

ASHRAE Windsor Chapter

c/o. Baymar A/C Supply 3200 Jefferson Blvd.

Windsor - Ontario - N8W 2W8



NEWSLETTER

February 14, 2017

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ARCHITECTS' NIGHT TUESDAY FEBRUARY 28, 2017 SPAGO EVENT LOUNGE - DISTINGUISHED LECTURER

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
Oct. 18, 2016 Ontario Climate Change Effects
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 - DL at
Beach Grove Golf & CC
May 16, 2017 Students' Night

CHAPTER OFFICERS & BOARD OF GOVERNORS

President: Paul Greff (519) 966 6100
President-Elect: Nathan Cook (519) 948 5000
Treasurer: David Dufour (519) 916 5411
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BOARD OF GOVERNORS

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Bill Davies (519) 251 6824

CHAPTER COMMITTEES:

Research Promotion: Andy Hrutka (519) 978 3903
Membership: Patrick Castellucci (519) 250 2006
Technology Transfer: Bill Davies (519) 251 6824
Historian: Gord Snell (519) 964 1700
Young Engineers in ASHRAE (YEA): Rene Plourde (226) 344 5218
Refrigeration Chair: Jon Palmer (519) 256 7922

Grassroots Government Advocacy: Dan Castellan (519) 253 3000
Student Activities: Jamie Smith (519) 890 8684
Fac. Adviser - U of W Student Chapter: Dr. David Ting (519) 253 2871
Newsletter: Adam Meeker (519) 737 5725
Reception: Jeff Armstrong (519) 256 7922



ASHRAE Windsor Chapter February 2017 Meeting

DISTINGUISHED LECTURER - IMPACTS OF CLIMATE CHANGE AND URBANIZATION ON FUTURE BUILDING PERFORMANCE

The Windsor Chapter of ASHRAE is pleased to invite you to our February 2017 meeting. We will be gathering at the Spago Event Lounge.

Spago Restaurants are family owned businesses that have been serving the Windsor/Detroit area with authentic Italian dishes for over 25 years. The restaurants are well known for their warm, friendly atmospheres and amazing aromas. Come join us to experience it for yourself!

Date: **Tuesday, February 28, 2017**
5:30 PM - Eastern Time

Location: **Spago Event Lounge**
690 Erie Street East
Windsor, Ontario

ASHRAE Windsor Chapter Members: **\$60**

Guests: **\$70**

Students: **\$20**

Dinner includes a variety of appetizer and main options for order at the time of the event.

Appetizers: Bruschetta, Fried Calamari, Arancini (Scicilian rice balls), pasta dish, house salad
Mains: Chicken - Pollo Crema- Boneless skinless chicken breast lightly flowered and sauteed, finished in a Brandy Cream sauce with mushrooms;
Lamb - Lamb Chop- Marinated lamb chops seasoned and charbroiled to perfection;
Fish -Trota Ripieno- Fresh Rainbow Trout stuffed with shrimp and scallops and finished in a white wine lemon sauce.
Meals served with a side of roasted seasonal vegetables
Beverages: Coffee and tea. Beverages from the bar are not included.
Dessert: Tiramisu

Please RSVP via email by Tuesday February 21st at 5:00 PM to Nathan Cook.

windsorashrae141@gmail.com

(519) 948-5000



DRURY B. CRAWLEY, PH.D.

FASHRAE, BEMP, FIBPSA, AIA, AFFIL. CIBSE

DIRECTOR, BUILDING PERFORMANCE, BENTLEY FELLOW

BENTLEY SYSTEMS INC.



Dr. Crawley is Bentley Fellow and Director, Building Performance focusing on building performance, design, BIM, energy efficiency, renewable energy, net-zero-energy buildings, interoperability, sustainability, and resilience. Prior to joining Bentley in 2010, Dr. Crawley developed launched and managed the development of EnergyPlus and the USDOE's Commercial Buildings Initiative (now Better Buildings Initiative and Alliances) promoting creation of low- and net-zero-energy buildings.

With more than 35 years of experience in buildings energy efficiency, renewable energy, and sustainability, he has worked in engineering software development, government research and standards development organizations, as well as building design and consulting companies. He received his PhD in Mechanical Engineering from

University of Strathclyde in Glasgow, Scotland on the topic of building simulation as a policy tool, looking at the potential impacts of climate change on the built environment. He received a Bachelor of Architecture from University of Tennessee and is a registered architect.

IMPACTS OF CLIMATE CHANGE AND URBANIZATION ON FUTURE BUILDING PERFORMANCE

With the increasing interest in climate change driven by human activity, recent research has focused on the impact of climate change or urban heat island on building operation and performance across the world. But this work usually aggregates the energy and peak demand impacts across a broad sector. In a recent study, impacts on the operating performance of an office building were estimated based on climate change and heat island scenarios in 25 locations (20 climate regions). This presentation presents the variation and differences among the 20 regions when climate change is introduced. The focus is on changes in comfort conditions, building equipment operation as well as daily patterns of energy performance using prototypical buildings that represent typical, good, and low-energy practices around the world. Other issues such as fuel swapping as heating and cooling ratios change, impacts on environmental emissions, and how low-energy building design incorporating renewables can significantly mitigate any potential climate variation are also presented.



TABLE TOP DISPLAY

The February 2017 Table Top Display presentation will be provided by Mr. Jerry Leyte of Uponor. Uponor provides a broad range of non-metallic (PEX) piping solutions for plumbing, radiant heating/cooling, hydronic piping, pre-insulated pipe and sprinkler systems for residential and commercial projects around the globe.

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

Uponor

Next Meeting:

March 21, 2017: ASHRAE/SMACNA Joint Meeting. Our guest speaker will be Mr. Eli P. Howard III, Executive Director of Technical Services at SMACNA (more details to follow)



January 2017 Meeting Recap

Last month's CTTC themed meeting took the chapter to Lilly Kazzilly's Crabshack and Grill. Attendees had the opportunity to witness a technical presentation on a unique heating system control strategy that can be effectively applied to and provide energy savings for multi-unit residential buildings. The presentation was provided by Dmitriy Knyazev, the president of K3D Inc..

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

Mr. Steven Weber of Smith Energy Inc. provided an informative table top display. Thank you presenters for your efforts and great presentations!

A special thanks goes to the staff of Lilly Kazzilly's Crabshack and Grill, 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.





History Corner - Keeping You Up-To-Date

BROUGHT TO YOU BY CHAPTER HISTORIAN GORD SNELL

100 years ago – Can you believe?

Windsor has had a strong presence in the automotive industry for many years. Throughout the years there have been many innovations, all thanks to changes in technology and engineering. Some of those innovations may not be so “new”. Can you believe that the concept of, and production of hybrid cars dates back 100 years? The following is a short excerpt from a historical record;

1917 – Dual power / hybrid car

'Dual Power' developed by Woods Motor Vehicles. It has a four cylinder internal combustion engine and an electric motor. For speeds under 15mph the car is powered by the electric motor, while the internal combustion engine takes it up to a maximum speed of 35mph. Around 600 are made up to 1918. The first was produced in 1917.

Advances in technology, engineering and industry respective organizations (similar to ASHRAE) have helped to further the hybrid and electric concepts into their present form.

Source: Institute of Mechanical Engineers, Mechanical Engineering History Timeline
(<http://www.imeche.org/about-us/imeche-engineering-history/mechanical-engineering-history-timeline>)



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 plaque.

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!*



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.

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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.

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ASHRAE Social and Video

ASHRAE has established and continues to develop an active Youtube video channel. The channel includes a variety of videos including interviews, training information, 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!



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.

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