

## **WEBINAR TALK ON**

## "ENGINEERING PROCESS TO TREAT AGRICULTURE WASTE WATER"

Organised by:
Agricultural and Food Engineering Technical Division

BEM APPROVED CPD: 2 REF NO: IEM21/HQ/175/T(w)

SPEAKERS :
MR. YAN LONG YEOW & Ir. HOR KOK LUEN

29 MAY 2021 (SATURDAY) 9.00AM - 11.00AM

REGISTRATION FEE (EFFECTIVE FROM 1ST AUGUST 2020)

IEM Students : FOC IEM Members : RM15 Non IEM Members : RM70





## **SYNOPSIS**

Waste water treatment is an engineering process which combines varies defined functional equipment to form a particular treatment system to bring about the desire outcome of a waste stream. However, a well functional equipment apart from the biological process, especially getting to the end of the waste water treatment system, requires evaluation of the proper chemical aid to achieve the design purpose. This course is looking at the cases study of engineering process together with the chemical treatment for achieving desire outcome. In this study, the engineering process involves chemical application are typically clarifier, aeration system and dewatering. This is an art where the application of the right chemical for a particularly operation process to maximize its performance. It involve the following three aspects:

- Full understanding of the engineering process-the source and quality of waste stream and how it being treated by step to achieve the overall performance.
- Equipment-How the hardware in making the engineering process work.
- Chemical application-In what way the chemical and the way it being applied to enhance the performance of the equipment.

In addition, the actual performance evaluation requires onsite quick evaluation of control parameters of turbidity, suspended solids, COD reduction and other of specific consideration by the end user.

## SPEAKERS'S PROFILE

**Mr. Yan Long Yeow** work as a Senior Technical Service Manager for Drew Ameroid which mainly provides chemical treatment services for boiler, cooling, raw water, waste water, polymers and processing aids. He graduated from University of Wisconsin (USA) in engineering with a B.SC and M. SC in 1990 and 1991 respectively.

He worked as project engineer for a sewage treatment company from 1992-1994 which mainly dealing with design, built, construct and install sewage treatment plant. He then join Drew Ameroid as a water treatment engineer and since then with the company. He had completed his advanced technical training in head quarter in New Jersey, USA in 1998. He has more than 26 years of field working experience for chemical treatment application in varies industries such as palm oil industry, biomass boiler, oil and gas industry, oleo chemicals plant, palm oil refinery, power plant, paper industry, food and beverage industry and other related industries. His scope of responsibility is to provide technical support and to assist in trouble shooting and optimization of chemical treatment application. He also represents Drew Ameroid to conduct boiler water treatment for MPOB, and regularly conducts refresh training for palm oil mills/refinery in the boiler, cooling and raw water and waste treatment aspect.

**Ir. Hor Kok Luen** (P.Eng, PEPC, MIEM, First Grade Competent Steam Engineer, ASEAN Engineer, APEC Engineer, International Professional Engineer) graduated from University of Science Malaysia (USM) in 2001. He is holding the Bachelor of Degree (Hons.) in Mechanical Engineering.

He has more than 20 years of working experience in the palm oil mill & related downstream industries, inclusive of biogas power plant and biomass plant. He has vast experience in palm oil mill design, mill upgrading and mill troubleshooting as well as palm oil waste handling & management.

As holding the qualification as Competent First Grade Steam Engineer (JKKP, Malaysia), currently he is performing his professional service by taking the responsibility and challenges (overall mill operation) for a well-established palm oil group of company which owns 100 tons per hour capacity palm oil mills, plantations and subsidiary plants, which aggressively embark involving in palm oil mill processing, long fiber plant, short fiber plant, organic waste water treatment plant design & management ,biomass power plant, biogas capturing plant, CHP plant and of course green energy generation for grid connection (Feed in tariff) besides islanded unit for in-house consumption. The speaker is a corporate member of The Institutions of Engineers Malaysia (IEM) in Mechanical Discipline. He is also a Registered Professional Engineer with Practicing Certificate (PEPC) with the Board of Engineers Malaysia (BEM). He is a qualifiedASEAN Engineer (AE), APEC Engineer and International Professional Engineer MY E 00573. Currently he is the Deputy Chairman of Agricultural & Food Engineering Technical Division (AFETD), The Institutions of Engineers Malaysia, IEM.