



**2017-2018 Officers**



*Mike Gilroy*  
President



*Dan Carington*  
President-Elect



*Mark Leonard*  
Vice President



*Christine Reinders*  
Secretary



*Deanna Adkison*  
Treasurer

**Table of Contents**

President's Message	2
April Meeting	3
Webmaster's Notes	4
Chapter News	4
Editor's Note / Ads	4
Student Activities	5
Upcoming Events	5
Membership and Promotion	6
YEA	7
Historical News	8-9
CTTC	10
Society News	11
Research and Promotion	12-13
Product Show	14
Annual Sponsor Program	15-16
ASHRAE Learning 2018	17
ASHRAE Meeting Schedule	18
Current BOG and Chairperson	19
ASHRAE Research	20

**May Meeting**

**Wednesday, May 09, 2018**

5:00 PM - 8:15 PM

**Main Meeting:**

**Boston ASHRAE Chapter  
Installation of Officers**

Central Wharf Co.

160 Milk St, Boston, MA 02109

Time: 5:00 – 6:00 PM Open Bar &  
Appetizer Buffet

6:00 – 7:30 PM Dinner

7:30 – 8:15 PM Installation of Officers

Menu: TBD

Check our [website](#) closer to the date!

Guest Master of Ceremonies: Darcy Carbone

Cost to attend:

Members: \$50

Non-members: \$60

**Sponsor Appreciation Night**



Special thanks to our 2017-2018 Sponsors:

**Platinum:**

[HTS New England](#)

[RST Thermal](#)

**Gold:**

[Victaulic](#)

**Investor Recognition:**

[Jim Armstrong](#)

[Lance Brown](#)

[Dan Carington](#)

[Eric Edman](#)

[James Generelli](#)

[Mike Gilroy](#)

[John Iacopucci](#)

[Mark Leonard](#)

[Justin Mole](#)

[Bob Persechini](#)

[Christine Reinders-Caron](#)

[Steve Tafone](#)

[William Tang](#)

[Jeffrey Zajac](#)

Please register online at [www.ashraeboston.org](http://www.ashraeboston.org).

If you have any questions, you may contact Christopher Pietrocario, Attendance Chair, at [ashraebostonattendance@outlook.com](mailto:ashraebostonattendance@outlook.com).

**Thank You**



## PRESIDENT’S MESSAGE

*By: Mike Gilroy*

Thanks to all who came downtown to see the ASHRAE Boston Society President speak at the Main Session. Maya Simulation’s Jacques Luk-Cyr also delivered a great Technical Session presentation on the indoor environment.

As we enter April, and hopefully warmer, spring weather, we look forward to the 16<sup>th</sup> Bi-ennial ASHRAE Boston Product Show!

Be sure to check out the technical seminars (all are pursuing PDH credits) and then stay for the free dinner and Product Displays.

We also had Julie Brown from Julie Brown Business Development speak to a crowd of about 50 people in the Seaport on improving Networking skills. From the feedback I received, it seemed like it was well received and was different than the typical technical seminars. We will look to bring Julie Brown back in the future, and mix in more “soft skill” presentations.

We hope to see you at the Product Show at Lantana's in Randolph, MA on April 10<sup>th</sup>.

<b>Presidential Award of Excellence</b>									
<b>Boston Chapter - 2017-2018</b>									
<b>Chapter Members</b>	<b>Membership Promotion Points</b>	<b>Student Activities Points</b>	<b>Research Promotion Points</b>	<b>History Points</b>	<b>Chapter Organization Points</b>	<b>Chapter Technology Transfer Points</b>	<b>Grassroots Government Affairs Points</b>	<b>Electronic Communications Points</b>	<b>Chapter PAOE Point Totals</b>
<b>1052</b>	<b>875</b>	<b>535</b>	<b>790</b>	<b>270</b>	<b>1530</b>	<b>425</b>	<b>150</b>	<b>50</b>	<b>4625</b>

## May Meeting Information

# ASHRAE Boston - Installation of Officers

**When:**

**Wednesday, May 09, 2018**

**Where:**

Central Wharf Co.  
160 Milk St, Boston, MA 02109

5:00 PM - 8:15 PM

**Registration**

**Member – \$50.00**

**Non-Member – \$60.00**

### ***Boston ASHRAE Chapter Installation of Officers***

Please come and celebrate another successful year with the Boston ASHRAE Chapter! This event is to show our appreciation and support for all who've served our Boston chapter during the 2017-2018 chapter year. We will also be inducting the new officers for 2018-2019. All members are welcome and please bring non-members as well to show them what ASHRAE Boston is all about!

Time: 5:00 – 6:00 PM Open Bar & Appetizer Buffet  
6:00 – 7:30 PM Dinner  
7:30 – 8:15 PM Installation of Officers

Menu: TBD

Guest Master of Ceremonies: Darcy Carbone

## Chapter News

Attention members,

The 2018 Edition of the ASHRAE Boston Chapter Product Guide is now available online! Thank you to all who participated! This year's Product Guide would not have been made possible without your help. You can find this year's Product Guide by visiting the [ASHRAE Boston Chapter website](#).



### Webmaster's Notes

By: Kevin Doty

Currently, the [Product Show](#) homepage is our most active page on the website. Here you can find the booth layout, presentation lineup, and general registration information.

Please make sure to add [admin@ashraeboston.org](mailto:admin@ashraeboston.org) to your "safe sender" list to prevent emails from going to your spam folder.

Please feel free to send comments and suggestions to [coo1web@ashrae.net](mailto:coo1web@ashrae.net)

## ASHRAE Boston Chapter – Employment Ads

The NorthEastAire is published monthly, September through June. It is posted on the Chapter website at [www.ashraeboston.org](http://www.ashraeboston.org). A link is sent each month to all members of the Chapter, currently over 1000.

**Newsletter Rate:** \$400 for 1/2 page, \$800 for full page

**Website Rate:** \$300 per calendar month

**Discount for Both Newsletter & Website:** \$630 - 1/2 page in newsletter and website (10% discount)  
\$935 - full page in newsletter and website (15% discount)

**Format:** Word format, company logos in .jpg or .gif

**Deadline for April Newsletter:** May 04, 2018



Materials for the April newsletter are due by May 04, 2018.

Please submit employment/want ads in .pdf, .doc or .jpg format. A company logo may also be included. Feel free to send any ideas you would like to share or include in next month's issue.

For additional information, refer to our website at [www.ashraeboston.org](http://www.ashraeboston.org).

### EDITOR'S NOTE

By: Sophia Scoon

For more information, please e-mail [northeastaire@gmail.com](mailto:northeastaire@gmail.com)



## STUDENT ACTIVITIES

By: Yuka Narisako

First and foremost, I would like to thank all of our applicants for the Cheryl Rossini Future Engineers Scholarship. This year we had a plethora of eligible applicants to review, and ultimately the Board of Governors decided on four (4) fantastic, highly qualified students. We would like to congratulate Mr. Moriah Lim, Mr. Nicholas Dariotis, Mr. Thomas Judd, and Mr. Jonathan Toomey for their outstanding applications and excellence in their pursuit of an education in engineering. I am highly optimistic that these four young men will become excellent members of the engineering community.

Thanks to those who helped spread the word for our chapter’s scholarship! We hope to receive even more scholarship applications next year.

Good luck to all our student members as they enter into final exam season! For those students looking for a summer internship, or full time career opportunities in the HVAC&R industry, look no further than the [ASHRAE Career Center](#). Keep in mind that our friendly ASHRAE Boston Chapter members are more than willing to help a fellow ASHRAE Boston Chapter member out, so I once again encourage all of our student members to use our monthly meetings as valuable networking opportunities! Please contact me at [c001sa@ashrae.net](mailto:c001sa@ashrae.net) with any questions.

ASHRAE BOSTON UPCOMING EVENTS	BOSTON AREA UPCOMING EVENTS
<p>Visit <a href="https://ashraeboston30.wildapricot.org/resources/Documents/Save%20the%20Date%205.pdf">https://ashraeboston30.wildapricot.org/resources/Documents/Save%20the%20Date%205.pdf</a> for more information.</p> <p><b>New Product Show &amp; Energy Show</b> When: Tuesday, April 10, 2018 9:00 am - 8:30 PM Where: Lantana's - 43 Scanlon Dr, Randolph, MA 02368</p> <p><b>ASHRAE CTTC Webcast</b> When: Wednesday, May 09, 2018 Where: 160 Milk St, Boston, MA 02109</p> <p><b>Brewery Tour at Night Shift!</b> When: Wednesday, May 23, 2018 Where: Night Shift Brewery - 87 Santilli Hwy, Everett, MA 02149</p> <p><b>ASHRAE 53rd Golf Outing</b> When: Monday, June 04, 2018 Where: Granite Links - 100 Quarry Hill Dr, Quincy, MA 02169</p>	<p><b>Association for Facilities Engineering Boston Chapter 33</b> <a href="http://www.afechapter33.org">www.afechapter33.org</a></p> <p><b>Intl. Facilities Management Assoc. Boston Chapter</b> <a href="http://www.ifmaboston.org">www.ifmaboston.org</a></p> <p><b>Great Boston Real State Board Boston Chapter</b> <a href="http://www.gbreb.com/boma/">www.gbreb.com/boma/</a></p> <p><b>Sustainable Performance Institute</b> <a href="http://www.sustainable-performance.org/">www.sustainable-performance.org/</a></p> <p><b>AFE Chapter 74-Worcester Area-Central MA</b> <a href="http://www.afe74.org">www.afe74.org</a></p> <p><b>US Green Building Council Massachusetts Chapter</b> <a href="http://www.usgbcm.org">www.usgbcm.org</a></p> <p><b>Association of Energy Engineers New England Chapter</b> <a href="http://www.aeenewengland.org/">www.aeenewengland.org/</a></p> <p><b>Intl Bldg. Performance Simm. Assoc. Boston Chapter</b> <a href="http://ibpsa-boston.com/">ibpsa-boston.com/</a></p>



## **MEMBERSHIP PROMOTION**

Hello members and readers! We are already a quarter of the way through the calendar year and now is the perfect time to reflect on your goals you have set for yourself this year and make sure that you are taking the right steps to reach those goals. One thing that you can get off your mind right now is your membership status for the rest of the ASHRAE year! You can review your membership status by logging into the Society website at [www.ashrae.org](http://www.ashrae.org). Sign in and confirm your yearly membership dues are up to date. Please remember that the Society only allows you 6 months grace period to pay your dues. Once that 6 month has passed you are dropped from their data base, thus you will need to start all over again, losing any years you have accumulated. Let's avoid that and bring our accounts up to date and enjoy the next year or 3 years worry free!

Any readers out there wondering if you should join ASHRAE, here are some of the benefits that may help sway you to give us a try:

Stay Up to Date with Changing Technologies and Design Principles – Keep up to date with the industry through the ASHRAE Society Connections Newsletter (monthly) and the HVAC Industry e-Newsletter (weekly). If any non-member readers join ASHRAE before May, you will receive the ASHRAE handbook for this year! You will receive a hard copy of the 2018 ASHRAE Handbook – Refrigeration in the mail but will have instant access to it online within 24 hours of joining!

Missed out on last year's handbook? Fear not! If this is your first year in ASHRAE, you will receive 20% off on all ASHRAE Handbook publications! Please contact the ASHRAE Member Contact Center at [membership@ashrae.org](mailto:membership@ashrae.org) or (800) 527-4723 (US & Canada) / (404) 636-8400 (worldwide) to learn more or place your order with the discount. The online handbook is excluded from this discount (only \$49 for ASHRAE members).

ASHRAE also offers various insurance products to ASHRAE members through the Members' Insurance Program. This program provides quality coverage with options that can be tailored to your specific needs and budget.

Career Advancement – You can look for employees and employment at [ashraejobs.com](http://ashraejobs.com) directly but you also give yourself the opportunity to network with other HVAC&R professionals at events and monthly meetings throughout the year, maintain your professional education and designation with 40+ courses to attend, earn PDHs/CEUs/AIA LUs, and explore technical topics at all levels of ASHRAE meetings (chapter, region, society).

Learn New Insights – By joining ASHRAE, you join a “team” of individuals who are voluntarily taking their time to share their personal experience in the industry to better the industry as a whole. By gaining insight to the industry on a personal level, we are able to shape the industry as a whole. Committees within ASHRAE take these insights and work them into new and existing design principles. Our principles help shape building designs and help build a better tomorrow!



## YEA

By: Nick Roth

### YEA Members!

Below is a proposed schedule of events for YEA this year, if you have suggestions or ideas please let me know! There is also a lot going on with YEA at the national level, please feel free to ask questions about these events

#### May/June – Outdoor Networking Events

ASHRAE YEA Night TBD

### Recent Events

#### Speed Networking with ASHRAE

YEA worked with ASHRAE to set up a speed networking event for all members YEA and ASHRAE Boston. Julie Brown delivered a presentation on networking and focused on audience interaction. Attendees were taught how to prepare for each networking event, allowing them to enter every room with confidence, how to approach people and groups, where to position yourself at events for the best conversations, how to mingle, how to skip the small talk and ask big questions, how to follow up post event and how to email network.

#### Cornhole Tournament

The annual YEA cornhole tournament was hosted at Towne Stove and Spirits. It was a fun night consisting of networking and a friendly cornhole tournament that was set up in the restaurant.

### Getting Involved

We are always looking for YEA members to get more involved in our chapter. If you are interested in learning more about YEA, please reach out to Nick Roth. Additionally, ASHRAE offers a leadership weekend for future ASHRAE leaders. The next available leadership weekend will be held in the Fall. Future newsletters will have additional info. Topics will include leadership, networking, communication, and professional development. More information can be found here:

<https://www.ashrae.org/membership--conferences/young-engineers-in-ashrae/yea-leadership-weekend>

ASHRAE Leadership U is another program offered through ASHRAE. Have you ever wondered what ASHRAE Officers do at the ASHRAE Winter & Annual Conferences? Here is your chance to find out! Through Leadership U (offered by the YEA Institute), a handful of YEA members are selected for each conference to be matched up with Society Officers and participate in all of their events and board meetings, including social activities. Leadership U not only allows you to experience a conference like an Officer, but it is also a great opportunity to network and form connections with those active in ASHRAE. More information can be found here:

<https://www.ashrae.org/communities/young-engineers-in-ashrae-yea/yea-events-and-programs/leadership-u>

I am looking forward to being a part of YEA this year. Please feel free to reach out to me anytime if you have any questions at [bostoneya@gmail.com](mailto:bostoneya@gmail.com)



## HISTORICAL NEWS

By: Eric Edman



### History

As you read the news in this newsletter, the April Product Show will be History. This was certainly the best show ever and it was great to see so many of you.

In this monthly feature, it was our intent to share something different. It is history of old, and has some interesting origins of common words. We hope this will provide some entertaining reading for those of you who actually read monthly newsletters and are not glued to your smartphones for intelligence.

#### ***A little bit of different history to enjoy. Some of it is quite interesting.***

There is an old Hotel/Pub in Marble Arch, London, which used to have a gallows adjacent to it. Prisoners were taken to the gallows (after a fair trial of course!) to be hanged.

The horse-drawn dray, carting the prisoner, was accompanied by an armed guard, who would stop the dray outside the pub and ask the prisoner if he would like "ONE LAST DRINK".

If he said YES, it was referred to as **ONE FOR THE ROAD**.

If he declined, that Prisoner was **ON THE WAGON**.

So there you go!!

#### *More history...*

People used to use urine to tan animal skins, so families used to all pee in a pot and then, once a day, it was taken and sold to the tannery.

If you had to do this to survive you were "**piss poor**".

But worse than that were the really poor folk, who couldn't even afford to buy a pot, they "**Didn't have a pot to piss in**" and were considered the lowest of the low.

The next time you are washing your hands and complain because the water temperature isn't just how you like it, think about how things used to be.

#### *Here are some facts about England in the 1500s:*

Most people got married in June, because they took their yearly bath in May and they still smelled pretty good by June!! However, since they were starting to smell, brides carried a bouquet of flowers to hide the body odor. Hence, the custom today of carrying a bouquet when getting married.

Baths consisted of a big tub filled with hot water. The man of the house had the privilege of the nice clean water, then all the other sons and men, then the women, and finally the children and then the babies.

By then the water was so dirty you could actually lose someone in it.! Hence the saying, "**Don't throw the baby out with the bath water!**"

Houses had thatched roofs, thick straw piled high, with no wood underneath. It was the only place for animals to get warm, so all the cats and other small animals (mice, bugs, etc.) lived in the roof.

When it rained it became slippery and sometimes the animals would slip and fall off the roof. Hence the saying "**It's raining cats and dogs.**"

There also was nothing to stop things from falling into the house. This posed a real problem in the bedroom, where bugs and other droppings could mess up your nice clean bed.

Hence, a bed with big posts and a sheet hung over the top afforded some protection.

That's how **canopy beds** came into existence.

[See next page for cont....](#)

Cont.....

The floor was dirt. Only the wealthy had something other than dirt.  
Hence, the saying, "**dirt poor.**"

The wealthy had slate floors that would get slippery in the winter when wet, so they spread thresh (straw) on the floor to help keep their footing.

As the winter wore on they added more thresh until, when you opened the door, it would all start slipping outside. So, a piece of wood was placed in the entrance.

Hence: a "**thresh hold.**" (Getting quite an education, aren't you?)

Sometimes people could obtain pork, which made them feel quite special. When visitors came over they would hang up their bacon, to show off.

It was a sign of wealth that a man could, "**Bring home the bacon.**"

They would cut off a little to share with guests and they would all sit around talking and "**chew the fat.**"

Those with money had plates made of pewter.

Food with high acid content caused some of the lead in the pewter to leach onto the food, causing lead poisoning and death. This happened most often with tomatoes.

So for the next 400 years or so, tomatoes were considered poisonous.

Bread was divided according to status. Workers got the burnt bottom of the loaf.

The family got the middle, and guests got the top, or "**The Upper Crust.**"

Lead cups were used to drink ale or whisky.

The combination would sometimes knock the imbibers out for a couple of days. Someone walking along the road would take them for dead and prepare them for burial. They were laid out on the kitchen table for a couple of days and the family would gather around and eat and drink and wait and see if they would wake up.

Hence, the custom of "**Holding a Wake.**"

*And lastly, for the moment.*

England is an old and small country and the local folks started running out of places to bury people. So they would dig up coffins and would take the bones to a bone-house and then reuse the grave!!

When reopening these coffins, 1 out of 25 coffins were found to have scratch marks on the inside and they then realised they had been burying people alive. So they would tie a string on the wrist of the corpse, thread it through the coffin and up through the ground and tie it to a bell. Someone would have to sit out in the graveyard all night (the "**graveyard shift**") to listen for the bell; thus someone could be, "**Saved by the Bell**" or was considered a "**Dead Ringer**". And that's the truth!!

***Now, whoever said English history was boring!!! So pass this on and educate someone!***

As always, we look forward to greeting you at a meeting. If there is something of historical nature you think interesting, share it with us. We will do some leg work and share the story with others. Your ideas really do help us.

All our best  
The historical committee.

David L. Chandler | MIT News Office  
February 22, 2018



CTTC

By: Mark Leonard

## Urban heat island effects depend on a city's layout

The way streets and buildings are arranged makes a big difference in how heat builds up, study shows.

The arrangement of a city's streets and buildings plays a crucial role in the local urban heat island effect, which causes cities to be hotter than their surroundings, researchers have found. The new finding could provide city planners and officials with new ways to influence those effects. Some cities, such as New York and Chicago, are laid out on a precise grid, like the atoms in a crystal, while others such as Boston or London are arranged more chaotically, like the disordered atoms in a liquid or glass. The researchers found that the "crystalline" cities had a far greater buildup of heat compared to their surroundings than did the "glass-like" ones. The study, published today in the journal *Physical Review Letters*, found these differences in city patterns, which they call "texture," was the most important determinant of a city's heat island effect. The research was carried out by MIT and National Center for Scientific Research senior research scientist Roland Pellenq, who is also director of a joint MIT/ CNRS/ Aix-Marseille University laboratory called  $\langle MSE \rangle^2$  (MultiScale Material Science for Energy and Environment); professor of civil and environmental engineering Franz-Josef Ulm; research assistant Jacob Sobstyl;  $\langle MSE \rangle^2$  senior research scientist T. Emig; and M.J. Abdolhosseini Qomi, assistant professor of civil and environmental engineering at the University of California at Irvine.

The heat island effect has been known for decades. It essentially results from the fact that urban building materials, such as concrete and asphalt, can absorb heat during the day and radiate it back at night, much more than areas covered with vegetation do. The effect can be quite dramatic, adding as much as 10 degrees Fahrenheit to night-time temperatures in places such as Phoenix, Arizona. In such places this effect can significantly increase health problems and energy use during hot weather, so a better understanding of what produces it will be important in an era when ever more people are living in cities.

The team found that using mathematical models that were developed to analyze atomic structures in materials provides a useful tool, leading to a straightforward formula to describe the way a city's design would influence its heat-island effect, Pellenq says.

"We use tools of classical statistical physics," he explains. The researchers adapted formulas initially devised to describe how individual atoms in a material are affected by forces from the other atoms, and they reduced these complex sets of relationships to much simpler statistical descriptions of the relative distances of nearby buildings to each other. They then applied

them to patterns of buildings determined from satellite images of 47 cities in the U.S. and other countries, ultimately ending up with a single index number for each — called the local order parameter — ranging between 0 (total disorder) and 1 (perfect crystalline structure), to provide a statistical description of the cluster of nearest neighbors of any given building. For each city, they had to collect reliable temperature data, which came from one station within the city and another outside it but nearby, and then determine the difference. To calculate this local order parameter, physicists typically have to use methods such as bombarding materials with neutrons to locate the positions of atoms within them. But for this project, Pellenq says, "to get the building positions we don't use neutrons, just Google maps." Using algorithms they developed to determine the parameter from the city maps, they found that the cities varied from 0.5 to 0.9.

The differences in the heating effect seem to result from the way buildings reradiate heat that can then be reabsorbed by other buildings that face them directly, the team determined. Especially for places such as China where new cities are rapidly being built, and other regions where existing cities are expanding rapidly, the information could be important to have, he says. In hot locations, cities could be designed to minimize the extra heating, but in colder places the effect might actually be an advantage, and cities could be designed accordingly. "If you're planning a new section of Phoenix," Pellenq says, "you don't want to build on a grid, since it's already a very hot place. But somewhere in Canada, a mayor may say no, we'll choose to use the grid, to keep the city warmer."

The effects are significant, he says. The team evaluated all the states individually and found, for example, that in the state of Florida alone urban heat island effects cause an estimated \$400 million in excess costs for air conditioning. "This gives a strategy for urban planners," he says. While in general it's simpler to follow a grid pattern, in terms of placing utility lines, sewer and water pipes, and transportation systems, in places where heat can be a serious issue, it can be well worth the extra complications for a less linear layout.

This study also suggests that research on construction materials may offer a way forward to properly manage heat interaction between buildings in cities' historical downtown areas. The work was partly supported by the Concrete Sustainability Hub at MIT, sponsored by the Portland Cement Association and the Ready-Mixed Concrete Research and Education Foundation.

## Society News

### 2018 ASHRAE LOWDOWN SHOWDOWN MODELING COMPETITION SEEKS PARTICIPANTS

**Media Contact:**

Allen Haynes

404-446-1677

[ahaynes@duffey.com](mailto:ahaynes@duffey.com)

**ATLANTA (March 22, 2018)** – ASHRAE is seeking participants for its fourth annual LowDown Showdown Modeling Competition, held in conjunction with the [2018 Building Performance Analysis Conference and SimBuild Conference](#), co-organized by ASHRAE and IBPSA-USA, Sept. 26-28, in Chicago.

Teams will compete to design and model a near zero energy, 60,000 square foot, newly constructed museum with retail space and a full service restaurant, located in Denver, Colo.

“The focus of the 2018 Building Performance Analysis Conference and SimBuild is the adoption of new techniques and work processes to meet the growing challenges faced by today’s designers and modelers,” says Annie Marston, competition committee chair. “The LowDown Showdown is a fun, collaborative opportunity for conference attendees to engage and learn. Teams will be judged not only on how close they get to zero energy, but on the creativity of their design and the use of innovative new technologies and approaches.”

The competition engages architects, engineers, designers and energy modelers by working on integrated teams in the creation of effective workflow and outstanding design in real-world building efficiency challenges.

Each team will create and submit a poster of their building design, a performance analysis model and results spreadsheet, and write a one-page narrative on project workflow. Participants will also be required to submit one graphic to Project StaSIO, an online crowd sourced repository of modeling graphics and images.

Team members have roles, simulating real-life working scenarios, pushing the boundaries of integrated design. Participants are matched up according to software proficiency and teams will be evaluated in six categories: energy, teamwork, practicality, creativity, calibration and presentation. Prizes will be awarded for the top three teams and conference attendees will vote electronically for the fan favorite. The results will be announced at a reception during the conference.

The deadline to sign up for participation is April 16. To sign up and for more information on the 2018 LowDown Showdown, visit [www.ashrae.org/4thlowdown](http://www.ashrae.org/4thlowdown).



## Research and Promotion

By: William Tang

I am excited to announce that the ASHRAE Boston Chapter Board of Governors has approved the motion to establish an endowment for the Boston Chapter Future Engineers Scholarship, and ASHRAE Foundation will manage the endowment. We need your support to build principal in the Boston Chapter Endowment! Please see below how you can support your ASHRAE Boston Chapter. As always, please contact me should you have any questions, [coo1rp@ashrae.net](mailto:coo1rp@ashrae.net).

Visit the website - <https://xp20.ashrae.org/secure/researchpromotion/rp.html>

Fill the donation form by entering a donation amount in either ASHRAE Research, Endowed Research via ASHRAE Foundation, ASHRAE Scholarship or all three.

William Tang

[Coo1rp@ashrae.net](mailto:coo1rp@ashrae.net)

Amount entered here goes to the named scholarship endowment. An annual return of 5% funds future scholarship awards.

U.S.\$	<b>i.e. - \$100</b>	ASHRAE Scholarships (endowed scholarship support) Select One ← <b>select "Other"</b>
If "Other" is selected, please enter the name of the Scholarship <b>Boston Chapter - Future Engineers Scholarship</b>		
U.S.\$		ASHRAE General Fund
U.S.\$		Young Engineers in ASHRAE (YEA) Support
U.S.\$		<b>Total</b> contribution to be charged to credit card

**Please check one:**  
 Personal Contribution    Company Contribution    Chapter Contribution  
 (Honor Roll level contributions listed in ASHRAE's October Journal Issue start at \$100.00 for individuals and \$250.00 for companies.)

**Payment Method (Note - all fields are required)**

**Charge my gift to:**  
 Name as Appears On Card: \_\_\_\_\_  
 Credit Card Type: American Express  
 Credit/Charge Card Number: \_\_\_\_\_  
 Expiration Date: Select Month   Select Year

By completing this transaction, you agree to ASHRAE's Privacy Policy

**Contributor Information Fields in red are required**

Donor Name (Individual / Company to be Recognized): \_\_\_\_\_



## Research and Promotion

By: William Tang

Conti....

### Please check one:

Personal Contribution  Company Contribution  Chapter Contribution

(Honor Roll level contributions listed in ASHRAE's October Journal Issue start at \$100.00 for individuals and \$250.00 for companies.)

### Payment Method (Note - all fields are required)

#### Charge my gift to:

Name as Appears On Card:

Credit Card Type:

American Express

Credit/Charge Card Number:

Expiration Date:

Select Month

Select Year

By completing this transaction, you agree to ASHRAE's Privacy Policy

### Contributor Information Fields in red are required

Donor Name (Individual /  
Company to be Recognized):

ID # (if known):

Chapter (if known):

Address 1:

Address 2:

Donor Contact

Select "Submit".



## PLEASE JOIN US!

Attendance & Dinner are FREE!  
Dozens of HVAC Product Booths &  
Displays!

PDH-Approved Seminars!  
New & cutting-edge technology!

**DATE: APRIL 10TH**  
**TIME: 3PM - 8PM**

THE LANTANA, 43 SCANLON DR, RANDOLPH, MA

**REGISTER NOW AT**  
**[WWW.ASHRAEBOSTON.ORG](http://WWW.ASHRAEBOSTON.ORG)**

**RSVP BY APRIL 1st!**

For more info, contact:

Teri Shannon - [tshannon@dac-hvac.com](mailto:tshannon@dac-hvac.com)

Dan Diorio - [dan.diorio@bc.edu](mailto:dan.diorio@bc.edu)

### TECH SESSIONS:

3PM - 4PM

- Fire-Rated Duct Systems
- Passive House Building Standard
- Cold Climate VRF Design
- Steam Systems & Steam Component Design

5PM - 6PM

- VAV System Optimization
- ASHRAE 36P
- Demand Control Ventilation - Control Strategies & Technologies
- The Changing Paradigm of DOAS



### ANNUAL CORPORATE SPONSOR PROGRAM

*Support the ASHRAE Boston Chapter by becoming a Sponsor and shining the spotlight on your organization!*

**EVENT BEVERAGE SPONSOR \$1500**

- Donation of \$300 in your company name to ASHRAE Research – Boston Chapter Endowment
- Company name listed in the ASHRAE Insight and earn Honor Roll Corporate Status
- Company name display and recognition on name badges at the sponsored event
- One (1) complimentary tickets to the Annual Sponsor Recognition Event

**SILVER LEVEL SPONSOR \$2000**

- Donation of \$1000 in your company name to ASHRAE Research – Boston Chapter Endowment
- Company name listed in the ASHRAE Insight and earn Honor Roll Corporate Status
- Company name display on ASHRAE Boston Chapter website and monthly meetings for one year\*
- Full-page ad in the Boston Chapter Roster & Product Guide for one year\*
- Recognition on name badges at all events for one year\*
- One (1) complimentary tickets to the Annual Sponsor Recognition Event

\*ASHRAE Calendar Year – July 1 to June 30 of the following year

**GOLD LEVEL SPONSOR \$3000**

- Donation of \$1500 in your company name to ASHRAE Research – Boston Chapter Endowment
- Company name listed in the ASHRAE Insight and earn Honor Roll Corporate Status
- Company name display on ASHRAE Boston Chapter website and monthly meetings for one year\*
- Full-page ad in the Boston Chapter Roster & Product Guide and half-page ad in the Boston Chapter newsletter – North-eastAire for one year\*
- Recognition on name badges at all events for one year\*
- Two (2) complimentary tickets to the Annual Sponsor Recognition Event
- Complimentary hole sponsor sign at the annual ASHRAE Boston Chapter Golf Tournament

**PLATINUM LEVEL SPONSOR \$5000**

- Donation of \$2500 in your company name to ASHRAE Research – Boston Chapter Endowment
- Company name listed in the ASHRAE Insight and earn Honor Roll Corporate Status
- Company name display on ASHRAE Boston Chapter website and monthly meetings for one year\*
- Full-page ad in the Boston Chapter Roster & Product Guide and the Boston Chapter newsletter – NortheastAire for one year\*
- Recognition on name badges at all events for one year\*
- Four (4) complimentary tickets to the Annual Sponsor Recognition Event
- Company name on event name badge lanyards for one year\*
- Complimentary hole sponsor sign at the annual ASHRAE Boston Chapter Golf Tournament

\*ASHRAE Calendar Year – July 1 to June 30 of the following year

### COMMITMENT FORM

I would like to become a sponsor for the ASHRAE Boston Chapter!

#### SPONSORSHIP LEVEL

Please check one

- PLATINUM \$5000
- GOLD \$3000
- SILVER \$2000
- EVENT \$1500

#### PAYMENT METHODS

PayPal – <http://ashraeboston.org/oursponsors>

Check – please mail the completed form and check to:

ASHRAE Boston Chapter  
197 Lothrop Street  
Beverly, MA01915  
ATTN: Deanna Adkison

#### SPONSORSHIP CHECKLIST

Please submit the following when you register to become a sponsor

- Sponsorship Commitment Form completed
- Company ad in high-resolution ESP or JPG format to be place in the Roster & Product Guide and/or the NortheastAire.
- Company logo in high-resolution ESP or JPG format to be place on the pre-meeting presentation and/or the Boston Chapter homepage

Questions? Please contact any of the ASHRAE Boston Chapter Corporate Sponsorship Committee members.

William Tang  
[co01rp@ashrae.net](mailto:co01rp@ashrae.net)

Mike Gilroy  
[co01@ashrae.net](mailto:co01@ashrae.net)

Dan Carington  
[co01pe@ashrae.net](mailto:co01pe@ashrae.net)

Mark Leonard  
[co01vp@ashrae.net](mailto:co01vp@ashrae.net)

Bob Persechini  
[rpersechini@rdkengineers.com](mailto:rpersechini@rdkengineers.com)

## ASHRAE Learning 2018 Online Course Series



Self-Directed or Group Learning

[LEARN MORE](#)



eLearning on Demand

[LEARN MORE](#)



Course Catalog

[DOWNLOAD PDF](#)



Instructor-Led Training

[LEARN MORE](#)

**2017-2018 Meeting Schedule**

Date	Main Meeting/ Tech Session	Speaker	PDH Credits	Location/ Special Night
<b>April</b> April 10, 2018	Product Show 2018	See Program	See Program	Lantana's 43 Scanlon Dr. Randolph, MA 02368
<b>May</b> Wednesday May 09, 2018  Wednesday May 23, 2018	ASHRAE CTTC Webcast  Brewery Tour at Night Shift	Tom Durkin Mark Frankel Christopher Mathis  N/A	3  N/A	Central Wharf Co. 160 Milk St, Boston, MA 02109  87 Santilli Hwy, Everett, MA 02149
<b>June</b>  Monday June 4, 2018	Golf Outing	Jim Liston	N/A	Granite Links 100 Quarry Hill Dr. Quincy, MA 02169

**OFFICERS**

**President**

Mike Gilroy,  
BR+A  
617-925-9255  
[coo1@ashrae.net](mailto:coo1@ashrae.net)

**President-Elect**

Dan Carington  
BR+A  
617-925-8236  
[coo1pe@ashrae.net](mailto:coo1pe@ashrae.net)

**Vice President**

Mark Leonard  
BR+A  
617-925-8322  
[coo1vp@ashrae.net](mailto:coo1vp@ashrae.net)

**Secretary**

Christine Reinders  
Cannon Design  
[coo1sec@ashrae.net](mailto:coo1sec@ashrae.net)

**Treasurer**

Deanna Adkison  
Fitzemeyer &  
Tocci  
781-285-2262  
[coo1tr@ashrae.net](mailto:coo1tr@ashrae.net)

**BOARD OF GOVERNORS**

**2017-2020**

Bob Persechini  
RDK Engineers  
617-345-9885  
[rpersechini@rdkengineers.com](mailto:rpersechini@rdkengineers.com)

Lance Brown  
BVH  
[LanceB@bvhis.com](mailto:LanceB@bvhis.com)

Chris Pietrocarlo  
BR+A  
[cpietrocarlo@brplusa.com](mailto:cpietrocarlo@brplusa.com)

William Tang  
BR+A  
617-254-0016  
[wkt@brplus.com](mailto:wkt@brplus.com)

**2016-2019**

Darcy Carbone  
Stebbins Duffy, Inc.  
617-957-2567  
[coo1bog2@ashrae.net](mailto:coo1bog2@ashrae.net)

Christine Reinders  
CannonDesign  
617-517-6204  
[coo1bog1@ashrae.net](mailto:coo1bog1@ashrae.net)

Steve Tafone  
Suffolk Construction  
978-774-1057  
[coo1bog10@ashrae.net](mailto:coo1bog10@ashrae.net)

**2015-2018**

Daniel Diorio  
Boston College  
617-552-8772  
[coo1bog4@ashrae.net](mailto:coo1bog4@ashrae.net)

Jim Liston  
Columbia Construction Co.  
978-664-9500  
[coo1bog6@ashrae.net](mailto:coo1bog6@ashrae.net)

Justin Mole  
Cannon Design  
[coo1bog7@ashrae.net](mailto:coo1bog7@ashrae.net)

Erin Popa  
BR+A  
617-925-8205  
[coo1bog5@ashrae.net](mailto:coo1bog5@ashrae.net)

**COMMITTEES**

**Attendance**

Chris Pietrocarlo  
BR+A  
[ashraebostonattendance@outlook.com](mailto:ashraebostonattendance@outlook.com)

**Chapter Program**

Mark Leonard  
BR+A  
617-925-8322  
[coo1cttc@ashrae.net](mailto:coo1cttc@ashrae.net)

**Chapter Technology Transfer**

Mark Lenard  
BR+A  
617-925-8322  
[coo1cttc@ashrae.net](mailto:coo1cttc@ashrae.net)

**CRC Alternate**

Dan Carington  
BR+A  
617-925-8236  
[coo1pe@ashrae.net](mailto:coo1pe@ashrae.net)

**CRC Delegate**

William Tang  
BR+A  
617-254-0016  
[coo1@ashrae.net](mailto:coo1@ashrae.net)

**Golf Outing**

Jim Liston  
Columbia Construction Co.  
978-664-9500  
[jliston@columbiacc.com](mailto:jliston@columbiacc.com)

**Grassroots Government Activities**

Christine Reinders  
Cannon Design  
[Creinders@cannondesign.com](mailto:Creinders@cannondesign.com)

**Historian**

Eric Edman  
BR+A  
617-925-8325  
[coo1his@ashrae.net](mailto:coo1his@ashrae.net)

**Honors & Awards**

Will Cunningham  
BR+A  
[coo1ha@ashrae.net](mailto:coo1ha@ashrae.net)

**Membership Promotion**

Will Cunningham  
BR+A  
[coo1mem@ashrae.net](mailto:coo1mem@ashrae.net)

**Nominating**

Bob Persechini  
RDK Engineers  
617-345-9885  
[coo1nom@ashrae.net](mailto:coo1nom@ashrae.net)

**Research Promotion**

William Tang  
BR+A  
617-254-0016  
[coo1rp@ashrae.net](mailto:coo1rp@ashrae.net)

**Newsletter Editor**

Sophia Scoon  
Jacobs  
[coo1ne@ashrae.net](mailto:coo1ne@ashrae.net)

**Professional Development**

Mark Leonard  
BR+A  
617-925-8322  
[mleonard@brplusa.com](mailto:mleonard@brplusa.com)

**Publicity**

Erin Popa  
BR+A  
617-925-8205  
[coo1pub@ashrae.net](mailto:coo1pub@ashrae.net)

**Refrigeration**

Steven Tafone  
Suffolk Construction  
978-774-1057  
[coo1ref@ashrae.net](mailto:coo1ref@ashrae.net)

**Student Activities**

Yuka Narisako  
BR+A  
[coo1sa@ashrae.net](mailto:coo1sa@ashrae.net)

**Sustainability**

Lance Brown  
BVH  
[LanceB@bvhis.com](mailto:LanceB@bvhis.com)

**Special Events**

Erin Popa  
BR+A  
617-925-8205  
  
Teri Shannon  
[ashraebostonspecialevents@outlook.com](mailto:ashraebostonspecialevents@outlook.com)

**Website**

Kevin Doty  
Victaulic  
[coo1web@ashrae.net](mailto:coo1web@ashrae.net)

**WiA**

Deanna Adkison  
Fitzemeyer & Tocci  
[adkison@f-t.com](mailto:adkison@f-t.com)

**YEA**

Nick Roth  
NE Applied Products  
[coo1yea@ashrae.net](mailto:coo1yea@ashrae.net)

# ASHRAE RESEARCH

Investors Who  
Care About  
Tomorrow

## ASHRAE Boston Chapter Contributors

<b>Corporate Research Contributors</b>		
Victaulic	Mr James E Armstrong	Mr William Cunningham
BR+A	Mr Robert J Persechini	Mr Eric M Edman
HTS New England	Mr Michael P Gilroy	Mr Chris Pietrocarlo
RST Thermal	Mr Daniel P Diorio	Ms Deanna Jean Adkison
Trane	Mr Jeffrey Zajac	Mr Karl R Hudson
	Mr Justin J Mole	Mr John A Iacopucci
<b>Personal Research Contributors</b>		
Ms Sarah E Maston, PE	Mr Lance Brown	Mr Joel Gordon, PE
Mr Gary M Elovitz	Mr Daniel P J Carington	Gary Wilkins
Mr Majid Seghatoleslami	Mr Steven J Tafone	Mr David Bennett III
Mr James R Generelli	Mr William K Tang	Mr Eric M Edman
Ms Christine Reinders-Caron	Mark C Leonard	RST Thermal

CONTACT William Tang at [coo1rp@ashrae.net](mailto:coo1rp@ashrae.net)

Mail Check (Payable to "ASHRAE Research") to:

ASHRAE RESEARCH  
William Tang  
c/o Bard, Rao + Athanas Consulting Engineers  
10 Guest St. 4<sup>th</sup> Floor  
Brighton MA 02135

**Your contribution puts us closer to achieving our goal.  
Please send what you can today!**

Individual contributions of \$100 or more and Corporate contributions of \$150 or more receive this year's Commemorative Coin and Honor Roll Contribution status.

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

TEL: \_\_\_\_\_

INDIVIDUAL	\$25.00	\$50.00	\$100.00	\$200.00
CORPORATE	\$250.00	\$500.00	\$1,000.00	\$2,000.00

Other: \_\_\_\_\_

Other: \_\_\_\_\_



## NorthEastAire

ASHRAE - BOSTON CHAPTER [www.ashraeboston.org](http://www.ashraeboston.org)

Deanna Adkison

**Fitzmeyer & Tocci Associates, Inc.**

300 Unicorn Park Drive, 5<sup>th</sup> Floor, Woburn, MA 01801

(P) 781.285.2262d

[adkison@f-t.com](mailto:adkison@f-t.com)