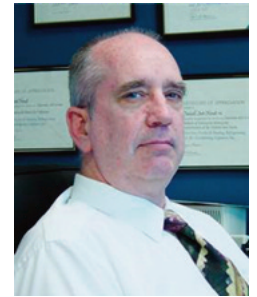




Ottawa Valley Chapter



- DATE:** Tuesday October 18, 2016
Social: 17:30, Dinner: 18:30, Program: 19:30
- LOCATION:** Algonquin College Restaurant International
1385 Woodroffe Ave, Building H, Room H100
- THEME:** Student
- PROGRAM:** You Can't Afford Discomfort

While much has been said about saving energy, little is said of the downside if the savings strategy reduces occupant productivity. The average salary in any office is 100 times greater than the full cost of heating and cooling that space. Strategies that add to the first, renovation, or operating cost of a space have to be weighed against the potential for reduced productivity when calculating the time to payback.

We aren't doing a very good job, it seems. BOMA continues to report that the #1 reason for tenants not renewing the lease is "occupant dissatisfaction with the thermal environment". ASHRAE Standard 55 describes the conditions that will satisfy a majority of the occupants. It is often referenced in code, and many LEED projects have been awarded a point for compliance, at the design stage, of course.

In practice however, we find that systems don't operate at design, or even as designed. We will discuss the issues related to maintaining comfortable conditions at all loads, and discuss the benefits of ventilation and economizer operations.

HOST: Daniel Int-Hout

Mr. Dan Int-Hout, Chief Engineer, Krueger, is responsible for the presentation of technical data and advanced application engineering for the Grilles, Registers and Diffusers, as well as the VAV air terminals, produced by Krueger. Mr. Int-Hout originally joined Krueger in 1981, but has had several other jobs in the industry, in engineering, marketing and product research roles, with Owens Corning Fiberglas, Carrier, Titus and Environmental Technologies. Mr. Int-Hout has been in the air distribution research and design business since 1973, has a Masters degree in Business Management from Central Michigan University, and a Bachelors degree in Biology and Physics from Denison University. Mr. Int-Hout has written over thirty technical papers and articles on VAV system performance, acoustics, air diffusion, controls and occupant comfort. He was recently Chairman of both ASHRAE Technical and Standards



Committees on Thermal Comfort, is a past Chairman of several other related ASHRAE Technical and Standards Committees, as well as ASHRAE Standards and Environmental Health Committees. He received the ASHRAE Distinguished Service Award in 1993. He is currently the Chairman of the ARI Committee on Applied Acoustics (885) and Chair of ISO 205 U.S. Panel on Thermal Comfort. He is presently a member of the ASHRAE Technical Activities Committee (TAC).

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>

President's Message

With the **ASHRAE** season officially well underway, I'd like to start this month's message by thanking everyone who helped make our first meeting a fun networking event. Congratulations to team Adam Moons, champions of the Canadiana Trivia.

We continue the year this month returning to our regular venue, the **Restaurant International at Algonquin College**. We look forward to outstanding food, and what promises to be an entertaining technical meeting as **ASHRAE DL Dan Int-Hout** returns for a visit.

Our theme this month is **Students**. Students are the future of our industry and our committee is continuously working to facilitate the integration of student to our industry, even before they complete their studies. Attendance at meetings gives students the opportunity to meet future employers, socialize with peers, and learn about HVAC related topics. I encourage everyone to take

a few minutes to engage the students in conversation throughout the evening and together we can show them the value of becoming ASHRAE members.

As I mentioned in my last message, it is the participation of numerous volunteers that makes our chapter so successful. In recognition of their outstanding contributions to ASHRAE at the Chapter level, the following members were awarded the **Chapter Service Award** at the 2016 CRC in Moncton: Rod Potter, Christine Kemp and Steve Moons. The **PAOE Star Award with Special Citation** was awarded to Georges Maamari. In appreciation of their outstanding contributions to ASHRAE at the Regional Level, the following individuals were awarded the **Regional Award of Merit**: Rod Potter and Cathy Godin. In addition, Chris Fudge was awarded a **Certificate of Appreciation** for his devoted service as RVC CTTC 2013 – 2016. For a full recap of all awards presented to OVC Chapter members



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

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

at the 2016 Moncton CRC, please refer to the CRC Wrap-up article by Dan Redmond.

To register for the October program meeting please go to our website at www.ashrae.ottawa.on.ca and select the October meeting link. If you haven't already done so, don't forget to purchase your meal plan.

Enjoy the first few weeks of fall, and I hope to see lots of familiar and new faces at the next meeting.

Sincerely,
Abbey Saunders
2016-2017 OVC President

Technical Tour - Seresco

DATE & TIME: **Tuesday October 18, 2016**
from 3:45pm to 4:45pm (before the evening monthly program meeting)

LOCATION: **Soresco Technologies Inc.**
1071 Ages Drive, Ottawa, ON K1G 6L3

OVERVIEW:

Seresco is a leading manufacturer of mechanical dehumidification equipment specializing in pool units. This technical tour of the local Seresco factory will include a half hour presentation covering topics from natatorium design to basic refrigeration system design. This will be followed by a tour of the facility where any product or application specific questions can be answered.

Click on this link to register: <https://ashraeottawa.simplesignup.ca/en/1940/index.php?m=eventSummary>

 <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>WALMAR www.walmar.net</p> <p>24 Gurdwara Road Nepean, Ontario K2E 8B5 Tel: (613) 225-9774 Fax: (613) 225-2972</p> <p>RANDY CAVILL, C.E.T. President</p> <p>e-mail: randy@walmar.net</p> <p>VENTILATION & FILTRATION PRODUCTS</p>
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What You Missed

The first program meeting of the 2016/2017 ASHRAE season was held in the **Prescott**, located in the heart of Ottawa's little Italy. The theme for the evening was Membership Promotion. The meeting was attended by a total thirty nine guest, twenty five of which were members and one a student. The program for the evening was **Quiz Night**. Master of Ceremonies for the Quiz was Past President and current Web Site Chair **Rod Potter**.

President **Abbey Saunders** called the meeting to order and introduced the Executive and Board of Governors. Secretary **Chris Fudge** introduced the guest for the evening.

Membership Promotion Chair **Celine Baribeau** introduced the new members of the Ottawa Chapter. In the spirit of the evenings theme, Celine reviewed in detail the **Smart Start** program for students as well as how to become an affiliate member. Celine also covered the

requirements to become a full member. Celine also gave an overview of the membership in Ottawa and noted that Ottawa won the highest PAOE points in Region 2 for Membership Promotion last year. YEA Chair Joe DellaValle then discussed the YEA leadership weekend he will be attending on Nov 4th - 6th. Joe also discussed there will be an upcoming event for YEA in the near future with further details to follow.

Adam Graham, President Elect and Research Promotion Chair, distributed raffle tickets for four 100 Level **Sens Tickets**. The tickets were generously donated by **Airtron**. A total of **660\$** was raised for ASHRAE Research.

Dinner was a choice of chicken parmesan or the Prescott's' famous meatball sandwich both served with a side of fries and coleslaw.

The Quiz began at **19:30** lasted **2 ½**



Secretary
Chris Fudge
2016-2017
OVC Secretary
Master

E-mail: cfudge@master.ca

hours with a brief intermission at the midway point. The Quiz consisted of name that moment in time based on popular events of the day, name that tune and name that movie. Bonus points were provided for providing additional details such as year the tune was released or lead actor/actress in a movie. Rod prepared an elaborate power point that contained; video clips of movies and moments in time as well as sound clips of popular music. Past President Donald Weeks was the Arbitrator/Spotter for the evening. The quiz champions were team **Adam Moons**. Each team member took home the Grand Prize, a substantial jug of maple syrup.

<p>Mark Csiffary P.Eng. President</p> <p>BAXTEC MECHANICAL SERVICES</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>TOTAL HVAC</p> <p>Steve Moons Principal</p> <p>Total HVAC Inc. 14A-190 Colonnade Rd., S. Ottawa, Ontario Canada, K2E 7J5</p> <p>Tel: (613) 723-4611 Fax: (613) 723-4677 Cel: (613) 229-5806 Email: stevem@totalhvac.com Web: www.totalhvac.com</p>	<p>Glenn Jones B.Eng LEED AP BD+C Sales Manager - HVAC Systems</p> <p>TRANE</p> <p>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</p> <p>IR Ingersoll Rand.</p>
<p>Smith + Andersen</p> <p>David Eastwood P.Eng. Principal 613 2301186 ext. 403 david.eastwood@smithandandersen.com</p> <p>1600 Carling Avenue Suite 530 Ottawa Ontario K1Z 1G3 t 613 2301186 f 613 2302598 smithandandersen.com</p> <p>Ottawa Vancouver Toronto Edmonton Dubai Calgary</p>	<p>Stantec</p> <p>David Yin, P.Eng., LEED AP Senior Associate, Buildings Engineering</p> <p>Stantec 400 - 1331 Clyde Avenue, Ottawa ON K2C 3G4 phone: (613) 725-5573 cell: (613) 323-4964 fax: (613) 722-2799 david.yin@stantec.com</p>	<p>TAMCO INNOVATIVE DAMPER PRODUCTS</p> <p>Experience the true meaning of service and quality</p> <p>Frank Picchione Regional Sales Manager</p> <p>Tel: 800-561-3449 Cell: 514-781-8381 Fax: 800-668-8476 frank@tamcodampers.com www.tamcodampers.com</p> <p>TAMCO locations in Ottawa, Ontario and Nashville, Tennessee.</p>

CRC Recap

The **2016 Region II Chapter Regional Conference (CRC)** was hosted this year by the **ASHRAE NB/PEI Chapter** in **Moncton, New Brunswick** between **August 26th and 28th**. The CRC is a meeting of the chapters within the region to discuss regional business as well as to meet and collaborate on ASHRAE matters. Region II includes all Canadian ASHRAE chapters East of Manitoba and each chapter sends representatives to ensure a productive conference.

This year, the following people attended from the Ottawa Valley Chapter:

- President Abbey Saunders (CRC Delegate)
- Daniel Redmond (CRC Alternate and Research Promotion Co-Chair)
- Jacob Hough

(Program Chair and Grassroots Government Affairs Chair)

- Peter Shaw-Wood (Student Activities Co-Chair)
- Celine Baribeau (Membership Promotion Chair)
- Joe Della Valle (Young Engineers in ASHRAE Chair)
- Jeremy Strong (History Chair)
- Jeff Watson (Chapter Technology Transfer Chair)
- Darryl Boyce (President of ASHRAE Research Canada)
- Glen Greer (CRC Platinum Sponsor)

It was a great CRC that included meetings and workshops to facilitate improved chapter and regional operations. The Ottawa Valley Chapter was presented with several awards during the **Awards**



Secretary
Daniel Redmond

2016-2017

OVC Treasurer

Carleton University

E-mail:

DanielRedmond@cunet.carleton.ca

Luncheon including:

- PR Endowment Chevron
- RP Full Circle Chevron
- RP Gold Treasury Ribbon & Special Citation
- PAOE Honor Roll
- Gold Star

While the event was focused on the business and operations side of ASHRAE, the attendees did also have some time to relax and get to know the other ASHRAE volunteers during the Saturday night lobster boat cruise.

<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 3P8 T: 613-728-7400 Ext. 221 F: 613-728-8032 Toll Free: 888-280-8544 ontario.htseng.com</p>
<p>ENGINEERING PERFORMANCE...</p> <p>... mechanical, electrical, building automation, environmental, ...</p> <p>advanced sustainable building systems</p> <p>Patrick St-Onge, P. Eng. LEED AP 613-596-6454 bpa.ca 1960 Roberson Road, Suite 100, Ottawa, Ontario, K2H 5B9</p>	<p>Larry Gravelle Tel: (613) 721-3301 Fax: (613) 721-4906 1-877-733-3833 www.yorkland.net</p> <p>Yorkland Controls represents leading control systems and component manufacturers. Integrated solutions for Lighting, Card Access, CCTV and Building Automation.</p>	<p>WESMECH TECHNICAL SALES INC.</p> <p>50 Ronson Drive, Suite 160 • Toronto, Ontario • M9W 1B3 Tel: 416-251-8990 • Watts: 1-800-613-3789 • Fax: 416-251-8900 www.wesmechtech.com</p> <p>Joseph McCallion, C.E.T. President</p> <p>josephm@wesmechtech.com cell: 416-720-8976</p>

Membership Update

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

- Maninder Singh**
- Catherine Le Blanc**
- Christopher Chi**
- Hal McPhail**
- Graham Falt**
- David Michelin**
- Ryan Crowle**
- Evan Boucher**
- Evans Wambua Mutua**

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

Thank you all for the continued support and participation in your local ASHRAE chapter. Looking forward to seeing everyone at the next **ASHRAE** meeting.



Committee Chair

Celine Baribeau

2016-2017

Membership Committee Chair
BPA

E-mail: cbaribeau@bpa.ca

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 even the food we eat are all affected and hopefully protected by their HVAC&R system, or lack thereof. Although Abbey and her committee have left me big shoes to fill, I am pleased to be part of such an important part of society in serving as the Research Promotion Chair for our **Ottawa Valley Chapter**.

Our objective for the 2016-2017 RP Campaign is **\$29,000**. Although this seems like a lot, our chapter history, in particular last year's stellar fundraising efforts have shown us this objective is attainable. No donation is too small, and all money raised goes to ASHRAE Research Canada.

The raffle draws for event tickets will continue at each program meeting in support of our 2016-2017 RP Campaign. The **Oct 22 Sens v. Lightning** tickets graciously donated

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

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

by **Airtron** raised a total of **\$660!** A special thanks to Airtron for donating the tickets, and congratulations to **Cathy Godin** of **SK Sheet Metal** winner of the tickets. We are always looking for donors that may have something to contribute for our monthly raffles. Please contact me if interested.

As of **Sep 30**, we have raised **\$1010** towards our campaign goal, approximately 3% of our objective.

Thanks to all our donors who helped make last year's 2015-2016 RP Campaign a huge success. Formal donor recognition will take place at the **November** program meeting.

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 you donation using cheques, please



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

E-mail: adam.graham@hta.com

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

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Major Donor Bronze	Major Donor Antique	Honor Roll
Aitron		Abbey Saunders Chris Frauley Richard Cameron Adam Graham

 <p>Jp2g Consultants Inc. ENGINEERS • PLANNERS • PROJECT MANAGERS</p> <p>1150 Morrison Drive Suite 410 Ottawa, Ontario K2H 8S9</p> <p>Mike Swayne, P. Eng. Director of Building Services</p> <p>Phone: 613-828-7800 x224 Cell: 613-809-4843 Fax: 613-828-2600 email: mswayne@jp2g.com</p>	 <p>AMERESCO Green • Clean • Sustainable</p> <p>ROY SAMHABER, P. ENG. senior project manager</p> <p>P: 613 224 7500 x6158 P: 888 283 7267 F: 613 224 3726 rsamhaber@ameresco.com ameresco.ca Ameresco Canada Inc. 106 Colonnade Rd N, Ste 200 Ottawa, ON K2E 7L6</p>	 <p>WSP</p> <p>Jim Mills, P.Eng., ing., LEED AP Director, Mechanical Group</p> <p>T 613-829-2800, ext. 19108 F 613-829-8299 C 613-240-2746 jim.mills@wspgroup.com</p> <p>WSP Canada Inc. 2611 Queensview Drive, Suite 300 Ottawa ON K2B 8K2 www.wspgroup.com</p>
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Seminar : CSA B139-Series 15 Installation of Oil-Burning Equipment

DATE & TIME: Thursday November 24th, 2016
9 AM to 4 PM (Sign-In/Coffee 8:30 AM)

LOCATION: Master Group
25H, North Side Road, Ottawa (Ontario), K2H 8S1

SEMINAR DESCRIPTION:

The course will

- Fuel Oil Regulations – approvals, distributor inspections, unacceptable conditions, certification of installers
- Updates made to the 2015 standard.
- B139.1.0 -15
 - Aboveground Tank installations
 - Piping systems and high pressure piping systems
 - Tank connections and components
 - Day tank installations
 - Venting systems
- B139.1.1-15
 - Aboveground tank installations
 - Engine service rooms
 - Exhaust systems
 - Air dampers
 - Anti-siphon requirements

DOCUMENTATION:

- A hard printed copy of instructor's presentation will be provided.
- Attendees are suggested to bring their own copies of the CSA B139-15.

SPEAKER: RAPHAEL SUMABAT, TSSA ENGINEERING SPECIALIST

COST: ASHRAE OVC MEMBERS: \$ 325
NON-MEMBERS: \$ 400

Cost includes documentation, lunch and mid-session refreshments

REGISTRATION:

<https://ashraeottawa.simplesignup.ca/en/1941/index.php?m=eventSummary>

Stroke Play Tournament

The **ASHRAE OVC stroke play golf tournament** was held this year at **Eagle Creek Golf Club**. It was a perfect fall day and the course was in very good condition. A special thanks needs to go to **Doug Wellman** and **Kevin Goodhue** of **Modern Niagara** for their help in getting us on such a wonderful course.

Congratulations go to **Patrick Goodhue** with **Modern Niagara**, who was crowned champion with a score of **77**, the lowest yet in the event's history. The continued success of the tournament means we will continue to hold it next year. You have **12 months** to sharpen your game!



Committee Chair
Steve Moons
2016-2017
Special Events
Total HVAC

E-mail: stevem@totalhvac.com

See you all next year.

YEA

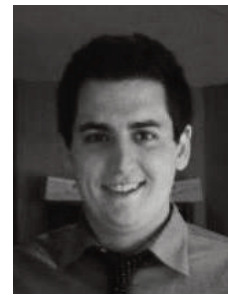
Hi YEA Ottawa!

Our first social event of the year will be held **Thursday, October 20th** at **Orange Monkey** pool hall, 6-10pm. There will be a \$5 entrance fee which will cover appetizers and pool tables. All are welcome, there is a link to

register for the event on the chapter website.

Thank you for your support.

Joe Della Valle



Committee Chair

Joe Della Valle

2016-2017

OVC YEA Chair

Walmart Ventilation

E-mail: joedellavalle@walmart.net

Student Activities

Hi All,

September shaped up to be a productive month. After meeting with the local **Carleton** and **Algonquin** student chapter presidents, we have set up Facebook groups to facilitate event announcements and updates. Students interested should message myself, Jayson Bursill (Carleton) or Jason Juurlink (Algonquin) to gain access. We are still actively searching for candidates for **UOttawa**, **CEGEP** and **Queen's**. Any interested students are highly encouraged to reach out.

The month of **October** is a busy one, starting with a presentation at Carleton University on **October 18th**

link: <https://ashraeottawa.simplesignup.ca/en/1929/index.php?m=eventSummary>

at 2pm by **DL Daniel Int-Hout**. This presentation is open to any student interested and will be a hour! We'll follow up with a YEA/Student pool night at the **Orange Monkey** on **October 20th** starting at 6pm. Event details and the sign-up sheet can be found at the link below.

For the month of November we have organized a plant tour at **Algonquin College**. Students will be invited to tour the new Co-Generation plant that will be in operation next year, along with some large chillers. Students will be required to attend a quick 30-minute presentation at their school to learn about what they will be seeing, plus sign-up for a Student Membership with ASHRAE. Details



Committee Chair

Peter Shaw-Wood

2016-2017

OVC Student Activities

Co-chair

Applied Energy

E-mail: peter@applied-energy.ca

can be found on the **ASHRAE Student Chapter Facebook** groups. A limited number of spaces will be available and granted on a first come first serve basis.

All the best,

Peter Shaw-Wood
OVC Student Activities Co-Chair

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.

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 are currently starting to reserve table-top openings for this ASHRAE year.

Please contact **Adam Moons**



Governor

Adam Moons

2016-2017

Table Top Chair

Walmart Ventilation Products

E-mail: adam@walmart.net

(adam@walmart.net) to secure yours today! Cost for table tops is **225\$** and spaces are filling up quickly, so book your table-top today!

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>

News Update

A Winning Hand: ASHRAE 2017 Winter Conference, AHR Expo In Las Vegas

ATLANTA – When it comes to opportunities for professional development, networking and access to the latest technology, ASHRAE has stacked the deck in favor of its 2017 Winter Conference and AHR Expo taking place in Las Vegas.

The Conference dates are Jan. 28-Feb. 1 at Caesars Palace with the Expo being held Jan. 30-Feb. 1 at the Las Vegas Convention Center. The two events are expected to draw thousands of industry professionals from around the world, drawing on the record breaking attendance from the 2011 Conference and Expo held in Las Vegas for the first time.

To register for the Conference, which includes free access to the Expo, visit: www.ashrae.org/lasvegas

The Conference offers some 200 Professional Development Hours recognized by most U.S. states, AIA LUs and LEED AP credits through ASHRAE Learning Institute course and Technical Program sessions.

ASHRAE's Technical Program raises the stakes in addressing the challenges faced today and in the future by industry professionals. Via eight tracks, the program attempts to bridge the gap between the design decisions made today that will impact the future. New tracks that address changes in technology include Water-Energy Nexus, Advances in Mission Critical Design and Operation, Climate Change and Its Effects on HVAC&R Design and Technologies, and Energy Efficiency Industrial Buildings and Life Safety. The full program will be available later this month.

Twenty Professional Development Seminars and Short courses are offered by the ASHRAE Learning Institute. New courses include Cogeneration from the Basics through Construction and Operation, Complying with Standard 90.1-2016, Complying with the Requirements of Standard 62.1-2016, New ASHRAE-Classified Refrigerants to Meet Society's Changing Needs, Variable Refrigerant Flow System Design and Application, Complying with Standard 90.1-2016 Appendix G, and Design of Affordable and Efficient Ground Source Heat Pumps.

Additionally, ASHRAE is offering two administrations of its six certification program exams, including its new Building Commissioning Professional (BCxP) certification developed with the goal of achieving U.S. Department of Energy (DOE) recognition by summer 2017. The other certifications are the ANSI-accredited Building Energy Assessment Professional (BEAP), Building Energy Modeling Professional (BEMP) and High-Performance Building Design Professional (HBDP) as well as the Healthcare Facility Design Professional (HFDP), and Operations & Performance Management Professional (OPMP).

The keynote speaker at the opening Plenary Session is Adam Steltzner, team lead and chief engineer for NASA's Mars Rover, Curiosity. For 10 years, Steltzner led a team of engineers inventing, designing and testing the revolutionary "sky crane" landing system that successfully placed the rover on the Martian surface in 2012. Five times heavier than its predecessors, Curiosity required an entirely new landing system for the 7-minute phase when the one-ton rover—entering Martian atmosphere at 13,000 mph—must

Committee Chair

Jeff Watson

2016-2017

OVC CTTC Chair

Chorley + Bissett

E-mail: Jeff.Watson@chorley.com

stop fully on the surface. To inspire attendees, Steltzner discusses the power of human curiosity and the importance of fostering a culture of collaborative innovation.

Data Center Standard Published By ASHRAE

ATLANTA – A newly published energy standard for data centers features a performance based approach that is more flexible and accommodating of innovative changes that rapidly occur in design, construction and operations in that industry.

ANSI/ASHRAE Standard 90.4-2016, Energy Standard for Data Centers, establishes the minimum energy efficiency requirements of data centers for design and construction, for creation of a plan for operation and maintenance and for utilization of on-site or off-site renewable energy resources.

"We worked very hard to craft this standard in a manner that does not stifle innovation in the data center industry while simultaneously offering criteria to help ensure energy savings," Ron Jarnagin, chair of the 90.4 committee, said. *"It is important to keep in mind that data centers are mission critical facilities where risk management is the primary concern."*

Jarnagin noted that high plug loads and rapidly advancing IT technology make data center applications significantly different from their commercial building counterparts.

 <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>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> 
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Standard 90.4 specifically addresses the unique energy requirements of data centers.

Standard 90.4 is a performance-based design standard that offers the design components for mechanical load (MLC) and electrical loss (ELC). Calculations of the MLC and ELC are made and then compared to the maximum allowable values shown in the standard based on climate zones. Compliance with Standard 90.4 is achieved when the calculated values do not exceed the values contained in the standard. An alternative compliance path is provided that allows tradeoffs between the MLC and ELC.

"The committee initially pursued a Green Grid power use effectiveness-like (PUE) process for setting the criteria in the standard but the Green Grid's PUE metric is actually based on measured energy use data rather than design criteria calculations," Jarnagin said. "We realized that the

design calculations contained in Standard 90.4 would not likely match up with the actual energy use data so this approach was amended. We feel that we've recommended the requirements for 90.4 based on a justifiable 80/20 rule where only the lower performing systems will be affected."

The Standards Committee, which has oversight of all ASHRAE standards, will work together with the chairs of Standard 90.4 and ANSI/ASHRAE/IES Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings, to remove data centers from Standard 90.1. Standard 90.4 already refers users to Standard 90.1 for requirements on lighting, service water heating and the building envelope.

Other requirements in Standard 90.4 include:

- A sample compliance checklist
- Diagrams to illustrate compliance

- Sample calculations

Jarnagin noted that industry input is vital as the standard moves forward. The standard now is under a continuous maintenance process that allows changes to the standard to be made on a continuous basis through the mechanism of addenda to the standard. This process will allow for frequent changes to the standard as needed to keep pace with the rapidly changing technologies in the industry, he said.

The cost of Standard 90.4-2016, Energy Standard for Data Centers, is \$89, ASHRAE members (\$105, non-members). To order, visit www.ashrae.org/bookstore or contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide) or fax 678-539-2129.

2016 Bowling Social

Ladies and Gentlemen,

You are cordially invited to participate in the 2016 **ASHRAE** Bowling Social, to be held on **Wednesday November 16th, 2016** at the **Merivale Bowling Center** (1916 Merivale Rd., Ottawa, www.merivalebowlingcentre.com).

The format will be three games with 4 people per lane. **7:00pm** start. Please show up at **6:30pm** to register. The entry fee is **\$200** per foursome, or **\$60** per individual. The entry fee includes warm-up, 3 games, shoe rental and plenty of nachos/wings/pizza. Individual participants will be assigned into groups of four.

Link: <https://ashraeottawa.simplesignup.ca/en/1950/index.php?m=eventSummary>

This is intended to be a social event to promote the camaraderie and fellowship of **ASHRAE**, please consider attending. Numbers need to be finalized by the first week of November, so please register early. Registration can be done on-line via the link below. Registrations will be confirmed via email receipt. If you have any questions, or need more information, please don't hesitate to contact me.

Payment can be made during the online registration.



Governor
Adam Moons

2016-2017

Table Top Chair

Walmart Ventilation Products

E-mail: adam@walmart.net

Adam Moons
Walmart Ventilation Products
24 Gurdwara Rd. Nepean, On.
Cell: 613-323-5341
adam@walmart.net

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

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CANADA
Tel.: (613) 723-9585 x128
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JOB POSTING 2016-002

Senior Mechanical Engineer - OTTAWA

Job ID	2016-002	# of Positions	1
Location	Ottawa, Ontario	Experience (years)	10 minimum in Consulting
Posted Date	August 24, 2016	Status	Permanent full-time
Job Title	Senior Mechanical Engineer	Category	Mechanical

Overview

Jp2g Consultants Inc. is a multi-discipline Consulting Engineering firm providing services in municipal infrastructure and building services. Our firm currently requires a qualified Senior Mechanical Engineer in our Ottawa Office. Jp2g provides opportunities for work on a wide variety of projects, with emphasis on educational, federal, commercial, and institutional clients. Focus of mechanical work includes; building HVAC, plumbing, fire protection, energy management, investigations and reports.

Responsibilities

- Undertake feasibility studies.
- Assist Section Manager to develop engineering concepts, concept reports and construction budgets.
- Attend client meetings as directed by Section Manager.
- Attend co-ordination meetings with design team.
- Review codes and obtain preliminary approvals where appropriate.
- Assign tasks to Designer and CAD operator; supervise delegated tasks for content and completion in assigned hours.
- Complete heating, cooling and piping calculations and design of mechanical systems for building projects.
- Complete layout of plumbing, piping and ductwork through complex facilities integrating multiple mechanical spaces and systems.
- Co-ordinate mechanical systems installation requirements with other design disciplines.
- Prepare documents to supplement drawings in project bid packages
- Review contract documents prior to tender for completeness.
- Ensure proper coordination of documents with the other design disciplines.
- Perform contract administration.
- Prepares project fee proposals
- Prepare schedule of tasks required to complete project, man hours to perform tasks and critical data required for performance.
- Mentor junior staff
- Maintains existing business and develops new business opportunities
- Any other tasks assigned by Section Manager required to assist in the continued success of the firm.

Qualifications

- Bachelor's Degree in Mechanical Engineering.
- Minimum 10 years of experience in a Consulting Engineering office in the field of mechanical building services – fire protection, plumbing, HVAC and controls.
- Professional Engineer, Licenced in the Province of Ontario.
- Strong ability to work independently and in a complex environment, dealing with multiple projects and clients.
- Sound communications skills (oral and written) as demonstrated through client and staff relations.
- Demonstrate experience working with other consultants and contractors, and coordination of major projects.
- Knowledge of OBC, NBC, ASHRAE, CSA and NFPA standards.
- Familiar with HVAC software (such as Carrier HAP and Trane Trace) and NMS specifications.
- Strong sense of urgency and ability to prioritize tasks.
- Excellent problem solving and decision-making skills.
- Basic CADD experience.



- LEED certification / Experience implementing sustainable design (LEED projects) is considered an asset.
- Experience in project management is considered an asset.

Compensation and Benefits

- Competitive compensation package commensurate with experience and based on industry standards
- Friday afternoon's off year-round (36 hour/week)
- Group RSP planning opportunities
- Group benefits plan
- Professional development and advancement opportunities
- Shareholder opportunities
- An Equal Opportunity Employer

Please submit hard copy resumes in confidence to:

David Nguyen, P.Eng, ing,
Ottawa Office Manager
Jp2g Consultants Inc.
1150 Morrison Drive, Suite 410
Ottawa, Ontario, K2H 8S9

Or Email to Ottawa@jp2g.com

We thank all applicants for their interest, however only candidates selected for an interview will be contacted.



JOB POSTING 2016-015

Intermediate Mechanical Engineer - OTTAWA

Job ID	2016-O15	# of Positions	1
Location	Ottawa, Ontario	Experience (years)	7-10 minimum
Posted Date	August 24, 2016	Status	Permanent full-time
Job Title	Intermediate Mechanical Engineer	Category	Mechanical

Overview

Jp2g Consultants Inc. is a multi-discipline Consulting Engineering firm providing services in municipal infrastructure and building services. Our firm currently requires a qualified Intermediate Mechanical Engineer in our Ottawa Office. Jp2g provides opportunities for work on a wide variety of projects, with emphasis on educational, federal, commercial, and institutional clients. Focus of mechanical work includes; building HVAC, plumbing, fire protection, energy management, investigations and reports.

Responsibilities

- Undertake feasibility studies.
- Assist Section Manager to develop engineering concepts, concept reports and construction budgets.
- Attend client meetings as directed by Section Manager.
- Attend co-ordination meetings with design team.
- Review codes and obtain preliminary approvals where appropriate.
- Assign tasks to Designer and CAD operator; supervise delegated tasks for content and completion in assigned hours.
- Complete heating, cooling and piping calculations and design of mechanical systems for building projects.
- Complete layout of plumbing, piping and ductwork through complex facilities integrating multiple mechanical spaces and systems.
- Co-ordinate mechanical systems installation requirements with other design disciplines.
- Prepare documents to supplement drawings in project bid packages
- Review contract documents prior to tender for completeness.
- Ensure proper coordination of documents with the other design disciplines.
- Perform contract administration.
- Prepare schedule of tasks required to complete project, man hours to perform tasks and critical data required for performance.
- Mentor junior staff
- Any other tasks assigned by Section Manager required to assist in the continued success of the firm.

Qualifications

- Bachelor's Degree in Mechanical Engineering.
- 7 - 10 years of experience in the field of mechanical building services – fire protection, plumbing, HVAC and controls.
- Professional Engineer, Licenced in the Province of Ontario.
- Strong ability to work independently and in a complex environment, dealing with multiple projects and clients.
- Sound communications skills (oral and written) as demonstrated through client and staff relations.
- Demonstrate experience working with other consultants and contractors, and coordination of major projects.
- Knowledge of OBC, NBC, ASHRAE, CSA and NFPA standards.
- Familiar with HVAC software (such as Carrier HAP and Trane Trace) and NMS specifications.
- Strong sense of urgency and ability to prioritize tasks.
- Excellent problem solving and decision-making skills.
- Basic CADD experience.
- LEED certification / Experience implementing sustainable design (LEED projects) is considered an asset.
- Experience in project management is considered an asset.



Compensation and Benefits

- Competitive compensation package commensurate with experience and based on industry standards
- Friday afternoon's off year-round (36 hour/week)
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- Group benefits plan
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- Shareholder opportunities
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Please submit hard copy resumes in confidence to:

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Ottawa Office Manager
Jp2g Consultants Inc.
1150 Morrison Drive, Suite 410
Ottawa, Ontario, K2H 8S9

Or Email to Ottawa@jp2g.com

We thank all applicants for their interest, however only candidates selected for an interview will be contacted.

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<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.



E-mail:
DanielRedmond@cunet.carleton.ca

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2016-2017
OVC Treasurer
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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: 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



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