

**TALK ON “APPROACH TO WHOLE – FACILITY DESIGN;
Desalination & System Hydraulics for BETTER ENVIRONMENT”**

Jointly Organise by the Civil and Structural Education Technical Division (CSETD) &
Environmental Engineering Technical Division (ENETD)

BEM Approved CPD/PDP: 2 hours

Ref: IEM17/HQ/196/T

Date : **23 MAY 2017 (Tuesday)**
Time : **5.30 p.m. – 7.30 p.m.**
Venue : **Auditorium Tan Sri Prof. Chin Fung Kee,
3rd Floor, Wisma IEM, Petaling Jaya, Selangor**
Speaker : **Mr Peter Chan (MS, PE)**

SYNOPSIS

This presentation will focus on the use of membrane desalination in an off-shore application. Membrane desalination technology was developed in the late 1940s at UCLA and since then, membrane desalination systems have been implemented successfully all over the world. Seawater desalination has been widely used in maritime and municipal applications. In many cases, seawater desalination has been found to be a financially viable technology for use in a municipal-wide drinking water system. As a result, coastal desalination plants have been successfully implemented by municipalities all over the world. Off-shore desalination is now considered a technology that can be used to enhance oil production. The design of these large scale facilities has real challenges that must be attended to prior to the start of design and equipment procurement. Challenges of a “closed-circuit”, high pressure system can create high surge (transient) pressures that can create cyclic stresses on equipment, resulting in disruptive downtimes. The presentation focuses on a “whole-facility” design approach, intellectual property rights, pump optimization and demonstrates how hydraulic surges can be mitigated, and outlines strategies that can be used to develop a complete process control logic. The development of next generation engineering tools will also be presented.

ATTENDEES with knowledge of process design in water systems, water chemistry, desalination and pump design will greatly benefit from the presentation. Senior engineers with project management and business development responsibilities may also find this presentation useful, especially in developing new business opportunities and expanding their technology base.

About the Speaker

Peter Chan has over 25 years of engineering, business consulting and management experience. He started his engineering career in Texas. In 1995, he established his engineering practice in Phoenix, Arizona when he joined the international infrastructure consulting firm. He went on to form a startup engineering consulting corporation in Phoenix in 1999. CSA Engineering specialized in water and wastewater projects and was subsequently acquired and merged into a global engineering consulting firm in 2009. He has extensive experience in human resources functions, mentoring, business development and leading highly specialized project teams globally. He served as a Business Group Manager for Western United States until his retirement.



While directing his corporate interests, he streamlined management, administration and engineering design/production procedures. He was in charge of all aspects of operating a business enterprise, including financial management, business development, and led specialized engineering design teams in water, wastewater, membrane desalination and hydraulic modeling projects. He served as a consultant for a large off-shore seawater desalination project in the Gulf of Mexico for an enhanced oil recovery project for a multi-national Oil & Gas (O&G) conglomerate. His experience also include managing large projects and starting up new business lines in water, wastewater and membrane projects for municipal, industrial and O&G clients.

He currently serves as the President of a real estate investment corporation in Arizona. He manages real estate investment properties, property development and investment funding. He also provides water and wastewater consulting services to several international firms. Peter stays active in the community by establishing scholarship endowments at a university in Texas and perform guest speaking assignments globally to engineering, business corporations, and student groups.

ANNOUNCEMENT TO NOTE

- **Non members may also attend the talk but will need to pay a registration fee of RM50 and an administrative fee of RM15. GST is inclusive.**
- **Limited seats are available on a "first come first served" basis (maximum 100 participants). To secure your seat, kindly register online at www.myiem.org.my**

PERSONAL DATA PROTECTION ACT

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal

CPD HOURS CONFIRMATION

Name:

Membership No: