AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS INC.
LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon Mar 21/2016

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Topic
Designing Displacement Ventilation

Speaker
ASHRAE Distinguished Lecturer
Dr Jerry Sipes, Ph.D., P.E.
Vice President of Engineering
Price Industries, Inc., Suwanee, GA

Course Credits
GBCI Approved | 1 CE Hour | 0920002729
AIA Approved | 1LU/HSW | SIPES02

Meeting - MONDAY MAR 21/2016
Membership Night

5:15pm - Social
6:15pm - Dinner
7:15pm - Speaker

ADVANCED PAYMENT BEFORE MEETING
by using PAYPAL
use the chapter web site to register and pay
http://LondonCanada.AshraeChapters.org

location:
Best Western Lamplighter Inn
591 Wellington Rd, London
President's Message

Greetings,

It feels as though we've made it to spring already. Let's hope the colder weather is past, although this winter has been much milder than the last two! That being said, it is time to start thinking about the golf season... You should have received an email regarding registration for our golf tournament this coming June. Please be sure to reserve your team today so that you don't miss out. Historically this tournament has always sold out! We are once again happy to welcome Brett Cleverdon as our special trick shot guest this year and we're looking forward to another great day out on the course.

The theme for our meeting this month is membership. We have a distinguished lecturer who will be joining us to speak on the topic of designing displacement ventilation. Dr Jerry Sipes has a vast amount of experience in this field and his biography is included elsewhere in the newsletter. Be sure to take a look. We look forward to welcoming Dr Sipes. Our meeting this month will take place at the Best Western Lamplighter on Wellington Road. Eric Shaw will be sharing a brief message with us in regards to ASHRAE membership during the business session. We would encourage anyone who has friends or colleagues with any interest in ASHRAE to invite them out to our meeting this month!

On April 21st, the chapter will be hosting a broadcast of the ASHRAE 2016 Webcast. This year we will be visiting the BMO Centre to enjoy a meal beforehand, the webcast and then a social hour of soccer on one of the indoor soccer fields. Please make sure to register for this event. It should be good time of networking and team building for the London Chapter! Further details will be made available in the coming weeks.

We look forward to seeing you at this month's chapter. If you have any questions related to ASHRAE in London, please don't hesitate to send us an email or give us a call and we will be happy to assist you. Thanks for your continued support of ASHRAE!

Regards,
Jordan Foster
Chapter President 2015/2016
ASHRAE London Canada Chapter

Upcoming Chapter Meetings

Thursday Apr 21/2016 - WEBCAST: Realistic Commercial Net Zero Building Design through Energy Conservation and Renewables
Monday Apr 25/2016 - Tour: Western University, Music Building
Monday June 4/2016 - Golf Tournament

Other Meetings
May 9 to 11, 2016 = HVAC Design: Level 1 - Essentials, Halifax, Nova Scotia
see the chapter web site for more information

June 25 to 29, 2016 = ASHRAE Annual Conference - St. Louis, MO
Register before rates increase on April 26. www.ashrae.org/stlouis.

Jan 28 to Feb 1, 2017 = ASHRAE Winter Conference - Las Vegas, NV

Join us at ASHRAE's 2016 Annual Conference
June 25-June 29
St. Louis, Missouri
www.ashrae.org/stlouis
SPEAKER
Jerry M. Sipes, Ph.D., P.E.
Vice President of Engineering
Price Industries, Inc., Suwanee, GA

Jerry Sipes is the Vice President of Engineering for Price Industries and a Professional Engineer with more than twenty years of experience in the HVAC field. He received his Ph.D. in Mechanical Engineering from Kansas State University in 1998, and is a registered professional in 2 states.

His technical areas of interest include heat transfer, fluid flow, human thermal comfort, HVAC and acoustics. The title of his Dissertation is "Analytical, Experimental and Numerical Analysis of Moisture Movement in Walls Exposed to Hot and Humid Climates."

Dr. Sipes is a Member of ASHRAE and a member of the USGBC Education Steering Committee. At ASHRAE, he is the vice chairman of ASHRAE Technical Committee 5.3 Room Air Distribution, member of Standard 195, chairman of Standard 200 Method of Testing for Chilled Beams, member of Standard 79, and past chairman of Standard 130 Methods of Testing for Rating Ducted Air Terminal Units. He is a past Chairman of the Air-Conditioning, Heating and Refrigeration Institute (AHRI) Air Control and Distribution Devices (ACDD) Section, the chairman of the AHRI ACDD and AHRI Chilled Beams engineering committees, vice chairman of the AHRI Chilled Beam Section, member of the AHRI Compliance Committee and is the chairman of the AHRI Standard 1240P Performance Rating of Active Chilled Beam Units.

He has presented at various worldwide conferences including most recently, ISHRAE and FEBRASA.

Coming Thu April 21/2016 - WEBCAST
Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox

Save the date for the April 21, 2016 ASHRAE Webcast - Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox. This webcast will feature industry experts who will define the importance of, and why we should strive for, net zero in the built environment. Viewers will be able to identify behaviors that create more effective ownership, design and construction teams, and will recognize the value of a collaborative process in building design and the impact on costs. With a strong emphasis on real-world applications, the program will also discuss the primary technical and financial challenges in achieving net zero buildings, and where this design approach can best be applied.

ASHRAE LONDON GOLF TOURNAMENT
Monday June 6/2016
Fire Rock GCC
10345 Oxbow Dr., Komoka

10:00am Registration and Social
11:00am BBQ Lunch

**** 11:30am Trick Show - Brett Cleverdon ****
12:00pm Golf
5:00pm Dinner and Banquet

HOLE IN ONE COMPETION - 11th Hole = $5,000

See chapter web site for flyer, registration form and Paypal links http://londoncanada.ashraechapters.org
February Chapter Meeting Highlights
A building tour of London District Energy was undertaken by chapter members. The
housing provides steam, chilled water and electrical todowntown customers including
City Hall, Convocation Centre and other commercial and residential buildings.

The members also enjoyed a large meal at the Budapest Restaurant.

STUDENT EVENTS
Aria Brands hosted a plant tour. We had a good turnout of students and we got to see
how residential and small commercial HRVs work and are manufactured.

ASHRAE Toronto Chapter has arranged for the 6th Annual Career Fair
Ryerson University - Kerr Hall Gymnasium, 379 Victoria Steet, Toronto
WED MARCH 9, 2016
see flyer in newsletter

HVAC Design Training www.ashrae.org/hvacdesign
2 Training Courses, 5 Days of Intense Instruction
see flyer in the newsletter

ASHRAE RESEARCH
The following have contributed to ASHRAE Research
Honor Roll level contributors will be listed in the ASHRAE Journal.

Individual Donors - $100+ (Honor Roll Level)
Tom Pollard
Ibrahim Semhat
Jordan Foster
Karl Gilroy
James Scudamore
Philip Cook
Khalid El-Kadri
John Freeman
Peter Golem
Scott Edmunds
Jerald Lavender
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Baymar Supply Limited
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Union Gas
Curney Mechanical

Corporate Donors - Up to $250
Trane Sales Agency London
Callidus Engineering
Palser Enterprises Ltd
Bayview Sheet Metal
EmCad Consulting Engineers
Linde Mechanical

Please assist ASHRAE Research and the London Canada reach it goal.

http://www.ashrae.org/contribute

Thank You to all the donors!
ASHREA London Canada
James Scudamore - RP Chair
Halifax HVAC Design Training
May 9 - 11, 2016

HVAC Design: Level I - Essentials training provides participants with instruction that accelerates their transformation into effective members of a design, construction or facilities maintenance team. Developed by industry-leading professionals selected by ASHRAE, the training provides attendees with the fundamentals and technical aspects of HVAC design. Attendees will gain practical skills and knowledge to design and maintain HVAC systems that can be put to immediate use.

In addition to gaining in-depth knowledge and understanding, attendees will receive real-world examples of HVAC systems based on the renovated ASHRAE Headquarters building. The training also teaches a systematic approach to guide a design team to a solution that optimally meets the client’s expectations. Engineered drawings of the ASHRAE Headquarters renovation will also be discussed so participants are exposed to plan reading and visual understanding of system design.

Registration Fees
(Register 30 days prior to training date, for Early Bird pricing)
Level I - Essentials
Early Bird $959
Standard $1009

Non-Mbr
Early Bird $1,214
Standard $1,264

Group 3+
$909

Fee Covers: Course admittance, course materials, publications, break refreshments, lunches, and reception.

Company Discount Fee: Enroll 3 or more participants from the same company at the same time and save.

Instructor
Joel Primeau, P.Eng., ASHRAE Member, HBDP, LEED®AP

Web Site
https://www.ashrae.org/education--certification/hvac-design-training/halifax-hvac-design-training-may-2016

ASHRAE LOGO HISTORY

A great article has been crafted by George Menzies about the evolution of the ASHRAE logos through the years. The article is posted on the Region 2 web site.

http://region2.ashraeregions.org

CONNECT-A-COLLEAGUE

Informing colleagues about ASHRAE takes less than 1 minute now with Connect-a-Colleague. During #MarchIntoMembership contest you could win a $500 American Express gift card when your colleagues join ASHRAE through your customized email referral. Connect-a-Colleague simply creates an automated email on your behalf and the more people you invite during the month of March, the more chances you have to win.

ASHRAE member referrals continue to be the top reason new members join. As an ASHRAE member, your referral is a very powerful tool that can benefit your colleagues, your Society, and the HVAC&R industry. Please take a minute to Connect-a-Colleague today.

Get started now: Connect-a-Colleague

For #MarchIntoMembership contest rules please visit: ashrae.org/connect

ASHRAE JOB BOARD

Having trouble finding the time to search through all of the available jobs on ASHRAE Job Board? Let ASHRAE do the work for you! Create a personal job alert and new jobs that match your search criteria will be emailed directly to you.

Our Job Alerts will: match jobs to your customized criteria; notify you when potential opportunities become available; allow you to focus on other career-building activities, such as networking

Sign up for job alerts today on ASHRAE Job Board and you will be notified as soon as the jobs you want are posted!
ASHRAE LONDON STUDENT AWARD
The chapter presents 2 awards each year at Western University. The most recent winner is Matthew Kyle, a fourth and final year student of Mechanical Engineering at Western.

ASHRAE Award - Year Three Mechanical and Materials Engineering 2015-2016

I would like to express my sincere thanks for supporting me as the recipient of the ASHRAE Award - Year Three Mechanical and Materials Engineering. Since beginning the HVAC I course at Western, I have become increasingly interested in the industry and have enjoyed attending the monthly ASHRAE events and getting to know some of the members.

It is an honour to be acknowledged for my efforts at school. This award has not only assisted me financially but it has given me a sense of pride and confidence in the path I have chosen and the work I have done in my engineering career.

As a student aspiring to become a Practising Engineer in the HVAC field, being recognized by a group of local London Engineers for my work towards this goal demonstrates to me that this goal is achievable and that I have succeeded in my efforts so far.

Sincerely,
Matthew Kyle

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New Course on Variable Refrigerant Flow Offered in ASHRAE Spring Online Courses

A new course, "Variable Refrigerant Flow System Design & Application," is one of 11 offerings in ASHRAE’s Spring Online Course series.

Variable refrigerant flow (VRF) systems are now being applied in a range of building types across North America. Benefits of VRF include zoning applications, variable capacity, distributed control, low operating sound, simultaneous heating and cooling, effective energy usage, quick installation, low ambient operation and low maintenance costs.

The course, which takes place May 16, provides non-manufacturer specific concepts of how to apply VRF systems to buildings. It will supplement the fundamental technology introduction presented in the 2012 ASHRAE Handbook, HVAC Systems and Equipment, offering the consulting engineers who already have a basic knowledge of VRF technology.

Eleven online professional development seminars focused on commissioning, environmental quality, energy efficiency, HVAC applications, and standards and guidelines are being offered this fall by the ASHRAE Learning Institute (ALI).

Participants can access these instructor-led courses from anywhere with an Internet connection, and earn continuing education units/professional development hours for each course completed.

ALI courses provide professional development through in-depth information that is timely, practical and advanced beyond a fundamental level. Online courses are offered every spring and fall.

For pricing or to register, visit www.ashrae.org/onlinecourses. The courses offered this fall cover a variety of topics relevant to today’s built environment, including:

Commissioning
  Commissioning Process & Standard 202, March 30

Energy Efficiency
  IT Equipment Design Evolution & Data Center Operation Optimization, April 6

HVAC Applications
  Air-to-Air Energy Recovery Applications: Best Practices, April 27
  Laboratory Design: The Basics and Beyond, April 18
  Operation & Maintenance of High-Performance Buildings, May 17 and 18
  Variable Refrigerant Flow System Design & Applications, May 16

Standards & Guidelines
  ASHRAE Standard 188-2015 – Successfully Managing the Risk of Legionellosis, April 25
  Complying with Standard 90.1-2013; HVAC/Mechanical, April 13
  Exceeding Standard 90.1-2013 to Meet LEED®, April 11 and 20
  Fundamental Requirements of Standard 62.1-2013, May 2
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Fundamental Requirements of Standard 62.1-2013, May 2

ASHRAE Announces Call for Programs and Papers for Conferences
A call for programs has been announced for ASHRAE’s 2016 Annual Conference, June 25-29, St. Louis, Mo.


To see more, visit www.ashrae.org

New ASHRAE Application Automates Compliance Calculations for Standard 90.1-2010
ATLANTA – A new web application from ASHRAE automates the calculations needed to show a building project’s compliance with Standard 90.1-2010. The 90.1 ECB web application is a tool for modeling compliance with ANSI/ASHRAE/IES 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, using the Energy Cost Budget (ECB) method in the standard.

The application allows users to input project parameters and then calculate the proposed design’s projected performance and compliance, with the results exportable in a workable spreadsheet for project use,” Drake Erbe, chair of the Standard 90.1 committee, said.

The application is accessible from desktop, tablet or other device. It allows users to store project information in one place for easy reference and comparison.

The app is free of charge to users. To learn more, visit 901ECB.ashrae.org.
App, App and Away! Enter the ASHRAE App Contest!

As a means of generating app solutions for its membership and the HVAC&R industry, ASHRAE is sponsoring an app development contest.

If you have a beta version, recently released working version or an idea or for a mobile device app that meets a building technology or industrial application design or operations need, ASHRAE is interested.

ASHRAE is inviting submissions from current or “wanna-be” app developers. A committee of ASHRAE volunteers will judge the entries, awarding a maximum of two $5,000 honorariums to selected developers for their respective apps and prime display on the ASHRAE website and at ASHRAE conferences.

In addition, up to 5 additional apps can be selected by the judges for non-branded promotion by ASHRAE as a service to the industry.

Entry Rules:
- The submission must be a working app designed for use on a mobile device.
- If the app is already commercially available, it must have an initial release date of not earlier than January 1, 2016.
- If the app is not yet commercially available, it must be ready for deployment at time of submission to ASHRAE.
- No apps will be considered by ASHRAE if pricing is greater than US $19.99.
- The app can be for iOS, Android, or Windows devices.
- The app must be based on or use ASHRAE content from a current ASHRAE Standard or current ASHRAE Handbook volume.
- The app must be free of advertising except to cite the app’s developer.
- The app developer may be a practitioner, research or academic institution, agency, or supplier of goods and services to the industry.
- ASHRAE will not be responsible for any portion of development cost.
- Developers of selected apps must agree to include within the app ASHRAE’s license agreement for use of data and disclaimer of warranties.

Submissions must be made prior to June 1, 2016, and only the first 30 entries will be considered.

Visit https://www.ashrae.org/appcontest for complete rules and for the link where you can make your submission.

Please note this is not a contest for ASHRAE committees but one for individual ASHRAE members or for nonmembers. This is also a trial program. ASHRAE may choose to not select from any of the submissions. Once the number of qualified submissions reaches 30, no additional entries will be accepted.

ASHRAE Funds 24 Undergraduate Projects: Aerial Vehicle for Energy Audits

ATLANTA – Engineers will get a bird’s eye view of the energy use of building envelopes under a project funded through an ASHRAE Undergraduate Senior Project Grant. This year, 24 schools from around the world were awarded grants. The grants, totaling some $110,000, are awarded by ASHRAE to colleges and universities worldwide to promote the study and teaching of HVAC&R, encouraging senior undergraduate students to pursue related careers.

The grants are used to design and construct projects, such as The University of Alabama’s proposal to use an unmanned aerial vehicle to document building energy audits. The project notes that while building audits are a key process for determining building efficiency, performance and faults, audits require knowledge of the internal building and energy system and the external building envelope, which can present a challenge.

“The vehicle would be used to quantify envelope characteristics of hard-to-reach and large regions on modern buildings,” Zheng O’Neill, Ph.D., of the Mechanical Engineering Department and advisor of the project, said. “The information will provide engineers with systematically measured control volume characteristics. For example, infrared thermal camera data will provide information of building envelope temperature, which can be used for building infiltration diagnostics.”

She will work with Charles O’Neill of the Aerospace Engineering and Mechanics Department for the vehicle development and flight tests.

The goal of the project is to build a co-robot (human controlled with robotic assistance) quadcopter with onboard sensors including infrared temperature camera, visible light camera, heat flux sensors, direct temperature probes and location and orientation.

Other ASHRAE grant recipients include:

- University of Windsor (Ontario), A Novel Membrane Absorption Heat Pump
- Carleton University, Ottawa, Ontario, Evaluation of Office-Level Energy Consumption Using a Sparse Sensor Network

For more information on the grant program, visit www.ashrae.org/grants. ASHRAE will begin accepting applications for the 2016-17 program in August 2016, with a December 2016 final deadline.