

# HKFEMC Joint Professional BS Training Courses 2020

## Lectures Details

Date	Lecture	Speaker
1 Sept (Tue)	<p><b><u>Topic</u></b>  <b>IoT Application on Building Life Cycle and Retro-Commissioning</b></p> <p><b><u>Contents</u></b>  IoT application in Building Life Cycle:</p> <ul style="list-style-type: none"> <li>• Design Stage</li> <li>• Construction Stage</li> <li>• Testing and Commissioning Stage</li> <li>• Post Move-in Stage</li> </ul> <p>Retro-commissioning:</p> <ul style="list-style-type: none"> <li>• Advantages</li> <li>• How to further improve and by what</li> </ul> <p>Case Studies:</p> <ul style="list-style-type: none"> <li>• How monitoring could help on energy saving in an international group</li> <li>• How a building block save energy by checking the equipment performance</li> </ul>	<p><b>Mr Ian LEE</b>  Solution Director,  Schneider Electric</p>
3 Sept (Thur)	<p><b><u>Topic</u></b>  <b>Latest Technology and Standard on Sprinkler Systems</b></p> <p>This technical talk provides an introduction to sprinkler systems, major contents in design principles, the latest technology and the operational aspects with other fire protection systems.</p> <ul style="list-style-type: none"> <li>• Understanding of the principles of system design, major components and the operation of sprinkler systems;</li> <li>• Knowledge of the local code / LPC rules and BS EN 12845 of sprinkler rules;</li> <li>• Understanding the operating linking to other active fire protection systems.</li> <li>• Latest development of sprinkler systems technology, environmental and safety issues with experiences sharing.</li> </ul>	<p><b>Mr Simon YAN</b>  Engineering  Manager,  InnoTec  Engineering Ltd</p>
15 Sept (Tue)	<p><b><u>Topic</u></b>  <b>Digitalization for Building Operations</b></p> <p><b><u>Contents</u></b>  How IoT and Digitalization helps on Building Operations including:</p> <ul style="list-style-type: none"> <li>• Energy saving</li> <li>• Labour saving</li> <li>• Critical equipment monitoring</li> <li>• Critical assets monitoring</li> <li>• Critical condition monitoring</li> </ul> <p>Sharing on possible cases like:</p> <ul style="list-style-type: none"> <li>• Critical room monitoring inside a hospital e.g. negative pressure room</li> <li>• Workplace efficiency improvement</li> </ul>	<p><b>Mr Ian LEE</b>  Solution Director,  Schneider Electric</p>

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Date	Lecture	Speaker
17 Sept (Fri)	<p><b>Topic</b>  <b>Fire Science and Hot Smoke Test in Hong Kong</b></p> <p>Fire dynamics play a vital role in smoke control system and it is a key component for the fire safety of a building. This seminar introduces the fire science and the key elements to the success of hot smoke test in Hong Kong. Through the discussion of the current statutory requirements and the major procedures of the hot smoke test, the participants will be able to get a full picture of the hot smoke test. The salient points of the hot smoke test (i.e. applicable to both static and dynamic system) will also be discussed one by one with case studies.</p> <p>Key elements to the success of Hot Smoke Test</p> <ul style="list-style-type: none"> <li>• Early appointment of field test expert</li> <li>• Allow sufficient time for method statement's submission</li> <li>• Consider a reasonable time for FSD engagement</li> <li>• Demonstrate the situation with CFD study</li> <li>• Carry out mock-up test prior to the formal test</li> </ul>	<p><b>Dr Jason YUEN</b>  Associate,  Arch &amp; Fire  Professional (Int'l)  Ltd</p>
22 Sept (Tue)	<p><b>Topic</b>  <b>H.V. Generator System with Synchronisation from Planning, FAT, Installation, SAT, FSI to Final Commissioning</b></p> <p>Sharing of real and practical experience in managing the most complex emergency power system of Macau Studio City back up by numerous high voltage generating sets with synchronisation from initial planning stage to final completion and handover stage.</p> <ul style="list-style-type: none"> <li>• Considerations of technical submission and project execution plan including logistic and delivery of generator sets</li> <li>• Organisation of FAT and technical back up for preparing high voltage generator sets synchronisation test</li> <li>• Measures taken when FAT testing encountered failure and deficiency</li> <li>• Application of BIM in generator plant room and monitoring the compliance of installation on site including underground fuel tanks.</li> <li>• Preparation and implementation of SAT and interfacing tests before formal FSI</li> <li>• Full commissioning of the generator system with synchronisation and its interfacing with other systems.</li> </ul>	<p><b>Mr Jonathan C K WONG</b>  Director &amp; General  Manager,  Paul Y. (E &amp; M)  Contractors  Limited</p>
24 Sept (Thur)	<p><b>Topic</b>  <b>Plumbing and Drainage Design – Learning from the Latest Developments to Embrace Future Challenges</b></p> <p>Over the past 15 years, Plumbing &amp; Drainage Engineers have been working closely with governmental departments and various stakeholders in the plumbing and drainage industry in response to public concerns on water safety, sanitary health, anti-flooding provision and sustainability. This seminar will revisit engineers' efforts on the latest developments in these areas, and suggest ways to maintain our momentous effort in order to tackle future challenges on climate change, public health issues and conservation of water resources.</p>	<p><b>Ir Tommy LEUNG</b>  Technical Director,  WSP</p>

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Date	Lecture	Speaker
6 Oct (Tue)	<p><b>Topics</b></p> <p><b>1) Introduction of Siphonic Rainwater Drainage System (Part 1)</b></p> <p><b>Content</b></p> <ul style="list-style-type: none"> <li>● Principles</li> <li>● Key benefits</li> <li>● Design considerations</li> <li>● Installation recommendations</li> </ul> <p><b>2) Introduction of Using Flush Valves for WC (Part 2)</b></p> <p><b>Content</b></p> <ul style="list-style-type: none"> <li>● Polymer materials for sea water application</li> <li>● Benefits of using flush valves for WC</li> <li>● Improved technologies for WC flushing</li> <li>● Concept of Internet of Toilet (IOT)</li> </ul>	<p><b>Mr Eddy YEUNG Wai Kit</b> Technical Sales Director, Gate Way Valve &amp; Fitting Ltd</p> <p><b>Mr Larry CHAN</b> Senior Sales Manage, Top Goal Group</p> <p>OR Representative from Rigel Singapore</p>
13 Oct (Tue)	<p><b>Topic</b></p> <p><b>1) Barrier Free Access (BFA) Lifts for Footbridge</b></p> <p><b>Speaker</b> Over 40 Years in lift industry. Specialized in design.</p> <p><b>Content</b> Special features &amp; requirement of BFA lifts</p> <ul style="list-style-type: none"> <li>● Machine room-less</li> <li>● Glazing lift car &amp; lift shaft</li> <li>● Automatic rescue device</li> <li>● Telemetry system for fault reporting</li> <li>● RMU for temperature sensing inside lift car &amp; lift shaft</li> </ul> <p><b>2) Implementation of New EMSD Design Code 2019 edition</b></p> <p><b>Speaker</b> Mr. Daniel Siu is a Registered Lift and Escalator Engineer and has over 20 years' experience in lift industry. He currently holds the position of Senior Engineer at Chevalier (HK) Ltd. Mr Siu is also a chartered engineer and possess a MSc degree. He has taken the post as Secretary for Technical Sub-committee of the Lift and Escalator Contractors Association for several years.</p> <p><b>Content</b> Brief review of New Design Code 2019</p> <ul style="list-style-type: none"> <li>● New requirements from EN81-20/50</li> <li>● Major changes</li> <li>● Local requirements</li> <li>● Implementation challenges</li> <li>● Common missing items</li> <li>● Future development</li> </ul>	<p><b>Mr Johnson LAI</b> Chief Engineer, Sigma (HK) Ltd</p> <p><b>Mr Daniel SIU</b> Senior Engineer, Chevalier (HK) Ltd</p>

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Date	Lecture	Speaker
20 Oct (Tue)	<p><b><u>Topic</u></b>  <b>Pump &amp; Valve Selection</b></p> <p><b><u>Speaker</u></b>            Mr. John MA has over twenty-five years in dealing with pump business and specialist in HVAC pump application and system. Academic qualification from HK Polytechnic before joining JEC.</p> <p>Mr. David Kwong has twelve years in dealing with valve business and ten years involved in water work facilities business in JEC. Academic qualification from UK university and HK Polytechnic.</p> <p><b><u>Content</u></b>            Fundamental knowledge of Practical Pump and Valve selection and application including</p> <ul style="list-style-type: none"> <li>• Common pump types for Local Building Services Market</li> <li>• Pump Characteristic and Selection</li> <li>• Efficiency and Energy Saving in Pumping System</li> <li>• Cavitation &amp; Pump Operation</li> <li>• General Valve Type and Application</li> <li>• Balancing Valve in Heating/Cooling System</li> </ul>	<p><b>Mr John MA and Mr David KWONG</b>            Sales Managers,            The Jardine            Engineering            Corporation Ltd</p>
23 Oct (Fri)	<p><b><u>Topic</u></b>  <b>Fan &amp; AHU Selection</b></p> <p><b><u>Speaker</u></b>            Mr. Tony NG has over 20 years' experience in HVAC industry specializing in various air side equipment. He has worked extensively in different Integrated AHU or EC AHU design in various project such as North Lantau Hospital, Tin Siu Wai Hospital, Disneyland, and Taikoo Phase 2A. He currently holds the position of Assistant Director at Welcome Air-Tech. Ltd.</p> <p><b><u>Content</u></b>            Basic Principle</p> <ul style="list-style-type: none"> <li>• Common Terms</li> <li>• Fan Laws</li> <li>• Functions of fan and AHU in HVAC systems</li> </ul> <p>Fan Selection</p> <ul style="list-style-type: none"> <li>• Different types of fan</li> <li>• Optimizing fan selection based on application</li> </ul> <p>AHU Selection</p> <ul style="list-style-type: none"> <li>• Common types of AHU</li> <li>• Different components of AHU</li> <li>• Optimizing AHU selection</li> <li>• Filter Classes</li> <li>• Common Misconception in industry</li> </ul>	<p><b>Mr Tony NG</b>            Assistant Director,            Welcome Air-Tech            Ltd</p>

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Date	Lecture	Speaker
5 Nov (Thur)	<p><b><u>Topic</u></b> Energy management for HVAC system</p> <p><b><u>Speaker</u></b> Dr. Pan Lee is currently an Assistant Technical Manager at ATAL Building Services Engineering Ltd. He obtained his Doctor of Philosophy (in Energy Performance Contracting) at the Hong Kong Polytechnic University in 2016. He has extensive experience in both commercial and R&amp;D projects, including HVAC optimisation, fault detection and diagnosis (FDD), data visualisation, as well as artificial intelligence in building control. The recent R&amp;D project, entitled 'Cloud-based Chiller Plant Energy Management Platform', was awarded the Silver Award in Big Data and Open Data Applications of Smart Business at Hong Kong ICT Awards 2019.</p> <p><b><u>Content</u></b> Energy management for HVAC system</p> <ul style="list-style-type: none"><li>• Fundamental concepts of HVAC control and energy management</li><li>• Energy optimization for air-side &amp; water-side system: Concepts and practical Applications</li><li>• Advanced energy optimization using big data and Artificial Intelligence techniques</li></ul>	<p><b>Dr Pan LEE</b> Assistant Technical Manager, ATAL Building Services Engineering Ltd</p>