

2006 - 2007

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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

November 2006

EVENING PROGRAM

DATE: Tuesday November 21st, 2006. Social: 17:30 Dinner: 18:30 Program: 20:00

La Contessa, 156 Cleopatra Dr., Nepean, Ont., (613) 224-8700

TECH SESSION Incentive Programs 101: 16:30 -17:30 at La Contessa

Luigi Pisani of Enbridge, Ottawa, will give a short presentation on:

Energy recovery - the payback analysis

- an outline of the various natural gas incentive programs offered

- calculation methodology in assessing incentives

THEME: Research Promotion

PROGRAM: Heat Recovery Technologies in Typical HVAC Applications

SPEAKER: Mr. Geoff Gorai, P.Eng.

Engineered Air, Division of Airtex Manufacturing Partnership

OVERVIEW: The presentation will look at the different technologies typically available in

HVAC heat recovery applications: Glycol Run-Around, Air to Air Plate Type Heat Exchangers, Heat Pipes, and Total Energy or 'Heat' Wheels. Each type of system will be reviewed, as to how it works, and the recovery performance expected. Advantages and disadvantages of each system type will also be explored, with a discussion on some of the pitfalls of selecting one recovery type

versus another, depending on the application. .

SPEAKER BIO: Geoff Gorai is a graduate of the University of Calgary and has been with

Engineered Air in Calgary since 1994 in various roles. Through the years Geoff has worked in the product design group, and has played key roles in product developments for Engineered Air, including Mutizone Units, Evaporative Condensers, and Unit Ventilators. Geoff's current role is that of Product Manager at the Engineered Air Heat Transfer Plant in Calgary. The Heat Transfer

Plant manufactures the Heat Wheels, Heat Pipes and Coils for all of Engineered Air's manufacturing facilities, and also manufactures Unit Ventilators, Fancoil Units, Radiant Panels, Finned Tube Radiation, Unit Heaters, Cabinet Unit Heaters, and all other hydronic heating equipment that Engineered Air produces.

Menu

Appetizer: Salad

Main Menu: Chicken Kiev, Rice, Potatoes, Mixed Vegetables

Dessert: Baked Alaska, Coffee







President & CRC Delegate



President's Message By Glenn MacLean

Our theme for November is **Research Promotion**. The major focus for ASHRAE and our local chapter this year is **'Sustainability'**. Curiously, these two seemingly divergent topics are not only related but intrinsically linked and feed off each other. As the need to find sustainable solutions for our energy needs for our buildings and for our communities increases, the need for *Research and Development* in these areas also grows. As the demand for new technologies and better efficiencies increases, so does the need to promote and *sustain* the bodies that perform the research on how to improve existing technology, and where to develop new ideas. Jay Doshi, our current Past President, will be approaching you to make contributions to ASHRAE Research this month and in the months to follow. Please give him your consideration.

Another resource we need to protect and foster is our own workforce. Currently the average age in our industry is over 40 years old. Having just recently crossed that milestone myself I consider that to be a young and productive age. The concerning trend is that the average age is going up - fewer young professionals and even fewer young trades people are choosing the HVAC industry when they start their working years. Last month was the first of our two **Student Nights** for this year. The second will be in January, and will be combined with a **Career Fair** to which we will be inviting students from Algonquin College, Carleton University, CEGEP de L'Outaouais, La Cite Collegiale, and the University of Ottawa. This is our opportunity to attract the best and the brightest of the new graduating classes to consider a career in our industry. Please consider promoting yourself, your company, our industry and ASHRAE at this exciting half-day event.

The students of today are the resources our industry will depend on tomorrow.

In your service, Glenn MacLean President 2006-2007 Ottawa Valley Chapter ASHRAE

Tel: (613) 723-1661 Fax: (613) 723-0818

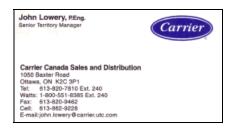
e-mail: eng02@engineeredair.com

"He has never been known to use a word that might send a reader to the dictionary."

-- William Faulkner (about Ernest Hemingway)

"Poor Faulkner. Does he really think big emotions come from big words?"

-- Ernest Hemingway (about William Faulkner)







Past President



Theme Research Promotion

By Jay Doshi P.Eng. Chapter President 2005-2006

The Ottawa Valley Chapter (OVC) and ASHRAE would like to thank you again for investing in *ASHRAE Research Canada*. Last year 2005-2006, we raised \$15,460.00 compared with our goal of \$16,000.00, a 96.6% result. This is a major achievement for the Research Promotion committee as they managed to come within reach of our goal for the first time in several years. The Ottawa Valley Chapter recognizes all contributors to the Research Promotion campaign by posting their names on the OVC website. Congratulations to last year's Research promotion committee and **Cathy Godin** for leading the initiative.

This year we have made some enhancements to the Ottawa Valley Chapter Research Promotion section of our website in order to better recognize our donors and to keep you updated on our current status. Among the refinements include target to total contributions received to date, publishing the names of contributors as they come in, and information on the research. Please take a moment and check out the web site.

We sincerely hope that that you and your company will once again renew, or even increase, your much needed investment in *ASHRAE Research Canada* and the future of the HVAC&R profession and industry. Not only does your generous contribution ensure the future of our industry; it also influences the health and well being of everyone today and for future generations to come.

NEW AGE OF RESEARCH IS HERE AND YOUR SUPPORT IS NEEDED

This new age is the ASHRAE Research Strategic Plan. The Plan centers on the concept of Sustainability. The world has finite resources, and so it is essential to effectively utilize those resources to accomplish the mission of ASHRAE. Out of this process, five broad, far reaching **Research Opportunity Themes** for ASHRAE were identified:

- Energy & Resources
- Indoor Environmental Quality
- Tools and Applications
- Equipment, Components, and Materials
- Education and Outreach

The above themes are used as simple labels to describe the emphasis of any given project. A list of ASHRAE Research projects is available on OVC website (link listed later in this article). These projects get funded through your support and investment in *ASHRAE Research Canada*. The results from the research program are benefiting the HVAC&R industry in a number of forms, namely;

- Revised ASHRAE Handbooks, which are used by professionals around the world.
- ASHRAE standards to benefit the public and the HVAC&R industry
- ASHRAE guidelines
- Education and knowledge dissemination

(cont...)







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Your investment in ASHRAE Research Canada is doubly important for the following reasons:

- All funds raised in Canada go towards ASHRAE Research Canada;
- ASHRAE has a policy of <u>matching contributions dollar for dollar</u> with the revenues generated from the Winter AHR Expo
- Canadian companies/institutions receive more funds per Society member than our American counterparts;
- Canadian companies/institutions are recognized as leaders in research.
- Every dollar being contributed in Canada, about four (4) U.S. dollars are being reinvested back into Canadian HVAC&R research projects

Your investment is needed today, next year's research budget is based on contributions received this year by <u>June 30th!</u> Please consider renewing your support as soon as possible so we can put your investment to work as well as recognize your contributions on our website immediately.

You can download an Excel file detailing the ASHRAE Research Project History at:

http://www.ashrae.ottawa.on.ca/ashraeoc docs/ASHRAE Research Project History.xls

Thank you for your support.

In your service, Jay Doshi Research Promotion Chair 2006-2007 Chapter President 2005-2006

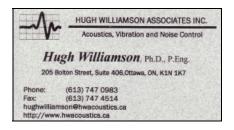




Business Card Ads by Rod Lancefield

You can support your chapter and promote your business by placing your business card in the Capital Communiqué. It will appear in the electronic and printed version as well as on the Chapter website.

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











Student Sponsorship (Adopt a Student Program)

By Glenn MacLean

This year, as with most years, we are encouraging students from Carleton, University of Ottawa, Algonquin, CEGEP de L'Outaouais, and La Cite Collegiale to join us at our monthly meetings. We typically have two student nights per year in October and January, but encourage students to attend whenever their schedule permits. On student nights we invite the students to attend our meetings and we pick up the cost of their meals. This is a program we have been offering for some time, and wish to continue to offer in the future. However, as the program becomes more successful it also creates a greater draw on our Chapter funds and resources. We would also like to extend this offer to students attending on other nights as well. Currently, students are charged \$15 per meal when they attend on their own. Meals actually cost more than this, but any contribution members are able to make is appreciated.

If your company or you personally are interested in sponsoring a student for this month's meeting or future meetings, please contact our Treasurer, Imtee Baksh imteeb@lonhill.ca, or see him at the check-in table at our monthly meetings. As a way of recognizing our members for their contributions we will give you a receipt for your investment in Student Activities, publish your name or your company's name on our website, and include you in our list of previous donors in the Capital Communiqué.

Thank you for your support, Glenn MacLean





Student Sponsors October 17th, 2006 Meeting

By Imtee Baksh

Michael Swayne - two students
Trane - two students
Johnson Controls - one student
Steven Lynch - one student

Your Chapter thanks you!











News Update By Robert Lefebvre

Technical News:

ASHRAE Winter Meeting Centers on Energy Efficiency

ASHRAE will be showing off its technical expertise at the 2007 AHR Expo in January. For the first time, 16 technical sessions will be held at the AHR Expo during the 2007 ASHRAE Winter Meeting in Dallas.

Designed to share ASHRAE's technical guidance with Expo attendees, the sessions include topics such as vibration control, energy-efficient ventilation systems, using ground-source heat pumps in schools, and new BACnet capabilities. "Offering attendees an opportunity to learn about the latest advancements in technology via the technical program complements the Expo, which features those advancements being incorporated into products and equipment," says Ginger Scoggins, chair of the program committee. "These sessions make ASHRAE's meeting and top-rate technical program more visible while at the same time drawing more meeting attendees to the expo."

In addition, ASHRAE will present a comprehensive technical program at the Adam's Mark Hotel, January 28-31. The overall six-track technical program centers around energy efficiency in buildings and includes such seminars as Achieving a 50 Percent Approach to Net Zero Energy Use in Buildings and Risk Management of Infectious Airborne Diseases. The technical program consists of 67 seminars plus the 16 seminars at the convention center, 12 open-discussion forums, one public session, one poster session with 21 papers presented, and 18 transaction sessions with a total of 48 papers presented.

Also new for this year is the technical plenary speaker, National Geographic Magazine Executive Editor Dennis Dimick. Dimick, a picture editor specializing in environmental stories for more than 15 years, will address technical program attendees between sessions on Sunday, Jan. 28 at 9:30 a.m. at the Adam's Mark hotel about a 2004 project he oversaw on global climate change. Meeting registration is required to attend.

Registration for the 2007 ASHRAE Winter Meeting is \$630 (\$360, ASHRAE member) prior to Nov. 17. After Nov. 17, the registration fee will be \$655 (\$385, ASHRAE member). The deadline for advance registration is December 15. For more information or to register, visit www.ashrae.org/dallas.

(cont...)

"I've had a perfectly wonderful evening. But this wasn't it."
-- Groucho Marx







(cont...)

Sustainability News:

Wood stoves in poor countries worse than expected for global warming

October 24, 2006. Wood stoves used in developing countries emit more harmful smoke particles and could have a much greater impact on global climate change than previously thought, according to research published in the Nov. 1 issue of the American Chemical Society journal Environmental Science & Technology.

The study's lead authors, Dr. Tami Bond of the Department of Civil & Environmental Engineering the University of Illinois, Urbana-Champaign and graduate student Christoph Roden, estimate that some 400 million of these stoves are used on a daily basis for cooking and heating by more than 2 billion people.

Bond and Roden say that not only do the stoves produce two times more heat-absorbing smoke particles than expected, but they also contribute to health problems including eye infections and tuberculosis.

"Emissions from wood cook stoves affect the health of users -- especially of women and children -- neighborhood air quality, and global climate," said Bond. "Reducing these emissions, through the use of cleaner burning stoves and fuels, should have far-reaching benefits."

The researchers say that less polluting and more fuel efficient stoves could help improve health while fighting global warming.

"Designing and distributing improved cook stoves may be an effective method of mitigating global climate change, and can improve the health of the users," Roden said. "However, the cook stoves must be well designed and properly tested. They must be built with local traditions and practices in mind and must be easy to use, or they may become expensive doorstops."

Many carbon offset programs currently involve renewable energy cooking stoves in developing countries. Typically, people in industrialized countries can "offset" their personal emissions by contributing money to organizations that fund these programs.

This article is based on a news release from the American Chemical Society

"I am enclosing two tickets to the first night of my new play; bring a friend.... if you have one."

-- George Bernard Shaw to Winston Churchill

"Cannot possibly attend first night, will attend second... if there is one."
-- Winston Churchill, in response



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Governor



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BOG Representative



Career Fair January 16th, 2007 By Patrick St. Onge

The career fair is coming back this year! Don't miss this extraordinary event that will take place at our regular monthly venue: La Contessa Banquet Hall, January 16th 2007.

The career fair is an exceptional opportunity for students to make contacts, ask questions of people actually working in the industry, and eventually get a job! Potential employers are wide ranging in nature: manufacturers, consultants, suppliers and contractors.

For employers it is a great event for recruiting, meeting students who are interested in a career in the HVAC industry and taking the time to talk with them in an informal context.

Time: 14:00 to 18:00

Cost: 200\$ per booth including refreshments during the after noon and one meal for our monthly meeting taking place the same evening.

Absolutely free for students!

Shuttle: There will be a shuttle service organized between the various colleges and Universities and La Contessa.

Employers are invited to download the registration form (this will soon be available on our website, notification will be sent) and send it once completed to Tony Doyon: e-mail: tdoyon@trane.com, fax: 613 820-1414. Bookings will be on a first come, first serve basis and places are limited.

As always, students will be invited to attend our meeting and the chapter will pick up the cost of their meals.

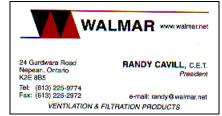
"He has all the virtues I dislike and none of the vices I admire."
-- Winston Churchill

"A modest little person, with much to be modest about."

-- Winston Churchill













TEGA Update

Hello everybody, and a warm welcome from TEGA sub-committee of the CTTC.

I am happy to be chairing this committee for one more year. We did very well last year, coming in second in the entire region. This year, we plan to do even better and we have lots of interesting activities planned.

The theme for TEGA this year is Sustainability, in keeping with the objectives set by the ASHRAE President, Terry Townsend. We will focus on Sustainability in our programs, and carry articles on Sustainability in our Communiqués. I also welcome your inputs on this important subject, where your professional expertise can make a difference.

One of the highlights of the year will be an ASHRAE presentation on Sustainability, geared toward Canadian government departments. We are forming a working group to organize this effort, with the help of Timothy Ma and Frank Vaculik. We are lucky to have in our midst Darryl Boyce, the Vice President of ASHRAE, to help is with the presentation.

The Chapter awards program will continue as before under the able leadership of Robert Kilpatrick, who did a fantastic job last year. We continue to maintain the ASHRAE Library at the office of the Ottawa Construction Association at 196 Bronson Avenue, and we will add more documents this year.

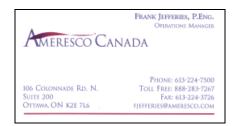
Last year, we did a couple of handbook chapter reviews, and some of our members also provided input to the book "HVAC Simplified", by Steven Kavanaugh. We also sent comments to the Society on the ASHRAE Standard 62.1-2004. We would like to do more reviews this year, with your help.

And, as always, we need fresh blood in our Committee, so we can contribute more to ASHRAE at the Chapter, Region, and Society level. We need your participation, so please do sign up for Committee membership and help us make a difference to the ASHRAE world.

Niraj Chandra, P.Eng PWGSC

E-mail: niraj Chandra@hotmail.com

"Thank you for sending me a copy of your book; I'll waste no time reading it."
-- Moses Hadas











19th Annual Real Property Workshop By Robert Kilpatrick Committee Chair

Dear ASHRAE OVC Colleagues,

The Real Property Institute of Canada (RPIC) is a non-profit organization comprising both public and private members involved in the real property field. It is the goal of the RPIC to develop and foster a high professional standard of real property management, and to provide a forum for information exchange and continuous improvement.



The 19th Annual Real Property National Workshop, entitled Greening Real Property for Sustainability is being held November 14 to 16, 2006 at the Ottawa Congress Centre.

The National Workshop provides a forum for individuals, agencies and firms working in the areas of real property, including building design and construction, sustainable development, facility management, facility planning, program delivery, regulations, policy development, and project management. This year's program will showcase the latest in environmental and energy management including the following five key streams:

- 1) Greening Buildings;
- 2) Greening Your Workplace;
- 3) Policy and Legislative Requirements
- 4) Emerging Environmental and Energy Technologies; and
- 5) Case Studies for Sustainability

The program also includes several high profile speakers, including **Elizabeth May, Leader of the Green Party**, and a 2005 recipient of the United Nations Environment Program Global 500 Award. She will be making her keynote address to conference delegates on November 15 with a speech entitled "Energy for change: how the real property community can tackle reducing costs and pollution"

Please visit the following website for all program and registration details, and I hope to see you there! Thank you.

http://www.rpic-ibic.ca/en/index.shtml

Bob Kilpatrick, Member ASHRAE OVC, Co-chair, 2006 RPIC National Workshop





Table Top Display by Frank "Johnny Cash" Bann

Past President 2001-2002

Venmar CES Inc. has been manufacturing energy recovery equipment since 1952 from its two manufacturing facilities located in Canada at Saskatoon, Saskatchewan and St-Léonard-d'Aston, Quebec. Founded on a dedication to provide cost-effective commercial ventilation, Venmar CES devotes its time and energy to designing a variety of ventilation products to meet diverse needs. Over one million installations across North America carry the Venmar CES name.



Venmar CES Inc. Saskatoon, SK, Canada



Venmar CES Inc. St-Léonard-d'Aston, OC, Canada

Venmar CES takes pride in its research and development (R&D) efforts in the energy recovery industry. With over 5% of its annual sales devoted to research and development, Venmar CES is truly the leading edge manufacturer of energy recovery products. The R&D staff performs product tests using modern labs with AMCA accredited airflow performance chambers for noise analysis. These testing procedures give the customer assurance that ventilation systems designed and manufactured by Venmar CES will meet or exceed performance expectations.

The manufacturing plant in Saskatoon produces an extensive line of products including: light commercial units of 300 to 2,000 CFM in ERV, HRV and vertical wall mount models and commercial units from 800 to 5,500 CFM in ERV, HRV and VHC models. VHC models allow maximum flexibility to the end user with integrated heating and cooling as well as multiple enthalpy wheel effectiveness choices. These ventilation products are distributed throughout North America as well as internationally.

In St-Léonard-d'Aston, a fully customized line of ventilation products with integrated heating and cooling systems are manufactured for distribution throughout North America. The products are designed with an expansive range of 1,000 to 40,000 CFM, meeting requirements for a large variety of applications from light commercial to industrial. These units include ERVs, HRVs (with flat plate or heat pipe heat exchangers) and make-up air units. Venmar CES excels at manufacturing custom equipment that is engineer-specified for commercial and industrial applications.

Past President



What You Mused

October 17th, 2006 Chapter Meeting by Harry Fortesque-Smythe O.B.E. Past President 1971-1972 Portmahomack Chapter

Another excellent visit to La Contessa started with a well attended afternoon technical session on Dampers, given by Mr. Doug Graham of Tamco. Doug discussed everything from features to sizing and energy calculations based on damper construction. Unfortunately my dear wife Peggy was considerably more entertained by whispered conversations about the "meaning of life", which she had with a delightful representative of the Lord, who accompanied our good friend Marcel Heming to the meeting. This put the "dampers" on the session a tad, but this was more than amply offset by the number of student guests seated with us, who showed great interest in the presentation. Mr. Graham is to be complimented for a tophole effort all-round.

The evening program began on time with only a slight miscue where our president and master Glenn MacLean forgot our chapter secretary's name during the introduction (this may have been a hint for that rake Francois Belair to pull up his socks as his attendance record is a bit shoddy). Then standard committee discussions ensued: TEGA, Student, Research followed by a brief summary of October's mayoral debate on sustainability hosted by BOMA. The student turnout was noticeably strong.

The program was **Condensing Heat Recovery from Boiler and Process Exhaust,** presented by Mr. Robert W. Triebe, M.A.Sc., P.Eng, of Thermal Energy International Inc. From what I understand Mr. Triebe is in great demand internationally to speak on heat recovery techniques, and for good reason. Robert was dynamic and knowledgeable in presenting this extremely important technology to our chapter.

Here are some points from his presentation worth sharing:

In certain boiler/process installations, up to 40-50% of fossil fuel energy is sent out the chimney/breeching stack 10-15% of that lost energy is from latent waste heat

Fuel bills may be reduced up to 18% with condensing heat recovery systems

Canadian firms are leading North America in this technology

Overall this was an extremely enjoyable meeting with an excellent program (as reflected in the strong attendance). At some point during the evening, mention was made by the Executive of the "Young Engineers in ASHRAE" program, or "YEA" for short. Peggy and I were honoured to be seated during the meeting with Douglas S. Walkinshaw of Indoor Air Technologies, and feeling somewhat left out, I decided that he and I should perhaps create our own club with a fancy acronym. I came up with "OAF", which stands for "Old ASHRAE Farts". I have yet to suggest this name to Douglas; I am hesitant to do so because I think he may not approve!

On a somewhat more somber note, this is of course the time of year for remembering those who have fallen in past conflicts for our benefit. The other day I was reminded by a colleague of an absolutely marvelous song by Terry Kelly entitled "A **Pittance of Time**", which never fails to bring a tear to the eye. Even if you have already seen it, watch it again for the first time at: <a href="http://www.youtube.com/watch?v=7phct3aKuFQ&mode=related&search="http://www.youtube.com/watch?v=7phct3aKuFQ&mode=related

Harry Fortesque-Smythe O.B.E. *Qualis pater, talis filius*



*** end of Communiqué ***



