ASHRAE DL Seminar on "High Performance Building Design and the Coming Age of a Smart Grid and Smart Buildings"

***Date & Time**: 9 Mar 2017 (Thursday) 2:00pm – 5:15pm*
***Venue:** Singapore Polytechnic Graduates' Guild (SPGG), Ballroom, Level 2*

▶ High Performance Building Design – What the Future holds for the Direction for our Industry

During the past two decades we have seen the growth and maturation of the green or high-performance building design concept. The U.S. Green Building Council's LEED program was one of the main pioneers in this and ASHRAE's Standard 189.1 helped evolve this concept into mandatory building codes.
This session provides an overview of how building systems have evolved to meet the demands for green building design and where we are headed in the future in this arena. Also covered are topics such as the evolution of building codes to include green or sustainability features, how a building designer can include these concepts in their designs, the impact of new technologies such as a smart grid and BIM on the design, and discussion on how this will impact the industry.

▶ The Coming Age of a Smart Grid and Smart Buildings

The smart grid is coming and in that future era buildings will be interacting even more with the electric utilities. The communication will be in both directions, with the utility working to balance the grid supply and demand through methods such as signaling requests for demand response measures, real-time price adjustments, etc. This is a new and evolving field and, while there are some differences in the need for and how a smart grid might function in the various regions of the world, there are some common factors as well. This seminar provides an overview of the smart grid particularly as it relates to buildings and their systems.

Speaker Profile

THOMAS M. LAWRENCE, Ph.D, P.E., LEED-AP

College of Engineering
The University of Georgia
Athens, GA

Dr. Lawrence is the Mechanical Engineering program coordinator with the University of Georgia, and has over 30 years of professional experience. Before going back for his Ph.D. in Mechanical Engineering at Purdue, he spent approximately 20 of those years in industry and consulting. He is the past chair of ASHRAE Technical Committee 2.8, "Building Environmental Impact and Sustainability", and is a member of the committee which wrote the ASHRAE standard on high-performance green buildings (Standard 189.1). As an ASHRAE Distinguished Lecturer, he gives presentations and workshops on green building design at venues around the world. At the University of Georgia, teaches courses in HVAC, Green Building Design, Residential Building Design, and Heat Transfer. His students have entered the ASHRAE Student Design Competition several years in the area of Integrated Sustainable Building Design, and three of the years the teams have earned second or third place in the contest.

Dr. Lawrence has a B.S. with Highest Distinction honors in Environmental Science from Purdue University (1978), a M.S. in Mechanical Engineering from Oregon State University (1982) and a second M.S. degree in Engineering Management from Washington University earned in 1989. He received a Ph.D. in Mechanical Engineering from Purdue University in the spring of 2004 researching the impacts of demand-controlled ventilation on energy consumption and indoor air quality in smaller commercial buildings.

Registration Form – **ASHRAE DL Seminar on "High Performance Building Design and the Coming Age of a Smart Grid and Smart Buildings"**

Date: 9 Mar 2017 (Thursday)
Time: 2.00pm – 5.15pm
(*Registration starts 1.30pm)*

Fee for early registration by 23 Feb 2017:
S$50 for ASHRAE Singapore Chapter (ASC) members
S$30 for ASC Student members
S$60 for ASHRAE/IFMA/IES members
S$80 for non-members

Fee for registration after 23 Feb 2017
S$60 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
Ballroom, Level 2, 1010 Dover Road
Singapore 139658 (Singapore Poly Gate No. 4)

Register by email to elta.ascsecretariat@gmail.com before **2 Mar 2017,** 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 (PDU) Points: Qualified for 3 PDUs by PEB
SCEM-PDU Points: 3 PDUs

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

Registration Details

Name of Participant	ASHRAE Membership No.:	ASC Reg No.:	PE Reg No.:

Organization: _____ Designation: _____

Mailing Address: _____

_____ Postal Code _____

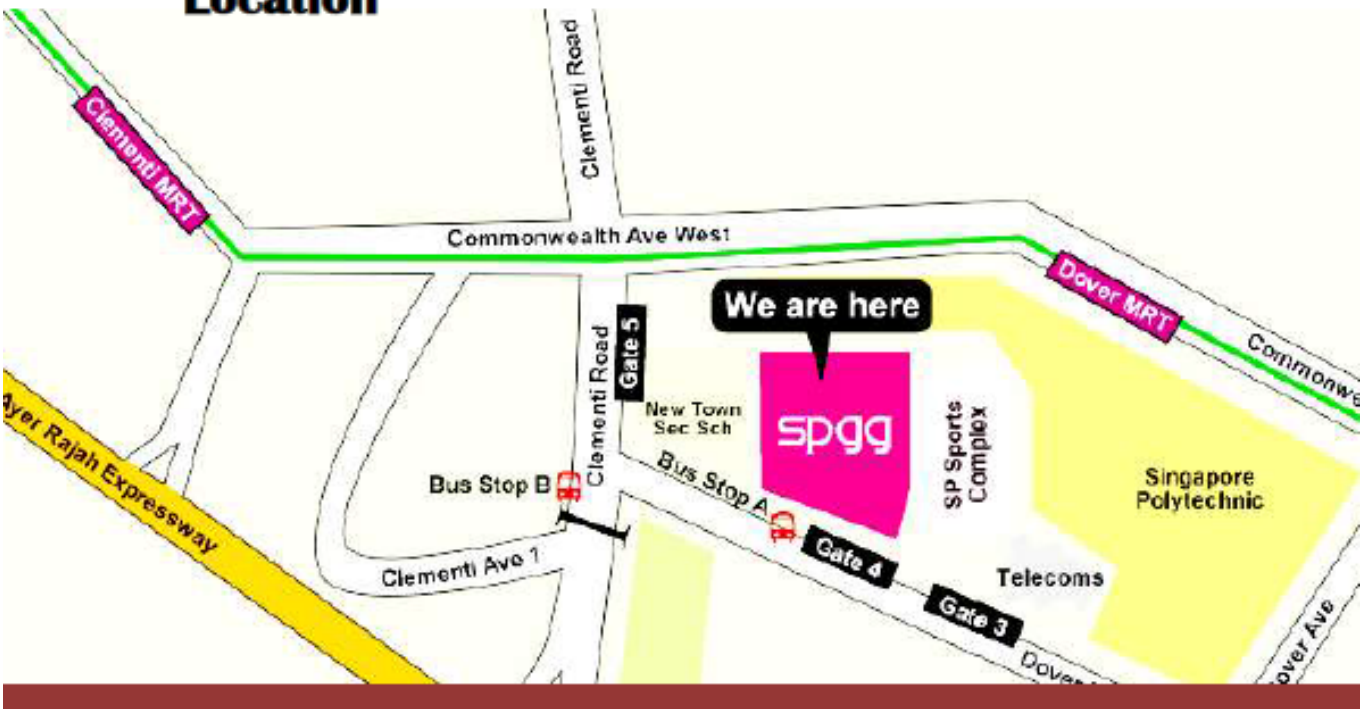
Telephone / Mobile No.: _____ Fax no.: _____

Email: _____

_____ .....

Signature **Date**

Location



- 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