course introduction ||

Wastewater treatment facilities operation and maintenance workforce is essential to assure effective operation, maintenance and management of these facilities. Some of these plants are complex facilities with advanced levels of treatment which requires the plant operation team to be competent to handle not only its operation but also be able to identify and troubleshoot problems.

course objectives ||

At the end of the course, the participants will be able to understand:

i) Various wastewater treatment operating and design systems

ii) Applications and formulations of wastewater treatment chemicals

iii) How to troubleshoot typical problems face during operation of wastewater treatment plants

iv) How to use Superpro Designer software to design the wastewater treatment plant

who should attend ||

- Plant Engineers, Scientists and Supervisors working at the wastewater treatment plant
- Graduate Engineers and Scientists entering the industry
- Professionals involve in the design of wastewater treatment plants
- Researchers working in the areas of pollution control, wastewater and water treatment.

course content ||

A. Overview of wastewater Treatment Systems

i. Characteristics of Wastewater
ii. Municipal Wastewater Treatment System
iii. Unit Operations of Physical Treatment System
iv. Unit Operations of Chemical Treatment System
v. Unit Operations of Biological Treatment System
vi. Advanced Wastewater Treatment System
vii. Sludge Treatment and Disposal

B. Wastewater Treatment Chemical Formulation and Application

- Flocculants, Coagulants, Nutrients, Enzymes

C. Wastewater Treatment Process Troubleshooting and Problem Solving –Tips or case studies involving various Troubleshooting Issues and Plant Problems.

D. Wastewater Treatment Plant Design using Superpro Designer software a leading software on wastewater treatment modeling initiated at Massachusetts Institute of Technology (MIT) and further developed by Intelligen Inc. Participants will be guided on how to use this software to design a typical wastewater treatment plant and its economics analysis. Evaluation copy of Superpro Designer will be given free of charge.
B. Y. Yoeng, graduated with Bachelor of Science (Hons.) Degree in Chemistry (1984), and Master of Science (1989), both from Mann in Dublin University. In 1994, his compact System Wastewater Treatment invention was awarded First Prize at Malaysian Invention and Design Competition, MINDEX. In 1995, his ‘Upgraded Sequence Batch Reactor’ design won an award at the 15th International Award for the Technology and Quality in Paris, France. He had used his innovative talent to troubleshoot wastewater treatment plants in food, electro plating, textile and paper industries.

Mohd Ariffin obtained his Beng. (Chem.Eng.) from Universiti Teknologi Malaysia (UTM) and was awarded the ESSO medal. He graduated with Meng.(Eng.Mgmt.) from UTM in 1998 and obtained his PhD in Environmental Engineering from UMIST in 2004. His research interests are in the areas of oxidation catalysis and ultrasonic sonochemistry applications in wastewater treatment especially for the removal of organic pollutants. He is a part of a team in UTM that promotes the use of appropriate technology in pollution control. He has lectured to professionals from local and overseas companies through CEPP’s lifelong training programme.

Dominic Foo is currently a Research Associate at the Chemical Engineering Pilot Plant, Universiti Teknologi Malaysia (CEPP, UTM). He obtained his BEng degree in 2000 and his MEng degree in 2002, both in Chemical Engineering. His main research areas are in Process Synthesis and Design. In Process Synthesis, he makes use of Pinch Technology in synthesising cost effective mass exchange network, with emphasis on efficient use of utility (process water) and pollution prevention. He has involved in extensive training by using various process simulators for process modeling and debottlenecking. He has also jointly developed various training modules for plant operators, supervisors and management staff in CEPP, UTM.

Venue

UTM City Campus is situated about 10 minutes drive from the famous Kuala Lumpur landmark, the PETRONAS TWIN TOWER and KLCC, the primer shopping centre. It is easily accessible by road and major hotels are located nearby.

Method of Payments

Please kindly complete and return the reply form together with :

Local Participants

- By cheque / Bank draft which are made payable to

  PHYTO BIZNET SDN BHD

International Participants

- By Direct Transfer/Bank Draft:

  CEPP Bank details: Bumiputra Commerce Bank Berhad
  Universiti Teknologi Malaysia
  81310 UTM Skudai, Johor, Malaysia
  Account No : 0118-0004178-05-7
  Please instruct your bank to remit us the full amount, net of bank charges

Cancelation & Substitutions

A full refund will be promptly made for all written cancellations 3 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 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.

Credit Transfer

This module carries equivalent credit for qualified engineers or scientists who wish to register under MSc. In Process Plant Management Programme. Terms and conditions apply. Contact Rohaizan at 07-5531559 or rohaizan@cepp.utm.my for further details.

**REPLY FORM**

WASTEWATER TREATMENT PLANT DESIGN, OPERATION & TROUBLESHOOTING

29-31 March & 1 June 2006 : UTM City Campus, Kuala Lumpur

**YES ! I would like to register the following participants**

Name 1
Job Title
Name 2
Job Title

**COMPANY INFORMATION**

Company
Address
Town
State
Tel
Fax

**AUTHORISED Signatory** (*This registration is invalid without signature form an authorised officer*)

Name
Job Title
Tel
Fax

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**Course Fee**

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<tr>
<td>Local Participant (RM)</td>
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<tr>
<td>International Participants (USD)</td>
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(Fee is inclusive of lunch, refreshments and course materials)