

January 2019
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COSTS

Fees are based on online
reservations and prepayment.

Philadelphia Chapter Members:

\$80

ASHRAE Society Members -

Non-Chapter Members:

\$80

ASHRAE Life Members:

\$80

Non- ASHRAE Member:

\$100

YEA Member (35 & under):

\$70

Students:

\$40



QUAKER CITY CLIMATE

January Social Event

Wednesday, January 16, 2019

Philadelphia Flyers vs. Boston Bruins

5:45 PM—6:00 PM

Arrive at the Wells Fargo Center Box Office
(southwest side of building) for tickets

6:00 PM

Buffet Dinner, Beer, & Soda
in the Corona Extra Beach House

7:30 PM

Game Begins
(hangout in the Beach House or head up to your seat)

Tickets will be distributed the day of the game
at the Wells Fargo Center Box Office,
located on the Broad Street side of the building.

[Click here](#) to Register

Register quickly, there is limited seating !!

[Click here](#) to see the locations for various parking lots in the area.

The Wells Fargo Center is accessible from the Pattison Avenue Station
on the SEPTA Broad Street Line.

LOCATION

Wells Fargo Center

3601 South Broad Street
Philadelphia, PA 19148
800-298-4200

www.wellsfargocenterphilly.com

The Corona Extra Beach House is open through the end of the second intermission.
For those arriving as a group wishing to sit together,
best efforts will be made but cannot be guaranteed.

2018-2019

President

Mike Radio, PE, CEM, BEMP, LEED AP

President-Elect

Michael Calabrese, PE, CEM, LEED AP

Vice President

Tim Reinking

Treasurer

Eric Feinschil

Secretary

Judd Vail

Senior Governor

Jeff Crozier, PE, CEM, LEED AP

Governors

Dan Brown

Sean Hughes, PE

Mike Magee

Electronic Communications

James Piscopo, PE, LEED AP

Chapter Technology

Transfer Committee Chair

Henry Hoffman

Research Promotion Chair

Gary Debes

Basic School Coordinator

James Lill, PE

Refrigeration

Chris Moore

Membership Promotion Chair

Kevin Clare

Student Activities Chair

Mike Magee

Program Committee Chair

Michael Calabrese

Chapter Historian

Sean Hughes

Young Engineers in ASHRAE

Dan Brown

Publicity

Mike Radio

Grassroot Government Activities

Anthony Scaccia

Special Events

Tim Reinking

Honors and Awards Committee

Jeff Crozier

PRESIDENT'S MESSAGE

Happy New Year!

I hope you all enjoyed the holidays and are excited for 2019.

ASHRAE Philadelphia Chapter celebrated the end of 2018 with our December breakfast meeting at the Union League with a potential industry-defining trending topic for 2019 – The Future of Microgrids. I would like to thank UGI's Gary Fechter and Burns Engineering Phil Gonski for helping our chapter learn about the benefits of on-site power, integrating on-site power with the utility, and implemented various renewable energy sources within the microgrid.

The ASHRAE Winter Conference will take place in Atlanta, Georgia from January 12 through January 16. ASHRAE Philadelphia's Student Activities Committee is proud to sponsor and host four college students (three students from Drexel University, one student from Widener University). The Technical Program along with Committee meetings, Registration, the Bookstore and Speakers Lounge will be at the Omni CNN Center and the Georgia World Congress Center. The AHR Expo will take place at the Georgia World Congress Center, Monday, Jan. 14 – Wednesday, Jan. 16. Registration is still open on the ASHRAE Society website if you are interested.

Our January meeting will be our annual social event at the Wells Fargo Center to see the Flyers vs. Boston Bruins. Registration is now open on the ASHRAE Philadelphia Chapter website. As usual, a buffet dinner, beer and soda will be served in the Lexus Club prior to the game. It is always a lot of fun and I am excited to see every there!

Follow us on LinkedIn for further chapter updates. I stated at our last chapter meeting that our goal for the year is to reach 1,000 followers...we are currently at 204. We have a long way to go! Our New Year's resolution is to post chapter activity more frequently, and open up topics of discussion on our page for lively debate. Topics could include technical topics (VAV vs. Chilled Beam), meeting venue ideas, meeting topics, etc.

Thanks for your continued interest and participation in ASHRAE, and here's to a successful 2019!

Mike Radio, PE
Philadelphia Chapter President
c021@ashrae.net

The 2018-2019 Directory is Available!

The latest edition of the Directory of Associations, Consulting Firms, and Manufacturers' Representatives in the Philadelphia Area is now available.
It sells for \$23 each.

Send your check to:

ASHRAE, 994 Old Eagle School Road, Suite 1019, Wayne, PA 19087.
If you prefer to pay by credit card, please call Hope at 610-971-2169
or email her at hope@mmco1.com.

PHILADELPHIA CHAPTER PROGRAMS CALENDAR 2018-2019

<u>Date</u>	Time	Venue	Session Topic	Theme
<u>Wednesday, January 16, 2019</u>	5:45pm - 10pm	Wells Fargo Center	Social Event - Hockey Flyers vs Bruins	Membership Promotion and YEA
Thursday, February 21, 2019	4pm - 8pm	Mummers Museum	"Codes / Standards"	SMCA / Student Night
Thursday, March 14, 2019	12pm - 2pm	Fogo de Chao	"Legal / Ethics"	ASHRAE History Night
Thursday, April 11, 2019	12pm - 2pm	TBD	"Air Distribution"	
Thursday, May 09, 2019	12pm - 2pm	TBD	"Diversity"	Employer Recognition Past Presidents Research Promotion
Monday, May 13, 2019	11am - 7pm	DuPont CC	Annual Golf Outing	Fun and Relaxation

*Program calendar is tentative and subject to change. Please refer to [ASHRAE Philadelphia Website](#) for up to date information.
Advance registration and pre-payment are required before the meetings.*

We need your attendance!

If we are below our guaranteed level for attendees at our meetings, our treasury could be negatively effected.
Our programs are designed around the membership's input and we all need to support these meetings to maintain a strong/informed association. We hope to see you at our next meeting. Please come out and support our Chapter!



Save the Date !! Philadelphia Chapter ASHRAE Golf Outing

**Monday, May 13, 2019
DuPont Country Club, Wilmington, DE**

**Shotgun start will be at 12:30 pm.
Online registration and full outing details to follow.**

December Meeting Photos



Philadelphia Chapter President Mike Radio (far right) thanks Philip Gonski of Burns Engineering and Gary Fechter of UGI Performance Solutions for their presentation on "Microgrids" at the December breakfast meeting at The Union League.

From the CTT Committee

Cooling waterside economizers have been applied in various forms over the years to increase system efficiency or meet energy code requirements; one approach that has recently gained popularity is the integrated chiller free-cooling coil. This is a set of glycol drycooler coils attached to the condenser coil bank of an air cooled chiller. It's an attractive choice as it offers the ability partially or fully economize when the ambient dry bulb temperature is sufficiently low, without the necessity of an additional footprint or electrical feed.

In addition to the material cost of this approach however, there is a hidden efficiency penalty: the additional coils reduce the chiller's efficiency during straight cooling periods, and often against a radically higher load than those seen in free cooling periods. This efficiency penalty must be accounted for when considering such systems.

As air cooled chillers become increasingly efficient during part load operation – often <0.35 kW/ton at low ambient temperatures – the payback period for dry cooler economizers increases drastically.

Brian N. Stehman
CTTC Refrigeration Subcommittee Chairman
bstehman@tristatehvac.com

Henry Hoffman, PE
CTTC Chairman
c021cttc@ashrae.net

Is “Free Cooling” Really Free?

By Robert Loftin,
Daikin Applied Chiller Applications
From a 2016 public white paper

Daikin recently simulated dry free cooling in two separate building environments representing light internal loads and high internal loads, to help determine the feasibility and value of free cooling in these settings. The simulation incorporated building data from several climates and geographical locations to factor in weather variation across the United States and modeled both integrated free cooling – where a water coil is directly mounted on an air cooled chiller, and standalone free cooling, where dry coolers are located separately from the air cooled chillers.

The results of the simulation suggest that free cooling cost benefits are often only realized in certain circumstances. Building type and climate dramatically impact the viability of free cooling, and in many cases, opting for standalone dry coolers rather than integrated free cooling may also positively impact cost-savings.

This simulation focused on non-evaporative (dry) free cooling methods where the chilled water system directly exchanges heat through the use of an air-to-water heat exchanger, either integrated into an air-cooled chiller or through a standalone dry cooler. The two methods detailed here include: 1) integrated free cooling as part of the air-cooled chiller, and 2) the use of separate dry coolers.

Integrated free cooling uses an additional coil, typically attached to the chiller on the outside of the primary condenser coil, to cool the process fluid using low temperature ambient air, as seen in Figure 1 below. Instead of mechanical cooling with refrigerant circulating through the condenser coil, the building process water is run through the integrated free cooling coil, which exchanges heat with the outdoor air to achieve either full or partial cooling of the building load before returning it to the building; in turn, this process requires less mechanical cooling.

[\(click here to read the entire article\)](#)

**ASHRAE Philadelphia Chapter is a proud sponsor
of Future City Philadelphia!**



Happy Holidays from Future City Philadelphia!

We are getting down to the wire for the competition with a little more than two weeks away.

We still need many more preliminary judges, special awards evaluators and general volunteers for the day of the competition, which is Saturday, January 19th at Archbishop Carroll High School in Wayne, PA. Preliminary judges and special awards evaluators are needed for the morning session of the competition, which runs from 8:30a to approximately noon. General volunteers are needed throughout the day to help organize the schools, get the schools to the judging rooms, collect scorecards, etc.

For more information about judging, please click on the following link, <http://www.futurecityphilly.org/fcvolops.html>

Please visit our website at www.futurecityphilly.org and "Click here to sign up as a Volunteer" on the top left of the page. There you can register to be a mentor, judge, or general volunteer.

Any questions please contact me via e-mail or phone. Please feel free to forward this e-mail to your friends, co-workers, and technical society members.

Karen R. McManuels, PE
Philadelphia Regional Volunteer Coordinator
volunteer@futurecityphilly.org or
kmcmanuels@aeceng.net



**ASHRAE 2018 Winter Conference
and AHR Expo
January 12 - 16, 2019
Atlanta, Georgia**

In addition to the Technical Program and social events, twenty courses will be taught during the Conference and Expo, providing an excellent opportunity for attendees to earn PDH's.

The Technical Program along with Committee meetings, Registration, the Bookstore and Speakers Lounge will be at the Omni CNN Center and the Georgia World Congress Center.

The AHR Expo will take place at the Georgia World Congress Center on January 14 - 16.

When you register for the ASHRAE Conference, your ASHRAE badge will give you access to the AHR Expo.

[Click here](#) for info!
Registration is now open.



The Philadelphia Chapter
of the
American Society of Heating,
Refrigerating and Air
Conditioning Engineers, Inc.

994 Old Eagle School Road
Suite 1019
Wayne, PA 19087-1866
P 610-971-2169
F 610-971-4859

Visit
our web site at:

www.ashraephilly.org

Republication of material
contained herein is expressly
forbidden without official Chapter
authorization. The Chapter does
not speak or act for the Society.

Any member with material to
submit for inclusion in the
Climate can send the information
to:

Hope Silverman
P 610-971-2169
hope@mmco1.com

Material can include letters to the
editor, member news, upcoming
events, comments on chapter
programs or issues, etc.

New Philadelphia Chapter Members

New Members:

Jason Lutchendorf
Kyle C. Markell
Mark Joseph Roberts

New Associates:

Taylor Castonguay
Jen Hafington
Devon V. Lam
Jeanine M. Lancellotti
Thomas Matthew Senia
Matthew John Teter
Brandon Wellington

New Affiliates:

Victoria Leigh Binz
Kristin M. Comitale
Matthew Johannes

Membership Advancement

If you are currently an ASHRAE Associate Member, becoming a full Member is easier than you think! The following count toward the required **12 points** to advance to full membership status. You must update your ASHRAE online biography and send an email to membership@ashrae.org to advance.

Non-accredited degree = 4 points

Accredited degree = 6 points

PE = 4 points

Industry experience = 1 point/year

