ASHRAE Ottawa Valley Chapter

DATE:

Tuesday February 17, 2015 Technical Session: 16:30, Social: 17:30 Dinner: 18:30, Program: 19:30

LOCATION: Algonquin College Restaurant International 1385 Woodroffe Ave, Building H, Room H100

PROGRAM: Sudbury Neutrino Observatory (SNOLAB)

SPEAKER: Darryl Boyce, P. Eng.

SPEAKER BIO:

Darryl Boyce joined Carleton University as Director of the Department of Physical Plant in 1998 and was promoted to the position of Assistant Vice-President (Facilities Management and Planning) in 2007. He came to Carleton having spent the previous twelve years with the University of Western Ontario where he served as Associate Director, Facilities Engineering and Construction directing activities related to alterations, new construction, energy management, and utilities operations. Darryl has been a member of ASHRAE since 1983 and has served on numerous Society Committees over the years. Additionally, Darryl has served on the ASHRAE Board of Directors as a Director, Regional Chairman (Region II), a Director-atlarge, and a Vice-President. Mr. Boyce is the Past President of the Ontario Association of Physical Plant Administrators (OAPPA), Chair of the Canadian Association of University Business Officers (CAUBO) National Facilities Management Committee, and a member of the Association of Higher Education Facilities Officers (APPA) Information and Research Committee. He completed the Mechanical Engineering Technology Program at the British Columbia Institute of Technology and received a Bachelor of Science Degree in Mechanical Engineering from the University of Alberta.

TECHNICAL SESSION:

This month's technical session will be the second session of our series of three sessions focusing on mentorship. The session will focus on how mechanical equipment suppliers/representatives interact with the other equipment reps, consultants and contractors, suggestions to newer members of our Society for increasing their knowledge, abilities and penetration into the industry, and suggestions for students on how to prepare for a career in our industry in equipment supply. Consider if there are junior people in your firm, or students that you know that might benefit from this. It is intended to be very open discussion, with lots of conversation.

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

Space is limited so please register online at: https://ashraeottawa.simplesignup.ca/en/610/index.php?m=eventSummary

President's Message

Our **ASHRAE** season continues this month with a local flair, as we are fortunate enough to have our very own **Darryl Boyce** as this month's speaker. Darryl is an **ASHRAE Soci**ety vice-president, and represents the OVC chapter well at **ASHRAE**'s higher levels. He will speak on a project that is very close to him, and I think will prove of great interest to our membership as well.

We are past the mid-point of this ASHRAE year, and it seems the time as flown by. I know we've all returned from our break over Christmas, back to the grindstone and the weather is at its most miserable for the year, but I encourage you to still make the time to attend our monthly meetings. We have a continuing series of top quality presentations for you, and we will have more technical sessions centered on mentoring in the months to come as well. The days may be short and cold, but the camaraderie of ASHRAE (and perhaps some libations found at the bar) can help warm you on a frigid February night.

This past week I was fortunate to attend the **ASHRAE** winter meeting and **AHRI trade show**, as I have done several times in the past. If you have not yet attended either of these events, I strongly recommend that you plan to next year. First, the event is held in **Florida** in 2016, so I would expect any excuse to go would be welcome, but beyond that the **ASHRAE** winter meeting offers a wide variety of opportunities that

don't come about too often. First, there are several seminars and courses to be attended for a very modest cost, and you will inevitably find that there are many like-minded professionals to discuss projects and ideas with. Second, you are able to sit in on a variety of technical committee and business meetings for ASHRAE Society, and really get a look at the inner workings of ASHRAE. Perhaps by finding out more about the "dark side" of **ASHRAE**, you'll find something that sparks a passion in you to volunteer at the society level. Ottawa is well represented at Society with the aforementioned **Darryl Boyce**, **Rod Potter** and others, but opportunities exist for participation with much less demand. There is also the AHRI trade show that occurs on the Monday through Wednesday of the winter meeting. Being a manufacturer's rep, it is an excellent chance for us to catch up with many of our manufacturers at the same time, as well as a chance to walk the floor of many thousands of booths to find out what is new in the industry. While the amount of Chinese brass fittings can be overwhelming, you'll never find a better opportunity to talk to the manufacturers of virtually every type of equipment available, with the best minds they have employed waiting to help you. It really offers perspective to what we do, and the vast array of options that are available.

This month's theme is **Chapter Technology Transfer Committee** (**CTTC**). The **OVC** chapter has been



President & CRC Delegate Steve Moons 2014-2015 OVC President Total HVAC

E-mail: Stevem@totalhvac.com

very successful in past years with a variety of projects that have won awards for new and innovative design. **Dan Redmond** is our current **CTTC Chair**, and I encourage anyone with projects that are fitting, or with questions about the application process to contact Dan. He will be including some information in this Communique, and it would be great to see another strong turnout from our local designers.

This month we will continue with our "mentorship" technical sessions. The first one was very well attended, and seemed to be of value. The goal of these three sessions is to provide insight into some of the specific roles that are played in our industry, as well as what is required to find employment in those roles as well. While these are geared towards junior people in the industry and students, I would encourage more senior people to attend, as we want to encourage discussion and various points of view.

In closing, I hope to see you all warm and safe at February's meeting.

2015 ASHRAE Curling Bonspiel

Date: Friday March 6, 2015

Location: Nepean Sportsplex

Cost is \$ 360.00 per team (only a few spots remaining)

1:00 pm to 5:00 pm, dinner to follow

More details and registration link can be found on the **OVC website**. Please contact **Chris Healey** with any questions or concerns.

Chris Healey P: 613-225-9774 E: chris@walmar.net



Committee Chair Chris Healey 2014-2015 Special Events Walmar Ventilation

E-mail: chris@walmar.net

Registration link: https://ashraeottawa.simplesignup.ca/en/796/index.php?m=eventSummary

What You Missed

The fourth meeting of the program year took place at the **Restaurant International** at **Algonquin College**. The meeting was called to order by **President Steve Moons** at 6:28PM and attendees were seated.

The business session commenced with President **Steve Moons** introducing the Board of Governors and Executive, followed by **Adam Graham** introducing the guests for the evening and giving a preview of the upcoming part 2 of the hydronic systems design seminar. There were several students in attendance and we would like to thank everyone that donated a student meal to help make this possible. **Adam Moons** welcomed new members.

Georges Maamari introduced the evening's theme of research and gave an overview of where these funds go when you donate. Thank you to all that have made a donation to support **ASHRAE Research**.

Table top displays were introduced as follows: The **Aaon** and **Semco** table top display was introduced by **Andrew Douma** of **Total HVAC**. The **Munters** table top display was then introduced by **EI Solutions** followed by **Master Group** introducing **BKM**.

During the social hour, the research promotion committee raffled off 4 tickets to an **Ottawa Senators** game. The tickets were graciously donated by **Airtron**, raising money for **ASHRAE Research**. **Andrew Douma** was the lucky winner.

Following the business session, attendees enjoyed an excellent seated dinner.

Next, the evening program commenced at around 8:10PM with Steve Moons introducing the speaker. Paul Pieper of Venmar gave a background on himself and introduced his presentation on Understanding and Evaluating Air-to-Air Energy Recovery Technologies. Paul is heavily involved in the dark side of ASHRAE, along with other organizations such as AHRI, etc.

The speaker then went through several recent changes to **ASHRAE** standards concerning energy recovery. Several concepts were introduced and a quick highlight of the information is given below. For more information please see the **ASHRAE OVC** website for a copy of the presentation.

ASHRAE Std 62.1-2013

5.16.2 Redesignation Class 1,2,3,4 (class 4, shall not be recirculated with class 1 air)

Exception: Mixing class 2 air up to 10%, class 3 air up to 5% when using energy recovery.

ASHRAE Std 90.1-2007

6.5.6.1 Last year with single rating point for energy recovery.

50%min effectiveness on all systems above 5000cfm with 70% or more OA.

90.1 effectiveness does not include mass flow rates (traditional calculation does)

AHRI Std 1060 net effectiveness includes EATR (exhaust air transfer ratio). Next version of 90.1 to include for this.

ASHRAE Std 90.1-2010

Breaks down into climate zones as to min OA% where energy recovery is required.

ASHRAE Std 90.1-2013

Includes continuous and non-continuous ventilation (above or below 8000h/yr).

ASHRAE 189.1

Increases minimum effectiveness of energy recovery to 60% but does not yet include continuous vs. noncontinuous ventilation.

ASHRAE Std 84-2008

Standard for testing energy recovery. Baseline for AHRI 1060. Not a ratings program.

AHRI 1060

Defines terms used in new effectiveness calculation:

EATR (exhaust air transfer ratio): Ratio of tracer gas concentration difference between leaving supply and entering supply and the difference between entering exhaust and entering supply as a percentage.

OACF (outdoor air correction factor): Entering outdoor airflow/leaving supply airflow



Secretary Adam Graham 2014-2015 OVC Secretary HTS Ottawa

E-mail: adam.graham@hts.com

Factors affecting EATR and OACF

Fan placement and differential pressures.

DT (supply), DT (exhaust) minimizes OACF, reasonable EATR

BT (supply), DT (exhaust) maximizes OACF, minimizes EATR

Combined Efficiency (CEF) – application EER for 100% OA unit

CEF = Net cooling delivered/total electrical power consumed.

This is the energy recovery metric endorsed by AHRI.

AHRI Guideline W – Selecting, Sizing, and Specifying Packaged AAERV.

Various methods of energy recovery were introduced along with associated frost control, condensation potential and other considerations. It was noted that one should always size based on frost control supply temps and not assuming energy recovery that will not really take place. Proper filtration is critical when implementing energy recovery. The speaker suggested that MERV 8 is sufficient for protecting most energy recovery devices. **ASHRAE Std 90.1** allows you to deduct static pressure of heat recovery device and filters.

The speaker followed with a discussion of when to consider or discount certain types of energy recovery.

The speaker completed his presentation at 9:05PM. A copy of the presentation will be available on the **OVC** website shortly. Following the presentation, Paul opened the floor up to some questions. **President Steve Moons** then thanked the speaker and presented him with a gift. The meeting was adjourned at approximately 9:10PM.

ASHRAE OVC Seminar

DATE:Wednesday, March 4, 2015
Full Day Seminar (8am - 4pm)LOCATION:Master Group Ottawa Training Room
25H, North Side Road, Nepean, ON, K2H 8S1TOPIC:Hydronic/Pumping System Design (Part 2 of 2)PRESENTER:Phil Searle, C.E.T.
Manager, Consultant Services, Xylem

OVERVIEW: This full day seminar will be geared mainly towards consultants with some water systems and pumping system design experience and an interest in understanding the components and design fundamentals of these systems. This is the second of a two part presentation series. A full presentation outline for Part 2 is given below.

#	TOPIC	BRIEF DESCRIPTION
1	Hydronics Overview	Definition of Hydronic & review of basic system types.
9	Pressure Boosting	Estimating flow & pressure boost. Determining flow split between pumps. Constant & variable speed operating cost analysis. Sizing & placement of storage tank.
10	Heat Transfer Review	Theory behind sizing of all types of Heat Exchangers. Why Shell & Tube differ vs. Plate including effect of fouling.
11	Shell & Tube basics	Construction of Shell & Tube heat exchangers discussing benefits vs. Plate Heat Exchangers.
12	Plate Heat Exchanger basics	Construction of Plate Heat Exchangers discussing benefits vs. Shell & Tube.
13	Brazed Plate Heat Exchanger	Construction of Brazed Plate Heat Exchangers with application examples.
14	Primary Secondary Pumping	Introduction of the Primary Secondary principle. Discussion of the multitude of variations, KISS!
15	Variable Speed Pumping	Understanding the application of using Adjustable Frequency Drives in pumping applications. Why fans and pumps differ significantly. Mechanical system design considerations to stay out of trouble. Primary Secondary vs. Primary only on chilled water systems. ASHRAE 90.1

Space is limited to 30 people so please register online ASAP

https://ashraeottawa.simplesignup.ca/en/791/index.php?m=eventSummary

Registration will close February 25, 2015

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

News Update

ASHRAE TECHNICAL COMMITTEE SEEKING NEW MEMBERS

ASHRAE Technical Committee 2.3

is concerned with the nature of trace gaseous contaminants; the measurement of their properties; their effects on living things and materials; the means of removing unwanted contaminants from gases; and the effectiveness, energy usage, and economy of such purification equipment. The TC scope covers all aspects of odor technology, including odors which are produced by volatile particulate contaminants, but excludes purely physiological or psychological aspects of gaseous contaminants such as toxicology and odor perception (these are the province of TC 2.1). TC 2.3 is concerned with the effects of gaseous contaminants on the quality of air supplied to and exhausted from enclosed spaces and with the sources of gaseous contaminant pollution within such spaces.

ASHRAE TC 2.3 is currently seeking new members to be part of their team. If you are interested in learning more about TC 2.3 and possibly becoming a member please don't hesitate to contact Chris Fudge (cfudge@master.ca) or Dan Redmond (redmonddan@mmm.ca).

ASHRAE EXPANDS SCOPE, RE-NAMES RESEARCH JOURNAL

ATLANTA – In recognition of the changing role of **HVAC&R** since it was first published 20 years ago, **ASHRAE's HVAC&R Research** has a new title, an expanded scope and

an updated look.

Beginning in January 2015, the journal will be known as **Science and Technology for the Built Environment**. All manuscripts in process now will be published in the journal under its new name. Learn more at www.ashrae.org/stbe.

"This new name reflects its expanded scope, which includes papers in many areas of science and technology for the built environment," Reinhard Radermacher, Journal editor, said. "In addition to traditional areas of research in HVAC&R, the Journal's papers now often cover topics that have come to be associated with the industry since the Journal was first published in 1995. These include smart buildings, thermal comfort, aircraft ventilation and automotive climate technology. Science and Technology for the Built Environment will offer comprehensive reporting of original research in science and technology related to the stationary and mobile built environment."

Future article topics include:

- Indoor environmental quality, occupant health, comfort and productivity
- HVAC&R and related technologies
- Thermodynamic and energy system dynamics, controls, optimization, fault detection and diagnosis, smart systems and building demand-side management
- Experiments and analysis related



Governor Daniel Redmond 2014-2015 Chapter Technology Transfer Chair MMM Group

E-mail: RedmondDan@mmm.ca

- to material properties, underlying thermodynamics, refrigerants, fluid dynamics, airflow, and heat and mass transfer
- Renewable and traditional energy systems and related processes and concepts
- Integrated built environmental system design approaches and tools
- Novel simulation approaches and algorithms and validated simulations
- Building enclosure materials, assemblies, and systems for minimizing and/or regulating space heating and cooling modes
- Review articles that critically assess existing literature and point out future research directions

Just as before with HVAC&R Research, Science and Technology for the Built Environment will accept for publication only works reporting on research that is original and of lasting value. This journal will continue to be published by Taylor & Francis Group on behalf of ASHRAE and be included in the Web of Science and Current Contents Connect databases.



Capital Communiqué

Free ASHRAE Webinar

Each spring **ASHRAE CTTC** presents a free 3-hour webinar to members. Attendees may be awarded three (3) Professional Develop**ment Hours** (PDHs). The webcast program has also been approved for three (3) AIA Learning Units (LUs) and three (3) GBCI Continuing Education Hours (CEs).

Please join the **Ottawa Valley Chapter** as we host this webinar. In

order to ensure that enough seating is available for everyone, please contact Daniel Redmond at redmonddan@mmm.ca if you plan to attend. More details regarding the venue will be provided once we know how many people are interested in attending.

For more information please feel free to contact Daniel Redmond or visit the **Society CTTC** webpage at the link below.



Governor Daniel Redmond 2014-2015 Chapter Technology Transfer Chair **MMM Group**

E-mail: RedmondDan@mmm.ca

https://www.ashrae.org/membership--conferences/webcasts





P.E., FellowASHRAE, BEAP BEMP



James K. Vallort Fellow ASHRAE

Robert G. Baker. OPMP, Fellow ASHRAE



PE CPMP

scopes of commissioning, when to apply comprehensive versus focused commissioning, and best practices in existing building commissioning specifications & contracting.

Earn PDHs!

Attend this FREE webcast program and you may be awarded three Professional Development Hours (PDHs).

This webcast will feature industry experts who will define the benefits of existing building commissioning for the environment, occupants, operations staff, and overall

ownership costs. Viewers will be able to recognize the varied



Job Posting

Inside Sales - Estimation

Alliance Engineering & Construction Limited

(Alliance) is looking for a full-time Inside Sales person to join our team. Alliance offers Mechanical and Electrical Design and Construction services, providing integrated solutions across the industrial, commercial, institutional and high-rise residential sectors with an emphasis on sustainable building systems models.



Working directly under the supervision of the Director of Business Development, this position encompasses a wide range of duties which includes but is not necessarily limited to the following:

- Managing day to day needs of existing clients to ensure they are getting the support from the organization
- Analyzes documents, specifications, proposals, addendums in preparation for pricing
- Assists with Prequalification submissions, Request for Qualification (RFQ)'s and Request for Information (RFI)'s as required
- Reviews project site prior to price preparation
- Performs quantity take-off from construction drawings where applicable
- Obtains and formulates all costs for tender submission labour, equipment, material, rentals and subcontracts
- Manages Scope Changes as required
- Performs Post Bid / Post Project Analysis completion
- Provide support to field operations regarding mechanical estimates
- Drives positive relationships and serves as key contact with clients, consultants and key subcontractors
- Maintains Estimating data systems to ensure they are kept up to date
- Actively mentor junior estimators and support staff on an ongoing basis

Qualifications/Background

- Diploma / Degree Engineering or Business related
- Prior operational experience an asset
- Ability to read and understand construction drawings and contract documents
- Skills allow for working independently with little supervision
- Strong computer skills MS Excel / Word / Project, Viewpoint Estimation software would be an asset
- Strong communication skills oral and written
- Self motivated with excellent organizational skills
- Ability to work accurately, effectively under pressure
- Adaptable to flexible work schedule when required to meet deadlines
- Ability to work with others as a team
- Valid driver's license and ability to travel as required

<u>Salary</u>

Based on experience

Profit Sharing

Available after 6 months probationary period

Employee Benefit Package

Available after 3 months of employment

Location Ottawa, ON

Contact info@allianceengineering.ca

Capital Communiqué

Job Posting

Intermediate to Senior Buildings Engineer



Description:

A career advancement opportunity exists for a highly motivated senior or advanced intermediate Professional Mechanical Engineer to assume or grow into a leadership role within our **NORR Ottawa** office. NORR is a multidisciplinary Architectural and Engineering services company providing Mechanical, Electrical and Structural engineering services as well as Architectural and Interior design. NORR has consistently been awarded many of the largest and most prestigious and complex projects in Ottawa and the surrounding area. Building design will span both existing/heritage building renovations and new construction of commercial, government, education, residential, recreational, transportation, and research laboratories. Our staff consists of a dynamic group of highly skilled professionals that work as a closely collaborative team towards the shared success of each project.

The success of any one professional discipline is measured based on the success of the project as a whole and not along departmental lines. This sets the stage for highly integrated and collaborative design, enriching the professional knowledge and design participation across various elements of building design. The opportunity exists to take a leadership role in the design development process working closely with the clients and architects to define building systems that are innovative, sustainable and closely integrated with the architectural and client vision that delivers superior project performance to our clients. Some overseas project opportunities may also exist is such places as Europe, Africa and Asia.

The successful candidate will assume the position of Senior Mechanical Engineer responsible to manage, mentor and ensure the highest level of quality of work generated by the mechanical design team. Senior engineering design ability is fundamentally required for HVAC, plumbing and fire protection. Also required is a working knowledge of codes and standards, , strong communications skills and good interpersonal skills for interaction with external and internal clients and stakeholders. Design applications will include building loads analysis for HVAC and plumbing. Also required is the selection and design application of equipment and building services components including building automation systems and control logic. You will be responsible for the creation of construction contract documents in the form of drawing and specifications that will be reviewed and sealed. In addition to design related engineering, your responsibilities will include, participating in sales and marketing activities to develop proposals and participate in design competitions.

Qualifications:

You possess at least a Bachelor's degree in mechanical engineering or equivalent and shall have a Professional Engineers designation in the Province of Ontario. You possess a solid knowledge of mechanical building services design combined with a minimum of 10 years of relevant experience. You are a self-motivated team player with experience in site investigations, construction review, CAD and, or REVIT drawing, specification and report writing and presentations. Access to a personal vehicle to visit sites is required. Other valued skills that will be taken into consideration include sustainable design experience such LEED[™] certified building design, building energy simulations such as EE4 and EQEST, energy and water conservation design applications. Preference may also be given to those candidates with the ability to communicate effectively in both official languages. Your leadership and project management skills including; preparation of work plans for new assignments, organizing and arranging work programs to meet cost and time schedules, and administrative functions will also be highly valued. Your excellent organization, interpersonal and communication skills are required to meet project schedules, liaise with clients and fellow design professionals.

For additional information about NORR and the services we provide we encourage you to visit our website at www.norr.com

To Apply:

Interested candidates should forward, in confidence, a resume and covering letter to:

Chris Pal, P.Eng., LEED[™] AP Director of Engineering NORR Ltd. 175 Bloor St. East, Toronto, Ontario M4W 3R8, Canada

Email: chris.pal@norr.com

ASHRAE Technology Award

Are your engineering projects innovative? Do you want to identify yourself as a leader in the HVAC&R industry? Would your clients be interested to know that you are innovative? If so, then the **ASHRAE Technology Awards** program should be of interest to you.

The **ASHRAE Technology Awards** program recognizes successful applications of innovative design, which incorporate **ASHRAE** standards for effective energy management, indoor air quality, and good mechanical design.

The purpose of the **ASHRAE Technology Awards** program is threefold

- To recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven through actual operating data.
- 2. To communicate innovative systems design to other ASHRAE members
- To highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners

Projects submitted should have been in operation 9 months and there are six main categories to which applications may be submitted, as follows:

- **I.** Commercial Buildings (New, Existing and Retrocommissioning)
- **II.** Institutional Buildings (New, Existing and Retrocommissioning)
 - Educational Facilities
 - Other Institutional
- **III.**Health Care Facilities (New, Existing and Retrocommissioning)
- IV. Industrial Facilities or Processes (New, Existing and Retrocommissioning)
- Public Assembly Facilities (New, Existing and Retrocommissioning)
- **VI.** Residential (New, Existing and Retrocommissioning)

Winners will be recognized at the chapter level and may be able to submit their project for a regional or even societal award to gain exposure well beyond our local chapter.

The **ASHRAE** website has plenty of helpful information to guide you during the application process. The technology awards section of the **ASHRAE** website is located at the link 1 below.

The deadline for application to Chapter is **March 20th**, **2015**.

Submission at the chapter level is not very complicated or time consuming. The following is all that is required for submission:



Governor Daniel Redmond 2014-2015 Chapter Technology Transfer Chair MMM Group

E-mail: RedmondDan@mmm.ca

- Submission of the short form application form (please see example below)
- Provide a system schematic/diagram not larger than 11" x 17" in size
- **3.** Attach a brief narrative (maximum of 2 pages)

For further information please find a fillable version of the application form at the end of this Newsletter and on the Society webpage at the link 2 below.

If you have any questions or concerns, please don't hesitate to contact the **OVC CTTC Technology Awards Team**:

- Andrew Douma
 (andrewd@totalhvac.com)
- Michael Grant (Michael.Grant@trane.com)
- **Daniel Redmond** (redmonddan@mmm.ca)

Thank you and I hope you realize that the work you do every day is worthy of recognition. Please consider submitting your projects for an **ASHRAE Technology Award**.

Link 1: http://www.ashrae.org/membership--conferences/honors--awards/technology-awards-program Link 2:

https://www.ashrae.org/File%20Library/docLib/HonorsandAwards/AwardDocs/Tech-Award-Application-Short-Form-June-2014.pdf



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 50+ people.

We currently have table-top openings for our May 2015 OVC ASHRAE meeting schedule. Please contact Andrew Klassen at the email below to secure yours today! Cost for tabletops is \$225 and spaces are filling up quickly, so book your table-top today!

The featured table-tops for the February OVC meeting are NAD Klima presented by The Master Group and Fijitsu Generals's VRF presented by Air Solutions.

Remember to drop by and check out the displays, and thank you for your



Committee Chair

Andrew Klassen 2014-2015 Table Top Committee Chair Trane Canada ULC

E-mail: andrew.klassen@trane.com

continued support of our ASHRAE Ottawa Valley Chapter.

NAD Klima is a Canadian manufacturer of high induction diffusers. NAD Klima has the most complete line of high induction diffusers in North America. High Induction diffusers provide excellent thermal comfort, ventilation effectiveness and energy efficiency.



Air Solutions

Fujitsu General's Variable Frequency Flow (VRF) **Airstage** series has been developed to meet the demands nergy & Air Quality Specialists of small and large projects. Provided in heat pump and heat recovery models and with an extensive lineup from 6 to 24 tons, with connectable capacity ratio up to 150%, Airstage

VRF is an efficient , flexible and reliable system for medical , healthcare , educational and religious facilities as well as multi tenant dwellings and office buildings and retail spaces. 33 different indoor units are available in 9 styles and three outdoor units maybe combined with twining kits to meet larger capacity demands. the units are backed with 7 years compressor warranty.

Student Activities

The January meeting was a great kick off for the new semester for the students from Algonquin, Carleton and uOttawa at the monthly meeting, with a great technical session about a sales career in industry given by Steve Moons.

The 2015 ASHRAE Career Fair is Tuesday March 3rd, and will be hosted at Carleton University this year. It is always a great opportunity to network with current and graduating students from Carleton, uOttawa and Algonquin. Deadline for booths and sponsorships will be February 27th. See the full page flyer for employers in this Communique, come

out and support the students and the chapter! Check the website or email for more information.

Other information for Students: Check out the Carleton ASHRAE Student Chapter website, http://carletonashrae.blogspot.ca/

The **ASHRAE Scholarship** program is now excepting applications for undergraduate engineering scholarships at \$3,000 to \$10,000 each, Engineering Technology Scholarships deadlines are May 1st, 2015. Please visit the link below for more information:

http://www.ashrae.org/scholarships



Committee Chair Adrianne Mitani 2014-2015

Student Activity Chair Smith and Andersen

E-mail: Adrianne.Mitani@smithandandersen.com

If you are a student member who just graduated this summer, you can save lots of money by transferring your student membership with the Smart Start Program save \$410 (US) over three years!

Smart Start Program:

https://www.ashrae.org/membership--conferences/student-zone/membership-and-meetings/ashraes-smartstart-program



AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING ENGINEERS

Is looking for booth sponsors for:

CAREERAIR 15

Tuesday March 3th, 2015

at

Carleton University – TBD

- 1125 Colonel By Drive
- 1. Affordable Booths \$200.00 (cash, cheque, money order payable to ASHRAE OVC or Credit card) see information below for what is included.
- 2. If you would prefer to just have your company logo in the program guide as advertisement along with other ASHRAE supporters, this is available for \$100.00.
- 3. Schools that are being canvassed; University of Ottawa, Carleton University, and Algonquin College.

Booth Information:

- Booth Size 10' x 8' (Approximately 24 available)
- 120 VAC Available (bring your own extension cords and power bars)
- Tables, Skirts, and Chairs Provided
- Contact Adrianne Mitani for any special requirements (613-230-1186x3115, <u>adrianne.mitani@smithandandersen.com</u>)
- Invoices will be sent out upon RSVP

Schedule:

- 14:30 15:00 Access to room and Set-up
- 15:00 15:30 Career Panel
- 15:00 18:00 Career Fair
- 18:00 18:30 Clean-up

Please RSVP by March 1st 2015 to Adrianne Mitani:

By Phone: By Email:	613-230-1186x3115 Adrianne.mitani@smitha ndandersen.com;	Company: Contact:
		I am interested in:
		□ Booth
		Logo in program guide only



Membership Update

Greetings Everyone!

Getting the right advice early in your professional development can save you time, money and ensure you are not wasting your effort. ASHRAE has a range of mentorship opportunities designed to help you avoid common pitfalls. Mentorship and business advice may be general or specific dependina on your needs and requirements. Many of our members have grown successful companies in our industry and are able to offer a wealth of information in many areas.

How can mentoring help you and your professional life?

Avoid the mistakes most commonly made by professionals in their early years. Learn from others' mistakes and successes. A mentor's role is to share with you lessons from their own experience so that you can benefit

without having to learn from painful trial and error.

- Stay focused on what is most important for your growing career. Mentors assist you in identifying what steps will have the greatest positive impact on your career, and help prioritize an action plan.
- Mentors provide a sounding board. When you're starting your professional life, often there's no one to turn to for advice or direction. You're on your own. Everybody needs a good reliable sounding board, a second opinion, and someone who offers positive support.
- Expand your knowledge network. Your mentor, being experienced in the industry, is likely to have an extensive network, and can offer you access to other senior decision-makers.



Committee Chair

Adam Moons 2014-2015 Membership Committee Chair Walmar Ventilation Products

E-mail: adam@walmar.net

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

Mr. Stephen J Harrison Mr. Yue Ma

Looking forward to seeing you at the next **ASHRAE** event!



2014-2015 Research Promotion Campaign

Hi Everyone,

ASHRAE's research program, established in 1912, supports 140 research projects with a combined value of more than \$15 million. Currently our region alone has \$670,205 worth of research taking place in its schools and companies. Below is the list of current research taking place in our region.

- (1447-RP) Performance of Pressurized Stairwells with Open Doors
- (1561-RP) Characterization of Liquid Refrigerant Flow Emerging from a Flooded Evaporator Tube Bundle
- 1613-RP) Update Climatic Design Data in Chapter 14 of the 2013 Handbook of Fundamentals
- (1699-RP) Update Climatic Design Data in Chapter 14 of the 2017 Handbook of Fundamentals
- (GIA 13-14) Calibrating a Building Energy Model on a Component Level Using a Bottom-up Based Methodology
- (GIA 14-15) Integrating thermal energy storage into hybrid solar assisted heat pump systems for residential houses in cold climate
- (GIA 14-15) Study on an advance hybrid air filtration system
- (GIA 14-15) Occupant-Learning

Blinds and Lighting Automation

- (GIA 14-15) Advanced models of fire smoke transport in high rise buildings
- (GIA 14-15) The protective effect of buildings characterizing indoor air quality, infiltration and ventilation

Whether you specialize in IAQ, green building, tools and applications or refrigeration, **ASHRAE** has research projects focused on your field and the specific topics that affect you and your business the most.

At the January meeting, we raffled off 4 tickets to the Ottawa vs Carolina game that were generously donated by Airtron. These tickets helped raise \$470 towards ASHRAE **Research**. The hockey raffle will continue at the February meeting. As of January 28th, we have raised over \$12,100.00 towards our campaign goal, which means we are at 49% of our \$25,000 objective. With the amazing support that we have received to date, we are right on track of meeting our RP campaign objective. Our RP committee will likely start the calling campaign within the next few weeks, so please have your check book ready! I would like to thank our donors to date for the 2014-2015 RP Campaign. This list will be updated for each monthly newsletter, so hurry up and donate to have your name appear.

Thank you for your continued support of **ASHRAE Research Canada**!



President-Elect Georges Maamari 2014-2015 Research Promotion BPA

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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.



President & CRC Delegate Steve Moons 2014-2015 OVC President Total HVAC

E-mail: stevem@totalhvac.com

Rates for career opportunities ads are as follows: Chapter Member: \$50/month Non-member: \$250/month

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 online or for payment and other information contact **Abbey Saunders** at *abbey.saunders@nrc-cnrc.gc.ca*.

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.





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CHAPTER/REGIONAL TECHNOLOGY AWARD APPLICATION SHORT FORM

(Revision June 2014)

INTRODUCTION:

This Short Form has been developed to stimulate more participation in chapter and regional competition. <u>This form is</u> <u>not intended to replace the full Society Technology Award Application form</u>. Regional winners using the short form will be required to complete the full Technology Award Application form before their applications can be forwarded for Society Competition. (This form does not require extensive narrative, plans or photographs.)

INSTRUCTIONS:

- A. The individual submitting the Technology Award Application must be a current member of ASHRAE who had a significant role in the design or development of the project.
- B. Complete the "Short Form" and use it as the cover page.
- C. Provide a system schematic/diagram not larger than 11" x 17" in size. In addition, attach a brief narrative (maximum of 2 pages). The narrative should include the gross and net building areas applicable to the project, a description of the major building areas (i.e., operating rooms, laboratories, computer rooms, industrial processes, offices, warehouses) and a brief discussion regarding the following five criteria (if a criterion is not applicable, state accordingly):
 - Energy Efficiency
 - Indoor Air Quality
 - Innovation
 - Operation & Maintenance
 - Cost Effectiveness
 - Environmental Impact
- D. Submit your schematic, brief narrative, and completed form to your Chapter Technology Committee Chapter (CTTC) Chair for judging at the chapter level in accordance with their instructions.
- E. The ASHRAE Technology Award program is intended for built projects. First place winning projects should be eligible for submission to the Society level competition on September 1st of the following Society calendar year. Therefore, a project submitted to a Chapter or Regional competition shall be occupied prior to September 1st of the current Society year in order satisfy the proceeding Society level competition requirement of one full year of occupancy.

First place winners in each category from chapter competition will be submitted by the CTTC Chapter Chair to the CTTC Regional Vice Chair for judging in the Regional Technology Awards competition. At the discretion of the CTTC Regional Vice Chair, this may require completion of the full Society Technology Award Application form if the chapter submission was done on the Short Form Application.

The CTTC Regional Vice Chair will invite first place winners in each category from regional competition to submit them for judging in the Society level Technology Awards competition. The regional winners will be given the opportunity to incorporate new information or otherwise improve their submittal before submitting it to the society level competition (e.g., by addressing comments from regional judges). At the discretion of the judging panels at the chapter and regional competitions, more than one first place winner may be awarded in each category.

For the regional competition, submit the number of copies requested by the Regional CTTC Vice Chair. The CTTC Regional Vice Chair may require entries into the regional competition to be done on the full Society Technology Award Application form. In any case, all submissions to the Society level competition must be done on the full Society Technology Award Application form.

F. It is highly recommended that each entrant confirm by letter (and retain a copy for record) to the owner that the owner has granted permission to submit this project to competition.

NOTE: ASHRAE Technology Awards are the HVAC&R industry's most prestigious honor for efficient energy use in buildings and environmental system performance. While the awards do not certify responsible charge or professional license status, they do recognize outstanding design innovation and successful implementation.

CHAPTER/REGIONAL TECHNOLOGY AWARD - SHORT FORM

1.	Category - Check one and indicate	New, Existing, or Retrocommissioning (RCx)
	Commercial Buildings	New Existing or RCx
	Institutional Buildings:	
	Educational Facilities	New Existing or RCx
	Other Institutional	New Existing or RCx
	Health Care Facilities	New Existing or RCx
	Industrial Facilities or Process	es New Existing or RCx
	Public Assembly	New Existing or RCx
	Residential (Single and Multi-I	⁻ amily)
2.	Name of building or project:	
	City/State:	
3.	Project Description:	
	Project Study/Design Period:	to
		Begin date (mm/yyyy) End date (mm/yyyy)
	Percent Occupancy at time of subr	nission:
4.	Entrant (ASHRAE member with sig	nificant role in project):
4.	Entrant (ASHRAE member with sign	nificant role in project):
4.	Entrant (ASHRAE member with sign a. Name:	hificant role in project): First Middle
4.	a. Name:	
4.	a. Name:Last Membership Number: Chapter: Region: b. Address (including country): City	First Middle State Zip Country
4.	a. Name:	First Middle State Zip Country
4.	a. Name:	First Middle State Zip Country d. Email:
4.	a. Name:Last Membership Number: Chapter: Region: b. Address (including country): City c. Telephone: (0) e. Member's Role in Project:	First Middle State Zip Country d. Email:

By affixing my signature above, I certify that the information contained in this application is accurate to the best of my knowledge. In addition, I certify that I have discussed this entry with the owner and have received permission from the owner to submit this project to the ASHRAE Technology Awards Competition.