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## CPD Seminar on Indoor Air Quality (IAQ) – How to acquire GEES CP IAQ

(Accredited by AIBC and certified by UL)

18<sup>th</sup> May 2015 / 1900 – 2200 hrs

Convened by GEES Group  
NO. 1 - 6 2015

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Co-organizers:



Supporting Organizations:



工程界社促會  
Association of Engineering Professionals  
in Society Ltd



亞洲持續發展中心  
Asian Centre for Sustainable Development



香港風險管理與安全協會  
Hong Kong Association of  
Risk Management and Safety

**Institute of  
Measurement  
and Control**



engineering success  
soe hong kong region  
營運工程師學會 香港分會

### Indoor Air Quality

People spend 90% of their time on indoor activities, including working, sleeping, eating, reading, etc. and, therefore, the quality of the indoor environment has great impact on human health and well-being.

The term IAQ is defined as the characteristic of the indoor climate of a building, including the gaseous composition, temperature, relative humidity, and airborne contaminant levels (human bio-effluents, chemicals). The indoor air likely contains harmful chemicals such as volatile organic content (VOCs), formaldehyde, environmental tobacco smoke (ETS) and particulate matters (PM 2.5/PM 10).

Occupants in poorly designed or regularly maintained mechanically ventilated buildings may suffer sick building syndrome. The symptoms include eye, nose or throat irritation, headaches, fatigue, dizziness, difficulty in concentration, dry skin, rashes, irritability, nasal congestion, etc. Study also shows that children and elderly are more vulnerable to air pollutants. Better design, audit and regular maintenance of ventilation systems help to ensure good IAQ. Meanwhile, collecting indoor air samples and analyzing them in a scientific laboratory is the most effective way to identify and benchmark actual IAQ, after construction or during occupancy.

### What is GEES CP IAQ ?



**GEES CP IAQ** stands for Green Environment & Energy Saving Certified Professional in Indoor Air Quality. This certification program is accredited by the Academy of Intelligent Building Certification (AIBC), an organisation committed to help standardize and promote the terms, definitions and best practices used by the intelligent and green building industry in Hong Kong and the Asia Pacific Region and certified by UL Environment (ULE), which is a worldwide leading organization in certification and validation.

The candidate for **GEES CP IAQ** is required to attend a total of 27-hour in classroom and laboratory training and 2-hour examination for accreditation. **GEES CP IAQ** holder is authorized to perform on-site sampling with UL laboratory in Nansha, Guangdong Province, PRC, as support. **GEES CP IAQ** holder can also be involved in UL's new program: Building Indoor Air Quality to help clients achieve related certification relating to Building Indoor Air Quality.

### Objectives of this CPD seminar

- To appeal to the audience the impact of indoor air quality on their physical health.
- To provide information to those professionals who are interested to pursue how to be equipped with a qualification recognized by UL.
- To introduce candidate IAQ testing, monitoring, and management techniques.
- To keep the participants informed of the frontiers of IAQ management.



### Audience

This course is ideal for architect, project manager, green building consultant, developer, sustainability coordinator, landscape architect, technical manager, energy engineer, MEP consultant, facility managers, or anyone interested in understanding indoor air quality issues and the way to improve IAQ for a better indoor/office environment.

### Speakers

#### Ir Dr Albert T. So

PhD, CEng, FIMechE,  
FCIBSE, FSOE,  
MASHRAE, SMIEEE,  
REA

Honorary Associate  
Professor of HKU;  
Co-Founder of AIBC;  
VP of Asian Institute of Intelligent  
Buildings (AIIB)



Ir Dr Albert T. So is specialized in building automation, energy and elevator systems, having published more than 300 articles in international journals and conference proceedings. Dr So has been awarded 3 bronze medals from CIBSE on best publications and services. He was also awarded four patents, one from Hong Kong, one from China and two from the U.S.A. He is one co-founder of the Academy of Intelligent Building Certification (AIBC), Director of Asian Institute of Built Environment, Scientific Advisor and Executive Board Member of the International Association of Elevator Engineers. Currently, he is based in Seattle in the U.S.A.

#### Dr Kim Fung Tsang

PHD, CEng, FHKIE, SMIEEE

Associate Professor and  
Director, Wireless Sustainability  
Center, Dept of EE, CityU;  
ZigBee Chair, IEEE Consumer  
Electronics Society;

Associate Editor, IEEE Trans Ind Informatics;  
EChairman, IoT SUG HK



Dr Kim Fung Tsang has close ties with industry, and is working actively on RFID (ZigBee) for numerous applications, including IAQ, energy management, AMI, security, and office/home automation. Dr Tsang has published more than 150 technical papers. He was the recipient of CityU's Applied Research Excellence Award, the first HK Science & Product Innovation Competition and the World Chinese Invention Exposition. The other accolades won by Dr Tsang include the EDN Asia Innovator Award, Ericsson's Super-Wireless Application Award, the Best Award from Freescale Semiconductor, the Innovation China Outstanding Entrepreneur Award and the Excellent Product Award from the China Hi-Tech Fair. KF is the Associate Editor of IEEE Trans on Ind Informatics, and Chair of Internet of Things SUG HK.

#### Mr Markku Rajala

VP, Sales & Marketing  
and Intellectual  
Property, Pegasor Oy;  
Chairman, Board of  
the Finnish Fine  
Particle Forum;

Board member, Faculty of natural  
Sciences in Tampere University of  
Technology



Mr Markku Rajala has extensive knowledge in fine particles capture and monitoring. Have been working as intellectual property manager in Pegasor Oy, a world leading IAQ monitoring technology provider, Mr Markku Rajala gains innovative IAQ management technologies. He is also chairman of the board of the Finnish Fine Particle Forum, as well as the member of the editorial board of the Chinese "Standards and Inspection for HVAC" magazine. In 2001, Mr Markku Rajala awarded the Innovation Prize of the President of Finland. He also awarded the Finnish Fine Particle Forum Award in 2012.



## Curriculum

Time	Speaker	Topic	Content
1900 – 1945	Ir Dr Albert T. So	A Review on IAQ Standards and Assessment	<ul style="list-style-type: none"> <li>IAQ related requirement in LEED v4 BD+C guide for new construction</li> <li>IAQ related requirement in ASHRAE 62.1/90.1/189.1</li> <li>IAQ related requirement in Guidance Notes of HKSAR government</li> <li>What is the intelligent building index of AIB?</li> </ul>
2000 – 2045	Dr Kim Fung Tsang	IAQ Modelling and Development	<ul style="list-style-type: none"> <li>IAQ Modelling and Development</li> </ul>
2100 – 2200	Mr Markku Rajala	Most hazardous environmental exposure (by WHO): indoor air particles	<ul style="list-style-type: none"> <li>Particle size affects their deposition into lungs</li> <li>Ultrafine particles can penetrate from lungs into all body parts</li> <li>How to monitor particles in indoor air?</li> <li>What is required from an effective and economical particle filter</li> <li>How can the resident affect indoor air quality?</li> </ul>
<b>Date/Time:</b> 18 <sup>th</sup> May 2015/ 19:00 to 22:00 <b>Language:</b> English			
<b>Venue:</b> Eco Health Institute, 1A, 1/F, 60, Comfort Gardens, King's Road, North Point, Hong Kong (3 minutes' walk from Fortress Hill MTR Station Exit A turn left)			
<b>CPD earnings:</b> LEED Professional (3 hours) / GEES CP (3 hours) / UL (1 hour)			

## Fees

	Early bird (register before 25 <sup>th</sup> April)	Regular Fee
Member of supporting organization	HK\$ 100	HK\$ 200
Non-members	HK\$ 200	HK\$ 400



## REGISTRATION FORM

Seating is limited. Registration deadline is ONE WEEK PRIOR to seminar date.

Confirmation of seat after payment received.

Please deposit payment to L GEES Limited account# 078-505302-838 at HSBC,

Then email deposit slip and registration form to [training@lgees-ltd.com](mailto:training@lgees-ltd.com)

Name:	_____	Email:	_____
Company:	_____	Position:	_____
Organization:	_____	Membership No.:	_____
Mobile:	_____	Company phone	_____

## Enrollment

	Early bird (register before 25 <sup>th</sup> April)	Regular Fee	Person(s)	Sub-total
Member of supporting organization	HK\$ 100	HK\$ 200		HK\$
Non-members	HK\$ 200	HK\$ 400		HK\$
Total fee				HK\$

Remarks:

- 1) For more information, please check [LGEES training website](#)
- 2) For any enquiry please contact us at [training@lgees-ltd.com](mailto:training@lgees-ltd.com)

