

Capital Communiqué



ASHRAE - AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS

http:/www.ashrae.ottawa.on.ca

OTTAWA VALLEY CHAPTER e-mail:contact@ashrae.ottawa.on.ca

EVENING PROGRAM

DATE: Tuesday January 20, 2009. Tech: 16:00 Social: 17:30 Dinner: 18:30 Program: 20:00

Travelodge Ottawa Hotel & Conference Centre, 1376 Carling Avenue, Ottawa, Ont., 613-722-7600

Air Diffuser Performance Index (ADPI)

TECH ADPI is defined by the ASHRAE Standard 113 as the percentage of points measured in a room that **SESSION** are within both the ASHRAE temperature and velocity ranges for comfort. ADPI is based on the

acceptance and recognition that it is not possible to achieve a comfort level of 100 percent, but 80

percent acceptance is achievable and measurable.

The technical session will be given by Jim Aswegan Chief Engineer of TITUS. Jim has completed more than forty-three years of service at Titus. After more than 15 years of service in the Research

and Development department, he has been in the Sales & Marketing group since 1983.

THEME: **TEGA/Student Activities**

PROGRAM: **Integrated Building Design (IBD)**

SPEAKER: Joel Primeau, P.Eng

OVERVIEW: Truly sustainable buildings can only be achieved when all disciplines are coordinated and pointed in the same direction. Validating the benefits of solutions against the impact on the total performance of

the building is necessary throughout the entire design phase. Integrated Building Design or IBD is growing in popularity as builders and designers recognize that working in isolation has limited

benefits, and true synergy is the only way to achieve affordable sustainability.

Mr. Primeau's presentation covers the basics of IBD as well as a description of the roles of the HVAC engineer, the HVAC supplier and mechanical trades in IBD. He'll also present concrete

examples of successful integrated solutions.

Joel Primeau is Director of Sustainable Design for Genivar. Based in Ottawa, he leads the efforts of **SPEAKER** his firm in the design of high performance, sustainable buildings. He graduated in mechanical BIO:

engineering from the Royal Military College in Kingston, and after a brief career as an army engineer, he worked for over 15 years in the HVAC industry in consulting, facilities management and technical sales. He's a Past-President of the Ottawa Valley Chapter and he now holds the position of

Regional Vice-Chair for Student Activities for Region II.

Joel's technical expertise has centered on energy efficiency and indoor air quality. Recently, he gravitated to the world of sustainability, LEED and Integrated Building Design. Joel was among the very first engineers to obtain ASHRAE's new High-performance Building Design Professional

(HBDP) designation. He's currently developing an ASHRAE short course on IBD.

Menu

Assorted Rolls and Butter with Classic Tossed Caesar Poached Salmon on Roast Tomato Ragout with Watercress and Crème Fraiche, Steamed Rice and Vegetables Chocolate Pecan Flan with Coffee & Tea

Chapter Members: \$30.00 Guests: \$45.00

2008 - 2009 President Patrick St-Onge President Elect Jason Alexander Secretary

Christine Kemp Treasurer

Stephen Lynch Past President

Rob Lefebvre Governors Paul Baker Steve Moons

Donald Weekes Roderic Potter Georges Maamari

COMMITTEES Audit

Cathy Godin Research Prom.

Robert Lefebvre Membership

Phil Lemieux Program Aaron Dobson

Student Activities Sebastien Laroche

TEGA Thomas Chiykowski Chapter Historian

Roderic Potter **Special Events** Chris Healey

Adam Beales Communiqué

Georges Maamari Publicity Jason Alexander

> Table Top Frank Bann

> Telephone Cathy Godin

Greeter Mike Swayne Roster

Kevin Toll Webmaster Roderic Potter

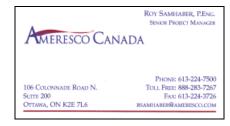
PAOE Jason Alexander

Business Cards Rod Lancefield

Nominations David Eastwood CRC Action

Patrick St-Onge

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President's Message By Patrick St-Onge P.Eng., LEED AP

2008-2009 OVC President

I hope that you all had a very good Christmas and I wish you all a happy New Year and trust that 2009 will bring you much success.

We have a number of very interesting programs planned for the upcoming meetings in the second half of the ASHRAE season. We have recently received confirmation that the current President of ASHRAE society, Mr. Bill Harrison, will be our guest for the May meeting. Exceptionally, the May meeting will be on the second Tuesday of the month.

January will be TEGA night. This year again, we are looking to have as many submissions as possible for all of the technical awards categories. Ottawa is presently going through a very active period in the construction industry. There are many creative and innovative projects in the city that come from our local engineering industry. You can find the TEGA application form here: http://www.ashrae.ottawa.on.ca/ashraeoc_docs/TEGAAwardForm%202007.pdf . If you have any question or need some help filling the application, please contact Tom Chiykowski, who is our TEGA chair and he will be glad to assist you.

The January meeting should be of great interest to anyone interested in the design of sustainable buildings (and not only LEED buildings) as this month's topic being Integrated Building Design. Of course, since our guest is Joel Primeau, Ottawa Valley Chapter past president and RVC Student Activities, there will be a K-12 special activity you'll not want to miss!... the people who know what K-12 means will certainly be delighted, the rest should be intrigued...

Yours very truly,

Patrick St-Onge, P.Eng., LEED AP ASHRAE Ottawa Valley Chapter 2008-2009 President

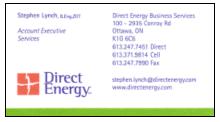






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What you missed by Christine Kemp 2008-2009 Chapter Secretary

The Technical Session was "Condensing Boilers". This presentation was given by Patrick Albert. Thanks very much Pat for filling in when needed and putting on a great Technical talk.

The night's theme was Student Activities and Research Promotion.

Stephen Lynch is now able to accept credit cards. Over 20 transactions were processed that night. A \$ 3.00 charge was applied for this service. After about 2-3 days a receipt was e-mailed to those who paid with a credit card. Just a reminder....a meal plan is \$160.00 and Chapter dues are \$50.00.

Algonquin is going strong on the design competition. They are looking for 2005 Fundamentals books. If you have any to donate, please contact Sebastien Laroche.

The Career Fair will be held in March. At least 7 students received jobs after attending last years career fair. If you are interested in sponsoring student meals, please let Stephen Lynch know.

The Chapter Service Award was presented to David Eastwood. Congratulations David.

Robert Lefebvre spoke about Research. Last year we exceeded our goal of \$19,400.00. Thanks to everyone who has donated in the past. Special thanks to Enbridge who received a certificate for over \$10,000 level. All the money raised stays in Canada.

Incentive

From now on till January, if you donate, your name will show up in the communiqué and in a draw to purchase a paver. If you win this draw, your name will go in the walkway at ASHRAE Headquarters.

The table top this month was: GasMasters presented by Breckmar and CleanEnergy presented by HTS Engineering.

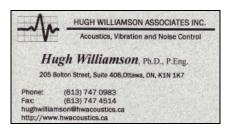
This meetings program was "High Performance New Construction" put on by Susan Clinesmith of Enbridge Gas Distribution. This Program, a major initiative in the OPA, provides design assistance as well as financial incentives to encourage building owners and architects to include sustainable and energy-efficient features in new construction and major renovations projects across Ontario.

Yours truly,

















Membership
By Philippe Lemieux
2008-2009 OVC Membership Promotion Chair

The ASHREA Ottawa Valley Chapter would like to welcome the following new members:

Mr. Kevin Voelker;

Mr Aaron Volker Kromm;

Mr. Dan Gilbert Jones;

Mr Wayne E Wilson;

Mr Andre J Mariani;

Mr Sebastien Seguin;

Mr Scott A Black

Thank you all for joining our chapter. Let's make them feel at home at the new year meeting.





Student Sponsors
By Stephen Lynch
2008-2009 OVC Treasurer

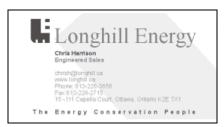
The student sponsors for the ASHRAE Ottawa Valley Chapter October 2008 meeting are as follows:

Joel Primeau, Cathy Godin, Rod Potter, Eric Van Benschoten

Your student sponsorship is much appreciated by the ASHRAE Ottawa Valley Chapter. Your contribution to help compensate student meals allows the chapter to provide meals to the students at no cost to them. A lot of the students that attend these meetings will one day become ASHRAE members and your contributions help to grow our membership which is the heart of the Ottawa Valley Chapter.







Past President



Research Promotion

By Robert Lefebvre P.Eng., LEED AP 2008-2009 Past President and Research Promotion Chair

Hi Everyone,

At November's chapter meeting we had a chance to thank all of the 07-08 investors in ASHRAE Research Canada. Last year's investors are as follows:

Honour Roll Donor (Investment of \$100 to \$249):

Bob Brownstein, Dalton McIntyre, William Schneider, Mike Swayne, Darryl Boyce, Dilfo Mechanical, Siemens building Technologies, JL Richards & Associates, Smith & Andersen Consulting Engineers, Eric Van Benschoten, Neil Armstrong, Glenn MacLean, Engineered Air, Lan Chi Nguyen Thi, Joel Primeau, Robert Lefebvre, Francois Belair, Byron J Landry & Associates, Patrick St. Onge, Janice Fierobin, Jason Alexandre, Marc Chiasson.

Major Donor – Antique (Investment of \$250 to \$499):

RJ McKee Engineering, Modern Niagara Ottawa, SK Sheet Metal, Walmar Ventilation Products, Mastron Mechanical Contractors, Urbandale Realty Corporation, Direct Energy Business Services, Steve Moons.

Major Donor – Bronze (Investment of \$500 to \$999):

Longhill Energy Products Eastern, Mechanical Contractors Association of Ottawa, Total HVAC, Genivar Consulting Group, Breck-Mar Sales & Service.

Major Donor - Silver (Investment of \$1000 to \$2499):

Goodkey Weedmark & Associates, Nortec

Golden Circle Donor (Investment of \$10,000 or more):

Enbridge Consumers Gas

Thanks to everyone who supported ASHRAE last year, and I hope we can count on your continued support.

Focusing on this year, I am pleased to announce that once again the chapter executive have stepped-up and all made an investment in ASHRAE Research Canada, ensuring the chapter receives the Full Circle Award.

In an effort to encourage early investment to ASHRAE Research Canada, the chapter is having a raffle to win a paver inscribed with the winner's name to be immortalized in the new ASHRAE headquarters' walk of fame. To be eligible to win, a minimum investment in ASHRAE Research Canada of \$100 for individuals or \$150 for companies must be made before the January chapter meeting on January 20, 2009. Investments can be made directly at the ASHRAE website (http://www.ashrae.org), by cheque made out to ASHRAE Research Canada, or by credit card through me at refebvre@gwal.com. If you have any questions, please feel free to contact me at 613-727-5111ext.234.

Thank you,

Robert Lefebvre, P.Eng., LEED AP ASHRAE Ottawa Valley Chapter 2008-2009 Research Promotion Chair

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Table Top Display

By Frank Bann, P.Eng.

The Master Group is pleased to feature BKM's Reverse Flow technology at their table top.





BKM's patented Reverse Flow Technology is an energy recovery system that is guaranteed to recover over 90% of the energy from an exhaust air stream. The technology is simple and extremely effective.

As air is exhausted from a building or process, a two position damper directs the flow of air through one of two banks of aluminum plates whose surface area has been maximized to capture energy from the exhaust air stream. At the same time, outdoor air is being drawn through the opposite heat exchanger "cassette" bank, returning the previously stored energy to the space. As the damper changes position the entire system now works in reverse flow.

In addition this technology is low in maintenance, self-cleaning, has a long life expectancy and self-defrosting. What more could you want in a heat recovery system!

We are looking forward to seeing you at our table top display at the January Ottawa Chapter ASHRAE meeting.

Total HVAC is pleased to feature AAON for Green Buildings at their table top



By offering a wide variety of green features and options, AAON is ready to meet the needs of customers with LEED objectives. Whether building teams are just looking to reduce long term monthly expenses, or pursuing LEED platinum certification, they can look to AAON to provide HVAC system solution for green building.

We are looking forward to seeing you at our table top display at the January Ottawa Chapter ASHRAE meeting.











TEGABy Tom Chiykowski
2008-2009 OVC Committee Chair

It is always a good idea to start any discussion on TEGA with a breakdown of the acronym. TEGA is the abbreviation of *Technical*, *Energy* and *Government Activities*. TEGA is actually part of the Chapter Technology Transfer Committee (CTTC).

TEGA's responsibilities include the promotion and administration of awards within the Chapter and the dissemination of technical information within the Chapter area.

Locally, the committee is probably best known for the administration of the Chapter Technology Award or "TEGA" awards. Last year the Chapter had an excellent response to the request for entries and we are hoping that this year will be as successful. Several of last year's entries will be submitted to the Regional Competition.

We are now looking for submissions for 2008/2009. There are seven categories:

- Commercial Buildings (New and Existing)
- Institutional Buildings (New and Existing)
- Health Care Facilities (New and Existing)
- Industrial Facilities or Processes (New and Existing)
- Public Assembly (New and Existing)
- Residential (New and Existing)
- Alternative or Renewable Energy Use

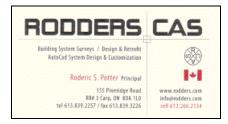
Entries are judged on energy efficiency, indoor air quality and thermal comfort, innovation, operation and maintenance, cost effectiveness, environmental impact and quality of presentation.

We are looking for entries by the end of March, 2009. The short form application is all that is required to submit at the Chapter level. A copy of this form is available here, or through the Chapter website.

Please forward submission to myself, Tom Chiykowski, at tchiykowski@master.ca . If you have any questions please contact any of the TEGA Committee members, Tom Chiykowski, Robert Kilpatrick or Frank Vaculik.

We look forward to seeing the Chapter promote its innovation.

Tom Chiykowski

















News Update
By Robert Lefebvre
P.Eng., LEED AP
OVC Past President

Technical News:

ASHRAE Opens Green Building Standard Committee to New Membership

November 14, 2008

ATLANTA – As ASHRAE, USGBC and IESNA move forward in developing the nation's first standard for high-performance, green commercial buildings, membership on the committee developing the standard is being reconstituted.

Proposed Standard 189.1, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings, will provide minimum requirements for the design of high-performance new commercial buildings and major renovation projects, addressing energy efficiency, a building's impact on the atmosphere, sustainable sites, water use efficiency, materials and resources, and indoor environmental quality. It is being developed by ASHRAE, the Illuminating Engineering Society of North America (IESNA) and the U.S. Green Building Council (USGBC).

To better address the varied areas covered in the proposed standard, a new committee is being appointed. A call for members is open through December 4 at www.ashrae.org/publicreviews.

"The market will benefit from the lead taken by ASHRAE and its cosponsors in developing this most challenging standard, which addresses ever-evolving technology," said ASHRAE Presidential Member Kent Peterson, who has been named as chair of the Standard 189.1P committee. "As we have proceeded down this path, we recognized that the proposed standard would benefit from additional expertise and more involvement from interested parties. We are committed to developing this green building standard with accurate and appropriate technical content through a rigorous, transparent and fair standards development process."

The proposed standard has generated much public interest, with more than 900 comments received during each of the two public reviews. While the standard has undergone two public reviews, it is anticipated that the standard will undergo a new full public review in the near future as technical guidance and input is offered by new committee members.

Those interested in serving on the committee can find more information at www.ashrae.org/publicreviews.

(cont...)







Sustainability News:

ASHRAE Hosts Conference on Net-Zero Buildings

December 10, 2008

ATLANTA – To help drive the building industry toward market-viable net-zero-energy buildings, ASHRAE is hosting a specialty conference on the topic in March in San Francisco.

"We have a reached a time when the building industry is being called to shift to a new level of performance that will reduce our energy and carbon footprint," Bill Harrison, ASHRAE president, said. "It is time to advance net-zero-energy building knowledge."

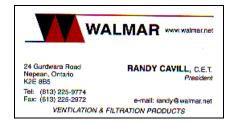
ASHRAE's *Countdown to a Sustainable Energy Future...Net-Zero and Beyond* conference takes place March 29-31 at Hyatt at Fisherman's Wharf in San Francisco. The conference will provide a forum to discuss the role of policy and regulatory involvement in addition to providing application knowledge for the various aspects of net-zero-energy buildings for both residential and non-residential buildings. It will include building science, energy efficiency in HVAC, lighting and appliances, and renewable energy sources applied to buildings.

To register or for more information, visit www.ashrae.org/netzeroconference.

ASHRAE defines net-zero-energy buildings as those which, on an annual basis, use no more energy from the utility grid than is provided by on-site renewable energy sources. These buildings use 50 to 70 percent less energy than comparable traditional buildings, and the remaining energy use comes from renewable sources, like solar panels or wind turbines incorporated into the facility itself, according to Harrison.

He noted that the state of California recently announced its goal of new residential developments being net-zero-energy by 2020 and new commercial developments being net-zero by 2030.

"As the industry seeks solutions to these challenges, ASHRAE must be there to help disseminate the knowledge," he said.





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Business Card Ads by Rod Lancefield

You can support your chapter and promote your business by placing your business card in the Capital Communiqué. It will also appear on the Chapter website.

Cost is \$225.00 for the year; contact Rod Lancefield, rodl@htseng.com, (613) 728-7400.



Your card here!



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ASHRAE CHAPTER/REGIONAL TECHNOLOGY AWARD APPLICATION SHORT FORM

(7/29/08)

INTRODUCTION:

This Short Form has been developed to stimulate more participation in chapter and regional competition. <u>This</u> form is not intended to replace the full Society Technology Award Application form. Regional winners using the short form will be required to complete the full Technology Award Application form before their applications can be forwarded for Society Competition. (This form does not require extensive narrative, plans or photographs.)

INSTRUCTIONS:

- A. The individual submitting the Technology Award Application must be a current member of ASHRAE who had a significant role in the design or development of the project.
- B. Complete the "Short Form" and use it as the cover page.
- C. Provide a system schematic/diagram not larger than 11" x 17" in size. In addition, attach a brief narrative (maximum of 2 pages). The narrative should include the gross and net building areas applicable to the project, a description of the major building areas (i.e., operating rooms, laboratories, computer rooms, industrial processes, offices, warehouses) and a brief discussion regarding the following five criteria (if a criterion is not applicable, state accordingly):
 - Energy Efficiency
 - Indoor Air Quality
 - Innovation
 - Operation & Maintenance
 - Cost Effectiveness
 - Environmental Impact
- D. Submit your schematic, brief narrative, and completed form to your Chapter Technology Committee Chapter (CTTC) Chair for judging at the chapter level in accordance with their instructions.
- E. Winners in each category from the chapter competition will be submitted by the CTTC Chapter Chair to the Regional CTTC RVC Chair. Submit the appropriate number of copies as requested by your Regional RVC.
- F. It is highly recommended that each entrant confirm by letter (and retain a copy for record) to the owner that the owner has granted permission to submit this project to competition.

NOTE: ASHRAE Technology Awards are the HVAC&R industry's most prestigious honor for efficient energy use in buildings and environmental system performance. While the awards do not certify responsible charge or professional license status, they do recognize outstanding design innovation and successful implementation.