

HISTORY - PAST PRESIDENTS' NIGHT TUESDAY APRIL 18, 2017 **BEACH GROVE - TECHNICAL PRESENTATION**

Please confirm your attendance by calling Nathan Cook @ 519 948 5000 or Email: windsorashrae141@gmail.com

SCHEDULED MEETINGS:

Sept. 12, 2016 25th Annual Golf Tournament

Ontario Climate Change Effects Oct. 18, 2016

to HVAC Industry

Nov. 29, 2016 Applying ASHRAE Standards to

Existing Buildings - DL

Dec. 13, 2016 Christmas Social

Jan. 17, 2017 Multi Family Heating Control System

Feb. 28, 2017 Climate Change and Urbanization - DL

Mar. 21, 2017 ASHRAE/SMACNA Joint Meeting

April 18, 2017 Past Presidents' Night at

Beach Grove Golf & CC

May 16, 2017 Students' Night

CHAPTER OFFICERS & BOARD OF GOVERNORS

BOARD OF GOVERNORS President: Paul Greff (519) 966 6100 James Smith (519) 737 5725 President-Elect: Nathan Cook (519) 948 5000 Dan Castellan (519) 253 3000 Steve Koutsonicolas Treasurer: **David Dufour** (519) 916 5411 (519) 999 9954 **Bill Davies** Secretary: Adam Meeker (519) 737 5725 (519) 251 6824

CHAPTER COMMITTEES:

Research Promotion:	Andy Hrutka	(519) 978 3903	Grassroots Govern- ment Advocacy	Dan Castellan	(519) 253 3000
Membership:	Patrick Castellucci	(519) 250 2006	Student Activities	Jamie Smith	(519) 890 8684
Technology Transfer	Bill Davies	(519) 251 6824	Fac. Adviser - U of W Student Chapter	Dr. David Ting	(519) 253 2871
Historian:	Gord Snell	(519) 964 1700	Newsletter	Adam Meeker	(519) 737 5725
Young Engi- neers in ASHRAE (YEA)	Rene Plourde	(226) 344 5218	Reception	Jeff Armstrong	(519) 256 7922
Refrigeration Chair	Jon Palmer	(519) 256 7922			

ASHRAE Windsor Chapter April 2017 Meeting

PAST PRESIDENTS' NIGHT

The Windsor Chapter of ASHRAE is pleased to invite you to our April 2017 meeting. We will be gathering at the Beach Grove Golf and Country Club for dinner, fellowship and a technical presentation. The presentation topic is exhaust heat recovery technologies and will be provided by Simon Mandeville, who is the Technical Director of the Heating Division at Smith Energy.

Located on the waterfront of Lake St. Clair, Beach Grove Golf and Country Club is an all-season, private member owned Club.

Date: Tuesday, April 18, 2017

5:30 PM - 6pm (EST) - Registration/Social 6pm - Dinner (presentation to follow)

Location: Beach Grove Golf and Country Club

14134 Riverside Drive East Tecumseh, Ontario

Past Presidents and ASHRAE Windsor Chapter Members: \$55

Guests: **\$60** Students: **\$25**

Dinner includes a 10oz NY steak, salads, green beans, dauphinoise potatoes, assorted pastries, coffee and tea. Beverages are not included.

<u>Please RSVP via email by Friday April 14th at 3:00 PM to Nathan Cook.</u> *windsorashrae141@gmail.com,* (519) 948-5000













TABLE TOP DISPLAY

The April 2017 meeting will have three (3) table top displays!

The Lennox display will be provided by Mr. Bechara Sabat and Mr. David Tressler. Lennox produces a wide range of HVAC systems for the residential and commercial market places with manufacturing and distribution facilities across North America.



The Trane display will be provided by Mr. Jon Palmer. Trane is an international provider of air-conditioning systems and services for the residential and commercial market places.



The Smith Energy display will be provided by Mr. Steven Weber. Smith Energy Inc. provides a broad range of heat transfer products, many of which focus on energy recovery and savings.



Be sure to check out the presentations to see if these product lines can be applied to any of your future projects.

Next Meeting:

May 16, 2017: Students' Night (more details to follow).

March 2017 Meeting Recap

Last month's Membership Promotion themed meeting took the chapter to Lilly Kazzilly's Crabshack Bar & Grill. Attendees had the opportunity to witness the SMACNA Executive Director of Technical Sales, Mr. Eli P. Howard III, provide a technical presentation on the new SMACNA standard for Indoor Air Quality (IAQ).

Prior to the presentation, the group enjoyed an excellent meal and good fellowship.

Prior to the monthly meeting, the Chapter hosted a Membership Drive event in which several prospective members learned about the many offerings of ASHRAE membership. We would like to extend our appreciation to Region 2 officers Ibrahim Semhat and Mark Lawrence for attending the Membership Drive event and supporting our Chapter.

A special thanks goes to the staff of Lilly Kazzilly's, who provided a great dining experience.

Overall, the evening was a great success! Thank you to everyone who participated and for supporting the ASHRAE Windsor Chapter.









New ASHRAE Members

An important goal for the ASHRAE Windsor Chapter and the ASHRAE Society in general is to promote and increase membership.

A membership with ASHRAE provides a plethora of resources and technical information through conferences, design guides, handbooks, journal publications, webcasts and educational courses. Members also have the opportunity to participate in monthly Chapter meetings, social events, dinners and technical tours with friends and colleagues.

It is a pleasure to introduce the newest members of the ASHRAE Windsor Chapter! Please take some time to introduce yourselves to these individuals at the next meeting and welcome them to the Chapter.

Ms. Amanda Smith Mr. Andrew Cook Mr. David Arsenault



History Corner - Keeping You Up-To-Date

BROUGHT TO YOU BY CHAPTER HISTORIAN GORD SNELL

Fascinating Facts About the History of Plumbing in the Buildings of the Northeast

Did you know that the flush toilet was invented in the late 1500s, but that it didn't become common for another 250 years? This is just one of the interesting factoids about the history of plumbing that experts in the plumbing profession enjoy, but it's also worthwhile knowledge for anybody who appreciates the luxuries of the modern world. Here are some lesser known points about plumbing in days gone by.

**Pipes used to be made of wood.

- 1. The earliest sewer and water pipes in America were made from wood because the people who made them didn't have any knowledge of metalwork.
- 2. The favorite trees of the borers, the people who bored holes through the center of the logs, were elm and hemlock.
- 3. After the Great Fire of New York in 1835, better and more efficient water systems were created that would be able to accommodate a growing population, and this is when a huge conversion occurred from wooden to metal pipes.
- 4. Today, there are still sections of communities throughout America that still have wooden pipes as part of their drinking water systems.

**Modern Plumbing in America is All Based on the Croton Aqueduct System

- 5. The Croton Aqueduct System was a New York accomplishment that was completed in 1842. It brought water to the city's buildings and laid the framework for widespread indoor plumbing.
- 6. This system became the model for city plumbing infrastructure all over America.
- 7. The purpose of the system was to supply the city with pressurized water, though initially the intended use was for fire hydrants.

**There was a time when indoor plumbing only existed in hotels.

- 8. Prior to the 1840s, indoor plumbing could only be found in the most upscale of hotels.
- 9. The Tremont Hotel in Boston is credited as being one of the first buildings in America to have running water and flushing toilets.

**Indoor Residential Plumbing Has Existed Since the Mid-Nineteenth Century

10. By the 1850s, most new homes were being built with separate indoor bathrooms, but plumbing professionals hadn't yet perfected the system, meaning there were lots of sewer smells that seeped into the rest of the home and lots of back-pressure problems.



History Corner - Keeping You Up-To-Date

- 11. The engineer Julius W. Adams took on the job of installing the city sewer system for Brooklyn in 1857, and eventually his knowledge and experience was transferred to instructional books that were used to recreate his work all over the country.
- 12. Eventually, the perfect combination of ventilation, sewers, and water supply was discovered, and this led to the perfection and proliferation of the indoor toilet in America. The history of plumbing in the buildings of the Northeast is more about the development and modernization of this country than it is about sewers, and without these developments, this country's cities and communities wouldn't be as safe, healthy, or great as they are.
- Source Water Works in Westwood New Jersey

 http://www.waterwksplumbing.com/fascinating-facts-history-plumbing-buildingsnortheast/

CTTC Announcement—ASHRAE Technology Awards

Do you think you did an exceptional job on a design? If so, we would like to hear from you. We will be selecting project submittals and you may win the award for Windsor chapter and possibly be selected to compete with those in our region. At the very least the local winner's projects will be highlighted in our newsletter and will receive an award at our Past Presidents Night in the spring.

If the project goes on to win at the society level it will be published in the ASHRAE Journal with press releases. The winner and building owner will also receive a plague.

These are the criteria segments:

- Energy Efficiency (water included)
- Indoor Air Quality and Thermal Comfort
- Innovation
- Operation and Maintenance
- Cost Effectiveness
- Environmental Impact
- Quality of Presentation

Your project must be commissioned, running and have some data to back up your claims in your project. Any commercial, industrial, institutional or residential project will be considered. It can be a new building or existing and also building commissioning is a separate category.

Want some inspiration or even some guidance on what could reach society level competition? Follow the link below for some examples of winning projects (look for "Technology Award" in the title):

https://www.ashrae.org/resources--publications/periodicals/ashrae-journal/features/ashrae-journal-featured-article-excerpts

Remember though, your project doesn't have to be high profile or world class. It can be just a local project that you put a lot of thought into. It should be a design that you took pride in creating and that someone else could benefit from your creativity.

Here is an idea for you. Let's say you designed the HVAC for a sunroom addition of a house. The room has in-floor heat but not cooled so no ductwork would be required. It faces south and gets quite warm in the winter and shoulder months so you install a damper to re-direct the return air to pull mainly from this room to take advantage of the passive solar gain. This will spread the heat out through the house and save on heating bills. In the summer the damper is closed by the residents to keep the warm air from entering the cooled zones.

This is not a typical design but for a small investment it will save the homeowner energy costs and reduce carbon emissions. It will also improve the thermal comfort during shoulder months when residents may need to keep opening windows to control the temperature. This project will touch upon 5 of the 7 criteria mentioned above!

Let's celebrate our hard efforts and ingenuity! Contact Bill Davies at 519 564-7946 to discuss!

Education and Training Opportunities

WEBCAST - TAKE CONTROL: USING BUILDING ANALYTICS TO DRIVE BUILDING PERFORMANCE

APRIL 20, 2017 - 1:00PM TO 4:00PM EDT



The ASHRAE Windsor Chapter is invited to witness the annual ASHRAE webcast!

This webcast will feature industry experts who will define the importance of, and why we should strive for, better building operations through improved controls and analytics. Viewers will be able to describe key elements of controls and analytics for building operations, and identify steps required to deploy analytics in building projects, including commissioning. This program will quantify how applying best practice controls improve building performance, and will recognize the value of analytics in building operations to achieve a reduced cost and increased performance.

Additional information on the webcast can be found at the following link.

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

Participants will watch the webcast in the audio visual room at the Vollmer head office.

3822 Sandwich Street, Windsor

If interested in participating, contact Bill Davies to schedule.

bdavies@uniongas.com (519) 251-6824

Refreshments will be provided courtesy of Union Gas. Attendees may be awarded with Continuing Education Hours if they are needed, so be sure to mark your calendars for this opportunity!



April 20, 2017 | 1:00 p.m. – 4:00 p.m. EDT

Take Control: Using Analytics to Drive Building Performance

Webcast participants must complete the Participant Reaction Form by May 5, 2017 at www.ashrae.org/webcast to receive PDH Credits.

WAYS TO EARN PDH CREDITS

☐ VIEW THE LIVE WEBCAST

Three (3) Professional Development Hours (PDHs), (3) AIA HSW Learning Units (LU/HSW), or (3) GBCI Continuing Education Hours (CEs) may be awarded to viewers of the live webcast who complete the Participant Reaction Form online. The Participant Reaction Form will be posted following the live webcast at www.ashrae.org/webcast and must be completed by May 5, 2017 to allow ASHRAE to comply with reporting requirements. Your Attendance Certificate will be available for you to print immediately after you submit the Participant Reaction Form.

☐ VIEW THE ON DEMAND WEBCAST

If you are unable to participate in the live webcast, the program will be available On Demand online until May 5, 2017. Registration is necessary to view the On Demand program. After viewing the On Demand program, be sure to complete the Participant Reaction Form online at www.ashrae.org/webcast by May 5, 2017 and print your Attendance Certificate. Many states and organizations accept viewing the On Demand program and completing the Participation Reaction Form as credit toward continuing education, license renewal, or certification renewal requirements. The individual is responsible for verifying approval from a state or organization. ASHRAE will not assume responsibility in reporting participation for viewers of the On Demand program.

If you have questions regarding continuing education credits or reporting for the webcast, please call (678) 539-1200 or email ashrae-webcast@ashrae.org.

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)

Basics of High-Performance Building Design

Wednesday, February 8, 2017 – 1:00 p.m. to 4:00 p.m.

Designing Toward Net-Zero Energy Commercial Buildings

Tuesday, February 14, 2017 – 1:00 p.m. to 4:00 p.m.

ASHRAE Guideline 0: The Commissioning Process

Tuesday, February 21, 2017 – 1:00 p.m. to 4:00 p.m.

Commissioning Process & ASHRAE Standard 202

Monday, February 27, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Fundamental Requirements of Standard 62.1-2016

Thursday, March 9, 2017 - 1:00 p.m. to 4:00 p.m.

Commissioning Process in New and Existing Buildings

Part I: Monday, March 13, 2017 – 1:00 p.m. to 4:00 p.m. Part II: Wednesday, March 15, 2017 – 1:00 p.m. to 4:00 p.m.

Design of Affordable & Efficient Ground Source Heat Pump Systems

Wednesday, March 29, 2017 - 1:00 p.m. to 4:00 p.m.

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.

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.

Designing High-Performance Healthcare HVAC Systems

Tuesday, September 19, 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! 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 Training

2 Courses, 5 Days of Intense Instruction

Atlanta • Dallas • Doha • Hartford • Toronto

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 <u>www.ashrae.org/hvactraining</u> 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.

The Benefits of an ASHRAE Certification

SHINE IN A RISING FIELD

Certification validates critical job knowledge, skills and abilities in a given practice area.

GAIN A COMPETITIVE EDGE

ASHRAE certifications are recognized by over 30 national, state and municipal entities.

DISTINGUISH YOURSELF

Use the ASHRAE Certified logo and designation—e.g. Curtis Smith, BEAP, BEMP—in email signatures, professional networking and business cards to enhance your reputation.

LET ASHRAE PROMOTE YOUR ACHIEVEMENT

Certificants and their employers are listed on the website and in ASHRAE *Insights*.



5 Easy Steps to Earn and Maintain an ASHRAE Certification

1. Read the Candidate Guidebook

Visit www.ashrae.org/certification and download the guidebook for the program in which you are interested.

2. Complete the Application

Complete the online application at www.ashrae.org/certification. Membership in ASHRAE is not a requirement for certification.

3. Schedule an Examination

BCxP, BEAP, BEMP, HBDP, HFDP and OPMP examinations are offered at over 300 conveniently located computer-based testing centers worldwide. Candidates may schedule an examination appointment online or by telephone.

4. Review Available Resources

The *Candidate Guidebook* for a program identifies available resources, including practice exams, that may help candidates gain an understanding of the body of knowledge that the examination tests. Purchase of books or course registrations is not a prerequisite to taking any ASHRAE certification examination.

5. Renew the Certification

Each certification is renewable every three years. To retain certification, each certification holder must earn 45* Professional Development Hours (PDHs) during the three year period following initial certification or the last renewal.

Schedule an exam at one of over **300 testing centers** worldwide **TODAY!**

To learn more or apply, please go to www.ashrae.org/certification

ASHRAE Certification

More than 2,500 professionals certified in six key built-environment fields.

Are You Ready to Join Them?



Validation. Pride. Recognition.

"Because of the high level of expertise, professionalism and ethics demonstrated by ASHRAE, achieving certification under their established requirements implies one of the highest levels of competence and knowledge available in the industry."

Jeffrey G Ross-Bain, BEMP, Ross-Bain Green Building, LLC

ASHRAE Conferences

REGION II CHAPTERS REGIONAL CONFERENCES (CRC) 2017

MONTREAL, QC AUGUST 25-27, 2016

The ASHRAE Region II CRC 2017 is quickly approaching! It will be hosted by the Montreal Chapter from August 25 through 27, 2017.

CRCs are held annually to bring representatives from each Chapter together to discuss Chapter operations and provide an opportunity to meet fellow ASHRAE members from other Chapters.

Registration for the event is now open and can be completed at the following website

https://ashraemontreal.simplesignup.ca/fr/0/index.php?m=eventsList&ID=&I=en

Early bird prices are available until June 1 and registration for the event closes on June 24. Hotel registration is completed separately through the link found on the registration web page.

Several Chair Committee and Board of Governors members will be in attendance to develop their knowledge and skills such that they can be applied to assist our local chapter. Feel free to locate these members during future meetings to discuss their experiences at the CRC.

Additional details for the upcoming Region II CRC can be found on the ASHRAE Region II website below.

http://region2.ashraeregions.org/crc.html

Advertising and Promotion

Actively participating in ASHRAE events is a great way to network and discuss potential projects and applications. Chapter meetings provide a captive audience and exposure to a group actively involved in our industry. Promotion opportunities are available during our chapter meetings, through the monthly newsletter and the new website.

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 monthly chapter meetings?

The fee to provide a Table Top Display is \$200.00 (CAD). In addition to the presentation, the fee also covers the cost of the presenter's meal at the event. If interested in providing a Table Top Display at a future meeting to promote product lines or technologies, please contact Nathan Cook to schedule.

windsorashrae141@gmail.com (519) 948-5000

BUSINESS CARD PROMOTION

The monthly newsletter is distributed to all of our ASHRAE Windsor members as well as several others that are involved in our industry. Inclusion of your business card in the newsletter would provide a great opportunity to introduce your name and company to those members who may not know you personally. Business cards may also be displayed on the new website.

The fee to include your business card in the newsletter is \$100.00 (CAD) for the year ending June 30, 2017. If interested in having your business card information included in the monthly newsletter, please contact Nathan Cook.

windsorashrae141@gmail.com (519) 948-5000

ASHRAE Social and Video

YOUTUBE

ASHRAE has established and continues to develop an active Youtube video channel. The channel includes a variety of videos including interviews, training invormation, technical discussions and instructional videos. The channel can be found at the following link:

https://www.youtube.com/user/ASHRAEvideo

Be sure to subscribe to the channel to keep tabs on recent videos and activity in the Society. In fact, ASHRAE has published two new videos that may contain some familiar faces to our chapter! The links for these specific videos are below:

#MyASHRAE—Collection 3

https://www.youtube.com/watch?v=qx4ogD9XNgg&t=2s

Members ROCK the Photo Booth at Vegas Welcome Party

https://www.youtube.com/watch?v=8zYGC6mCnBA&t=32s

Enjoy the show!

LINKED IN

The ASHRAE Windsor Chapter has a Linkedin account! Search for ASHRAE Windsor Chapter 141 on Linkedin to further connect with Chapter members and colleagues in the industry.

ASHRAE Chapter Involvement

It is a welcome site to see Chapter members and non-member guests alike attend the monthly meetings and events. The time and effort put fourth by all individuals to attend these events is greatly appreciated as it helps strengthen and develop our Chapter as a whole.

As it takes time and effort to attend these meetings, it also takes a great deal of time, effort and dedication to organize and prepare for these events such that they are informative and enjoyable for everyone.

It is a goal of the Chapter to increase the number of participating members. Involvement in Chapter operations is not limited to the Board of Governor and Chapter Committee positions. All individuals interested in getting involved with ASHRAE at any level are encouraged to volunteer in any capacity they are willing and able to. Any efforts to help the Chapter continue to develop and improve would be greatly appreciated.

If anyone is interested in volunteering for general involvement or have a specific task in mind, please contact Nathan Cook.

windsorashrae141@gmail.com (519) 948-5000