ASHRAE LONDON CANADA CHAPTER #116

TOPIC:
The Integration of a Smart Grid and Smart Buildings

GBCI Approved | 1 CE Hour | 0920014297
AIA Approved | 1 LU/HSW | LAWRENCE01

Presenter:
Thomas M. Lawrence, Ph.D.
College of Engineering
The University of Georgia
Driftmier Engineering Center
proftom@uga.edu

Tuesday, February 22, 2022
5:00-6:30 PM – Hosted virtually on ‘GoToMeeting’
Cost = $30.00*

*One-time fee for full year of meetings – if you have registered for a previous meeting no action required!

Hosted by ASHRAE London in joint online meeting with ASHRAE Windsor
February Topic
The Integration of a Smart Grid and Smart Buildings

The smart grid is developing and moving forward buildings and the built environment will be interacting more closely 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 an 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, and includes material and topics outlined in ASHRAE’s Smart Grid Application Guide.

February Presenter

Dr. Lawrence is the Mechanical Engineering program lead with the University of Georgia, and has nearly 40 years of professional experience. He spent the first 18 years in industry and after going back for his PhD at Purdue he has been at UGA since January 2004. He is the past chair of ASHRAE Technical Committee 2.8 and is a member of the committee that wrote and maintains ASHRAE Standard 189.1 for High Performance Green Buildings. As an ASHRAE Distinguished Lecturer, he gives seminars related to high-performance buildings at venues around the world. Dr. Lawrence was named an ASHRAE Fellow in 2017 and was a Director-at-Large on the Board of Directors for ASHRAE from 2016-2019.

Dr. Lawrence has a B.S. with Highest Distinction in Environmental Science from Purdue University (1978), a M.S. degree in Mechanical Engineering from Oregon State University (1982) and a second M.S. degree in Engineering Management from Washington University in 1989. He received a Ph.D. in Mechanical Engineering from Purdue University in the spring of 2004.
Chapter President’s Message

To ASHRAE London Chapter Members,

I am Kate Mayberry, your ASHRAE London Chapter President for 2021/2022. I am a Mechanical Engineer for Strik Baldinelli Moniz Ltd. located in London ON.

These past couple of years has been challenging for all of us and hope that you and your family are in good health and spirits. Thank you to everybody that attended our virtual meetings in 2020/2021! Similar to last year, our typical way of conducting ASHRAE business will be a bit different than previous years, and we will continue with Chapter meetings virtually on Go to Meeting until at least January but most likely will be all year. London and Windsor Chapters will alternate hosting meetings, combining members from both chapters. There are currently 7 meetings being planned for the 2021/2022 year. There will be a one-time fee of $30 to attend any or all the virtual meetings this year and a sign up form will be sent out shortly. Again this year, we will be taking advantage of the virtual meetings and booking many ASHRAE Distinguished Lecturer speakers.

We have an enthusiastic board of governors/committee chairs with lots of ideas for the year and we always have space for members wanting to join.

If you have any questions, please reach out to the ASHRAE London Chapter Board of Governors. You can also contact me directly at:
Kate Mayberry
c116@ashrae.net

We are looking forward to a successful year!

From your ASHRAE London Chapter BOG

A Word About Meeting Costs...

As there are no chapter meals that help contribute to the chapter operation and offset some meeting expenses, the chapter still needs some funds due to ongoing expenses such as bank charges, ASHRAE Region 2 dues on behalf of chapter members, and to contribute to ASHRAE Research. The low-cost fee of $30 will help the ASHRAE London Chapter and board members continue to provide services to the chapter members.

If there are any comments/concerns please reach out to any of the board members, we are happy to receive all feedback.
Professional Development
Need hours for your professional development requirements? Be sure to attend a chapter meeting. Professional Engineers Ontario requires members to have yearly professional development training recorded through the Practice Evaluation and Knowledge (PEAK) program. Other groups may also require continuing education.

Chapter Upcoming Meetings
Tuesday February 22 – Chapter Meeting
• Hosted by ASHRAE London

*** be sure to check web site for latest information ***
http://LondonCanada.AshraeChapters.org

Society Upcoming Meeting
June 25-29 – ASHRAE Annual Conference
• Hosted by ASHRAE Toronto
• For more information click here:
  https://www.ashrae.org/conferences/2022-annual-conference-toronto

Coronavirus COVID-19 Response Resources
ASHRAE has compiled a list of industry reviewed and recommended resources on COVID-19 guidelines and FAQ’s. Please follow the below link to access to these resources:

www.ashrae.org/covid19
ASHRAE Recognizes Outstanding Achievements of Members at the 2022 Winter Conference

ASHRAE recognized the outstanding achievements and contributions of members to the Society and the built environment industry during its 2022 Winter Conference in Las Vegas. “Congratulations to all of ASHRAE’s Honors and Awards recipients,” said 2021-22 ASHRAE President Mick Schwedler, P.E., Fellow ASHRAE, LEED AP. “Your service to the global built environment and our Society is appreciated.”

A list of some of the Canadian awards and recipients are:

**Fellow ASHRAE**

Fellow ASHRAE is a membership grade that recognizes members who have attained distinction and made substantial contributions in HVAC&R and the built environment such as education, research, engineering design and consultation, publications, presentations and mentoring. The Society elevated 25 members to the grade of Fellow:

- Robert Bean, President, Indoor Climate Consultants Inc., Calgary, Alberta, Canada
- Tim McGinn, P.Eng., HBDP, Principal, McGinn Technical Services, Calgary, Alberta, Canada

**Student Design Competition**

The 2021 Student Design Competition focused on a new 50,000 square foot building on a higher education campus in Prince George, British Columbia, Canada. The building included a two-story cafeteria, associated office, and commercial kitchen and storage space. The teams were tasked with providing safe and healthy storage of food materials on the lower level in a manner that prevents spoiling and the growth of bacteria, while providing enough kitchen/servery space and permanent seating to serve a peak occupancy of 720 students and a total of 3,000 students per day.

First place in the HVAC Design Calculations category was awarded to the University of British Columbia, Vancouver, British Columbia, Canada. Team members are Brandon Jung, Arin Lee, Lukengo Miguel, Kyle Vanderhorst and Taewoong (Jeff) Yoon.

**YEA Inspirational Leader Award**

Badri Patel, BEAP, received the YEA Inspirational Leader Award. The award recognizes a Young Engineer in ASHRAE (YEA) member who has gone above and beyond to make considerable contributions to the industry and community. Patel is commercial market account executive, Johnson Controls Canada, Toronto, Ontario, Canada.

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**ASHRAE LONDON – Call for Volunteers**

There are many volunteering opportunities within the London ASHRAE Chapter! The Chapter always welcomes new members who would like to get involved and assist the chapter in any way you are able. If this is of interest, please forward your name to any one of the board of governors. We are currently looking for someone who would be interested in helping organize the 2022 golf tournament as well as people for chair positions. Now is an excellent time to get involved to get a feel for how the organization works and to indicate interest for chair positions next year.

It is a great way to get involved in the industry and grow your professional network. We are a very enthusiastic group and like to keep things efficient and fun!
ASHRAE RESEARCH
Hello ASHRAE London Members,

My name is Raj Deenadayalan and I am your Chapter Research Promotion Chair for this year. Our Research Promotion goal for this year is $12,500 and look forward to reaching this goal through your continued support.

This year we will be recognizing donors at a RP Donor Recognition meeting by displaying individual and company donors prior to one of the technical presentations. Donors will also be recognized in the monthly newsletter and on the London Chapter website. To donate online please visit: http://www.ashrae.com/donate

Current Honour Roll Individual Donors:
Tom Pollard, Glenn Kernaghan, Jeff Armstrong, Rajarajan Deenadayalan, Richard Hammond, John Xiang, Ibrahim Semhat, Kathleen Mayberry, Christopher Zettler

Current Honour Roll Corporate Donors:

Current Corporate Major Donor Silver:

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If any questions, please contact:
Rajarajan Deenadayalan
519-453-9100
rdeenath@drennan.on.ca

ASHRAE's Building EQ Portal provides a quick energy analysis that benchmarks a building's energy performance. Building EQ assists in the preparation of an ASHRAE Level 1 Energy Audit to identify means to improve a building's energy performance including low-cost, no-cost energy efficiency measures and an Indoor Environmental Quality survey with recorded measurements to provide additional information to assess a building's performance.

Two different evaluations can be used independently to compare a candidate building to other similar buildings in the same climate zone or together for an assessment of a building's design potential compared to actual operation:

- **In Operation** compares actual building energy use based on metered energy information.
- **As Designed** compares potential energy use based on the building's physical characteristics and systems with standardized energy use simulation.

Learn more on how to access the portal, initiate a project, and begin a submission: https://www.ashrae.org/technical-resources/building-eq/building-eq-portal