ASHRAE Philadelphia Chapter

February 2019
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COSTS

Fees are based on online reservations and prepayment.

Philadelphia Chapter Members:
$40

ASHRAE Society Members - Non-Chapter Members:
$50

ASHRAE Life Members:
No Charge

Non- ASHRAE Member:
$60

YEA Member (35 & under):
$40

Students:
$20



QUAKER CITY CLIMATE

Thursday, February 21, 2019

"Engineers are the Physicians of the Future"

presented by

Stephanie Taylor, MD, MArch, FRSPH (UK)
ASHRAE Distinguished Lecturer
Taylor Healthcare Consulting

Also pre-dinner presentation from
Elizabeth Baldwin, PE
Department of Licenses and Inspections

(see page 4 for more information)

4:30 PM to 5:15 PM	Registration/Open Bar
5:15 PM to 5:45 PM	Buffet Dinner
5:45 PM to 6:00 PM	L&I Updates
6:00 PM to 7:00 PM	Dinner Presentation
7:00 PM to 7:20 PM	Scholarship Presentations

This is a joint meeting with SMCA.

Please join us - there is so much happening at this meeting!

It's **Student Night** *and* **SMCA Student Scholarship Night!**
It's **Women in ASHRAE** (WiA) **Night!**
It's **Government Affairs Night** *and* **Chapter History Night!**

Click here to Register

LOCATION

Mummers Museum
1100 South 2nd Street
Philadelphia, PA 19147
(2nd Street at Washington Avenue)
Mummersmuseum.com
Parking is free. Street parking is also available.

2018-2019

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Honors and Awards Committee
Jeff Crozier

PRESIDENT'S MESSAGE

I'd like to welcome everybody back from the ASHRAE Winter Conference held in Atlanta a few weeks ago. ASHRAE Philly hosted our annual Flyers game social during the conference. Thanks to those of you that made it out for the game. It was a great time, and the Flyers actually played really well and got the win. Maybe next year we will switch it up and try to catch a Sixers game. We definitely won't schedule the game the same week as the winter conference in an effort to not overload our members with ASHRAE events.

At the conference, we attended some very interesting presentations and topics. The presenters were so impressive that it made us re-evaluate our chapter program schedule for the upcoming months. The website has now been updated to reflect the most recent slate of presenters. We have scheduled some of the most heavily attended presentations at the conference to come to Philly and speak to our chapter.

Our meeting venues continue to be revamped. We have some very exciting venues selected. I'm very excited for our upcoming meetings. I'd like to thank Programs Director Mike Calabrese of Burns Engineering for doing a fantastic job this year and coming up with some great ideas!

Our next meeting on February 21st will be hosted at the Mummers Museum. There will be an open bar starting at 4:30 pm with an early dinner at 5:15 pm. Dr. Stephanie Taylor will be presenting "Engineers are the Physicians of the Future". Dr. Taylor will present real-time data that presents strategies on improving the health of building occupants while reducing building energy consumption. As a pre-dinner speaker, Elizabeth Baldwin, Director at the Department of Licenses & Inspections, will provide a brief overview of the updates for the Philadelphia Building Codes.

I'm looking forward to seeing you all at the meeting!

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

Date	Time	Venue	Session Topic	Theme
Thursday, February 21, 2019	4:30pm - 7:20pm	Mummers Museum	**"Philadelphia L&I Updates"** **"Engineers are the Physicians of the Future"** *ASHRAE Distinguished Lecturer Series*	SMCA / Student Night Women in ASHRAE Government Affairs Chapter History
Thursday, March 14, 2019	TBD	TBD	**"Indoor Environment"**	YEA
Thursday, April 11, 2019	12pm - 2pm	Del Frisco's	**"The (un)Ethical Engineer"** Devin Abellon, PE *ASHRAE Distinguished Lecturer Series*	Membership Promotion
Thursday, May 09, 2019	TBD	TBD	**"Building Codes"** Elizabeth Baldwin, PE	Women in ASHRAE Government Affairs Past Presidents Research Promotion
Monday, May 13, 2019	11am - 7pm	DuPont CC	Annual Golf Outing	Social Event

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

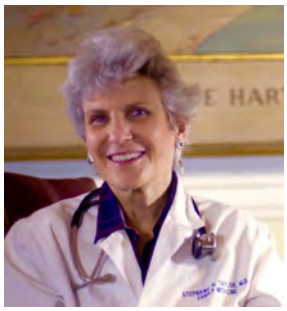
Shotgun start will be at 12:30 pm.
Online registration and full outing details to follow.

February Meeting Dinner Presentation and Speaker

Dinner Presentation: Engineers Are the Physicians of the Future

Dr. Taylor presents real-time data that presents strategies on improving the health of building occupants while reducing building energy consumption. We spend the majority of our time indoors, yet there is little information relating human physiology to indoor spaces. This presentation will reveal new data on occupant health and the indoor environment, and will turned preexisting views on indoor air management, design of inhabited spaces and surface cleaning upside down! Learn how indoor spaces can truly support human health and get ready to be totally amazed by the healing potential of the built environment.

Presenter Bio



Dr. Stephanie Taylor received her MD from Harvard Medical School, Boston, Massachusetts in 1984. For the next several decades, she practiced clinical medicine and did academic research in cellular growth mechanisms.

During this time, she became increasingly concerned about patients who were harmed by new infection during their in-patient treatment. Determined to gain a better understanding of the impact of the built environment on patient well-being, she returned to school and obtained her Master's Degree I Architecture and Engineering from Norwich University in Northfield, Vermont. After working for several years in a healthcare design architecture firm, she founded Taylor Healthcare Consulting, Inc., in order to focus on designing, building and maintaining hospitals to better support patient healing. She quickly learned that many of the building and indoor air characteristics that affect people in hospitals also influenced the health of all people in buildings.

Dr. Taylor is currently working at the intersection of architectural design, indoor air management, the microbiome of the built environment and occupant health. She finds the impact of buildings on our health startling! Managing the built environment and indoor air with the goal of decreasing diseases from acute infections to chronic inflammation to cognitive impairment, is a very underutilized yet powerful approach to disease prevention. She finds that her physician insights and biological research helps her understand the science behind the interaction of buildings, human physiology and energy consumption.

Dr. Taylor has designed hospitals globally, from the United States to Papua New Guinea to Vietnam. In addition to her Taylor Healthcare Consulting work, she is a member of the Harvard Medical School Incite Health Fellowship. This program brings together multidisciplinary teams from across the US, trains them in design thinking and entrepreneurship, and gives them the tools and resources to guide the future of medical care.

To communicate her work and understanding about the fascinating convergence of human health, microbiology and architecture, Dr. Taylor writes monthly columns and bi-annual feature articles for Engineered Systems Magazine and publishes in other healthcare journals. She is an active member of ASHRAE, ASHE and national and international medical associations. When not working elsewhere, Dr. Taylor lives in beautiful Stowe, Vermont with her husband and eight dogs. One of her favorite activities is skydiving, which she finds is great practice for staying outside of her comfort zone!

February Meeting Pre-Dinner Speaker: Elizabeth Baldwin, P.E.

LICENSES + INSPECTIONS
CITY OF PHILADELPHIA

Elizabeth Baldwin is the Development Division, Director at the Department of Licenses & Inspections. The Director will provide a brief overview of the updates for the Philadelphia Building Codes. This topic will be further explored at our May 9th session.

Note from the CTT Committee

This past November, we presented you with a couple of technical articles regarding Variable Refrigerant Flow systems. Continuing our tradition of presenting you with different viewpoints, the white paper presented below from a manufacturer of hydronic pumps (among other things) compares VRF to hydronic systems and evaluates their suitability to various building types.

Brian N. Stehman
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Henry Hoffman, PE
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HVAC System Design Requires Methodical Assessment of the Options
Engineers Must Evaluate Safety, Costs, Efficiency of VRF Versus Hydronics

By Kyle DelPiano

Business Development Manager – Commercial Building Services Market for Xylem

With heating and cooling among the largest costs in commercial buildings, HVAC system selection is an important component in both new construction and retrofit projects to keep costs in line and realize energy-efficiency targets. Hydronic systems provide water-based heating and cooling, a proven, cost-effective and sustainable medium.

Rising energy costs and a movement toward sustainability are driving changes in the commercial HVAC market. As design engineers, building owners and mechanical contractors focus on increasing comfort and maintaining air quality while reducing overall energy consumption, the technology and components of HVAC systems are constantly being re-evaluated.

With heating and cooling among the largest costs for most buildings, building owners are intent on finding new and effective approaches for new buildings and improving performance of existing facilities. And as the industry continues the shift to sustainable building practices that maximize building performance while minimizing environmental impact, the type of HVAC system is an important factor in realizing energy efficiency targets. Additional factors such as safety and code compliance, and costs related to serviceability and life cycle are among those that also must be considered in evaluating HVAC systems.

Two heating and cooling methods often compared in terms of energy consumption and system performance are hydronic systems and variable refrigerant flow (VRF) systems.

Hydronic systems as a room comfort technology have been in use in some form for centuries. Today's hydronic systems provide water-based heating and cooling through pipes, ductwork and other components such as pumps, drives, controls, heat exchangers and valves.

VRF systems use refrigerant as the primary heating/ cooling medium, comprised of a main compressor unit connected through refrigerant lines to multiple indoor cassette units that can be individually controlled. They were developed in the 1980s in Europe and Asia and introduced in the United States about a decade ago.

While each has its place in commercial building HVAC systems, specifying engineers must be diligent in their review of project parameters and the applicable safety codes of ASHRAE Standards 15 and 34 to ensure they are making suitable selections. A closer examination of the key areas of differentiation between hydronic and VRF can also assist system designers in the process.

(click here to read the entire article)

The Philadelphia Chapter
of the
American Society of Heating,
Refrigerating and Air
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Visit
our web site at:

www.ashraephilly.org

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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:

Rick Kobylinski
Jason Lutchendorf

New Associates:
Edwin James Allan
Andrew Caden
Thomas Campbell
Jesse Fornataro
Ahmad F Fraih
Robert Hughes
Carl E Ray

New Affiliates:
John A Durkee

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