



# ASHRAE Ottawa Valley Chapter

- DATE:** **Tuesday April 17, 2018**  
Social: 17:30, Dinner: 18:30, Program: 19:30
- LOCATION:** **Centurion Conference & Event Center**  
170 Colonnade Road, Nepean, ON K2E 7J5
- THEME:** **Research**
- PROGRAM:** **Acoustics: Supporting Sound Mechanical HVAC Design**

Occupant comfort, limited space and energy available, initial and operating costs - there are many challenges encountered in today's building designs. The mechanical HVAC system designer should consider some key noise related factors and available tools to avoid potential issues on their projects. The presentation, entitled "Acoustics: Supporting Sound Mechanical HVAC Design", will discuss cost-effective design strategies and a range of evaluation methods to help achieve acoustics success.

**SPEAKER:** **Emanuel Mouratidis, M.Eng., P.Eng.**  
**Director of Acoustic Engineering, VAW Systems Ltd.**

Emanuel Mouratidis is the Director of Acoustic Engineering at VAW Systems Ltd., a noise control manufacturer based in Winnipeg, Manitoba. In his role at VAW Systems, Emanuel manages the firm's noise control laboratory, special applications engineering and software development. Emanuel is a Professional Engineer with a Master of Engineering in Acoustics from Penn State University. He is active at the ASHRAE and ASTM Committees for Acoustics. This includes work as the lead investigator in the ASHRAE Research Project on the aero-acoustic properties of HVAC plenums, which received an ASHRAE Symposium Paper Award. Mr. Mouratidis has presented research papers at the Canadian Acoustical Association, Noise-Con and Inter-Noise conferences. Emanuel has been employed in noise control manufacturing, applied research, and acoustic consulting fields for over 23-years.

**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/3235/index.php?m=eventSummary>

# President's Message

With spring finally here, we near the end of our current **ASHRAE** year. I hope that you have all enjoyed the program and social events to date and I look forward to the next couple of remaining months prior to the big **Annual Golf Tournament** in **June**.

**March** was an extremely busy month where we hosted several events including our regular program meeting, a **career fair**, a **curling bonspiel**, and a **technical seminar on ASHRAE 90.1**. I would like to take this opportunity to thank all involved in the planning and implementation of each of these events and those that continue to volunteer for the Chapter.

This month's theme is **Research**. Our **Research Promotion (RP) Committee** is right in the middle of their calling campaign, so if you have not yet received a call, you can expect to hear from one of us shortly. Our **RP Chair Daniel Redmond** and his committee have been doing a fantastic job this year with the campaign but still have a long way to go to hit our ambitious objective. Please feel free to contact Daniel Redmond directly anytime, or visit the website if you would like to **donate**.

We are back at the **Centurion Center** for our monthly program meeting on **April 17th**. The upcoming

program topic of **"Acoustics: Supporting Sound HVAC Design"** will be put on by **Emanuel Mourtatis**, an **ASHRAE distinguished lecturer**. Please refer to the program article for location and more program details. I encourage you all to attend. To register please visit our website at [www.ashrae.ottawa.on.ca](http://www.ashrae.ottawa.on.ca).

**CTTC Technology Award** submissions are currently being reviewed at the **Chapter level** and **winners** will be announced at the **April meeting**.

Our **Nominations Committee Chair Steve Moons** will be closing nominations at our **April meeting** so if you have any suggestions for someone that may be able to **fill a position on the board** please get in touch with him or his committee prior to the meeting. Our **Honours and Awards Committee Chair Abbey Saunders** will be reviewing our membership for **various awards** at the **Chapter and Regional level**. I remind everyone to please **update your ASHRAE Society Bio** so that you may be considered for awards you may be eligible for.

We will be hosting another **two technical seminars** on the day of our program meeting, **April 17th**. The first half day seminar will be put on by a **DL** from the **UK, Mr. Frank**



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

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

**Mills** and will be on **"Cold Climate Design"**. The second half day will be put on by **DL Emanuel Mourtatis** and will cover **"Acoustics"** in much more detail than the program meeting. Check out the article in this month's communique for additional details, or visit the website to register at the link provided.

Lastly, I would like to ask everyone interested in joining us at our **annual golf tournament** to put **Monday June 4th** in their calendars. **Rod Lancefield** is in the process of reaching out to those that were registered last year and the **general registration will go up later this month**. Please keep an eye on the website for ongoing news and updates and don't forget to register for this month's program. I look forward to seeing you all there.

Regards,

**Adam Graham**  
2017-2018 OVC President

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## ASHRAE OVC Annual Golf Tournament 2018

### Save the Date!

**Monday June 4, 2018** at **The Marshes Golf Club**.  
Noon Shotgun.

General registration link including more details to follow in coming weeks.

Contact **Rod Lancefield** if there are any questions.  
[rod.lancefield@hts.com](mailto:rod.lancefield@hts.com)

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

**DATE:** **Tuesday April 17, 2018**  
Half Day Seminar - 9:00am - 12:00pm (noon)

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

**TOPIC:** **Cold Climate Design Guide**

**PRESENTER:** **Frank Mills**

Frank Mills has spent the past 40 years applying best practice engineering to develop innovative and leading-edge solutions to new and existing building projects ranging from individual buildings to multiple, neighborhood and city-wide developments. Frank received his mechanical engineering degree from the University of Surrey, Guildford, England, where he completed a four year 'thick' sandwich degree course which included a full year's industrial experience at the UK Atomic Energy Authority Labs and Workshops at Risley, UK. He received a Postgraduate Diploma (Masters) at Southbank University in Environmental Engineering where his studies covered all aspects of building services engineering and energy use in buildings and integrated architectural/engineering design.

Frank is now Principal of Frank Mills Consulting Ltd and provides high level strategic design advice, technical reports and expert witness to clients including hospitals, government bodies, developers and building owners. Frank has been an ASHRAE member since 1971 and has been active on technical and standards committees and on Councils. Whilst on Handbook he has promoted the Board initiative to update all Handbooks with more digital content for the Online Handbook, more worked examples, case studies and material that can support project engineers who wish to apply new, innovative and modern design solutions. He is President of the new (2017 formed) ASHRAE UK Northern section. He was chair of the new ASHRAE Cold Climate Design Guide and member/past chair of ASHRAE Publications committee. He is chair of the guide for Hot Climates (due for publication in 2018). He has presented ASHRAE ALI short courses on Natural Ventilation, Design of zero energy buildings and Healthcare HVAC and presented papers on Atrium design, Fire engineering, Education buildings, best practice engineering and sustainable development.

## OVERVIEW:

ASHRAE published the new Cold Climate Design Guide in 2015 following the successful Cold Conference held in Calgary in 2012. This presentation provides an overview of this new guide, identifying the specific design considerations for projects in cold climates, and the unique construction and planning logistics in cold climates, highlighting common pitfalls.

The presentation also covers the special issues with Cold Climates and how sustainable designs can be developed, particularly energy efficiency and even Net Zero Carbon solutions.

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**DATE:** **Tuesday April 17, 2018**  
Half Day Seminar - 1:00pm - 4:00pm

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

**TOPIC:** **Acoustics: Supporting Sound Mechanical HVAC Design**

**PRESENTER:** **Emanuel Mouratidis, M.Eng., P.Eng. (Refer to April Program Details above for Bio)**

## OVERVIEW:

Occupant comfort, limited space and energy available, initial and operating costs - there are many challenges encountered in today's building designs. The mechanical HVAC system designer should consider some key noise related factors and available tools, in order to avoid potential issues on their projects. The presentation, entitled "Acoustics: Supporting Sound Mechanical HVAC Design", will discuss cost-effective design strategies and a range of evaluation methods in order to help achieve acoustics success.

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

Half Day: ASHRAE OVC Members: \$175.00, Non-Members: \$225.00  
Full Day: ASHRAE OVC Members: \$300.00, Non-Members: \$375.00

**Registration will close Friday, April 13, 2018**

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

<https://ashraeottawa.simplesignup.ca/en/3243/index.php?m=eventSummary>

# What You Missed

The sixth 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 **Students**. The meeting was attended by **fifty-two people**, which consisted of **thirty-eight members**, **eleven guests** and **three students**. The program for the evening was **Why Buildings Matter and the Role of ASHRAE 90.1**. The speaker was **Christopher Mathis** who is an **ASHRAE Distinguished Lecturer** and President of Mathis Consulting Company.

**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 one new member to the Ottawa Chapter.

**Nominations and Awards Co-Chair Steve Moons** talked about building chapter leadership for tomorrow and the **open nominations for next year**.

- **Dan Redmond** will be **President**
- **Chris Fudge** will be **President-Elect**
- **Aaron Dobson** will be **Treasurer**

Nominations for **Secretary** and **Board of Governor** representative will be announced at the **April** meeting and the **May** meeting will install new members to executive and board.

**Adrienne Mitani** talked about the recent **Career Fair** at **Carleton University**. Adrienne thanked everyone who showed up. There was a great turn out from Employers and Students. Adrienne also thanked companies who sponsored the event. Just under **100 students** attended the event.

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**Colleen Fox** talked about the recent **Curling event** that took place on **March 9th**. **18 teams** participated, and the **winning team** was **Modern Niagara**. Proceeds from the event (**\$1,440**) will be donated to local charities. In addition, **\$610** was raised from the **50/50 raffle** which will be donated to **ASHRAE Research**. Colleen thanked **Stacey Gillis** and **Stan Millross** for volunteering at the event. She also gave special thanks to **Chris Healey** who has ran the event for many years.

**CTTC Chair Jacob Hough** talked about **Technology awards**. The deadline is approaching to submit tech awards which will be awarded at the **April** meeting.

**Student Activities Chair Peter Shaw-Wood** talked about this month's theme - **Students**. There has been a good turnout of Students to all events happening with the Chapter. There has been good traction with meetings at the local schools. There was a Presentation at **Carleton University** with the Speaker **Chris Mathis** where **20-25 Grad Students** and **Professors** attended. Peter mentioned he is pleased to see former Students, now working in the industry at the chapter meetings.

**Adam Graham** invited the companies to talk about their **table-tops**. **Andrew Klassen** from **Modern Niagara** talked about their products in building automation and different disciplines such as plumbing, electrical, HVAC. **Trevor Freeman** from **Hydro Ottawa** talked about the **Save on Energy program**.

**Adam Graham** presented **Trevor Freeman** with a **donor recognition plaque** for Hydro Ottawa's support to the Ottawa chapter and Adam invited Trevor to talk about their program. Trevor mentioned the goal

**DANNY DILLON, GSC**  
PRESIDENT  
1481 Cyrville Road  
Ottawa, ON K1B 3L7  
Ph. 613.741.7731  
Cell. 613.880.8504  
Fax. 613.741.9962  
danny@dilfo.com  
**DILFO.COM**



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

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

is to **promote energy efficiency** and **reduce electricity consumption** in their service territory. Hydro Ottawa has a dedicated team to focus on conservation. The programs are for **new construction, retrofit programs** and anything that reduces electricity consumption. Hydro Ottawa will help fund the projects.

**Two Ottawa Senators tickets** were donated by **JCI** which was won by **Andrew Brown**. A total of **\$640** was raised for ASHRAE research.

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

**Adam Graham** introduced the speaker **Christopher Mathis**. Christopher Mathis is an **ASHRAE Distinguished Lecturer** and topic for the evening is **Why Buildings Matter and ASHRAE's Critical Role in the Future of Building Performance**.

Chris started the presentation with the end in mind. **Buildings matter, more than we know**. There is a lot going on in the world most of which will make us uncomfortable (energy, power, water, climate etc.). What does the future hold - emerging building performance priorities, implications for building professionals (Engineers, Architects, Code Officials, Contractors, Owners) and what is our responsibility in all of this.

**Goodkey, Weedmark & Associates Limited**  
Consulting Engineers  
**Ross McIntyre, P.Eng.**  
Principal, Designated Consultant, Mechanical Engineer  
1688 Woodward Dr., Ottawa, ON, Canada, K2C 3R8  
Telephone: 613-727-5111 ext. 239 Fax: 613-727-5115  
rossmc@gwal.com

**Chris** is a **Building Scientist** for 35+ years, an **Author, Educator, Standards Developer** and **User**. He has been an **ASHRAE member** for over 30 years and helped develop codes for the US and several states.

Chris talked about the **energy pie** for the **US** (Transportation 29.0%, Buildings 39.4% and Industry 31.6%). Buildings have the largest energy use which is split between residential at 20.7% and commercial at 18.7%. Chris talked about a graph showing **energy production by source**. The largest being natural gas at 39%, then petroleum at 23%, coal at 17%, renewables at 12% and nuclear at 9%. The interesting part of the graph, which is the scary part, is that **80%** of it is from a **finite resource – fossil fuels**. Projecting to the future to see where we are going to be, the fuel mixture (Coal, Natural Gas, Petroleum, Nuclear, Renewables) is not going to change much. What's going to change is the consumption because we want more. Projecting worldwide, with every fuel, everywhere, everybody, the same will occur because everyone will want more. Don't do what we do. **Diversify energy and power sources**. Know what "finite resource" means and **decentralize where possible**. Put power production close to need.

In **Canada**, the energy use is similar to the US. The energy use in Canada for **buildings is 27%**. Looking into the future for growth by sector, nothing is flat. The **largest growth rate** from 1990 to 2013 was transportation at 43%, followed by agriculture at 40%, industrial at 30%, commercial/institutional at 23% and residential at 7%. Chris showed the energy use for **commercial and residential with more than half being consumed by space heating**. From a Canada savings perspective, the **energy use in Canada increased 31%** between 1990 and 2014. It would have increased 55% without energy efficiency improvements.

Chris talked about the **world population and the doubling rates** of populations which is getting shorter and shorter and what the growing population is going to need (homes, jobs, schools, hospitals etc.). The **population is expected to double in 30 years**. For World population trends, in the next few years, **India will surpass China** as the **World's Most Populous Country** and **Nigeria will surpass the US** as the 3rd most populous country by 2050. All the countries want the same thing, the same quality of life that the US has benefited from.

Chris talked about the **issues with water in the US**. There has been a water war in the South-East. The reason for the importance of water is for the use in creating electricity. **More than half of the surface water extracted is used for producing electricity**. The volume of water flowing through America's utilities is 3 times the amount flowing over Niagara Falls. The water is used for **cooling in coal and nuclear plants**. Coal and Nuclear Plants use 30-50 gallons of water to produce just 1 kWh of electricity (once through cooling).

**93% of US Commercial buildings were built before 2003**. Most of the buildings **would not meet the 2004 energy code**. 74% of buildings were built before 1989. Existing buildings matter as they have one thing in common. They are close to infrastructure – water and roads. **Recognize, prioritize and bring the professional skills to address the performance of existing buildings**. Value their performance for a long time. The same is for residential buildings. In a good year, the US builds 1 million new homes. There are 130 million existing homes in the US.

Chris went through **life expectancy of old buildings in Canada**. Buildings that are around 200 years old which are young by European

standards. For US commercial construction in 2035, **half of the commercial floor space in the US will be new buildings built from 2010**. This will involve retiring old buildings with new. There is estimated to be **105 billion square feet of commercial buildings in the US by 2035**.

Other trends are **environmental trends**. There are more severe climate events such as **superstorms, extreme cold "polar vortex" and extreme heat**. Chris talked about the world breaking a **new heat record for July in 2015** since modern record keeping began in 1880. October smashed record for global warmth. This keeps 2015 on track to be the hottest year since 1880. **Ten of the hottest years have been since 1998**. Since then 2016 has surpassed 2015 as the **hottest year**.

Chris talked about how everybody everywhere wants what we have. Chris went through a graph showing **if there was air conditioning for everyone around the world** at the same rate as the US. The world **would not be able to provide enough electricity** to provide air conditioning to everyone.

The primary friction in the system is our resistance to change. **What is the building code?** It is the least safe, least strong, least energy efficient building **allowed by law**. In other words, we are not allowed to build it any worse. **It is the starting point for anything better**. How do we make codes? We wait for a disaster, we wait until we hurt.

The first code we know of is the **Code of Hammurabi – 1750 BC**. It contains five key elements designed to protect the occupants. Disaster breeds codes.

The **burning of Rome** in 64 A.D. was because the Emperor Nero did not like the slums and stench. This **established fire safety and**

**Rod Lancefield, P.Eng., LEED® AP**  
Engineering Sales  
rod@htseng.com  
C 613.851.1997

**HTS Ottawa**  
1646 Woodward Dr.  
Ottawa, Ontario K2C 3R8  
T 613.728.7400 Ext.221  
F 613.728.8032  
Toll Free 888.288.8544  
ontario.htseng.com



**InAIR Environmental Ltd.**  
Donald M. Weekes, CIH, CSP, FAIHA™  
Partner  
613.858.0244  
don.weekes@inairenvironmental.ca

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

Indoor Environmental Consultants  
www.inairenvironmental.ca



**Jp2g Consultants Inc.**  
Andrew Young, P.Eng.  
Project Manager | Mechanical Engineer

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



**sanitation requirements** for all buildings following the fire.

The **Great London fire** in 1666 could not get the fire wagons to the buildings in time and the buildings were full of flammable objects. **Two-thirds of the City was destroyed.** The **London Building Act** was adopted after the fire which was the first fire code.

In North America, the **Chicago fire** in 1871 **destroyed 17,000 buildings.** This bankrupted the insurance industry and resulted in developing a new code in 1875 for regulating building construction and fire protection.

The **San Francisco earthquake** in 1906 was the major influencer of today's structural, fire and life safety codes.

The **Arab Oil Embargo** in 1973-74 precipitated the first energy codes for buildings - **ASHRAE 1975.** Consumer signals about energy was created as a means of comparison (EPA fuel economy for automotive, energy guide for appliances).

Chris went through pictures of **natural disasters and the resulting changes that were made because of damages.**

An example was **Hurricane Andrew** in **August 1992.** The hurricane ripped shingles off roofs which went through neighbor's windows causing water damage in the homes from rain. This led to the insurance industry changing the rules to have

**aggressive roof tie downs and impact resistance windows in high wind zones.** Following **Hurricane Katrina, Louisiana and Mississippi** adopted their first building codes.

Chris went through pictures of homes that were devastated from different natural disasters, including the **Super Typhoon Haiyan** in 2013 which was the strongest storm in recorded history. A **Category 5** event with **sustained winds of over 96 mph for several hours. Wind speeds more than 260 mph.**

History has shown that we wait for disaster before we act. There are consequences to waiting. **Prioritize building performance now (energy performance, durability, resilience, water use, IEQ, etc.).**

ASHRAE's leadership role is to advance the arts and sciences of heating, ventilating, air conditioning and refrigerating to serve humanity and promote a sustainable world.

Chris went through the **ASHRAE 90.1 energy code** from 1975 to present. The code minimum is still a long way from **net zero.** The normalized energy use index (1975 = 100) is now around 50 for **ASHRAE 90.1-2016.** The **code** is not leading edge, not superior performance, not exemplary, not green, not sustainable, not differentiation. **It is the starting point for all differentiation.**

Chris talked about the **road to "Net Zero"** with raising the minimum

standards and how everybody wants to be green with **ASHRAE 189.** He gave examples of problems with green buildings how they **use more energy than the code baseline.** What about those other objectives (**durability, resilience, IEQ, comfort, water savings, carbon**).

Chris talked about our **responsibility as ASHRAE leaders.** Get engaged in local code adoption and compliance. Support local building performance education. Commission building envelopes, HVAC, lighting systems, controls. Measure leakage, comfort conditions, air flows, radiant asymmetry, water use, energy use for new and existing buildings. **EIA projects world energy consumption will increase 56% by 2040.** Buildings matter - It is up to knowledgeable building industry professionals to deliver this message. There are major trends impacting building decisions such as environmental trends, human expectation trends, population, water, power. The latest energy code is the starting point for building performance.

**President Adam Graham** thanked the speaker and reminded all attendees of the survey. Next meeting is **April 17th** at the **Centurion Convention and Event Center.** Meeting adjourned at 20:40.


All chapter meeting pictures and videos are posted online. Visit: [www.ashrae.ottawa.on.ca](http://www.ashrae.ottawa.on.ca) and search under the Chapter year for links.



**Chris Harrison**  
President

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

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Commercial, Applied, Heating and Vent  
cfudge@master.ca

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F 613-829-3731  
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Ottawa (Ontario) K2H 8S1  
MASTER.CA



**Sylvain Chenier, P. Eng., ing., LEED® AP**  
Vice President - Mechanical  
Sylvain.Chenier@mckeeottawa.ca

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



**Andrew Klassen**  
Account Executive  
Modern Niagara Building Controls

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

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

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613-565-2129, ext. 2128  
sriffault@regulvar.com  
[www.regulvar.com](http://www.regulvar.com)

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Associate Principal  
d 613 691 0264  
david.mcclatchie@smithandandersen.com

1600 Carling Ave. Suite 530  
Ottawa Ontario K1Z 1G3  
t 613 230 1186 f 613 230 2598  
smithandandersen.com



# 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 **67%** of our total goal of **\$30,100** for **2017-2018**.

At the **March Program Meeting**, two tickets to see the Ottawa Senators face off against the Winnipeg Jets were graciously donated by **JCI** and **\$620.00** was raised towards this year's campaign. Thank you very much JCI for your continued support!

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



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

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

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

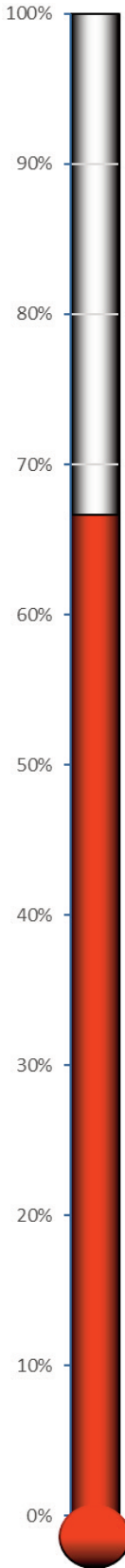
Should you wish to make a donation with a cheque, please make all cheques payable to **ASHRAE Research Canada**.

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

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

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

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



<b>ASHRAE Partner</b> \$5,000-\$9,999	<b>ASHRAE Associate</b> \$2,500-\$4,999	<b>Major Donor Silver</b> \$1,000-\$2,499
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# News Update

**ASHRAE Webcast: "Making Energy Efficiency a Reality" Registration Now Open for April 19 Broadcast**

**ATLANTA** – Registration for the **free ASHRAE Webcast, "Making Energy Efficiency a Reality,"** is now open at: [www.ashrae.org/webcast](http://www.ashrae.org/webcast)

There is no fee for registration. However, registration is required to view the free webcast.

The webcast will broadcast live on **April 19, 2018**, from 1-4 p.m. EDT, and is available to registrants on **demand** from **April 20 – May 4, 2018**. This webcast is offered by **ASHRAE's Chapter Technology Transfer Committee (CTTC)**.

"The presenters will discuss strategies and policies that dive into deep efficiency goals," says **Steve Piccolo, chair of the Webcast Ad Hoc committee**. "The webcast focuses on recognizing the value of a holistic approach to assessing a building and its systems, as well as addressing the myths and realities of energy efficiency as discovered through real life experiences."

Opening remarks will be provided by **ASHRAE President Bjarne W. Olesen, Ph.D., Fellow ASHRAE**.

Webcast presenters are:

- **Tom Durkin, P.E., LEED AP, Fellow ASHRAE, Senior Partner, Sims-Durkin Associates, Indianapolis, IN**
- **Mark Frankel, ASHRAE, AIA, LEED Fellow, Technical Director, New Buildings Institute, Portland, OR**
- **R. Christopher Mathis, ASHRAE, President, MC2 – Mathis Consulting Company, Asheville, NC**

"Viewers will learn how a practical design approach can help achieve optimum energy performance in

commercial and high-rise residential buildings across the globe," Piccolo says.

Participants of the webcast may receive **three Professional Development Hours (PDHs), three Continuing Education Hours (CEs)** awarded by **Green Business Certification Inc. (GBCI)**, or **three Learning Units (LU/HSWs)** awarded by **American Institute of Architects (AIA)**.

Visit [www.ashrae.org/webcast](http://www.ashrae.org/webcast) for more information on the webcast and continuing education credits.

## ASHRAE Announces Call for Papers for 2019 Winter Conference, January 12-16, Atlanta

**ATLANTA** – **ASHRAE** announced a call for papers for its **2019 Winter Conference** Jan. 12-16 in **Atlanta** at the **Omni Hotel Atlanta CNN Center**. The **2019 AHR Expo**, taking place Jan. 14-16 at the **Georgia World Congress Center**, is expected to attract **70,000** registered visitors and exhibitor personnel.

"Technology, operational demands, codes, and design objectives are constantly changing. System designers, manufacturers, representatives, and contractors must continually adapt to a changing industry landscape," said **Conference Chair, Corey Metzger**. "The **2019 ASHRAE Winter Conference** will provide a valuable opportunity for the sharing of knowledge and information, and the technical program at the conference will provide a venue for a wide range of presentations and discussion."

The **"Systems and Equipment"** track will focus on the development



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

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

of new systems and equipment, improvements to existing systems and equipment, and the proper application and operation of systems and equipment.

The **"HVAC&R Fundamentals and Applications"** track offers concepts, design elements and shared experiences in thermodynamics, psychrometrics, fluid and mass flow. This track provides opportunities for papers and presentations of varying levels across a large topic base.

The **"Refrigeration"** track examines the significant changes on the horizon for refrigerant regulations, along with new applications for refrigeration systems being frequently applied. Papers and programs in this track will focus on refrigerants, refrigerant regulation, refrigeration cycles, and refrigeration applications.

The **"Construction, Operation, and Maintenance of High Performance Systems"** track addresses why there have been numerous cases where buildings with high performance design objectives have failed to achieve targeted performance. Papers and programs in this track will focus on meeting high performance design goals through construction and operation phases of a project.

The **"Common System Issues and Misapplications"** track will help professionals sort through system and equipment options and combinations and the issues that are frequently encountered with HVAC&R systems. Papers and programs in this

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Senior Associate, Buildings Engineering

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track will focus on issues or misapplications that are frequently observed, and opportunities to avoid these issues in the future.

The **"207.2 (55+62.1+90.1): The Convergence of Comfort, Indoor Air Quality, and Energy Efficiency"** track focuses on the importance placed on optimizing comfort, indoor air quality, and energy efficiency and there are often trade-offs that must be made, including the codes and standards that create similar challenges in optimizing systems. Papers and programs in this track will focus on strategies to limit required compromises, and on finding the best set of design criteria for each building or system.

As the movement toward more sustainable buildings and net-zero buildings continues to grow, the inclusion of building integrated renewable energy systems paired with other natural systems will become increasingly common.

The **"Building Integrated Renewables and Natural Systems"** track highlights the advances are being made with respect to integrating renewable energy systems into the built environment. Papers and programs in this track will focus on advancements in building integrated renewable systems, application of building integrated renewable systems, and the use of renewable and natural systems in the move toward net-zero buildings.

**"The Engineer's Role in Architecture"** track highlights the role of the engineer in developing

high performance facilities and the significant attention being paid to integrated teams. Papers and programs in this track will focus on improving the design and construction process by defining the roles to be played by engineers moving forward.

**Conference paper abstracts are due March 26, 2018.** Upon acceptance, final papers will be due **July 9, 2018.**

To submit a conference paper abstract or for more information about the conference, visit [www.ashrae.org/atlanta](http://www.ashrae.org/atlanta)

**ASHRAE Learning Institute Offers New Consulting Engineering Essentials Course**

**ATLANTA – ASHRAE Learning Institute (ALI)** has added a new course specifically designed for the needs of consulting engineers.

The course **"Consulting Engineering Essentials"** taking place on March 29 in **New Orleans**, provides an overview of ownership responsibilities and offers insights to help develop project engineers into well-rounded consulting engineers.

In the course, participants will learn how to work collaboratively with people at every level, applying skills such as verbal communication and appropriate goal-setting to incorporating techniques to prioritize problems. Participants will learn how to delegate tasks, organize large teams of people, and coordinate many complex processes.

Knowledge of firm ownership and operation, business development and marketing of engineering services will also be covered.

"Young engineers and engineers new to the industry need more than the proper educational background and relevant technical experience to thrive in the profession," course instructor **Dennis Wessel, P.E., Fellow/Life Member ASHRAE.**

"Business skills such as project management, marketing, techniques to acquire new projects and client management are crucial for long term success. This course presents these skills in a practical format."

"Consulting Engineering Essentials" is one of four intensive HVAC Design and Operations training sessions offered by **ALI**. Other sessions include:

**HVAC Design: Level I – Essentials**

**HVAC Design Level II – Applications**


**Improving Existing Building Operation**

For pricing, location, registration or more information about the Consulting Engineering Essentials session, visit: [www.ashrae.org/hvacdesign](http://www.ashrae.org/hvacdesign)

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



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# 2018 Curling Wrap-Up

The annual **ASHRAE Curling Bonspiel** took place on Friday, March 9th at the **Nepean Sportsplex**. There were a total of 18 teams registered. All the participants had a good time and enjoyed the day. The **winning team** entered by **Modern Niagara** consisted of:

**Brad Hartzke**  
**Kevin Aldridge**  
**Steve McAninch**  
**Patrick Goodhue.**



These gentlemen took home the trophy, as well as a nice bottle of wine for their skilled efforts.

As in the past years we have donated money to local charities which were deemed as worthwhile causes. Places like The Salvation Army, Rogers House and The Ottawa Food Bank are who we have given to in the past.

This year we are once again lucky enough to donate \$1,440 which brings the total to \$14,070 since 2010. In addition to the charity donation, we were also able to donate approximately \$610 to **ASHRAE Research** from the proceeds and the 50/50 draw that we ran.

Thank-you to **Mastron Mechanical** and **Trane** for the prize donations.



**Committee Chair**

**Colleen Fox**

2017-2018

OVC Curling Chair

**Trane Canada ULC**

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

I'd like to thank **Capone's Catering** for the great meal they put on, as well as **Stan Millross** for being our Emcee once again for the event.

I'd also like to give a special thank-you to our previous Event Chair, **Chris Healey**, for all his hard work and dedication in the past.

We look forward to seeing everyone again next year.

## YEA

Hi OVC!

On Thursday, April 26th we will be planning another **YEA social event!**

It will be held at **Tail Gators Pool Hall**.

I will be sending out an email invitation shortly with all the details.

Hope to see you there and thank you for continued support!



**Committee Chair**

**Joe Della Valle**

2017-2018

OVC YEA Chair

**Walmar Ventilation**

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

## Membership Update

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

**Mr Pooya Khameneh**  
**Mr Stephen Kroff**  
**Mr Devin Lake**  
**Mr Cameron Haines**

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 April.



**Committee Chair**

**Celine Baribeau**

2017-2018

OVC Membership Committee Chair

**BPA**

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

## YEA Leadership Weekend

I attended the **Spring YEA Leadership Weekend** that was held in **Seattle** from March 22-25, 2018. It was definitely a rewarding experience and I want to thank the **OVC** for sponsoring this great opportunity. Prior to the weekend we completed a **personality test** that placed each of us as either an

**initiator, implementer or facilitator**. We learned how to work with people with different traits and that it is important to have people from each category for an effective team.

We also learned many useful tools such as the **Johari Window** for self

awareness and **Mind Mapping** to help visualise and structure ideas.

This weekend helped me learn more about myself. It's important to do business with people who believe what you believe, in order to be successful.

# Student Activities

Hello all,

Moving through this **cold spring**, the month of **March** certainly was **hot with student activities!** Earlier in the month our **UOttawa President Elizabeth Primeau** organized an **ASHRAE OVC Table** at the **UOttawa Open House!**

From left to right: **Adrienne Mitani, Zhongjun Huang, Elizabeth Primeau and Peter Shaw-Wood.**



We also had a very well attended presentation at **Carleton University** with **Christopher Mathis**. The material was very well received! **Big thanks Chris!**

The month of **April** will see some great representation for the **OVC**, starting at the **Ottawa Regional Science Fair April 7th**, handing out prize money to applicable projects.



**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)

On **April 17th** at **Algonquin College**, we will be checking out the **3rd year final year projects** from the **Mechanical Engineering Technology students** including the submission from the team entered into the **ASHRAE student design competition**. I'm certainly looking forward to seeing what these bright young minds have come up with!

All the best,

**Peter Shaw-Wood**

OVC Student Activities Co-Chair

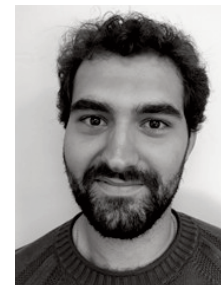


## Table Top Display

What better way to display a new product, existing line, or share great ideas than to have a table-top display at our local OVC **ASHRAE** meetings? The OVC meetings provide a captive audience in the industry and exposure to **60+ people**.

We only have two meetings left this year so time is running out! Get your table before they are all gone!

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



**Committee Chair**

**David Michelin**

2017-2018

OVC Table Top Chair  
**HTS**

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

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

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### **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;
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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.

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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**  
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**HTS Engineering Ltd.**

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

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