

## **ASHRAE DL Seminar on**

# **“Leveraging Innovative Technologies for Life Cycle Operational Efficiency and Improved Indoor Environment Quality and An Approach to Facilities Operational Improvements”**

**Date & Time:** 14 May 2019 (Tuesday) (2:00pm – 5:15pm)

**Venue:** Singapore Polytechnic Graduates' Guild (SPGG), Grand Ballroom, Level 3

### **► Leveraging Innovative Technologies for Life Cycle Operational Efficiency and Improved Indoor Environment Quality**

Interest on relevant technologies is to help improve operations of infrastructure and buildings during “Normal and Emergency” situations as well as to allow a quicker reconstitution of spaces, equipment and technologies after emergency situations. This requires metering, sensors, remote monitoring and analytic tools for data monitoring and compilation, managing energy and water use, benchmarking, retro-commissioning and reporting. Innovations in HVAC systems that can help improve performance should be explored, such as, ductless cooling, “demand controlled ventilation”, “dedicated outdoor air systems”, “chilled beams”, “variable refrigerant flow unitary systems”, “geothermal heat pumps”, magnetic bearing for chiller compressors, wireless sensor networks for data centers, solar heating and cooling systems, and adaptive Building Energy Management systems. Greater use of Energy Analytics, Internet of Things (IoT) and collaboration with IT system administrators can help dynamically tune up or down the building operating parameters, based on occupancy, time of day, and other human, environmental, and business considerations.

### **► An Approach to Facilities Operational Improvements: Train O&M Staff and Provide Tools to Measure, Track & Adjust Equipment and Systems**

This talk provides details about how to track performance of High Performance Buildings and how proper training and development of Operations and Maintenance staff can help improve the performance.

### **Speaker Profile**



**Om Taneja, Ph.D., P.E.**  
**Fellow ASHRAE**  
**Associated Consulting Company**

Dr. Taneja is a licensed professional engineer and active in power generation and distribution, sustainability, energy-efficiency, innovative technologies, operations and maintenance issues. Om has been active in discussing facilities, sustainability and energy-related issues at various professional organizations. Om has presented more than 40 technical and management papers at different national and international conferences.

Dr. Taneja has more than 35 years of diversified experience in the area of design, construction, operations and maintenance of large facilities, including the United Nations HQ, General Electric HQ, US General Services Administration and a 17 years in the Infrastructure Development for hospitals, court houses and varied commercial, industrial and historical facilities. He was the Chief of Planning, Design & Overseas Properties, at the UN HQ for 12 years, where he had the responsibility for coordination and management of facilities, security and technology implementation for the UN HQ and Overseas Properties worldwide. At the UN he had the supervisory responsibilities for the Architecture & Engineering Unit, Office Space Planning Unit, environmental and budgetary issues. He also worked as Senior Engineering Manager for long range capital improvements plan for the UN HQ, and Refurbishment of the Rockefeller Center for General Electric & National Broadcasting Company. Dr. Taneja has recently been the “Director of Manhattan Service Center” for the United States General Services Administration where he managed the Federally owned and leased Properties with diverse and growing portfolio of assets and with emphasis on greening, energy and water efficiency, analytics, technology adoption, alternate work space designs, emergency preparedness and improved operations, and maintenance.



Registration Form – **ASHRAE DL Seminar on “Leveraging Innovative Technologies for Life Cycle Operational Efficiency and Improved Indoor Environment Quality and An Approach to Facilities Operational Improvements”**

**Date:** 14 May 2019 (Tue)  
**Time:** 2.00pm – 5.15pm  
*(Registration starts 1.30pm)*

**Fee for early registration by 30 April 2019:**  
 S\$10 for ASHRAE Singapore Chapter (ASC) members  
 S\$60 for ASHRAE/IFMA/IES members  
 S\$80 per participant (non-members)

**Fee for registration after 30 April 2019**  
 S\$10 for ASC members  
 S\$80 for ASHRAE/IFMA/IES members  
 S\$100 for non-members  
*(1 Tea Break will be provided)*

**Venue:**  
 Singapore Polytechnic Graduates’ Guild  
 Grand Ballroom, Level 3, 1010 Dover Road  
 Singapore 139658 (Singapore Poly Gate No. 4)

Register by email to [elta.ascsecretariat@gmail.com](mailto:elta.ascsecretariat@gmail.com) before **7 May 2019**, with the required Registration Details below.

Please make the payment by issuing a cheque to **ASHRAE Singapore Chapter, c/o 159 Sin Ming Road, AMTECH Building, Lobby 2 #07-02, Singapore 575625**

**Professional Engineers Board:** 3 PDUs  
**SCEM-PDU Points:** 3 PDUs

**For enquires on program and registration matters please contact:**  
 Dr. Peter Cheng [Email: [peter.cheng@armacell.com](mailto:peter.cheng@armacell.com)], ASC

**Registration Details**

| Name of Participant     | ASHRAE Membership No.: | ASC Reg No.:         | PE Reg No.:          |
|-------------------------|------------------------|----------------------|----------------------|
| <input type="text"/>    | <input type="text"/>   | <input type="text"/> | <input type="text"/> |
| Organization:           | <input type="text"/>   | Designation:         | <input type="text"/> |
| Mailing Address:        | <input type="text"/>   |                      |                      |
|                         | <input type="text"/>   | Postal Code          | <input type="text"/> |
| Telephone / Mobile No.: | <input type="text"/>   | Fax no.:             | <input type="text"/> |
| Email:                  | <input type="text"/>   |                      |                      |

Signature

Date



- Located at 1010 Dover Road (SP Gate 4)
- 10 mins walk from Dover MRT
- Bus Services to SPGG:
  - Bus Stop A: SBS 33 & SBS 196
  - Bus Stop B: SBS 96, 151, 183