AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS INC.

LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon Jan 18/2016

Topic

Heat Transfer Methods

Speaker

David Ladoucer
Delta T Heat Exchangers

Special Guests:
Mark Lawrence (Region 2 RVC Membership)
John Bisset (Founding London Chapter Secretary)

Meeting - MONDAY JAN 18/2016

Past President Night
and Student Night

5:15 pm 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:

IVEY SPENCER LEADERSHIO CENTRE
551 Windermere Rd., London

President's Message

Greetings,

On behalf of the ASHRAE London Chapter Board of Governors, we would like to wish you a Happy New Year. As we usually do the January meeting this year will be a week early on January 18th. This is to avoid a conflict with the ASHRAE Winter Conference and AHR Expo in Orlando, Florida. See the attached brochure which gives the dates and details of the conference. Our meeting this month will be a student night and will be combined with a past president's night. The meeting will be held at Ivey Spencer Leadership Centre. We are already expecting a number of past presidents to be in attendance but I would like to encourage everyone to invite any of the past presidents of the Chapter you know. This will be both a great opportunity to recognize their contributions and have them share their experiences with the students who will be attending.

We welcome David LaDoucer from Delta T Heat Exchangers as our speaker this month. He will be presenting to us on "Heat Transfer Methods". In addition, we will have a short presentation from both our Chapter founding vice-president, John Bisset and the RVC of membership for Region II, Mark Lawrence.

I look forward to seeing you at the Chapter Meeting this month and I hope that we have a good turnout for the meeting. Thank you for your continued support!

As a primer for the February meeting, we will be heading to the London District Energy facility for a tour and will be gathering a restaurant nearby for a meal after the tour. There will be no formal program other than a short business session. Please save the date, February 29th.

All the best,
I look forward to seeing you at the chapter meeting, if not sooner.

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

Upcoming Chapter Meetings

Monday Jan 18/2016 - Heat Transfer Methods, David LaDoucer, Delta T Heat Exchangers
Monday Feb 29/2016 - Tech Tour, London District Energy
Monday Mar 21/2016 - Designing Displacement Ventilation
ASHRAE Distinguished Lecture, Dr Jerry Sipes, Ph.D., P.E.
GBCI Approved | 1 CE Hour | 0920002729
AIA Approved|1LU/HSW|SIPES02
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

Jan 23 to 27, 2016 = ASHRAE Winter Conference - Orlando, FL
Jan 25 to 27, 2016 = AHR Expo, Orange County Convention Center, Orlando, FL
March 16 to 18, 2016 = CMPX - Canadian Mechanical & Plumbing Exposition
www.cmpxshow.ca
June 25 to 29, 2016 = ASHRAE Annual Conference - St. Louis, MO

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

SPEAKER

David LaDoucer
Delta T Heat Exchangers

David LaDouceur is the owner of Delta T Heat Exchangers. He began his heat transfer career 28 years ago as an estimator and thermal designer before moving into a sales manager, engineering manager and helping to establish Delta T Heat Exchangers in 1998. Mr. LaDouceur is a graduate of St. Clair College's "Energy Management" program in 1987.

TOPIC

Heat Transfer Methods

Discussions will involve
- plate and frame heat exchangers
- shell & tube heat exchangers
- and heat recovery heat exchanger heat exchangers

ASHRAE London Canada - Historical Item

The idea of forming a Chapter of ASHRAE in London, Ontario, Canada had been in the minds of a number of people for some time. However, it was not until the Fall of 1970 when, over a longer than usual lunch, Jack Vanstone and Cliff Morrison started to firm up a definite proposal. As Cliff Morrison recounts, the longer the lunch lasted, the better ASHRAE looked. As a result of this meeting and other meetings held with other interested parties, including John Bisset and Russ Gender, a formal meeting to organize the proposed Chapter was held at M. M. Dillon's Boardroom on Jan 19, 1971.

The first Chapter dinner meeting held on Feb 16,I971 at the Highland Golf and Country Club was successful as 22 people attended and took part in budget discussions, requirements for forming a Chapter, and how to join the Society. There were only nine ASHRAE members in the London area at the time. Society admission fees were $12.50, annual dues $27.50, and reduced rates were offered to those under 30 years of $7.50 and $17.50 respectively.

The first regular meeting of the proposed London Chapter was on March 2, 1971 at Sunnlngdale Country Club. 54 people attended, including 18 from the Hamilton Chapter. Guest speaker was Region ll Membership Chairman, Wilf Woodcock, subject: ASHRAE Organization and the Organization's Relationship to the HVAC industry. Hamilton Chapter President, Frank Smith, also spoke on Chapter Operation.

A regular meeting of the proposed London Canada Chapter took place on April 13, 1971 at the Highland Country Club and was attended by 41 people, all from the London area. Wiif Lamb, Architect, was the guest speaker, with a look at the future of the City of London, Ontario, titled 'London 2000'.

The final regular meeting of the 1970-71 season was June 8, 1971 at the Highland Country Club. The guest speaker was Professor David Kuechle, The University of Western Ontario, Business School. Subject: Labour Relations

2016 Winter Conference Registration NOW Open!

Register for the 2016 Winter Conference in Orlando, Florida. Members only pay $395 through November 2, 2015. Download our Sample Letter requesting employer support to attend the 2016 ASHRAE Winter Conference.

Learn more about the conference and registration details on the Society web site

Coming April 2016 - 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.

Business Card Ads
Place your business card HERE
contact:
Tom Pollard
<tpollard@execulink.com>
or
Phil Cook
<pcook@ehprice.com>

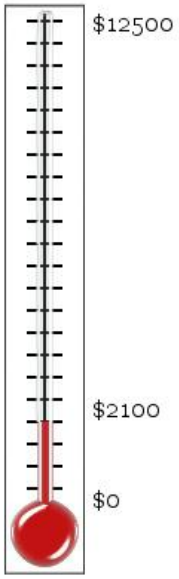
ASHRAE RESEARCH

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

Corporate Donors - $250+ (Honor Roll Level)
Baymar Supply Limited
Drennan Refrigeration Incorporated
Mechanical Contractors Association of London

Corporate Donors - Up to $250
Trane Sales Agency London
Callidus Engineering
Palser Enterprises Ltd
Bayview Sheet Metal



Chapter Goal $12,500

Current Research contributions $2,100

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

http://www.ashrae.org/contribute

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	Mbr	Non-Mbr	Group 3+
Early Bird	$959	$1,214	
Standard	$1009	$1,264	$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

Be sure to look at the SOCIETY web site for the latest conference information

New ASHRAE Guideline Focuses on Optimum Facility and System Operation
ATLANTA – Helping commissioning providers ensure optimized operation of their facilities and systems is the focus of a newly published guideline from ASHRAE. ASHRAE Guideline 0.2-2015, Commissioning Process for Existing Building Systems and Assemblies, outlines a systematic quality-oriented process that improves the performance and sustainability of existing facilities. This roadmap includes planning, assessing, investigating, implementing, verifying and documenting performance to meet operational requirements.

"Guideline 0.2 provides commissioning providers with the latest tools needed to address the growing market of commissioning existing buildings that require improvements to reduce energy consumption, improve occupant comfort and increase operational efficiency," Tom Cappellin, vice chair of the committee that wrote the guideline, said. The step-by-step process guides owners and facility managers through the process of ensuring optimum effectiveness from their facility for the lowest investment and provides the tools to ensure those benefits last for the life of the building. Guideline 0.2 is intended for use by owners, facility decision makers and commissioning providers who are seeking to achieve goals as identified in the owner's "current facility requirements." It expands on the commissioning principles developed in ASHRAE Guideline 0. Guideline 0.2 includes 10 sections that explain recommended steps to apply the existing building commissioning process, as well as 23 informative annexes that explain how the process steps can be organized into a comprehensive set of activities and commissioning documents. The annexes include flow charts, costs/benefits information, RFQ and team selection information, and guidance on preparing various commissioning reports. Many of the annexes include links to example documents prepared for actual projects.

Other commissioning guidance from ASHRAE includes Guideline 0-2005, The Commissioning Process; Guideline 1.1-2007, HVAC&R Technical Requirements for the Commissioning Process; and Guideline 1.5-2012, The Commissioning Process for Smoke Control Systems; and Standard 202-2013, Commissioning Process for Buildings and Systems. ASHRAE also is working on several other guidelines related to commissioning: Guideline 1.2P, The Commissioning Process for Existing HVAC&R Systems; Guideline 1.3P, Building Operation and Maintenance Training for the HVAC&R Commissioning Process; and Guideline 1.4P, Procedures for Preparing Facility Systems Manuals.

The cost of ASHRAE Guideline 0.2-2015, Commissioning Processes for Existing System and Assemblies, is $72 ($61, ASHRAE members). To order, visit www.ashrae.org/bookstore or contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide) or fax 678-539-2129.

Guidance on Low GWP Refrigerants Presented at ASHRAE Winter Conference

ATLANTA –As climate change talks in Paris conclude with signing of a historic agreement, countries with high ambient temperature characteristics are looking ahead to next-generation low global warming potential (GWP) refrigerants, which take into account environmental impact, performance, safety and costs. Such countries with high dependency on refrigeration and air-conditioning applications are mainly located in the Middle East and particularly in the Gulf region. Those countries have traditionally been recipients of globally proven refrigeration technologies.

“This trend is witnessing a change lately with movement of regional industry to enhance its research and selection capacities but it remains framed with what is commercially available worldwide in terms of the raw materials,” Walid Chakroun said.

The challenges of hot countries in finding refrigerant alternatives for the widely used HCFC-22 in residential air-conditioning will be discussed in a seminar chaired by Chakroun at the ASHRAE 2016 Winter Conference, which takes place Jan. 23-27, Orlando, Fla. The ASHRAE co-sponsored AHR Expo is being held Jan. 25-27, next door at the Orange County Convention Center. To register for the ASHRAE Conference, which includes free access to the Expo, visit www.ashrae.org/orlando. The Technical Program features eight tracks, some 100 sessions and more than 300 speakers. It runs Sunday, Jan. 24, through Wednesday, Jan. 27, and offers over 200 Professional Development Hours, as well as Continuing Education Units, which can be applied toward a Professional Engineering license in many states, including the state of Florida.

The seminar, “Evaluating Low-GWP Refrigerants for Air-Conditioning Industry in High Ambient Temperature Countries,” is sponsored by the United Nations Environmental Programme (UNEP) and the United Nations Industrial Development Organization (UNIDO).

Chakroun, who serves as ASHRAE’s representative to UNEP, noted that most of governments in the region have started to apply new energy efficiency requirements for air-conditioning equipment. Known as Minimum Energy Performance Standards (MEPS), these standards will certainly have impact on the choice of refrigerant as well as design and operating characteristics of air-conditioning units. Meeting those conditions for high-ambient climates is another challenge for countries with air conditioning consuming 50 to 60 percent of their domestic power supply, according to Chakroun.

As a response to the above issues, UNEP and UNIDO designed and launched a regional project, known as PRAHA, for assessing the feasibility of low-GWP alternatives. The project aims to practically assess next-generation low-GWP refrigerants taking into account energy efficiency, environmental impact, performance, safety and cost.

The project involves partnerships of 13 international/regional technology providers and equipment manufacturers, seeking to independently assess and evaluate the techno-economic feasibility of low-GWP refrigerants in comparison with existing commercially available refrigerants, such as HCFCs and HFCs for different domestic and medium size commercial air-conditioning applications.

Speakers will discuss the outcome of these tests and a comparison of the results, which by no means endorse any of the tested refrigerants, but shed light on possible workable refrigerant alternatives for high ambient operation, Chakroun said. Other aspects of the project deal with economics, technology transfer and the challenges to deploy low-GWP alternatives, including recommendations of further required investigation.

Additional sessions at the ASHRAE Winter Conference that address low GWP include:

- Refrigerant Advances
- Evaluating Low-GWP Refrigerants for Air-Conditioning Industry in High Ambient Temperature Countries
- Making the Commercialization of Low-GWP Refrigerants a Reality
- Highlights from the 24th IIR International Congress of Refrigeration
- Improving the Efficiency of Low-GWP Commercial Refrigeration Systems
- Compression Challenges for Low-GWP Refrigerants
- Trending Research and Advances in Simulation

2016 CMPX Online Registration is Now Open!

Book your travel today

Registration is now open for CMPX 2016, Canada's national show for the HVACR and Plumbing industries - doors open March 16, 2016 for 3 exciting days!

It’s the biggest HVACR and Plumbing show in Canada. Over 500 exhibitors will completely fill the 200,000 square foot Metro Toronto Convention Centre, North Building with an un-equaled display of New Products and the latest technology for every area of the HVACR and Plumbing industries.

http://www.cmpxshow.com/

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- Trending Research and Advances in Simulation

ASHRAE Announces Call for Programs for 2016 Annual Conference

ATLANTA – A call for programs has been announced for ASHRAE’s 2016 Annual Conference, June 25-29, St. Louis, Mo.

“A new ‘Smart Building Systems’ track for this conference addresses the revolution in information technology applied to the built environment,” Tom Kuehn, Conference Program chair, said. “Weather and time of day utility rate forecasting, distributed sensors and remote monitoring and control are all included in the track. Topics key to personal success are included in the “Professional Skills Beyond Engineering’ track. Programs describing advances in refrigeration technology are given special emphasis and other tracks cover more conventional topics.”

Programs are sought for the following tracks: Advances in Refrigeration Systems and Alternative Refrigerants; Fundamentals and Applications; HVAC Systems and Equipment; Smart Building Systems/Remote Monitoring and Diagnostics; Indoor Environment: Health, Comfort, Productivity; Professional Skills Beyond Engineering; and Renewable Energy Systems and Net Zero Buildings. Programs are also sought for the fourth annual Research Summit, which reports results on any aspect of ASHRAE-related research. In addition, programs focusing on practical applications and utilizing case studies are requested. Programs are requested for the following program types: Seminars, which include 1-4 presentations on a similar topic; Workshops, which allow equal time for 1-2 presentations and discussion; and Forums, which are discussion-based sessions with no presentations. A call for programs (non-paper based presentations) is now open through Feb. 8, 2016. To submit a proposal or for more information, go to www.ashrae.org/Stlouis.

The ASHRAE 2016 Annual Conference will take place at the America’s Center Convention Complex and Renaissance St. Louis Grand Hotel. The event will attract some 2,500 conference attendees and meeting participants.

ASHRAE Learning Institute

Seminars & Courses at ASHRAE's Winter Conference in Orlando, FL

2 WAYS TO REGISTER

Internet: www.ashrae.org/orlandocourses
Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Full-Day Professional Development Seminars

$485/$395 ASHRAE Member -- Earn 6 PDHs/AIA LUs or .6 CEUs

Commercial Building Energy Audits
Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m.

Commissioning Process in New & Existing Buildings
Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m.

Designing HVAC Systems to Control Noise & Vibrations
Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m.

Energy Modeling Best Practices and Applications
Tuesday, January 26, 2016 – 9:00 a.m. to 4:00 p.m.

Operations & Maintenance of High-Performance Buildings
Tuesday, January 26, 2016 – 9:00 a.m. to 4:00 p.m.

Half-Day Short Courses

$159/$119 ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

Laboratory Design: The Basics and Beyond
Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

Troubleshooting Humidity Control Problems
Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

Understanding & Designing Dedicated Outdoor Air Systems
Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

Variable Refrigerant Flow System Design & Applications NEW!
Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

Air-to-Air Energy Recovery Applications: Best Practices
Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

Applications of Standard 62.1-2013
Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

Building Demand Response & the Coming Smart Grid
Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

Energy Management Best Practices
Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

Advoiding IAQ Problems
Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

Commissioning Process & ASHRAE Standard 202
Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

Complying with Standard 90.1-2013: HVAC/Mechanical
Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

Evaluation and Control of Legionella in Building Water Systems NEW!
Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

Exceeding Standard 90.1-2013 to Meet LEED Requirements
Monday, January 26, 2016 – 9:00 a.m. to 12:00 p.m.

IT Equipment Design Evolution & Data Center Operation Optimization
Monday, January 26, 2016 – 9:00 a.m. to 12:00 p.m.

Designing High-Performance Healthcare HVAC
Monday, January 26, 2016 – 1:00 p.m. to 4:00 p.m.

ASHRAE HVAC Design Training

2 Courses, 5 Days of Intense Instruction

Atlanta • Halifax • Hong Kong • Houston • Kuala Lumpur
Miami • Minneapolis • San Francisco • Vancouver

HVAC Design: Level I – Essentials - Registration is $1,264 ($1,009 ASHRAE Member)

Gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

HVAC Design: Level II – Applications - Registration is $854 ($699 ASHRAE Member)

HVAC Design: Level II — Applications provides instruction on HVAC system design for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. The training provides information that allows practicing engineers and designers an opportunity to expand their exposure to HVAC systems design procedures for a better understanding of system options to save energy.

Visit www.ashrae.org/hvactraining to register.