



*PHYSICAL EVENT*

# Technical Talk on “Distributed Pumping System – Smarter Way to Chilled Water Distribution”

📅 11 JANUARY 2023, WEDNESDAY

🕒 05.30 PM – 07.30 PM

📍 MALAKOFF AUDITORIUM, GROUND FLOOR, WISMA IEM,  
PETALING JAYA

CPD: 2.0

REF. NO.: IEM22/HQ/490/T



*Presented by:*

**Ms. Lee Siew Wee**

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

ORGANISED BY:  
CHEMICAL ENGINEERING TECHNICAL DIVISION (CETD)

# SYNOPSIS

Air-conditioning consumes a large portion of energy in a building. Inefficient in chilled water distribution not only cost more in energy bill, it also compromising the human comfort. Buildings with inefficient chilled water distribution are experiencing balancing issue and uneven cooling which lead to unsatisfied customers and tenants. Excessive pumping from huge centralised pump does not resolve uneven cooling and costing more energy and may also lead to low delta T syndrome.

Accurately controlled cooling systems are crucial to maintain an efficient, comfortable building. Distributed Pumping System, a radically new control strategy for pumping water in a closed loop chilled water circuit of centralised air-conditioning system is proven an intelligent way to a balanced chilled water system. Distributed Pumping Systems replace larger centralised pumps and energy-consuming balancing and control valves with smaller intelligent pumps placed on each floor of the building. This means the system is equipped only with components that generate pressure only when and where needed, automatically balancing the system. The result is substantial energy savings and a more comfortable indoor climate.

## ABOUT SPEAKER

**Ms. Lee Siew Wee** is a Registered Electrical Energy Manager (REEM with Suruhanjaya Tenaga). She is the Sales Development Specialist at Grundfos Pumps Sdn Bhd, a position she has held for more than 8 years since joining the Company. Among her job responsibilities, she has spearheaded the Grundfos Energy Optimisation activities in Malaysia, which is a Grundfos Global initiative. Through this programme, she has handled many big MNC setups and managed to bring savings of 13million kWh of energy and 9000 ton of CO2 emissions reduction to these customers. This in turn, translates into big monetary savings to the customers as well. Prior to Grundfos, Siew Wee has more than 9 years' experience in water treatment process optimisation. In total, Siew Wee has 17 years' experience in optimisation. Siew Wee holds a bachelor degree in Mineral Resources Engineering from Universiti Sains Malaysia and a Master's degree in Business Administration (International Business) from University of East London.