



ASHRAE Ottawa Valley Chapter

- DATE:** **Tuesday January 16, 2018**
Technical Session: 16:30, Social: 17:30, Dinner: 18:30, Program: 19:30
- LOCATION:** **Centurion Conference & Event Center**
170 Colonnade Road, Nepean, ON K2E 7J5
- THEME:** **YEA**
- PROGRAM:** **The BIM Transition - How Building Information Modeling is Changing the Construction Industry**

Join us for a discussion on how Building Information Modeling is changing the way that we design, coordinate, construct and maintain buildings. This diverse group from our industry will give different perspectives on how BIM is used, pros and cons of using it, and the possibilities of where this technology can take us.

SPEAKERS:
(Speaker biographies continued on page 2)

Mechanical Consultant:
Spencer Cripps – WSP – Mechanical Designer

Mechanical Contractor:
Chris Chi – X-L-Air – Project Manager

Architect:
Robert Van Lin – Perkins + Will – Intermediate Architect, Associate

Building Operations:
Daniel Redmond – Carleton University – Director of Energy and Sustainable Services

TECHNICAL SESSION:

This month's technical session will provide a technical background for the program discussion on BIM. It will be an introduction BIM and Revit, terminology, history of the platforms and technical background. This session will be useful for designer, contractor or owners who wish to have a greater understanding of what BIM and Revit are bringing to the industry and how it can be used. This will be presented by **Adrienne Mitani** of **Smith + Andersen**.

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/610/index.php?m=eventSummary>

SPEAKER BIOS:

Spencer Cripps – WSP

In his roles as mechanical designer and BIM coordinator at WSP, Spencer Cripps has worked on combining the two fields for a wide range of projects including the Confederation Line stations, University of Ottawa Learning Centre, and Ottawa Community Housing Carlington HUB.

Chris Chi – X-L-Air – Project Manager

Chris is a Project Manager at X-L Air, and has worked with the BIM management, coordination and drafting sides of the process. He has worked with BIM on projects such as Lansdowne Park, and the Government Conference Centre, providing interference drawings and fabrication drawings using these BIM software's.

Robert Van Lin – Perkins + Will – Intermediate Architect, Associate

Robert is an Associate and Design Technology Leader with Perkins+Will's Ottawa studio. Since joining Perkins+Will full-time in 2012, Robert has worked within a variety of roles on numerous healthcare, institutional and high-profile capital projects. He provides design sensibility and problem-solving skills coupled with valuable design applications experience to carry forth a high standard of quality in all aspects of his work. Robert holds a Bachelor of Architectural Studies and a Master of Architecture from the Azrieli School of Architecture and Urbanism at Carleton University, graduating with High Distinction and as a member of the RAIC Architecture Canada Honor Roll.

Daniel Redmond – Carleton University – Director of Energy and Sustainable Services

Dan is an experienced Professional Engineer with a demonstrated history of working in the construction industry supporting new and existing buildings and campuses around the world. Dan is the Director of Energy and Sustainability Services at Carleton University and is overseeing the implementation of BIM for the new Health Sciences Building as well as establishing an overarching BIM execution plan to guide the implementation and usage of BIM in the future.

President's Message

Welcome back and Happy New Year everyone! I hope that everyone had a great holiday and nice little break with family and friends.

November marked our third program meeting of the year and **Andreas Wintzer** from **Viessmann** discussed Biomass boiler technology and system design. **Andreas** will be back this month, putting on our **first seminar** of the **ASHRAE year**. We will be putting this seminar on in the afternoon, **prior to the monthly program meeting** at the **Centurion Center**. He will be reviewing **hydronic boiler system design**. Refer to the seminar article for more details and to visit our website to sign up.

Our **bowling social** took place on **November 22**. This event was great fun and another opportunity to get to know our **ASHRAE peers** a little better. Thanks to **Adam Moons** for organizing.

Our **January** program meeting will be a **panel discussion on BIM**. I think that this is a topic worth discussion. Our industry is changing, and gaining some more insight on

these evolving technologies from a few local experts is a great opportunity. Please refer to the program article for more details and go to our website at www.ashrae.ottawa.on.ca and click on the registration link to sign up.

The **theme for January is YEA** and I am hoping to see many of our young members in attendance. Student participation and mentorship of YEA members in ASHRAE is important to facilitate new, bright minds to join and remain in our industry. I encourage you all to **sponsor a student meal** and take the opportunity to chat with your future colleagues.

The **ASHRAE Winter Conference & Expo** is quickly approaching in **Chicago** from **January 20 through January 24, 2018**. I would definitely encourage anyone that has not been to one of these annual meetings to plan attending in the coming years. Not only does the **ASHRAE Winter Conference & Expo** coincide with the largest trade show in our industry, ASHRAE also offers a number of courses and learning opportunities throughout the event.



President
Adam Graham
2017-2018
OVC President
HTS

E-mail: adam.graham@hts.com

Daniel Redmond and his **Research Promotion Committee** deserve a big thanks for their early efforts to get the **2017-2018 RP Campaign** rolling. **Research Promotion** is one of the most important annual goals from **Society**, and I encourage all individuals and organizations to continue with your generous donations to help us achieve our goal. Please speak with Dan directly if you have any questions.

I look forward to seeing everyone at the next meeting and wish you all a **wonderful 2018!**

Sincerely,

Adam Graham
2017-2018 OVC President

Seminar: Commercial Boiler Heating Systems

DATE: **Tuesday January 16, 2018**
Half Day Seminar - Afternoon (13:00-16:30, prior to evening program)

LOCATION: **Centurion Conference & Event Center**
170 Colonnade Road, Nepean, ON K2E 7J5

PRESENTER: **Andreas Wintzer, Viessman Manufacturing Company Inc.**



Andreas is the Biomass and Commercial System Manager for Viessmann Canada. Appointed to this role in 2010, Andreas is responsible for the overall strategic direction for Commercial and Biomass Systems, and manages customer support services for pre-sale of Biomass and Commercial products.

Prior to joining Viessmann, Andreas held a variety of positions within sales and engineering with Baxi Group in Germany and North America

Andreas is a Certified Engineering Technologist, HVAC Mechanic/Master and a Certified Heating & Plumbing Technician.

OVERVIEW:

The speaker will discuss hydronic heating system design and review several boiler and system piping options. He will analyze how proper system design can help improve overall performance, efficiency, emissions, boiler life, and control. Boiler control and BAS integration will also be discussed.

- 1) **GHG Emission Canada**
 - a. Funding Opportunities
- 2) **Boiler Plant Efficiencies**
- 3) **Boiler/System Piping Design**
 - a. Variable primary
 - b. Primary secondary
 - c. Hybrid systems
- 4) **Boiler and System Controls**
 - a. Controlling condensing boilers
 - b. Multiple boiler installations
 - c. Building automation systems

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

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

Registration will close Tuesday, January 9, 2018

Drinks and snacks will be provided. Please contact **Sandy Taylor** with any special dietary concerns.
sandy@ashrae.ottawa.on.ca

<https://ashraeottawa.simplesignup.ca/en/2965/index.php?m=eventSummary>

What You Missed

The third 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 **Research Promotion**. The meeting was attended by **sixty-five guests**, which consisted of **fifty members, thirteen guests and two students**. The program for the evening was **Biomass Heating System**. The speaker was **Andreas Wintzer** from **Viessmann Manufacturing Company 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 seven new members to the Ottawa Chapter, including a member advancement from associate to member.

President Adam Graham talked about the **YEA Leadership Weekend** on March 23-25th, 2018. Region 2 has a contest to send a chapter member to the Leadership Weekend. Details were provided in an email blast sent to members to submit an application.

Andrew Brown gave a reminder of the **ASHRAE bowling event** to take place the following day.

Rod Lancefield from **HTS** and **Peter Shaw-Wood** from **Alscott** discussed their **table tops**. Rod talked about the **Viessmann** boiler product line including the condensing boilers and **Peter** talked about the

line from **Riello** for boiler burners.

With November's theme being **Research**, **President Adam Graham** welcomed **Research Promotions Chair Dan Redmond** to talk about Research. Dan Redmond talked about Research Promotion, what it means to ASHRAE, what it means to us and why it is a good cause. **ASHRAE** has **100 technical committees** divided into ten sections each specializing in one area of HVAC and R. Over **1500 individuals** involved – all volunteers. Dan talked about how research goes from an idea to funded project, by going through the different groups (Technology Council, Research Administrative Committee, Research Activities Subcommittee, Technical Committees and Task Groups).

Dan Redmond talked about last year's results and **recognized 57 donors (Companies and Individuals) from last year. 2016-2017 Campaign Results** were \$31,151 out of a goal of \$29,000 (not including the \$30,000 set aside for the **ASHRAE OVC Scholarship**). Last year's **Research Promotion Chair Adam Graham** was congratulated on a successful campaign. **2017-2018 Campaign** goal is \$30,100. So far \$9,452.54 has been raised which meets ASHRAE's 30% target for Dec 31st which was achieved by November 1st. **Dan Redmond** mentioned that **100% of donated funds goes to research** and the research money raised stays within **Canada**. Currently there is approximately \$1M of research funding going on in our **region**.



Secretary
Aaron Dobson
2017-2018
OVC Secretary
Ainsworth

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Raffle tickets were sold to win two **Ottawa Senators** hockey tickets that were generously donated by **Walmar**. A total of **\$535** was raised for **ASHRAE research**.

Dinner was garden salad for starter. Roast beef with mashed potatoes, carrots and tomato for main and chocolate cake for dessert.

President Adam Graham announced the program topic and welcomed the speaker, **Andreas Wintzer**. Andreas Wintzer is the **Biomass and Commercial System Manager** for **Viessmann Canada**. Appointed to this role in 2010, Andreas is responsible for the overall strategic direction for commercial biomass systems, and manages customer support services for pre-sale of biomass and commercial products. Andreas is a Certified Engineering Technologist, HVAC Mechanic/Master and a Certified Heating & Plumbing Technician. Andreas is from Germany, now living in Canada for the last 9 years.

The presentation gave an **overview of biomass heating systems** which included wood heating fundamentals, fuel types and considerations, fuel delivery and storage systems, biomass boiler technology and sizing and design criteria.

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Biomass boilers are wood-fueled heating systems which burn different groups of solid fuel (logwood, pellets, wood chips and shavings). **Ontario's forests** alone cover 1,076,364 square kilometers which represents 66% of Ontario, 2% of the World's forests and 17% of Canada's forests with the most common tree being black spruce. **Biomass heating systems are CO2 neutral** since the burning wood releases the same amount of CO2 as it absorbed for its growth, and as it would release if it would be left to rot. **Public Works and Government Services Canada** considers Biomass as carbon neutral. Biomass supports **regional sustainability** since the biomass fuel is usually harvested near boiler plants which creates jobs and is a direct investment into the local economy. The forest management activities are defined in the **Crown Forest Sustainability Act (CFSA)**.

Useable fuels for biomass boilers are forest wood, compressed wood/pellets, bark or tree cuttings, remnants from derived timber and used wood. You can go into the woods and cut trees to burn in biomass boilers. It is not recommended to use bark since there is too much ash created when burning. Wood pellets are the best quality with the highest energy fuel (good BTU value) when compared to the other solid fuels such as wood chips. The pellets are transported in vacuum trucks. Good quality pellets should have a smooth surface and uniform in size. Pellets should sink like stone when dropped in water. The fuel type and quality determine the heating value, boiler efficiency, economics, fuel storage requirements, the amount of ash and life expectancy of the boiler. **Typically: <500kW – pellets are used, >500kW – wood chips are used.**

There are different **fuel storage and extraction systems** of a biomass heating system. The most common

system to receive delivering is the **walking floor extraction system**. Other storage and extraction systems were discussed such as spring operated extraction systems, funnel extraction systems, drive on walking floor, extraction auger and silos.

Different biomass heating boilers were reviewed. The **rotary combustion boilers** are smaller boilers that only work for dry fuels less than 35% moisture content. **Underfeed combustions boilers** are used when wood fuels have a moisture content of <50%.

It is mandatory to provide **emission controls** for biomass boilers. Particulate matter is a weakness of solid fuels. There are **flue gas cyclones** that filter out large particles and captures sparks. This **must be used on all installations in Ontario**. There are also electrostatic particulators that are proven with wood boilers larger than 500kW.

When designing a biomass boiler system, the expectation is efficient system operation, equipment safety, low maintenance and low emissions. The biomass boilers should not be oversized to prevent **short cycling**. The biomass boilers take longer to adjust output to heat demands. Igniting wood takes longer than igniting gas or oil. Once the wood fuel is burned, you cannot simply turn the fire off. The **base load** should be with biomass boilers to get the **maximum possible run times**. The **peak loads** could be with **fossil fuel boilers** to dramatically reduce the boiler size needed by a biomass boiler. Biomass should have a **backup boiler** or two biomass boilers sized 75% in case the primary boiler fails.

To reduce the **maintenance cost** of a biomass system, you need good quality dry fuel, automatic de-ashing, pneumatic cleaning system, auto ignition. The biomass system

requires regular cleaning and maintenance. The biomass systems are extremely safe. They have burnback preventers over slide gate, automatic fire-extinguishing systems (water reservoir). The control systems are CSA certified and the pressure vessels are ASME certified.

The **fuel storage** is determined by yearly fuel requirement, supply situation and truck load capacity. The storage facilities should have capacity for **5 to 7 days of operation** plus one additional trailer load. The scope of supply for a biomass boiler should include the fuel transport systems and security equipment CSA approved. ASME construction, control panel for biomass system and backup system, mixing valve and pump for the biomass boiler, delivery to site and start-up.

The presentation was concluded with an overview of **sample biomass projects completed in Canada**.

President Adam Graham thanked **Andreas Wintzer** and reminded all attendees of the survey. Next meeting **January 16th** 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 and search under the Chapter year for links.

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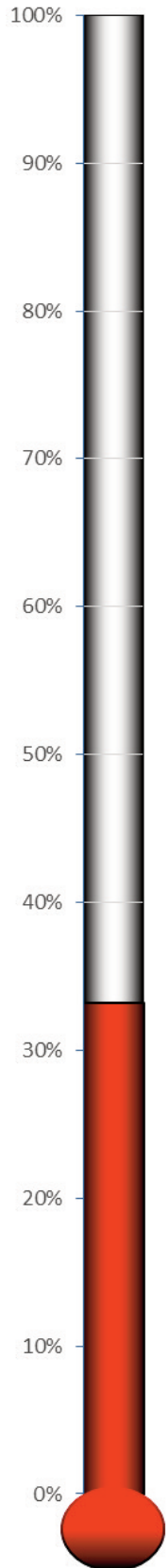
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Research Promotion

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 **33%** of our total goal of **\$30,100** for **2017-2018**.

At the **November Program Meeting**, tickets to see the Ottawa Senators face off against the New York Islanders were graciously donated by **Walmar Ventilation Inc.** and **\$535.00** was raised towards this year's campaign. Thank you very much Walmar!

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

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

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

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News Update

ASHRAE Seeks Additional Comments for Proposed Standard Assessing Moisture Affected Areas, Fungal Contamination of Educational Facilities

ATLANTA – ASHRAE seeks a second round of public comments on **BSR/ASHRAE/IAQA Standard 3210P, Standard for the Assessment of Educational Facilities for Moisture Affected Areas and Fungal Contamination**. Standard 3210P is open for a **45-day public review until Dec. 25**. Those interested in reviewing and commenting on the proposed standard can do so at www.ashrae.org/publicreviews.

A joint ASHRAE-IAQA standard, Standard 3210P is intended to provide a **uniform and repeatable procedure**, specifically tailored to **educational facilities**, to identify areas in buildings, materials, equipment and systems that are subject to moisture or are suspected of **fungal contamination** or adverse conditions associated with fungal contamination.

The proposed standard will provide essential information and guidance to determine if and to what degree facilities that are used for educational purposes are contaminated. This standard does not apply to biological contamination beyond fungal growth.

"Gaining input from the public on new ASHRAE standards is crucial toward **improving the safety of education facilities**," says **Jay Stake, chair of the Standard**

3210P committee. "The goal of SPC 3210P is to guide professionals through the proper assessment to obtain a healthy indoor environment for educational facilities and its occupants."

According to **ASHRAE research, moisture damage and microbial growth cause billions of dollars in repair costs and interruption of building operations**. The buildup of moisture indoors can be controlled through the building's design, construction, and operation and the actions of its occupants.

To make a comment or learn more, please visit: www.ashrae.org/publicreviews.

-- Those interested in commenting on the standard may do so until Dec. 25 --

ASHRAE Earns Prestigious UN Environment Award for Dedication in Advancing Montreal Protocol

ATLANTA – **ASHRAE** has received the prestigious **Partnership Award from the United Nations Environment Programme's (UN Environment) Ozone Secretariat** for its extraordinary commitment and contribution to the progress and achievements of the **Montreal Protocol on Substances that Deplete the Ozone Layer**, which is celebrating its 30th anniversary.

The award was presented to **ASHRAE** at the **2017 Ozone Awards** ceremony on Nov. 23 in



Governor Jacob Hough
2017-2018 Program Committee Chair
Total HVAC

E-mail: jacobh@totalhvac.com

Montreal. The Partnership Award recognizes the work of civil society and other international organizations that have played a critical role in the development of the **Kigali Amendment** and/or implementation of the **Montreal Protocol**.

"We could not be more pleased to have earned this recognition. Receiving the **Partnership Award is a great honor** and acknowledgment of the tireless work ASHRAE and our members are doing to support the **phase-out activities of ozone-depleting substances** around the world," said **2017-2018 ASHRAE President Bjarne W. Olesen, Ph.D.** "We are proud to be a part of this initiative and look forward to continuing our partnership with **UN Environment** as we work toward a more sustainable built environment."

Commonly referred to as "**the treaty that saved the ozone layer**," the **Montreal Protocol**, signed in **1987**, is an international agreement designed to substantially **reduce emissions of substances that deplete the stratospheric ozone layer**. The Protocol has led to the phase-out of more than **99 percent** of nearly **100 ozone-depleting chemicals** and significantly contributed to climate change mitigation, according to UN

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Environment.

"I congratulate **ASHRAE** for this well-deserved award honoring its exceptional efforts to support the advancement of technologies which help protect the ozone layer. We appreciate the organization's dedication to the **Montreal Protocol** and its contribution to the success of the treaty," said **Tina Birmpili, head of the Ozone Secretariat**.

ASHRAE's partnership with UN Environment has been highly transparent and visible since it began and has been recognized with appreciation by governments around the world as well as the **HVAC&R industry**. Through ASHRAE's more than **56,000 members** in more than **100 countries**, the **Society** has mobilized its resources to develop, implement and support UN Environment and Montreal Protocol projects.

Most recently, ASHRAE and UN Environment launched a work plan titled, "**Working Beyond High Global Warming Potential (GWP) Refrigerants**." It is the organizations' **fifth joint biennial work plan** and is another tangible example of ASHRAE's dedication to promote the Montreal Protocol by leading the way in research to identify **effective refrigerant alternatives with low GWP**.

Another way ASHRAE is leading this charge is through its collaboration with the **Air-Conditioning, Heating, and Refrigeration Institute (AHRI)** and the **U.S. Department of Energy (DOE)**. Through a **\$5.2 million joint**

investment, the three organizations are **funding vital research** to expedite findings and establish a more robust fact base about the **properties and use of flammable refrigerants**, which will also help update international standards.

ASHRAE Offers Free Residential and Refrigerants "Mini-Tracks" at AHR Expo

ATLANTA – ASHRAE will present a series of refrigerant and residential building "**mini-track**" seminars at the **2018 AHR Expo**.

The **2018 ASHRAE Winter Conference** takes place Jan. 20-24 at the **Palmer House Chicago** with the co-sponsored **AHR Expo** being held Jan. 22-24 at **McCormick Place**. To register for the conference, which includes free access to the Expo, visit www.ashrae.org/chicago.

The **eight seminars are free**, and no badge is required to attend. They take place from **11 a.m. until 5 p.m.** on **Monday, Jan. 22**.

According to **Michael Collarin, conference chair**, high-efficiency home materials and the drive to incorporate low global warming potential (GWP) refrigerants are timely subjects for building industry professionals.

"**The refrigerant and residential mini-tracks** featured at this year's AHR Expo highlight two industry segments that are experiencing rapid change," he said. "The goal is to provide an integrated look at these two important topics, in order to equip manufacturers, designers,

building owners and other users with the resources they need to improve residential energy efficiency and overall sustainability."

The seminar topics by track are:

Residential Track

Senses and Cents: Reducing Sound, Improving Comfort and Enabling Energy Efficiency in Residential Buildings

People complain about a lot of stuff, but when it comes to residential heating and cooling systems it's all about the noise, discomfort and forking out money to an unfriendly utility. Learn to apply the fundamentals in duct and pipe design for the benefit of your client's senses and cents.

Real-World Experience Providing Residential Energy Excellence

High performance residential buildings combine modeling skills, designs for sustainable performance, installation practices that implement the integrated designs and strategies that satisfy a diverse set of occupant needs without penalizing energy performance or indoor environmental quality over the life of the building. This seminar highlights the importance of a trained workforce in meeting expected design and performance targets, shows the benefits of modeling to achieve exceptional performance affordably, compares model predictions with monitored performance in multifamily applications and demonstrates the positive impact of awareness and actionable energy data on occupant behavior.



David Yin, P.Eng., LEED AP
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Keeping Occupants Happy and Healthy Through Affordable and Flexible Air and Water Control Strategies

Hidden opportunities for improving home energy and environmental performance include inexpensive filtration approaches that clear the air we breathe, and simple and reliable water system design strategies that reduce the amount of hot water needed for bathing, washing clothes and washing dishes. This seminar highlights challenges and opportunities to better understand and control exposure to ultrafine particulate matter in homes. Domestic hot water design and control strategies to minimize the amount of water in the distribution system along with optimizing consumption requirements are addressed.

ASHRAE's Duct Size Calculator Tool for Easy, Reliable Residential Duct Sizing

ASHRAE has developed a new duct calculator tool that uses the results of ASHRAE research to provide practitioners with better and quicker ways to size/design duct systems - particularly for flexible ducts. This

seminar discusses the research and methodology underlying the calculator tool and provides demonstrations and examples of how to use it in various residential applications and duct designs.

Refrigerants Track

Lubricant Changes for Low GWP Next Generation Equipment

This seminar focuses on the lubricant changes and challenges needed for next generation refrigerants and replacement for R123, R134a, R404A and R410A.

Some Low GWP Next Generation Refrigerants Will Be Flammable: What Does It Mean to Be Flammable?

This seminar focuses on the fundamentals of flammability, issues in handling flammable refrigerants and ASHRAE and industry funded research into flammable refrigerants. Product and standard changes needed to handle flammable refrigerants are also discussed.

Next Generation of Lower or Low GWP Next Generation HVAC&R Equipment

New lower and low GWP next

generation refrigerants are being offered in equipment today in the market place. This seminar focuses on the type of new equipment being offered with lower GWP refrigerants and also includes retrofitting of equipment with high GWP HFC's with lower GWP refrigerants. Seminar topics include discussions on new equipment in the area of chillers, unitary, commercial refrigeration, portable HVAC&R equipment and retrofitting of existing R404A commercial refrigeration with lower GWP refrigerants.

Contaminant Control: What Is the Same and What Is New When Using Low GWP Refrigerants?

This seminar focuses on the contaminant control needs, differences and experiences when using next generation low GWP refrigerant-containing products.

For more information about the speakers and when the sessions take place, visit www.ashrae.org/chicago. Professional Development Hours will be available for each of the sessions.

Bowling Recap

Greetings All!!

The **ASHRAE Bowling Social** was held on **Wednesday, November 22, 2017** at the **Merivale Bowling Lanes**. In all, **42 people** took part in the action.

Ainsworth was able to hold off some fierce competition in the end,

and managed to eke out a narrow victory. **Congratulations** to them on the championship.

Thank you all for the tremendous support that this event receives every year. Looking forward to seeing you all at next year's event as well!



Governor
Adam Moons

2017-2018
Bowling Chair
Master Group

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YEA

Hi YEA!

I would like to thank the group who attended the **Archery Tag** event on **November 3rd**. We had a great turn out and a good time was had by all!

These social events are great way to meet other members. Our next event will be **Axe Throwing** taking place in **January**. This event was a big success last year so keep an eye out for the event and registration details!

Also a reminder that there is another **Leadership Weekend** contest available for **Region 2**. The contest application was sent out by email a few weeks ago.

If you didn't receive an invite and want to apply let me know. The registration deadline for the contest is **December 20, 2017**.

Thank you for your continued support!



Committee Chair

Joe Della Valle
2017-2018
OVC YEA Chair
Walmar Ventilation

E-mail: joedellavalle@walmar.net

Joe Della Valle

The Slippery Slope into Revit

Back in the late 90's BBC World News ran a very entertaining History of Music series as a filler between main news slots. It was wonderful and made its way chronologically through the 60's, 70's, and then BAM synthesizers. In the glorious classic rock 70's, supergroups used to spend gobs of money on amplifiers, huge speakers, enormous stages with floodlights, the whole kit and roadies kaboodle. Everything was massive and expensive. Then along came synthesizers that cost something like 100 Pounds Sterling - and cheeky upstarts could record smash hits in their garage. Take the cover version of "Money" by the Flying Lizards in 1976 for instance. To the supergroups, this certainly wasn't cricket I can tell you. And it certainly WAS cheeky. More on that later.

Back in the late 80's, I had my first experience of AutoCad on a 286 and it was version 9 DOS and I had no idea what I was doing. It was (shush) ripped-off and it was early days. Since then I have specialized in AutoCad and it has provided me with a very rewarding career. I have paid my dues to Autodesk and continue to do so each spring with a hefty subscription payment. For some time now, that subscription has included all sorts of products along with AutoCad, most of which I have chosen to ignore. Revit started biting at my heels about four years ago when projects like Lansdowne Park South Stands and others came my way, built entirely in 3D, probably a good thing when you look at the shape of those stands. I took a week-long course and came away thinking it was pretty Mickey-Mouse as they say, and the instructors advised that we keep using it or we will forget everything learned.

Luckily Revit exports to lovely AutoCad and I got away with avoiding it for the past few years but

more and more work called for Revit and I saw the writing on the wall. It was either get with the CAD Program or get off the Pot. My somewhat arrogant attitude liked to quote Dr. Evil: "I haven't been specializing in AutoCad for 30 freaking years to be superseded by Revit" - you get the picture. So in August I found myself at X-L-Air taking on the role of BIM Coordinator and responsible for modelling the new Irving Oil headquarters in St. John NB to fabrication level. I remember the first weekly BIM conference call, nervously waiting for the Revit questions to snare me, which thankfully never happened. Immersed in the deep end, I was thrust headlong into the world of 3d modelling. The online crash-courses offered by Lynda.com were of immense value, and I highly recommend these.

The first thing I noticed was how hungry Revit is. Mainstream computers these days tend to be made up of some variety of i7 chip with about 16GB of RAM. Like my home PC which has never choked on even the larger AutoCad files. However the Revit world, being entirely 3d, is a different animal. AutoCad people are fond of using externally referenced files provided by other team members, which typically could be the architectural layout etc. These exist in Revit also, but they are called Links. Nothing about a mainstream Revit project is small, and the entire headquarters model amounts to nearly 1GB of data. In fact, it takes about 3.5 minutes just to get it loaded (time best spent getting that first coffee of the day). I think the fact that the data exists on our LAN server might have bearing here. My work PC has a Xeon chip, a high-end graphics card, and 32GB of RAM so it just about cuts the Revit mustard.



Committee Chair
Roderic Potter
 2017-2018
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I remember when I took the Revit course, architecturally and structurally the program was up to speed. However M&E was behind. In AutoCad we use repeating objects for pumps etc. called "blocks". In the Revit world these are called "families" that you load into your model, and a few years ago these were not reliably available. Things are much improved now and I am pleased to say Daikin and Price Industries have not failed me yet. Creating a quick block in AutoCad is easy, but creating a family for Revit is much more work, particularly when the family is parametric (not that I have tried to create one).

Once or twice during the BIM conference calls I have referred to Revit as "AutoCad for Dummies" which has been received with both laughter and derision from the other team members. Some of them make their entire living using Revit, and snigger a bit when you mention AutoCad. Many people are completely sold on the product and I can see why. Trouble is I come from 30 years of AutoCad accuracy using a digitizer puck as my pointing device, and now I am having to adapt to using a mouse to line things up and it's a little frustrating. There are weird things like "press down on the middle mouse button to pan" which you gradually get used to, but now I sometimes flip to a PDF and try the same thing which tends to make it fly off the screen into oblivion. I even occasionally try to pan Google Maps and similar using the middle mouse button but to quote a favourite UK comedy show: "Computer Says NO...". Speaking of



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frustrating things, where the heck is the Stretch Command? And what happened to a Command Line? It's at times like this when I need to take a breather. Or a valium.

Do I enjoy Revit? Well, I have enjoyed the AutoCad environment for most of my working life. It pains me to hear someone refer to their work life as "just a job". If CAD life was just monotony I would have to find something else to earn my living. Someone said to me the other day that "every new CAD file is a new canvas" or something to that effect. I am not sure if that's why I like it. I am getting used to Revit, its foibles and waiting occasionally for a new section to generate, and I can

appreciate its merits. But it will never be my beloved AutoCad, which requires that you have been using it for years to become really proficient.

Getting back to the first paragraph, I am somewhat miffed that my 30 years of AutoCad proficiency is being easily usurped by young hotshots with a short college course under their belt. Maybe this is the beauty of Revit, it is so cleverly written that you can automatically create stuff quickly that would take so much more time in the true CAD environment. Like when the guy at Home Depot builds your new kitchen in 3d Sketch in about 5 minutes and walks you through it.

Yes I do enjoy Revit. The mental block I had for years has now passed thanks to being thrown into that deep end. My work day is a mix of both Revit and AutoCad, because I realize both programs have their place in our construction environment. So rather than heading to that graveyard for AutoCad stalwarts, I have embraced Revit, and expect to be thrust deeper into add-on and related products for years to come.

January 2018

Membership Update

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

Allain Gebriel
Etienne Bergeron
James Gubbels
Svetlana Ulitsky
Angdon Liebrechts
Marc Lafleur
Denon Sheppard
Matt Leeson
Samir Elchamaa
Mohamed Ouf
Myriam St. Hilaire

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 the new year.



Committee Chair

Celine Baribeau

2017-2018
Membership
Committee Chair
BPA

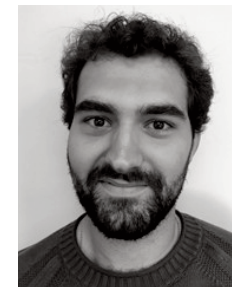
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Table Top Display

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 new year starting in January. Get your table before they are all gone!

Please contact **David Michelin** (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

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>

Student Activities

Hi All,

Following up from the **October Communiqué**, we're happy to report that the **UOttawa Team** has officially signed up to the **Student Design Competition**. If you're interested in being a mentor please get in contact with me!

The **UOttawa** chapter also had a welcome guest this month, our very own **Joel Primeau** was in town so he stopped by to attend the **UOttawa ASHRAE Student Chapter monthly meeting**. Big thanks to **Joel** for stopping by and **Elizabeth** for Organizing! **Joel** was also busy over at **Carleton University** that day where he spoke in a few of the first year engineering courses on the virtues of our industry and **ASHRAE**.

We also held a meeting at the **CEGEP Student Chapter** where **Richard Lemelin** spoke to the students about the role of service contractors and what challenges they face in the field. The meeting was well attended and we had some very good conversations going on, so big thanks to **Richard** for taking the time and **Louis Laurier** for organizing!

Moving forward, we are looking for companies interested in the **ASHRAE Career Fair** taking place in **March**. For any interested companies please contact **Adrienne Mitani** for more information.

Happy holidays to everyone and we'll look forward to seeing you in 2018!

All the best,

Peter Shaw-Wood
OVC Student Activities Chair



Committee Chair

Peter Shaw-Wood

2017-2018

OVC Student Activities
Chair

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2017-2018

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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

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.



E-mail: cfudge@master.ca

Treasurer

Chris Fudge

2017-2018

OVC Treasurer

Master Group

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) 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 for more details.



E-mail: rod.lancefield@hts.com

Publicity

Rod Lancefield

2017-2018 Publicity

Committee Co-Chair

HTS Engineering

Ltd.

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

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