



# Ottawa Valley Chapter

- DATE:** **Tuesday February 20, 2018**  
Social: 17:30, Dinner: 18:30, Program: 19:30
- LOCATION:** **Centurion Conference & Event Center**  
170 Colonnade Road, Nepean, ON K2E 7J5
- THEME:** **CTTC**
- PROGRAM:** **Seismic Restraint of Mechanical Systems**

This lecture goes over how mechanical systems are seismically braced. This includes piping, ductwork, suspended equipment and floor supported equipment. Other topics discussed are housekeeping pads, building codes, anchorage and specifications. Typical details from the ASHRAE Manual "A Practical Guide to Seismic Restraint" will be discussed.

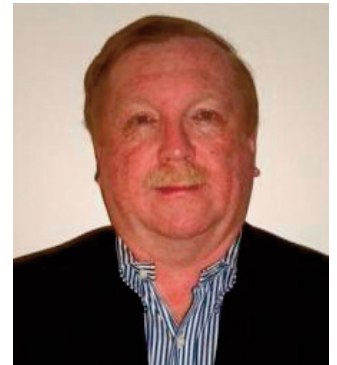
**SPEAKER:** **James R. Tauby, P.E.**

Mr. Tauby is Chief Executive Engineer for Mason Industries, Inc., a worldwide leader in the field of noise and vibration control products, as well as seismic and wind restraint systems. He is a professional engineer in 45 states. He holds a Bachelors of Science in Mechanical Engineering from the University of Alabama.

He regularly lectures around the world on topics ranging from vibration isolation, seismic and wind restraint of mechanical systems to the use of elastomeric expansion joints for piping in seismic applications. He was a member of a team of engineers that inspected numerous buildings after the Loma Prieta and Northridge earthquakes. He has been a featured speaker at the American Society of Plumbing Engineers (ASPE) and ASHRAE National Conventions numerous times.

He is a past chairman of ASHRAE's Technical Committee TC-2.7, "Seismic and Wind Restraint Design." He is currently the chairman of ASHRAE Standards Committee SPC 171P, "Method of Test of Seismic Restraints for HVAC & R Equipment." He is currently ASHRAE's liaison to the American Society of Civil Engineers' (ASCE) Wind Load Task Group. He is a member of the Standards Committee for ASHRAE.

He is a member of the "Hanging and Bracing of Water-Based Fire Protection Systems," technical committee for the National Fire Protection Association's (NFPA) NFPA-13. He is a corresponding member of the Building Seismic Safety Council's (BSSC) TS-5, Masonry construction. He was a member of the BSSC "Anchorage Task Group."



He was an editor on FEMA documents 412, 413, & 414 for the installation of seismic restraints on equipment, piping, ductwork, and electrical distribution systems.

He was the lead author on ASHRAE design publication, "A Practical Guide to Seismic Restraint." This publication includes code requirements, specification considerations, seismic restraint connection methods, along with determining whether a piece of outdoor equipment is governed by seismic or wind loads on a particular project.

**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/3052/index.php?m=eventSummary>

## President's Message

As we move past the halfway mark of the current **ASHRAE** year, I hope that everyone has enjoyed the events that we have hosted to date and that you are looking forward to another few months full of activity. I would love to hear any **feedback from members** that can help improve the way we serve you for the remainder of this year and those to follow.

The **January** meeting included a great panel discussion on **Building Information Modeling (BIM)**. I feel that it was an excellent and timely topic and that the use of technology to improve the design and ongoing maintenance of our built environment is essential. I would like to thank our panel made up of **Spencer Cripps, Chris Chi, Robert Van Lin, Daniel Redmond, and our moderator Adrienne Mitani**.

Last month we also hosted our **second seminar** of the **ASHRAE** year. Thank you to **Andreas Wintzer** for his presentation on **Hydronic Heating System Design**. We had a great turnout, with a good mix from the engineering and contracting community.

Our **February** program meeting is on **February 20th** on the topic of

**Seismic Restraint of Mechanical Systems**. **James Tauby** will discuss some of the ins and outs of seismic restraint and cover details from the **ASHRAE** design publication, "**A Practical Guide to Seismic Restraint**". Please refer to the program article for more details, and go to our website at: [www.ashrae.ottawa.on.ca](http://www.ashrae.ottawa.on.ca) and click on the registration link to sign up.

This month's theme is **Chapter Technology Transfer Committee (CTTC)**. One of the many annual objectives of the CTTC is participation in the **Chapter Technology Awards**. The **OVC** has been very successful in past years with a variety of projects winning Technology Awards at the **Regional Level** for new and innovative designs. **Jacob Hough** is our current **CTTC chair**, and I encourage anyone with questions about the application process to contact him directly.

**March** is shaping up to be a busy month. Our **Annual Career Fair** will be happening on **March 6th** at **Carleton University**. Look out for more information if you are interested in sponsoring or attending. Thank you **Adrienne Mitani** for organizing.



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

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On **March 9th**, we will be hosting our **Annual Curling Bonspiel** at the **Nepean Sportsplex**. This event has always been a great success namely due to the past efforts of **Chris Healey** and his team of volunteers. Chris has decided to pass the torch and **Colleen Fox** has stepped in to run this event for the Chapter. Thank you all for your help. Please contact Colleen if you have any questions.

We have plans for **one or two more seminars** and are working to set up a couple of **technical tours**. Keep an eye on the website and future newsletters for updates. I look forward to seeing everyone at the next program meeting!

Sincerely,

**Adam Graham**  
2017-2018 OVC President

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# 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>

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# What You Missed

The fourth 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 **Young Engineers in ASHRAE**. The meeting was attended by sixty-nine guests, which consisted of forty-six members, nineteen guests and four students. The program for the evening was **The BIM Transition – How Building Information Modeling is Changing the Construction Industry**. The speakers were **Spencer Cripps** from WSP, **Chris Chi** from X-L-Air, **Robert Van Lin** from Perkins + Will and **Daniel Redmond** from Carleton University.

**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 eleven new members to the Ottawa Chapter.

**Student Activities Chair Peter Shaw-Wood** is looking for a volunteer in the consulting community to **mentor** the students at **Ottawa University** for the student design competition. Peter also announced that the **ASHRAE Career Fair** is March 6th at **Carleton University**.

**Adam Moons** provided a wrap-up on the **ASHRAE Bowling** event last November. 42 people attended the event. The winning team was **Ainsworth**.

**President-Elect and Research Promotion Chair Dan Redmond** gave an update on Research Promotion. The research campaign is currently at 47% of goal.

**David Michelin** from HTS mentioned there are openings for **tabletops** for the remaining chapter meetings.

**President Adam Graham** invited **Joe Della Valle** to talk about this month's theme – **YEA (Young Engineers in ASHRAE)**. Joe talked about the goal of YEA, which is to introduce the younger people to the local chapter through the YEA meetings which are held every month or so.

**Adam Moons** and **Joe Della Valle** have been encouraging members to attend the **Leadership Weekend** that will be from **March 23rd to 25th in Seattle**. The Chapter has allocated funds to pay for a chapter member to attend. Anyone can attend the leadership weekend. The cost is **\$450 plus cost of flight**.

Joe Della Valle mentioned the next **YEA event** is **February 9th** which is an **Axe Throwing** event. There are 24 spots available. Cost is **\$45 for members and \$55 for non-members**. Details to be provided on the **ASHRAE** website.

**Adam Graham** mentioned that **February 1st** is the cutoff for people who want to **register** for the **Leadership Weekend** and that there will be an announcement on who the Chapter sends to the leadership weekend.

**Raffle tickets** were sold to win **four Ottawa Senators hockey tickets** that were generously donated by **Engineered Air**. A total of **\$620** was raised for **ASHRAE Research**.

Dinner was Garden Salad for starter. Roast beef with mash potatoes, carrots and asparagus for main and chocolate cake for dessert.

**President Adam Graham** introduced the **moderator Adrienne Mitani** who lead a



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discussion on how **Building Information Modeling** is changing the way we **design, coordinate, construct** and **maintain buildings**. Building Information Modeling is a three-dimensional model-based process that provides the **architecture, engineering and construction industry** the tools to plan, design, construct and manage their buildings. Adrienne welcomed the speakers with an introduction. **Spencer Cripps** is a BIM designer with WSP, **Chris Chi** is a Project Manager with X-L-Air, **Robert Van Lin** is an Architect with Perkins + Will and **Daniel Redmond** is a Director with Carleton University.

Adrienne opened the discussion with **how BIM is different than CAD projects**. With BIM, the **level of effort has increased**, and decisions must be made earlier on in the design process. BIM modelers need to have a **greater depth** on how the building operates. The role of the draftsman becomes **more technical** with BIM. If there is a design change, it allows the Architect to get to a **resolution quicker**. BIM forces sub-contractors to **work together to make things work**.

Adrienne mentioned this also **changes the roles** in the project. Using BIM as a **communication tool** across the construction team allows for **better understanding and collaboration**. BIM breaks down barriers vs traditional approach which operated independent of each other. This allows the project team to **make changes early on with minor impact**. There is more collaboration required on the

  
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**construction side to make the BIM ready for fabrication.** The designer's model does not get used for the fabrications.

Adrienne asked **what would they like for the model to do in the end.** They would like the model to be an information tool to **manage the asset for the lifecycle of the building** which will allow the operations team to understand what is there and **how to maintain it.** BIM is a database of information. During phases of the project, the Architect starts with the 3D orientation. By the time it gets to the Owner, at the end of the project, it is imbedded with all the information. BIM modelers need to understand from the beginning **the level of detail required by the Owner.** This will impact the time required in putting together the model during the project.

Adrienne asked of the **learning curve for BIM** and their experience getting started. The learning curve is getting **familiar with the technology using Revit.** Once you are immersed in the tool it becomes easier. **Consistency is key.** It takes a few projects to develop a list of questions to ask the Architect/Owner and develop your own **design process.** It is a challenge getting started when the model is only received after the project is awarded to the Contractor. The time is limited in getting the model **ready for fabrication** which is less than the time the Architect/Consultant must develop the design model.

Adrienne asked **what are the expectations of the model and are there any misconceptions.** Writing a **good execution plan** is key for the project team to understand what is expected. There is a misunderstanding that things need to change right away, which they do not. There is a **misconception that the Revit model is error free.** The error is less for new construction than

existing. **Revit models are not always updated** with the issued change orders during the project, so issues could still be present on-site due to **interferences.** Especially with a project with a lot of changes, it is very difficult to catch all the elements that could cause a problem. There needs to be an understanding from the project team that **there will still be challenges, still be discrepancies.**

Adrienne asked **what would make a BIM project successful.** Understanding at the start of the project of **how far do you take the BIM model.** Clear expectations of that model. Understanding the **level of detail required** from each group. More time to develop BIM and to **educate field-level staff** on Revit software. Planning and developing the **BIM execution plan** to meet your targets. **A designated BIM coordinator is required to maintain the model.**

Adrienne asked **who owns the BIM process.** The BIM model is authored by the design team at the beginning of the project, but the **ownership evolves over the life of the project timeline.** There are different people that are the primary user of the model over the course of the project. There is a **handover process** from the Consultant to the Contractor with **design assist** where the Contractors are working at the same level as the Consultant on the BIM model or it's a **hard turnover** where there is the expectation for the **Contractor to start their as-builts and coordination right away.** The Ownership rotates through different user groups, the Owner, design team, contractor, back to Owner etc.

Adrienne asked **what are the reasons to do a BIM project.** Increased **efficiencies/productivity over time, increased collaboration, resolving complex issues sooner and quicker.** Architects are creative with their

building shapes. BIM allows Consultants to figure out **placement of equipment in spaces not thought possible.** BIM provides communication with other trades that have an impact on each other, and a better understanding of how the building is constructed. The database is an accurate representation of what there is for **building maintenance and operation.**

Adrienne asked **what is the future of BIM in the industry.** We will see BIM being used with **smaller projects.** Would like to incorporate **mechanical design calculations** into Revit. Incorporate the **use of mobile devices** with the Revit model for the field staff to use. **Use of estimating plug-ins.** Incorporate **building automation system functionality** into the Revit model to uncover issues with building operation vs design/performance, and **design performance plug-ins** to automate functions and simplify complex processes.

**President Adam Graham** thanked the speakers and reminded all attendees of the survey. Next meeting **February 20th** at the **Centurion Convention and Event Center.** Meeting adjourned at **21:05.**

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.



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# 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 **52%** of our total goal of **\$30,100** for **2017-2018**.

At the **January Program Meeting**, four tickets to see the Ottawa Senators face off against the New Jersey Devils were graciously donated by **Engineered Air Ottawa** and **\$620.00** was raised towards this year's campaign. Thank you very much Engineered Air!

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!

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

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



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

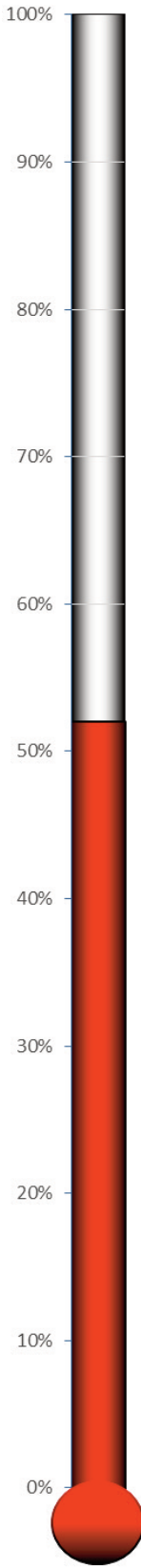
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Two of the easiest ways to make your donation to the 2017-2018 RP Campaign are by clicking either of the links below.

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.

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# News Update

## ASHRAE Presents Awards at the 2018 Winter Conference

**ATLANTA – ASHRAE** recognized the outstanding achievements and contributions of members to furthering energy efficiency in the heating, ventilation, air conditioning and refrigeration industry during the **2018 Winter Conference**. A list of the **awards and their recipients** are below.

### Fellow ASHRAE

Fellow ASHRAE is a membership grade that recognizes members who have attained distinction and made substantial contributions in HVAC&R such as education, research, engineering design and consultation, publications and mentoring. The Society elevated **25 members** to the grade of Fellow:

- **Andreas Athienitis**, Ph.D., Eng., professor, BCEE Department & NSERC/Hydro Quebec Industrial Research Chair and Director, Centre for Zero Energy Building Studies, Concordia University, Montreal, Quebec, Canada.
- **Frederick W. Betz**, Life Member ASHRAE, senior mechanical engineer, PEDCO E & A Services, Inc., Cincinnati, Ohio.
- **Jeff G. Boldt**, P.E., HBDP, director of innovation and quality, IMEG Corp., Madison, Wis.
- **James A. Carlson**, president, Seismic Source International, Omaha, Neb.
- **B. Keith Dunnivant**, P.E., vice president, Sales/Americas, Data Center Division, Munters Corporation, Buena Vista, Va.
- **Deep Ghosh**, P.E., principal/lead engineer, Southern Nuclear, Birmingham, Ala.
- **Katherine G. Hammack**, executive director, performance improvement, government and public sector services, Ernst & Young, McLean, Va.
- **Traci A. Hanegan**, P.E., HFDP, principal, Coffman Engineers, Inc., Spokane, Wash.
- **Adam W. Hinge**, P.E., managing director, Sustainable Energy Partnerships, Tarrytown, N.Y.
- **Ronald E. Jarnagin**, Presidential Member ASHRAE, principal owner, RLK Technical Consultants, Richland, Wash.
- **Shaobo Jia**, Ph.D., principal

engineer, global research and development, Heatcraft Worldwide Refrigeration, Stone Mountain, Ga.

- **Jay A. Kohler**, P.E., director, technology and innovation, chiller solutions, Johnson Controls, New Freedom, Pa.
- **Edwin J. Langebartel**, P.E., senior discipline engineer, mechanical, Coffman Engineers, Inc., Spokane, Wash.
- **Qiao Lu**, Ph.D., P.E., senior staff scientist and engineer, Rockwell Collins (B/E Aerospace Inc.), Anaheim, Calif.
- **Raj M. Manglik**, Ph.D., professor of mechanical engineering and director of the Thermal-Fluids & Thermal Processing Laboratory, University of Cincinnati, Ohio.
- **Mark O. McLinden**, Ph.D., chemical engineer, National Institute of Standards and Technology, Boulder, Colo.
- **R. Lee Millies**, Jr., P.E., president, Millies Engineering Group, Munster, Indiana.
- **Alessandro Sandelewski**, Ph.D., Ing., Life Member ASHRAE, technical director, ASC Engineering SRL, Milano, Italy.
- **Dilip R. Sarda**, director, Synergy Agrotech PVT Ltd., Ahmedabad, Gujarat, India.
- **Jeffrey Siegel**, Ph.D., professor, Department of Civil Engineering, University of Toronto, Ontario, Canada.
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- **Rex Stockwell**, P.E., senior engineering consultant, Vibrantcy, Albuquerque, N.M.
- **Wei Sun**, P.E., president and CEO, Engysco, Inc., Ann Arbor and Farmington Hills, Mich.
- **Adrienne Thomle**, retired global product manager, Honeywell International, Reno, Nev.
- **Gerald J. Williams**, P.E., Life Member ASHRAE, partner/senior vice president, 8760 Engineering, St. Louis, Mo.

### Award of Engineering Excellence

The Award of Engineering Excellence was created in 1989 to recognize a **first place winner** of the **Technology Award competition** for an outstanding application of innovative design and effective energy utilization. The recipient of the Award of Engineering Excellence has demonstrated the best overall



**Governor  
Jacob Hough**

2017-2018  
OVC Program  
Committee Chair  
**Total HVAC**

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compliance with the judging criteria. This award was last presented in 2014. The recipients are **Jonathan R. Rumohr**, P.E. and **Jesse Hendershot** in the existing educational facilities category for the **Heritage Hall Alumni Center** at **Western Michigan University**.

### ASHRAE Technology Awards

The ASHRAE Technology Awards recognize outstanding achievements by ASHRAE members who have successfully applied innovative building designs. Their designs incorporate ASHRAE standards for effective energy management and indoor air quality and serve to communicate innovative systems design. Winning projects are selected from entries earning **regional awards**. First place recipients are:

- **Roland Charneux**, Pageau Morel et Associés, Inc. Montreal, Quebec, Canada, first place, new Commercial Buildings category, Mountain Equipment Co-Op Head Office, Vancouver, British Columbia. The building is owned by the Mountain Equipment Co-Op.
- **Mark C. Hersch**, P.E. and **Holly M. Stevens**, P.E., MODUS, Des Moines, Iowa, first place, Existing Commercial Buildings category, Market One LLC, Des Moines, Iowa. The building is owned by Market One.
- **Raymond L. Beaufait**, P.E. CMTA Consulting Engineers, Prospect, Kentucky, first place, New Educational Facilities category, Discovery Elementary School, Arlington, Va. The building is owned by Arlington Public Schools.
- **Steven T. Taylor**, P.E., Fellow ASHRAE, Taylor Engineering LLC, Alameda, Calif.; **Todd Gottshall**, P.E., Western Allied Mechanical, Inc., Menlo Park, Calif.; **David Heinzerling**, P.E., Taylor Engineering LLC, Alameda, California; and **Allan Daly**, P.E., Albany, Calif., first place, New Other Institutional Buildings category, San Francisco Museum of Modern Art, San Francisco, Calif. The building is owned by San Francisco

Museum of Modern Art.

• **Eric Michael Fullerton**, P.E., HFDP, **Adam M. McElderry**, **Andrew Jester**, Bernhard TME, Little Rock, Arkansas, first place, Health Care Facilities Existing Building Commissioning category, Pineville Enterprise Energy Management Phase 1, Charlotte, N.C. The building is owned by Carolinas Healthcare System.

• **Samuel Paradis** and, **Yves St-Georges**, P.Eng., SNC – Lavalin, Quebec, Canada, first place, New Public Assembly category, Amphithéâtre Multifonctionnel de Québec (Centre Videotron), Québec. The building is owned by Ville de Québec.

### Student Design Competition

The Student Design Competition focused on a new single-story meteorological station in the Diego Ramirez Islands (Islas Diego Ramirez), Chile.

First place in the HVAC Design Calculations category was awarded to San Jose State University. Team members are **Wilton Chang**, **Matthew Le**, **Aditya Mairal**, **Austin Stevenson** and **Suraj Thapa**.

First place in the HVAC System Selection category was awarded to Warsaw University of Technology. Team members are **Dagmara Ćwiek**, **Tomasz Kolsicki**, **Karolina Kowal** and **Bartłomiej Tokarzewski**.

First place in the category of Integrated Sustainable Building Design was awarded to the University of Central Florida. Team members are **Itza Beltran**, **Matthew Coalson**, **Karena Wai-Ling Edminister**, **Toby Miles**, **Samad Syed** and **Woranart Timsuwan**.

The Setty Family Foundation Applied Engineering Challenge required students to plan, develop and enact solutions to sustainability issues in their local or regional areas.

The first place student team from Cal Poly San Luis Obispo designed a retrofit evaporative cooled system to reduce the energy consumption of typical residential air conditioning system using harvested and/or reclaimed water for a residence in Atlanta, Ga. Team members are

**Sean Bybee**, **Sunghoon Chung**, **Austin Hochstetler** and **Antonio De Jesus Aguayo**.

### E.K. Campbell Award of Merit

**Julia Keen**, Ph.D., P.E., Fellow ASHRAE, received the E.K. Campbell Award of Merit. The award honors an individual for outstanding service and achievement in teaching and is presented by the Life Members Club.

### John F. James International Award

**Timothy C. Dwyer**, C.Eng., Fellow ASHRAE, received the John F. James International Award. The award recognizes a member who has done the most to enhance the Society's international presence.

### ASHRAE Pioneers of Industry Award

The ASHRAE Pioneers of Industry Award recognizes deceased individuals who have made milestone contributions to the growth of HVAC&R. The recipient, **Sadi Carnot (1796 – 1832)**, was a French military engineer and physicist, often described as the "**father of thermodynamics**". Carnot's work attracted little attention during his lifetime, but it was later used by **Rudolf Clausius** and **Lord Kelvin** to formalize the second law of thermodynamics and define the concept of entropy.

### ASHRAE Hall of Fame

**Lynn G. Bellenger**, P.E. Fellow/Presidential Member ASHRAE and **Seichi "Bud" Konzo** were inducted into the ASHRAE Hall of Fame. The ASHRAE Hall of Fame honors deceased members of the Society who have made milestone contributions to the growth of ASHRAE-related technology or the development of ASHRAE as a society.

### F. Paul Anderson Award

**Steven T. Taylor**, P.E., Fellow ASHRAE received the F. Paul Anderson Award. The award is given for notable achievement of outstanding services performed in the HVAC&R field. The award, ASHRAE's highest given for technical achievement, is named in memory of Presidential Member F. Paul Anderson, who was a pioneer in the study of environmental conditions for comfort.

### New Advanced Energy Design Guide Available to Help K-12 Schools Achieve Zero Energy

**ATLANTA** – A new publication is now available to empower owners, contractors, consulting engineers, architects, designers and administrators of K-12 school buildings to cost effectively achieve advanced levels of energy savings.

The resource, **Advanced Energy Design Guide for K-12 School Buildings – Achieving Zero Energy**, is the first in a series of guides that is tailored to the design and creation of **zero energy buildings**. The guides are developed by **ASHRAE**, the **American Institute of Architects (AIA)**, the **Illuminating Engineering Society (IES)**, the **U.S. Green Building Council (USGBC)** with support and funding from the **U.S. Department of Energy (DOE)** through the **National Renewable Energy Laboratory (NREL)**. The guide is available as a free download at: [www.ashrae.org/freedaedg](http://www.ashrae.org/freedaedg).

"This comprehensive guide was developed by a team of zero energy experts that bring building science and practical application together to create an achievable goal of zero energy schools," says **Paul Torcellini**, project committee chair. "The guide builds upon the popular **50% advanced energy design guide series** with new and updated recommendations on energy efficiency. Additionally, it provides guidance for **on-site renewable energy generation** and establishes a set of energy performance goals for achieving zero energy. The goals are provided for all ASHRAE climate zones, in both site and source energy."

Strategies for achieving energy targets are provided throughout the guide and cover how to set measurable goals, hire design teams committed to that goal, use simulation throughout the design and construction process, and maintain awareness about how process decisions affect energy usage.

As in previous guides, the how-to tips provide specific direction broken into specialty areas—**building and site planning, envelope, daylighting, electric lighting, plug loads, kitchens and food**



**service, water heating, HVAC and renewable generation.** Each section contains multiple tips that move the design incrementally toward the zero-energy goal. **Case studies** and **technical examples** illustrate that the energy goals are achievable at typical construction budgets, as well as demonstrate the technologies in real-world applications.

Additional features of the Advanced Energy Design Guide for K-12 School Buildings – Achieving Zero Energy include:

- Guidance on how to connect zero energy and teaching and learning, as well as how to use zero energy as a catalyst for learning

- Practical advice for owners and designers to achieve successful energy outcomes – and direction for school administrators on how to achieve zero energy in their new schools

- Information on how every design decision can move a project toward zero energy

- Achievable energy targets all schools can strive toward, including schools without renewable energy sources

- Recommendations for conceptual phase building planning and siting

- Strategies to reduce and eliminate thermal bridging through the building enclosure

- Plug load control and management plans to reduce energy consumption in K-12 schools

- LED light sources and controls recommendations for better lighting quality and energy benefits

- Information on thermal mass to ensure optimum energy savings for HVAC systems

- Strategies for balancing energy efficiency and renewable energy generation including the best use of roof space

To learn more and download Advanced Energy Design Guide for K-12 School Buildings – Achieving Zero Energy, please visit: [www.ashrae.org/freeaedg](http://www.ashrae.org/freeaedg).

## ASHRAE Curling Bonspiel

The **2018 ASHRAE Curling Bonspiel** will be held again this year at the **Nepean Sportsplex** on Friday, March 9th.

We have room for **18 teams** this year. The cost is **\$400.00 per team**.

First rock will be thrown at **12:00pm** and dinner will follow at approximately **6:00 pm**.

Registration Link: <https://ashraeottawa.simplesignup.ca/en/3069/index.php?m=eventSummary>

To register please visit our website at the link below.

For any other questions, please contact **Committee Chair Colleen Fox** at **613-808-4316** or [cfox@trane.com](mailto:cfox@trane.com)



**Committee Chair**

**Colleen Fox**

2017-2018

OVC Curling Chair

**Trane Canada ULC**

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

## YEA

**Hi OVC!**

I am excited to announce the date for our next **YEA event!** I have booked **BATL Axe Throwing** on February 9th at 6:00pm.

An email has been sent to all members with a registration link and event details. The event is open to everyone so please share with anyone who may be interested. **24 people max** so sign up asap if interested.

Also a decision has been made, the **OVC Board of Governors** has selected **Celine Baribeau** to attend the upcoming **YLW (YEA Leadership Weekend)** in **Seattle**.

**Congratulations Celine!** This is a great opportunity and will be well worth the trip.

If you have any questions about Axe throwing or future YLW's let me know.



**Committee Chair**

**Joe Della Valle**

2017-2018

OVC YEA Chair

**Walmar Ventilation**

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

Thank you for your support!

**Joe Della Valle**

**David Yin, P.Eng., LEED AP**  
Senior Associate, Buildings Engineering

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# Membership Update

Are you eligible for **grade advancement**? To become a **Member**, twelve Society-approved years of experience composed of an approved combination of completed education beyond high school, work experience, and professional engineering or related professional registration or license issued by a legally authorized body.

Here is how it breaks down:

- **One and one-half years of credit** for each year of completed education for **graduates of approved technical curricula**.
- **One year of credit** for each year of education for **non-graduates** who have completed at least **two years of approved technical curricula**.
- **One year of credit** for each year of completed education for **graduates of colleges or universities which do not have accreditation**. Those holding associate degrees from

technical institutions shall also be credited for one year for each year of education.

- **One year** for each year of qualifying work experience in the performance of duties in **work related to ASHRAE fields**.
- **Three years of credit** for **professional registration or license** issued by a legally authorized body in engineering or related fields.

In other words, **if you have your P.Eng**, I encourage you to **advance your ASHRAE membership**.

To advance from **Associate** to **Member**, you must update your **ASHRAE bio online**, and notify [membership@ashrae.org](mailto:membership@ashrae.org) that you have an updated bio and wish to be considered for grade advancement.

I would like to introduce and welcome the following new



## Committee Chair

**Celine Baribeau**  
2017-2018  
OVC Membership  
Committee Chair  
**BPA**

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

members:

**Dr Araz Ashouri**  
**Zixiao Shi**  
**Mr Ghofran Chiha**  
**Mr Darcy Gray**  
**Mr Christopher Goudie**  
**Ms Shamsa Hidayat**

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 February.

# Student Activities

## Good day everyone –

Coming off the short but sweet break, 2018 is going to be a great year for the **ASHRAE OVC students** at all levels.

Moving ahead we're all focused on the **Career Fair** taking place at **Carleton University** on **March 6th**. For companies interested in having a booth please follow the link below to register.

I'd like to formally announce the addition to the joint student design competition entry from **Carleton & Uottawa**. **Kevin Courneya**, with a long and profound history in the local HVAC industry, will be working with

the students as their mentor. I am very excited about the partnership and want to thank **Kevin** for taking on the job! Good luck team!



Booth Registration Link: <https://ashraeottawa.simplesignup.ca/en/2947/index.php?m=eventSummary>



## Committee Chair

**Peter Shaw-Wood**  
2017-2018  
OVC Student Activities  
Chair  
**Alscott Air Systems Limited**

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

All the best,

**Peter Shaw-Wood**  
OVC Student Activities Chair

Glenn Jones B.Eng LEED AP BD+C  
Sales Manager - HVAC Systems

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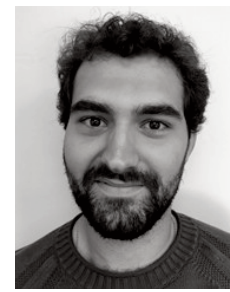
# Table Top Display

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!

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>

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!



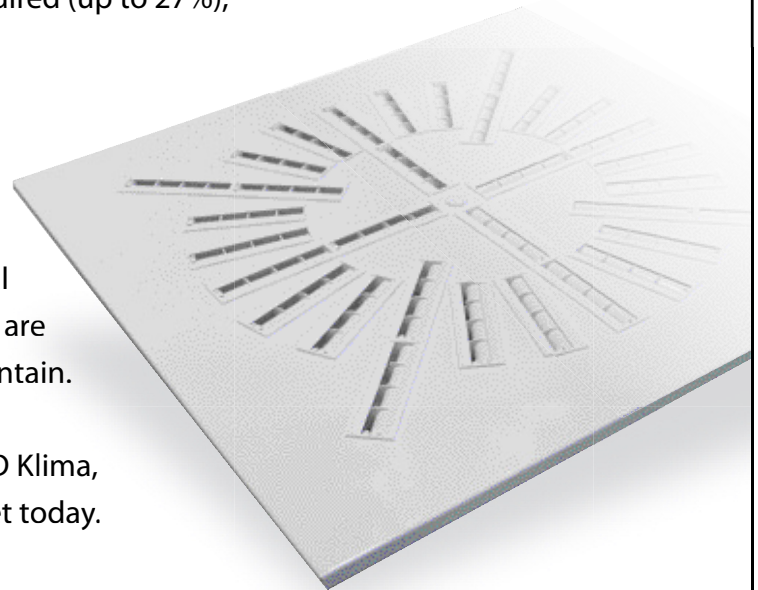
**Committee Chair**  
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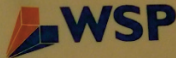
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**Enviroair Industries Inc.** is a manufacturing agent based in Montreal, Quebec. Enviroair is a leader in the HVAC Industry, by providing HVAC equipment based solutions for engineers, architects, building owners and contractors. We have a reputation 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)

# 2017-2018

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### Promotion

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### Roster

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## Special Events

Colleen Fox

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## Student

### Activities

Peter Shaw-Wood

## Table Top

David Michelin

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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

\$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.**

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