



## Ottawa Valley Chapter

- DATE:** **Tuesday March 20, 2018**  
Social: 17:30, Dinner: 18:30, Program: 19:30
- LOCATION:** **Centurion Conference & Event Center**  
170 Colonnade Road, Nepean, ON K2E 7J5
- THEME:** **Student Activities**
- PROGRAM:** **Why Buildings Matter and the Role of ASHRAE 90.1**

As our flagship standard for the minimum energy efficiency for buildings (except low-rise residential) ASHRAE 90.1 represents the Standard of Care for all certifying professionals serving the building industry. The latest version of that standard, 2013, contains dramatic changes that all certifying professionals should know. In this lecture, attendees will be provided a renewed perspective on the importance of our buildings. Attendees will learn about the connections between buildings and their energy use and other social and environmental objectives. We will discuss peak power, water consumption, carbon emissions and other connected issues. Attendees will learn about some of the latest changes to 90.1, especially in those critical areas often overlooked by HVAC professionals – the revised building envelope provisions – as well as other changes, and will be challenged to update their knowledge and understanding of the Standard and its role in delivering better buildings. The presenter served 10 years on the 90.1 development committee and remains an active participant in its development.

**SPEAKER:** **R. Christopher Mathis**

R. Christopher “Chris” Mathis has spent the past 30 years focusing on how buildings and building products perform – from energy efficiency to code compliance to sustainability and long-term performance durability.

Chris received his undergraduate degree in Physics from the University of North Carolina at Asheville. He received a Master of Science in Architecture Studies from MIT where his graduate work focused on energy use in buildings. He has served as a Scientist in the Insulation Technology Laboratory at the Owens-Corning Fiberglas Technical Center, was the Director of the Thermal Testing Laboratory for the National Association of Home Builders Research Center, and Director of Marketing for Architectural Testing, Inc., a private laboratory specializing in the performance of buildings and building products, particularly fenestration performance testing.



Chris is an active participant in Standards and Code development at ASHRAE, NFRC, ASTM and the ICC. He was a founding member and served for four years as the first Director of the National Fenestration Rating Council, the non-profit organization that developed the nation's energy performance rating and labeling system for windows, doors and skylights.

Chris has been a member and active participant in ASTM committee E06 on Performance of Buildings since 1984. During his tenure at ASTM he has worked on numerous task groups and subcommittees developing a range of standards and test methods addressing window performance, window installation, thermal testing of windows, wall system performance and whole building performance. He currently chairs E06.51.11 addressing window installation standards. He is also a member of committee C16 on Insulation and E60 on Sustainability. Chris currently chairs the Built Environment Advisory Committee at ASTM.

Chris is a 30-year member of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE). In ASHRAE he has worked on window thermal test standards, national model codes for commercial buildings (ASHRAE 90.1), model codes for residential buildings (ASHRAE 90.2) and is the energy consultant to Standard 189.1 – ASHRAE's model code for sustainable commercial buildings. He is also the energy consultant to the Chapter Technology Transfer Committee. Chris has been recognized as an ASHRAE Distinguished Lecturer, conducting seminars on a variety of building science, energy efficiency and sustainability topics across the US and worldwide.

Chris has published numerous technical papers at ASHRAE and presented his work at a variety of national and international conferences. His publications include technical papers on: advanced test methods for insulation materials and wall systems; daylighting design and assessment techniques; off-peak cooling techniques for commercial office buildings; new residential and commercial energy codes; and metrics for environmentally preferable products. He has written numerous engineer-, architect-, builder- and consumer-targeted articles and guides on various building and product performance issues. He is the author of Insulating Guide - a book for home builders providing insulating best practices for many of the most common home building details. He is the co-author of Is Your Home Protected from Water Damage? A Homeowner's Guide to Water Damage Prevention published by the Insurance Institute for Business and Home Safety.

Chris has been involved in state and national code development since 1988. He was selected four times to serve on the International Energy Conservation Code Committee of the ICC, working to refine and improve the IECC – our national model energy code. He was also selected to be a member of ICC's Sustainable Building Technology Committee helping to draft a national model code for sustainable buildings. He served on the ICC's first Code Development Committee for the International Green Construction Code.

Chris is a member of the Board of Directors of BETEC – the Building Enclosure Technology and Environment Council, a council of the National Institute of Building Sciences. He also served six years on the Board of Directors of the Energy and Environmental Building Association (EEBA).

Chris provides a number of accredited training seminars for architects, engineers, builders, manufacturers, code officials, utility program developers and others addressing these myriad building science and building performance issues – from improved building energy efficiency and comfort to energy and power planning to improved building and energy codes to the challenges of sustainability and green building. He is a frequent keynote speaker at various national conferences and events.

Chris is also an on-going student of about 90 million years of sustainability and building science through his activities as a beekeeper. He lives and works near the farm he grew up on in the beautiful mountains of Western North Carolina.

**Space is limited so please register online at the link below**

Chapter Members: \$48.00    Guests: \$65.00  
Student Members: \$35.00    Life or Fellow: \$48.00

<https://ashraeottawa.simplesignup.ca/en/3053/index.php?m=eventSummary>

 <p><b>ROY SAMHABER, P. ENG.</b> senior project manager</p> <p>P: 613 224 7500 x6158   P: 888 283 7267   F: 613 224 3726 rsamhaber@ameresco.com   ameresco.ca Ameresco Canada Inc. 106 Colonnade Rd N, Ste 200   Ottawa, ON K2E 7L6</p>	<p>Green • Clean • Sustainable</p>  <p><b>Mark Csiffary P.Eng.</b> President</p> <p>2470 Don Reid Drive Ottawa ON K1H 1E1 mark@baxtec.com www.baxtec.com W: 613-738-7450 C: 613-229-8277</p>	 <p><b>Belimo Americas</b> 5845 Kennedy Road Mississauga, ON L4Z 2G3 Tel: 905-712-3118 Toll Free: 866-805-7089 Cell: 416-659-0823 Fax: 905-712-3124 clark.campbell@ca.belimo.com www.belimo.ca</p> <p><b>Clark Campbell CET</b> District Sales Manager, Eastern Ontario &amp; Atlantic Canada</p>
---	--	--

# President's Message

As we finally head into spring, we also enter the home stretch of our current **ASHRAE** year. We wrapped up **February** with a very interesting program meeting on **Seismic Restraint of Mechanical Systems** and will start the month of **March** off with a couple of special events. On **March 9th**, we will be hosting our **Annual Curling Bonspiel** at the **Nepean Sportsplex**. I am very much looking forward to what should be another successful and fun **ASHRAE social event**.

This month's theme is **Student Activities**, and to that end we have a couple of really exciting events planned. Our student activities chair **Peter Shaw-Wood** and his committee have been doing a great job this year in generating interest from our local colleges and universities. **Adrienne Mitani** has been busily working to ensure the success of our upcoming **Career Fair** scheduled for **March 6th** from 3-6pm, and hosted at **Carleton University**. I encourage everyone that can to participate. We will be suggesting to our **student participants** that they attend our **March Program Meeting**. That said, I would like to ask for your help in **welcoming them** and encourage you to please take some time to **speak with a student about a possible future in our industry**. As usual, we will be looking for **student meal sponsors**. Please consider this option when registering for the next meeting.

Our next program meeting will be held on **March 20th**, and we are back at the **Centurion Center**. Please refer to the program article for location and program details. The upcoming program will provide insight on the latest revisions to **ASHRAE Standard 90.1**. This is a flagship ASHRAE standard and the backbone of **energy efficient design**. It will be put on by **Chris Mathis**, an **ASHRAE distinguished lecturer**. I encourage you all to attend. To register for the upcoming **March** meeting please visit our website at: [www.ashrae.ottawa.on.ca](http://www.ashrae.ottawa.on.ca).

March brings with it an approaching **deadline** for **CTTC Technology Award submissions**. Our CTTC chair **Jacob Hough** spoke at the **February** meeting about how easy it is to submit a project for consideration. I encourage anyone with projects fitting, or questions about the application process to contact Jacob. It would be great to see another strong turnout from our local designers with **Technology Award submissions**.

Our **Research Promotion Campaign** is in full swing now with a **calling campaign** about to be initiated. If you have not received a call from our RP committee members yet, please expect one in the near future. Please feel free to contact **Daniel Redmond** directly anytime, or visit the website to **donate**. Our membership and their personal donations are what make our RP campaign so successful, and I encourage all individuals and organizations to **continue with your generous donations to help us achieve our goal**.

Every year at this time, we officially open the floor for **nomination of chapter members** to positions as next year's officers and executive members. Our **Nominations and Awards Committee**, led for many years by **Bob Kilpatrick** is now in the very capable hands of our **Past President Abbey Saunders**. Thank you Bob for your years of service and we wish you all the best in your retirement. This committee will take **recommendations** from members, past-presidents, officers, and others into account when reviewing the **future leadership of our chapter**. If you have been contemplating increasing your participation in our local ASHRAE chapter, **please see myself or Abbey**. Additionally, if you would like to suggest a colleague or friend that you feel would be an asset to the chapter, please contact us to discuss leadership roles within the chapter and what those roles provide for the chapter. Encouraging members to take action in shaping our chapter is one of our primary



**President**  
**Adam Graham**  
2017-2018  
OVC President  
**HTS**

**E-mail:** [adam.graham@hts.com](mailto:adam.graham@hts.com)

objectives. The next couple months offer a chance for members to have the biggest impact on the leadership of the chapter for the years to come. There are **many roles to fill**, and I can assure you that participation in **ASHRAE** is a rewarding experience.

We will also be reviewing our membership for various **awards** at the **Chapter and Regional level**, so I remind everyone to please update your **ASHRAE Society Bio** so that you may be considered for awards you may be eligible for.

As mentioned in the last issue of the communicate we will be hosting another **technical seminar** on **March 21**. This will be a continuation of the program meeting and will include a more **in depth review of ASHRAE 90.1-2016**. Check out the article in this month's communicate for additional details, or visit the website to register at the link provided.

Lastly, I would like to ask everyone interested in joining us at our **Annual Golf Tournament** to put **Monday June 4th** in their calendars. Details are being coordinated and will be available shortly. Please keep an eye on the website for ongoing news and updates and don't forget to register for this month's program. I look forward to seeing everyone there!

Sincerely,

**Adam Graham**  
**2017-2018 OVC President**

---

## ASHRAE OVC Annual Golf Tournament 2018

**Save the Date!** Monday June 4, 2018 at **The Marshes Golf Club**. More details to follow in coming weeks.

# Seminar: Why Buildings Matter and the Role of ASHRAE 90.1

**DATE:** Wednesday March 21, 2018  
Half Day Seminar - 9:00am - 12:00pm (noon)

**LOCATION:** Master Group  
25 Northside Road, Nepean, ON, K2H 8S1

**PRESENTER:** R. Christopher Mathis (Refer to March Program Details above for Bio)

## OVERVIEW:

As our flagship standard for the minimum energy efficiency for buildings (except low-rise residential) ASHRAE 90.1 represents the Standard of Care for all certifying professionals serving the building industry. The latest version of that standard, 2013, contains dramatic changes that all certifying professionals should know. In this lecture, attendees will be provided a renewed perspective on the importance of our buildings. Attendees will be learning about the connections between buildings and their energy use and other social and environmental objectives. We will discuss peak power, water consumption, carbon emissions and other connected issues. Attendees will learn about some of the latest changes to 90.1, especially in those critical areas often overlooked by HVAC professionals – the revised building envelope provisions – as well as other changes and will be challenged to update their knowledge and understanding of the Standard and its role in delivering better buildings. The presenter served 10 years on the 90.1 development committee and remains an active participant in its development.

**Space is limited so please register online ASAP at the link below.**

ASHRAE OVC Members: \$175.00  
Non-Members: \$225.00

**Registration will close Monday, March 19, 2018**

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

<https://ashraeottawa.simplesignup.ca/en/3167/index.php?m=eventSummary>

**ENGINEERING PERFORMANCE...**

... mechanical, electrical, building automation, environmental, ...

**bpa**

advanced sustainable building systems

Patrick St-Onge, P. Eng., LEED AP | 613-596-6454 | [bpa.ca](http://bpa.ca)  
1960 Roberson Road, Suite 100, Ottawa, Ontario, K2H 5B9

**DILFO MECHANICAL CONTRACTORS**

**DANNY DILLON, GSC**  
PRESIDENT

1481 Cyrville Road  
Ottawa, ON K1B 3L7  
Ph. 613.741.7731  
Cell. 613.880.8504  
Fax. 613.741.9962  
[danny@dilfo.com](mailto:danny@dilfo.com)

**DILFO.COM**

**Goodkey, Weedmark & Associates Limited**  
Consulting Engineers

**Ross McIntyre, P.Eng.**  
Principal, Designated Consultant, Mechanical Engineer

1688 Woodward Dr., Ottawa, ON, Canada, K2C 3R8  
Telephone: 613-727-5111 ext. 239 Fax: 613-727-5115  
[rossmc@gwal.com](mailto:rossmc@gwal.com)

Goodkey Weedmark  
50 Years  
1956 - 2006

**Rod Lancefield, P.Eng., LEED\*AP**  
Engineering Sales  
[rod@htseng.com](mailto:rod@htseng.com)  
C 613.851.1997

**HTS Ottawa**  
1646 Woodward Dr.  
Ottawa, Ontario K2C 3R8  
T 613.728.7408 Ext.221  
F 613.728.8032  
Toll Free 888.280.8544  
[ontario.htseng.com](http://ontario.htseng.com)

**InAIR Environmental Ltd.**

**Donald M. Weekes, CIH, CSP, FAIHA™**  
Partner  
613.858.0244  
[don.weekes@inairenvironmental.ca](mailto:don.weekes@inairenvironmental.ca)

503-1390 Prince of Wales Drive  
Ottawa, ON K2C 3N6  
☎ 613.224.3863  
📠 613.224.2561

Indoor Environmental Consultants  
[www.inairenvironmental.ca](http://www.inairenvironmental.ca)

**Jp2g Consultants Inc.**

**Andrew Young, P.Eng.**  
Project Manager | Mechanical Engineer

1150 Morrison Drive, Suite 410  
Ottawa, ON K2H 8S9  
Tel.: 613.828.7800 x.240  
Email: [andrewy@jp2g.com](mailto:andrewy@jp2g.com)

# What You Missed

The fifth program meeting of the 2017/2018 **ASHRAE** season was held at the **Centurion Conference & Event Center** on Colonnade Road in Ottawa. The theme for the evening was **Chapter Technology Transfer Committee (CTTC)**. The meeting was attended by fifty-seven guests, which consisted of thirty-eight members, sixteen guests and three students. The program for the evening was **Seismic Restraint of Mechanical Systems**. The speaker was **James R. Tauby, P.E.** who is an **ASHRAE Distinguished Lecturer** and Chief Executive Engineer for Mason Industries Inc.

**President Adam Graham** called the meeting to order, introduced the Executive and Board of Governors. **Secretary Aaron Dobson** introduced the guests for the evening.

**Celine Baribeau**, membership promotion chair introduced **nine new members** to the Ottawa Chapter and **two new member advancements**.

**Adrienne Mitani** talked about the **Career Fair** happening at **Carleton University** in the Fenn lounge. Students from **Carleton University, Algonquin College, Ottawa University, La Cite Collegiale** and **Cegep de l'Outaouais** are invited to attend and visit the various booths from companies in the **ASHRAE** community.

**Student Activities Chair Peter Shaw-Wood** thanked **Kevin Courneya** for volunteering his time to help the students at Ottawa University and Carleton University for their **design competition joint entry**.

**YEA Chair Joe Della Valle** congratulated **James** from **Longhill** for winning the **axe throwing competition** from the last **YEA event**. Joe thanked the **eighteen** guests for attending the event. Joe mentioned that the **ASHRAE OVC BOG** selected **Celine Baribeau** to attend the **Leadership Weekend** in **Seattle**. The next YEA event is being planned for the end of **March** at **TailGators** to play billiards.

**Adam Graham** talked about the upcoming **Curling Bonspiel** event

on **March 9th** at the **Nepean Sportsplex**. Registration is open, and spots are available. The cost is **\$400 per team** which includes dinner. Since **2010**, a total of **\$12,630** has been raised from the **ASHRAE curling event** which has been used towards the **ASHRAE OVC scholarship** and **local charities** that **Chris Healy** has initiated.

**President-Elect and Research Promotion Chair Dan Redmond** gave an update on Research Promotion. Every dollar raised in Canada, stays in Canada. For every dollar raised, 2 to 3 dollars is contributed to active research. **Four Ottawa Senators tickets with parking pass** were donated by the **Master Group** which was won by **Chris Frauley**. A total of **\$600** was raised for ASHRAE research which brings the year to date total to **\$16,500**.

**Adam Graham** gave an update from the **ASHRAE Winter Conference**. He congratulated **Jeff Clarke** who has been nominated as **Region 2 DRC** and **Daryll Boyce** who has been nominated as **Society President-Elect** starting **July**.

**CTTC Chair Jacob Hough** mentioned a Technology Award Winner from the Winter Conference for **Region 2. Pageau Morel** in **Montreal** won the **ASHRAE Technology Award for New Commercial Building – First Place (international)** for the Mountain Equipment Co-op Head Office project in Vancouver. Jacob mentioned the local chapter is **accepting applications for technology awards**. The deadline is **March 23rd**. There are different groups for the technology awards (commercial, institutional, healthcare, industrial, public assembly and residential). Each group has a separate award for new building, existing building and retro-commissioning. If any members have a project they are proud of that **shows efficiency and innovation** they are asked to **submit an application**.

**Adam Graham** invited the companies to talk about their **table-tops**. **Adam Moons** from **Master Group** talked about their products in air diffusion and distribution technologies. **Richard**



**Secretary**  
**Aaron Dobson**  
2017-2018  
OVC Secretary  
**Ainsworth**

**E-mail:** [Aaron.Dobson@ainsworth.com](mailto:Aaron.Dobson@ainsworth.com)

**Levesque** from **HTS** talked about new lines for seismic restraints.

Dinner was Garden Salad for starter. Chicken parmigiana with potatoes, carrots and asparagus for main and black forest cake for dessert.

**President Adam Graham** announced the program topic and introduced the speaker, **ASHRAE DL James R. Tauby, P.E.**, who is Chief Executive Engineer for Mason Industries Inc.

The presentation discussed **how mechanical systems are seismically braced**. This includes piping, ductwork, suspended equipment and floor supported equipment. Other topics discussed were housekeeping pads, building codes, anchorage, specifications and going through pictures of equipment failures post-earthquake and how they could have been prevented as well as videos of mechanical equipment going through shaker table testing. Before James started the presentation, he talked about the **ASHRAE Distinguished Lecturer event summary critique** which asks the members and guest to evaluate his presentation in an online survey. This is to ensure ASHRAE has **top quality speakers** in their **Distinguish Lecturer program**. James also mentioned that ASHRAE is looking for volunteers at every level. His advice was to be a Secretary of a technical committee as a good way to start. The Secretary position usually evolves to membership chair, vice-chair and eventually chair of the technical committee. Everything that James talked about is in **ASHRAE Seismic Restraint Manual RP-812 (second edition)**. The manual is part of United States building code and various other building codes as a reference document around world. Australia and New Zealand use the guide for their seismic requirements.

The presentation started with the **specifications** which is the Engineers most important tool. This is to **ensure the project in a seismic area is constructed as planned**. They need to be a properly prepared set of construction documents (drawings and specifications), detailed review, approval of shop drawings and field enforcement.

The **seismic restraint systems** should be looked at as an **engineered system**, not a selection of hardware. The complete load path from the equipment to the structure must be taken into account by the seismic restraint system.

The connection types – **Steel to Steel** connections with bolts should be **designed to handle the appropriate shear and vertical forces**. The **bolts** should be a minimum of **class 4.8 or ASTM – A-307 quality**. James went over a picture of what happens if you do not have good connections. The picture was of the **failure of a cooling tower support after the Northridge Earthquake of 1994 which had been tack welded**. The connection types – **Steel to Concrete** with Post Installed Anchors include wedge, undercut, and adhesive anchors. The **anchors** must be tested to the guideline for **European Technical Approval of Metal Anchors for use in concrete ETAG-001 or American Concrete Institute’s ACI-355.2** to ensure seismic capability. The connection types – **Steel to Wood** using lag bolts. The **lag bolts** must be designed in accordance with the **National Design Specification for Wood Construction**.

**Housekeeping Pads** called Plynth’s or Plinth’s in parts of the world are the **most overlooked portion of equipment installation**. They provide load transfer between the equipment anchorage and the structure of the building. Housekeeping pads need to be **reinforced** and **attached to the**

**structural slab**. James showed a picture of a **housekeeping pad failure at a hospital after an earthquake**. The housekeeping pad shattered like a piece of glass. Other resulting damage after the housekeeping pad failing is the mechanical equipment connections break causing water from the hydronic systems to empty causing considerable damage. 70% of the monetary damage from the earthquake was from mechanical failures.

**All suspended piping requires seismic bracing**. The pipe ductility helps decide the seismic performance of the pipe system. **Weak links are at equipment and valve connections**. Steel and cooper piping with welded or brazed joints are extremely ductile and perform well. Steel and cooper piping with threaded, bonded, compression or grooved joints do not perform as well as welded or brazed joints. Cast iron, plastic or glass piping joints do not perform well. James looked at different **pipe bracing types – cable restraints and rigid brace**. Cable restraints are used for **vibration isolation** and rigid for **non-isolated**. You can use cable restraints for non-isolated. **Cable restraints are less expensive** and need to be **mounted in 2 places**. **Rigid pipe** bracing adds a **downward vertical force** that adds to the gravity load and tries to pull the hanger rod out of the above structure. **This does not happen on tension only cable bracing**. Cable pipe bracing systems use galvanized aircraft cable. This can be used for both vibration isolated and non-vibration isolated systems. **Caution must be taken with hot water or steam systems**, cables can be installed slack for the anticipated **thermal movements**. Work in tension only. James went through pictures of pipe bracing and the effects of the bracing and pipe after the earthquake. There is a lot of movement of pipe during the earthquake. Pictures of hangers damaging the pipe, hangers moving

from its original position and the pipe damaging the hangers.

**Duct bracing** on all ductwork types (rectangular, round and oval) require **seismic bracing depending on the size**. Ductwork may be braced with **either rigid or cable bracing**. Ductwork that is **vibration isolated must use cable bracing**.

**Suspended equipment** requires **seismic bracing depending on the size**. Equipment may be braced with **either rigid or cable bracing**. Equipment that is **vibration isolated must use cable bracing**. **Floor mounted equipment** must be **attached to the structure**. Equipment can be bolted down to the structure and can be held in position with **seismic snubbers**. James went through pictures of **floor mounted equipment anchors failing during an earthquake**.

James mentioned the **ASHRAE Standard 171-2017 Method of Testing for Rating Seismic and Wind Restraints** will show up in the US building code during the 2024 cycle. James played 3 videos on **ASHRAE testing RP-1323 using a shaker testing table** on 2 pieces of equipment donated to ASHRAE. This determines what is the best seismic restraint ASHRAE could come up with. They look at how thick the rubber is, how hard is the rubber and the air gap for the rubber for the vibration isolators. ASHRAE made a mock up restraint and put it through the testing. James went through different reference guides pertaining to seismic.


**President Adam Graham** thanked the speaker and reminded all attendees of the survey. Next meeting is **March 20th** at the **Centurion Conference and Event Center**. Meeting adjourned at 20:58. All chapter meeting pictures and videos are posted online. Visit [www.ashrae.ottawa.on.ca](http://www.ashrae.ottawa.on.ca) and search under the Chapter year for links.



**Chris Harrison**  
President

chrish@longhill.ca  
Phone and cell option: 613-226-3856 ext. 24  
Fax: 613-226-2715  
124 Reiss Rd., Ottawa, Ontario K0A 1L0  
[www.longhill.ca](http://www.longhill.ca)

The Energy Conservation People



**Chris Fudge, P. Eng., LEED® AP**  
Sales Director  
Commercial, Applied, Heating and Vent  
cfudge@master.ca

T 613-829-2816 #263  
C 613-761-2173  
F 613-829-3731  
1 866 429-1977

The Master Group  
25H, Northside Road  
Ottawa (Ontario) K2H 8S1  
MASTER.CA



**Sylvain Chenier, P. Eng., ing., LEED® AP**  
Vice President - Mechanical  
[Sylvain.Chenier@mckeeottawa.ca](mailto:Sylvain.Chenier@mckeeottawa.ca)

1785 Woodward Drive  
Ottawa, ON K2C 0P9  
CANADA  
Tel.: (613) 723-9585 x128  
Fax.: (613) 723-9584  
[www.mckeeottawa.ca](http://www.mckeeottawa.ca)

# Research Promotion

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

Many of you are aware that ASHRAE research plays an important role in our everyday lives. Our built environment including everything from our homes, offices and hospitals to quality of food and living conditions in airplanes are dependent upon the research conducted by ASHRAE to keep people healthy and comfortable. Every dollar raised by **ASHRAE Research Canada** stays in Canada to further research in the HVAC&R industry. Furthermore, for every dollar raised, two to three dollars are invested in research, here in Canada.

The 2017-2018 RP Campaign Team includes:

**Adam Graham, Abbey Saunders, Georges Maamari, Frank Bann, Mike Swayne and Rob Lefebvre.**

Currently the team is off to a great start having raised **59%** of our total goal of **\$30,100** for **2017-2018**.

At the **February Program Meeting**, four tickets to see the Ottawa Senators face off against the Buffalo Sabres were graciously donated by the **Master Group** and **\$620.00** was raised towards this year's campaign. Thank you very much Master Group for your continued support!

Thank you very much to our **2017-2018 RP Campaign donors**. The list below of current 2017-2018 RP Campaign donors will be updated for each monthly newsletter, so donate quickly to see you name appear!



**President-Elect**  
**Daniel Redmond**  
2017-2018  
OVC President-Elect  
**Carleton University**

**E-mail:** [daniel.redmond@carleton.ca](mailto:daniel.redmond@carleton.ca)

Two of the easiest ways to make your donation to the 2017-2018 RP Campaign are by clicking either of the links below.

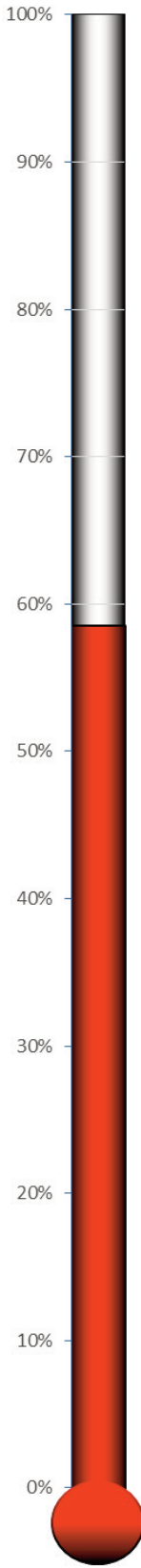
Should you wish to make a donation with a cheque, please make all cheques payable to **ASHRAE Research Canada**.

My contact details are shown below, but I will gladly make arrangements to pick-up any cheques if needed.

**Daniel Redmond**  
**Carleton University**  
Facilities Management and Planning  
1125 Colonel By Drive  
Maintenance Building, Room 200  
Ottawa ON  
K1S 5B6  
[daniel.redmond@carleton.ca](mailto:daniel.redmond@carleton.ca)  
p: 613.520.2600 x8641

ASHRAE OVC link: <https://ashraeottawa.simplesignup.ca/en/2594/index.php?m=eventSummary>

ASHRAE Society link: <https://xp20.ashrae.org/secure/researchpromotion/rp.html>



<b>ASHRAE Partner</b> \$5,000-\$9,999	<b>ASHRAE Associate</b> \$2,500-\$4,999	<b>Major Donor Silver</b> \$1,000-\$2,499
	Longhill Enbridge Gas Distribution	EH Price Ottawa Honeywell
<b>Major Donor Bronze</b> \$500-\$999	<b>Major Donor Antique</b> \$250-\$499	<b>Honor Roll</b> \$150-\$249 (\$100-\$249 for individuals)
Ainsworth Modern Niagara Ottawa Total HVAC Walmar Ventilation Inc. Engineered Air Ottawa Master Group	Aaron Dobson T.A. Morrison & Co. Inc.	Abbey Saunders Chris Frauley Richard Cameron Adam Graham Daniel Redmond Stan Millross Steve Moons Jacob Hough Ryan Dickinson Adrienne Mitani Mike Swayne Chris Fudge Adam Moons Robert Kilpatrick Subash Vohra Andrew Douma Belimo

# News Update

## ASHRAE Announces Redesigned Website

ATLANTA – ASHRAE announced the launch of a new, redesigned version of its website, [www.ashrae.org](http://www.ashrae.org). This website offers quick and easy access to essential information and simplified navigation through mega-menus.

ASHRAE's redesigned website features a **device-responsive layout to support viewing on smartphones, tablets and desktop/laptop computers**. The new search is powered by Amazon Elasticsearch Service, a new and powerful technology. The new search includes thousands of relevant results from other ASHRAE sites such as its **bookstore, eLearning platform and Technology Portal**.

"Visitors are now able to move seamlessly between **learning, planning, and participating online**," says **Jeff Littleton, Executive Director of ASHRAE**. "We are excited about the possibilities that this website will provide to our visitors."

The new website offers users a **customized experience** with IP targeted content, which provides the opportunity for **locally-targeted content based on a website visitor's location**. This feature will continue to evolve over time as content is made available (some seen sooner than others).

"This redesign benefits all of our members and partners whether they are **engineers, contractors, architects, manufacturers, educators** and others whose work is linked to the global built environment," says **2017-2018 ASHRAE President Bjarne W. Olesen, Ph.D.** "Our website visitors want to quickly find the information they need, whether they are searching from their desk or from a smartphone. We believe that this website speaks vividly to ASHRAE's leadership in the industry as well as the passionate support of our members."

The website roll out will take place on a limited basis with continuously expanded content becoming

available over time. The website redesign reflects ASHRAE's ongoing priority to expand its communications, outreach, and dissemination strategies.

## ASHRAE Learning Institute Releases 2018 Online Instructor-Led Course Schedule

ATLANTA – ASHRAE Learning Institute (ALI) has added three new courses to the 23 offerings in its 2018 online instructor-led course schedule.

The course **"Latest in High-Performance Dedicated Outdoor Air Systems (DOAS),"** taking place on **March 20**, covers the latest in DOAS application, design, and control for this very popular means to providing ventilation for a building, particular for low-energy, max tech and **zero energy buildings**. This course supplements material presented in the **ASHRAE Design Guide for Dedicated Outdoor Air Systems (DOAS)**.

**"Save 30% while Complying with ASHRAE Standard 90.1-2013,"** to be held on **May 8**, provides guidance on the use of **ASHRAE/IES Standard 90.1**, which is used by many state and local jurisdictions. Key updates for each of the major building systems are presented, including **HVAC system, lighting system, building envelope, service water heating, and power**.

The course **"Understanding and Designing Chilled-Beam Systems,"** to be held on **May 15** and **Nov. 8**, provides a review of HVAC fundamentals as they relate to **chilled-beam system design** and how to properly identify and control equipment and components that optimize design. Chilled-beam systems **save on cooling and transport energy** by decoupling most or all of the space sensible loads from the air-distribution system and removing them with water, more efficient heat transfer medium in some applications.

Through the instructor-led online courses, industry experts present three-hour sessions on such other



**Governor Jacob Hough**  
2017-2018  
OVC Program  
Committee Chair  
**Total HVAC**

E-mail: [jacobh@totalhvac.com](mailto:jacobh@totalhvac.com)

HVAC&R topics areas as commissioning, energy efficiency, HVAC applications and specialized HVAC environments. Participants will receive access to a recorded version of the courses for which they are registered for continuing reference.

To register, visit: [www.ashrae.org/onlinecourses](http://www.ashrae.org/onlinecourses)

The following is the full **2018 course schedule**:

### Commissioning

- Commissioning Process in New & Existing Buildings - Two-Part Course, **April 23 and April 30**

### Energy Efficiency

- IT Equipment Design Evolution and Data Center Operation Optimization, **March 22**
- Designing Toward Net-Zero Energy Commercial Buildings, **April 5**
- Building Demand Response and the Coming Smart Grid, **July 9**
- Humidity Control I: Design Tips and Traps, **Aug. 21**
- Humidity Control II: Real-World Problems and Solutions, **Aug. 28**
- Energy Modeling Best Practices and Applications - Two-Part Course, **Oct. 2 and Oct. 4**

### HVAC Applications

- Latest in High-Performance Dedicated Outdoor Air Systems (DOAS), **March 20**
- Air-to-Air Energy Recovery Applications: Best Practices, **April 10**
- Understanding and Designing Chilled-Beam Systems, **May 15 and Nov. 8**
- Design of Affordable and Efficient Ground Source Heat Pump Systems, **June 12**
- Optimizing Indoor Environment: Increasing Building Value - Two-Part Course, **June 18 and June 19**
- Variable Refrigerant Flow System: Design and Applications, **July 18 and Nov. 28**
- Designing and Operating High-Performing Healthcare HVAC Systems, **Sep. 18**





- High-Performance Building Design: Applications and Future Trends, **Oct. 29**
- Variable Refrigerant Flow System: Design and Applications, **Nov. 28**

#### Standards and Guidelines

- Save 30% while Complying with ASHRAE/IES Standard 90.1-2013, **May 8 and Nov. 6**
- Complying with ASHRAE Standard 90.1-2016: Appendix G, **May 10**
- Fundamental and Application of ASHRAE Standard 55, **May 23**
- Successfully Managing the Risk of Legionellosis Using ASHRAE Standard 188-2015, **Sept. 12**
- Fundamental Requirements of Standard 62.1-2013, **Dec. 18**

#### ASHRAE Heads to Houston for Annual Conference, June 23 - 27

**ATLANTA** – **ASHRAE** is heading to one of the world’s most air-conditioned cities – **Houston**, for the **2018 ASHRAE Annual Conference**, June 23-27.

The **five-day event** includes **eight conference tracks**, **one mini track**, **tours**, **social events** and a **keynote message** from research scientist and author, **Dr. Ainissa Ramirez**.

Registration is now open for the conference which takes place at the **Hilton Americas-Houston Hotel** and the **George R. Brown Convention Center**. Early bird registration ends **April 30**.

**“ASHRAE’s Annual Conference** provides a forum for a meaningful exchange of knowledge and ideas among thousands of industry professionals seeking new sustainable technology solutions for the built environment,” says **2017-18 ASHRAE President Bjarne W. Olesen, Ph.D.** “This conference is an example of how ASHRAE is at the forefront of innovation in an ever-evolving industry.”

This year’s **Technical Program** features several new tracks, including one on **Residential – Modern Building in Hot and Humid Climates** – a pertinent topic in the building industry recently with the movement toward **net zero housing** and indoor air quality.

The Technical Program will also address one of the most dynamic areas in HVAC&R through the track **HVAC&R Control Freaks**. Topics range from design innovations spreading through the industry to the latest in building integration and

observation, as well as troubleshooting the most common issues occurring in building management systems.

#### Conference Tracks include:

- HVAC&R Systems and Equipment
- Fundamentals and Applications
- District Energy and Cogeneration Plants
- HVAC & Resiliency: Safeguarding our World
- Residential – Modern Building in Hot and Humid Climates
- Professional Skills
- Research Summit
- HVAC&R Control Freaks
- HVAC&R Analytics

At this year’s **sixth annual Research Summit**, an announcement will be made about an exciting collaboration with ASHRAE’s archival research publication, **Science and Technology for the Built Environment (STBE)**.

Additionally, **2018-19 ASHRAE President Sheila J. Hayter, P.E., Fellow ASHRAE**, will present the Society theme for the coming year during the **President’s Luncheon** on **Monday, June 25**.

Learn more and register for the **2018 ASHRAE Annual Conference** at: [www.ashrae.org/houston](http://www.ashrae.org/houston)

# Nominations and Elections Announcement

**Abbey Saunders** and I want to introduce ourselves as the chairs of the **Awards & Nominations Committee**. We would be remiss if we didn't start by sending a huge thank-you to **Bob Kilpatrick**, who so ably chaired the Awards & Nominations committee for many years. We were fortunate to have Bob's direction on this critical committee for so long. The nomination committee is responsible to **build the chapter leadership of tomorrow**. The Nominations Committee helps to shape the direction of the chapter, in that we try to **ensure the very best people are in position to advance our local chapter and respond to the needs of its members**.

The time has come when we need to consider the nominations for **next year's Executive and Board of Governors**. On behalf of the Nominating Committee, I'm pleased to announce the following eligible members to hold office as the **Chapter Executive for 2018-2019**, and the positions for which we are seeking nominations:

**President: Dan Redmond**  
**President-Elect: Chris Fudge**  
**Treasurer: Aaron Dobson**  
**Secretary: Open-nominations invited.**

**Board of Governors:** Nominations are also invited for positions on the Board of Governors, although the number of available positions is not yet determined as the committee gauges the interest and availability of the existing Board members to return for another term.

To complete the nominations process, we will also be asking for **nominations from the floor at the March Chapter meeting**. To be considered for the **Board of Governors**, nominees must be Chapter members in good standing with Society and must have consented either orally or in writing to have their name put forward. The **election to Chapter officers is a distinct honour bestowed on ASHRAE members by their peers**, and in anticipation of their dedication to the continued success of the Chapter.



**Committee Chair**

**Steve Moons**

2017-2018

OVC Nominations and Awards Chair

**Total HVAC**

E-mail: [stevem@totalhvac.com](mailto:stevem@totalhvac.com)

Final recommendations for the available positions on the Executive and the Board of Governors will be made by the Nominating Committee in the coming weeks and will be **announced at the April Chapter meeting, with the installation at the May Chapter meeting**.

Thank you for your participation in this important step in ensuring the future success of the Ottawa Valley Chapter.

## Membership Update

I would like to introduce and welcome the following new members:

**Mr Richard Cameron**  
**Mr Adam Moons**  
**Mr Gurbhinder Sandhu**  
**Mr Tareq Abuimara**  
**Mr Pierre Desjardins**  
**Mr Dent Harrison**  
**Miss Rebecca Pinto**

I would also like to congratulate **Ryan Dickinson** and **Nicholas Lea** on their membership advancement, from Associate to Member.

At any time, if you have any questions or comments regarding your **ASHRAE membership**, please do not hesitate to contact me.

Thank you all for the continued support and participation in your local ASHRAE chapter.

Looking forward to seeing everyone at the next ASHRAE meeting in **March**.



**Committee Chair**

**Celine Baribeau**

2017-2018

OVC Membership Committee Chair

**BPA**

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



**MODERN NIAGARA**

Design. Build. Service.

**Andrew Klassen**

Account Executive  
Modern Niagara Building Controls

WE MAKE BUILDINGS WORK

613-591-7505 (W)  
613-223-2785 (M)  
[aklassen@modernniagara.com](mailto:aklassen@modernniagara.com)  
[www.modernniagara.com](http://www.modernniagara.com)



**Stéphan Riffault, P.Eng.**  
Sales Representative

1250 Old Innes Road, Unit 518  
Ottawa, Ontario K1B 5L3  
613-565-2129, ext. 2128  
[sriffault@regulvar.com](mailto:sriffault@regulvar.com)  
[www.regulvar.com](http://www.regulvar.com)

**Smith + Andersen**

**David McClatchie** C.E.T.  
Associate Principal  
d 613 691 0264  
[david.mcclatchie@smithandandersen.com](mailto:david.mcclatchie@smithandandersen.com)

1600 Carling Ave. Suite 530  
Ottawa Ontario K1Z 1G3  
t 613 230 1186 f 613 230 2598  
[smithandandersen.com](http://smithandandersen.com)



# Chapter Technology Award

Are your engineering projects **innovative**? Do you want to identify yourself as a **leader in the HVAC industry**? Would your clients be interested to know that you are **creative**? 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 threefold:

- 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, including associated professionals and societies worldwide, as well as building and facility owners.

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

**1) Commercial Buildings**  
(New, Existing and Retrocommissioning)

**2) Institutional Buildings**  
(New, Existing and Retrocommissioning)

**3) Health Care Facilities**  
(New, Existing and Retrocommissioning)

**4) Industrial Facilities or Processes** (New, Existing and Retrocommissioning)

**5) Public Assembly Facilities**  
(New, Existing and Retrocommissioning)

**6) Residential**  
(New, Existing and Retrocommissioning)

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.



**Governor  
Jacob Hough**  
2017-2018  
OVC CTTC Chair  
**Total HVAC**

**E-mail:** [jacobh@totalhvac.com](mailto:jacobh@totalhvac.com)

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

The **deadline** for application to Chapter is **March 23th, 2018**. Submission at the chapter level is not very complicated or time consuming.

The following is all that is required for submission:

- 1) Submission of the short form application form (**Link 2** Below)
- 2) Provide a system schematic/ diagram not larger than 11" x 17" in size
- 3) Attach a brief narrative (maximum of 2 pages)

If you have any questions or concerns, please don't hesitate to contact the OVC CTTC Chair: Jacob Hough ([jacobh@totalhvac.com](mailto:jacobh@totalhvac.com))

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

**Link 2:** <https://www.ashrae.org/File%20Library/docLib/HonorsandAwards/AwardDocs/Tech-Award-Application-Short-Form-January-2016.pdf>

 <p><b>David Yin, P.Eng., LEED AP</b> Senior Associate, Buildings Engineering</p> <p>Stantec 400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4 phone: (613) 725-5573 cell: (613) 323-4964 fax: (613) 722-2799 <a href="mailto:david.yin@stantec.com">david.yin@stantec.com</a></p>	 <p>Experience the true meaning of service and quality</p> <p><b>Frank Picchione</b> Regional Sales Manager</p> <p>Tel: 800-561-3449 Cell: 514-781-8381 Fax: 800-668-8476 <a href="mailto:frank@tamcodampers.com">frank@tamcodampers.com</a> <a href="http://www.tamcodampers.com">www.tamcodampers.com</a></p> <p>TAMCO locations in Ottawa, Ontario and Nashville, Tennessee.</p>	 <p><b>Steve Moons</b> Principal</p> <p>Total HVAC Inc. 14A-190 Colonnade Rd., S. Ottawa, Ontario Canada, K2E 7J5</p> <p>Tel: (613) 723-4611 Fax: (613) 723-4677 Cell: (613) 229-5806 Email: <a href="mailto:stevem@totalhvac.com">stevem@totalhvac.com</a> Web: <a href="http://www.totalhvac.com">www.totalhvac.com</a></p>
 <p><b>Glenn Jones B.Eng LEED AP BD+C</b> Sales Manager - HVAC Systems</p> <p>1024 Morrison Drive Ottawa, ON K2H 8K7 613-356-1940 / Cell 514-951-7809 613-820-8111 / Fax 613-820-1414 <a href="mailto:gjones@trane.com">gjones@trane.com</a> <a href="http://www.trane.com">www.trane.com</a></p> 	 <p><b>WALMAR</b> <a href="http://www.walmarventilation.ca">www.walmarventilation.ca</a></p> <p>24 Gurdwara Road Nepean, Ontario K2E 8B5</p> <p><b>BRIAN EUSTACE</b> Engineer Liaison</p> <p>Tel: (613) 225-9774 x 252 Fax: (613) 225-2972 e-mail: <a href="mailto:brian@walmar.net">brian@walmar.net</a></p> <p>VENTILATION &amp; FILTRATION PRODUCTS</p>	 <p><b>WESMECH</b> TECHNICAL SALES INC.</p> <p>50 Ronson Drive, Suite 160 • Toronto, Ontario • M9W 1B3 Tel: 416-251-8990 • Watts: 1-800-613-3789 • Fax: 416-251-8900 <a href="http://www.wesmechtech.com">www.wesmechtech.com</a></p> <p><b>Joseph McCallion, C.E.T.</b> President</p> <p><a href="mailto:josephm@wesmechtech.com">josephm@wesmechtech.com</a> cell: 416-720-8976</p>

# YEA

Hi OVC!

I would like to thank everyone who participated in the **2nd Annual Axe Throwing Event**.

It was an awesome time with many new comers and returning members. I would like to congratulate **James Pady** who narrowly overtook **Samir Elchamaa** for the **Tournament Championship**.

The next event will likely be held near the end of **March**, more details to come.

In other news, the board of governors has selected **Celine Baribeau** to attend the upcoming **YEA Leadership Weekend!**

We hope you have a great experience at the YLW and safe travels to **Seattle!**

Thank you for your support!

**Joe Della Valle**



**Committee Chair**

**Joe Della Valle**

2017-2018

OVC YEA Chair

**Walmar Ventilation**

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



**WSP**

Jim Mills, P.Eng., ing., LEED AP  
Director, Mechanical Group

T 613-829-2800, ext. 19108  
F 613-829-8299  
C 613-240-2746  
[jim.mills@wspgroup.com](mailto:jim.mills@wspgroup.com)

WSP Canada Inc.  
2611 Queensview Drive, Suite 300  
Ottawa ON K2B 8K2  
[www.wspgroup.com](http://www.wspgroup.com)

**Yorkland Controls**  
ENVIRONMENTAL SOLUTIONS

Larry Gravelle  
Tel: (613) 721-3301  
Fax: (613) 721-4906  
1-877-733-3833  
[www.yorkland.net](http://www.yorkland.net)

Yorkland Controls represents leading control systems and component manufacturers. Integrated solutions for Lighting, Card Access, CCTV and Building Automation.

**Honeywell** HVAC/BAS & Vulcan  
**BELIMO**  
**Johnson Controls**  
**Siemens**  
**KMC**  
**GREYSTONE**

**X-L-AIR**

Roderic Potter  
BIM Mechanical Coordinator

**X-L-AIR ENERGY SERVICES LTD.**  
MECHANICAL CONTRACTOR

141 Wescar Lane  
Carp, Ontario  
K0A 1L0

Tel: 613-836-5002 x206  
Cell: 613-266-2134  
Fax: 613-836-8369  
E-mail: [rpotter@x-l-air.ca](mailto:rpotter@x-l-air.ca)  
Web site: [www.x-l-air.ca](http://www.x-l-air.ca)

# Student Activities

**February** started out cold and ended up hot for student activities!

At **Algonquin** our shiny new **Student President Michel** has been advocating the virtues of **ASHRAE** to other years and building the interest.

If anyone has time to stop by the **Applied Research Day** at **Algonquin College** (April 17th) you certainly won't regret it. All of the **final year projects** will be on display including the **Algonquin Submission** to the **Student Design Competition**, I'm sure the team would be happy to see you and get some feedback before final submission. That submission date is creeping up! **Good luck teams!**

Our chapters at **Carleton**, **CEGEP** and **UOttawa** are all also seeing a great influx! **Well done everyone!**

The **ASHRAE Career Fair** was this past **Tuesday March 7th**, at **Carleton University**. With some delays due to the CUPE 2424 strike, we had **15 industry employers** with booths and **4 great sponsors**. We got around a hundred students this year for a great turnout of students. Thanks to all of our attendees and sponsors who helped make a great event.

**Booths:**  
**Algonquin College**  
**Black and MacDonald**  
**Dilfo**  
**Engineered Air**  
**HTS Engineering**  
**JP2G**  
**Master Group**  
**Modern Niagara**  
**Nortec**  
**NORR**  
**Regulvar**  
**Smith + Andersen**  
**Total HVAC**  
**Trane**  
**WSP**



**Committee Chair**

**Peter Shaw-Wood**

2017-2018

OVC Student Activities Chair

**Alscott Air Systems Limited**

E-mail: [pshaw-wood@alscott.ca](mailto:pshaw-wood@alscott.ca)

**Sponsors:**

**Ainsworth**  
**Applied Energy Systems**  
**EH Price**  
**Engineered Air**  
**Johnson Controls**

All the best,

**Peter Shaw-Wood**

OVC Student Activities Chair

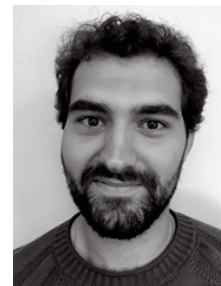


## Table Top Display

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 **60+ people**.

We currently have table-top openings available for the remaining meetings so get your table before they are all gone!

Please contact **David Michelin** ([david.michelin@hts.com](mailto:david.michelin@hts.com)) to secure yours today! Cost for a table-top is **\$225** and spaces are filling up quickly, so book your table-top today!



**Committee Chair**

**David Michelin**

2017-2018

OVC Table Top Chair

**HTS**

E-mail: [David.Michelin@hts.com](mailto:David.Michelin@hts.com)

Payment is to be made through the online system prior to the date reserved. Follow the link below: <https://ashraeottawa.simplesignup.ca/en/2592/index.php?m=eventSummary>

# ASHRAE Training At CMPX 2018 TORONTO



Get in-depth training for real-world HVAC&R challenges from ASHRAE in conjunction with the **2018 Canadian Mechanical & Plumbing Exposition (CMPX) in Toronto**. ASHRAE will present **two courses on ASHRAE Standard 90.1** including the new Save 35% while Complying with ASHRAE Standard 90.1-2013 course to practicing professionals in the HVAC&R industry.

The courses are structured to help participants achieve defined learning objectives, and each attendee receives a course workbook and an ASHRAE certificate of attendance. Courses will be held at the **Metro Toronto Convention Centre in Toronto**.

.....  
Wednesday, March 21, 2018

## **NEW! Save 35% while Complying with ASHRAE Standard 90.1-2013**

**Time:** 9:00am – 12:00pm

**Cost:** \$184 USD / \$234 CAD (\$139 USD / \$177 CAD ASHRAE Member)

**Course Summary:** The 2013 version of ASHRAE Standard 90.1 is widely used by many state and government entities. Learn the background and development of ASHRAE Standard 90.1, its requirements and compliance paths, and how to understand and apply the requirements. Key updates for each of the major building systems will be discussed. This includes the HVAC system, lighting system, building envelope, service water heating, and power. You will learn key mandatory and prescriptive requirements applicable to each system, as well as whole-building compliance options. Case studies and in-class exercises are included as appendices to the classroom presentation.

**Instructors:** **McHenry Wallace, P.E., Member ASHRAE, LEED® AP**  
**Joseph Deringer, AIA, Member ASHRAE, LEED® AP**

.....  
Thursday, March 22, 2018

## **Save Over 40% Using Appendix G of ASHRAE Standard 90.1-2016**

**Time:** 9:00am – 12:00pm

**Cost:** \$184 USD / \$234 CAD (\$139 USD / \$177 CAD ASHRAE Member)

**Course Summary:** Learn how to use the innovative new performance rating method in Appendix G of ASHRAE Standard 90.1-2016. Learn to apply the new rules and procedures via whole-building energy simulations to demonstrate that a building has much better energy performance than a building that just meets the requirements of ASHRAE Standard 90.1-2016. See how Appendix G-2016 can be used to show compliance with ASHRAE Standard 90.1-2016; this is the first time Appendix G has been usable in this manner. [Read More](#)

**Instructors:** **McHenry Wallace, P.E., Member ASHRAE, LEED® AP**  
**Joseph Deringer, AIA, Member ASHRAE, LEED® AP**

ASHRAE Society link: <http://www.ashrae.org/cmpxcourses>



**Enviroair Industries Inc.** is a manufacturing agent based in Montreal, Quebec. Enviroair is a leader in the HVAC Industry, by providing HVAC equipment based solutions for engineers, architects, building owners and contractors. We have a reputation for practical, economical, innovative solutions that meet our client's needs. Our team is composed of dynamic people who want to achieve new challenges. We are currently seeking a Technical Sales Representative to represent our company, products, culture and values within the territory of **Eastern Ontario**.

### **Job Description**

Working out of our Ottawa Branch satellite office, your mandate is to develop business, grow sales and maintain good professional relations with assigned customers in the Greater Ottawa area. Enviroair represents a large portfolio of products provided mainly but not limited to by Patterson-Kelley, Raypak, Enerflex, SPX Cooling Technologies, Dunham-Bush, Taco, Samsung and others.

### **Main Responsibilities**

- Establish and execute a sales plan for your given customers in the Ottawa market.
- Making sales calls with consulting firms and mechanical contractors
- Able to execute a successful presentation (lunch and learn, general technical, other other)
- Educating the local engineering community on our various products
- Keep yourself up to date technically
- Be responsible for the following on your projects:
  - Equipment selections and budget pricing for customers
  - Take-off / revision of BOM (Bill of Material) and pricing of projects
  - Negotiating purchase orders
  - Preparing your project releases to production
  - Verifications of Order Acknowledgements
  - Be willing to go to job sites and assist contractors with questions, start-ups, and troubleshooting of technical issues
- Equipment selection, design, application and optimization
- Provide technical support to our customer on plans and design
- Prepare pricing and quotes for different products when the insides sales department is backlogged

### **Training & Experience**

Bachelor's degree in Mechanical Engineering or at least a College Degree in Building Engineering with relevant experience.

- Good technical knowledge in the following areas: hydronics, ventilation, heating, air conditioning, refrigeration of mechanical building systems;
- Relevant professional experience in the field of technical representation of building ideally or in a related field;
- Customer service experience.
- Excellent selling, communication and negotiation skills
- Strong sense of organization, good rigor at work, autonomy, resourcefulness, strong enthusiasm;
- Excellent communication skills, ease of adaptation, interpersonal skills, strong team spirit;
- Advisory approach, ability to analyze and understand customer needs, sound judgment;
- Sense of negotiation, conviction and persuasion. Ability to work with a diverse clientele of professionals;
- Ability to conduct multiple projects simultaneously and work under high pressure;
- Great interest and motivation for sales, professionalism and customer-oriented attitude, results and objectives;
- Strong overall computer literacy
- Hold a driver's license, own a car and be available for travel.

If you are a dynamic person who enjoys the challenges of technical sales,  
Please send your resume to [mlallemmand@enviroair.ca](mailto:mlallemmand@enviroair.ca)

# 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  
\$80/2 months  
\$100/3 months

## Non-member:

\$250/month

*Note: Purchase of additional months will only have a discounted rate if purchased up front. Otherwise the standard rate will apply for additional months.*

## 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 through the online system and contact **Chris Fudge** ([cfudge@master.ca](mailto:cfudge@master.ca)) with any questions. Follow the link below for payment.

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.

Link: <https://ashraeottawa.simplesignup.ca/en/2590/index.php?m=eventSummary>

Link: <https://ashraeottawa.simplesignup.ca/en/2593/index.php?m=eventSummary>

# Business Card Ads

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.

The cost is \$250.00 for the year. Please contact **Rod Lancefield** at [rod.lancefield@hts.com](mailto:rod.lancefield@hts.com) for more details.

Payment will be made through the online system. Follow the link below for payment.

<https://ashraeottawa.simplesignup.ca/en/2591/index.php?m=eventSummary>

Ads will **now require prepayment**. All of last year's ads will appear in the Communiqué for the first month of this year to allow time for payment for the upcoming year. Ads will be refreshed accordingly in the second Communiqué.

**Publicity**  
**2017-2018 Publicity Committee Co-Chair**  
HTS Engineering Ltd.  
E-mail: [rod.lancefield@hts.com](mailto:rod.lancefield@hts.com)



**Treasurer**  
**Chris Fudge**  
2017-2018  
OVC Treasurer  
**Master Group**

E-mail: [cfudge@master.ca](mailto:cfudge@master.ca)



**Publicity**  
**Rod Lancefield**  
2017-2018 Publicity  
Committee Co-Chair  
**HTS Engineering Ltd.**

E-mail: [rod.lancefield@hts.com](mailto:rod.lancefield@hts.com)

## 2017-2018

### President

Adam Graham

### President-Elect

Daniel Redmond

### Treasurer

Chris Fudge

### Secretary

Aaron Dobson

### Governors

Richard Cameron

Adrienne Mitani

Chris Frauley

Adam Moons

Jacob Hough

### Past President

Abbey Saunders

### Committees

#### Attendance

Sandy Taylor

#### Audit

Georges Maamari

### Capital Communiqué

Ryan Dickinson

#### CRC

Adam Graham

#### CTTC

Jacob Hough

#### Grassroots

### Government Affairs

Richard Cameron

#### Financial

Sandy Taylor

#### Greeter

Mike Swayne

#### History

Jeremy Strong

Ryan Dickinson

### Membership

#### Promotion

Celine Baribeau

### Nominations &

#### Awards

Abbey Saunders

Steve Moons

#### PAOE

Daniel Redmond

#### Program

Graham Falt

#### Research

#### Promotion

Daniel Redmond

#### Roster

Georges Maamari

### Special Events

Colleen Fox

Andrew Douma

Adam Moons

Steve Moons

#### Student

#### Activities

Peter Shaw-Wood

#### Table Top

David Michelin

#### YEA

Joe Della Valle

#### Website

Roderic Potter