

Program topics, speakers and schedules listed herein are confirmed as at printing time.
Please refer to the event's **Latest Schedule** at www.cmtevents.com for most up-to-date details.



Centre for
Management
Technology®
Into our 24th year

A 2-day intensive course on

STORAGE TANKS

13 - 14 AUGUST 2007 ■ NIKKO HOTEL, KUALA LUMPUR

- **Design Considerations**
- **Construction, Erection and Commissioning**
- **Inspection & Maintenance**
- **Testing and Repairs**

Who Should Attend

- *Consulting Engineers*
- *Maintenance Engineers*
- *Project Engineers*
- *Maintenance Superintendents*
- *Maintenance Personnel*
- *Service Engineers*
- *Operations, Maintenance and Instrumentation Leadmen*
- *Plant Operators*
- *Chargemen*
- *Technical Assistants*
- *Technical Co-ordinators*
- *Operation & Maintenance Personnel*
- *Technicians*
- *New/Trainee Engineers*
- *Contractors*

COURSE HIGHLIGHTS:

- Basic Design Concepts
- Types Of Storage Tanks
- Construction And Erection Of Typical Aboveground Storage Tank
- Operations
 - Operating Principles
 - Operating Problems
 - Foaming
 - Leaks And Repairs
 - Corrosion
 - Vent Associated Problems
 - Spillage Control And Environment Protection
- Maintenance, Repair And Troubleshooting
 - Bottom Plate Thickness Inspection And Analysis
 - Tank Verticality
 - Leak Test
 - Sludge Removal And Tank Cleaning
 - Sludge Treatment And Disposal

10:30 Tea Break

10:45 **BASIC DESIGN CONCEPTS** (CONT)

1:00 Lunch

2:00 **CONSTRUCTION AND ERECTION**

- Floating Roof Tank
- Fixed Roof Tank
- Bullet Type Gas Tanks
- Spherical Gas Tanks
- Bolted Tanks
- Welding Procedures
- Plate Pre-Forming
- Bund Provision

3:30 Tea Break

3:45 **CONSTRUCTION AND ERECTION** (CONT)

4:30 Review and Q&A

5:00 End of Day 1

Day 1

Monday, 13th August 2007

8:30 Welcome Address and Course Introduction

9:00 **BASIC DESIGN CONCEPTS**

- Types Of Storage Tanks
 - Floating Roof
 - Fixed Roof
 - Bullet Tanks
 - Spherical Gas Tanks
 - Bolted Tanks
 - Plate Thickness, Bottom And Side Plates
 - Roof Frame Design

Day 2

Tuesday, 14th August 2007

8:30 **TANK OPERATIONS**

- Operating Pressures
- Vaporization And Its Effect On Operating Pressures
- Operating Tanks With Higher Fluid Density
- Wind Load Effects On Verticality
- Inspection Of Vents And Other Safety Features
- Leak Test

9:30 **OPERATING PROBLEMS**

- Water Formation Due To Vaporization
- Product Contamination
- Sludge Deposits At Tank Bottom

10:30 Tea Break

10:45 **MAINTENANCE AND REPAIR PART 1**

- Corrosion Inhibition
- Tank Painting And Coating

1:00 Lunch

2:00 **MAINTENANCE AND REPAIR PART 2**

- Painting Inspection And Repair
- Sludge Removal And Tank Cleaning
- Sludge Treatment Disposal
- Tank Leak Repair
- Hot Tapping
- Leak Plugs
- Valve Replacements And Repair

3:30 Tea Break

3:45 **MAINTENANCE AND REPAIR PART 2 (CONT)**

4:30 **Review with Q&A**

5:00 End Of Course

LEARN FROM THE BEST

ROBERTO BENEDICTO MARAVILLA, BS in Mech Eng., was acting Consultant to Petronas Plants & Qatar Petroleum on the following subjects; Pipelines & Piping System and Mechanical Equipment Management.

Prior to that, Roberto was a Corporate Assessor attached to a Multinational Oil and Gas company, where he evaluated the competency of engineers, operators and technicians. He was also responsible for identifying, analysing, developing and delivering of courses/training programmes for the staff. Roberto has also customised courses for other clients, notably ESSO Production Malaysia, SUDAN Petroleum and PETRO-VIETNAM oil refinery.

He has taken the lead in the development and delivery of the multinational company initiative on "World Class Plants" with subjects like Reliability Centered Maintenance – A New Approach, Pipelines and Piping Systems, Distillation Columns, Storage Tanks, Mechanical Equipment Management, Operations and Maintenance of Boilers, he has also developed and delivered a host of other generic courses like Pumps, Compressors, Furnace, Separators, Heat Exchangers, Internal Combustion Engines, Gas Turbines.

Roberto also was a Deputy Project Manager responsible for a project implementation, which totalled a contract value of USD 40 million and has also served as a Project Manager in a Nuclear Power Plant overseas.

Roberto has served as a Lecturer at a University in the Philippines lecturing senior students on major subjects such as Power Plant Engineering, Engineering Management, Process Plant Equipment, Project Management and Maintenance Optimisation.

With his vast experience, he is able to provide hands-on and practical training sessions, which have received excellent feedback from past clients from both the local and international markets.

Program topics, speakers and schedules published herein are confirmed as at printing time. Please refer to the event's timetable page at www.cmtevents.com for the most up-to-date information.

Program topics, speakers and schedules listed herein are confirmed as at printing time.
Please refer to the event's **Latest Schedule** at www.cmtevents.com for most up-to-date details.

REGISTRATION

Name _____
 Position _____
 Email _____
 Name _____
 Position _____
 Email _____
 Tel _____ Fax _____

Company _____
 Address _____
 City/Postcode _____ Country _____
 Approving Manager's Name _____
 Position _____
 E-mail _____

STORAGE TANKS

Update your details at
www.cmtevents.com

070851 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

COURSE TIMING

Registration: 8.00 am,
 Course Begins: 8.30 am,
 Morning Coffee: 10.30 am,
 Lunch & Zohor: 1.00 pm to 2.00 pm,
 Break: 3:30 pm,
 Course Ends: 5.00 pm

CERTIFICATE OF COMPLETION

A Certificate of Completion will be awarded upon successful completion of each course. This serves as evidence of your personal and professional commitment to your career.

Fees: The full Registration Fee includes cost of all sessions, luncheon, coffee/tea & documentation.

	1 Person	Group fee for 3 or more* (from the same company)
Regular Fee	RM2,695	RM2,395 (MIN SAVINGS OF RM900)

* Terms and conditions apply.

Cancellations, Refunds & Transfers: A full refund will be promptly made for all written cancellations 3 weeks before the meeting. Thereafter, cancellations are not refundable. A substitute may be made at any time.

Cheques : Crossed & payable to
"Centre for Management Technology Sdn Bhd"

Photocopy Registration Form to Preserve Brochure Copy. Aug 2007

TO REGISTER

Online: www.cmtevents.com
 Email: adminkl@cmtsp.com.sg
 Fax: (603) 2162 6393
 Tel: (603) 2162 7322
 Post to: Lot 7.03, 7th Floor, North Block,
 The Ampwalk, 218 Jalan Ampang
 50450 Kuala Lumpur

Register online ~ www.cmtevents.com

~ CMT'S UPCOMING 2007 EVENTS ~

A 2-day intensive course on

DISTILLATION

- Principles, Operation and Maintenance
- Distillation Simulation
- Basic Computation for Heat and Material Balance

15 - 16 AUGUST 2007 • KUALA LUMPUR

Course Highlights:

DESIGN CONCEPTS AND DISTILLATION PRINCIPLES

- Basic Design Concepts
- Fractional Distillation
- Column Installation
- Simple Distillation
- Distilling Tower Design And Construction

OPERATIONS

- Operating Parameters
- Operational Problems
- Hydrotesting
- Normal Operations
- Maintenance, Inspection And Repair
- Introduction To Plant Distillation Simulation

A PRACTICAL COURSE ON OPERATION,
 MAINTENANCE & TROUBLE SHOOTING OF

Air Conditioning System

28 - 29 AUGUST 2007 • KUALA LUMPUR

Course Highlights:

- Introduction
- Theory And Practice Of Air Conditioning System
- The Constructions Of Air Conditioning Equipment
- Different Types Of Air Conditioning Systems
- Operating Parameters That Affect Performance
- Water Cooled System: Cooling Towers & Water Pumps
- Air Conditioning Control System
- Maintenance Of Air Conditioning Systems

Plus:

CASE STUDY (1): Trouble Shooting Air Cooled Systems
 CASE STUDY (2): Trouble Shooting Water Cooled Systems
 CASE STUDY (3): Trouble Shooting Ahu Performance

