



VOLUME 10, ISSUE 3

NOVEMBER, 2015

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## November ASHRAE Meeting

**Topic:** Environmental Quality in High Performance Buildings **(PDH Approved!)**

**Presenter:** Mr. Brian Monk, ASHRAE Distinguished Lecturer

**When:** Monday November 9, 2015

**Time:** 12 PM with Buffet Lunch Served

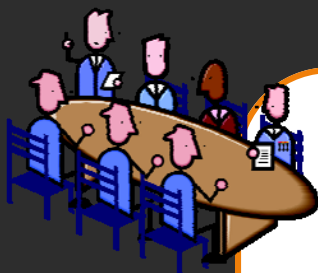


**Where:** Mario's Italian Steakhouse  
2740 Monroe Ave, Rochester

**Cost:** \$25.00

Please RSVP by noon Friday, November 6th to Tim Duprey  
[tim.duprey@pres-services.com](mailto:tim.duprey@pres-services.com) or [tduprey@rochester.rr.com](mailto:tduprey@rochester.rr.com)

Statements made in this publication are not expressions of the Society or of the chapter and may not be reproduced without special permission of the chapter.



## Chapter Officers

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Christina Walter  
585-486-2148  
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## ASHRAE 2015-2016 Meeting Schedule

Date	Event	Theme	Location
Monday, 11/9/2015	Environmental Quality in High Performance Buildings (presented by Brian Monk P.E., Racan) *** Distinguished Lecturer ***	Resource Promotion	Mario's @ 12:00 PM
Monday, 12/14/2015	Control Systems - Ways to Identify Performance Issues (presented by Day Automation)		Mario's @ 12:00 PM
Monday, 1/11/2016	Operation and Applying Drives (presented by Kevin Diehl - Yasawa America, Inc.)		TBD @ 12:00 PM
Friday, 2/5/2016	Annual ASHRAE Valentines Dinner Dance (Colgate Rochester Crozer Divinity School)	---	TBD @ 12:00 PM
Monday, 2/8/2016	Building Load Analysis (presented by Robert Feduik, Carrier Corporation)	Membership Promotion	TBD @ 12:00 PM
Monday, 3/14/2016	Chapter Facility Tour (University of Rochester - Strong Hospital Central Plant)	---	Strong Hospital @ 5:00 PM
Monday, 4/11/2016	Retro-Commissioning Existing Buildings (presented by Al Rodgers & Ron Sanger)	Pending	TBD @ 12:00 PM
Monday, 5/9/2016	Annual ASHRAE Golf Outing and Picnic (Ravenwood Golf Course)	---	9:30 AM Golf 4:30 - 8:00 Picnic

## Mission Statement

ASHRAE will advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related human factors to serve the evolving needs of the public and ASHRAE members.



Shaping Tomorrow's  
Built Environment Today

## Vision Statement

- will be the global leader in the arts and sciences of heating, ventilation, air conditioning and refrigeration.
- will be the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines.
- will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.

# President's November Message

## November President's Message:

Let me start by recapping the awards that the Rochester Chapter received at the 2015 CRC, of which were handed out at our September Clambake meeting:

ASHRAE Community Sustainability Project Plaque: **Ed Burns**

Presidential Award of Excellence (PAOE) for Sustainability Excellence Certificate:

**Ed Burns**

Newsletter - Black Ink Award Honorable Mention Plaque: **Scott Edwards**

Outstanding Performance Chapter Programs Honorable Mention Plaque: **Christina**

**Walter**

Research Promotion - Exceeding Goal Certificate,

Bronze Treasury Ribbon: **Paul Kenna**

Research Promotion – Full Circle Chevron: Rochester Chapter



*Christina Walter, 2015-2016 President*

I would like to thank Mr. **Andrew Randolph** of LTG, Inc. for presenting on Chilled Beams at our October lunch meeting. This topic was well received and enjoyed by all. Our November meeting will be held on November 9<sup>th</sup>. We have many things planned for the November meeting. ASHRAE Distinguished Lecturer, Mr. **Brian Monk** of Carrier Racan, will be presenting on Environmental Quality on High Performance Buildings. Mr. **Bill Walter**, ASHRAE Region I DRC (Director & Regional Chair), will visit us to share the latest news from Region and Society. Lastly, this meeting will be a Resource Promotion event, a time to recognize last year's Major Donors and to thank all for their contributions. We hope to see you at our November meeting. Come and enjoy *Making Connections*!

Please continue to check out our website at [www.rochester.ashraechapters.org](http://www.rochester.ashraechapters.org) for information on upcoming chapter meetings, current officer list and contact information, our current newsletter and more! Or if Facebook is your preferred method of communication take a moment to 'like' us at [www.facebook.com/#!/ashraerochester](https://www.facebook.com/#!/ashraerochester).

Christina Walter  
2015-2016 President - Rochester Chapter



# Highlights from October ASHRAE Meeting



*(Left) Andrew Rudolph of LTG, Inc. leads a discussion on Chilled Beam on October 13th.*



*Jeff Close and Andrew Rudolph (right) pull a name for the 50/50 raffle.*

# November Meeting Info

Please consider joining us for this upcoming monthly meeting and/or please forward this e-mail to anyone you may think would be interested in attending or benefit from this presentation.

## November ASHRAE Meeting << PDH APPROVED >>

**Date:** Monday, November 9, 2015

**Location:** Mario's Italian Restaurant

**Time:** 12:00 PM Lunch Buffet ... Presentation to start approx. 12:30pm

**Cost:** \$25.00

**Speaker:** Brian Monk. Carrier Racan \*\*\* ASHRAE Distinguished Lecturer \*\*\* <see Bio below>

**Topic:** Environmental Quality in High Performance Buildings

**Note:** (1) PDH

Remember, as an option, we have on-line payments available via PayPal. (no PayPal account required)

<< Pay for Meeting Registration online via PayPal >>

Use the following link: <http://rochester.ashraechapters.org/meetings.html>

Cash or check payment is still accepted at the door with your reservation.

Please RSVP no later than noon Friday November 6th to Tim Duprey

Phone: 585.330.6430 or e-Mail ... [ASHRAERochester@gmail.com](mailto:ASHRAERochester@gmail.com), [tim.duprey@pres-services.com](mailto:tim.duprey@pres-services.com) or [tduprey@rochester.rr.com](mailto:tduprey@rochester.rr.com).

**Brian Monk** is responsible for UTC Climate-Control-Security Custom Air Handling Solutions, specializing in design of air treatment systems, including airborne contaminant control and dedicated outdoor air systems with energy recovery.

Previously Mr. Monk was Director of Sales / Marketing for Carrier Corporation's custom air handling division. During this period Mr. Monk was also an instructor for Carrier University's Sustainability Symposiums under the International Association for Continuing Education and Training (IACET) program which provides CEU Credit for Professional Engineering Licensure in the USA.

His academic background comprises of a college degree in Applied Science (Building Systems Engineering Technology) from Vanier College of Montreal and a Bachelor of Building Engineering from Concordia University of Montreal. He is a Registered Professional Engineer with the Province of Quebec, Canada, and the Association of Professional Engineers and Geoscientists of British Columbia, Canada.

Mr. Monk is an ASHRAE Distinguished Lecturer, Member of Committee TC 2.3 Gaseous Air Contaminant Removal Equipment, and TG HVAC Security. He is also a Part-Time Professor at Concordia University, in the Faculty of Building, Civil and Environmental Engineering, as well as Vanier College, Building Systems Engineering Technology.



This section of the newsletter is reserved for those firms wishing to advertise their desires to hire from the Chapters Membership.

If you are interested in utilizing this FREE service provided by the Rochester Chapter, please contact our Chapter President, Christina Walter 585-486-2148 or by email [cmwalter@trane.com](mailto:cmwalter@trane.com).

This service is available to ASHRAE members for any local firm in our industry looking for knowledgeable persons in the HVAC&R industry.

## Presidential Award Of Excellence



Download



Achievements

Chapter:

Fiscal Year:

▶ Chapter Operations	Par: 1000	Min Points: 400	Total Points: 300
▶ Chapter Technology Transfer	Par: 1050	Min Points: 450	Total Points: 400
▶ Grassroots Government Advocacy	Par: 650	Min Points: 500	Total Points: 0
▶ Historical Criteria	Par: 300	Min Points: 100	Total Points: 0
▶ Membership Promotion	Par: 800	Min Points: 500	Total Points: 385
▶ RP	Par: 1050	Min Points: 800	Total Points: 0
▶ Student Activities	Par: 500	Min Points: 300	Total Points: 0

## Like us on Facebook!



Visit our new Facebook page by searching for "ASHARE Rochester" on Facebook. Any ideas for additions or improvements email to Mark Kukla at [mark@airsystemsbalancing.com](mailto:mark@airsystemsbalancing.com). Keep up to date with current events and photos from recent meetings.

## Committee Chairs Updates

### Research Promotion

Monday is ASHRAE's Research Promotion and donor recognition meeting. The ASHRAE Rochester Chapter would like to thank all donors for their generous support of ASHRAE Research during the 2014-15 campaign. ASHRAE research benefits us all, from energy efficiency to indoor air quality to green solutions and more. Research donations are an investment in our region and the future of our industry. Thanks again for all your support and we look forward to seeing you at Monday's meeting.

### Membership Promotion

#### ASHRAE Rochester Chapter- Membership Promotion

Please remember to take a few minutes to make sure that your profile is up to date at [www.ASHRAE.org](http://www.ASHRAE.org). Maybe you've changed jobs? email address? or would like to advance your membership (i.e. Associate Member to Member). Keeping this information current ensures that you get the most value out of ASHRAE.

There is also a lot of emphasis this year to attempt to do as much of our Membership Renewals and New Member Applications online to decrease the amount of paperwork for the Society and make the process "Greener." If you have any questions or need assistance with any Membership Issues, please let me know.

Thank you, and as always, thank you for your support for ASHRAE.

Sincerely,

Jake Hall

Membership Promotion Chair



# Board of Governors Meeting Minutes

Rochester Chapter - ASHRAE  
Board of Governors Meeting  
October 8<sup>th</sup>, 2015 7:30 AM  
Location: Trane, 75 Town Centre Dr.  
Rochester, NY 14623

President / CRC Alternate	Christina Walter	X
President Elect / Program	Jeff Close	X
Secretary	Bill Clark	
Treasurer	Paul Kenna	X
Immediate Past President / CRC Delegate	Ed Burns	X
Board of Gov. (1)	Steve Dear	X
Board of Gov. (1)	Sam Scorsone	
Board of Gov. (2)	Branden Farnsworth-Weinblatt	X
Board of Gov. (2)	Tom Streber	
Board of Gov. (3)	Mike Benedict	
Board of Gov. (3)	Scott Edwards	
Attendance	Tim Duprey	X
Historian	Lee Loomis	
Membership Promotion	Jake Hall	
Newsletter Editor	Scott Edwards	
Resource Promotion	Matt Devlin	X
Awards	Al Rodgers	
CTTC	Jeff Wiedrick	
Education	Bill Murray	
Publicity	Mark Kukla	X
Website	Kevin Wind	
YEA Chair	Matt Kremers	
Student Activities	Chris Lukasiewicz	X
Nominating (2 <sup>nd</sup> Past President)	Michelle Sommerman	
Picnic/Golf Chair	Jim Browe	
Buyers Guide	Marianne Schumacher	C
Valentine's Dinner Dance	Jody M. McGarry	
Chapter Tech Energy & Govt Activities	Tom Burke	
Refrigeration	Mike Nohle	

# Board of Governors Meeting Minutes

**Roll Call:** The above noted individuals were present.

**Call to Order:** 7:37 AM

## Meeting Minutes:

1. Call to Order Chris Walter
2. Roll Call Bill Clark
3. President Elect / Program Jeff Close
  - Next (2) meetings are PDH approved
  - See newsletter or RES for meeting schedule
4. Approval of previous meeting's minutes All
  - Motion to accept by Jeff Close
  - Second by Ed Burns
5. Treasurer's Report 2015/2016 Paul Kenna
  - Paul distributed the Treasurer's Report dated 10-8-2015
  - Clambake balance = -\$874.14
6. Committee Reports
  - Technology Transfer Committee Program/Tech Sessions Jeff Wiedrick
    - Technology Transfer
      - Sam Scorsone submitted the transit center application to the Society level. Winners will be announced the week of October 19<sup>th</sup>.
  - Membership Jacob Hall
    - No report this month
  - Student Activities Chris Lukasiewicz
    - Mark Kukla is going to a MCC class next week and will put a pitch in for ASHRAE.
  - Education Bill Murray
    - OCT & NOV presentations are approved for PDH's.
  - YEA Matt Kremers
    - Planning meeting at the end of the month @ Sticky Lips, on Jefferson 10/23 @ noon.
    - Brandon volunteered to teach and host tech sessions.
  - Awards & Recognition Al Rodgers
    - Encourage members to go on ashrae.org and update your bio.
  - Resource Promotion Matt Devins
    - Nov. 15<sup>th</sup> = Full Circle Donations
    - RP Recognition Meeting = NOV
  - Refrigeration Mike Nohle
    - Sam Scorsone to join the Refrigeration committee.
  - Chapter Tech Energy & Govt Activities Tom Burke
    - We are looking for a few people to create a TEGA committee.
  - Newsletter Scott Edwards
    - No report, newsletter updates to be submitted by 10/16.
  - Buyers Guide Marianne Schumacher
    - Inserting an article to the newsletter and putting information on website.

# Board of Governors Meeting Minutes

- Attendance Tim Duprey
    - Clambake = 126 dinners & 205 dozen clams
    - OCT current reservations = 31
    - Pay Pal issues have been resolved.
  - Historian Lee Loomis
    - Add article in newsletter along with photos of this years historian exhibit.
  - Publicity Mark Kukla
    - Sent some chapter photos to society.
  - Website Kevin Wind
    - Create a shortcut to send out invitations or save the date for meetings / events.
  - Nominating Ed Burns
    - MOPS update last year to change nominating to electronic communication.
  - CRC 2016 General Chair Jim Browe
    - Narrowing in on main dinner venue (Thursday).
    - Finalizing budget & schedule
    - Identifying areas where others can support
7. Old Business Campus
- Audit Committee - Fall
  - Log PAOE points in monthly - **Chris to send out instructions**
  - Each person should create their own MBO and goals for this year. This doesn't need to be extreme. Keep it clear and attainable. **Due 10/30 to Chris.**
  - Create/Update your Biography on [www.ASHRAE.org](http://www.ASHRAE.org) website
  - CRC 2016 in Rochester, August 18-20
8. New Business
- Grass Roots community project possibilities, STEM Outreach
    - i. Reach out to Rob Hudson about local STEM day.
9. Next BOG meeting: Monday, November 9, 10:00 am @ Marios (DRC visit - Bill Walter)
10. Adjourn 8:42 am



# ASHRAE Student Membership Application

## What You'll Get With Your ASHRAE Student Membership!

### What's "Cool" In ASHRAE

- ASHRAE promotes energy efficiency, savings and recovery
- ASHRAE reports on building controls, automation and integration
- ASHRAE focuses on green building issues and green technology
- ASHRAE maintains standards for indoor air quality
- ASHRAE promotes solar and other alternative energy sources
- ASHRAE offers certification programs, online learning opportunities and courses and seminars at ASHRAE Conferences

### How Can ASHRAE Help You?

- Provide access to new technology
- Offer professional development opportunities
- Create opportunities for networking
- Offer online continuing education programs and eLearning programs

### Student Member Benefits

- Access to members-only web pages
- Discounts on ASHRAE Handbooks
- Monthly ASHRAE Journal - print and digital
- HVAC&R Industry and Society Connections eNewsletters
- Complimentary ASHRAE Annual and Winter Conference registration (AHR Expo, Student Program, Technical Sessions)
- Virtual online HVAC&R resume posting, job and internship searching program

### ASHRAE Student Member Opportunities

- Society and chapter-level scholarships for both undergraduate and graduate engineering students
- Discounts for student members on select publications, go to [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore) for more information
- Student Design Competition
- Networking with local ASHRAE Chapters
- Senior Undergraduate Project Grant Program
- At the student branch level, you'll enjoy meeting other students with similar interests - if your school hasn't yet started a student branch, take charge and contact a faculty member and ask for help on getting started!

You can continue your student membership after college with the ASHRAE SmartStart Program. After you graduate, you pay \$20 for the first year, \$50 for the second and the third years before advancing to regular member dues!

**Join ASHRAE students on Facebook  
Visit [www.ashrae.org/students](http://www.ashrae.org/students) to join!**





\*Checks will be accepted in U.S and Canadian funds. Credit Card payments will be accepted in U.S. funds only.



# ASHRAE Learning Institute

## Seminars & Courses at ASHRAE's Winter Conference in Orlando, FL

### 2 WAYS TO REGISTER

Internet: [www.ashrae.org/orlandocourses](http://www.ashrae.org/orlandocourses)

Phone: Call 1-800-527-4723 (US and Canada) or 404-836-8400 (worldwide)

### Full-Day Professional Development Seminars

\$485/\$395 ASHRAE Member -- Earn 6 PDHs/AIA LUs or .6 CEUs

**Commercial Building Energy Audits**  
Saturday, January 23, 2016 -- 8:00 a.m. to 3:00 p.m.

**Commissioning Process in New & Existing Buildings**  
Saturday, January 23, 2016 -- 8:00 a.m. to 3:00 p.m.

**Designing HVAC Systems to Control Noise & Vibrations**  
Saturday, January 23, 2016 -- 8:00 a.m. to 3:00 p.m.

**Energy Modeling Best Practices and Applications**  
Tuesday, January 26, 2016 -- 9:00 a.m. to 4:00 p.m.

**Operations & Maintenance of High-Performance Buildings**  
Tuesday, January 26, 2016 -- 9:00 a.m. to 4:00 p.m.

### Half-Day Short Courses

\$159/\$119 ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

**Laboratory Design: The Basics and Beyond**  
Sunday, January 24, 2016 -- 3:30 p.m. to 6:30 p.m.

**Troubleshooting Humidity Control Problems**  
Sunday, January 24, 2016 -- 3:30 p.m. to 6:30 p.m.

**Understanding & Designing Dedicated Outdoor Air Systems**  
Sunday, January 24, 2016 -- 3:30 p.m. to 6:30 p.m.

**Variable Refrigerant Flow System Design & Applications **NEW!****  
Sunday, January 24, 2016 -- 3:30 p.m. to 6:30 p.m.

**Air-to-Air Energy Recovery Applications: Best Practices**  
Monday, January 25, 2016 -- 8:30 a.m. to 11:30 a.m.

**Applications of Standard 62.1-2013**  
Monday, January 25, 2016 -- 8:30 a.m. to 11:30 a.m.

**Building Demand Response & the Coming Smart Grid**  
Monday, January 25, 2016 -- 8:30 a.m. to 11:30 a.m.

**Energy Management Best Practices**  
Monday, January 25, 2016 -- 8:30 a.m. to 11:30 a.m.

**Advoiding IAQ Problems**  
Monday, January 25, 2016 -- 2:45 p.m. to 5:45 p.m.

**Commissioning Process & ASHRAE Standard 202**  
Monday, January 25, 2016 -- 2:45 p.m. to 5:45 p.m.

**Complying with Standard 90.1-2013: HVAC/Mechanical**  
Monday, January 25, 2016 -- 2:45 p.m. to 5:45 p.m.

**Evaluation and Control of Legionella in Building Water Systems **NEW!****  
Monday, January 25, 2016 -- 2:45 p.m. to 5:45 p.m.

**Exceeding Standard 90.1-2013 to Meet LEED Requirements**  
Monday, January 26, 2016 -- 9:00 a.m. to 12:00 p.m.

**IT Equipment Design Evolution & Data Center Operation Optimization**  
Monday, January 26, 2016 -- 9:00 a.m. to 12:00 p.m.

**Designing High-Performance Healthcare HVAC**  
Monday, January 26, 2016 -- 1:00 p.m. to 4:00 p.m.

## ASHRAE HVAC Design Training

### 2 Courses, 5 Days of Intense Instruction

Atlanta • Halifax • Hong Kong • Houston

Kuala Lumpur • Miami • Minneapolis • Vancouver

### HVAC Design: Level I – Essentials - Registration is \$1,264 (\$1,009 ASHRAE Member)

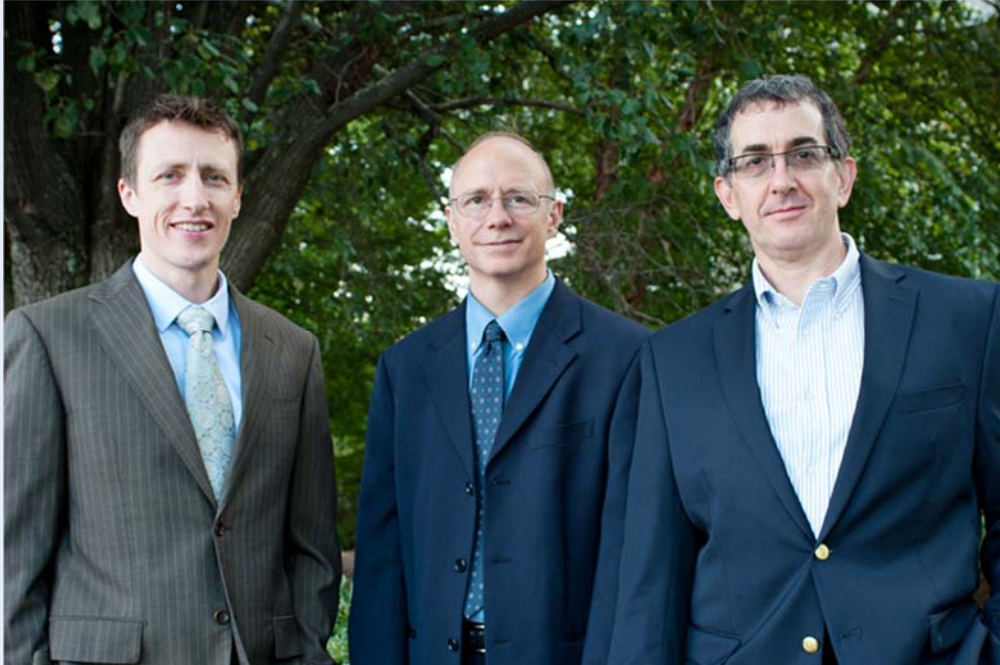
Gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

### HVAC Design: Level II – Applications - Registration is \$854 (\$699 ASHRAE Member)

*HVAC Design: Level II — Applications* provides instruction on HVAC system design for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. The training provides information that allows practicing engineers and designers an opportunity to expand their exposure to HVAC systems design procedures for a better understanding of system options to save energy.

Visit [www.ashrae.org/hvactraining](http://www.ashrae.org/hvactraining) to register.

## **Coming April 2016 - Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox.**



Save the date for the April 21, 2016 ASHRAE Webcast - Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox. This webcast will feature industry experts who will define the importance of, and why we should strive for, net zero in the built environment. Viewers will be able to identify behaviors that create more effective ownership, design and construction teams, and will recognize the value of a collaborative process in building design and the impact on costs. With a strong emphasis on real-world applications, the program will also discuss the primary technical and financial challenges in achieving net zero buildings, and where this design approach can best be applied.

*<https://www.ashrae.org> and select Memberships & Conferences, "WEBCASTS"*



# 2016 ASHRAE Winter Conference

Jan. 23–27 | Orlando Hilton | Orlando, Fla.

*New Technical Program Tracks, Networking,  
World's Largest HVAC&R Marketplace*

Special first time attendee registration fee available! Low, early-bird registration rates end Nov. 2. Register early! Registration to the ASHRAE Winter Conference includes free access to the AHR Expo!

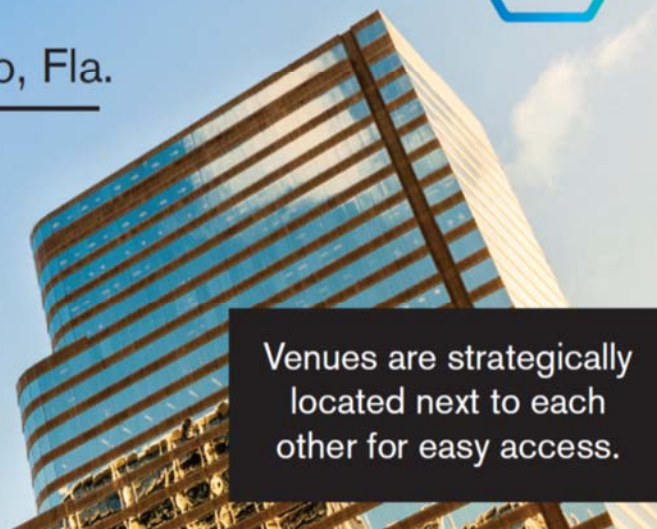


## 2016 AHR Expo

Jan. 25–27 | Orange Co.  
Conv. Center | Orlando, Fla.



Venues are strategically  
located next to each  
other for easy access.



2016 **AHR EXPO** JAN 25-27  
ORLANDO

ORANGE COUNTY CONVENTION CENTER | CO-SPONSORS



# ASHRAE Region I 2015-2016

## Executive Committee & Society Contacts

### Region Director & Regional Chair

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### Region Nominating Committee Member

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### Region Student Activities

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### Region Treasurer

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### Region Programs RVS

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# ASHRAE Region I 2015-2016

## Executive Committee & Society Contacts

### **Region Nominating Committee**

#### **Alternate**

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### **Region Membership Promotion**

Steven Sill  
NYS Office of People with  
Developmental Disabilities  
2930 State Route 104A  
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(718) 494-5133  
stevesill1966@hotmail.com

### **Region Grassroots Gov't Affairs**

Richard E Vehlow, PE  
NYS OGS Design  
10 Catherine Pl  
Latham, NY 12110-5204  
(518) 474-2471  
rev1969@gmail.com

### **Region Members Council Rep**

Joseph L Furman  
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16 Country Way  
Wallingford, CT 06492-5356  
(203) 678-2208  
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### **Region Refrigeration**

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## Tips for ASHRAE Scholarship Applicants

### Make sure ...

- You meet all applicable criteria
- You read the application carefully and answer all questions completely and honestly.
- The application and all required documents are submitted or postmarked on or before the applicable deadline.
- Your application is NEAT, legible (typed or handwritten clearly), and proper English (correct grammar and spelling) is used when responding to essay questions.
- To take time to submit a brief, non-required introductory cover letter
- You are clear and thorough when stating goals and financial need.
- You contact the nearest ASHRAE chapter for an interview with the Student Activities Chair or other officer to learn more about the Society.
- You find out if your school hosts an ASHRAE student branch.
- You contact ASHRAE headquarters if you have any questions and to ensure your application has been completed and submitted properly.



More information on the scholarship and details on how to apply can be found at [www.ashrae.org/scholarships](http://www.ashrae.org/scholarships).

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# News

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## Updates on ASHRAE Standards, Publications Featured in 2016 Winter Conference Tech Program

ATLANTA – The most up-to-date information on the standards that guide industry technology, along with presentations focused on upcoming ASHRAE publications, is featured at the ASHRAE 2016 Winter Conference.

The ASHRAE Conference takes place Jan. 23-27, Orlando Hilton, while the ASHRAE co-sponsored AHR Expo takes place Jan. 25-27, next door at the Orange County Convention Center. To register for the ASHRAE Conference, which includes free access to the Expo, visit [www.ashrae.org/orlando](http://www.ashrae.org/orlando). Information about the Expo can be found at [www.ahrexpo.com](http://www.ahrexpo.com).

The Technical Program features eight tracks, some 100 sessions and more than 300 speakers. It runs Sunday, Jan. 24 through Wednesday, Jan. 27, and offers over 200 Professional Development Hours, as well as Continuing Education Units, which can be applied toward a Professional Engineering license in many states, including the state of Florida.

Among the sessions are several providing updates on ASHRAE and industry standards and publications.

“Since ASHRAE is the leader in HVAC&R standards and guidelines, these sessions are a hot topic for attendees,” Jennifer Leach, Conference chair, said. “This year, we will focus on some international standards like EU Qualicheck and the International Institute of Refrigeration as well as ASHRAE standards related to environmental quality, energy and Legionella. Attendees can use the information shared through the Technical Program while walking the Expo floor to see how it directly impacts the development of technology.”

Among the standards addressed in the program are ANSI/ASHRAE Standard 205, *Standard Representation of Performance Simulation Data for HVAC&R and Other Facility Equipment*; ANSI/ASHRAE Standard 188-2015: *Legionellosis: Risk Management for Building Water Systems*; the ICC/ASHRAE 700 National Green Building Standard; the *International Green Construction Code* (IgCC) sponsored by ASHRAE, the American Institute of Architects, the International Code Council, the Illuminating Engineering Society and the U.S. Green Building Council and its inclusion of ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1, *Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings*; and bi-national ground loop heat exchanger/ground-source heat pump standards.

Publication updates include the *Combined Heat and Power Design Guide* (slated for publication in May 2015), the *Cold Climate Buildings Design Guide*, and the ASHRAE Survival Guide to Design-Build.

The Conference also features several innovative sessions in the Cutting Edge and International Design tracks as well as residential programs, numerous refrigerant update presentations, especially on low global warming potential, and fundamentals, applications, systems and equipment sessions.

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 54,000 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](http://www.ashrae.org/news).

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## Cold Climate Challenges Addressed in New Publication from ASHRAE

ATLANTA – Buildings in arctic and subarctic climates face not only challenges related to cold but also remoteness, limited utilities, permafrost and extreme temperature shifts. Designers must meet these challenges while keeping occupants comfortable and minimizing impact on the environment.

The newly published “Cold-Climate Buildings Design Guide” from ASHRAE provides information on the issues commonly faced by designers in these climates. The idea for the guide came from a working session at the 7<sup>th</sup> International Cold-Climate Design Conference held in 2012 and co-sponsored by ASHRAE, SCANVAC and REHVA.

“Harmonizing human comfort with the climatic realities of these environments is a balancing act,” Erich Binder, who oversaw the writing of the guide, said. “Strategic design is key to building, commissioning and operating efficient and long-lasting cold-climate structures.” A cold climate is defined by a combination of factors that create a unique set of building design challenges. These factors include temperature, frozen precipitation, wind, humidity, thermal comfort, thermal envelope/enclosure, maintainability, permafrost and frozen ground and remote building locations.

Following are tips from several committee members for designing, operating and maintaining buildings and systems in cold climates:

- What happens when building air exfiltrates a building envelope in cold weather is similar to what happens in cooling coils in hot humid weather – understanding psychometrics is essential to understanding building envelope performance in cold climates.
- The colder the climate, the more important it is for critical equipment to be sheltered – you can’t expect service personnel to properly repair HVAC equipment in a winter blizzard.
- In extreme climates, windblown snow takes on a consistency similar to sand and requires special design techniques to keep it from getting into the HVAC intakes.
- The manual also covers the design impacts from non-mechanical components of a facility such as the building envelope and roof construction. For instance, snow and ice sliding down of a metal roof can shear off mechanical roof penetrations as well as hoods on the exterior wall below.
- A building envelope must address all modes of heat loss to be truly efficient; ignoring any mode of loss may lead to excessive thermal transfer.
- Frost can be devastating for HVAC equipment, blocking intake hoods, filters, coils, etc.
- Design out cold bridges in both building fabric and engineering penetrations.
- Avoid or minimize any external service pipe runs.
- Locate air inlets and exhausts in locations that avoid snow drift and blockage.
- Ensure condensing pipes never freeze and block.
- Provide safe access to roof mechanical plants in all weathers – frozen roof surfaces can be a hazard.

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Frank Mills, who helped write the guide, noted that the book applies to all climates that have a heating season, not just the very cold ones.

“We do cover the extreme cold climates very well, but we also have very useful information for any buildings which have heating for part of the year,” he said. “This covers a lot of climate regions – including Europe where I am.” In addition to cold-climate considerations in HVAC calculations and system design, this book’s chapters cover sustainability, controls, building design, and commissioning, all from this distinctive climatic perspective. The book also includes an appendix with seven case studies of buildings located in cold and extreme cold climates. These buildings are leaders in their field with regard to both efficiency and cold-climate design.

The cost of the “Cold-Climate Buildings Design Guide” is \$90 (\$77, ASHRAE members).

To order, visit [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore) or contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide) or fax 678-539-2129.

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## **Deadline Extended for ASHRAE and IBPSA-USA SimBuild 2016 Conference Papers**

ATLANTA – ASHRAE and IBPSA-USA announce the deadline for submitting a paper abstract has been extended until Oct. 23 for the ASHRAE and IBPSA-USA SimBuild 2016 Conference: Building Performance Modeling.

The co-organized conference takes place Aug. 10-12, 2016, Salt Lake City, Utah. There is currently an open call for papers until Oct. 23.

Modelers, software developers, owners and researchers will address the practices of energy modeling and building performance simulation using existing simulation tools, software development, and future simulation research and applications.

The conference seeks papers on the following topics:

- Energy efficiency
- HVAC component modeling and load analysis
- Urban scale modeling
- Lighting and daylighting
- Combined use of tools
- Co-simulation
- Optimization
- Algorithm advances
- Computational fluid dynamics
- Data exchange and interoperability
- Energy auditing
- Life cycle cost and economic analysis
- Model calibration and validation
- Automation and scripting
- Modeling of tall buildings
- Weather data for modeling
- Occupant comfort
- Heat, air, moisture modeling
- Uncertainty analysis
- Big data applications for large scale simulations
- Reality capture for modeling
- Data visualization and user experience

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## ***Continued from previous page***

In addition, papers describing workarounds, case studies, how to's, challenges, barriers and cloud-based solutions are encouraged. Abstracts (400 or less words in length) are due Oct. 23, 2015. If accepted, papers are due Jan. 15, 2016. The conference papers will be a maximum of eight pages in length.

To submit an abstract or for more information, visit [www.ashrae.org/simbuild2016](http://www.ashrae.org/simbuild2016).

A call for presenters will be announced after the call for papers closes. Invited speakers and keynote speakers will be announced.

The conference will cover two-and-a-half days and will be preceded by two days of training seminars and short courses. 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 50,000 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. For more information, visit [www.ashrae.org/news](http://www.ashrae.org/news).

IBPSA-USA is the United States regional affiliate of the [International Building Performance Simulation Association \(IBPSA\)](http://www.ibpsa.org). The mission of IBPSA-USA is to advance and promote the science of building simulation in order to improve the design, construction, operation and maintenance of new and existing buildings in the United States.

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## **ASHRAE LowDown Showdown Modeling Challenge Highlights Industry's Creativity**

ATLANTA – When the smoke cleared and the dust settled at the ASHRAE “LowDown Showdown,” organizers declared the overall “winner” to be the building industry, which will reap the benefits of knowledge shared at the event.

ASHRAE’s LowDown Showdown was featured at the Society’s “Energy Modeling Conference: Tools for Designing High Performance Buildings,” held Sept. 30 to Oct. 2, 2015, in Atlanta, Ga. Eight teams with 45 people participated in the modeling challenge and presented their models to conference attendees.

“While it wasn’t exactly the Wild West, there were a lot of ideas flying around and impassioned discussion among attendees,” Dennis Knight, Conference chair, said. “The LowDown Showdown proved to be a big draw and a big success. Hopefully attendees will take the knowledge learned back to their jobs and use it to further the industry in energy modeling.”

The LowDown Showdown complimented the conference’s focus on the practical application of high performance building modeling. The Showdown challenged teams to model a net zero or better than net zero building. It gave team members the opportunity to work with the vendor/developer of their choice to showcase their abilities using the vendor’s simulation tools, innovative workflows and creative problem solving to model a high performance building while having fun. The teams participating in the LowDown Showdown were:

- Autodesk
- Carrier HAP
- DesignBuilder
- EnergyPlus
- eQuest
- IES
- Sefaira
- Trane TRACE

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## *Continued from previous page*

"From the very beginning, the Steering Committee's intent when creating the challenge was to encourage participation, demonstrate tools' usage in modeling buildings and have the teams present their models before their peers and colleagues within a 'fair play' environment for the benefit of all participants and vendors," Knight said. "I really want to acknowledge all of the participants for their time and leadership that they devoted to their models – they are all to be commended for their successful projects."

The modeling challenge included four categories for "judging" the models by live polling from the audience and the Steering Committee.

Knight said, "In retrospect all of the teams could have been recognized but it was decided to recognize the following:

- Best Energy Use Results – TEAM IES;
- Best Innovative Workflow – Team DesignBuilder;
- Best Team Work – Team Trane TRACE; and
- Most Creative – Team eQuest."

Team's models are highlighted at [www.ashrae.org/emc2015](http://www.ashrae.org/emc2015).

"We learned a lot in doing this for the first time," he said. "The extremely positive feedback from the LowDown Showdown participants and the conference attendees leads us to decide to organize another modeling challenge at the next ASHRAE conference."

ASHRAE and IBPSA-USA SimBuild 2016 Conference: Building Performance Modeling takes place Aug. 10-12, 2016, Salt Lake City, Utah. There is currently an open call for papers until Oct. 23. For more information or to submit an abstract, visit [www.ashrae.org/simbuild2016](http://www.ashrae.org/simbuild2016).

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 50,000 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.

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## Design Build Sessions Offered by ASHRAE at AHR Expo

ATLANTA – Four sessions focused on design build are being offered for free at the AHR Expo as part of the ASHRAE 2016 Winter Conference.

The Conference takes place Jan. 23-27, Orlando Hilton, while the ASHRAE co-sponsored AHR Expo takes place Jan. 25-27, next door at the Orange County Convention Center. To register for the ASHRAE Conference, which includes free access to the Expo, visit [www.ashrae.org/orlando](http://www.ashrae.org/orlando). Information about the Expo can be found at [www.ahrexpo.com](http://www.ahrexpo.com).

The Technical Program features eight tracks, some 100 sessions and more than 300 speakers. It runs Sunday, Jan. 24 through Wednesday, Jan. 27, and offers over 200 Professional Development Hours, as well as Continuing Education Units, which can be applied toward a Professional Engineering license in many states, including the state of Florida.

Four sessions are being offered at no cost at the AHR Expo. The three seminars and one workshop are all part of the Design Build track. “ASHRAE is always looking for opportunities to improve the Technical Program, and at the same time, to include the theme of the Society president,” Jennifer Leach, Conference chair, said. “ASHRAE President David Underwood spent much of his career as a design-build contractor and suggested the Design Build track. Offering these programs at the Expo is a win-win given its close proximity to ASHRAE Conference at the hotel next door. ASHRAE gets an opportunity to reach out to its contractor members and engineers now have another reason to attend the Expo.”

The sessions are:

- Don't Call it a Comeback! The New and Improved Design-Build Survival Guide, 11 a.m.- noon, Tuesday, Jan. 26. ASHRAE published its “Survival Guide to Design-Build” in 2004. Since that time, the design build delivery method has exploded. In this seminar, speakers provide a first look at the new, improved and updated Design-Build Survival Guide.
- Avoiding Pesky Pitfalls Integrating Seismic and Sound Control, 1-2 p.m., Tuesday, Jan. 26. This session addresses the advantage of integrating seismic compliance and sound control early in the design build process. Design of building systems for seismic, wind, sound and vibration control generally occurs later in the project, with the feeling that it is not essential to the design of the HVAC, controls, electrical or other system. However, when this seemingly non-essential item is overlooked, the cost to meet code compliance and/or owner demands often becomes more than budgeted. Speakers discuss how to avoid these pitfalls.
- Design-Build for DDC: Yes, It Works! No, It Doesn't! A Healthy Debate by Two Experts, 2:30-3:30 p.m., Tuesday, Jan. 26. Those who recommend design build for every situation need to be careful. When it comes to direct digital controls (DDC), design build may not be the best solution. Some general contractors claim that the controls subcontractor is no different than the drywall subcontractor, and if a design build delivery method works for one, it should work for all. One speaker in this session feels strongly that a design build scenario is the best solution for today's DDC systems, while the other speaker begs to differ.
- How Does the Criterion Engineer's Role Affect the Design Build Contractor's and Design Build Engineer's Roles during All Phases of a Design Build Project?, 3:45-5:15 p.m., Tuesday, Jan. 26. Building owners often retain a criterion engineer to establish the initial design criteria for a project. The engineer creates documents that are handed off to a design build contractor. After this, the role of the engineer can vary. This seminar discusses issues that can arise as the owner and design build contractor interpret the bridging documents and how open or closed a line of communication is with the engineer during all phases of a design build project.

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## **ASHRAE Celebrates Future of Engineering Innovation as Solar Decathlon Sponsor**

ATLANTA – Innovative systems and interaction with future leaders of the built environment industry were among the highlights for ASHRAE members who took part in the recent U.S. Department of Energy Solar Decathlon.

As a sponsor, ASHRAE helped fund events at the Decathlon, which took place Oct. 8-18, 2015, at Orange County Great Park in Irvine, Calif. ASHRAE has been involved in the event for some 10 years.

The Decathlon challenges collegiate teams to design, build and operate solar-powered houses that are cost-effective, energy-efficient and attractive. Stevens Institute of Technology won top honors overall, sweeping all four juried categories, by designing, building, and operating the most cost-effective, energy-efficient and attractive solar powered house.

ASHRAE provided a judge on the engineering jury, with other juries focused on architecture, market appeal and communications. Ginger Scoggins, P.E., is ASHRAE Region IV director and regional chair on the Board of Directors. Michael J. Brandemuehl, Ph.D., P.E., a former director-at-large on the ASHRAE Board of Directors also served as a judge.

"It was extremely enjoyable," Scoggins said. "The enthusiasm of the students and the systems that they included in their houses were very innovative! These kids worked on these houses for two years and raised money to cover the costs of construction and shipment, which ran in the \$300,000 range for most of the homes."

Scoggins said some of the innovative systems she saw included:

- Houses designed to withstand natural disasters (100 percent waterproof up to 4' above grade)
- Windows with the same thermal resistance as typical building walls
- Grey water and rainwater collection and treatment systems, some with heat recovery
- Radiant heating and cooling systems – both floors and ceilings
- Evaporative cooling systems that displace and enhance conventional air conditioners
- Lots of heat pump technologies for both water heating and space conditioning
- Phase change material for energy storage
- Thermal energy storage using water tanks, including one integrated with rainwater collection
- A freeze tolerant solar water heating system
- Integrated solar PV and water heating equipment
- PV cells integrated into awnings and building glass
- A forward looking electrical system with both AC and DC distribution
- A variety of smart home energy monitoring, control, and dashboard systems

ASHRAE also sponsored a lunch for teams based in its Region X, which included the University of California, Irvine; Chapman University; Irvine Valley College; and Saddleback College.

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Authors are invited to submit papers on the following topics and others appropriate to the Conference theme:

- Definitions and metrics
- Perception vs. performance
- Monetization of IAQ
- DALY (disability adjusted life years) and related approaches
- Task performance/productivity
- Integrated IEQ metrics
- Regulatory vs. voluntary compliance for achieving IAQ
- IAQ certification programs
- Low energy/high performance buildings and IAQ
- IAQ in sustainable building programs
- Interactions: IEQ, climate change, energy efficiency
- Monitoring
- Sensors and big data
- Post occupancy evaluations
- Best practices
- Case studies with data
- Design, construction, operation
- Commissioning
- Ventilation and infiltration
- IAQ, energy and moisture impacts
- Mechanical and natural ventilation performance
- IEQ and natural ventilation
- IAQ and building/ductwork airtightness
- Residential IAQ standards and policies
- IAQ in Developing Economies
- IAQ in mobile environments: aircraft, trains, ships, motor vehicles

Abstracts are due Nov. 30, 2015. Upon acceptance, papers are due March 14, 2016.

The conference program will include internationally acclaimed keynote speakers, original peer reviewed papers and the latest in indoor environmental quality control, plus invited speakers, workshops and panel discussions. A call for presenters will be announced after the call for papers closes. Invited speakers and keynote speakers will be announced.

The Indoor Air Quality Association and the Indoor Environmental Quality Global Alliance are partnering organizations.