

HKFEMC Joint Professional BS Training Courses 2018

Lectures Details

Date	Lecture	lecturer
<p>12 Apr 2018 (Thu)</p> <p>(ACRA)</p>	<p><u>Transition to HVAC&R equipment using low-GWP HFO refrigerants and their application considerations</u></p> <p>Our industry has started transitioning to the next generation technology using new refrigerants of HFO type with low global warming potential (GWP) or some old refrigerants with renewed interest. Water-cooled centrifugal chillers now have next-gen version available from multiple equipment manufacturers. Some air-cooled screw chillers also have next-gen version. However, low GWP options may use flammable refrigerants that can be challenging to both equipment R&D and applications safety. This course will try to start with fundamental concepts of refrigeration and air-conditioning, then walk through the environmental background in consideration of product development.</p>	<p>Dr Philip YU Environmental and Applications Engineering Director, Trane Pacific</p>
<p>24 Apr 2018 (Tue)</p> <p>(ACRA)</p>	<p><u>Applying Big Data Analytics for Energy Efficiency and Retro-Commissioning</u></p> <p>The building industry in Hong Kong is being shaped by trends in big data analytics, cloud computing and Internet of Things (IoT) applications, benefits being delivered by IoT technologies continue to reveal themselves to various stakeholders. In order to effectively analyze a huge amount of data, big data analytical skills become the essential skill in today's digital age to investigate energy performance of chiller plant. This lecture provides an introduction to big data and corresponding quantitative methods. Besides, case studies are used to illustrate the key concept. The lecture will cover:</p> <ul style="list-style-type: none"> • Latest market trend • Overview applications of Big Data Analytics in Energy Efficiency and Retro-Commissioning • Handling and processing Big Data • Developing equipment and system models for real-time chiller plant optimization (e.g. chiller, pump and cooling tower models) • Applying energy analytics to identify inefficient performance of chiller plant operation • Fault detection and diagnosis methods on HVAC systems (e.g. sensor faults, VAV system faults, rate of chiller deterioration, etc.) • Cooling load prediction using deep learning • Essential Skills for Data visualization • Case studies 	<p>Ir Charles CHAU Manager of Automation and Energy,</p> <p>Dr Pan LEE Senior R&D Engineer,</p> <p>ATAL Building Services Engineering Ltd</p>

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<p>26 Apr 2018 (Thu)</p> <p>(ACRA)</p>	<p><u>Applying IoT, Deep Learning and Big Data Analytics in the E&M Industry</u></p> <p>Internet of Things (IoT) is the new element to thrive a change in Building Services Industry. “Deep Learning” and “Big Data Analytics” are currently one of the widely-discussed topics among the industry insiders. How do we apply the technologies of “Deep Learning” and “Big Data Analytics” to keep us ahead of competition?</p> <p>The lecture will cover:</p> <ul style="list-style-type: none"> • Latest market trend on IoT and its applications in Building Services Industry • Introduction and applications of wireless & IoT technology for HVAC & lighting, CCTV, Security & Access Control, smart metering etc • Turn your mobile into All-In-One device for various applications • Introduction to Big Data Artificial Intelligence Technology • Introduction to Deep Learning algorithms for improving the accuracy of traditional AI algorithms • The role of Deep Learning in image recognition and object tracking, and more • Case studies 	<p>Ir Billy CHEUNG Manager of Automation and ELV, ATAL Building Services Engineering Ltd</p>
<p>8 May 2018 (Tue)</p> <p>(ECA)</p>	<p><u>Essential Power Supply Design</u></p> <ul style="list-style-type: none"> • Essential power supply design and installation; • Emergency generator system, UPS system and the application & consideration. 	<p>Mr Sherman W M TONG Associate Director, Wong & Ouyang (Building Services) Ltd</p>
<p>15 May 2018 (Tue)</p> <p>(ECA)</p>	<p><u>Artificaial Intelligence – Deep Learning and its applications in E&M Industry</u></p> <p>Artificial Intelligence - Deep learning in recent years has attracted a lot of attention in both the academia and industries. It is proved to be very useful in a wide range of domains, ranging from computer vision, natural language processing, speech recognition to game playing. Its impact to society is wide spreading, likely be resulted in a new version of Industrial Revolution. This talk will give an overview of deep learning and its latest development. Examples of E&M applications with Deep Learning will also be discussed.</p>	<p>Dr CHAN Fuk Cheung Vice President of HKECA</p>

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<p>31 May 2018 (Thu)</p> <p>(FSICA)</p>	<p><u>An Introduction to Hot Smoke Test</u></p> <p>Prescriptive 2012 “Minimum Standards” Codes in Hong Kong including smoke management provisions and the requirement of hot smoke test will be stipulated if considered necessary by the Director of Fire Services in the building plans involving compartments: -</p> <ul style="list-style-type: none"> (i) with headroom of 12 m or more; or (ii) with irregular geometrical dimensions or extraordinary large size. <p>This seminar explores the statutory requirements and the general procedure (including the submission of the Method Statement to the FSD) of the hot smoke test in Hong Kong. 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"> - Early appointment of field test expert - Allow sufficient time for method statement’s submission - Consider a reasonable time for FSD engagement - Demonstrate the situation with CFD study - Carry out mock-up test prior to the formal test 	<p>Dr Jason YUEN Associate, Arch & Fire Professional (Int’l) Ltd</p>
<p>5 Jun 2018 (Tue)</p> <p>(FSICA)</p>	<p><u>Introduction to Sprinkler System and sharing on FS501 Submission Procedure</u></p> <p>This technical talk provides an introduction to sprinkler systems, major contents in design principles, the latest LPC rules and the operational aspects with other fire protection systems. You will develop:</p> <ul style="list-style-type: none"> • Understanding of the principles of system design, major components and the operation of sprinkler systems; • Knowledge of the local code / LPC rules and BS EN 12845 of sprinkler rules; • Understanding the operating linking to other active fire protection systems. • How full scale fire link in related to the LPC rules • Experience sharing on FS 501 and inspection check List 	<p>Mr Victor Ng General Manger,</p> <p>Mr Simon YAN Engineering Manager,</p> <p>InnoTec Engineering Ltd.</p>

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<p>8 Jun 2018 (Fri)</p> <p>(ECA)</p>	<p><u>Latest Smart-Lighting Technologies and Applications</u></p> <p>Ongoing digitalization for the building facilities is shaking up the world of energy and building management. One of main elements for digitalizing your house/building will be the development of the smart-lighting technology. It is also the theme of the greatest biennial lighting industry exhibition which will be held at Germany Frankfurt in March this year. The speakers will share with you:</p> <ol style="list-style-type: none"> the trend of the smart lightings being showed in the exhibition; the latest technology of the smart lighting system in regard to the application and energy efficient; how the smart lighting system could digitalise your building and improve your life styles, especially your health condition. 	<p>Mr Kelon YAN Accredited Trainer / Lighting Solution Specialist, Light Engine Technology Ltd</p>
<p>12 Jun 2018 (Tue)</p> <p>(PSWTA)</p>	<p><u>Water Conservation, Recycling and Balancing</u></p> <p>(Contents : TBA)</p> <hr/> <p><u>Water Safety</u></p> <p>(Contents : TBA)</p>	<p>Ir Ben Yuen Kai Chi Technical Director,</p> <p>Mr Tommy LEUNG Technical Director,</p> <p>WSP</p>
<p>14 Jun 2018 (Thu)</p> <p>(PSWTA)</p>	<p><u>Compare the application of latest UK design guide CIPHE, CIBSE, BSI Standard in plumbing and drainage and its application in HK</u></p> <p>(Contents : TBA)</p>	<p>Mr Lonnie CHEUNG Lecturer of Division of Building Science and Technology, City University of Hong Kong</p>
<p>28 Jun 2018 (Thu)</p> <p>(LECA)</p>	<p><u>Smart Technology for Vertical Transportation</u></p> <p>(Contents : TBA)</p> <hr/> <p><u>Continuous Improvement of Escalator Safety Devices</u></p> <p>(Contents : TBA)</p>	<p>Mr Jack Chan Senior Engineer Otis Elevator Company (HK) Limited</p> <p>Mr Y K Ng Maintenance Manager Anlev Elex Elevator Ltd.</p>