



# ASHRAE Ottawa Valley Chapter

**DATE:** Tuesday January 20, 2015

Technical Session: 16:30, Social: 17:30  
Dinner: 18:30, Program: 19:30

**LOCATION:** Algonquin College Restaurant International  
1385 Woodroffe Ave, Building H, Room H100

**PROGRAM:** Understanding and Evaluating Air-to-Air Energy Recovery Technologies

**SPEAKER:** Paul Pieper, Eng.

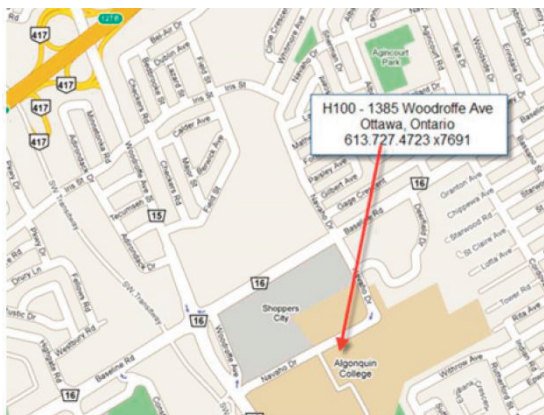
**SPEAKER BIO:**

**Paul Pieper, Eng.**, is the Product Line General Manager for **Venmar CES Unitary Products**. He holds a degree in Pure and Applied Science from Marianopolis College, a Bachelor of Engineering degree from the Department of Building, Civil and Environmental Engineering. Mr. Pieper is a member of the Quebec Order of Professional Engineers (OIQ) as well as ASHRAE and the U.S. Green Building Council (USGBC). He is currently the Vice Chair of ASHRAE TC 5.5 Air-to-Air Energy Recovery and on the Project Monitoring Sub-committee for 1712-RP for the upcoming Dedicated Outdoor Air Design Guide. He is active as an Instructor for the ASHRAE Learning Institutes (ALI).

**TECHNICAL SESSION:**

This month's technical session will begin our series of three sessions focusing on mentorship. This month's session will be hosted by **Steve Moons**, Principal at **Total HVAC**. The session will focus on how mechanical equipment suppliers/representatives interact with the other equipment reps, consultants and contractors, suggestions to newer members of our Society for increasing their knowledge, abilities and penetration into the industry, and suggestions for students on how to prepare for a career in our industry in equipment supply. Consider if there are junior people in your firm, or students that you know that might benefit from this. It is intended to be very open discussion, with lots of conversation.

**DIRECTIONS:**



Chapter Members: \$45.00 Guests: \$65.00  
Student Members: \$30.00 Life or Fellow: \$45.00

**Space is limited so please register online at:**  
<https://ashraeottawa.simplesignup.ca/en/610/index.php?m=eventSummary>

# President's Message

I hope you all had an enjoyable holiday season. I want to welcome you to a new year, and welcome you back to our **ASHRAE** season. **January** always presents the opportunity for new beginnings and new opportunities, and I hope that you all are able to take advantage of the opportunities in your personal and professional lives.

Our next evening meeting will focus on **Air-To-Air Energy Recovery Technologies**. We are very fortunate to have strong local representation for many manufacturers, and they are able to help us arrange for experts who are willing to come to **Ottawa** and speak about the newest technology. This month we welcome **Paul Pieper** with **Venmar**, who also is heavily involved with **ASHRAE** as vice chair of TC 5.5 as well as an instructor for the **ASHRAE Learning Institute**. While I encourage participation at every evening meeting, as energy recovery and efficiency continues to come to the fore in our industry, this meeting can offer very tangible benefits in your day-to-day work to ensure projects meet current requirements and qualify for various grants and certifications.

We are also close upon **ASHRAE's**

winter meetings, held this year in Chicago. While it is short notice to attend this year's event, I would encourage you to think ahead to next year's event, and consider attending. Not only does this coincide with the largest trade show in our industry, but **ASHRAE** also offers a number of courses and learning opportunities throughout the week. It can be difficult to find the time for professional development, and this event offers an excellent opportunity.

I want to thank **Georges Maamari** and his Research Promotion team for their early efforts in this year's campaign. Research Promotion is one of the most important items in our yearly goals. Georges was able to attain a significant milestone of donations by his end-of-**December** deadline, the first time in a number of years the **OVC** was able to achieve this. While ultimately our membership is responsible for donations, Georges has really taken control of this task. I encourage you to continue with your generous donations, and help us achieve our goal. Please speak to Georges directly with any questions.

Lastly, this month we will have the first of three "mentorship" technical



**President & CRC Delegate**  
**Steve Moons**  
2014-2015  
OVC President  
**Total HVAC**

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sessions. These will include a talk from an equipment supplier, consulting engineer and contractor on how they got into the industry, how they interact with the other trades in the industry, what they would suggest to newer members of our Society for increasing their knowledge, abilities and penetration into the industry, and suggestions for students on how to prepare for a career in our industry, depending on which avenue they wish to pursue. I would ask you all to consider if there are junior people in your firm, or students that you know that might benefit from this. It is intended to be very open and honest, with lots of discussion back and forth.

Welcome to **2015**, I hope it is a very successful and enjoyable year for all of you.



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Principal

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## 2015 ASHRAE Curling Bonspiel

**Date:** Friday March 6, 2015  
**Location:** Nepean Sportsplex

1:00 pm to 5:00 pm, dinner to follow

More details and registration link can be found on the OVC website. Please

contact **Chris Healey** with any questions or concerns.

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

Chris Healey  
P: 613-225-9774



**Committee Chair**  
**Chris Healey**

2014-2015  
Special Events

**Walmar Ventilation**

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# What You Missed

The third meeting of the program year took place at the **Restaurant International** at **Algonquin College**. The meeting was called to order by President **Steve Moons** at 6:15PM and attendees were seated.

The business session commenced with President **Steve Moons** introducing the Board of Governors and Executive, followed by **Adam Graham** introducing the guests for the evening. **Adam Moons** welcomed new members and gave a recap of the **ASHRAE** bowling event. The **YEA** theme was introduced by **Joe Della Valle**.

The **Walmart/VibroAcoustics** table top display was introduced by **Ron Giessmann** of **VibroAcoustics**.

The **HTS/Kinetics** table top display was then introduced by **Josee Potvin** of **HTS**.

**Georges Maamari** listed the recipients of last year's research promotion awards. Thank you to all that have made a donation to support **ASHRAE Research**.

During the social hour, the research promotion committee raffled off tickets to an **Ottawa Senators** game. The tickets were graciously donated by Walmart, raising \$440 for **ASHRAE Research**. **Glenn Jones** was the lucky winner.

Following the business session, attendees enjoyed an excellent seated dinner.

Next the evening program commenced at around 7:30PM with **Steve Moons** introducing the himself as the moderator and each of the panel members. He then gave a brief summary of the panel discussion format. The panel members were as follows:

**Ross McIntyre**, P.Eng., Principal, Goodkey, **Weedmark & Associates Ltd. Consulting Engineers**

**Stacey Perron**, Ph.D., P.Eng., Seismic Engineer, **Brownstone Engineering**

**Richard Levesque**, P.Eng., ing., LEED AP, Seismic Engineer, **HTS Engineering Ltd.**

**Cathy Godin**, Project Manager, **SK Sheet Metal Ltd.**

Moderator **Steve Moons** gave the floor to **Ross McIntyre** to give an

introduction to seismic, including where and why it is required. Ross introduced the **OCA** guideline for seismic restraint of operational and functional components document as baseline document for evening discussion. The actual contents of this document and a list of contributors can be found at the link at the end of this article. All of the panelists were involved in the creation of this document.

The **OCA Seismic Design Task Group** provided direction and guidance to complete this guideline over the past 2 years and produced an invaluable document which is intended to help bring some clarity and ultimately standardization within the construction industry when dealing with seismic designs and installations with the **Ottawa** region. The hope is to have this document or one similar, adopted and incorporated into the **Ontario Building Code**, however at this time it remains only as an unofficial reference guide for those responsible for the design and certification for the seismic restraint of operational and functional components within buildings.

**Ross McIntyre** continued discussion from the standpoint of a mechanical consultant and covered several topics including the current standard seismic procurement process. Ross stressed that the cost of proper seismic restraint is less than the potential cost of earthquake damage to M&E systems.

**Steve Moons** then handed the floor to **Stacey Perron** to describe the role of the seismic designer. Stacey went through the calculation that is used in design and explained that some of the components in the equation are site and function specific. This helped clarify why every design is different and why something may be required in one case but not in another or vice versa. She described some challenges that she sees in estimation and execution and stressed the importance of getting your seismic designer involved early in the process.

**Richard Levesque** was then asked to present from the standpoint of a seismic designer and supplier of equipment. He described the estimation process in detail and revealed the location where you can typically



**Secretary**  
**Adam Graham**  
2014-2015  
OVC Secretary  
**HTS Ottawa**

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find important site specific data on the structural plans. He stressed the importance of getting both the designer and supplier involved early and the requirement for the designer to review the work before it is covered or inaccessible.

**Cathy Godin** then discussed seismic from the role of a contractor. She brought up some possible challenges with the current process and also commented on the intent of the **OCA** document. This document was partially meant to level the playing field between local and out of town contractors. It can be challenging for a good, local contractor that is aware of the standards and expectations for seismic in **Ottawa** when they must compete with uneducated, residential or out of town contractors.

Cathy discussed the frustration of some contractors that are being required to do seismic on a small fitup where none of the base building was designed accordingly. Richard formed a rebuttal to this, stating that the idea is that if each fitup is done, eventually everything will be brought up to today's standards.

**Ross McIntyre** then rounded out the night by discussing the role of the code compliance officials and consultants. He stressed that the code officials are reliant on the consultants producing a letter stating compliance. Ross does not feel that this will change but did comment on the importance of seismic certification of an entire project. All drawings, changes, site instructions, and addenda must be reviewed and considered by the seismic designer to protect from gaps. Ross then went on to stress the importance of a prime mechanical/electrical contractor to allow for design synergies and again to help protect from gaps in scope.

Ross performed a quick recap of the evening and again stressed that the **OCA** document is just a guideline but can be a useful tool for consultants, suppliers, contractors, and city officials.



Following the presentation, **Steve Moons** opened the floor up to some questions. After several minutes of Q&A, President **Steve Moons** thanked the speakers and presented them with a gift. The meeting was adjourned at approximately **9:00PM**.

Link: <http://www.oca.ca/docs/resources/SeismicRestraint%202014.pdf>

 <p><b>BAXTEC</b> Mechanical Services Your energy savings partner</p> <p><b>MARK CSIFFARY P.ENG.</b> President • mark@baxtec.com</p> <hr/> <p>Office: 613-738-7450 Fax: 613-738-2973 Cell: 613-229-8277 www.baxtec.com 2470 Dan Reid Drive, Ottawa, ON K1H 1E1</p>  <p>A member of</p>	 <p><b>Daniel Chouinard G. S. C.</b> VP of Operations Cell: (613) 978-2334</p> <p><b>S&amp;R</b> MECHANICAL Division of 681281 Ontario Inc.</p> <p><b>2035 Lanthier Dr., Cumberland, Ontario K4A 3V3</b> Tel: (613) 830-0265 ext. 134 • Fax: (613) 830-9152 dchouinard=srmech.com</p>	 <p><b>Infrastructure and Cities</b></p> <p>Siemens Canada Limited Building Technologies Division 3030 Conroy Road, Suite 100 Ottawa, Ontario K1G 6C2 / Canada</p> <p>Tel: (613) 733-9781 ext. 2099 Fax: (613) 737-4985 Cell: (613) 614-7165 atma.anantram@siemens.com</p> <p><b>Atma Anantram P. Eng</b> Account Executive</p>
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# ASHRAE OVC Seminar

**DATE:** **Wednesday, February 25, 2015**  
Full Day Seminar (8am - 4pm)

**LOCATION:** Master Group Ottawa Training Room  
25H, North Side Road, Nepean, ON, K2H 8S1

**TOPIC:** **Hydronic/Pumping System Design (Part 2 of 2)**

**PRESENTER:** **Phil Searle, C.E.T.**  
*Manager, Consultant Services, Xylem*

**OVERVIEW:** This full day seminar will be geared mainly towards consultants with some water systems and pumping system design experience and an interest in understanding the components and design fundamentals of these systems. This is the second of a two part presentation series. A full presentation outline for Part 2 is given below.

#	TOPIC	BRIEF DESCRIPTION
1	Hydronics Overview	Definition of Hydronic & review of basic system types.
9	Pressure Boosting	Estimating flow & pressure boost. Determining flow split between pumps. Constant & variable speed operating cost analysis. Sizing & placement of storage tank.
10	Heat Transfer Review	Theory behind sizing of all types of Heat Exchangers. Why Shell & Tube differ vs. Plate including effect of fouling.
11	Shell & Tube basics	Construction of Shell & Tube heat exchangers discussing benefits vs. Plate Heat Exchangers.
12	Plate Heat Exchanger basics	Construction of Plate Heat Exchangers discussing benefits vs. Shell & Tube.
13	Brazed Plate Heat Exchanger	Construction of Brazed Plate Heat Exchangers with application examples.
14	Primary Secondary Pumping	Introduction of the Primary Secondary principle. Discussion of the multitude of variations, KISS!
15	Variable Speed Pumping	Understanding the application of using Adjustable Frequency Drives in pumping applications. Why fans and pumps differ significantly. Mechanical system design considerations to stay out of trouble. Primary Secondary vs. Primary only on chilled water systems. ASHRAE 90.1

**Space is limited to 30 people so please register online ASAP**  
<https://ashraeottawa.simplesignup.ca>

Registration will close **February 18, 2015**

Continental breakfast and lunch will be provided.  
Please contact **Sandy Taylor** with any special dietary concerns.  
[sandy@ashrae.ottawa.on.ca](mailto:sandy@ashrae.ottawa.on.ca)

# News Update

## ASHRAE 2015 WINTER CONFERENCE TECHNICAL PROGRAM: NEW TRACKS ADDRESS INDUSTRY'S BIG NEEDS

**ATLANTA** – With more than **five** new tracks, **100** sessions and **400** speakers, the Technical Program at **ASHRAE's 2015 Winter Conference** capitalizes on the wide range of systems, equipment and applications in the **Chicago** area to present several relevant and timely programs.

*"With the Conference being held in the big city of Chicago, the Technical Program itself is going big with a focus on big projects, the big picture and big impacts with the intent of presenting big results for engineers, contractors, manufacturers and building professionals,"* **Doug Cochrane**, Conference chair, said.

The Conference takes place **Jan. 24-28, Palmer House Hilton**, while the **ASHRAE** co-sponsored **AHR Expo** is held **Jan. 26-28, McCormick Place**. Complete Conference information and registration can be found at [www.ashrae.org/chicago](http://www.ashrae.org/chicago), and Expo information at [www.ahrexpo.com](http://www.ahrexpo.com).

The Technical Program begins **Sunday, Jan. 24**, with special hour-long interactive sessions with audience participation, followed by a networking coffee break. It concludes **Wednesday, Jan. 28**.

The Technical Program offers over **200** Professional Development Hours, as well as Continuing Education Units, which can be applied toward a Professional Engineering license.

The Conference features papers and programs for eight tracks, which address trends in the industry and also are relevant to the design community in the area.

The tracks are:

- **Systems and Equipment:** The proper selection of HVAC&R for a job is critical. This track covers considerations for a proper functioning system.
- **Fundamentals and Applications:** Basic HVAC&R principles are key in any project. Knowing what they are helps to apply in specific

projects. This track covers a broad array of pertinent information.

- **New! Industrial Facilities:** Manufacturing and processes can have different requirements for HVAC&R. This track explores design and practices for industrial buildings.

- **New! Large Buildings:** Mission Critical Facilities and Applications: Facilities like data centers have different characteristics. This track looks at what is required for these unique applications.

- **Energy Efficiency:** Energy efficiency is on everyone's mind as energy costs continue to rise. This track covers an array of considerations to help drive toward net zero energy.

- **New! Life Safety:** This encompasses egress, sprinklers, alarms, emergency lighting, smoke barriers and special hazard protection. This track provides the tools for all the factors to consider in life safety and lessons learned.

- **New! Design of Energy and Water Efficient Systems:** The trend is to green sustainable buildings. This track looks at what works and what doesn't to attain these efficient systems.

- **New! Hospital Design and Codes:** Healthcare design takes into account some unique aspects. This track explores design and code requirements to ensure patient comfort.

## 2014 GREEN BUILDING STANDARD NOW AVAILABLE FROM ASHRAE/USGBC/IES

**ATLANTA** - New requirements to further reduce energy and environmental impacts of buildings are contained in the **2014** version of the green building standard from **ASHRAE**, the U.S. Green Building Council and the Illuminating Engineering Society.

**ANSI/ASHRAE/USGBC/IES Standard 189.1-2014**, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, addresses the areas of site sustainability; water-use efficiency; energy efficiency; indoor environmental quality; and the building's impact on the atmosphere, materials and resources.



**Governor**  
**Daniel Redmond**

2014-2015

Chapter Technology

Transfer Chair

**MMM Group**

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The **2014** standard incorporates **67** addenda, reflecting changes made through the public review process since the standard was last published in **2011**. Appendix H gives brief descriptions and approval dates of the addenda included in this new edition.

*"The new standard updates all of its sections to reflect the latest information available to the committee,"* **Andrew Persily**, chair of the **Standard 189.1** committee, said. *"Compliance with these updated provisions will help further reduce energy and environmental impacts through high performance building design, construction and operation while providing indoor environments that support the activities of building occupants."*

Major changes in the **2014** edition include:

- **Energy:** Significant updates are included to reflect the publication of **Standard 90.1-2013**, Energy Standard for Buildings Except Low-Rise Residential Buildings, including revised building envelope provisions. Fenestration orientation requirements were updated based on new research, as well as changes and updates made to equipment efficiency tables, ENERGYSTAR references and continuous air-barrier requirements.

- **Energy Performance, Carbon Dioxide Emissions, and Renewables:** Changes and clarifications are included to reflect changes to **Standard 90.1**. Carbon dioxide emission factors for different energy sources are updated.

- **Indoor Environmental Quality:** Lighting quality is added to the scope of this section, and requirements are added for lighting controls in specific space types. Requirements for air sealing of filtration and air-cleaning equipment are clarified, and new requirements for pre-occupancy ventilation and building envelope moisture management are added.

- **Site Sustainability:** All site requirements are now mandatory, with prescriptive and performance options moved to the mandatory requirements. Requirements for stormwater management are enhanced, and new requirements added for bicycle parking and for preferred parking for low-emission, hybrid and electric vehicles. New requirements are added for predesign assessment of native and invasive plants.

- **Water:** More stringent water use requirements are included for toilets, clothes washers, dishwashers and green roofs.

- **Building Impacts on the Atmosphere, Materials, and Resources:** Requirements are updated for areas to store and collect recyclables, including batteries and electronics. Requirements also are updated for construction waste management and for life-cycle assessment. New requirements are added for multiple-attribute product declaration or certification and for maximum mercury content levels of certain types of electric lamps.

- **Construction and Plans for Operation:** Requirements related to environmental impacts associated with idling construction vehicles are updated. New requirements are added to reduce the entry of airborne contaminants associated with construction areas.

The cost of ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the **Design of High-Performance Green Buildings**, Except Low-Rise Residential Buildings, is \$128 (\$109, **ASHRAE** members).

To order, contact **ASHRAE Customer Contact Center** at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore).

## IMPORTANCE OF REFRIGERATION - AND ICE CREAM - FOCUS

## OF ASHRAE CONFERENCE WORKSHOP

**ATLANTA** - From **Cherry Garcia** to **Sea Salt Caramel**, Americans love their ice cream. Nearly **9 percent** of cow's milk produced in the United States goes toward making ice cream, and **America** is the number one consumer worldwide. What better way to illustrate the importance of refrigeration technology, than to explore the process of making this country's favorite frozen treat?

**Doug Reindl** and **Dan Dettmers'** workshop, "*I Scream, You Scream, We All Scream for Refrigeration Basics of Ice Cream*," is part of the Technical Program at **ASHRAE's 2015 Winter Conference**. The Conference takes place **Jan. 24-28, Palmer House Hilton**, while the **ASHRAE** co-sponsored **AHR Expo** is held **Jan. 26-28, McCormick Place**. Complete Conference information and registration can be found at [www.ashrae.org/chicago](http://www.ashrae.org/chicago).

The session explores the process of making ice cream, leads attendees through the cooling load calculations and finishes up with a chance to participate in the ice cream making process.

One catch, however. Attendees have to correctly calculate the cooling load before they can taste the final product, which will be made cryogenically. The workshop starts at **8 a.m. Sunday, Jan. 25**.

"*We want to reach a younger audience to interest them in the 'R' in ASHRAE - refrigeration*," **Reindl**, a speaker at the session, said. "*We thought this would be an out of the box way to show them about processes, the science, taste and texture of food, home refrigeration.*"

His presentation will focus on the methods and cooling loads encountered in the ice cream industry.

Session chair **Dan Dettmers** notes

that while ice cream is one of the simple pleasures of life, it also is one of the most complex frozen products available today.

"*Unlike ice, which freezes in a crystalline structure, ice cream is an amorphous solid similar to glass*," he explained. "*Its structure is primarily air held in a complex lattice of sugars and fats. Likewise, the process of producing ice cream is far more complex than most frozen foods with variations from traditional ice cream to frozen novelty bars and cakes.*"

Other sessions related to refrigeration include:

- Energy Use Analysis in Retail and Small/Medium Office Applications, **Sunday, Jan. 25**

- Alternative Refrigerants for Residential Refrigerator-Freezers, **Sunday, Jan. 25**

- Walgreens Pursuit of a Net-Zero Store, **Sunday, Jan. 25**

- Refrigeration for Craft Brewing, **Monday, Jan. 26**

- Demand-Defrost Controller for Walk-in Boxes, **Monday, Jan. 26**

- Energy Efficiency of Novel and Conventional Compressors using Low-GWP Refrigerants, **Tuesday, Jan. 27**

- Environmentally Sound Refrigeration, **Wednesday, Jan. 28**

- Supermarket Hot Gas Defrost Piping Guidelines for Best Performance, Reliability and Leak Reduction, **Wednesday, Jan. 28**


- Energy Reducing Design Developments for Ice Arenas, **Wednesday, Jan. 28**



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# Young Engineers in ASHRAE

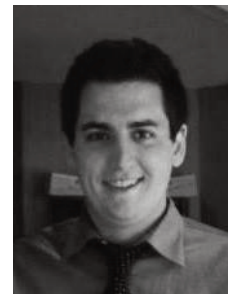
**Hello!**

November was a quite month for **YEA**, however I am working on an event for the end of **January**. The plan so far is a brewery tour, location TBD. The event will be held in conjunction with Student Activities and Membership Promotions. I will send

out an invite email near the end of December once I have finalized details on location and costing.

ALL WILL BE WELCOME, NO AGE LIMITATIONS

Happy Holidays!



**Committee Chair**

**Joe Della Valle**

2014-2015

YEA Chair

**Walmar Ventilation**

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## Job Posting

**Hold the key to your future.** Are you looking for a community with an unbeatable lifestyle, first-class amenities, short-commute times and a smaller, more livable scale? The *Thousand Islands Region of Gananoque, Kingston, Belleville and Quinte West* has it all, plus access to amazing waterfront and educational institutions. You will be inspired by the natural beauty of the area. We sit at the gateway to the world famous Trent-Severn Waterway and the Rideau Canal (a UNESCO World Heritage Site). And you will still be a short drive from Toronto, Ottawa or Montreal.

**The Greer Galloway Group Inc.** was founded in 1965 and since then, public and private sector clients alike have relied upon our services, from initial planning, to environmental issues, to designing basic infrastructure and sophisticated facilities. Today, working from multiple offices in Southeastern Ontario, our staff of professional engineers, hydrogeologists, biologists, planners, technicians, and technologists provides engineering and planning services to federal and provincial governments, municipal authorities and private developers. **The Greer Galloway Group Inc.** currently has opportunities for key engineering staff in our *Belleville and Kingston* locations.

Immediately we are looking for **Mechanical Engineers**.

**Mechanical Engineers** with 10 to 15 years of experience in the Building Services Sector as well as Mechanical Engineers with 10 to 15 years Water / Wastewater Treatment design experience. These positions will involve design and Project Management with responsibilities for supervising junior staff, deadlines and budgets. We require people with excellent communication skills that need little supervision.

We are looking for aggressive, positive personalities who are adaptable to various office and field duties. Candidates should be self-motivated with a desire to learn.

Reply to: [Kingston@greergalloway.com](mailto:Kingston@greergalloway.com) and [Belleville@greergalloway.com](mailto:Belleville@greergalloway.com)

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## 2014 Bowling Social

**Ladies and Gentlemen,**

The annual Bowling Social was held on **Wednesday, Nov. 19th** at the **Merivale Bowling Center**. Turnout was excellent this year, with **11** teams vying for the trophy. In the end, **Walmar** pulled out the victory,

ending a three year run of **Direct Energy** dominance. **Bill Bouris** of **Walmar** was quoted as saying, "A *good time was had by all.*"

Thank you all for the participation and support! See you next year!



**Committee Chair**

**Adam Moons**

2014-2015

Membership Committee Chair

**Walmar Ventilation Products**

E-mail: [adam@walmar.net](mailto:adam@walmar.net)

# Table Top Display

What better way to display a new product, existing line, or share great ideas than to have a table-top display at our local **OVC ASHRAE** meetings? The **OVC** meetings provide a captive audience in the industry and exposure to 50+ people.

We currently have table-top openings for our May 2015 **OVC ASHRAE** meeting schedule. Please contact **Andrew Klassen** at the email below to

secure yours today! Cost for table-tops is \$225 and spaces are filling up quickly, so book your table-top today!

The featured table-tops for the January **OVC** meeting are **AAON** and **SEMCO** presented by **Total HVAC** and **bkm REVERSE FLOW** presented by **Trane**.

Remember to drop by and check out the displays, and thank you for your



**Committee Chair**

**Andrew Klassen**

2014-2015

Table Top Committee Chair

**Trane Canada ULC**

E-mail: [andrew.klassen@trane.com](mailto:andrew.klassen@trane.com)

continued support of our **ASHRAE** Ottawa Valley Chapter.



*polyurethane foam insulated panels, corrosion resistant polyurethane paint exceeding a 2,500 hour salt spray test, and a 25 year non-prorated stainless steel gas heat exchanger warranty.*

**AAON** designs, manufactures and sells semi-custom heating, ventilation and air conditioning equipment for commercial and residential use. Included in their product line are **Air Handling Units** (Direct and Indirect Fired), **Condensers and Condensing Units**, **Chillers**, **Packaged Rooftop Units**, **Geothermal and Water-Source Heat Pumps**, **Air-Source Heat Pumps** and **Pool Room Units**. **AAON** offers superior features like two inch rigid



*increase ventilation, and control humidity. SEMCO manufactures a complete line of energy recovery wheels, energy recovery units, and dehumidification units.*

**SEMCO** has pioneered products and services improving both the quality of air and the efficiency of its delivery by utilizing technology that provides cost-effective control of indoor environments. Taking the quality of indoor environments for granted can be costly. Continuously re-circulated old air contributes to unhealthy indoor environments caused by a build-up of germs and potentially dangerous chemical pollutants. Today, they are a worldwide innovator of desiccant-based products and systems able to recover energy,



*ketplace in their sector. We are pleased to work with the Eastern Ontario construction community on all construction projects in this capacity.*

**SEMCO** and **AAON** are proudly represented locally by **Total HVAC**. **Total HVAC** has been professionally representing **HVAC&R** equipment manufacturers with exceptional sales, support, and accountability for over 17 years. Our policy of continuous improvement means we strive to offer a broad range of the highest quality and most energy efficient products that lead the mar-



*Our energy recovery roots began with the Regent Eco® company back in 1986 in Ontario, Canada.*

*In 1999 we began operations in the United States under the bkm REVERSE FLOW® banner. Over the years, bkm REVERSE FLOW® has installed an extensive number of units throughout the entire North American market place.*

*One of our first installations was in the University of Ottawa, which has been in operation for over 19 years and is still maintaining 90% effectiveness.*

*The technology is both simple and extremely effective. As air is exhausted from a building or process, our two positional damper directs the flow of air through one of two banks of aluminum energy absorbing cassettes whose surface area has been maximized to capture energy from the exhausted air stream. At the same time, outdoor air is being drawn through the opposite cassette bank, returning the previously stored energy to the supply air stream. As our damper changes position, (standard is 70 seconds) the entire system now works in REVERSE FLOW®. Outdoor air is now drawn through the newly energized cassette bank where the captured energy is released, returning it to the supply air stream.*

*While the bkm REVERSE FLOW® Technology's first cost is comparable with all other energy recovery devices, it occupies a category all by itself, when considering the "cost of ownership" associated with energy recovery. Most people agree that energy recovery is a "good thing" but only look at the manufacturer's claimed percentage of efficiency and purchase price. It's equally important to look at the associated life cycle cost which can be many times the initial investment.*



# ASHRAE Technology Award

Are your engineering projects innovative? Do you want to identify yourself as a leader in the **HVAC&R** industry? Would your clients be interested to know that you are innovative? If so, then the **ASHRAE Technology Awards** program should be of interest to you.

The **ASHRAE Technology Awards** program recognizes successful applications of innovative design, which incorporate **ASHRAE** standards for effective energy management, indoor air quality, and good mechanical design.

The purpose of the **ASHRAE Technology Awards** program is three-fold

1. To recognize **ASHRAE** members who design and/or conceive innovative technological concepts that are proven through actual operating data.
2. To communicate innovative systems design to other **ASHRAE** members
3. To highlight technological achievements of **ASHRAE** to others, in-

Link 1: <http://www.ashrae.org/membership--conferences/honors--awards/technology-awards-program>

Link 2:  
<https://www.ashrae.org/File%20Library/docLib/Committees/CTTC/Chapter-Regional-Application-Short-Form.pdf>

cluding associated professionals and societies worldwide, as well as building and facility owners

Projects submitted should have been in operation 9 months and there are six main categories to which applications may be submitted, as follows:

- I. Commercial Buildings (New and Existing)
- II. Institutional Buildings (New and Existing)
  - Educational Facilities
  - Other Institutional
- III. Health Care Facilities (New and Existing)
- IV. Industrial Facilities or Processes (New and Existing)
- V. Public Assembly Facilities (New and Existing)
- VI. Residential (New and Existing)

Winners will be recognized at the chapter level and may be able to submit their project for a regional or even societal award to gain exposure well beyond our local chapter.

The **ASHRAE** website has plenty of



**Governor**  
**Daniel Redmond**  
2014-2015  
Chapter Technology  
Transfer Chair  
**MMM Group**

E-mail: [RedmondDan@mmm.ca](mailto:RedmondDan@mmm.ca)

helpful information to guide you during the application process. The technology awards section of the **ASHRAE** website is located at Link 1 below.

Submission at the chapter level is not very complicated or time consuming. All that is required is submission of the the short form application form (please see link below) and a brief description of the project. See Link 2 below.

Thank you and I hope you realize that the work you do every day is worthy of recognition. Please consider submitting your projects for an **ASHRAE Technology Award**.

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## Student Activities

We had a great Career Panel for the Carleton student chapter in **November**, to introduce students to a number of careers possible in industry. We had a great turn out from young members in our industry to talk about their jobs and experiences. Our thanks to our great panel of **Brian Warren (MMM Group)**, **Kevin Overdulve (Gorlan)**, **Jeremy Strong (TRANE)**, **Chris Chi (XL-Air)** and **Adam Graham (HTS)** who all shared some great experience and advice with the students about our industry. We hope to host another career panel in conjunction with the Ca-

reer fair in the new year.

**Other information for Students:** Check out the **Carleton ASHRAE Student Chapter** website, <http://carletonashrae.blogspot.ca/>

The **ASHRAE Scholarship** program is now accepting applications for undergraduate engineering scholarships at \$3,000 to \$10,000 each, **Engineering Technology Scholarships** deadlines are **May 1st 2015**. Please visit the link below for more information:  
<http://www.ashrae.org/scholarships>



**Committee Chair**  
**Adrienne Mitani**  
2014-2015  
Student Activity  
Chair  
**Smith and Andersen**

E-mail: [Adrienne.Mitani@smithandandersen.com](mailto:Adrienne.Mitani@smithandandersen.com)

If you are a student member who just graduated this summer, you can save lots of money by transferring your student membership with the **Smart Start Program** save \$410 (US) over three years!

**Smart Start Program:**

<https://www.ashrae.org/membership--conferences/student-zone/membership-and-meetings/ashraes-smartstart-program>

# 2014-2015 Research Promotion Campaign

Hi Everyone,

Can you believe it is **January**? I want to start by wishing a Happy New Year to all of our members and **ASHRAE** family. I would like to thank all those who came out to our **Donor Night** last month and thanks again to all of you who have donated to **ASHRAE Research**. If you have already donated this year, please be on the lookout for your name or company name to be recognized at a chapter meeting next year around this time.

**ASHRAE's** research program, established in **1912**, supports **140** research projects with a combined value of more than **\$15 million**. Research focus includes energy and resource efficiency, indoor environmental quality, design and operation and management tools, alternative technologies and materials and equipment. Through scholarships, grants and awards, the Society supports engineering education for undergraduate students and research projects for graduate engineering students and new post-doctoral scholars. **ASHRAE** also produces hundreds of publications, including the **ASHRAE Handbook**, the bible of the HVAC&R industry, books on specialized topics within the field, and various CDs and DVDs. The

Society also publishes the peer-reviewed monthly **ASHRAE Journal**, quarterly **High Performing Buildings** and bimonthly HVAC&R Research, the most prestigious reporting of archival research in the fields of environmental control for the built environment. These are great examples of how our research dollars are put to use.

The **January** meeting theme is research promotion. At this meeting, we will be showcasing what **ASHRAE** research is all about. **2013-2014** saw **ASHRAE** continue its leadership in developing standards and guidance for the design, operation and maintenance of healthy, energy-efficient buildings. The **Ottawa Valley Chapter** met their goal to raise money for research, with the help of Donald Weekes as research chair. Research dollars help fund the science behind the handbooks and standards, making sure that guidance has a solid foundation. **ASHRAE's** research and educational programs are what keeps our industry and profession on the leading edge and assures its continued existence. Confident that you will recognize the benefits of this investment, I am asking you to help fund future HVAC&R research and development. Together, we can all make a difference!



**President-Elect**  
**Georges Maamari**  
2014-2015  
Research Promotion  
**BPA**

**E-mail:** [gmaamari@bpa.ca](mailto:gmaamari@bpa.ca)

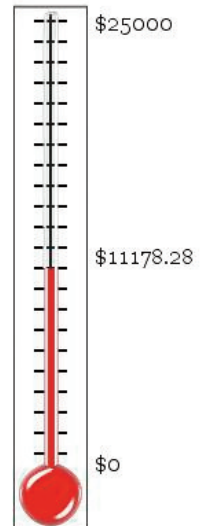
At the **November** meeting, we raffled off **2 tickets** to the Ottawa vs Los Angeles game that were generously donated by **Walmar Ventilation**. These tickets helped raise **\$440** towards **ASHRAE Research**. The hockey raffle will continue at the **January** meeting.

As of **December 16th**, we have raised over **\$11,100.00** towards our campaign goal, which means we are at **45%** of our **\$25,000** objective. I would like to thank our donors to date for the **2014-2015 RP Campaign**. This list will be updated for each monthly newsletter, so hurry up and donate to have your name appear.

Thank you for your continued support of **ASHRAE Research Canada!**

**Georges Maamari**, P.Eng  
President-Elect and RP Chair  
613-596-6454  
1960 Robertson Rd. Suite 100  
Ottawa, Ontario, K2H 5B9

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# Membership Update

## Greetings Everyone!

Heading into the New Year I feel like it's important to remind you all why there is tremendous value in **ASHRAE** membership. This is especially true for students, and those new to the HVAC/R world. My challenge to you all is to relate these values to a student you know or to a young colleague.

### 1. Test the Water

It's perfectly normal and acceptable for students to change their majors in college at least once or twice. But it is also in the best interest of your bank account to change your mind earlier rather than later. It's going to be pretty tough to graduate in **four** or even **five** years if you decide to transition from Recreation and Leisure to Chemistry halfway through your junior year. If you had attended a few meetings or events hosted by the National Recreation and Park Association (NRPA) during your freshman year, you probably would realize much sooner that this wasn't the right field for you. If you aren't positive about how in love you are with your major, what better way to figure it out, than to get outside of the campus bubble and see how it really looks in the real world?

### 2. Add to Your Education

Through award ceremonies, round-table discussions or guest speaker presentations, professional organizations provide plenty of ways to simply learn about an industry. Why do you think so many established, successful individuals participate in them? It keeps them sharp and refreshed on current trends, new ideas and different approaches. Even in less formal networking opportunities, there are many things to learn from talking with the best of the best in any indus-

try. Listen carefully to the language they use to discuss their work, and the types of things that seem important to them. Chances are, information like this will be more valuable than the things you read in your textbook the day before your midterm exam.

### 3. Experience the City

If you went away to college in an area you've never lived before, it's important to leave campus and get a feel for the rest of the area, as well. No matter how great your campus' amenities are, you will graduate one day, and won't be able to hang out by the pool tables in your residence hall anymore. Even if you chose to go to college very close to where you grew up, like I did, you'll still manage to see and experience different things than you would have if you didn't attend events of local organizations. From new restaurants and bars to auditoriums of other nearby colleges, it's all a part of learning the culture of the area in which you find yourself.

### 4. Build a Portfolio

If you're confident in the career path you've chosen, and checked out a few meetings of an organization already, it might be time to look for even bigger benefits. Professional associations are made up of volunteers – most of whom have day-jobs, families and social lives that matter, as well. In other words, the leadership is likely to be open to having some extra help. There are a ton of things you can do to get involved with an association, and simultaneously grow your experience and portfolio. For example, offer to live-tweet the next event, write a blog post to promote it or distribute survey questions after the event to improve event attendance.



## Committee Chair

**Adam Moons**

2014-2015  
Membership  
Committee Chair  
**Walmar Ventilation Products**

E-mail: [adam@walmar.net](mailto:adam@walmar.net)

### 5. Network

Most importantly, professional associations are composed of your future boss, hiring manager and colleagues. In the ultra-competitive job market that young professionals face today, it's no secret that the adage, "It's not what you know, it's who you know" rings true. In this day and age, we have the advantage of digital and social tools to enhance and simplify our networking efforts. During each event, it's important that you meet at least **three** to **five** new contacts. Afterwards, connect with them on **LinkedIn**, including a personal note so they remember who you are. Follow them on **Twitter**, and don't be afraid to talk to them about a professional topic. Not only will you stay on their radar, you will also be building your relationships, which could prove to be invaluable in your job search.

I would also like to introduce and welcome the following new member:

**Mr. Peter McClure**  
**Mr. Rod Sprules**

Looking forward to seeing you at the next **ASHRAE** event!



**DANNY DILLON, GSC**  
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Andrew Klassen

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### Website

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# Advertising

Advertising career opportunities on the **ASHRAE** Ottawa Valley website makes good business sense. We offer a unique way to reach technical professionals and make your ad dollars work hard for you.

To discuss your needs, contact one of our chapter officers, via our "This Year" page. Increase the impact of your advertising through the **ASHRAE** Ottawa Valley website today.

Rates for career opportunities ads are as follows:  
Chapter Member: \$50/month  
Non-member: \$250/month

### Placement of an Ad

We suggest that you complete and submit our advertisement form to speed up the processing of your request. If you have provided your e-mail address, a confirmation receipt e-mail will be sent to you for reference.

Please note that ads require prepayment made to the treasurer. Please register and pay online or for payment and other information contact **Abbey Saunders** at [abbey.saunders@nrc-cnrc.gc.ca](mailto:abbey.saunders@nrc-cnrc.gc.ca).

The ads will appear on the website until the end date for publication provided in the submitted form. To extend the ad, please resubmit the form with the new publication dates and the required prepayment amounts.



## President & CRC Delegate

**Steve Moons**

2014-2015

OVC President

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