



ASHRAE Ottawa Valley Chapter

DATE: Tuesday April 18, 2017

Social: 17:30, Dinner: 18:30, Program: 19:30

LOCATION: Centurion Conference & Event Center
170 Colonnade Rd S, Nepean, ON

THEME: Research Promotion

PROGRAM: Aircraft Ventilation System Operation and Enabling the Canadian Industry to Improve its Design

Come and learn how aircraft ventilations systems operate and what NRC will do to help the supply chain develop new systems to create a more comfortable cabin while reducing costs for aircraft operators. Topics covered:

- How aircraft ventilation systems are designed, developed and operated
- The differences between aircraft standards and building ASHRAE standards
- NRC's plans to support new aircraft cabin systems to improve comfort.

SPEAKERS: Dr. Paul Lebbin, NRC

Dr. Lebbin is a Research Council Officer for the National Research Council of Canada (NRC). Dr. Lebbin is the project manager for the new Cabin Comfort & Environment Research Center under construction in Ottawa. Dr. Lebbin is from Wichita, Kansas and received his mechanical engineering degrees from the Kansas State University. He was hired by NRC to lead a new initiative that has grown into a new research and development program called, Working and Travelling on Aircraft. The program looks at how new services and technologies can improve airline profitability through improved cabin comfort, flight operations, and safety.

Space is limited so please register online at the link below

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

<https://ashraeottawa.simplesignup.ca/en/610/index.php?m=eventSummary>

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

e-mail: contact@ashrae.ottawa.on.ca

President's Message

Spring is finally here, and although it tends to bring some rainy weather along, it also brings warmer temperatures which make our thoughts occasionally drift to participating in our favourite summer activities be it golfing, cycling, paddling or something else. It is hard to believe that we are only two meetings away from finishing off the **ASHRAE** year. I hope that you have enjoyed the year to date and have taken advantage of the many technical and social events the chapter has hosted.

March was a busy **ASHRAE** month and we successfully hosted several events including the **Curling Bonspiel, Student Job Site Tour** at **Carleton University**, the **Career Fair**, and the **CAN/CSA B52 - Mechanical Refrigeration Code Seminar**. I would like to say thank you on behalf of the chapter to all those who helped organize these events and ensure their success.

Our theme for **April** is **Research**. The Research Promotion (RP) Committee is very much into their calling campaign, so if you have not yet received a call, you can expect one soon. Our RP Chair **Adam**

Graham and his committee are doing a fantastic job so far with the campaign, however we still have quite a long way to go to achieve our objective. Feel free to be proactive and contact Adam Graham directly, or visit the website to donate.

We are back again at the **Centurion Centre** for the upcoming **April 18th** program meeting. In-line with our theme of Research, the technical presentation will feature **Dr. Paul Lebbin**, a researcher from the **Construction Portfolio of the National Research Council of Canada** providing some insight into a new **NRC Aircraft Ventilation and Cabin Comfort Facility**. Please refer to the program article for more details. In addition to the program meeting a technical tour is scheduled prior to the meeting. Refer to the tech tour article in the communicate for details. To register for the upcoming April meeting or technical tour please visit our website at: www.ashrae.ottawa.on.ca

CTTC Technology Award submissions are currently being evaluated at the chapter level, and winners will be announced at the April meeting.






President
Abbey Saunders
2016-2017
OVC President
National Research Council Canada

E-mail: abbey.saunders@nrc-cnrc.gc.ca

Bob Kilpatrick will be closing the nominations for this year at our **April** meeting, so if you have any suggestions on individuals who would be suitable for leadership of the chapter, please do not hesitate to contact him, or anyone else on the **Nominations Committee** or **BOG**. Furthermore, if you have been considering volunteering with **ASHRAE**, please let any one of the Board of Governors know, as there are spots to be filled, and it need not be a large time commitment to get involved.

Please take the time to register for the upcoming meeting, and I look forward to seeing everyone on **April 18th**.

Kind Regards,
Abbey Saunders
2016-2017 OVC President

 <p>DANNY DILLON, GSC PRESIDENT</p> <p>1481 Cyrville Road Ottawa, ON K1B 3L7 Ph. 613.741.7731 Cell. 613.880.8504 Fax. 613.741.9962 danny@dilfo.com</p> <p>DILFO.COM</p> 	 <p>Goodkey, Weedmark & Associates Limited Consulting Engineers</p> <p>Ross McIntyre, P.Eng. Principal, Designated Consultant, Mechanical Engineer</p> <p>1688 Woodward Dr., Ottawa, ON, Canada, K2C 3R8 Telephone: 613-727-5111 ext. 239 Fax: 613-727-5115 rossmc@gwal.com</p> 	<p>RODDERS CAS</p> <p>Building System Surveys / Design & Retrofit AutoCad System Design & Customization</p> <p>Roderic S. Potter Principal</p> <p>3 Rochester Street Carleton Place ON K7C 2P9</p> <p>www.rodgers.com info@rodgers.com cell 613.266.2134</p> 
 <p>Chris Harrison President</p> <p>chrish@longhill.ca Phone and cell option: 613-226-3856 ext. 24 Fax: 613-226-2715 111-15 Capella Court, Ottawa, Ontario K2E 7X1 www.longhill.ca</p> <p>The Energy Conservation People</p>	 <p>CHRISTOPHER FUDGE P.Eng. LEED® AP Commercial & Industrial Sales Engineer cfudge@master.ca</p> <p>TEL 613-829-2816 CELL 613-761-2173 FAX 613-829-3731</p> <p>The Master Group L.P. 25H, Northside Road Ottawa (Ontario) K2H 8S1 MASTER.CA</p>	<p>Rod Lancefield, P.Eng., LEED® AP Engineering Sales rod@htseng.com C 613.851.1997</p> <p>HTS Ottawa 1646 Woodward Dr. Ottawa, Ontario K2C 3R8 T 613.728.7400 Ext. 221 F 613.728.8032 Toll Free 888.280.8544 ontario.htseng.com</p> 
 <p>Stéphan Riffault, P.Eng. Sales Representative</p> <p>1250 Old Innes Road, Unit 518 Ottawa, Ontario K1B 5L3 613-565-2129, ext. 2128 sriffault@regulvar.com www.regulvar.com</p>	<p>InAIR Environmental Ltd.</p> <p>Lan Chi Nguyen Thi, P.Eng. Partner</p> <p>1390 Prince of Wales Dr., Suite 503 Ottawa, Ontario K2C 3N6 Phone 613.224.3863 Fax 613.224.2561 lanchi.nguyen@inairenvironmental.ca www.inairenvironmental.ca</p> <p>Mould & Flood Remediation Drinking Water Testing Training Courses IAQ Surveys</p> 	 <p>24 Gurdwara Road Nepean, Ontario K2E 8B5 Tel: (613) 225-9774 Fax: (613) 225-2972 e-mail: randy@walmar.net</p> <p>RANDY CAVILL, C.E.T. President</p> <p>VENTILATION & FILTRATION PRODUCTS</p>

What You Missed

President Abbey Saunders called the sixth meeting of the 2016/2017 season to order. The meeting took place at **Algonquin College**. President Saunders introduced the Board of Governors and the Executive.

Secretary **Chris Fudge** introduced the eleven guests for the evening. Total attendance for the meeting was sixty three.

Membership promotion chair **Celine Baribeau** introduced the new members

President Abbey Saunders gave an overview of the evening's technical session that was done on electrical fundamentals. The technical session was well attended with thirty two in the audience. The session presenter was **Jeff Siddall** of **Morrison Hershfield**.

Student Activities Co Chairs **Adrienne Mitani** and **Peter Shaw-Wood** gave an update on Student Activities. The career fair was very successful at **Carleton University**. **Doug Cochrane**, the visiting **Region II DRC** (Director and Regional Chair), met with several student members from **Algonquin College** and **Carleton** and **Ottawa Universities**.

President Saunders noted that the Technology Awards program deadline was extended until **March 29th**. President Saunders also reminded the audience that the HVAC design essentials one and two course is taking place in May.

Nominations committee chair **Bob Kilpatrick** opened up nominations for the executive and board of governors.

Region II DRC Doug Cochrane gave an update on the **AHR expo in Las Vegas**. 2761 people attended the ASHRAE Winter Conference. **Society President Timothy Wentz** main initiatives were reviewed. Mr. Cochrane highlighted many new educational courses and recent ASHRAE publications and standards.

He also reviewed upcoming publications. The advanced energy design guides are currently being offered for free download on the ASHRAE web site at the link below.

DRC Cochrane also recognized several Region II members who won society level awards or have been granted the member grade of fellow.

President Saunders gave a brief overview of chapter and region awards. Mrs. Saunders encouraged members to update their members BIO as many members may qualify for an award based on their service to the Chapter, Region or Society.

President Elect **Adam Graham** gave an update on membership promotion. **Airtron** donated **Senators** tickets for the membership promotion draw. Four tickets to the Sens vs Wings game. **Robert Lefebvre** won the draw. 510 dollars were raised for **ASHRAE** research through the evenings draw.

President Elect Graham gave an overview of the upcoming technical tour taking place at **Dilfo Mechanical**.

President Saunders introduced the evening's speaker **ASHRAE Distinguished Lecturer and President of Cold Dynamics Mr. Greg Scrivener**. The evening's Program was **Refrigeration Energy Essentials**.

Mr. Scrivener encouraged the evening's guest to complete their program evaluation surveys. He also discussed ASHRAE Technical Committees and his involvement in TC's.

Mr. Scrivener began his presentation by highlighting some of the issues with A2L refrigerants. **ASHRAE** is investing heavily in refrigerant research projects that are studying the safe use of these refrigerants among other things.

The objective of the evening's presentation was to review the basic refrigeration cycle and to understand



Secretary
Chris Fudge
2016-2017
OVC Secretary
Master

E-mail: cfudge@master.ca

the parameters which have the most impact on efficiency. Then to examine technologies and strategies.

The basic refrigeration components and the cycle were quickly reviewed in relation to the pressure enthalpy chart. Heat rejected, net refrigeration effect and work were also outlined on the pressure enthalpy chart. Coefficient of performance was reviewed in terms of cooling and heating.

Carnot efficiency calculation was also reviewed. Primary and secondary factors were covered. Primary factors are hot and cold reservoir temperatures which set max possible efficiency (Carnot Efficiency). Irreversibility and heat recovery cycle design, do not affect the max possible but do effect efficiency, these are secondary factors.

From the Carnot cycle, it can be seen that the lower the difference in temperature between the cold and hot reservoirs, the more efficient the system. A plot was reviewed that showed the effect on efficiency by evaporating temperature and condensing temperatures.

Rules of thumb were covered. For every one degree in condensing temperature, the system efficiency changes by one percent. For every one degree in evaporating temperature changes the system efficiency changes by two percent. What are the limits? There needs to be a temperature difference in order for heat transfer to occur. The smaller the temperature difference the larger the heat exchanger and cost. A higher temperature difference removes more latent load and decreases humidity. Dehumidification is sometimes needed to prevent mold. On the condensing side, some systems need

Link: <https://www.ashrae.org/standards-research--technology/advanced-energy-design-guides>

a pressure difference to actually work properly.

Related strategies are; floating head pressure and floating suction pressure. These strategies are similar to doing chilled water reset. These strategies keep the temperature differences lower, thereby improving efficiency.

There are many things that can be done to the cycle to make it more efficient; sub cooling, intercooling and flash gas removal, two stage compression, cascade, expanders, ejectors to name a few.

There are many ways to get sub cooling. The result is increased net refrigerating effect. Some strategies are mechanical sub coolers, using ambient air or melt pits.

Irreversibility. As with any real

system, we can't make it perfect. How important is pressure drop? Pressure drop in the suction line and through valves in the suction line are one of the largest negative effects on a refrigeration system. Remember the two percent rule of thumb?

Example: a R407a freezer suction line has the equivalent of 2 F suction pressure and evaporates at - 20 F. There is a suction drier installed in the suction line and measure a 2 psi pressure drop across the drier. Total pressure drop is 3.1 psi or 6% increase in power required. Actual is 7.9%.

Putting it all together. The total system COP depends on many other factors.

Combined COPs and heat recovery. Be very careful about marketing material and combined COPs. Make

sure the cost of doing the heat recovery is looked at terms of actual operating conditions and other ancillary devices.

There are many ways to save energy in refrigeration systems. Condensing temperature and evaporating temperature, cycle design and modifications are the main points to consider.

Small update on **CSA B52**. With A2L refrigerants there are some significant holes in the code. Flammable refrigerants will be seen in residential setting in the near future. The enforcement arm of the code currently does not enter into the residential area. There will be changes to the codes to address this.

President Abbey Saunders thanked the speaker and presented him with a gift.

Technical Tour – Dilfo Mechanical Shop

DATE: **Tuesday April 18, 2017**
3:00PM – 4:30PM (before the evening April program meeting)

LOCATION: **Dilfo Mechanical Limited**
1481 Cyrville Rd
Gloucester, ON K1B 3L7

REGISTRATION DEADLINE:
Monday, April 17th, 2017

OVERVIEW:
Demonstration of some CAD/estimating tools followed by tour of shop floor with fabrication demo. Steel toe boots/shoes and safety glasses are required.

Maximum 20 ppl (2 groups of 10)

*****Please register online at the link below if you wish to attend*****

<https://ashraeottawa.simplesignup.ca/en/2276/index.php?m=eventSummary>

Smith + Andersen

David McClatchie C.E.T.
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



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

Stantec
400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4
phone: (613) 725-5573
cell: (613) 323-4964 fax: (613) 722-2799
david.yin@stantec.com



Experience the true meaning
of service and quality

Frank Picchione
Regional Sales Manager

Tel: 800-561-3449
Cell: 514-781-8381
Fax: 800-668-8476
frank@tamcodampers.com
www.tamcodampers.com

TAMCO locations in Ottawa, Ontario and Nashville, Tennessee.

ASHRAE Learning Institute

2017 Online Course Series

2 WAYS TO REGISTER

Internet: www.ashrae.org/onlinecourses

Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

One-part course (3 hours) **\$284 (\$219 ASHRAE Member)** – -- -- Two-part course (6 hours) **\$484 (\$359 ASHRAE Member)**

NEW! Complying with Standard 90.1-2016: Envelope/Lighting
Wednesday, April 5, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Complying with Standard 90.1-2016: HVAC/Mechanical
Tuesday, April 11, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Complying with Standard 90.1-2016: Appendix G
Tuesday, April 18, 2017 – 1:00 p.m. to 4:00 p.m.

Air-to-Air Energy Recovery Fundamentals
Wednesday, May 3, 2017 – 1:00 p.m. to 4:00 p.m.

Air-to-Air Energy Recovery Applications: Best Practices
Tuesday, May 9, 2017 – 1:00 p.m. to 4:00 p.m.

Humidity Control: Basic Principles, Loads and Equipment
Tuesday, June 13, 2017 – 1:00 p.m. to 4:00 p.m.

Humidity Control: Applications, Control Levels and Mold Avoidance
Tuesday, June 20, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! New ASHRAE-Classified Refrigerants to Meet Society's Changing Needs
Tuesday, July 11, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Variable Refrigerant Flow System: Design & Application
Tuesday, July 18, 2017 – 1:00 p.m. to 4:00 p.m.

Advanced High-Performance Building Design
Wednesday, August 9, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Fundamental Requirements of Standard 62.1-2016
Wednesday, September 6, 2017 – 1:00 p.m. to 4:00 p.m.

Laboratory Design: The Basics and Beyond
Tuesday, October 10, 2017 – 1:00 p.m. to 4:00 p.m.

Introduction to Ultraviolet Germicidal Irradiation (UVGI) Systems
Monday, October 16, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Complying with Standard 90.1-2016
Part I: Wednesday, November 1, 2017 – 1:00 p.m. to 4:00 p.m.
Part II: Tuesday, November 7, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Variable Refrigerant Flow System: Design & Application
Wednesday, November 29, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! New ASHRAE-Classified Refrigerants to Meet Society's Changing Needs
Tuesday, December 5, 2017 – 1:00 p.m. to 4:00 p.m.

ASHRAE HVAC Design & Operation Training

3 Courses, 7 Days of Intense Instruction

Atlanta • Chicago • Denver • Hartford • Seattle • Toronto

Improving Existing Building Operation - Registration is \$599 (\$499 ASHRAE Member)

Identify ways to improve existing HVAC system efficiencies and reduce utility expenses while maximizing performance of the building systems. This training details proper system operation and maintenance and introduces methods for evaluating potential system improvements.

HVAC Design: Level I – Essentials - Registration is \$1,264 (\$1,009 ASHRAE Member)

Gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

HVAC Design: Level II – Applications - Registration is \$854 (\$699 ASHRAE Member)

HVAC Design: Level II — Applications provides instruction on HVAC system design for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. The training provides information that allows practicing engineers and designers an opportunity to expand their exposure to HVAC systems design procedures for a better understanding of system options to save energy.

Visit www.ashrae.org/hvactraining to register and learn how your Chapter can earn PAOE points.

Contact Karen Murray (kmurray@ashrae.org) to discuss scheduling ASHRAE HVAC Training in your Chapter area.

Student Activities

Ladies and Gentlemen,

Thank you to everyone who came out to our **Annual ASHRAE Career Fair** this year. We had over a hundred students come as well as **fifteen booths** and **four event sponsors**. We appreciate the support of all the companies who came out to the event.

Our thanks to **Tamco, Total HVAC, EH price, Engineered Air** and **Airtron** for sponsoring the event.

Students from **Carleton, Ottawa University** and **Cegep de l'Outaouais** were given the opportunity to tour the construction site for the **Carleton Health Science** building with **Modern Niagara** and **Carleton** staff. It was a fantastic opportunity for students to get a glimpse of an active construction site alongside the career fair. Thanks to Modern Niagara and Carleton for making it possible.

March 28th our president, **Abbey Saunders** and **Peter Shaw-Wood** presented to a packed room of students at **UOttawa** to talk about their backgrounds, and the importance of networking organizations; in particular **ASHRAE**. A big thanks to **Marie-Eve**, our **UOttawa Vice Presidents** for organizing!

On Thursday March 9th we visited the **Elmwood School** in the **Rockcliff** area, and talked about engineering and the HVAC industry to a **4th grade** girl's class. They were very interested in how temperature and air affected their everyday environment. We also did a short activity where we made zip line cars that had to carry a ping pong ball down the line. We are currently adding more engineering outreach at the elementary and high school level, if you are interested in being involved please contact **Adrienne**.



Governor
Adrienne Mitani
2016-2017 Student
Activity Co-chair
Smith and Andersen

E-mail: adrienne.mitani@smithandandersen.com



Committee Chair
Peter Shaw-Wood
2016-2017
OVC Student Activities
Co-chair
Applied Energy

E-mail: peter@applied-energy.ca

All the best,

Adrienne Mitani + Peter Shaw Wood
OVC Student Activities Co-Chairs



Mark Csiffary P.Eng.
President

BAXTEC
MECHANICAL SERVICES

2470 Don Reid Drive
Ottawa ON K1H 1E1
mark@baxtec.com
www.baxtec.com
W: 613-738-7450 C: 613-229-8277

TOTAL
HVAC

Steve Moons
Principal

Total HVAC Inc.
14A-190 Colonnade Rd., S.
Ottawa, Ontario
Canada, K2E 7J5

Tel: (613) 723-4611
Fax: (613) 723-4677
Cel: (613) 229-5806
Email: stevem@totalhvac.com
Web: www.totalhvac.com



1024 Morrison Drive
Ottawa, ON K2H 8K7
613-356-1940 / Cell 514-951-7809
613-820-8111 / Fax 613-820-1414
gjones@trane.com
www.trane.com

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



April 2017

YEA

Hi YEA!

I would like to thank the group who attended the **Axe Throwing** event **Friday March 24**, it was a huge success and good time was had by all.

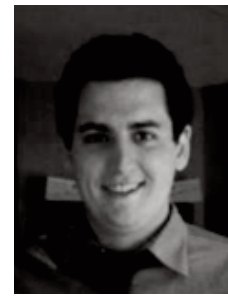
Graham Falt from **TOTAL HVAC** came in first place followed closely by **James Pady** from **Longhill Energy** in second place.

These social events are great way to meet other members and I plan to have another for end of **April**, early **May**.

More details to follow.

Thank you for your continued support.

Joe Della Valle



Committee Chair
Joe Della Valle
2016-2017
OVC YEA Chair
Walmar Ventilation

E-mail: joedellavalle@walmar.net



Table Top Display

If you're looking to communicate the value of your product, there is no better way than to invest in a table-top at an upcoming **ASHRAE OVC** meeting. Highly attended and highly regarded, our monthly meetings can afford you the opportunity to display your new technologies to an eager

group of HVAC/R engineers and contractors. If you wish to review the themes of each meeting to find an appropriate topic, please feel free to contact me.



Governor
Adam Moons
2016-2017
Table Top Chair
Master Group

E-mail: amoons@master.ca

Payment is to be made through the online system prior to the date reserved. Follow the link below:
<https://ashraeottawa.simplesignup.ca/en/1775/index.php?m=eventSummary>

Jp2g Consultants Inc.
ENGINEERS • PLANNERS • PROJECT MANAGERS

1150 Morrison Drive
Suite 410
Ottawa, Ontario
K2H 8S9

Mike Swayne, P. Eng.
Director of Building Services

Phone: 613-828-7800 x224
Cell: 613-809-4843
Fax: 613-828-2600
email: mswayne@jp2g.com

AMERESCO
Green • Clean • Sustainable

ROY SAMHABER, P. ENG.
senior project manager

P: 613 224 7500 x6158 | P: 888 283 7267 | F: 613 224 3726
rsamhaber@ameresco.com | ameresco.ca
Ameresco Canada Inc.
106 Colonnade Rd N, Ste 200 | Ottawa, ON K2E 7L6

Green • Clean • Sustainable

WSP

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

T 613-829-2800, ext. 19108
F 613-829-8299
C 613-240-2746
jim.mills@wspgroup.com

WSP Canada Inc.
2611 Queensview Drive, Suite 300
Ottawa ON K2B 8K2
www.wspgroup.com

Research Promotion

Thanks for your continued support for **ASHRAE Research Canada!**

ASHRAE Research plays a huge role in all aspects of our built environment. Our homes, offices, schools, hospitals, retail spaces and restaurants are all affected and hopefully protected by their respective HVAC&R systems.

Our objective for the **2016-2017 RP Campaign** is **\$29,000**. Although this seems like a lot, our chapter history has shown us this objective is attainable. No donation is too small, and all money raised goes to **ASHRAE Research Canada**.

Georges Maamari, Abbey Sauders, Michael Swayne, Robert Lefebvre, and Frank Bann have all agreed to help support this cause as a part of the ASHRAE RP Committee. Please contact any of us with your RP questions. We have started our annual calling campaign so expect to hear from one of us shortly if you have not yet.

The raffle draws for event tickets will continue at each program meeting in support of our 2016-2017 RP

Campaign. Last meeting's tickets for the **April 4, Sens v. Red Wings** game were graciously donated by **Airtron!** This event raised **\$510** for Research. A special thanks to all that have donated tickets. We are always looking for donors that may have something to contribute for our monthly raffles. Please contact me if interested.

As of **March 31, 2017**, we have raised **\$22,065** towards our campaign goal, approximately **76%** of our objective. Thanks to all our donors who continue to support the **RP Campaign**.

Thanks to all our donors who continue to support the RP Campaign.

A list of current 2016-2017 RP Campaign donors will be updated for each monthly newsletter, so donate quickly to see you name appear!

Two of the easiest ways to make your donation to the 2016-2017 RP Campaign are by clicking either of the links below.

However, should you wish to make



**President-Elect
Adam Graham**
2016-2017
OVC President-Elect
HTS

E-mail: adam.graham@hta.com

you donation using cheques, 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 need be.

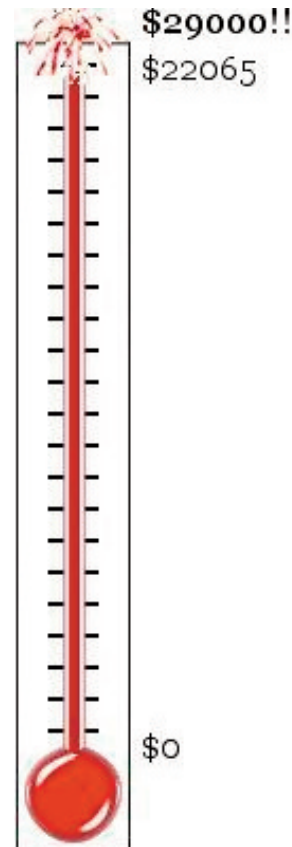
Again, I can't say this enough thanks for your continued support for **ASHRAE Research Canada!**

Adam Graham

ASHRAE OVC President Elect,
Research Promotion Chair

Attn: **Adam Graham**
HTS Ottawa
1646 Woodward Drive, Ottawa, ON,
K2C 3R8
T 613.728.7400x2804
C 613.889.6928
E adam.graham@hts.com

ASHRAE Partner	ASHRAE Associate	Major Donor Silver	
Hydro Ottawa	Longhill Energy	Goodkey Weedmark and Associates Ltd. Nortec Humidity Walmar Ventilation	
Major Donor Bronze	Major Donor Antique	Honor Roll	
Airtron Adam Graham Trane The Mechanical Contractors Association of Ottawa (MCA) Total HVAC JCI		Abbey Saunders Richard Cameron Chris Fudge Aaron Dobson Ryan Dickinson Robert Lefebvre Adam Moons Paul Morin Isotherm Commissioning Parson Refrigeration Mastron Mechanical R. J. Mckee Distech HVAC C & S Heating T.A. Morrison & Co LCI Engineering	Chris Frauley Daniel Redmond Adrienne Mitani Steve Moons Michael Swayne Robert Kilpatrick Andrew Douma



ASHRAE OVC link: <https://ashraeottawa.simplesignup.ca/en/1773/index.php?m=eventSummary>

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

Past President D.C. (Don) McKeen

Past President D.C. (Don) McKeen, who became **president** of the **Ottawa-Valley Chapter** in 1964, passed away on Wednesday **March 15th, 2017** at the age of **95**. Don was a delightful fellow with lots of stories to tell, including the story published below in the **March 2005 Communique** about his memories

of the refrigeration history and cutting ice on the river with his Dad. Don was in the **Navy** during **WWII** and held many honors in our industry, including some below:

- ASHRAE Ottawa-Valley Chapter President 1964-65
- AL Oakes Award of Excellence

- 1989 Milton Garland Ice Man Award ASHRAE Region II 1989-90 (first recipient)
- ASRE Montreal Section Chairman 1958-59
- OCA Ottawa President 1972
- HRA Institute of Canada President 1970-71 (2nd President)



ASHRAE Curling - Toronto (Hunt Club Sweaters)
Al Oakes, John Ruddy, Dave Minshall, Don McKeen



ASHRAE Golf Lachute 1975
George Bemis, Don McKeen, Gord Goodkey, Paul Fortier



ASHRAE Golf Brockville
George Carscallen, Paul Fortier, Don McKeen



ASHRAE Curling Quebec City
Ottawa vs. Montreal



Noel Kirby, Paul Fortier, Don McKeen, George Carscallen



ASHRAE OVC May Meeting 2011
Marjorie and Don McKeen



Let's Keep the "R" in ASHRAE! "R" is for Refrigeration

A letter from Don McKeen

When it comes to the subject of refrigeration it is hard to know where to begin. There is so much. My father owned and operated an ice, coal and wood business in Prince Albert, Saskatchewan before my time. I was born in 1921. He harvested the ice out of the North Saskatchewan River. When I was a kid, 10 or 11, I traveled around with the iceman delivering the ice – three hundred pound blocks. He would cut the blocks up into smaller sizes, down to twenty-five or fifty pounds for home delivery. There were two theatres in Prince Albert, one advertised as being comfort cooled. We would deliver a couple of three hundred pound blocks, placed in a chamber over which air would be circulated by a large fan and then circulated through the theatre by a duct system. This was in the mid 1930's.

I was in the Navy during WWII and after coming back from overseas in 1944, ended up as a gunnery instructor at HMCS Cornwallis training base in Digby, Nova Scotia. They had an ice-skating and hockey arena and it was there that I first got interested in refrigeration. May 1945, it was near the end of the month and quite warm outside. I was asked if I know how such good ice conditions could be maintained and in reply I mentioned something about cold brine being circulated through pipes under the ice. Anyway, this aroused my curiosity. I visited the base library that evening and came away with two books: one on Refrigeration published by the Ontario Department of Agriculture and the second a huge 1500 page volume on Thermodynamics. The former was just what I needed and I learned much from this book.

Amazing things started to click into place. Destiny or something like that. One day I was having a chat with the base protestant chaplain who dropped by the gunnery from time-to-time. On this occasion he asked as to when I expected to get my discharge out of the Navy and also as to what I was expecting to do on "Civvy" street. I mentioned this refrigeration "thing" and he came right back with the comment "you are talking to the right person!" "How come?" I asked. He told me that his roommate was the officer in charge of all the refrigeration on the base and that he was also teaching a course in refrigeration to a class of Navy motor pool mechanics. He thought that he could arrange for me to sit in whenever I had a chance and that's just what I did!

So it is now August 1945 and I am engaged to be married and on my way to Montreal for my discharge out of the Canadian Navy. I had joined the Navy in Saskatoon, Saskatchewan January 15, 1941, exactly 4 years and 8 months before. The government had started up a technical school for WWII vets, including a two-year course in refrigeration. I was able to enroll and we were off and running. I graduated as a Refrigeration Technologist. While at school, I arranged to have interviews with two of Canada's largest refrigeration companies, CIMCO (York) and Linde Canadian Refrigeration Co. Ltd. Right after graduation I was hired by Linde and I never looked back. Linde was 100% ammonia until towards the end of WWII. I was only the second Freon man to join Linde. I had four great years with Linde, then moved on to Murray Air Conditioning Co. Ltd. in Montreal. I was with Murray just one year, a great company and a great guy, but an opportunity came up that I just could not resist.

So on January 1, 1951, I was on my way to Brantford, Ontario to join the sales staff of Keeprite Products Limited, a sparkling new manufacturer of refrigeration products. I spent four years in Brantford and then it was back to Montreal as Sales Manager of all Eastern Canada including Ottawa. I could have taken Toronto; it was my choice. A wonderful company and I worked for great people. We rapidly moved into air conditioning, then heating, then building products and then OEM products like Frigidaire. I was one of the founding charter members of the Montreal A.S.R.E. Section. Some exciting times.

However, opportunity came knocking once again. So on June 24, 1959, it was off to Ottawa where I became a wholesaler of refrigeration and air conditioning products and components. It was tough leaving Keeprite after 9 1/2 years – I just missed my 10-year watch by six months! It was hard on my boss at the time, the guy that had hired me and became a good friend. He was the person who got me to join A.S.R.E. in Toronto in September 1951. He could not understand me leaving Keeprite, but his boss did and helped arrange that I be the Keeprite distributor in and around the Ottawa area, a big help for me. I was almost immediately elected to the A.S.H.R.A.E. Ottawa Valley Chapter Board of Governors and became President in 1964-1965

These are just some of the ways that refrigeration has been in my career and life. With my focus on the "R" in A.S.H.R.A.E., this is what I do not want to happen:

A.S.H.R.A.E.
A.S.H.(R)A.E.
A.S.H.(r)A.E.
A.S.H.A.E.

Let's Keep the "R" in ASHRAE! "R" is for Refrigeration

And this:

Two hydrogen atoms walk into a bar. One says, "I've lost my electron." The other says, "Are you sure?" The first replies, "Yes, I'm positive..."

NOMINATIONS AND ELECTIONS

ANNOUNCEMENT

Hello everyone,

On behalf of the **2017/2018 Nominating Committee**, I am pleased to announce the slate for the Executive and Board of Governors that will provide leadership for the **Ottawa Valley Chapter** for the upcoming year.

Executive

President Adam Graham
President-Elect Dan Redmond
Treasurer Chris Fudge
Secretary Aaron Dobson
Past-President Abbey Saunders

Board of Governors

Richard Cameron
Chris Frauley
Jacob Hough
Adrienne Mitani
Adam Moons

Please join me in offering congratulations to this committed group; I'm sure you will agree that the Chapter is in good hands going forward and that you will continue to offer your full support to this leadership group and Chapter activities.



Committee Chair

Robert Kilpatrick
2016-2017 Nominations and Awards Chair
NRC-CNRC

E-mail: Robert.Kilpatrick@nrc-cnrc.gc.ca

Installation of the new Executive and Board will take place at the **May** Chapter meeting.

Thank you

BAXTEC
Mechanical Services
Your energy savings partner

MARK CSIFFARY P.ENG.
President • mark@baxtec.com

Office: 613-738-7450 Fax: 613-738-2973
Cell: 613-229-8277 www.baxtec.com
2470 Don Reid Drive, Ottawa, ON K1H 1E1 A member of

McKEE
ENGINEERING

Sylvain Chenier, P. Eng., ing.,
LEED@AP
Vice President - Mechanical
Sylvain.Chenier@mckecottawa.ca

1785 Woodward Drive
Ottawa, ON K2C 0P9
CANADA
Tel.: (613) 723-9585 x128
Tel.: (613) 723-9584
www.mckecottawa.ca

BELIMO

Belimo Americas
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

Clark Campbell CET
District Sales Manager,
Eastern Ontario & Atlantic Canada

ENGINEERING PERFORMANCE...

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

bpa

advanced sustainable building systems

Patrick St-Onge, P. Eng. LEED AP | 613-596-6454 | bpa.ca
1960 Robertson Road, Suite 100, Ottawa, Ontario, K2H 5B9

Yorkland Controls
ENVIRONMENTAL SOLUTIONS

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

Honeywell BELIMO
HWAC/BAS & Vulcan

Johnson Controls FACILITY EXPLORER
SIEMENS

KMC GREYSTONE

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

WESMECH
TECHNICAL SALES INC.

50 Ronson Drive, Suite 160 • Toronto, Ontario • M9W 1B3
Tel: 416-251-8990 • Watts: 1-800-613-3789 • Fax: 416-251-8900
www.wesmechtech.com

Joseph McCallion, C.E.T.
President

josephm@wesmechtech.com cell: 416-720-8976

Membership Update

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

Mr Kellen Wadden
Mr Gino Theriault
Mr Nicholas Pankhurst
Mr Brian Michels
Mr Jonathan Osborne
Mr Sebastien Brideau
Mr Osama Nasir
Mr Oscar Wasilik
Mr Alan Moreau
Ms Caitlin Newey

At any time, if you have any questions or comments regarding your **ASHRAE** membership, please do not hesitate to contact me at: cbaribeau@bpa.ca

I would also like to remind everyone to update your Biographical Information in your ASHRAE Member Profile.

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



Committee Chair

Celine Baribeau
2016-2017 Membership Committee Chair
BPA

E-mail: cbaribeau@bpa.ca

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

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 **Daniel Redmond** (danielredmond@cunet.carleton.ca) with any questions. Follow the link below for payment.

<https://ashraeottawa.simplesignup.ca/en/1774/index.php?m=eventSummary>

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.

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@htseng.com for more details.

Payment will be made through the online system. Follow the link below for payment.
<https://ashraeottawa.simplesignup.ca/en/1776/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
2016-2017 Publicity Committee Co-Chair
HTS Engineering Ltd.
E-mail: rod.lancefield@hts.com



E-mail:
DanielRedmond@cunet.carleton.ca

Treasurer
Daniel Redmond
2016-2017
OVC Treasurer
Carleton University



E-mail: rod@htseng.com

Publicity
2016-2017 Publicity
Committee Co-Chair
**HTS Engineering
Ltd.**

Andrew Klassen
Account Manager



1024 Morrison Drive
Ottawa, ON K2H 8K7
Cell 613 808 4054 Direct 613 356 1966
Tel 613 820 8111
Toll Free 888 872 6326
andrew.klassen@trane.com
www.trane.com



2016-2017

President

Abbey Saunders

President-Elect

Adam Graham

Treasurer

Daniel Redmond

Secretary

Chris Fudge

Governors

Richard Cameron

Adrienne Mitani

Aaron Dobson

Chris Frauley

Adam Moons

Past President

Georges Maamari

Committees

Attendance

Sandy Taylor

Audit

Steve Moons

Capital Communiqué

Celine Baribeau

CRC

Abbey Saunders

CTTC

Jeff Watson

Grassroots

Government Affairs

Richard Cameron

Financial

Sandy Taylor

Greeter

Mike Swayne

History

Aaron Dobson

Jeremy Strong

Membership

Promotion

Celine Baribeau

Nominations &

Awards

Robert Kilpatrick

PAOE

Adam Graham

Program

Jacob Hough

Research

Promotion

Adam Graham

Roster

Georges Maamari

Special Events

Chris Healey

Andrew Douma

Adam Moons

Steve Moons

Student

Activities

Adrienne Mitani

Peter Shaw-Wood

Table Top

Adam Moons

YEA

Joe Della Valle

Website

Roderic Potter



WALMAR VENTILATION
PRODUCTS

Div. of Randebar Enterprises Inc.

*Manufacturer's
Agents and
Distributors*

JUNIOR ESTIMATOR

Walmart Ventilation Products is currently seeking someone to join our team. The opportunity that we now have available is **Junior Estimator**.

Since our beginnings in 1973, Walmart Ventilation Products has become a leader in providing Ventilation, Filtration and Heating products to our customers. An important part of our success is the quality of our personnel, we are proud to have such dedicated staff and boast about the service that we provide.

Your role would be to work closely with our senior estimator and monitor all construction websites, print plans and specifications. This information is to be maintained in CRM along with recording all addenda's and project specific information.

Once you are trained on all the products that Walmart represents, you will be ready to take off and quote all jobs out for tender.

- This is a full time position complete with a competitive salary, and benefits.
- HVAC Experience is considered an asset

If you think this is a good opportunity for you and would like to learn more about joining us, please send your resume to:

Christine Kemp
V.P. of Sales
Walmart Ventilation Products
christine@walmart.net

WWW.WALMAR.NET
24 GURDWARA ROAD
NEPEAN, ONTARIO
K2E 8B5

TEL: (613) 225-9774

FAX: (613) 225-2972