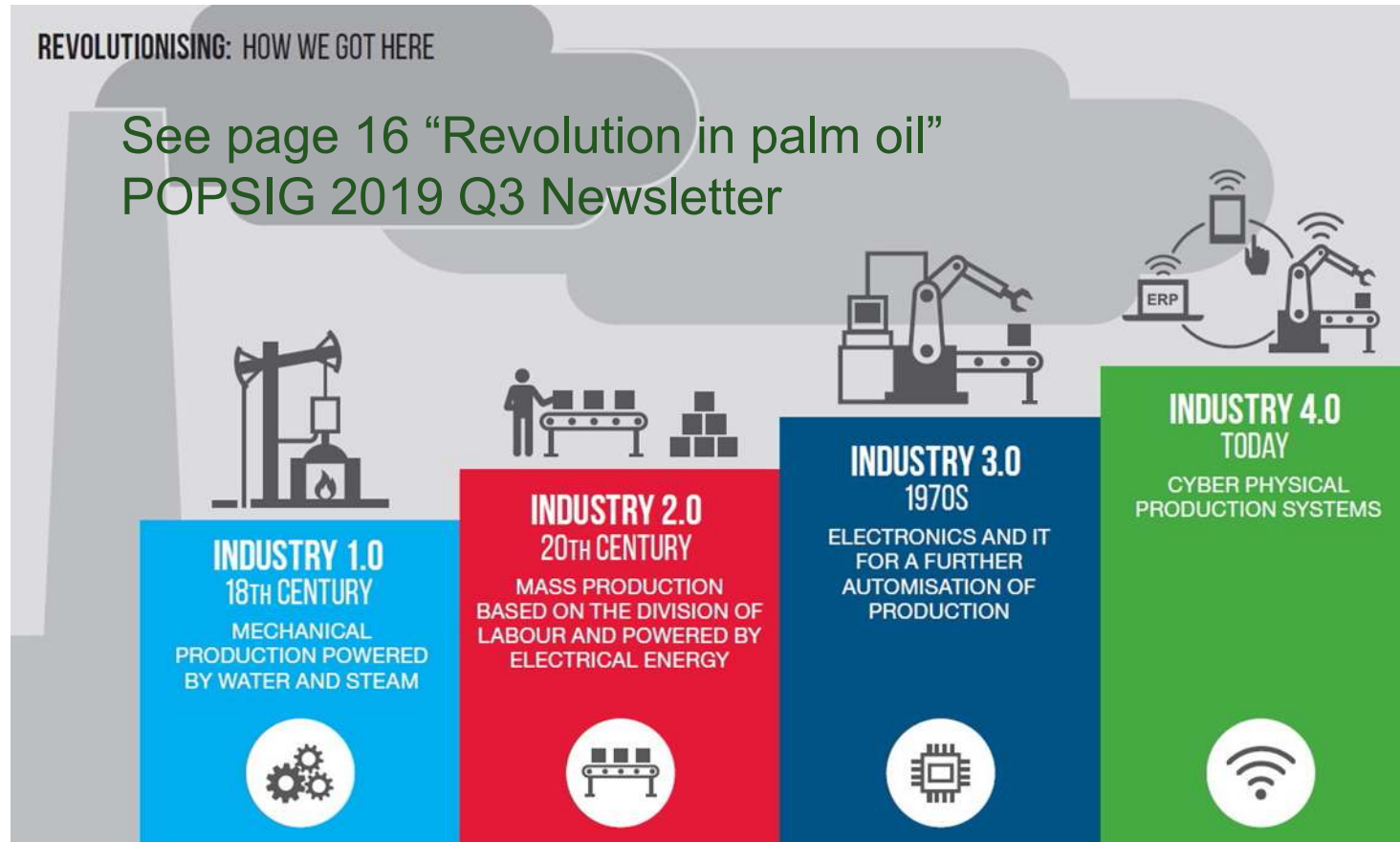


Roadshow schedule

Month	Date	University	
January	13th	UCSI	
February	19th	Universiti Kebangsaan Malaysia	
March		Heriot Watt University Malaysia	
April		Universiti Malaysia Pahang	
May		Taylor's University	



Industry 4.0 in the PO Industry



Plantation

Mill/Crusher Refinery Oleochemicals



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Thank you

www.icheme.org/membership/communities/special-interest-groups/palm-oil-processing-sig/



POPSIG Secretary
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