



# TECHNOLOGY SHARING 2016

機電工程營運基金

# EMSTF

## CALL FOR PARTICIPATION

### **TRADE TECHNOLOGY SEMINAR:**

#### **BY INDUSTRY AND EMSTF**

Event no. 1	4 May 2016 p.m.	Smart City
Event no. 2	10 May 2016 p.m.	Building Information Modelling
Event no. 3	12 May 2016 a.m.	Retro-commissioning
Event no. 4	12 May 2016 p.m.	Air-conditioning
Event no. 5	2 June 2016 a.m.	Fire Services and Lift & Escalator
Event no. 6	16 June 2016 p.m.	Biomedical and Electronic
Event no. 7	23 June 2016 p.m.	Electrical Services

### **INNOVATION TECHNOLOGY SHARING:**

#### **BY UNIVERSITIES (CITYU, CUHK, HKU, HKUST & POLYU)**

Event no. 1	19 May 2016 a.m.	Next-GEN Solutions
Event no. 2	19 May 2016 p.m.	Power Technologies
Event no. 3	2 June 2016 p.m.	Smart Solutions

***The Technology Sharing 2016 aims to promote collaborations with E&M Trades, Local Universities, Client Departments and EMSD for exchanging latest and advance engineering technology developments in order to achieve services excellence to the community.***

**Venue:** Room 7103A, EMSD HQs. 3 Kai Shing Street, Kowloon, Hong Kong

For enquiry: Please contact Mr. KT WONG at 3757 6056.

## Event no. 1 - Smart City Sharing Session (HKSTP)

Date : 4 May 2016 (Wednesday)

Programme Details (Session Leader: Ms. Jovian CHEUNG, Tel. 3155 4003)

Activity		Speakers
2:00 – 2:10pm	<i>Registration</i>	
2:10 – 2:20pm	Introduction to HKSTP & Smart Cities	<i>Hong Kong Science and Technology Park (HKSTP) Representatives</i>
2:20 – 2:45pm	Enabling Technologies for IoT and Smart Cities	<i>Mr. Dennis LEE ASTRI</i>
2:45 – 3:10pm	How Cellular Technology is Enabling Smart Cities	<i>Mr. Colin CHEW Sierra Wireless,</i>
3:10 – 3:35pm	Using Real-Time Analytics to Make Better Decision	<i>Mr. Ken LAW MotherApp,</i>
3:35 – 3:45pm	<i>Questions and Answers</i>	
3:45 – 4:00pm	<i>Break (Demonstration will be held in the open area outside the seminar room)</i>	
4:00 – 4:25pm	Access Authorisation by Optical Screen Security System (OSSS)	<i>Mr. Boris KWOK Thine Creative Ltd.,</i>
4:25 – 4:50pm	Leveraging Cloud Based Technologies and IoT to Gain Efficiencies and Comfort	<i>Mr. Jeff LIN Lirrico</i>
4:50 – 5:15pm	Synchronizing All the Clocks in a Building	<i>Mr. Kenny Yip Accue C., Ltd.</i>
5:15 – 5:30pm	<i>Questions and Answers</i>	

## Event no. 2 - Building Information Modelling

Date : 10 May 2016 (Tuesday)

Programme Details (Session Leader: Mr. Steve CHAN, Tel. 2808 3593)

Activity		Speakers
2:00 – 2:10pm	<i>Registration</i>	
2:10 – 2:40pm	BIM development roadmap and BIM standards in Hong Kong	<i>Julian LEE Senior Manager, R&amp;D, CIC</i>
2:40 – 3:10pm	BIM applications in private sector building or infrastructure projects in Hong Kong International Airport	<i>Patrick C. K. YIP Deputy GM, P&amp;P, AAHK</i>
3:10 – 3:40pm	The BIM journey in Architectural Services Department	<i>Kevin Pui K. LI Senior Architect, ArchSD</i>
3:40 – 3:50pm	<i>Questions and Answers</i>	
3:50 – 4:05pm	<i>Break</i>	
4:05 – 4:35pm	BIM – Moving Stakeholder Engagement from Visualisation to Operation & Maintenance	<i>Clement H. W Chung Director of M&amp;E, Ove Arup &amp; Partners</i>
4:35 – 5:20pm	BIM applications for building Operation and Maintenance (O&M) and Asset Management: BIM-AM pilot project in EMSD HQs	<i>Steve CHAN SE/P12, EMSD</i>
5:20 – 5:30pm	<i>Questions and Answers</i>	

## Event no. 3 – Retro-commissioning

Date : 12 May 2016 (Thursday)

Programme Details (Session Leader: Mr. KW KONG, Tel. 2808 3448)

Activity		Speakers
9:00 – 9:15am	Registration	
9:15 – 9:40am	Retro-commissioning - a Way for System Optimization	Ir Kenneth S.K. LI Director, Building MEP, China Region, Parsons Brinckerhoff (Asia) Limited
9:40 – 10:05am	Case sharing on Retro-commissioning leading to Energy Optimization Solution on HVAC Control System	Ir Antonio CHAN Executive Director, REC Engineering Company Limited REC Green Technologies Co., Ltd.
10:05 – 10:15am	Questions and Answers	
10:15 – 10:30am	Break	
10:30 – 10:55am	Experience sharing on conducting Retro-commissioning at Lok Fu Plaza	Ir Eric HO Senior Project Manager, Link Asset Management Ltd.
10:55 – 11:20am	Experience sharing on HVAC system Control Optimization	Ir Franco MOK Assistant Energy Services Manager, Energy & Automation, ATAL Building Services Engineering Ltd
11:20 – 11:45am	Energy Conservation and Re-commissioning on HVAC System	Dr Paul SAT, Head of Research and Public Education, Hong Kong Green Building Council Limited
11:45 – noon	Questions and Answers	

## Event no. 4 – Air-conditioning

Date : 12 May 2016 (Thursday)

Programme Details (Session Leader: Mr. Wilson HY MA, Tel. 3155 4063)

Activity		Speakers
2:00 – 2:10pm	Registration	
2:10 – 2:35pm	Study on Oil Free Chiller	Mr YUEN Kim Sang, SE/H/HKE, EMSD Mr IP Kin Ping, SE/GES/HK, EMSD
2:35 – 3:00pm	Mobile Chiller	Ms CHEUNG Man Chit, SE/H/P, EMSD Mr IP Kam Wing, E/H/P1, EMSD
3:00 – 3:10pm	Questions and Answers	
3:10 – 3:30pm	Break	
3:30 – 3:55pm	iBMS	Mr WONG Siu Wah, SE/MUN/H, EMSD Mr YU Tung Chun, E/MUN/H6, EMSD
3:55 – 4:20pm	Energy optimization of chiller plant	Mr ZSA Sing Tak, SE/MUN/MW, EMSD Mr WONG Chin Fai, E/MUN/MW2, EMSD
4:20 – 4:45pm	New generation of refrigerants	Mr NG Tsz Yeung, Eric, MTI, EMSD Mr TAI Tsz Yeung, Aaron, MTI, EMSD
4:45 – 5:00pm	Questions and Answers	

## Event no. 5 – Fire Services and Lift & Escalator

Date : 2 June 2016 (Thursday)

### Programme Details

(Session Leader: Mr. KM LEUNG, Tel. 2773 2526; Mr. WC TAI, Tel. 3757 6067)

<u>Activity</u>		<u>Speakers</u>
9:00 – 9:30am	<i>Registration</i>	
9:30 – 9:50am	An overview on fire engineering approach for building designs in Hong Kong and its critical concerns on AA&I works, maintenance and management	<i>Ms. Annie CHOI</i> <i>Parsons Brinckerhoff (Asia) Limited</i>
9:50 – 10:10am	New smoke detectors designed for mitigating unwanted fire alarms	<i>Mr. Angus CHANG</i> <i>Bosch Security Systems Ltd</i>
10:10 – 10:20am	<i>Questions and Answers</i>	
10:20 – 10:40am	<i>Break</i>	
10:40 – 11:00am	Escalator Modernization Solution	<i>Mr. Max WONG</i> <i>Services Development Manager,</i> <i>KONE Elevator (HK) Ltd.</i>
10:55 – 11:20am	Lift Remote Maintenance System	<i>Mr. Samson MS LIU</i> <i>Senior Manager,</i> <i>Mitsubishi Elevator Hong Kong Co., Ltd.</i>
11:20 – 11:40am	Observations and Findings of Independent Audit Inspection Works for Maintenance Services of Lifts and Escalators in Government Premises maintained by EMSD	<i>Dr Ir Leonard CHOW</i> <i>ISPL Consulting Ltd.</i>
11:40 – noon	<i>Questions and Answers</i>	

## Event no. 6 – Biomedical and Electronic

Date : 16 June 2016 (Thursday)

### Programme Details

(Session Leader: Mr. KK MAK, Tel. 2505 0136; Mr. SH CHEONG, Tel. 2808 3502)

<u>Activity</u>		<u>Speakers</u>
1:30 – 1:45pm	<i>Registration</i>	
1:45 – 2:00pm	Biomedical Installation - Latest Application in Dental Diagnostic Imaging	<i>Mr. Siu Hiu Fai, Stanley</i> <i>EH/HKW/3, EMSD</i>
2:00 – 3:00pm		<i>Ms. Gloria WEI</i> <i>Regional Product Manager</i> <i>Carestream Dental</i>
3:00 – 3:15pm	<i>Questions and Answers</i>	
3:15 – 3:30pm	<i>Break</i>	
3:30 – 4:20pm	Application of Geographical Information System	<i>ITM/P8/2 and EE/P8/5, EMSD</i>
4:20 – 4:45pm	Advanced Technologies on Traffic Management	<i>Charles SO, Executive Director</i> <i>Andy CHAN, Technical Director</i> <i>AECOM</i>
4:45 – 5:00pm	<i>Questions and Answers</i>	

## Event no. 7 – Electrical Services

**Date : 23 June 2016 (Thursday)**

Programme Details (Session Leader: [Mr. Sammy YEUNG, Tel. 2808 3717](#))

<u>Activity</u>		<u>Speakers</u>
2:00 – 2:15pm	<i>Registration</i>	
2:15 – 2:40pm	Lighting for more with less @ BEC	<i>Ms Macy WONG, E/EEB7/3, EMSD</i>
2:40 – 3:05pm	Advanced Digital Lighting for achieving Energy Efficiency and Operational Efficiency Improvement	<i>To be confirmed</i>
3:05 – 3:15pm	<i>Questions and Answers</i>	
3:15 – 3:30pm	<i>Break</i>	
3:30 – 3:55pm	<i>Application of LED in Footbridge Lighting and Floodlight</i>	<i>Mr Steve CHAN, SE/4, HyD / Mr K.K. WONG, EME/P6/2, EMSD / Mr Ryan LAW, E/TSCS1/5, EMSD</i>
3:55 – 4:20pm	<i>Application of Smart Metering and Energy Management System in Existing Building</i>	<i>To be confirmed</i>
4:20 – 4:45pm	<i>Smart Building Energy Management System in EMSD Headquarters</i>	<i>Ms Jovian CHEUNG, SE/H/P, EMSD</i>
4:45 – 5:00pm	<i>Questions and Answers</i>	

## Event no. 1 – Next-Gen Solutions

**Date : 19 May 2016 (Thursday)**

Programme Details (Session Leader: Mr. Stanley WY CHOW, Tel. 3757 6055)

Activity		Speakers
9:00 – 9:15am	Registration	
9:15 – 9:40am	"Internet of Things (IoT) application of environmental sensors for building energy saving and sustainable environment."	Dr Zhi Ning School of Energy and Environment, CityU
9:40 – 10:05am	Optimal HVAC system control; Optimal design of HVAC system; Smart energy management and demand response of buildings	Chair Professor Wang Shengwei PolyU
10:05 – 10:15am	Questions and Answers	
10:15 – 10:30am	Break	
10:30 – 10:55am	Energy Generation Scheduling for Microgrids with Renewable and Co-generation	Prof. Minghua Chen CUHK
10:55 – 11:20am	Next generation of smart flexible sensors	Dr Paddy Chan HKU
11:20 – noon	Questions and Answers	

## Event no. 2 – Power Technologies

**Date : 19 May 2016 (Thursday)**

Programme Details (Session Leader: Mr. Stanley WY CHOW, Tel. 3757 6055)

Activity		Speakers
2:00 – 2:10pm	Registration	
2:10 – 2:35pm	Power quality monitoring system	Prof. Eric Cheng PolyU
2:35 – 3:00pm	Latest advancement in LED and III-V compound semiconductor (GaN) technology for power and wideband RF (beyond Silicon)	Prof. Kei May, Lau HKUST
3:00 – 3:10pm	Questions and Answers	
3:10 – 3:30pm	Break	
3:30 – 3:55pm	Dye-sensitized solar cells for self-powering technologies	Tony Shien-Ping Feng HKU
3:55 – 4:20pm	Primary Frequency Control using Energy Storage Systems	Prof. Angela J.Y. Zhang CUHK
4:20 – 4:45pm	Thermo-Electric Power Conversion	Dr Roy Vellaisam Dept of Physics and Materials Science, CityU,
4:45 – 5:00pm	Questions and Answers	

## Event no. 3 – Smart Solutions

**Date : 2 June 2016 (Thursday)**

Programme Details (Session Leader: Mr. Stanley WY CHOW, Tel. 3757 6055)

<u>Activity</u>		<u>Speakers</u>
2:00 – 2:10pm	<i>Registration</i>	
2:10 – 2:35pm	Smart current sensing and metering and smart grid	<i>Prof. Derec Or PolyU</i>
2:35 – 3:00pm	Latest advancement in Data Science, AI and Machine Learning (towards Smarter City)	<i>Prof. Qiang, Yang HKUST</i>
3:00 – 3:10pm	<i>Questions and Answers</i>	
3:10 – 3:30pm	<i>Break</i>	
3:30 – 3:55pm	Human Participatory Thermal Comfort Enhancement and Energy Conservation in Buildings	<i>Prof. Wang Dan PolyU</i>
3:55 – 4:20pm	Data Analytic Policy Design for Energy Conservation	<i>Prof. Dahming Chiu CUHK</i>
4:20 – 4:45pm	Precise indoor localization and geo-fencing in heterogeneous wireless environment with Whereami (Case Study: Hospital)	<i>Prof. Gary, Chan (or his delegate) HKUST</i>
4:45 – 5:00pm	<i>Questions and Answers</i>	