DISTILLATION OPERATION, CONTROL & TROUBLESHOOTING

5 - 8 March 2018 | 13 - 16 August 2018 | 13 - 16 November 2018

Block N22, IBD UTM Johor Bahru, Johor MALAYSIA





COURSE CONTENT

Items that you might consider allowing me to review - we may need to have a round table discussion and have the team review what are the best options

- Introduction to Distillation Column
- **Operation Difficulties**
- Column Field Testing : Flooding, Foaming, Efficiency and Troubleshooting
- Reboilers and Condensers and Pressure Control
- **Temperature and Composition Control**
- Miscellaneous Column Control: Level Control, Reflux Control, Side Stream Draw off Control
- Key Concepts about Column Internals Efficiency, Capacity, Flooding, Pressure Drop and Liquid Hold Up
- Trays Verses Packings when to utilize each
- Distillation in Practice, Refining, Petrochemicals, Palm Oil and Specialty Chemicals
- **Designing Columns for Fouling Service**
- Designing Columns for Improved Operations and Maintenance
- Troubleshooting Guidelines Tower Scanning
- Troubleshooting Case Examples
- Practical sessions using pilot scale distillation column at Chemical Engineering Pilot Plant, Institute of Bioproduct Development

What you can expect to gain...

- The operation, troubleshooting of columns and it's equipment
- An understanding distillation concepts
- Valuable practical trouble free design proven techniques commissioning, start shutdown of operation
- The fundamental of distillation control
- To tailor your approach specific design, analysis troubleshooting problems

WHO SHOULD ATTEND

People who are making decisions regarding distillation equipment operation, design, and economics; Plant Managers, Process Support Engineers, Operations Engineers, Design Engineers, Senior Plant Supervisors.

People who must trouble shoot and solve distillaton problems in a plant, engineering office or laboratory.

Ideal for veterans and those with only a few years of experience who want to review or broaden their understanding in Distillation Operation, Control and Troubleshooting.

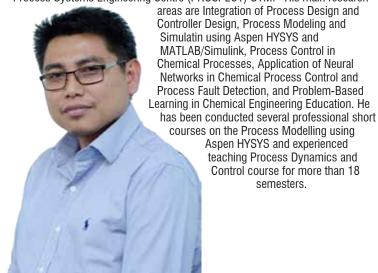
Other professionals who desire a better understanding of subject matter.



COURSE TUTORS Dr. MOHD. KAMARUDDIN BIN ABD. HAMID

Ph.D. (Chem. Eng.) (DTU), M.Eng. (Chem. Eng.) (UTM), B.Chem. Eng. (Hons.) (UTM), AMIChemE (UK), Grad.IEM

Mohd. Kamaruddin bin Abd. Hamid, is a senior lecturer at the Department of Chemical Engineering, Faculty of Chemical Engineering, Universiti Teknologi Malaysia (UTM) since 1st. July 2011. He is a Registered Graduate of the Board of Engineers Malaysia (BEM) since 2001, Graduate Member of the Institution of Engineers Malaysia (IEM) since 2006, Associate Member of the Institution of Chemical Engineers (IChemE) and Member of the American Institute of Chemical Engineers (AIChE) since 2007. Born in Membakut, Sabah, Malaysia, and educated in the Technical University of Denmark (DTU), started his academic career in UTM since 2003. He is noted as an innovative, energetic, versatile lecturer, and appointed as a research and development (R&D) manager for Process Systems Engineering Centre (PROSPECT) UTM. His main research



ASSOC. PROF. DR. MOHD AZIZI CHE YUNUS

Dr. Mohd Azizi Che Yunus is an Associate Professor in Chemical Engineering Department and also Director of Centre of Excellent of CLEAR (Centre of Lipid Engineering Applied Research) UTM. His research interests are on extraction, separation and isolation of active compounds from local herbs/malay appetizers/palm oil through process of supercritical fluid extraction and applications of experimental design and multivariate analysis in chemical and bio-process engineering.

He is also specialist in method development of identification and validation of extracted compounds using chromatogram analysis (GC-TOFMS, HPLC and LCTOFMS). Mohd Azizi Che Yunus actively involved in research activities, publications and consultancy. He was awarded several research

grants from MJIIT and government (FRGS, IE and GUP). Currently he has 7 postgraduate students working under his supervision. He has published more than 60 papers in international journals, proceedings and conferences. Currently, he was acknowledged with "Green Tech Award 2012" from Ministry of Energy, Green Technology and Water Malaysia.

Distillation Operation, Control & Troubleshooting

Please tick (\checkmark) where appropriate

[] 5 - 8 March 2018	[]	13 - 16 November 2018		
[] 13 - 16 August 2018					

YES! I would like to register the following participants

Name 1

Job Title

Name 2

Job Title

COMPANY INFORMATION

Company

State

Tel

Email

Authorised Signatory (*This registration is invalid without signature from an authorised officer)

Fax

Name

Job Title		
Tel	Fax	
Email		

COURSE FEE

Fee is inclusive of lunch, refreshments and course materials. Accommodation is not included.

Local Participant International Participant EUR01950

Method of Payment

Please kindly complete and return the reply form 3 weeks before the commencement date together with :

Local Participant Cheque / Bank Draft which are made payable to **PHYTO BIZNET SDN. BHD.**

International Participant Direct Transfer/Bank Draft : IBD Bank details : CIMB Bank Berhad, Universiti Teknologi Malaysia 81310 UTM Johor Bahru, Johor, Malaysia

Please instruct your bank to remit us the full amount, net of bank charges

Account No : 0118 - 0004178 - 05 - 7 Swift Code **CIBBMYKL**

Cancellation & Substitutions

A full refund will be promptly made for all written cancellations 2 weeks before the course. 50% refund will be made for written cancellations received 7 days before the course. A substitute may be made at any time.

Note

A) The organiser has the right to make any amendments that they deem to be in the best interest of the course and to cancel the course if insufficient registrations are received a week before course commencements date.

B) CERTIFICATE OF ATTENDANCE will be awarded at the end of the course.

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For more information, please contact INSTITUTE OF BIOPRODUCT DEVELOPMENT UNIVERSITI TEKNOLOGI MALAYSIA 81310 UTM Johor Bahru, Johor

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