



2016-2017 Officers



William Tang
President



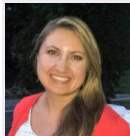
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Treasurer

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March Meeting
Wednesday March 1, 2017

Where:

Embassy Suites Hotel and Conference Center
550 Winter Street
Waltham, MA 02451

Meal:

Grilled Sirloin (Balsamic Fig Demi Glaze),
Caprese Tower (Heirloom Tomato, Buffalo
Mozzarella, Balsamic Reduction, Basil Oil)
Chocolate Decadence Cake with Berry Coulis

Main Meeting:

Demand Reduction

Time:

5:30 - 6:30PM Networking
6:30 - 7:00PM Social/Registration/Dinner
7:00 - 8:00PM Main Program

Joint Meeting with AEE

Cost:

ASHRAE Boston Members: \$50
Non-ASHRAE Boston Members: \$60
ASHRAE Student Members
with RSVP: Free

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

Parking:

Free

Special thanks to our Sponsors:

Platinum:	Gold:
	RST Thermal
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Silver:	• Victaulic
• Daikin	Event Sponsors:
• R.T. Forbes	• Cooney Coil & Energy
• Trane	• Siemens
• HTS New England	• TRO
• Leonhardt Company	• WSP

Please register online at www.ashraeboston.org.

RSVP by 12:00 PM on Friday, February 24th.

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 February meeting was the first joint meeting with I2SL New England. I want to thank our I2SL liaison, Andrew Krenning, for pulling this event together. The meeting was a success, and the Boston chapter will continue to explore future opportunities for joint meetings with I2SL New England. I also want to thank our distinguished lecturer Jim Coogan and our tech session speaker Jason Geagan for flying in from Chicago, IL and Fort Worth, TX to present at the February meeting.

At the beginning of this ASHRAE calendar year, I wrote that the Boston chapter will try to make behind the scenes improvements. We listened to our members. The Golf Committee is brainstorming to shorten the duration of the tournament. We are also exploring golf courses that are closer to metro Boston for the 2017-2018 annual golf tournament. Another enhancement you will notice soon is the name tag for our monthly meetings and larger badges for the 2017-2018 Product & Energy Show. We hope you will like these changes.

Please feel free to contact me c001@ashrae.net or any of the volunteers with any questions or concerns with regards to ASHRAE Boston Chapter.



EDITOR'S NOTE

By: Deanna Adkison

Materials for the April newsletter are due by **March 17, 2017**.

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.

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

Main Section Title of presentation: Demand Reduction

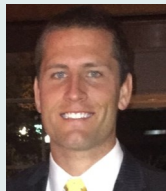
Speaker Bio: Carlos Nouel



Carlos Nouel is the Leader of National Grid’s New Energy Solutions (NES) team. NES is an agile team focused on developing and launching innovative solutions and technologies that unlock value for National Grid’s customers and communities and accelerate progress towards a sustainable future.

Before becoming its leader, Carlos was the Director of Partnerships for the NES team. In that role, he was responsible for identifying customer’s energy needs and determining the most comprehensive, cost effective and sustainable strategies to fulfill those needs through the creation of innovative partnerships and alliances with key industry players. In addition, he also leads the development and execution of strategies and tactics for our smart grid programs. Before coming to New Energy Solutions, Carlos developed sourcing strategies to support all the requirements for National Grid’s energy efficiency portfolio valued at \$400m per year.

Prior to joining National Grid, Carlos worked for companies such as Pfizer, British American Tobacco, IBM and AES in the supply chain area. Carlos holds an M.B.A. from Hult International Business School, and a B.S. in Industrial Engineering from Andres Bello Catholic University in Venezuela. He is also a Certified Energy Manager.



Webmaster’s Notes

By: Kevin Doty

Please remember to register for events as early as possible. For our standard monthly meetings, online registration closes the Friday before the meeting. Keep an eye out for email invites along with updates on our “Events” web page.

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

Please send comments and suggestions to coo1web@ashrae.net



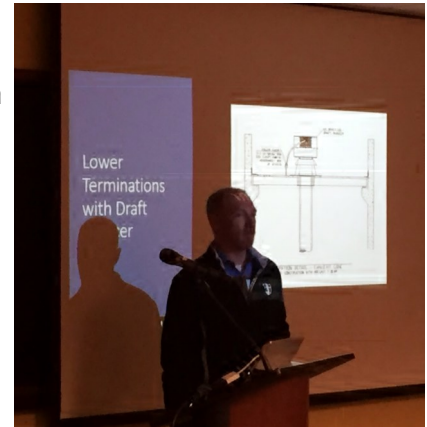
February Meeting Recap

By: Andrew Krenning

The February ASHRAE Boston Chapter meeting was held at the Metro Meeting Center in downtown Boston. It was the first meeting in our Boston location in the 2016/2017 year and we had great turnout and attendance from old and new faces. The evening was kicked off by a great networking and social hour presented by Siemens Building Technologies as our event and drink sponsor. The meeting was officially kicked off by ASHRAE Boston President William Tang who welcomed everyone in attendance to the first annual I²SL New England joint meeting. Ken Crooks, the Vice President of the I²SL New England Chapter, spoke and thanked everyone for their hospitality and being supportive of the joint meeting. He talked about the chapter and some of their goals specifically around the national convention that will be in Boston in October of 2017. He urged anyone working with and in laboratories, science and technology and critical environments to visit the website at <http://www.i2sl.org/conference/2017/index.html> to learn more about the event.



Then, Michael Gilroy President Elec for the ASHRAE Boston Chapter got up to introduce the main meeting speaker. Jim Coogan, P.E., is a Principal in product development at Siemens Building Technologies. In 35 years designing controls for mechanical systems, he has contributed to products ranging from room controllers to Internet-based interfaces. Jim has chaired several ASHRAE committees and is listed as one of ASHRAE’s Distinguished Lecturers. Jim participates in programs with the International Institute for Sustainable Labs. Publications include technical papers on room pressurization and laboratory ventilation. Jim earned his BS in mechanical engineering at MIT. Mr. Coogan opened the presentation talking about the DL program and how everyone can get involved at the local and national level and how that can make a difference. Then, he rolled right into his presentation on Space Pressurization: Concepts and Practices. In the presentation he discussed ventilation control design for critical pressurized spaces



such as laboratories, clean rooms and health care facilities. He touched on the basic physics of pressurization, through air flow control technology and detailed different design procedures. He focused on teaching the basics associated with pressurization as a tool for contamination control and how to recognize the effect of the room/ space envelope on the successful pressurization scheme. Within this topic, there were various ways to select the appropriate control method for a particular application and how to design around the many pressurization details for effective contamination control. If you have any questions on the presentation or specific items discussed, please feel free to reach out to me and I can put you in contact with Mr. Coogan.

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.



BOG Meeting Minutes

By: Mark Leonard

Meeting started at 4:26 PM

General Business

- January meeting minutes were approved.
- ABC discussed current outstanding registration fee invoices.
- ABC has rescheduled the Annual Social at The Kinsale. Event to be held on Thursday, March 9th from 5:30-8:30 PM.
- ABC Motioned to approve Gene Bard as this year's Hall of Fame candidate.
- ABC will be holding this year's brewery tour at Night Shift on Wednesday, April 26th from 5:30-8:30 PM.
 - Event will be limited to 100 people.
- ABC began discussions for a new event called Speed Networking
 - Anticipated to start in the 2017-2018 ASHRAE year
- ABC will host a private Corporate Sponsor Appreciation Event in March for the thirteen (13) generous companies who helped support the ABC this year.
- Chapter finances were discussed.

February Meeting

- February meeting is a joint meeting with I2SL at Metro Meeting Center
 - 90 confirmed registrants
 - Event sponsored by Siemens
 - Main speaker is Jim Coogan (distinguished lecturer)

March Meeting

- March meeting is a joint meeting with AEE
 - AEE to host ASHRAE Boston Chapter

Meeting adjourned at 4:53 PM



MEMBERSHIP PROMOTION

By: Dan Carington

Hello Members, Congrats to the New England Patriots, they are five time Super Bowl winners if you haven't heard, yay! Just quick updates with our membership count, as of February 22, 2017, we currently are 1052 members strong. Our net growth goal is to top 1059 members by the beginning of July 2017. Our membership seems to always fall in just about the beginning of the new year, so please review your membership status and see if your membership is due to expire about that time period. We have but four more months in the fiscal 2016-17 to retain our members and see our goal of 1059 members skyrocket beyond the goal.

Please help me welcome our latest new members since our February newsletter by giving them a warm welcome;

- | | | | |
|------------------------|---------------------|----------------------|-------------------------|
| Mr Robert Rieckelman | Patricia Kelly | Mr Lucas Rowe | Mr Neil Schurko |
| Vishal Patwari | Ms Caroline Mueller | Mr James J Walton | Mr Matthew Whitmore |
| Mr Steve Cusmin | Mr Duncan Fuller | Mr Jose Javier Ayala | Mr Maxwell Thomas King |
| Mr Simon M vonNieda | Mr Brian Hellrigel | Mr Nadim Chakroun | Mr Benjamin James Pepin |
| Mr Stephen J McCormack | | | |

Welcome, we are so looking forward to seeing you at our next Boston ASHRAE meeting or event. Any comments or questions, please feel free to contact me at dcarington@brplusa.com

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
1052	745	660	820	540	895	125	550	4335

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: \$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: March 17, 2017

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

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HISTORICAL NEWS

By: Eric Edman



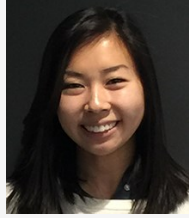
At the February meeting, our group received some very helpful suggestions for historical topics.

We have decided to write one of these up, and publish this, it is a work in progress. This will be available by next month- for the April edition.

There are no other major news announcements.

We always look forward to seeing you at our monthly meetings.

Eric



STUDENT ACTIVITIES

By: Yuka Narisako

Our April monthly meeting will be the second of our ASHRAE Boston Chapter Student Nights, so I am looking forward to seeing a high participation rate of student members at this upcoming meeting! Please feel free to chat with me about summer internships and plans after graduation for graduating seniors! ASHRAE's employment page posts employment positions available, both full time and internships, and I highly encourage our Student Members to check it out at <http://jobs.ashrae.org/>.

I'm very excited to announce that our Northeastern University Student Branch members will be participating in the U.S. Department of Energy Race to Zero Student Design Competition. The Northeastern University Student Team is the only team participating from Massachusetts this year. The team is challenged with designing a 2,250SF net zero energy urban single-family home for low-income residents in Roxbury, MA.

The competition will be held at the National Renewable Energy Lab in Golden, Colorado on April 22-23 with the students presenting to industry jurors. The Northeastern University team is looking for sponsorships and funding from fellow ASHRAE members to cover costs for flights, hotels, and living expenses for the 4 students travelling to Colorado. In return, the team will highlight the contribution of ASHRAE Boston Chapter during their presentation. The team is requesting \$3000 for their costs. Please reach out to Zhenyu Xue at xue.zhe@husky.neu.edu if interested in sponsoring the Northeastern University team at this competition! It is incredibly refreshing to see such a motivated team of students in our field!

Please feel free to reach out to me at coo1sa@ashrae.net with any questions you might have.





ASHRAE Recognizes Members for Outstanding Industry and Society Achievements

Jan 28, 2017

ATLANTA – Fifty-five people were recognized for their contributions to ASHRAE and the industry at the Society’s 2017 Winter Conference, Jan. 28-Feb. 1, in Las Vegas, Nev.

Fellow ASHRAE is a membership grade that recognizes members who have attained distinction and made substantial contributions in HVAC&R such as education, research, engineering design and consultation, publications and mentoring. The Society elevated 22 members to the grade of Fellow:

- Charles S. Barnaby, Life Member, BEMP, a building software developer, Moultonborough, N.H.
- Charlene Warres Bayer, Ph.D., chairman and chief science officer, Hygieia Sciences LLC., Atlanta, Ga.
- Michel Bernier, Ph.D., P.E., a professor, Department of Mechanical Engineering, Polytechnique Montreal, Quebec.
- James J. Bushnell, Life Member, owner, HVAC Consulting Services, Solana Beach, Calif.
- Thomas D. Colvin, P.E., Life Member, senior consultant, Colvin Engineering Associates Inc., Salt Lake City, Utah.
- John F. Dunlap, P.E., BEAP, BEMP, CPMP, HBDP, HFDP, president, Dunlap & Partners Engineers, Richmond, Va.
- Steven J. Emmerich, group leader, Indoor Air Quality and Ventilation Group, National Institute of Standards and Technology, Gaithersburg, Md.
- Krishnan Gowri, Ph.D., principal engineer, Generative Design Group, Autodesk, Inc., San Francisco, Calif.
- John L. Harrod, P.E., Life Member, HFDP, Edmond, Okla.
- Eliseo Huergo, Ing., Life Member, president, Termair S.A., Buenos Aires, Argentina.
- Julia Keen, Ph.D., P.E., BEAP, HBDP, professor, Kansas State University, Manhattan, Kan.
- Thomas M. Lawrence, Ph.D., P.E., coordinator, Mechanical Engineering Program, University of Georgia, Athens, Ga.
- Zoltan Magyar, Ph.D., head of the Department of Building Energetics and Building Service Engineering,

Budapest University of Technology and Economics, Budapest, Hungary.

- David R. Olson, P.E., vice president, PCD Engineering Services Inc., Longmont, Colo.
- Richard L. Pavlak, P.E. president, Heapy Engineering, Dayton, Ohio.
- Michael Rosenberg, senior research scientist, Pacific Northwest National Laboratory, Richland, Wash.
- Timothy A. Shedd, Ph.D., CEO and CTO, Ebullient Inc., Madison, Wis.
- Carey J. Simonson, Ph.D., P.E., professor, Department of Mechanical Engineering, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.
- Robert L. Towell, P.E., commissioning program manager and vice president, CxE Group LLC., Edwardsville, Ill.
- Phillip M. Trafton, Life Member, principal, Donald F. Dickerson Associates, Tarzana, Calif.
- R. Vijayakumar, Ph.D., consultant in chief/founder, Aerfil LLC., Liverpool, N.Y.

Fu-Jen Wang, Ph.D., P.E., professor, Department of Refrigeration, Air Conditioning and Energy Engineering, National Chin-Yi University of Technology, Taichung City, Taiwan.

The ASHRAE Technology Awards recognize outstanding achievements by ASHRAE members who have successfully applied innovative building designs. Their designs incorporate ASHRAE standards for effective energy management and indoor air quality and serve to communicate innovative systems design. Winning projects are selected from entries earning regional awards. First place recipients are:

- Kitaro Mizuide, Ph.D., P.Eng., general manager of mechanical and electrical engineering division, NIKKEN SEKKEI Ltd., Osaka, Japan, receives first place in the new commercial buildings category for the YKK8o Building, Tokyo. The building is owned by YKK Real Estate Co. Ltd.
- Adam C. S. Wheeler, P.E., principal, Sherrill Engineering Inc., San Francisco, Calif., receives first

[Continued on Next Page —](#)

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place in the existing building commissioning, other institutional buildings category for the University of California, San Francisco, Parnassus Services Seismic Replacement Building MBCx. The building is owned by the University of California, San Francisco.

- Bradford Crowley, P.E., associate principal, Ballinger, Philadelphia, Pa., receives first place in the new educational facility category for the Johns Hopkins University Undergraduate Teaching Laboratories, Baltimore, Md. The building is owned by Johns Hopkins University.
- Julien Allard, Eng., mechanical engineer, project manager and shareholder, Bouthillette Parizeau, Montreal, Quebec, receives first place in the new industry facilities or processes category for the Construction du Centre de transport Stinson, Montreal. The building is owned by the Societe de transport de Montreal (STM).
- Kurt Monteiro, P.Eng., HFDP, HBDP, Smith + Andersen, Toronto, Ontario, receives first place in the new health care facilities category for Humber River Hospital, Toronto. The building is owned by the hospital.
- Brian Rose, P.E., mechanical engineer, CMTA Inc., Cincinnati, Ohio, and Tracy Steward, mechanical engineer, CMTA Inc., Louisville, Ky., receive first place in the new commercial buildings category for the Cincinnati District 3 Police Headquarters – Net Zero Energy Building, Ohio. The building is owned by the City of Cincinnati.
- Shannon M. Allison, Integral Group, Oakland, Calif., receives first place in the existing commercial buildings category for 435 Indio Way, Sunnyvale, Calif. The building is owned by Huettig and Schromm Inc.

The 2016 Student Design Competition focused on a new 2-story municipal government building in Beijing, China.

First place in the HVAC Design Calculations category is awarded to the University of British Columbia. Team members are Alexander Brosky, Samarth Joshi, Aubrey McNeill, Silvia Odaya, Cheng Yang and Ziran Yu. Faculty advisors are Nima Atabaki, Ph.D., P.Eng., and Steven Rogak, Ph.D., P.Eng., while the industry advisor is Ali Nazari, P.Eng., BEMP, principal, Integral Group.

First place in the System Selection category is awarded to California State Polytechnic University, Pomona. Team members are Miro Zaroukian, Asped Khachatoorian, Christian Garcia, Sevan Hovsepian and Tade Mirzakhanyan. Advisors are Henry Xue, Ph.D., and Richard L. Gilbert, P.E., California Energy Designs Inc.

First place in the category of Integrated Sustainable Building Design is awarded to a team from the University of Central Florida. Team members are Logan G. Harrell, Gerald Hornik, Austin B. Christianson, Travis Kalikaperaud and Jeremy Palavecino. The faculty advisor is Muthusamy V. Swami, Ph.D., and the technical advisor is Nathaniel B. Boyd, P.E., CPMP.

The Applied Engineering Challenge for 2015-2016 required students to plan, develop and enact solutions to sustainability issues in their local or regional areas.

For the Applied Engineering Challenge, recipients are from the University of Regina, Saskatchewan – Bradley E.R. Lulik, Eva Rennie and Brent Yeske. Their faculty advisor is Adisorn Aroonwilas, Ph.D.

The E.K. Campbell Award of Merit honors an individual for outstanding service and achievement in teaching and is presented by the Life Members Club. The recipient is Thomas H. Kuehn, Ph.D., P.E., Fellow ASHRAE, Life Member, professor emeritus, Department of Mechanical Engineering, University of Minnesota, Minneapolis.

The John F. James International Award recognizes a member who has done the most to enhance the Society's international presence. The recipient is Gerald C. Groff, Fellow ASHRAE, Life Member, retired president/CEO, Marquardt Switches Inc., Cazenovia, New York.

The Milton W. Garland Commemorative Refrigeration Award for Project Excellence recognizes a non-comfort cooling refrigeration application that highlights innovation and/or new technologies in a unique manner. The recipient is Claude Dumas, P.Eng., Life Member, project engineer and an expert in skating rink refrigeration systems, City of Montreal, Montreal, Quebec.

The Comfort Cooling Award for Project Excellence recognizes the designer and owner of a comfort cooling application that highlights innovative and/or new technologies. The recipient is Andy Pearson, Ph.D., C.Eng., Fellow ASHRAE, group manager and director, Star Refrigeration Ltd., Glasgow, United Kingdom.

The ASHRAE Pioneers of Industry Award recognizes deceased individuals who have made milestone contributions to the growth of HVAC&R. Recipients are Carl Georg Munters (1897-1989), a founder of Munters AB whose inventions were based on simple heat and mass transfer with no refrigerants or compressors; and Frederick Wittenmeier (1863-1928), a pioneer in development of carbon dioxide refrigerant systems and their application to comfort cooling for public buildings.

Honorary Members, elected by the Board of Directors are defined as notable persons of preeminent professional distinction. The recipient is Stephen T. Ayers, FAIA, architect of the Capitol, Architect of the Capitol, Washington, D.C.



By: Lance Brown

According to a Green Economy survey by GreenBiz following the November elections, most businesses do not foresee significant slowdowns in their sustainability strategies. Of the companies surveyed, 60% said that the changes in Congress and the White House would have no impact on their strategy, whereas 34% anticipated a slowdown.

Although the survey did not point to reasons for this confidence, there are several factors favoring the march toward sustainability that transcend federal politics. To name a few: (1) the overwhelming cost-effectiveness of energy efficiency enhancements, (2) the persistently low cost of natural gas as a result of the fracking boom, (3) a precipitous drop in the cost of photovoltaic panels, (4) state governments, including Massachusetts, that have progressive energy policy that will likely be unaffected by changes in federal policy, and (5) consumers who reward companies' steps toward sustainability by purchasing their products and services.

Real estate departments for major corporations are still showing strong interest in adding zero net energy (ZNE) buildings to their portfolios, according to a report from CoreNet Global. This is despite uncertainty at the federal level and despite today's relatively low energy costs. ZNE projects are on the rise in large part due to the decline in the cost of solar, but efficient building systems are also necessary for a cost-effective ZNE project, as we learned at the October ASHRAE Boston meeting.

This month's joint ASHRAE-AEE meeting will touch on some of the factors driving the use of distributed electricity generation, including building-scale solar projects.

ASHRAE BOSTON UPCOMING EVENTS

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

March Meeting

When: March 1, 2017
Where: Embassy Suites, Waltham

Annual Social

When: March 9, 2017
Where: The Kinsale

Sponsor Recognition Event

When: March 30, 2017
Where: Post 390

ASHRAE YEA Annual Cornhole Tournament

When: March 31, 2017
Where: Baseball Tavern Boston, MA

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
www.afe74.org

USGBC Massachusetts Chapter
www.usgbcma.org

AEE New England Chapter
www.aeenewengland.org/

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



RESEARCH PROMOTION

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 dollars' worth of research. More than 80 research projects worldwide received support from ASHRAE because of your investment. We've begun the 2016-2017 Campaign and I hope we can once again count on your support of ASHRAE Research this year. The Boston Chapter goal for 2016-2017 is \$25,001, Region I goal \$188,000 and society goal is \$2.6 million. We have raised \$12,629.00 so far with \$12,372.00 remainder to go.



Thank you to following Donors:

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 Victory Heating & Air Conditioning
 Walsh Mechanical Contractors

As always, you may also make your investment online at www.ashrae.org/donate. If you are interested in donating in other ways, 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.

- Also you can find 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 a solicited research project, go to <https://www.ashrae.org/standards-research-technology/research>.
- If you are interested in donating to ASHRAE Research, 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.suh@dxseng.com.

Stacie Suh /RP Chair 2016-2017
[Email](#)

FREE SUNDAY RIVER & SUGARLOAF DISCOUNT SKI VOUCHERS, SAVE \$10 PER TICKET

The Boston Chapter is participating in the Sunday River/Sugarloaf corporate voucher program again this year. Each voucher entitles you to purchase up to four discounted lift tickets at either ski resort by presenting an ASHRAE membership card, picture ID, and voucher. The discount is \$10 per ticket for all age groups. Contact Ed Waldman, ewaldman1@verizon.net, and the voucher will be e-mailed to you. You can make as many copies as you like.. There is no charge for the vouchers and there are no blackout dates. Complete rules below:

How To Use Vouchers

1. Bring your corporate voucher to any participating resorts ticket window.
2. Present your voucher, photo ID, and valid ASHRAE membership card to the ticket seller. In the absence of the individual member, immediate family members defined as spouse and children, must present some form of ASHRAE identification, plus a photo ID in order to receive the discount.

Each person expecting the corporate pricing must be present with the corporate voucher holder at the time of ticket purchase. The ticket seller will take the voucher in exchange for up to 4 lift tickets.

Winter Season 2016/2017 Corporate Voucher

Present your **Corporate Voucher**, photo ID (driver's license, etc.) and valid company ID (company ID, business card, pay check stub, letter on company letterhead) to the ticket seller. In the absence of the individual directly employed by or member of the participating company, immediate family members, defined as spouse and children, must present the **Corporate Voucher**, some form of corporate identification (business card, pay stub, or letter from employer), plus a photo ID. Young children do not need a photo ID to receive the corporate discount.

Corporate Program Pricing: **\$10 OFF**



**American Society of Heating,
Refrigeration & A.C.
Engineers**



Corporate Voucher is valid for 4 ticket vouchers.

Boyer Reward Points are given to the company participating in the corporate program and cannot be redeemed by the individual participants

<http://sugarloaf.com/the-mountain/daily-report>

<http://www.sundayriver.com/TheMountain/MountainReport/index.asp>

Las Vegas Proves Big Winner for ASHRAE, AHR Expo and Industry

ATLANTA – The 2017 ASHRAE Winter Conference and the AHR Expo saw record attendance with industry collaboration a strong focus of the events.

The 2017 ASHRAE Winter Conference took place Jan. 28-Feb. 1 at Caesars Palace with the ASHRAE co-sponsored AHR Expo held Jan. 30-Feb. 1 at the Las Vegas Convention Center. The two events exceeded their record-breaking attendance from the Conference and Expo that were held in Las Vegas in 2011.

In total, 3,579 people attended the Conference, making it the most well attended Winter Conference in recent years. The attendees represented 58 countries and included 537 first-timers.

The AHR Expo set several records, including attendance of more than 68,000 registered visitors and exhibitor personnel, as well as 500,159 square feet sold. The Show was by far the largest and best attended Expo in the Western states, with some 1,968 exhibiting companies.

The Conference also saw several collaborative efforts and agreements with associations and organizations from around the world.

“Partnering with allied organizations and associations better allows us to harness and adapt new technologies, which we can all use in working toward a more sustainable environment,” ASHRAE President Tim Wentz said. “By working together, we can create a worldwide best practices databank of innovative and successful technologies that can serve the built environment community.”

ASHRAE signed memoranda of understanding with several groups, including the United Nations Development Programme (UNDP), the Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) and Association of German Engineers (VDI-GBG). The Society also signed a strategic partnership agreement with the Chartered Institution of Building Services Engineers (CIBSE) and the Federation of European Heating, Ventilation and Air-Conditioning Associations (REHVA). In addition, it updated its Work Plan with the United Nations Environmental Programme (UNEP).

As part of the event, the Clean Climate and Air Coalition (CCAC) held a Sustainable Technologies for Stationary Air Conditioning Workshop focused on climate-friendly and cost-effective air conditioning technologies. ASHRAE is an actor with CCAC.

At the Conference, Wentz provided updates on several Society initiatives and programs of importance to the industry.

Among them was creation of a new ‘ASHRAE University’ educational platform, which will locate all of ASHRAE’s educational products in one place where users can select the products to meet their professional goals. Additionally, a personal dashboard is built into the new platform allowing users to track their progress toward their goals. The new platform can be found at www.ashrae.org/elearning.

ASHRAE also has launched a new Technology Portal at www.ashrae.org/technologyportal. This gives ASHRAE members an easy, fast method of connecting to the latest information generated by ASHRAE’s research program. It serves a central body of knowledge for ASHRAE technology and research products. It provides access to more than 1,700 Journal articles published since 1997 and more than 600 final reports from ASHRAE research projects.

Wentz, an associate professor at the University of Nebraska – Lincoln, also shared an update on a new, online internship job board. The new internship portal is found on ASHRAE’s website at <http://jobs.ashrae.org>.

“I am big supporter of internship programs in that they are the easiest and most effective way to show students the importance of our work and why we are so passionate about what we do,” he said. “Check it out and start looking for the next generation of engineers for your firm.”

The Conference Bookstore featured several new standards of importance to the industry, including ANSI/ASHRAE/IES Standard 90.1-2016, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, ANSI/ASHRAE 15-2016, *Safety Standard for Refrigeration Systems*, and its sister standard, ANSI/ASHRAE 34-2016, *Designation and Safety Classification of Refrigerants*, as well as User’s Manuals for ANSI/ASHRAE Standard 62.1-2016, *Ventilation for Acceptable Indoor Air Quality* and ANSI/ASHRAE Standard 62.2-2016, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*.

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The ASHRAE Learning Institute saw overall record attendance with top attended courses being Variable Refrigerant Flow System: Design & Applications, Designing High-Performance Healthcare HVAC Systems, Understanding & Designing Dedicated Outdoor Air Systems, Laboratory Design: The Basics and Beyond, and Designing Toward Net-Zero Energy Commercial Buildings.

The Technical Program featured some 350 presentations and 300 speakers. Top attended sessions included Blue Is the New Green: The Water-Energy “Next Is,” Did It Really Work: Theory vs. Practice in Residential HVAC, Hydronic Water Flow Measurement, Recent Research in Data Center Cooling, When Good Valve Sizing Goes Bad, What Fire and Safety Engineers Have Learned Since the MGM Grand Fire in Las Vegas and What Are Present Day Fire and Life Safety Codes and Applications, Fresh Insights on Building Automation: A Seminar by the YEA Group, Modern Optimization Techniques for Hydronic Systems in Data Centers, Advancements in Ground Source Heat Pump Design, Energy Management: A Crucial Component of Operations and Maintenance, Commissioning a Central Chilled Water Plant and Data Driven Energy Auditing, Measurement and Verification.

The 2017 ASHRAE Annual Conference will take place June 24-28 in Long Beach, Calif., with the 2018 Winter Conference Jan. 20-24, and the AHR Expo, Jan. 22-24, in Chicago, Ill.

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 57,000 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.

SAVE THE DATE!

for the

2017 ASHRAE Golf Tournament

Date: June 5, 2017

Time: 1:00 PM

Location: The Country Club of Halifax

100 Country Club Drive, Halifax, MA

ASHRAE Learning 2017 Online Course Series

REGISTRATION

One-part course (3 hours):
\$284 (\$219 ASHRAE Member)

Two-part courses (6 hours):
\$484 (\$359 ASHRAE Member)

[Register](#)

MULTIPLE PARTICIPANTS

Site Licenses are Available when five or more attend. [Learn More >>](#)

TIME FRAME

All courses are presented from 1:00 - 4:00 PM, Eastern Time.

General Information

Information about the ASHRAE online course series. [Learn More >>](#)

Note: Course fees listed above are per person for a single presentation connection for individual use and may not be shared with other users. All registrants must individually register for the desired course to participate and receive continuing education credit.

All courses are archived for a period of time after their initial presentation.

Receive a 10% discount on the PDF format of the Recommended Reference. (Discount is included in item prices on registration form.)

Two-Part Half-Day Short Course List

The following course carries 6 CEU/PDH credits and is comprised of two parts. Registrants must attend both parts in order to receive CEU/PDH credits. Archiving is available.

Note: Course fees listed are per person for a single presentation connection for individual use and may not be shared with other users. All registrants must individually register for the desired course to participate and receive continuing education credit.

Nov 1, 2017

New! [Complying with Standard 90.1-2016, Parts I and II, ES Practices](#)

The 2016 update of ASHRAE Standard 90.1 Energy Standard for Buildings is a major revision, containing more than 125 changes from the 2013 version. Together, Standards 90.1-2007, 90.1-2010, 90.1-2013 and 90.1-2016 produce almost 40% energy savings from the 2004 version. The 2016 edition offers a si...

Half-Day Short Course List

The following courses each carry 3 CEU/PDH credits. Archiving is available.

Note: Course fees listed are per person for a single presentation connection for individual use and may not be shared with other users. All registrants must individually register for the desired course to participate and receive continuing education credit.

Mar 9, 2017

New! [Fundamental Requirements of Standard 62.1-2016 IAQ Practices](#)

This course will also be offered on Wednesday, September 6, 2017. This introductory course focuses on the basic requirements of ASHRAE Standard 62.1-2016, Ventilation for Acceptable Indoor Air Quality. The course covers the scope, application and multiple compliance paths available in the standa...

Mar 29, 2017

[Design of Affordable and Efficient Ground Source Heat Pump Systems](#)

This course describes the best design practices of ground source heat pump systems to achieve maximum customer benefit. The course examines the economic analysis of ground source vs. more traditional systems and what is necessary to design an effective and efficient ground source system. The course...

Apr 5, 2017

New! [Complying with Standard 90.1-2016: Envelope/Lighting ES Practices](#)

ASHRAE's Standards 90.1-2010 and 90.1-2013 together produce almost 40% energy savings from the 2004 version, with the envelope and lighting requirements contributing substantially to these reductions. This course focuses on the importance of the

2016-2017 Meeting Schedule

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

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