



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

LONDON CANADA CHAPTER #116

<http://LondonCanada.AshraeChapters.org>

Mon Jan 18/2010

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PAST PRESIDENT'S NIGHT

Meeting - Mon Jan 18/2010

History & Membership Night

6:30pm-Dinner

The Lamplighter Inn

591 Wellington Rd., London

\$40.00 for London Chapter dues paid members

\$15.00 for Students with valid student card

\$50.00 for others

ROAST BEEF DINNER





President's Message:

2010 is now upon us... Hopefully the holiday was an enjoyable time for you all, and everyone is now hard at work in keeping their New Year's Resolutions alive.

Our meeting this month comes a week early as the ASHRAE Winter Meeting in Orlando starts the following week in the sunny south.

This month's meeting looks to be a very special evening... Our first Past President's Night for the ASHRAE London Chapter – Being held at the Lamplighter Inn on Wellington Road. The menu has been changed to suit the special occasion, and the meeting room will change up to accommodate the larger group.

We are expecting many of the past presidents to be in attendance – even a few from far away have indicated an interest in attending.

We have asked a few of the honoured guests to take a few minutes to address the group and talk of their memories and involvement while serving as president with the London Chapter. Anyone wishing an opportunity to take a turn at the podium for a few minutes to further enlighten the group should contact Jason Vandenberghe or myself.

There will be no formal speaker or presentation – just a lot of reminiscing by the group about years past, present, and maybe even a little of the future.

The success of the ASHRAE London Chapter is primarily due to the effort put forth by the chapter members and guests, our special guest speakers, and the Board of Governors in bringing everyone together to share their experiences and ideas with each other.

Please help to make our Past President's Night a success by attending and contributing to the evening's festivities.

We look forward to seeing you out next Monday night... Do not miss it!

Eric Shaw
President
ASHRAE London Canada Chapter

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London ASHRAE Chapter Past President's Night

We are very excited about our upcoming Past Presidents Night on Monday January 18th. We have been able to confirm almost 22-24 of our chapters Past Presidents. I have also heard back from a lot of our current members who said they will be attending so it looks like we will a very large crowd which is great to see!

As mentioned in our letter we will be having some of our past presidents speak and so far confirmed are John Bisset, Brenda Stonehouse and waiting for confirmation on two others.

Please send me an email to confirm that you will be attending.
We look forward seeing everyone next Monday.

Jason Vandenberghe
VP and CTTC Chair
ASHRAE London Canada Chapter

PAST PRESIDENT'S LIST

| | |
|---------------------|------------------------|
| Jack Vanstone | Cliff Morrison |
| * John Bisset | * Russ A. Gonder |
| Jack Henderson | Wayne Barker |
| John J. Payne | * Bill Mitchell |
| * Chuck Sharpe | * William Rutherford |
| Richard Palser | Walter Lucas |
| * Ronald Granger | * Donald M. R. Johnson |
| John Kenney | * Peter Golem |
| Charles Clemence | Greg James |
| * Tom Brennan | Darryl Boyce |
| * Owen Glenden | Peter Ziebart |
| Kirk Flowers | Grant Hillard |
| * Brenda Stonehouse | * Norm Clarke |
| * Dennis Dawe | * Daryl Somers |
| * Tom Pollard | * Derek Vakaras |
| * Joe Claessens | * Scott Turner |
| * Scott Edmunds | * Eric Shaw |

* is planning on attending the Jan 18/2010 meeting



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Previous Meeting Summary

The November meeting and tour was a great success... The event began with a guided tour of The Claudette MacKay-Lassonde Pavilion, or Mechanical Engineering "Green Building" at the University of Western Ontario.

Our tour guide was Mike Dejager, a Project Manager with the UWO Facilities Engineering, Physical Plant & Capital Planning Services Department.

We were divided into two groups to facilitate the number of attendees, and make the space less crowded. The tour covered the many different aspects of the building that help to make it an energy efficient model that helps it qualify as a LEED structure.

The tour was followed by a well prepared dinner at the Windermere Manor, and our speaker – John Goshulak – Vice President of Sales and Marketing for Weil-McLean Canada spoke on The Future of Hydronics in Canada.

Overall, the evening was a success, with a number of UWO Engineering students in attendance – we hope to return to The Windermere Manor for another dinner meeting soon.

Next Meeting - Mon Feb 22/2010

Topic: HYBRID RADIANT HEATING
Speaker: Dale Hanscombe - Rehau Company
Location: Windermere Manor, UWO Research Park

Also

ASHRAE will hold its 2010 Winter Conference, Jan. 23-27 in Orlando
accompanied by the AHR Expo, Jan. 25-27

ASHRAE WEBCAST

April 21, 2010 – 1:00 p.m. – 4:00 p.m. EDT

“Right from the Start – Commissioning for High Performing Buildings”

ASHRAE's Chapter Technology Transfer Committee with support from ASHRAE's High Performing Buildings Magazine, will present a free Webcast, "Right from the Start – Commissioning for High Performing Buildings," on Wednesday, April 21, 2010.

www.ashrae.org/CxWebcast



**ASHRAE Design Competition Gives Students Hands-On Experience in Practical Design**

ATLANTA—The 2009 ASHRAE Student Design Competition, which encourages students to become more involved with their chosen major through practical design, saw the largest number of entries to date.

This year's Student Design Competition featured a 15,650-square-foot office building with first floor parking, second floor retail and office space and third floor offices. Among the 32 schools that submitted entries, three in particular stood out as first place winners in the three categories that the Competition offers.

First place in HVAC System Design is awarded to Craig Allen, Brian Sybesma, Chan Kim, William Raschefskey and Elyse Widin, of California Polytechnic State University, San Luis Obispo, Ca. Their faculty advisor is Jesse Maddren, Ph.D. The students chose a ground-source heat pump with an energy recovery ventilation system for the building, citing the benefits of a GSHP's minimal energy use and long life-span.

"The primary driving factors for the GSHP system were its low life cycle cost and minimal energy consumption," the students wrote. "Combining GSHPs with an energy recovery ventilator reduces the size of the equipment needed, thus lowering the strain on natural resources and keeping energy costs low," they added.

First place in HVAC System Selection is awarded to Kelly Griffith, James Newman, Phillip Podlasek and Darren Rottinghaus, of Kansas State University, Manhattan, Kan. Their faculty advisors are Fred Hasler, P.E. and Julia Keen, P.E.

The students also selected a ground-source heat pump, with each heat pump piped in a direct return loop, rather than reverse return, in order to save on the amount of piping used. The GSHP also utilizes variable frequency drives to control the hydronic pump, which would decrease the energy consumption of said pumps.

"The option is the most efficient and has the lowest environmental impact throughout the life of the building," the students wrote. "The [building] owner will be very pleased because of the system's highly green design and the number of LEED points that can be achieved through its design."

Perhaps this year's large number of entries was due in part to the new Integrated Sustainable Building Design (ISBD) category, which encouraged collaboration between engineering and architectural students. Students who chose to participate in the ISBD category were asked to redesign the office building to their own local climate, with the ultimate goal being a zero-energy building.

First place in ISBD is awarded to Troy White, Edward Wood, Jaime Gonsalves and Ivan Fernandes of Seneca College of Applied Arts and Technology, Toronto, Ontario, Canada. Their advisor is Filimon Tsionas

The students designed an office building that would be made up of 5 percent recycled materials collected from abandoned buildings on the construction site. A solar wall, curtain windows and chilled beams would be utilized for heating and cooling. The building would also feature an open concept atrium, acting as a solar chimney to reduce the number of ducts necessary, and in turn the number of fans and energy needed to power them. Grey water collected in a green roof would be used in sinks, toilets and irrigation of landscaping.

"The design group feels that the product of this design problem has been greatly influenced by the solution methodology and the end product exceeds that of a more conventional approach," the students wrote of their collaborative experience. A representative from each winning team will be presented with their awards at ASHRAE's 2010 Winter Conference, to be held in Orlando, Fla.

Role of HVAC&R Systems in Infectious Disease Transmission Addressed by ASHRAE

ATLANTA—As health and school officials deal with a second wave of the H1N1 virus, commonly referred to as swine flu, new information is available on health consequences of exposure to such airborne infectious diseases and the implications on the design, installation and operation of HVAC&R systems.

"While the long-standing public health view is that influenza transmission occurs through direct contact or large droplets, newer data suggests it also occurs through the airborne route, meaning HVAC&R systems may contribute far more to transmission of the disease and, potentially, to reduction of that same transmission risk," said Gordon Holness, president of the American Society of Heating, Refrigerating and Air-Conditioning Engineering (ASHRAE) that developed the guidance.

ASHRAE's Airborne Infectious Diseases Position Document addresses the impact of ventilation on disease transmission, the disease for which ventilation is important for either transmission or control and the control strategies that are available for implementation in buildings. The paper can be read at www.ashrae.org/positiondocuments.

Since the first reported case in the spring of 2009, the H1N1 virus has spread to nearly 170 countries, resulting in 1,154 deaths and some 160,000 illnesses. With a better understanding of ventilation's effect on the transmission of disease, future incidents of the H1N1 virus may now be easier to prevent, according to Holness. He said several technical solutions are available to assist in avoiding transmission. These include: dilution ventilation, airflow strategies, room pressurization, personalized ventilation, source control, filtration and ultraviolet germicidal irradiation.

Airborne transmission through building ventilation systems can be significantly reduced by provision of adequate air filtration and pressurization, Holness said. ASHRAE's other guidance of relevance includes Standard 170, Ventilation of Health Care Facilities, and Standard 611, Air Quality Within Commercial Aircraft.

**ASHRAE Provides Opportunity for Continuing Education**

ATLANTA—In keeping with ASHRAE's goal of continuing education, the Society will once again offer fall online seminars.

These online, instructor-led seminars will run from late September through early November and are available to those interested in expanding their knowledge of the HVAC industry and keeping up to date with the latest technology and their applications. Many popular courses will be offered, several of which will include updated material. The courses will cover a broad range of topics, including:

- Understanding & Designing Dedicated Outdoor Air Systems (DOAS)
- The Commissioning Process & Guideline 0
- Complying with Standard 90.1-2007 HVAC/Mechanical
- Introduction to Green Buildings and Sustainable Construction
- Complying with Standard 90.1-2007 Envelope/Lighting
- The Basics of Radiant Panel Heating & Cooling*
- Using Standard 90.1-2007 to Meet LEED Requirements
- Chilled Beam Technology for Excellent Indoor Climate in an Energy Efficient Manner
- Complying with Requirements of ASHRAE Standard 62.1-2007
- Energy Management in Existing Buildings*
- Humidity Controls: Basic Principles Loads & Equipment
- Humidity Controls: Application, Control Levels & Mold Avoidance
- The Basics of a Proposed Standard on High Performance Green Buildings (Standard 189.1)

*Indicates updated course material.

The three-hour-long courses are taught in real-time, from 1 p.m. to 4 p.m. EDT, and feature interactive audio. Either three professional development hours or American Institute of Architects learning units or 0.3 continuing education units are available for each course.

A full list of courses and registration information can be found at www.ashrae.org/onlinecourses.

Looking for Guidance on Standard 189.1? Visit www.ashrae.org/greenstandard

ATLANTA – As publication of the nation's first code-intended high-performance green building standard draws nearer, a Webpage providing the detailed information about the standard, including a draft copy of the document, has been launched.

Proposed Standard 189.1, Standard for the Design of High Performance, Green Buildings Except Low-Rise Residential Buildings, moved one step closer to publication in December. It was approved for publication by the Boards of Directors of ASHRAE, IES and USGBC, the three groups that are partnering in its development. ASHRAE is going through the final stages of the American National Standards Institute consensus development process and is hopeful the standard will be available in January.

"Given that this standard will set the foundation for green building codes, it is vital that the building industry is familiar with its requirements," Kent Peterson, chair of the Standard 189.1 committee, said. "ASHRAE, USGBC and IES recognize the potential of this standard to change the marketplace and are working to educate the industry. Given its impact, we also are working to make the standard available as quickly as possible."

www.ashrae.org/greenstandard serves as a one-stop resource for information on Proposed Standard 189.1, Standard for the Design of High Performance, Green Buildings Except Low-Rise Residential Buildings. The page contains an easily readable version of the standard, along with more information on the areas addressed by the standard and other resources for high-performance building.

Proposed Standard 189.1 is being developed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) in conjunction with the Illuminating Engineering Society of North America (IES) and the U.S. Green Building Council (USGBC). The standard, slated to be the first code-intended commercial green building standard in the United States, is expected to be published in early 2010

ASHRAE Conference Goes Virtual

ATLANTA—ASHRAE's Winter Conferences provide members and professionals in the HVAC&R industry with technical guidance, networking opportunities and access to the latest technology. For 2010, the Society will continue in this tradition with an additional new twist: The Conference is going virtual.

The Virtual Conference extends access to advances in the HVAC&R industry to professionals across the country and around the world. Participants in the Virtual Conference will be able to interact with speakers and attendees by posting questions and comments, viewing other comments and viewing the presenters' responses through an online discussion board, in addition to ASHRAE's traditional recordings (synced audio and PowerPoint presentations).

"The ASHRAE Winter Virtual Conference offers tremendous opportunities to learn about current practices, case studies and other professional and personal development sessions on a wide-range of hot-topics," Dennis Wessel, Orlando Conference chair, said. "From BIM to ASHRAE standards, attendees can post and view comments on their schedule and refer back to the sessions as needed after the conference ends."

ASHRAE members may register for the Virtual Conference at www.ashrae.org/orlandovirtual for \$299. Non-members may register for \$464; registration includes one-year ASHRAE membership upon completion of membership application. Companies may also register three or more employees for the Virtual Conference. Additionally, those already registered to attend the Conference in person will have access to all virtual content for free.