



PE160: The Olefins and Polyolefins Business, Markets & Technologies: *The Petrochemical Value Chains Leading to Olefins and Polyolefins*

Training Description:

This intensive training course focuses on the technology, value chains and industrial production of Olefins and Polyolefins. The training course will navigate through feedstocks, such as crude oil, through olefinic feedstock processing and polymer manufacturing all the way to the finished products as they are used in the end markets.

The costs and economics of producing the basic olefins and polymers are covered with consideration of the implications on marketing and economics. Historical and future industry direction and developments will be explored to provide real-life context. Fundamental process chemistry integral to the industry will be discussed as well.

The course will highlight:

- Commercial production of olefins and polyolefins
- Economic aspects of the feedstocks and polymers
- Technical aspects of the entire olefin and polyolefin value chain
- Associated petrochemicals markets
- Polymer manufacturing

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Apply acquired knowledge of the feedstocks for this industry
- ✓ Understand the wide-ranging use and versatility of Olefins
- ✓ Be familiar with the three major polyethylene types
- ✓ Have a full understanding of the rapid growth and importance of polypropylene
- ✓ Explain the benefits to customers and colleagues of polyolefins
- ✓ Added confidence and understanding of a complex global market
- ✓ Ability to share latest market knowledge
- ✓ State of the art information related to this business
- ✓ Potential to pass on this information to co-workers
- ✓ Networking with participants from similar background

Training Designed for:

This course is intended for Market Analysts interested in the olefins and polyolefins sector. Engineers and Industrial Chemists working in polymer and petrochemical companies, located in company headquarters, chemical plants or integrated petrochemicals/polymer complexes will find the information covered extremely beneficial. This course is suitable to a wide range of professionals but will greatly benefit Professionals in polymer and petrochemical companies, Sales Personnel with a petrochemical portfolio, Market Analysts, Business Development, Process Engineers, Industrial Chemists, and Researchers needing more commercial background.

Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- ❖ PRE-TEST
- ❖ Introduction
 - Petrochemicals gas and petroleum
 - The natural gas/shale gas revolution
 - Where does coal fit in the strategy?
 - Olefin derivatives and uses
 - Crude oil, refining, integration with petrochemical plants
 - Market growth and industry costs
 - The petrochemicals business
 - The origins and history of the industry
 - What makes the industry unique?
 - Costs, margins and prices
 - Evaluation of the major players
 - Strategies employed by the major players
 - Industry profitability
 - Ethylene and propylene markets

DAY TWO:

- ❖ The Petrochemical Value Chains
 - Aromatics sources, business and technologies
 - Sources of aromatics
 - Supply and demand
 - Costs and pricing
 - Styrene – routes to manufacture
 - Olefin Economics
 - Steam cracker margins
 - Feedstock costs and their impact on ethylene cost
 - Differences in costs and margins between producing regions
 - The dynamics of petrochemical feedstocks
 - Refining and gas separation
 - Olefins – Costs, margins, consumption and investment
 - An introduction to polyolefins

DAY THREE:

- ❖ Polymer Fundamentals
 - Plastics: What they are and how they are made
 - Methods of manufacture
 - Polymer types
 - Key properties

- Polymer markets and applications
- Polyethylene Fundamentals
 - LDPE, HDPE and LLDPE – What they are
 - How they are made
 - What they are used for
 - Margins and consumption
 - Business structure
 - What the future holds

DAY FOUR:

❖ Polypropylene Fundamentals

- What is polypropylene
- How is it made
- What it is used for
- Margins and consumption
- Business Structure
- What the future holds
- Polymers to products
 - The properties of finished products
 - The role of the processor
 - Markets and applications

DAY FIVE:

❖ The Polyolefins Business

- The major players and their profiles
- 2008 and the slump
- Consumption trends
- Market growth
- New capacity investment
- Trade between regions
- Green polyolefins, towards a sustainable future with polymers

❖ Course Conclusion

❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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