

KLM Technology Group is a technical consultancy group, providing specialized services and training to improve process plant operational efficiency, profitability and safety.

We provide engineering solutions by offering training, technical services, process safety management consulting, HAZOP facilitation, best practices, specialized equipment and engineering designs to meet the specific needs of our partner clients.

Since 1997, KLM Technology Group has been providing engineering, operations, and maintenance support for the hydrocarbon processing industry. From 2004 to the present, our key associates helped traineers 1000 operations; maintenance, and technical support personnel.

KLM Technology Group is an industry leader for engineering documentation in Unit Operation Design, Sizing, and Troubleshooting. We have assisted small, medium and Fortune 500 Companies in their critical information for well informed decisions.



# **Meet Our Professional**



**Karl Kolmetz** has Over twenty years of progressive experience in the design, construction, commissioning, and operations management of process units from the US Gulf Coast through Asia. Strengths encompass design details that originate from a strong operations background, with the ability to incorporate positive ideas from differing sources. High safety awareness that was developed from commissioning experiences, HAZOP Facilitation and the positive results of Process Safety Management.

His experience includes over seventeen years (17) of refining experience in Texas. Over 12 years (12) Ethylene experience in Louisiana, Malaysia, Indonesia, and the Philippines.

Publications include authoring and co-authoring over 40 technical papers on a variety of subjects for product recovery, distillation troubleshooting, training, project management, and process design with safety and environmental concerns. He is authoring a book "The Handbook of Process Equipment Design". He is an industrial lecturer at Universities and has taught many courses for the process industry. He has a Bachelor of Science in Chemical Engineering from The University of Houston, and is a member of the International Association of Certified Practicing Engineers.

# Optimizing Ethylene Plant Operations

Session One

6-8 November 2017

# **Course Overview**

This course focuses on the core building blocks of the Olefin / Ethylene Plant process systems, equipment and economics. This program will emphasize the process unit operation fundamentals, safe utilization of these fundamentals by operations, engineering, maintenance and support personnel.

# **Course Outline**

- Introduction
- Review of Process Incidents
- Fundamentals of Petroleum Chemistry
- Introduction to Petrochemical Key Concepts
- Introduction to Olefin Plant Equipment
- Overview of an Olefin Unit
- Ethylene Furnace Technology
- Ethylene Distillation
- Process Equipment Troubleshooting
- Plant Reliability
- Quality
- Cost Control
- People Development

#### Who Should Attend

- People who are making day to day decisions regarding operation, design, and economics of processing plants
- Ideal for veterans and those with only a few years of experience who want to review or broaden their understanding of process safety.
- Other professionals who desire a better understanding of the subject matter.

## What you can expect to gain

- An detailed overview of Olefin Unit operations, processes and economics
- Gain an understanding of the equipment of an Olefin Unit
- Gain an understanding of the Olefin Unit flow sheets
- Gain an understanding of chemistry and catalyst
- Gain an understating of process unit margins
- Troubleshooting Techniques
- Gain an insight to optimization strategies

# Advances in Ethylene Unit Pyrolysis Furnace Design and Optimization

Session Two

9 - 10 November 2017

#### **Course Overview**

This course will guide the participates to develop key concepts and techniques for the optimization of Ethylene Unit Pyrolysis Furnace Design and Optimization. These key concepts can be utilized to make operating decisions that can improve your unit's performance.

#### **Course Outline**

- Introduction
- Review of Process Incidents
- Fundamentals of Petroleum Chemistry
- Introduction to Process Equipment
- Introduction to Fired Heater
- Fired Heater Engineering
- Improve the Efficiency of Fired Heaters
- Introduction to Fired Heater Control
- Introduction to Fired Heater Boilers
- Fired Heater Safety
- Revamping Fired Heaters
- Reducing NOx Emissions
- Ethylene Furnace Technology
- Conclusions

#### Who Should Attend

- People who are making day to day decisions regarding operation, design, and economics of processing plants
- Ideal for veterans and those with only a few years of experience who want to review or broaden their understanding in Processing Plant Operations.
- Other professionals who desire a better understanding of subject matter

# What you can expect to gain

- An detailed overview of furnace operations, processes and economics
- Gain an understanding of the equipment of a process furnace
- Gain an understanding of the Olefin furnaces



Yes ! I would like to register the following participants				
Name 1				
Job Title				
Session Title				
Name 2				
Job Title				
Session Title				
Company Information				
	(*This registration is invalid without signature from an authorized officer)			
Address				
Town State		lame ob Title		Signature
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Method Of Payment				
Please kindly complete and return the reply form together with:				
Local Participants •By Bank draft which are made payable to <u>Summit Technology Management</u>				
International Participants				
•By Direct Transfer/Bank Draft:				
Public Bank Details: Public Bank Berhad Level 1, Public Bank Tower,				
No 19, Jalan Wong Ah Fook,				
80000 Johor Bahru, Johor				
•Account No : <u>3153933702</u> •Please instruct your bank to remit us the full amount, net of bank charges.				
Cancellation & Substitutions				
A full refund will be promptly made for all written cancellations 2 weeks before the meeting. 50% refund will be made for written cancellations				
received 7 days before the meeting. A substitute may be made at any time.				
Note				
A) The organizer 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.				
b) CERTIFICATE OF ATTENDANCE will be a		of the course.		
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Course	Course Fee	es		
Session One (Three Days)	USD	900		
Session Two (Two Days)	USD	600		
* The course fees are as follows which includes refreshments and lunch, but does not include transportation or accommodation.				

\* Course participates will receive a complementary copy of our Engineering Design Guidelines - Part 1 - Piping Fluid Flow and Line Sizing - Worth USD \$395.00



# **Mailing Address:**

#### Summit Technology Management

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