



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

LONDON CANADA CHAPTER #116

<http://LondonCanada.AshraeChapters.org>

Mon Oct 1/2012

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Topic

METHODS OF EFFECTIVE ROOM AIR DISTRIBUTION

Speaker

DAN INT-HOUT III, FASHRAE Chief Engineer, Krueger

Meeting - Monday Oct 1/2012

BEST WESTERN
591 Wellington Rd. S., London

5:30pm Social 6:00pm-Dinner
7:00pm to 8:00pm - Program

ADVANCED REGISTRATION AND PAYMENT BEFORE MEETING by using PAYPAL

use chapter web site to register and pay
<http://LondonCanada.AshraeChapters.org>

\$50 Nonmembers and Guests

\$40 London Chapter Member
or \$250.00 for meal plan

\$50 CASH AT DOOR
(if not preregistered)

\$10 for Students

Presidents Message

I hope everyone enjoyed the summer (went by way too fast) and as we now look forward to the fall and another upcoming ASHRAE year, I would like to introduce your new chapter executives: Karl Gilroy – President, Jamie Kruspel – Vice President, Ibrahim Semhat – Treasurer, Khalid El-Kadri – Secretary, Jordan Foster – CTTC Chair.

More Chapter information and upcoming dates and speakers can be located on our chapter website: londoncanada.ashrae.org

In August some of the executives attended the annual ASHRAE – CRC which was held in our country's capital – Ottawa. The CRC is a means in which chapters can bring forth their ideas to the attention of ASHRAE Society. The CRC is hosted by a different chapter in Region II each year, which means that every nine years our chapter hosts the CRC. London chapter will be hosting the 2014 CRC meeting and we will be asking for volunteer help as we move forward in planning so if anyone has interest in giving a helping hand in planning please feel free to contact myself (kgilroy@ehpricesales.com). The London chapter did receive a few recognitions at this year's CRC and I would just like to acknowledge them. First Eric Shaw received an award for exceeding our research goal of \$11,000; our past president Jason Vandenberghe received a star award, special Citation for Presidential award of excellence.

We moved our first meeting out by 1 week so that we could start the year off by having an ASHRAE Distinguished Lecturer give our first talk. The Oct 1 meeting will be held at the Best western Lamp Lighter Inn and the speaker for the evening will be Daniel Int-Hout, III of Krueger and will speaking on "Methods of Effective Room Air Distribution"

We look forward to seeing you in attendance at our monthly meetings, and look forward to our members participating, and even volunteering to help with the various local chapter functions that take place during the year. We welcome your suggestions and comments – please feel free to contact myself, or any of the London Chapter Officers– we appreciate your input

See you on Monday Oct 1 at the Best Western Lamplighter – Oak Room

Karl Gilroy
kgilroy@ehpricesales.com
 ASHRAE London (116) Chapter President 2012-2013

Upcoming Meetings

Mon Oct 29

Speaker: WILFRED LAMAN, Enviro-Tech

Topic: Chiller/Refrigerated System Analysis and the OPA "saveONenergy" Equipment Replacement Incentive Initiative (ERII) Programs

Generally, in re-commissioning, the chiller/refrigerated system analysis is overlooked due to the complexity of the analysis. historical data shows that resetting system controls, optimization and correction of identified problems resulted in energy savings of 15%–40% on the refrigeration systems. Is your/customer's building eligible under the "existing building commissioning program"?

Is your chilled water system eligible?
 Come and learn more . . .

Wed Nov 21

Speaker: PETER HORVATIS, Dimax Performance

Topic: Operational Design and Effective Capital Investment through Intelligent Building Performance

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Topic Methods of Effective Room Air Distribution

In order to meet the increased expectations of building occupants, designers must be aware of the conflicts between first cost economics, occupant productivity and life cycle costs. Buildings that do not meet the needs of the occupants often result in expensive redesign or worse, result in lawsuits against all parties involved. First, we need to understand the rules:

- LEED: Many are not aware of some significant changes that have resulted in air distribution, IAQ and Comfort in the 2009 version. And I am on the committee writing the 2012 version.
- Thermal Comfort: Determining optimum occupant comfort strategies. ASHRAE Standard 55 has been revised.
- Acoustics: Accurately predicting end use environments. A new classroom acoustical requirement needs to be understood.
- IAQ: The changing face of ASHRAE Standard 62.1, and upcoming developments.

With the goal of saving energy over the 90.1 baseline (Overhead VAV), many architects are challenging the mechanical engineer to come up with alternate systems that will meet this goal. Displacement Ventilation (DV), Underfloor Air Distribution (UFAD) and Chilled Beams all have a potential to save energy, and meet these needs. I will briefly cover pros and cons of all 4 methods of air delivery:

- Overhead air distribution
- DV (Displacement Ventilation)
- Underfloor Air Distribution (UFAD)
- Chilled Beams and the DOAS Fan Box

SPEAKER BIO DAN INT-HOUT III, FASHRAE Chief Engineer, Krueger

Dan Int-Hout, Chief Engineer, Krueger, is responsible for the presentation of technical data and advanced application engineering for the Grilles, Registers and Diffusers, as well as the VAV air terminals, produced by Krueger.

Dan has been in the Air Distribution research and design business since 1973, and has a Masters in Business Management from Central Michigan Univ., and a Bachelor in Biology & Physics from Denison University.

Dan originally joined Krueger in 1981, but has had several other jobs in the industry, including Owens Corning Fiberglas, Carrier, Titus and Environmental Technologies, in engineering, marketing and product research roles.

Dan has written over 40 technical papers and articles on VAV system performance, acoustics, air diffusion, controls and occupant comfort. He was recently Chairman of both ASHRAE Technical and Standards Committees on Thermal Comfort, is a past Chairman of several other related ASHRAE Technical and Standards Committees, as well as ASHRAE Standards, Technical Activities Committee (TAC). & Environmental Health Committees. He received the ASHRAE Distinguished Service Award in 1993 and the Exceptional Service award in 2007. Dan is currently the Chairman of the ARI committee on Applied Acoustics (885) and Chair of ISO 205 US Panel on Thermal Comfort. Dan was installed as an ASHRAE Fellow at the Long Beach meeting in 2007, and is an ASHRAE Distinguished Lecturer. Dan was nominated to Chair the TRG7 Committee to rewrite the Underfloor Air Distribution Guide, at the Chicago ASHRAE meeting in 2009.

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NEW PAYMENT OPTION

The chapter is trying out using PAYPAL for meeting payments. This will allow you to use a credit card to pay before the meeting and will assist in getting a count for room set. Please use the system to register and pay before the meetings.

MEMBERSHIP

If your Society payment was due this past summer, be sure to get your payment to ASHRAE Society. The recent handbook was set to all paid members in Aug. If you need to check on your membership status, use the www.ashrae.org web site to login or contact me.

MIKE PILUK
519-652-8280
mike_piluk@hotmail.com
ASHRAE LONDON CANADA - Membership Chair

EMPLOYMENT OPPORTUNITY

WELCOME TO AIREX!

Company Background

AIREX INC is a leading distributor of HVAC products to the commercial, industrial, and hi-rise markets in the greater Toronto area. We also distribute HVAC products to other key areas of the southern Ontario region. We are an established Canadian company that has been in business since 1982.

We are looking to add a qualified individual to our winning team for the position of APPLICATION ENGINEER to cover the London, Sarnia, & Windsor areas.

General Position Description

The Application Engineer will be required to call on mechanical engineer consultants in order to have our exclusive product offerings specified as basis of design or equal on upcoming and future projects. This person will also promote our strong customer focus, and superior product lines to further grow our successful business in these regions (travel required in noted areas).

Specific Position Responsibilities

The Application Engineer will:

- * Work to have our exclusive product lines in master specifications as base bid or acceptable/equal
- * Meet with regular and prospective consulting engineers on a regular basis to build upon and create new relationships
- * Recommend products to customers & engineers, based on specific needs
- * Provide technical solutions about products, price and durability
- * Represent the company in an ethical and professional manner at all times

Work Experience and Educational Background

Familiarity with consulting engineering firms in the southwestern Ontario region would be a definite asset. Minimum 2 years related work experience.

College Diploma or University Degree with a strong focus on 1 of the following:

- mechanical engineering
- mechanical design technology
- mechanical design and drafting

Interested applicants should forward resumes and salary range expectations to:

Vince Castellano – vcastellano@airex.ca
Website – www.airex.ca

Due to the volume of response, only individuals selected for interview will be contacted.

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New Scholarship Honors ASHRAE's First Female President

ATLANTA—A scholarship created in memory of Presidential Member Lynn G. Bellenger, P.E., Fellow ASHRAE, has been announced for the 2013-2014 school year.

The one-year \$ 5,000 Lynn G. Bellenger Scholarship will be awarded to a deserving female undergraduate engineering student pursuing a degree in a field related to HVAC&R.

"Lynn was a role model for us all, and her dedication to energy modeling helped to promote a more sustainable world," ASHRAE President Tom Watson said. "Through this scholarship we hope to build upon her legacy by encouraging students to pursue excellence in the field of engineering, just as she did."

More information on the scholarship and details on how to apply can be found at www.ashrae.org/scholarships.

Bellenger served as ASHRAE's president during 2010-2011 and was ASHRAE's first woman president in its 116 year history. Her presidential theme was Modeling a Sustainable World; she was a recognized expert in energy management, with a strong focus on the need for energy modeling to help create and refine more efficient buildings.

During her time as president, Bellenger promoted sustainable design, which according to her, "ignited a passion in people that is changing the world." The first ASHRAE Energy Modeling Conference was also held during her presidency.

Bellenger passed away in 2011. To honor her legacy, ASHRAE established the Lynn G. Bellenger Scholarship, which is being used to recognize women in engineering. Contributions to help fund the scholarship are being accepted at www.ashrae.org/bellenger.

Making Farms More Sustainable Focus of ASHRAE Grant Recipient

ATLANTA Farms are known for their green...when it comes to crops. But what about the green of buildings down on the farm?

With current research focused on enhancing building systems to make them more sustainable, a sometimes overlooked area with potential for an impact is the agricultural industry, according to Chantz Denowh, Montana State University.

"Farms and ranches have the potential to become completely energy independent due to available resources and space for their development," Denowh said. "The most prominent of these resources is geothermal heating/cooling. Most farms and ranches have a building complex ideally suited for a small district ground source heat pump (GSHP) system. With the addition of a natural gas or biomass cogeneration unit, a hybrid GSHP system is created that can satisfy thermal and electrical needs for farms and ranches."

Denowh is one of 23 students who will receive a grant through ASHRAE Graduate Student Grant-In-Aid Award Program, which is designed to encourage students to continue their education in preparation for service in the HVAC&R industry. The grants, totaling \$230,000, are awarded to full-time graduate students of ASHRAE-related technologies.

With his grant, Denowh plans to investigate and demonstrate the feasibility of an energy independent farm or ranch through the use of a cogenerative hybrid GSHP system, and develop dynamic control strategies to maximize efficiency of the system over its lifespan. The project will focus on the model and control strategy of the proposed system, as well as provide an economic analysis.

"Overall, this research fills valuable gaps of knowledge for hybrid GSHP systems and optimal control strategies," he said. "The results go beyond creating a more sustainable agricultural industry, and fulfill ASHRAE's mission of promoting a more sustainable world."

ASHRAE/NIST REFRIGERANTS CONFERENCE

October 29–30, 2012 | Gaithersburg, Maryland
www.ashrae.org/refrigerants2012

New low GWP fluorochemical refrigerants and equipment
applications for low GWP alternatives.



7th INTERNATIONAL COLD CLIMATE HVAC CONFERENCE

November 12–14, 2012 | Calgary, Alberta
www.ashrae.org/coldclimate

International applications and innovations in cold climate
HVAC design.



ASHRAE Proposes First Standard on Commissioning Process

ATLANTA ASHRAE's first standard focused on the commissioning process is open for public comment. Standard 202P, Commissioning Process for Buildings and Systems, would identify the minimum acceptable commissioning process for buildings and systems as described in ASHRAE's Guideline 0-2005, The Commissioning Process. The proposed standard is open for public review from Aug. 17-Oct. 1, 2012. To comment or more information, visit www.ashrae.org/publicreviews.

By taking the best practices from the guideline, first published in 1989, and writing a standard, the requirements can be adopted by code bodies and used by standards developers, according to Gerald Kettler, chair of the Standard 202P committee.

"The proposed standard will benefit the industry by ensuring that the built environment industry follows the owner's quality-oriented process for achieving, verifying and documenting that the performance of buildings, systems and assemblies meets defined criteria," he said. "Standard 202P will support the requirements in other ASHRAE standards and programs."

The commission process assumes that owners, programmers, designers, contractors and operations and maintenance entities are fully accountable for the quality of their work. The process begins at project inception and continues for the life of a facility.

"The process includes specific tasks to be conducted to verify that design, construction, verification, testing, documentation and training meet the owner's project requirements," Kettler said.

ASHRAE first began developing formal guidelines for commissioning in 1982, looking at documenting best practices to achieve facilities that perform according to an owner's needs and requirements. Its original guideline on commissioning was published in 1989.

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ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.