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The Institution of Engineers, Malaysia

Webinar Talk on Latest Trends in Facility Monitoring Control System (FMCS)

Organised by:
Engineering Education Technical Division, IEM

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9 MAY 2024, THURSDAY



3.00PM - 5.00PM

SPEAKER:

Ir. JOHNSON TAN



Registration Fee

IEM STUDENT : FOC

IEM MEMBERS: RM15

NON IEM MEMBERS: RM70



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SYNOPSIS

The Facility Management Control System (FMCS) supports the plant infrastructure and utilities:

- HVAC Heating, Ventilation and Air Conditioning
- Ultra Pure Water (UPW)
- Waste Water Treatment (WWT)
- Gases and Chemicals
- Low Voltage & Medium Voltage distribution
- Fire safety
- Security

One key to making this happen is our concept for plant-wide automation, which significantly contributes to sustained competitiveness; especially where changes in design philosophy, equipment are to be catered for plant extension / expansion with minimal disruption to the running production.

Modern plants / factories in the manufacturing industry must operate at an extremely high level of efficiency to remain economically viable throughout their entire life cycle.

Utilizing the full potential of every part of the plant at maximum efficiency is critical. Plantwide automation offers operators abundance of benefits: Thus, system-wide automation from the sensor, communication, and controller levels all the way to the process control system ensures maximum efficiency for process control in production lines and auxiliary systems. In addition, standardized additional functions for integrated safety, power control of switchboards, and energy management create unique cost benefits.

With current demand for faster time to market; production facilities are expected to be in production faster and earlier; along with the training of its respective personnel, therefore digital twin of the plant, integrated utilities and production skid is empirical for running integrated testing and as well as operator training simulators. Also, with the many inter-related design, process, software and hardware documentation, a good control of data and documents control mechanism is required to ensure, any changes are updated accordingly the related data and documents.

Above all, however, our holistic approach guarantees system-wide and consistent interaction of hardware and software as well as safeguarding the process plant from unauthorized access into system with the implementation of CyberSecurity measures – for more efficiency and transparency in the overall plant throughout its entire life cycle.

SPEAKER'S PROFILE

Ir. Johnson Tan, aged 50, a Malaysian, is currently the Head of Sales for the division Digital Industries; Siemens Malaysia Sdn Bhd. He graduated with multi discipline in engineering; from Electronics & Electrical Engineering, Electronics Engineering, as well as Electronics & Control Engineering. Upon graduation in 1997, he joined a local system integration company; Energy & Process Control Sdn. Bhd., a control and instrumentation company as a Project Engineer responsible for DCS / SCADA programming as well as project engineering typically in Water Treatment plant for a period of 6 years, till finally departing as System Sales Manager.

Following suit, Ir. Johnson Tan has joined Siemens Malaysia Sdn Bhd as Assistant Sales Manager to take up new responsibilities in Sales and Business Development, where over time, promoted to Vice President for Process Automation Business Unit, as well as Head of Application of Technology for the division Digital Industries in Siemens Malaysia Sdn Bhd; and now as the Head of Sales for the division Digital Industries.

Ir. Johnson Tan draws most of his key experiences in the industries of Water and Waste-Water, Semiconductor, Rail, OleoChemicals, Food & Beverages, Pharmaceutical, PetroChemicals as well as Oil & Gas.

Ir. Johnson Tan is a Professional Engineer with Practising Certificate registered with the Board of Engineers Malaysia, Institute Engineers of Malaysia under the discipline of Instrumentation & Controls, as well as ASEAN Certified Professional Engineer, and also certified Chartered Engineer conferred from the Engineering Council, U.K in the discipline of Measurement & Control; as well as a technical assessor to aspiring Chartered Engineers.

Also, Ir. Johnson Tan also the President of Malaysia Automation Technology Association (MATA, formerly known as the FMM-Automation Technology Industry Group (FMMATIG) and operated under the aegis of the Federation of Malaysian Manufacturers), with the primary objective to be the voice of the Automation Technology Industry.

He has more than 25 years of working experience in the field of automation systems; involving Distributed Control Systems (DCS) programming, Supervisory Control and Data Acquisition (SCADA) system programming, Programmable Logic Controllers (PLC) programming, system training, project engineering, project management, site commission works.

Other roles and responsibilities include technical marketing, design and system consultancy, project management, business development including profit and loss management; team management and personnel development.