

2016-2017 Officers



William Tang
President



Mike Gilroy
President-Elect



Dan Carington
Vice President



Mark Leonard
Secretary



Deanna Adkison
Treasurer

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October Meeting

Tuesday October 18, 2016

Main Meeting:

Net Zero Energy Building

Tech Session:

Coil Freeze Protection

Past Presidents and History Night

Please see **page 3** for more information.

Where:

CBRE Amenity Center
100 High St. Boston

Meal:

Buffet Dinner:

- Artisan Cheese Board
- Fresh Vegetable Crudités
- Glazed Cedar Plank Salmon with Mustard Cream Sauce
- Horseradish Encrusted Chicken with a Creamy Mustard Sauce
- Roasted Red Skin Potatoes with Rosemary
- Grilled Mixed Vegetables
- Cranberry Linzers
- Brownie Triangles
- Host Bar

Time:

- 5:00 - 6:15 Social/Registration
- 6:15 - 7:00 Dinner
- 7:00 - 8:00 Announcements & Main Program

Cost:

ASHRAE Boston Members:	\$50
Non -Members / Walk-Ins:	\$60
ASHRAE Student Members with RSVP:	Free
**Max RSVP = 100 People	
Past President	Complimentary
Life Members	\$50

Special thanks to our Sponsors:

Platinum:

Gold:

RST Thermal

Silver:

- Daikin
- R.T. Forbes
- Trane

Event Sponsors:

- Cooney Coil & Energy
- Siemens
- TRO



Please register online at www.ashraeboston.org.

RSVP by 12:00 PM on Friday, October 7th.

If you have any questions, you may contact Christopher Pietrocarlo, Attendance Chair, at ashraebostonattendance@outlook.com.

Thank You



PRESIDENT'S MESSAGE

By: *William Tang*

Our September meeting came and went. I would like to thank our volunteers and members for a successful first meeting of the ASRHAE year. Our guest speaker, Mr. Steve Tafone, volunteered his time and gave an educational as well as an entertaining presentation.

Since our last publication, we have added technical sessions to each of our meetings, all PDH pending. For more details, please check out the most up-to-date program schedule in the newsletter and on our website.

Our October meeting will be a busy one. In addition to our main program on Net Zero Energy Building and a technical session on Coil Freeze Protection, we will have our Past President and History Night. Our Chapter Historian, Eric Edman, will recognize the Past Presidents and Life Members of our Chapter and present a little piece of our chapter history. Furthermore, we will formally recognize our Supportive Employers of 2015 -2016.

- | | | |
|------------------------------|--------------|-----------------|
| AKF | BR+A | EYP |
| Ameresco | CannonDesign | HTS Engineering |
| Andelman & Lelek Engineering | DAC Sales | Stebbins-Duffy |
| | ERS | |

Our October meeting will be held at the CBRE Amenities Center located at 100 High Street in downtown Boston. The meeting venue is donated by TRO. Our food and beverage will be provided by Above & Beyond Catering. I am keeping my fingers crossed for nice weather that evening so we can enjoy the rooftop garden.

The amenities Center is limited to 100 occupants so please register quickly.

As always, we appreciate your feedback. Please email me at coo1@ashrae.net or any of the volunteers with questions, concerns, or suggestions to help improve our Chapter.



Materials for the November newsletter are due by **October 14, 2016.**

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.

EDITOR'S NOTE

By: *Deanna Adkison*

For more information, please e-mail northeastaire@gmail.com

TECH MEETING:

Title of presentation: **FREEZE BLOCK TECHNOLOGY; TECHNOLOGY DESIGNED TO PREVENT FREEZE DAMAGE TO HVAC COILS**

Description of presentation:

This month's presentation discusses the current industry dilemma of freeze damage to HVAC coils causing ruptures and exposing the system and building to flood damage. We will discuss the history that led to the current solution; Freeze Block. We will also discuss glycol applications in conjunction with this solution, advancements and enhancements, and additional technology to further the progress of the HVAC industry.

This presentation is pending approval for 1.0 PDH

Speaker Bio:



Mr. Bob Cooney

The past 14 years, Mr Bob Cooney has been an independent rep and founded the company Cooney Coil & Energy. With a total of 30 years' experience, Bob specializes in heat transfer equipment and invented the Freeze Block Technology. He believes necessity is the mother of invention and strives to have a strong, innovative, and creative team that backs him up at all times.

MAIN MEETING:

Title of presentation: **Net Zero Building**

Description of presentation:

This month's presentation clarifies the required approach to design, build, and operate Net Zero Energy Buildings using real world Net Zero Energy Buildings as examples.

This presentation has been approved for 1.0 PDH

Speaker Bio:



Mr. Conor McGuire

Mr. Conor McGuire is Director of Sustainability at Columbia Construction Company in North Reading, Massachusetts. Since 2012, Conor has lead the sustainability and green building strategy and implementation for the company. His experience includes building New England's largest Net Zero Office Building for the MA Division of Fisheries & Wildlife. Conor earned his Bachelor of Science in Mechanical Engineering from Northeastern University in 2002 and his Master's Certificate in Sustainable Design from Boston Architectural College in 2008. He's been a LEED AP since 2007, with specialty maintained in BD+C. He was elected to and served on the Board of Directors of USGBC MA Chapter. In his own city, he has served on civically on Melrose Historical Commission and also served on the Melrose Pedestrian & Bicycle Advisory Committee, working to make Greater Boston a safer place to recreate and commute by bicycle. By collaboratively working with owners, architects, consultants, and engineers, his projects deliver practical construction solutions that maintain design and sustainability project goals. He's worked on many LEED projects, including multiple LEED Platinum, projects and is currently working on MIT's first LEED v4 project and MA's first Net Zero Energy Dormitory Building.



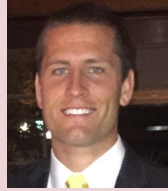
September Meeting Recap

By: Andrew Krenning

The 2016/2017 ASHRAE Boston Chapter meeting season was kicked off at the Embassy Suites in Waltham, MA. The evening started with a networking and social hour that allowed the attending members and guests to catch up after the summer break. It was great to see a number of new faces that either haven't been to a meeting in a while or were attending the meeting for the first time. The first portion of the meeting was started by the ASHRAE Boston Chapter President William Tang who welcomed all of the attending members and guest to the first chapter meeting of the year. William introduced last year's President and Research Promotion Chair Stacie Suh, who gave an update on the RP program and the goals for the Boston Chapter. She also introduced the 50/50 raffle that will be done at every meeting this year. Next, Membership Promotion Chair Dan Carington gave an update on the membership for the chapter and urged any guest to sign up and become a member.

The main presentation on "Lessons Learned" was given by Mr. Steven Tafone. Mr. Tafone is the VP of Engineering at Suffolk Construction and has more than 35 years of experience in the construction and HVAC&R industry. He began the presentation by loosening up the audience with a few jokes including explaining to the audience that he wasn't old, but just experienced. As the jokes continued for the few first few minutes he rolled right into a number of topics including electricity for HVAC Engineers, AHU's and DOAS systems, humidity systems and an interactive game of What's Wrong With This Picture. Mr. Tafone included some great refresher information on electricity and its components related to the HVAC industry. He made some great points around designing a system and the potential issues with not fully understanding the electrical systems that serve them. He stressed the importance of understanding the basics of how electricity works, what it looks like in the field and what to look for when troubleshooting problems in the field. Under the topic of air handling equipment, Steve included some great examples of issues he's encountered with AHU setup, airflow movement, ductwork connections and controls. When discussing humidifiers, he made the point that there are systems that DO leak water into the space and those that WILL leak water into the space. He highlighted some valuable lessons learned with humidifiers on control valve sizing, sequencing and how the overall system should be installed. To conclude the presentation, he shared a very valuable flowchart that he uses for problem resolution.

We look forward to everyone joining us at all of the meetings this year. We have a great year of different and interesting topics, speakers and events. Please visit our calendar of events on our website to save the dates in your calendar. Don't forget to follow us on twitter @ASHRAEboston and on LinkedIn for all the latest news and event updates.



Webmaster's Notes

By: Kevin Doty

Please make sure to add admin@ashraeboston.org to your "safe sender" list to prevent emails from going to your spam folder.

Helpful Tip When registering for events, you can save time by logging into the ASHRAE Boston chapter website. Have your internet browser (Chrome, IE, etc.) save your logon information so the next time you need to register for an event, the fields are already pre-populated with your information.

Not sure how to log to the website? Follow these simple steps:

1. Go to the chapter homepage located at www.ashraeboston.org
2. Enter your email address in the upper right-hand corner. NOTE you must use the same email address as the one on file at the ASHRAE society level. In other words, use the same email address you would use to logon to the main ASHRAE page (www.ashrae.org). If you use an email address OTHER THAN the one on file at the society level, the Boston chapter website will automatically create a new contact for you, but it will not recognize you as a member and you will not be able to access certain areas of the website.
3. Enter your password and check the "Remember Me" box. Click Login.
4. If it is your first time logging on to the website, enter your email address, leave the password field blank, and click "forgot password" and follow the instructions (you will receive an email).

Please feel free to send comments and suggestions to coo1web@ashrae.net

Presidential Award of Excellence

Boston Chapter - 2016-2017

Chapter Members	Membership Promotion Points	Student Activities Points	Research Promotion Points	History Points	Chapter Organization Points	Chapter Technology Transfer Points	Grassroots Government Affairs Points	Chapter PAOE Point Totals
1107	745	150	0	50	520	125	50	1640

Employment Ads

ASHRAE Boston Chapter – Employment Ads

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

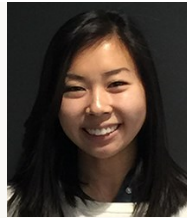
Newsletter Rate: \$200 for 1/4 page, \$400 for 1/2 page, \$800 for full page

Website Rate: \$300 per calendar month

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

Deadline for November Newsletter: October 14, 2016

Any questions, please contact Deanna Adkison, Newsletter Editor at 617-535-8236 or northeastaire@gmail.com



STUDENT ACTIVITIES

By: Yuka Narisako

With the students back in full swing at their respective educational institutions, it is a great time to bring to their attention the scholarships available to them through ASHRAE, both at a Chapter and Society Level. Please refer to the Student Activities page on the ASHRAE Boston Chapter website for application information regarding the Cheryl Rossini Future Engineers Scholarship Application. The Society also has 33 scholarships available for the 2017-2018 academic year and are all encouraged to apply at www.ashrae.org/scholarships.

I look forward to seeing many student members at our October Meeting as well as our Meet the Officers Meeting! In the meantime, please feel free to reach out to me at ynarisako@brplusa.com!



MEMBERSHIP PROMOTION

By: Dan Carington

Hello fellow ASHRAE members! Our September meeting started off really well. It was good to see Student Members, Life Time Members, Past Presidents of the Boston Chapter and guests at the meeting. It was also great meeting some of the new members that attended that night. So last month's meeting was about Membership Promotion (MP) alongside Research Promotion night. We have one more MP night coming up on January 10, 2017. I'm looking forward to meeting more new members and current ones alike. For more information please go to <http://www.ashraeboston.org/>.

The goal of MP night was to promote growth of our Boston Chapter and to introduce our new members to the Chapter. Rightfully so, we want all of our future leaders to be known for possible future leadership roles here or possibly within other Chapters of ASHRAE.

If you are or know someone that is a prospective new member, the Affiliate Grade Membership may be for you! This program is for individuals at or under the age of 30 that are new to ASHRAE (not previously a Student or Associate member). OR for individuals who have been honorably discharged from the Military within the past 5 years. These members will receive a discounted rate as follows:

- \$51 for the first year
- \$77 for the second year
- \$102 for the third year

Participants in this program will receive most of the benefits of Associate Membership (except the ASHRAE Handbook) but at a considerably discounted rate (Current Associate Member dues are \$204 per year). For more information go to <https://www.ashrae.org/membership-conferences/join-now/membership-grades> .

Please help me welcome our new members since September by giving them a warm welcome;

Mr Matthew D Brunner

Ms. Cheryl McIntosh

Welcome, we are so looking forward to seeing you at our next Boston ASHRAE event.

Any comments or questions, please feel free to contact me at dcarington@brplusa.com



HISTORICAL NEWS

By: Eric Edman



As this newsletter rolls across your desk, or computer screen, something happened. It always happens. The weather outside turned colder and many of us are thinking about old man winter returning. (You are probably only thinking and not really doing anything) Yes, snow-blowers and cold nights are due back despite all your best efforts.

We wanted you to stop and think of what life was like for your great grandparents 100 years ago. Yes, 1916. Most homes were heated with wood fireplaces, as a kid, a great deal of your possible free time was spent splitting wood. The lucky ones had coal fired furnaces or how about a significant invention- a steam boiler!

Someone had to shovel a heck of a lot of coal (and ashes). The dirt and smell would be unbearable-but so was the cold. Oil and gas was coming of age. Hunting for wood and coal was becoming a memory.

As you sit in your living room- and flip on the TV or laptop, or even grab a cold beer. Say thanks to engineers like us for making these creature comforts possible. As I sit around the Thanksgiving table, I quietly thank Eversource for the gas, Weil McLien and Grundfos for my boiler and pump so all I have to do is adjust my thermostat. I did split some of my own wood just to be able to say I did something.

As always, your historical committee is happy to hear from you. If you want to share something, please use the telephone on your desk before it goes the way of the coal boiler, and call. We really do like to hear from you.

Thank you

Eric Edman

Direct dial 617-925-8325

ASHRAE BOSTON UPCOMING EVENTS

Visit <https://ashraeboston30.wildapricot.org/resources/Documents/Save%20the%20Date%205.pdf> for more information.

October Meeting

When: October 18, 2016
Where: 100 High St. Boston

November Meeting

When: November 8, 2016
Where: Warrior Ice Arena, Boston

December Meeting

When: December 13, 2016
Where: Lantana, Boston

January Meeting

When: January 10, 2017
Where: Embassy Suites, Waltham

BOSTON AREA UPCOMING EVENTS

AFE Boston Chapter 33
www.afechapter33.org

IFMA Boston Chapter
www.ifmaboston.org

BOMA Boston Chapter
<http://www.gbreb.com/boma/>

Sustainable Performance Institute
<http://www.sustainable-performance.org/>

AFE Chapter 74-Worcester Area-Central MA
<http://chapters.afe.org/chaptersnew/index.cfm?chapterIndex=2>

USGBC Massachusetts Chapter
www.usgbcma.org

AEE New England Chapter
www.aeenewengland.org/

IBPSA Boston Chapter
<http://ibpsa-boston.com/>



Advanced Energy Design Guides Free Download

To promote building energy efficiency, ASHRAE and its partners are making the Advanced Energy Design Guides for 50% Savings available for free download (PDF). The 50% Guides offer designers and contractors the tools needed for achieving a 50% energy savings compared to buildings that meet the minimum requirements of Standard 90.1-2004. The 30% Guides offer a 30% energy savings compared to buildings that meet the minimum energy requirements of Standard 90.1-1999.



[50% Free
Download](#)

[30% Free
Download](#)

Print editions of each Guide are available for purchase in the [ASHRAE Bookstore](#).



Published Guides

Five 50% Guides have been published.

Six 30% Guides have been published.

Two Existing Buildings Guides have been completed:

Energy Efficiency Guides for Existing Commercial Buildings - a two volume set

- ***The Business Case for Building Owners and Managers*** Provides the rationale for making economic decisions related to improving and sustaining energy efficiency in existing buildings.

Technical Implementation Provides technical guidance for implementing energy efficiency measures in existing buildings. [Order these Design Guides as a package >>](#)

Visit the [Publications Updates page for updates and errata](#) on these and other publications.

Additional Guides being considered at this time include a K-12 net zero energy guide. Check back for more information on updates and progress.

LEED Compliance Path

The *Advanced Energy Design Guides* provide a prescriptive compliance path for LEED New Construction EA points. The specific points available for use of the AEDGs is described in the LEED documentation and may vary by Guide type. More details are available at the U.S. Green Building Council's LEED website.

[For information on LEED Rating System >>](#)

Resources

Technical Support Documents - 30%

All of the 30% *Advanced Energy Design Guides* have a corresponding Technical Support Document prepared by the National Lab

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that did the analysis for the development of that Guide. These documents contain additional details about the analysis and development process.

[View AEDG Technical Support Documents >>](#)

Technical Support Documents - 50%

Preliminary and/or final Technical Support Documents have been completed for each of the 50% *Advanced Energy Design Guide* building types as exploratory work to determine the types of equipment and design elements that may be needed to reach the 50% energy savings level as compared to Standard 90.1-2004.

[View 50% AEDG Technical Support Documents >>](#)

Energy Models

EnergyPlus input files are now available for the 50% *Advanced Energy Design Guides* from the Department of Energy EERE Commercial Building Resource Database. The information in the models has also been incorporated into the Open Source Building Component Library (BCL) on the NREL website.

[Access the EnergyPlus input files >>](#)

Building Component Library

[Access the Building Component Library \(BCL\) >>](#)

DOE Reference Buildings

DOE has developed a series of benchmark models, and associated EUIs, based on 16 different commercial building types (prototypical standard buildings that comply with Standard 90.1) for both new construction and existing buildings.

[View Energy Use Intensities \(EUIs\) for benchmark models >>](#)

Additional Information

Frequently Asked Questions

A list of frequently asked questions is provided as a service to ASHRAE members, users of the AEDG publications, and the general public. While every effort has been made to ensure their accuracy and reliability, the answers are advisory and provided for informational purposes only. They are not intended and should not be relied on as an official statement of ASHRAE. If you do not find the answer to your question in this list, please use the feedback form above to contact us with your question.

[Frequently Asked Questions >>](#)

International Climate Zones

ASHRAE Standard 90.1 provides information to apply the U.S. Climate Zones to international locations in Normative Appendix B – Building Envelope Climate Criteria. That information can be viewed here.

[View ASHRAE 90.1 International Climate Zone Information >>](#)

30% AEDG Market Assessment

In 2009, ASHRAE commissioned a market survey of its members to assess the market impact of the 30% *Advanced Energy Design Guides*. The study focused on the first four

published Guides and was intended to compare awareness and usage of the AEDGs, to assess the energy savings impacts resulting from using the AEDGs, and to assess potential improvements that would maximize the Guides effectiveness. The final report and briefing presentation can be viewed below.

[AEDG Market Assessment Final Report >>](#)

[AEDG Market Assessment Briefing Presentation >>](#)

AEDG Presentations

Varied information related to the Guides has been created since their initial publication. This information includes news releases, ASHRAE Journal articles and Power Point presentations. Some of the Power Point Presentations are available for review at the link below.

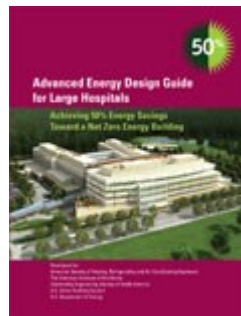
[View Power Point presentations>>](#)

Toolkits and Related Links

Additional information and resources are available at these other web sites.

[View Related Links >>](#)

Background Information



The *Advanced Energy Design Guides* (AEDG) are a series of publications designed to provide recommendations for achieving energy savings over the minimum code requirements of ANSI/ASHRAE/IESNA Standard 90.1, the first step in the process toward achieving a net zero energy building which is defined as a building that, on an annual basis, draws from outside resources equal or less energy than it provides using on-site, renewable energy sources. The Guides have been developed in collaboration with these partnering organizations: The American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IES), the U.S. Green Building Council (USGBC), and the U.S. Department of Energy (DOE). The New Building Institute (NBI) participated in the development of the initial Guide.

The partnership agreement between the organizations can be viewed here:

[Advanced Energy Design Guides \(AIA, ASHRAE, IES, USGBC\) \(PDF\)](#)

The original series of Guides have an energy savings target of 30% over 90.1-1999. Each 30% Guide addresses a specific

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building type.

The second series of Guides have an energy savings of 50% over 90.1-2004. Each 50% Guide addresses a specific building type.



The recommendations in the Guides allow those involved in designing or constructing the various building types to easily achieve advanced levels of energy savings without having to resort to detailed calculations or analyses. The prescriptive energy-saving recommendations are contained in a single table for each of the eight U.S. climate zones. Help in implementing the recommendations of the Guides can be found in an expanded section of how-to tips in the "How to Implement Recommendations" chapter. The how-to information is cross referenced with numbered tips and color-coded climate zone maps. Examples of advanced building designs and technologies are also provided to illustrate the points made and to demonstrate the flexibility offered in achieving the advanced energy savings provided within the Guides. Additional bonus recommendations point out other opportunities to incorporate greater energy savings into the design of the building. Feedback on the use of any of the Guides is welcomed and encouraged by ASHRAE. Please let us know your thoughts on the Guide itself and/or what impact the recommendations had on your building. How important was the Guide in your energy savings efforts? What energy savings have you experienced as a result of using the AEDG? ASHRAE is always interested in results that can be used as case studies in future publications. Please contact us in [Technical Activities](#) with your feedback or technical questions.



BOG Meeting Minutes

By: Mark Leonard

The Chapter Board of Governors met prior to the September Chapter meeting for approximately one (1) hour. The Board approved the meeting minutes from the June planning meeting.

The Chapter discussed a couple operational changes:

- The historical storage site has been moved from a local storage facility to BR+A's office to save on overhead expenses.
- Officers, BOGs and Committee Chairs were encouraged to utilize ASHRAE email aliases for a more uniform method of communication to the members and other participants.
- It was noted that membership numbers have decreased slightly in comparison to the start of last year.
- This month's meeting was slated as Research Promotion night and Membership Promotion night. The main presentation was also approved for 1.0 PDH.
- The current Chapter finances were reported to the BOG.
- The October meeting site has been confirmed and will be held at TRO's office at 100 High Street, Boston, MA.
- The BOG and Committee Chairs were requested to provide ideas as to how the Chapter can best utilize the Chapter Opportunity Fund budget.
- The new Women in ASHRAE Committee recently held their first event which was deemed a success. A motion was approved to provide the Committee with an annual budget to host periodic events similar to YEA.
- The Chapter will recognize select employers at the October meeting for their notable attendance at last year's events.
- Other accomplishments include last year's Hall of Fame inductee, Steve Rosen, who will be officially inducted at the upcoming November Meeting.
- The Chapter will look to continue raising money for Research Promotion this year. A notification will soon be distributed to members to help support this cause.
- The Chapter continues to improve the operations by utilizing the Basecamp tool as an organizational platform for Officers and Committee Chairs to complete necessary tasks. This tool will also be used at the Society and Regional levels moving forward.



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

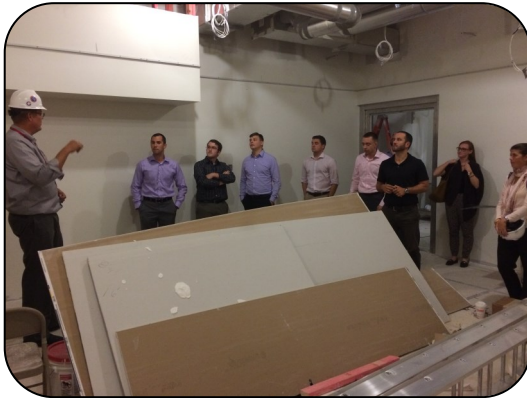
November – Lahey Technical Tour

January – Networking Event at Good Life

March – Annual Cornhole Tournament

April – ASHRAE YEA Night

BMC Technical Tour



Our first technical tour at Boston Medical Center went very well. Stacie Yeragotelis (TRO), Chris Hahn (Suffolk) and Brendan Whalen (BMC) gave YEA members a presentation on the Integrated Project Delivery (IPD) process. The presentation included a history of the project, overview of design and construction and lessons learned. The question and answer section allowed YEA members to learn more about the latest methods of design and construction.



As seen in the photos, the tour included the new radiology areas, central processing, operating rooms, patient care areas and mechanical rooms. YEA members were able to review the custom aluminum AHUs in detail while the Project Team described the BMC standard approach to AHU design.

Lahey Technical Tour

Our next YEA technical tour will be held at Lahey Hospital and Medical Center on November 16, 2016 at 6:00 PM. This tour will focus on the new “Stilts” Emergency Department Addition Project, lessons learned along the way, and an overview of the systems and equipment. The tour will also include an overview and tour of the 3 MW reciprocating engine cogeneration plant. Social hour will follow at Tavern in the Square after the tour. Please come out and join us! It’s a great way to get more involved in ASHRAE, learn more about the industry, and make new friends.

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 join us at our technical tour on 11/16/2016. Additionally, ASHRAE offers a leadership weekend for future ASHRAE leaders. This year’s leadership weekend will be held in Charlotte, NC on November 4, 2016. 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/membership-conferences/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 c001yea@ashrae.net.



By: Steve Rosen

Federal Activities

ASHRAE Supports House Bill to Promote STEM Education

ASHRAE applauds the U.S. House of Representatives on the passage of the "Strengthening Career and Technical Education for the 21st Century Act" (H.R. 5587). The legislation, which passed the House on Sept. 13 with a 405-5 vote, would reauthorize the "Carl D. Perkins Career and Technical Education Act of 2006" through Fiscal Year 2022, and provide increased support for science, technology, engineering and mathematics (STEM) education. Among other things, it gives middle schools access to funds, provides opportunities for dual enrollment in secondary and post-secondary programs, increases use of technology, and encourages collaboration between training programs and area employers. The bill requires a gradual increase in funding to \$1.23 billion in FY 2022. Said ASHRAE President Tim Wentz, P.E., HBDP, "We strongly encourage the Senate to build on these efforts and take bold action to provide further support for STEM education. Such action would help meet the workforce pipeline need for an estimated 115,000 new HVAC&R technicians by 2022, which will be created through growth and retirements." The Senate now has the bill and is expected to send it to the president by the end of the year.

GGAC Regional and Chapter Activities

EWeek 2017

Engineers Week (EWeek) 2017 will be held February 19-25, 2017. This year as in past years, GGAC is encouraging our Chapters to obtain proclamations from elected officials (Mayors, Legislatures, Governors, Provincial officials, etc.). Information, draft proclamations and cover letters will be posted soon on the GGAC website. Mark your calendars now and watch for more details soon.

Toolkits Available for Chapter Use

As part of the ongoing effort to provide Chapter GGACs tools to make their job easier, the GGAC has prepared two "how-to" toolkits for the promotion of programs. Available now on our website are "Member Engagement in the State Energy Program and Weatherization Assistance Program" and "Member Engagement to Promote ANSI/ASHRAE Standard 188-2015 Legionellosis: Risk Management for Building Water Systems. These two toolkits, plus others to follow in the coming months, are intended to help guide Chapters in various government advocacy initiatives on a step-by-step basis. To access these toolkits, go to the "GGAC Toolkits and Presentations" section found at the website located [here](#).

New, Simple Technique Creates Boiling Water, Steam Using

Ambient Sunlight

MIT engineers have developed a bubble-wrapped, sponge-like device that absorbs sunlight and heats water to boiling temperatures, generating steam through its pores. The design, which the researchers call a "solar vapor generator," requires no expensive mirrors or lenses to concentrate the sunlight. Instead, it relies on a combination of relatively low-tech materials to capture ambient sunlight and concentrate it as heat. The heat is then directed toward the pores of the sponge, which draw water up and release it as steam. The team says the low-tech design may provide inexpensive alternatives for applications ranging from desalination and residential water heating, to wastewater treatment and medical tool sterilization. The research is published in the journal Nature Energy.

New York State Provides Funding for Construction of Energy-Efficient Housing

New York Governor Andrew M. Cuomo recently announced the availability of \$16 million through the New York State Energy Research and Development Authority (NYSERDA) to support the design and construction of new energy-efficient housing and to complete similar improvements in existing buildings across New York State. Improvements in energy efficiency, particularly in the construction of new residential houses and apartment buildings, is a component of New York State's Clean Energy Standard, which requires 50% of the state's power to come from renewable sources by 2030. The governor's office estimates that homes and buildings that take advantage of the funding could see annual energy cost savings of more than \$9 million and total lifetime savings of as much as \$180 million. The funding will be distributed equally to low-rise housing developments, and mid- to high-rise projects.

Your Boston GGAC committee welcomes your articles and event suggestions!

Please contact Christine Reinders, Stacie Suh or Steve Rosen.

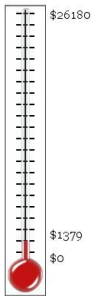
- stacie@stebbinsduffy.com
- creinders@CANNONDESIGN.COM
- srosen@RDKEngineers.com



By: Stacie Suh

Dear ASHRAE Members,

As always, I would like to extend my sincerest thanks to you for your support of ASHRAE Research last year. It's because of your support that we were able to fund more than \$14 Million worth of research. More than 80 research projects worldwide received support from ASHRAE because of your investment. We've begun the 2016-2017 Campaign already and I hope we can once again count on your support of ASHRAE Research this year. The Boston Chapter goal for 2016-2017 is \$26,180, Region I goal \$188,000 and society goal is \$2.6 million. We have raised \$1379.00 so far, we need your help to get to half our goal by end of December 2016.



Thank you to following Donors:

- Benjamin Weil
- Bob Persechini
- Robert Barstow
- Warren Hudson
- Kirschner Associates
- Stacie Suh
- Will Tang
- Deanna Adkison
- Mike Gilroy
- Mark Leonard
- Darcy Carbone
- Lance Brown
- Jeff Zajac

As always, you may also make your investment online at www.ashrae.org/donate. If you are interested in donating in other method than online, please let me know. Your contribution will automatically go toward helping the Boston Chapter reach our RP goal for 2016-2017.

If you'd like a list of research projects being conducted in the region or about specific topics, please let me know.

Here are few links that you might find useful.

- For more information on resource promotion, please go to <https://www.ashrae.org/standards-research-technology/ashrae-rp>.
- If you are interested in important dates and deadlines for research projects please click on <https://www.ashrae.org/standards-research-technology/research>.
- These Research Project Final Reports document the results of the research projects, and are approved by the sponsoring Technical Committee. ASHRAE members have free access through the [Members-Only Research Projects Final Reports site](#).
- If you are interested in submitting solicited research project, go to <https://www.ashrae.org/standards-research-technology/research>.
- If you are interested in donating to ASHRAE Resource, go to www.ashrae.org/donate

Again, Thank You for your continued support of these vital projects – it's greatly appreciated.

Please contact me with any questions at stacie@stebbinsduffy.com.

Stacie Suh /RP Chair 2016-2017

[Email](#)



HVAC Controls Technician

Status: Permanent Full Time
Location: Metro Boston and South Shore of Massachusetts

Job Summary:

Controls Technician for Building Management Systems (BMS) and Heating, Ventilation & Air Conditioning (HVAC) systems. Responsible for completing service calls in addition to working on larger projects under the direction of a project manager or controls engineer.

Responsibilities:

- Program and set up control systems from plans and specifications, including but not limited to schedules, trends, alarms, reports, and integrations to mechanical equipment.
- Configure, download, and commission controls using current software tools.
- Troubleshoot control system components and diagnose any related electrical or mechanical components.
- Read and understand mechanical plans and wiring diagrams.
- Coordinate work with associates and other trades (electricians, HVAC technicians, plumbers).
- Document work and procedures.
- Effectively present information verbal and written to managers, clients, customers, and the general public.
- Respond professionally to service calls and customer concerns and coordinate necessary resources.
- Analyze and correct network communication issues.
- Work according to project timelines and required processes.
- Work on construction sites and practice safe work habits.
- Comply with all codes, regulations, and company directives for building operations.

Qualifications:

- 4 to 6 years of experience in related field.
- Associate's degree/Technical School or greater.
- Must be experienced with computers and Microsoft Office programs.
- Must be able to perform the physical requirements of the position.
- Valid driver's license.
- Previous experience with Metasys or Tridium controls is considered an asset.
- Previous experience with DDC, PLC or similar Ladder-Logic programming is considered an asset.

Forward cover letter and resume to contactus@vikingcontrols.com

2016-2017

SPONSORSHIP PROGRAM



Become a Sponsor

Shine the Spotlight onto Your Organization.
Enjoy Amazing Networking Opportunities.
Customize Options to Fit Your Needs.
Look Inside!



2016-2017 ANNUAL PARTNER BENEFITS

SILVER

Cost:
\$1,500

- (1) Donation in your company name to ASHRAE Research Promotion
 - Be listed in ASHARE Insights and earn Honor Roll Corporate Status - \$300 value
- (1) Company name recognized on power point scrolling banner at all monthly meetings
- (1) Company Listing on ASHRAE Boston Chapter Website for one ASHRAE year
- (1) Full page Ad in Boston Chapter Online Roster & Product Guide for one year
- (1) Complimentary Ticket to Annual Sponsorship Event (May 2017)
- (*) Recognition on Name badges at all events

Everything above, plus...

GOLD

Cost:
\$3,000

- (1) Donation in your company name to ASHRAE Research Promotion (\$500 instead \$300)
- (1) Company Logo on ASHRAE Boston Chapter Home Page for one year
- (1) Quarter page Ad (Business card type) in Boston Chapter Newsletter /newsflash advertisement for one year
- (1) Additional Complimentary Ticket to Annual Sponsorship Event (May 2017) – (total of two)
- (6) Complimentary Non-Member admissions to main meeting(s)
- (*) Given Priority on Future Sponsorship opportunities

PLATINUM

Cost:
\$5,000

Everything above, plus...

- (1) Donation in your company name to ASHRAE Research Promotion (\$700 instead \$300)
 - (1) Full page Ad (Business card type) in Boston Chapter Newsletter (full page instead of Quarter page)
 - (2) Additional Complimentary Ticket to Annual Sponsorship Event (May 2017) - (total of four)
 - (6) Additional complimentary Non-Member admissions to main meeting(s) – (Total of 12)
 - (1) Company Logo on Monthly Meeting E-blasts
 - (1) Recognition on ASHRAE Boston Chapter social media - Facebook
 - (*) Given Priority on Future Sponsorship opportunities
-

COMMITMENT FORM

I would like to become / renew a chapter sponsor for the 2016-17 year!
Effective July 1, 2016-June 30, 2017

COMPANY NAME _____

YOUR NAME _____

COMPANY ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE _____ FAX _____

EMAIL _____

WEBSITE _____

NATURE OF BUSINESS _____

I am authorized to commit to this sponsorship.

SIGNATURE

SPONSORSHIP LEVEL

Please check sponsorship level

Platinum - \$5,000

Gold - \$3,000

Silver - \$1,500

SPONSORSHIP CHECKLIST

Please submit the following when you register to become a sponsor for the 2016-2017 year:

Your company logo in High Resolution / EPS and JPG format. *Logos are used on the Boston website*

Sponsorship contact name, title, address, phone number and email address.

Your company Ad in High Resolution / EPS and JPG format. *Ad are used on the newsletter and product guide.*

EMAIL THIS INFORMATION TO:

c001@ashrae.net

ANY QUESTIONS? CONTACT:

William Tang, Boston Chapter President c001@ashrae.net

Mike Gilroy, Sponsorship committee member c001pe@ashrae.net

Stacie Suh, Sponsorship committee member c001rp@ashrae.net

Chapter Website:

WWW.ASHRAEBOSTON.ORG

PAYMENT METHOD

Full payment must be made by October 1, 2016.

- Pay in Full
- Send an invoice to the address above
- Check for the full amount enclosed
- PayPal Payment for the full amount
<http://ashraeboston.org/Corporate-sponsors.html>

Please mail, email or fax the completed form to:

ASHRAE Boston Chapter

197 Lothrop Street

Beverly, MA 01915

ATTN: Deanna Adkison/William Tang

ASHRAE Scholarships Provide Financial Assistance for 33 Students

ATLANTA – Thirty-three students receiving scholarship funds from ASHRAE are joining more than 300 others who have received financial assistance from the Society over the years.

The students are accepting \$164,000 worth of financial assistance for the 2016-17 school year. Over the course of 28 years ASHRAE has awarded more than \$1.78 million to over 360 deserving undergraduate students.

“ASHRAE scholarships have a positive impact on the lives of students, often allowing them to focus more on their studies and work fewer hours at part-time jobs,” Chuck Curlin, chair of the Scholarship Trustees, said. “ASHRAE scholarships help defray some of the costs of a college education - which has gotten much more expensive in past years. The scholarships we provide not only helps with the financial needs of students, but also creates a direct connection between the recipients and ASHRAE.”

Curlin notes that ASHRAE receives thank you letters each year from scholarship recipients expressing their gratitude for the scholarships. Some of these can be viewed at www.ashrae.org/scholarships, along with complete information about the program.

The 2016-17 scholarship recipients are:

- **Willis H. Carrier Scholarships:** \$10,000 each for one year, Casey Zarger and Kristen Cole, architectural engineering, Pennsylvania State University. The scholarship was established by the Carrier Corp. in memory of its founder, who installed the world’s first scientifically designed air-conditioning system.
- **Reuben Trane Scholarships:** \$10,000 each to be awarded over two years, Danish Dhamani, mechanical engineering, Drexel University; Aldo Kusnardi, mechanical engineering, Minnesota State University; and Jacquelyn Sommers, architectural engineering, Kansas State University. The scholarship was established by the Trane Co. in memory of its founder, an innovative engineer, inventor and business executive.

The following awards provide one-year \$5,000 scholarships:

- **Lynn G. Bellenger Engineering Scholarship:** Linda Komnang Liezu, mechanical engineering, City College of New York. The scholarship recognizes female undergraduate engineering students and is named in memory of the Society’s first female president.
- **Lynn G. Bellenger Engineering Technology Scholarship:** Kathleen Agustin, sustainable energy and building technology, Humber College. The scholarship recognizes female undergraduate engineering technology students.
- **Region IV Benny Bootle Scholarship:** Robert Cosby, mechanical engineering, Georgia Institute of Technology. The scholarship is named for a former Region IV chair and regional director on the ASHRAE Board of Directors.
- **James R. Bullock Jr. Scholarship:** Benjamin Bingham, mechanical engineering, North Carolina State University. It is named in honor of Bullock Jr., P.E., Life Member, a longtime ASHRAE member who serves as president of Environmental Air Systems Inc.
- **Frank M. Coda Scholarship:** Mariana Silva, civil engineering, University of Texas at Austin. The scholarship was created in memory of ASHRAE’s former executive vice president, who served from 1981-2004.
- **Duane Hanson Scholarship:** Dayna Hedges, architectural engineering, Pennsylvania State University. The scholarship was established by Gayner Engineers and is named for the company’s former president.
- **Gordon V.R. Holness Scholarship,** Caitlin Bubel, mechanical engineering, Drexel University. It is named in honor of ASHRAE Presidential Member Holness, P.E., Fellow ASHRAE, Life Member, who served as president in 2009-10.
- **David C.J. Peters Scholarship:** Jacob Upton, mechanical engineering, California Polytechnic University San Luis Obispo. The scholarship was created by Southland Industries to honor Peters, an advocate of recruiting quality.

[Continued on Next Page —](#)

— Continued from Previous Page

- **Alwin B. Newton Scholarship:** Amber Zuehlke, architectural engineering, Lawrence Technological University. The scholarship is named for an industry pioneer and ASHRAE Fellow who was granted 219 patents.
- **General Scholarship:** Lauren Boyle, architectural engineering, Pennsylvania State University.
- **Legacy Scholarship:** Dallas Gardner, architectural engineering, Kansas State University.
- **Engineering Technology Scholarships:** Franciso Iniguez, HVAC engineering technology and energy management, and Justin Dean, HVAC&R technology, both from Ferris State University; and Seth Helliker, construction management, Pittsburg State University.
- **Freshman Engineering Scholarship:** Muhammad Abbasi, mechanical engineering, Minnesota State University.

The following awards provide one-year \$3,000 scholarships:

- **Henry Adams Scholarship:** Rachel Kendall, mechanical engineering, University of Manitoba. The scholarship was established by Henry Adams, Inc. in memory of its founder, a charter member and sixth president of ASHRAE'S predecessor society, ASHVE, established in 1899.
- **ASHRAE Central New York Chapter King-Traugott Scholarship,** Sandhya Sapkota, mechanical engineering, City College of New York. It is named in memory of Fritz Traugott, Ph.D., Fellow ASHRAE, Life Member, and Harry King, Life Member.
- **J. Richard Mehalick Scholarships: Richard Hollenbach III and Kevin White, mechanical engineering, University of Pittsburgh.** The scholarship is named in memory of an ASHRAE member who was a graduate of the University of Pittsburgh and oversaw development of air conditioning equipment used in commercial, military, aerospace and transportation applications
- **Donald E. Nichols Scholarship:** Hayden Rhymer, mechanical engineering, Tennessee Technological University. The scholarship is named for a former ASHRAE vice president and graduate of Tennessee Technological University.
- **Minnesota Chapter Peter Potvin Scholarship: Ryley Davis, mechanical engineering, Minnesota State University.** The scholarship is named in memory of a former president of the Minnesota Chapter.
- **Region I Setty Family Foundation Scholarship:** Michelle Shadpour, mechanical engineering, University of Southern California. The scholarship is named after Boggarm Setty, Fellow ASHRAE, Life Member.
- **Region III Setty Family Foundation Scholarship:** James Braza, mechanical engineering, University of Pittsburgh. This scholarship is named after Setty.
- **Region VIII Scholarship:** Matthew Coleman, mechanical engineering, University of Texas-Permian Basin.
 - **High School Senior Scholarships:** Daryl Williams, engineering, North Carolina State University; Tyler McCubbins, mechanical engineering, University of Tennessee; Anne Wellford, engineering, Trinity University; and Emily Ruble, engineering, Western Kentucky University.

For more information on ASHRAE scholarships, visit www.ashrae.org/scholarships. Applications are now being accepted for the 2017-2018 undergraduate, regional/chapter and university-specific scholarships. The deadline is December 1, 2016.

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 56,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today. More information can be found at www.ashrae.org/news.

ASHRAE's HVAC Design Training

HVAC Design: Level I – Essentials

ASHRAE's *HVAC Design: Level I – Essentials* provides intensive, practical training for HVAC designers and others involved in the delivery of HVAC services. In three days, gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use.

- Fundamentals
- Heating/Cooling Load Calculation
- System Selections
- HVAC System and Components
- Cooling System
- Basic Design of Hydronic Systems
- Basic Design of Air Systems
- Control/BAS

HVAC Design: Level I—Essentials

When: October 3-5, 2016 | Baltimore, MD

Cost: \$1,264 (ASHRAE Member: \$1,009)

Company Discount: Enroll 3 or more participants from the same company at the same time and SAVE!

REGISTER



BONUS!

Get a FREE copy of *Standard 189.1-2014* and *User's Manual*.

A \$200 Value!



Register for **BOTH training sessions** to save money and fast track your experience level!

HVAC Design: Level II – Applications

ASHRAE's *HVAC Design: Level II – Applications* provides instruction on HVAC system designs for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. In two days, gain an in-depth look into *Standards 55, 62.1, 90.1, 189.1* and the *Advanced Energy Design Guides*. Training will focus on a range of topics including: HVAC equipment and systems, energy modeling, designing a chiller plant, and BAS controls.

- Sustainability / Green/LEED / HPB / NZEB
- Standard 55
- Standard 62.1
- Building Systems: Education Facility
- System Applications: Chiller/Boiler, Air Handlers, VAV Terminals
- Life Cycle Cost
- Building Systems: Multi-story Office Building
- Water-to-Water GSHP Option 1 Chilled Beam with DOAS
- Water-to-Water GSHP Option 2 UFAD

HVAC Design: Level II—Applications

When: October 6-7, 2016 | Baltimore, MD

Cost: \$854 (ASHRAE Member: \$699)

Company Discount: Enroll 3 or more participants from the same company at the same time and SAVE!

REGISTER



BONUS!

Get a FREE copy of *ASHRAE GreenGuide: Design, Construction, and Operation of Sustainable Buildings, 4th. ed.*

A \$100 Value!

YOUR INSTRUCTORS



Joel Primeau, P.Eng.,
Member ASHRAE, HBDP,
LEED® AP

[view bio](#)



Dennis Wessel, P.E.,
Fellow/Life Member
ASHRAE, LEED® AP

[view bio](#)

2016-2017 Meeting Schedule

Date	Main Meeting/ Tech Session	Speaker	PDH Credits	Meeting Manager	Location/ Special Night
September	Lessons Learned	Steve Tafone	1.0	William Tang	Embassy Suites 550 Winter St. Waltham
Wednesday September 21, 2016	N/A		N/A	wtang@brplusa.com	Research Promotion/ Membership Promotion
October	Net Zero Energy Building	Conor McGuire	1.0	Jim Liston	CBRE Amenity Center 100 High St. Boston
Tuesday October 18, 2016	Tech Session: Coil Freeze Protection	Cooney Coil	TBD	jliston@columbiacc.com	Past Presidents & History
November	Tour of Bruins' Training Facility		-	William Tang	Warriors Ice Arena 80 Guest St. Boston
Tuesday November 8, 2016	N/A	N/A	N/A	wtang@brplusa.com	Student Activities/ Young Engineers in ASHRAE/Women in ASHRAE
December	Solar Heating - Hosted by ASPE	TBD	TBD	ASPE	Lantana 43 Scanlon Dr. Randolph
Tuesday December 13, 2016	Tech Session: TBD	TBD	TBD		Joint Meeting with ASPE
January	Steam Design	Kevin Foley	TBD	Stacie Suh	Embassy Suites 550 Winter St. Waltham
Tuesday January 10, 2017	Tech Session: Montreal Protocol Refrigerant Updates	Trane	TBD	Stacie@stebbinsduffy.com	Research Promotion/ Membership Promotion
February	Space Pressurization	Jim Coogan	TBD	Andrew Krenning	Metro Meeting Centers 101 Federal St. Boston
Wednesday February 15, 2017	Tech Session: Proper Venting of Fuel Fired Appliances	Frank I Rounds	TBD	coo1pub@ashrae.net	Joint Meeting with I2SL
March	Demand Reduction - Hosted by AEE	TBD	TBD	AEE	TBD
Wednesday March 1, 2017	Tech Session: TBD	TBD	TBD		Joint Meeting with AEE
April	Attract, Retain & Promote Women in the HVAC Industry	Ginger Scoggins	TBD	Stacie Suh	Metro Meeting Centers 101 Federal St. Boston
Tuesday April 11, 2017	Tech Session: Back to Basics - Psychometrics	Ginger Scoggins	TBD	Stacie@stebbinsduffy.com	Student Activities/Young Engineers in ASHRA/Women in ASHRAE
May	Installation of Officers		N/A	Mike Gilroy	TBD
Tuesday May 9, 2017				coo1pe@ashrae.net	
June	Golf Outing	Jim Liston	N/A	Golf Committee	Halifax Country Club, Halifax, MA
Monday June 5, 2017					Research Promotion

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et

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Investors Who
Care About
Tomorrow

ASHRAE RESEARCH

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Benjamin Weil
 Bob Persechini
 Robert Barstow
 Warren Hudson
 Kirschner Associates
 Stacie Suh
 Will Tang
 Deanna Adkison
 Mike Gilroy
 Mark Leonard
 Darcy Carbone
 Lance Brown
 Jeff Zajac

CONTACT STACIE SUH NOW! at 781-258-1002 or coo1rp@ashrae.net

<p>Mail Check (Payable to "ASHRAE Research") to:</p> <p style="padding-left: 40px;">ASHRAE RESEARCH</p> <p style="padding-left: 40px;">Stacie Suh 10 Technology Dr. Peabody, MA 01960</p>	<p>Your contribution puts us closer to achieving our goal. Please send what you can today!</p> <p>Individual contributions of \$100 or more and Corporate contributions of \$150 or more receive this year's Commemorative Coin and Honor Roll Contribution status.</p>				
Name: _____					
Company: _____					
Address: _____					
TEL: _____					
INDIVIDUAL	\$25.00	\$50.00	\$100.00	\$200.00	Other: _____
CORPORATE	\$250.00	\$500.00	\$1,000.00	\$2,000.00	Other: _____



NorthEastAire

ASHRAE - BOSTON CHAPTER www.ashraeboston.org

Deanna Adkison
 AKF Group
 99 Bedford St., 2nd FL
 Boston, MA 02111