

# ASHRAE Rochester



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NOVEMBER 3, 2014

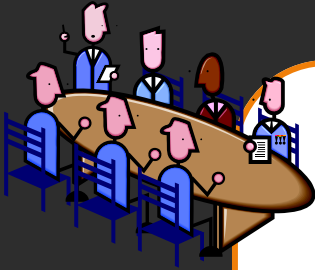
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### ASHRAE 2015 Winter Conference Jan. 24-28, 2015 Chicago

ASHRAE's 2015 Winter Conference will be held Jan. 24–28, at the Palmer House Hilton in Chicago. The ASHRAE-cosponsored AHR Expo will be held Jan. 26–28, at McCormick Place. At the conference, attendees have the chance to discuss and examine the latest topics in the building industry; network; participate in technical tours; attend ASHRAE Learning Institute courses; earn professional credits; and obtain ASHRAE certifications. The Technical Program features more than 100 sessions and 300 speakers in eight tracks. Also, continuing education courses at the conference will provide more than 200 Professional Development Hours, as well as Continuing Education Units.





## Chapter Officers

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ASHRAE 2014-2015 Meeting Schedule				
Date	Event	pdh / Theme	Location	Schedule
11/10/14	Vibration Isolation - HVAC Noise and Vibration Control Mr. Dick Sherren, Kinetics Noise	Available	Mario's	12:00 PM
12/08/14	Freeze Block Technology Mr. Bob Cooney, Cooney Coil and Energy	Available	Mario's	12:00 PM
01/09/15	Tour of 'Gene Polisseni Center' Ice Rink followed by an RIT Men's Hockey Game RIT Tigers vs American International	---	RIT	TBD
TBD	Annual ASHRAE Valentines Dinner Dance	---	Colgate Rochester Crozer Divinity School	7:00 PM
02/09/15	Air Flow Measurement, IAQ and Building Pressure Control Mr. Jim Riendeau, Ebtron	Available	Mario's	12:00 PM
03/09/15	TBD	---	Mario's	12:00 PM
04/06/15	Ethical Decision Making Barry Benator, PE, CEM - Benator, Inc. ASHRAE Distinguished Lecturer	Available	Mario's	12:00 PM
05/11/15	Annual ASHRAE Golf Outing and Picnic	---	Ravenwood Golf Club	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 Message

Fall is officially upon us,

At our lunch meeting on October 6<sup>th</sup> Mr. Bob Bechtold, HARBEC Plastics presented on the subject of Sustainability, Cogen Energy, Economics of Energy in Manufacturing and Challenges of Delivering Energy Across Lot Boundary Lines. This meeting was very well received and enjoyed by all who attended. Thank you Bob for the excellent program content and presentation.

Mark Kukla our Rochester Chapter Publicity Chair had the following statement regarding the presentation:

“Everyone really enjoyed your presentation yesterday at Mario’s. The work that you have done in the last fifteen years to move sustainable manufacturing forward is incredible. I just think that if more people did what you are doing, our country would be in a lot better shape. I will bet that some people will move in that direction after yesterday’s presentation.”

During this meeting I also had the honor of presenting Mr. Dave Porter, Bergman Engineering with a regional technology award. This award was chosen from multiple submissions from within ASHRAE Region I. The project submitted was Green Data Center Free Air Design and Heat Recovery System at RIT.

Highlights of Dave’s award winning design included:

- Decrease in energy demand
- Increase of heat transfer to adjacent labs
- Reduction of greenhouse gas emissions
- Improvement of indoor air quality when compared to traditional data center design

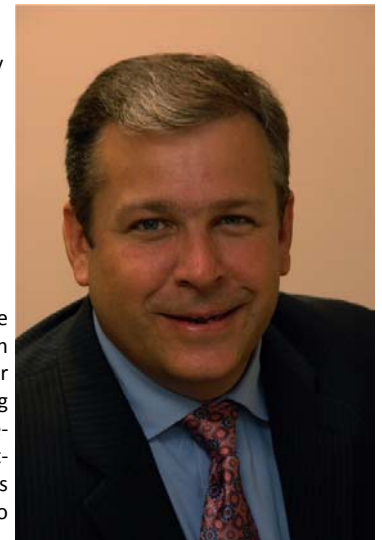
Also at this meeting we had attendance from our student chapter at MCC. I would like to thank Bill Horton from MCC and Chris Lukasiewicz our Student Activities Director for coming up with some exciting new opportunities for our student members.

This year the Rochester ASHRAE chapter has been invited to participate as a sponsor in the Finger Lakes First LEGO League Challenge. This exciting program encourages children to engage in team work, science, and technology. And compete against teams throughout our region. We have also been invited to participate in a program that the Seneca Waterways Explorers Council is interested in starting this year, an engineering competition at the high school level, where kids can come and learn about some aspect of engineering and different professions in the area. If you are interested in volunteering at either of these events please contact Ed Burns.

Are you planning on attending this year’s ASHRAE 2015 Winter Conference in Chicago, January 24<sup>th</sup>-28<sup>th</sup>? Chicago also serves as the site of the AHR Expo, January 26<sup>th</sup>-28<sup>th</sup>, co-sponsored by ASHRAE and held in conjunction with the Winter Conference. It’s not too early to plan your trip if you are planning to attend?

Do you know someone or does your firm have an intern that may be considering an ASHRAE scholarship? ASHRAE is currently accepting applications for 8 regional/ chapter and university-specific scholarships and 12 undergraduate engineering scholarships. Through its scholarships, ASHRAE seeks to motivate students and prospective students worldwide to pursue an engineering or technology career in the HVAC&R field. The Society’s Scholarship Program also serves the public interest by aiding in the education of men and women to become qualified to practice as engineers in HVAC&R. ASHRAE is seeking your assistance in making student members aware of this financial assistance.

Our November lunch meeting will take place November 10<sup>th</sup> at Mario’s on Monroe Ave. The program topic will be Vibration Isolation - HVAC Noise and Vibration Control presented by Mr. Dick Sherren Kinetics Noise. Thank you to Chris Walter our Chapter President Elect and program chair for the excellent work in preparing this year’s program topics and content. I have to say the program content presented at our Clambake and the program presented recently at our October meeting have been excellent. If you have not been able to join us yet at a meeting this year please consider joining us as the presentations have been outstanding. So check on the ASHRAE website, and I hope to see you all there.

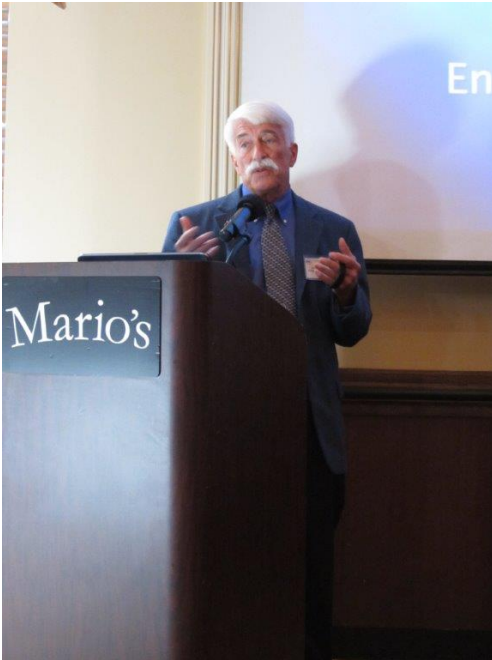


**Ed Burns, 2014-2015 President**

Edward J. Burns  
Rochester ASHRAE President

# Rochester Chapter Meetings

## Highlights from October ASHRAE Meeting



Bob Bechtold, President of HARBEC Plastics Inc., gives his presentation on Sustainability, Cogen Energy, Economics of Energy in manufacturing, and Challenges of delivering energy across lot boundary lines.

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## ASHRAE November Meeting info

### November ASHRAE Meeting (1 PDH approved)

**Monday, November 10, 2014**

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

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

**Cost:** \$25.00

**Speaker:** Mr. Richard Sherren, PE, Chief Product Engineer, Kinetics Noise Control

**Topic:** Vibration Isolation for HVAC

Please RSVP by noon Thursday, November 6th to  
Tim Duprey [tduprey@rochester.rr.com](mailto:tduprey@rochester.rr.com)



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, Ed Burns 585-739-7548 or by email [ejb@mechtechvac.com](mailto:ejb@mechtechvac.com).

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

## Rochester Chapter Committee Chairs Updates

### CTTC Tech Awards



Dave Porter, Mechanical Leader from Bergmann Associates accepted the ASHRAE Regional Technology Award of Engineering Excellence for the RIT Institute Hall Green Data Center at the October Chapter meeting.

The project won the award for ASHRAE Region 1 which covers New York, New Jersey, and New England. The Green Data Center uses an innovative free air design and energy recovery to minimize energy consumption. If you see Dave, congratulate him on his achievement!

## 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.

# Membership

## 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

# Young Engineers of ASHRAE (YEA)

Our first YEA tech session was October 23rd on Water Treatment. We had a great turnout. The next class will be announced In a few weeks.

Please consider joining us for casual networking with other young engineers. More information will be sent via email. If you would like to be added to the email list, contact Matt Kremers ([mkremers@mcsmms.com](mailto:mkremers@mcsmms.com)).

## 2014-2015 Presidential Award of Excellence Summary

Chapter #	Chapter Name	Chapter Members	Member Promotion	Student Activities	Research Promotion	Chapter Technology Transfer	History	Chapter Operations	Chapter PAOE Totals
11	Rochester	238	275	0	40	0	0	0	315

# Student Activities

## STUDENT ACTIVITIES



### Do you know the benefits of being an ASHRAE Student Member?

- **Monthly ASHRAE Journal** exploring issues such as indoor air quality, energy management, solar developments, and more.
- **ASHRAE Insights** monthly newspaper devoted to news and information about the Society at every level including news of special interest to students.
- **The HVAC&R Industry eNewsletter** for weekly industry news and information.
- **SmartStart Program** to ease into full membership dues over a three year period after graduation.
- **Opportunities** to participate in the Student Design Project Competition, Grants-in-Aid, Society and Local Scholarships, and Student Branch Activities.
- Access to **The Student Zone** web page which offers valuable career and educational resources.
- **ASHRAE Publication Discounts** at the ASHRAE Student Store including ASHRAE books, standards, reports, charts, and more.

### Do you know anyone that could benefit from being an ASHRAE Student Member?

- Join over 5,000 other students taking advantage of ASHRAE benefits today at <https://ashrae.org/membership--conferences/join-now>.

Visit the Student Zone at <https://ashrae.org/membership--conferences/student-zone> to learn about:

- Design Competition
- Scholarships and Grants
- New Faces of Engineering – College Edition
- K-12 Activities
- Membership Benefits and Meetings
- Educational Resources
- Student Activities
- Student News
- Student Branches
- ASHRAE's SmartStart Program



# Bellenger Book Corner



## WELCOME TO THE BELLENGER BOOK CORNER

Mrs. Lynn G. Bellenger was an avid reader and supporter of continuing education. She encouraged local firms to create internship opportunities for aspiring engineers in order for them to gain more experience.

Lynn had an extensive library collection of books ranging from introductory HVAC and hydronic systems to controls and energy efficiency manuals written by colleagues and friends that she had met through ASHRAE.

This section is dedicated in Lynn's honor to provide additional reading materials relevant to the ever-changing technology in the HVAC field. We hope this will be an especially valuable section for young engineers who are just starting their careers.

### ASHRAE TECHNICAL COMMITTEE TC 1.10

#### COGENERATION SYSTEMS

This technical committee is concerned with basic components for cogeneration systems and their use therein, the range of cogeneration cycles, and heat extraction methods for use in heating and air-conditioning systems.

The website is: <http://tc110.ashraetcs.org/>

#### ASHRAE COGENERATION DESIGN GUIDE

This design guide is available from the ASHRAE bookstore, authored by Joseph A. Orlando.

**Cogeneration Design Guide** offers a thorough discussion of the theoretical as well as the practical aspects of a cogeneration system design. A brief discussion of the legal and regulatory aspects is followed by a detailed discussion of the prime movers (reciprocating engines, combustion turbines and steam turbines), heat recovery and electrical recovery equipment. There are two case studies (a hospital and an industrial application) to help illustrate the entire design process.

ASHRAE Research Project 737.

If you know of a good manual that you would like to share with us, please send it to the newsletter editor Scott Edwards at [ashraerocnews@gmail.com](mailto:ashraerocnews@gmail.com). In order to keep with ASHRAE's goal of supporting continuing education without commercialization, we ask all reading materials recommended for this section be either ASHRAE sponsored or non-vendor specific.

The appearance of any technical data, editorial material or advertisement in ASHRAE.org or any of its electronic publications does not constitute endorsement, warranty or guarantee by ASHRAE of any product, service, process, procedure, design or the like. ASHRAE does not warrant that this information is free of errors and ASHRAE does not necessarily agree with any statement or opinion contained therein.



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# Student Membership Application

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

### What's "Cool" In ASHRAE

- ASHRAE maintains standards for indoor air quality
- 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 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
- Discounted 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/studentbookstore](http://www.ashrae.org/studentbookstore) 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 SmartStart Program. The SmartStart program locks in the price of student dues for the first year of membership after graduation.

Visit [www.ashrae.org/students](http://www.ashrae.org/students)  
to join online!



FIRST NAME: [Grid of 25 boxes]

LAST NAME: [Grid of 25 boxes]

DATE OF BIRTH (mm/dd/yyyy) [Grid of 2 boxes] / [Grid of 2 boxes] / [Grid of 4 boxes]

Current Mailing Address: (this will be where all correspondence will be sent unless otherwise specified)

Street Address: \_\_\_\_\_ Apt. # \_\_\_\_\_ City: \_\_\_\_\_
State/Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_
Email: \_\_\_\_\_ Alternate email: \_\_\_\_\_ Phone: \_\_\_\_\_

Permanent Mailing Address: (during the Summer Months and after graduation)

[ ] Check if Current Address is the same as Permanent Address

Street Address: \_\_\_\_\_ Apt. # \_\_\_\_\_ City: \_\_\_\_\_
State/Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_
Email: \_\_\_\_\_ Alternate email: \_\_\_\_\_ Phone: \_\_\_\_\_

ASHRAE protects contact information provided by its members and customers. To view ASHRAE's privacy policy, visit www.ashrae.org/privacypolicy.

All student applicants must have the name and member number of an ASHRAE member serving as their student sponsor. If your Student Branch Advisor is an active Associate or Full member, he/she can serve as your sponsor. If you need assistance locating a sponsor, please email students@ashrae.org or call 678-539-1212. Also, you must list the name, phone and email address of your faculty advisor or course instructor.

Sponsor Name: \_\_\_\_\_ ASHRAE Member #: \_\_\_\_\_
Advisor/Instructor: \_\_\_\_\_ Phone: \_\_\_\_\_
Email: \_\_\_\_\_

To receive your subscription to the ASHRAE Journal, please answer the following questions by entering the appropriate codes in the spaces provided.

- Which best describes your firm?
11. Consulting Engineering
12. Architect/Architectural & Eng. Services
15. Design/Build
21. Contractor
26. Property Mgmt & Dev
31. Industrial Facility
41. Commercial Facility
42. Government, Healthcare, Education
43. Utility
51. Manufacturer/HVAC&R Equipment
61. Manufacturer's Representative
62. Sales Engineering
71. Wholesaler or Distributor
83. Library
84. Technical, Professional or Trade Association
86. Student
91. Other (Please Specify)

- Which best describes your title?
B. President
C. Partner
D. Associate
E. Owner
F. Vice President
G. Vice President Eng. Chief Engineer
K. Design Engineer
L. Project/Application Engineer
O. Facility Engineer/Manager
R. Research/Development Engineer
S. Sales Engineer, Sales
S. Purchasing Agent
T. Draftsperson
U. Estimator
W. Technician
X. Instructor, Professor
Y. Student
Z. Librarian
ZZ. Other (Please Specify)

ASHRAE Society Dues include \$6.00 for ASHRAE Journal. This amount is not deductible from Membership dues.

I would like to participate in the activities of the \_\_\_\_\_ ASHRAE Chapter.

School Name: \_\_\_\_\_
Street Address: \_\_\_\_\_ City \_\_\_\_\_ State: \_\_\_\_\_
Country: \_\_\_\_\_ Postal Code \_\_\_\_\_

Expected Graduation Date: \_\_\_\_\_

Full time: [ ] Part time: [ ] Degree: \_\_\_\_\_

Classification: Freshman [ ] Sophomore [ ] Junior [ ] Senior [ ] Masters/PhD. [ ]

ASHRAE Student Membership \$20.00 USD

ASHRAE Handbook - Fundamentals [ ] I-P [ ] SI

(you will receive the most current edition of Fundamentals)

More than 900 pages of HVAC&R technical information and it includes the CD! (List Price \$199)

Student Member Price: \$49.00 USD \$ \_\_\_\_\_ USD

CD Only: \$39.00 USD Total \$ \_\_\_\_\_ USD

\*Additional books are available at ashrae.org/studentbookstore

\*Please allow up to 30 days to receive new member packets. For U.S. book orders, allow 3-5 business days from processing. For international locations and Canada, allow 7-10 business days from processing.

\*\*Please complete the ENTIRE application to ensure accuracy. Incomplete applications will NOT be processed.\*\*

Method of payment: [ ] VISA / Master Card [ ] American Express [ ] Diner's Club [ ] Check or money order enclosed\*

Card Number: \_\_\_\_\_ Expiration Date \_\_\_\_\_ CVV No. \_\_\_\_\_ Amount: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name (as it appears on card): \_\_\_\_\_

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

# Board of Governors Meeting Minutes



## **BOARD OF GOVERNORS MEETING MINUTES**

**Meeting Date:** Friday, October 3, 2014  
**Location:** Carrier Office, Rochester, NY

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

# Board of Governors Meeting Minutes

Roll Call: The above noted individuals were present.

Call to Order: 7:30am

## Minutes:

- **Previous Meeting Minutes** – no copies distributed or available. All minutes are available electronically only.
- **Treasurer's Report : Bill Clark**
  - See attached Treasurer's report dated 10/01/2014.
  - Expense line item for speaker gifts needs to be raised to \$350.00
  - Open new paypal account attached to chapter.
- **Program/ Tech Session: Chris Walters**
  - Reviewed program calendar for 2014/2015
  - Discussed refrigeration tour at new RIT ice rink possibly dovetailing with ASHRAE family night at a hockey game.
  - Sept speaker received a 95% rating.
  - Look into adding DL in Mar/Apr. Possibly an Ethics topic.
- **Refrigeration: Mike Nohle (not present)**
  - No report see above program/ tech session
- **Tech Awards: Jeff Wiedrick (not present)**
  - Dave Porter (Bergman) received a 2013/2014 tech award to be presented at the October lunch meeting.
- **Attendance: Tim Duprey**
  - Sept = 77 in attendance, 163 dozen clams.
- **Membership: Jake Hall**
  - Currently, we have 235 total members showing up on the roster.
  - Went to Atlanta for membership training – main focus was on retention
  - Discussed featuring new members in newsletter and possibly a membership anniversary board to display at meetings.
- **Awards: Al Rodgers (not present)**
  - 2013/2014 Realto E. Cherne award plaque to be presented at November meeting to Jim Browe.
- **Student Activities: Chris Lukasiewicz (not present)**
  - Rob Hudson would like assistance in an Explorer Program.
- **Education: Bill Murray (not present)**

# Board of Governors Meeting Minutes

- **YEA: Matt Kremers**
  - 10/26 = MIS Water Treatment Systems @ Modular Comfort
  - Future tech session to include Steam.
  
- **Research: Paul Kenna**
  - Full circle donations due November 15<sup>th</sup>.
  
- **Newsletter: Scott Edwards**
  - Please be aware of RES deadlines
  - Electronic Newsletter deadline = 18<sup>th</sup> of each month
  
- **Buyer's Guide: Stephanie Dempsey (not present)**
  - Ed to check with Stephanie and Chuck to see if Stephanie is on board to handle buyers guide this year, if not we will need to find someone to handle this task.
  
- **Historian: Lee Loomis (not present)**
  - Current project is documentation history of the Realto Cheme Award
  
- **Website: Kevin Wind (not present)**
  - Committee chairs need to forward updated information to Kevin to keep information on website current.
  
- **Nominating: Past President Duty TBD (not present)**
  - As our past president is no longer with the chapter delegating past president tasks is an action item.
  
- **Publicity: Mark Kukla (not present)**
  - Possibly step up Facebook exposure
  
- **Valentine's Dinner Dance: Jody McGarry (not present)**
  - No report - February date TBD
  
- **Picnic / Golf Outing: Jim Browe (not present)**
  - No report – scheduled for 5/11/2015
  
- **CRC2016: Jim Browe**
  - No report – budget needs to be created
  
- **Old Business:**
  - Since Rob is no longer engaged in chapter duties such as nominating, engineering symposium and other duties need to be picked up by others

# Board of Governors Meeting Minutes

- Scholarship update Bill M discussed approval of criteria to RIT and sign off need to get allocated money discussed to RIT. Discussed unfunded vs. funded
- Audit committee
- Create drop box for chapter documents

➤ **New Business:**

- Make sure everyone is logging PAOE points
- Region I meeting notice visit Ed Burns to set up
- As board members and committee chairs we have a responsibility to do our job if members cannot attend BOG meeting possibly we can set a teleconference up or call in for committee chairs for officers to report
- Who has the Rochester Chapter ASHRAE banners
- Chapter laptop to be turned over to president.

**Next Meeting:** Ed to send out invites

- The meeting was adjourned at 8:34am



#### 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).



# ASHRAE Region I 2014-2015

## Executive Committee & Society Contacts

### DRC-Director & Regional Chair

Joseph L Furman  
Automated Logic  
16 Country Way  
Wallingford, CT 06492-5356  
w: (203) 678-2208  
joe.furman@automatedlogic.com

### RVC Research Promotion

Chris Phelan  
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# Rochester Chapter Historian

ASHRAE History Article...by Lee M. Loomis, Chapter Historian

## **ASHVE Issues WW II – Fuel User’s Pledge**

It was May of 1943 and America’s “war machinery” was in full-production. Gasoline rationing was in full-swing. Food rationing had begun, and there was a sense of patriotic urgency given to nearly every daily task.

The Rochester Engineer published the following article:

“The American Society of Heating and Ventilating Engineers has sent us a Fuel User’s Pledge which we are publishing in the interests of National Security.

- To order my fuel early, to anticipate my needs and keep stock pile up so as to equalize and conserve transportation and delivery facilities and to prevent tie-ups and shortages next winter.
- To see that my heating plant is clean and kept clean.
- To have my heating system inspected by a competent heating engineer or contractor.
- To have recommended repairs or alterations essential to efficient operation of the heating equipment made in August and September.
- To install storm windows, weather-stripping, insulation and to do everything practical to reduce heat losses.
- To carefully follow instructions on how to operate my heating system properly.
- To prevent smoke because smoke means waste and inefficiency.
- To keep room temperatures at 68 – 70 degrees and to avoid over-heating because it endangers efficiency and health.
- To conserve heat and fuel at all times.”

Come to think of it, these are good practices, at anytime, war or no war.

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# News

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## Latin American Chapters Translate ASHRAE Documents

### Spanish-Speaking Chapters Take the Lead

By Victor Goldschmidt, ASHRAE Distinguished Lecturer

Just weeks after revised Model Chapter Constitution/Bylaws was released, something special started.

Led by John Harrod and Bill Klock (former and current Region VIII director and regional chairs), and with the awareness and support of Jennifer Isenbeck (Region XII director and regional chair), a group of volunteers from most of our ASHRAE Latin American Spanish speaking chapters cooperated toward the development of a translation of that key document. They prepared drafts, shared them and improved them by emails, met in a one-day intensive work session, continued improvements and reached consensus in the translation of the Chapter Constitution/Bylaws.

Attempting to provide a list of all those involved in this process would only lead to sad omissions. Each one embodied the ASHRAE Core Values of collaboration, commitment, and volunteerism. Actually, they went beyond the Chapter Constitution/Bylaws, developing consensus translations of the Code of Ethics and the Commercialism Policy as well.

On July 1, during a meeting of Members Council at ASHRAE's 2014 Annual Conference, a motion by Harrod to have these three documents accepted passed unanimously. Those three key documents are now available to Spanish speaking chapters to help improve their chapter activities. But those volunteering to develop these translations do not plan to stop with those three documents! The recently revised Manual of Chapter Operations is their next target.

The documents can be found at <https://www.ashrae.org/ashraeenespanol>.

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# News

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For Release:

Oct. 2, 2014

Contact: Jodi Scott

Public Relations

678-539-1140

[jscott@ashrae.org](mailto:jscott@ashrae.org)

## DOE Updates National Reference Standard for Commercial Buildings to 90.1-2013

ATLANTA - Following preliminary analysis that ASHRAE/IES's 2013 energy efficiency standard contains energy savings over the 2010 standard - 8.5 percent source energy savings and 7.6 site energy savings - the U.S. Department of Energy (DOE) has issued a ruling that establishes the 2013 standard as the commercial building reference standard for state building energy codes.

In an announcement in the Sept. 26, 2014 edition of "The Federal Register," DOE attributes the greater energy savings to improvements in ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, related to several areas, including better lighting, fans, commercial refrigeration, boilers and controls.

The determination means that states are required to update their codes to meet or exceed the 2013 standard within two years. Currently, states must meet or exceed the 2010 standard, which serves as the commercial building reference standard for state building energy codes under the federal Energy Conservation and Production Act.

"ASHRAE is pleased with this ruling from the DOE, recognizing the energy savings measures in the standard," ASHRAE President Tom Phoenix said.

"Standard 90.1 was an original cornerstone in our efforts to improve building performance, and we continue to strive to increase its efficiency in the future."

Among the eight addenda that are identified as having a major positive impact on energy efficiency, IES notes that three are attributed to lighting changes according to Rita Harrold, IES director of technology. These address control requirements for lighting alterations, additional controls for more spaces with a shortened time to lighting reduction or shutoff, and a decrease in lighting power density in most building types to reflect changes in revisions to illuminance recommendations in the IES Lighting Handbook, 10<sup>th</sup> edition.

The DOE noted that the 2013 standard contains 52 positive impacts on energy efficiency that were incorporated into the analysis. These impacts included changes made through the public review process in which users of the standard comment and offer guidance on proposed requirements.

*Continued on next page*

Specifically the major positive impacts include:

- Control requirements for lighting alternations
- New requirements for individual fans
- Reduction of energy usage for large boilers
- Reduction of fan energy usage
- New efficiency requirements for commercial refrigeration
- More controls in more spaces and reduction of time to reduction or shut off of those controls
- Reduction of lighting power density in most building types

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. More information can be found at [www.ashrae.org/news](http://www.ashrae.org/news).

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# News

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## **ASHRAE Announces Recipients of Student Design Competition; Applied Engineering Challenge**

Oct 16, 2014

**Contact:** Jodi Scott  
Public Relations  
678-539-1140  
[jscott@ashrae.org](mailto:jscott@ashrae.org)

**ATLANTA** - Students who took part in ASHRAE's 2014 Student Design Competition were challenged to do research and design for a research and design development facility.

The 2014 student competition focuses on a two story office building in New York City with a research and development facility. ASHRAE student teams outside the United States were allowed to locate the building in the capital of their state, province or country.

ASHRAE also announces the recipients of the Applied Engineering Challenge, which focused on the need to improve indoor air quality (IAQ), particularly in residential applications in developing countries.

Among the 39 entries from 13 countries, four were awarded first place in the categories that the competition and challenge offer.

First place in HVAC Design Calculations is awarded to a team from the University of Central Florida, Orlando: Christopher Erickson, associate engineer, Universal Creative, Orlando; Ian Faulkner, mechanical designer, exp U.S. Services, Orlando, Fla.; DJ Marshall, mechanical engineer, TLC Engineering for Architecture, Orlando, Fla.; Richard Suarez, quality engineer, Rockwell Collins, San Diego, Calif.; Kristian Jack Szymanski, Coral Springs, Fla.; and Ju Young Yu, Winter Park, Fla. Their faculty advisor is Gabriel Vazquez, Ph.D.

The team's objective was to design a high efficiency HVAC system with long life cycle, and excellent indoor air quality while maintaining cost effectiveness. They selected variable refrigerant flow (VRF) systems with simultaneous heating and cooling and dedicated outdoor air systems (DOAS) with energy recovery. Other equipment included air valves for lab areas and high efficiency particulate absorption (HEPA) filters and exhaust fans to eliminate contamination.

A 20 ton DOAS unit, three condensing units and several heat recovery units were used to supply required air to all types of VRF units contained within the building. A separate 50 ton DOAS unit was used for lab areas due to the high air change requirement of the clean room and high exhaust rate in the four research and development areas. For each DOAS unit, an exhaust fan was used, and one additional exhaust fan was selected for emergencies only, such as in the case of a refrigeration leak.

The total cost associated with the selected systems was \$570,203. The design encompasses efficiency, health and safety, comfort, functionality, longevity, flexibility and maintainability with a low life cycle cost.

First place in HVAC System Selection is awarded to a team from Kansas State University, Manhattan, Kans.: John Gaito, Kathryn Helmer, Lexie Oliver, Alex Pint, Megan C. Walkowiak and Gordon Zimmerman, all of whom are senior level students in architectural engineering. Faculty advisors are Julia Keen, Ph.D., P.E., HPBD, and Fred Hasler, P.E. The students selected a ground source heat pump (GSHP) system where water is pumped through vertical piping in the ground, providing a heat source and heat sink for the heat pumps. The main water loop serves the heat pumps and DOAS allowing heat transfer between spaces to maximize energy efficiency.

*Continued on next page*

The GSHP system met all the owner's requirements in using the ground as a heat sink and heat source to serve the building. As a result, the energy savings are immense. This creates a low-cost, reliable, flexible, maintainable, sustainable system.

An unusual addition to the system was incorporation of a wall of vegetation created by attaching plants that do not require soil to a mesh grid. Given that the building is used for research and design, the exhaust and ventilation rates are significant and consume large amounts of energy. Ten small bio-walls are used to decrease energy consumption for the entire building by decreasing the required ventilation in the office spaces.

First place in Integrated Sustainable Building Design is awarded to a team from Montana State University, Bozeman: Elyse Casper, Theresa R. Lindenau, Bozeman, Mont.; Terra Moran, materials engineer, Imperial Oil, Calgary, Alberta; Mary Peterson, project engineer in the commercial solutions division, 3M, Saint Paul, Minn.; and Martin Reaves, founder, Monolithic, Bozeman, Mont. Their faculty advisor is Kevin Amende, P.E.

For the HVAC systems, students implemented multiple systems with high efficiencies, using the nearby river as a heat exchanger. The main system -- a VRF system -- is more expensive upfront, but more cost-effective and energy saving throughout the life of the building. It was implemented to condition the open office, library, meeting rooms, mailroom and HR office spaces. It has the additional benefit of requiring no duct work; only the routing of small refrigerant lines.

Fresh air is pre-conditioned by a heat recovery ventilation unit that exchanges energy with exhaust air leaving the building. This recovers energy while improving air quality. Fresh air is vented directly into the fan coil units in the VRF spaces, first mixing and then distributing throughout the rooms. Fresh air for the computer server and research and design spaces is ducted into the heat pumps and blown into the rooms directly. Acoustic and filtration specifications were addressed through appropriate noise dampening and filtration products.

Review of data showed energy consumption was reduced by almost 70 percent; cooling load was reduced by over 60 tons; and carbon and greenhouse gas emissions were more than halved. The new design pays back after year twelve, and saves the owner almost \$1 million by the end of 40 years. Although the design did not reach net-zero, the improvements were exponential. With a larger budget or new construction, the net zero goal could be realized.

ASHRAE also announces the recipients of the 2014 Applied Engineering Challenge, in which students were required to design and specify a small, portable air conditioner that must be affordable, maintainable and effective in the local cultural environment.

The first place Applied Engineering Challenge recipients are a team from California Polytechnic State University, San Luis Obispo: Juan Silva, sales operation, SYSERCO, Fremont, Calif.; and Nelson E. Echeverry, design engineer, Donald F. Dickerson Associates, Tarzana, Calif. Their faculty advisors are Steffen Peuker, Ph.D., and Jesse Maddren, Ph.D., P.E.

The system involves a series of measures that a family living in Mexico City can take to improve the IAQ in their house. Starting in the kitchen, a wood stove with a chimney attached was used to vent out the smoke caused from burning biomass. The stove provides heating during cold days, reduces pollution caused by inefficient cooking stoves and provides reliable operation.

Next, in the living room, a window fan was modified with an external air filter at the inlet of the fan, capturing most of the harmful contaminants and allowing fresh air to enter the house. With forced airflow, pollutants are dispersed, thus avoiding high concentrations. A window fan providing a capacity of 1400 CFM is sufficient to supply the entire house. For cooling, students chose a window unit, which helps in reducing humidity.

One major benefit is that units are portable and can easily be installed in a new or different home. Two financial tiers were created: one targets low to middle class families, providing equipment and devices to satisfy comfort needs and to improve healthy living, but with less expensive materials. The second tier for high to mid class families contains a power generator and window unit.

The projects will be shared at the 2015 ASHRAE Winter Conference, Jan. 24-28, Palmer House Hilton, Chicago, Ill. Also taking place at that time is the ASHRAE co-sponsored AHR Expo, Jan. 26-28, McCormick Place, Chicago.

**REGISTRATION FORM**

# ASHRAE 2015 WINTER CONFERENCE

Chicago, IL January 24-28

Last Name _____		First _____	Initial _____
Nickname (for badge) _____		Phone Number _____	FAX Number _____
Company Name (or name of school if student) _____			
Mailing Address _____			
City _____	State/Province/Country _____	Zip/Postal Code _____	E-mail _____

**In which type of business or firm do you currently work? (check only one)**

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> 1 HVAC&R Contractor/Contracting Firm                   | <input type="checkbox"/> 9 Manufacturer's Agent/Representative                                   | <input type="checkbox"/> 16 Other Allied to Field (specify) _____ |
| <input type="checkbox"/> 2 Plumbing Contractor/Contracting Firm                 | <input type="checkbox"/> 10 Importer/Exporter  | <input type="checkbox"/> 17 Guest/Spouse Other                    |
| <input type="checkbox"/> 3 Mechanical Contractor/Contracting Firm               | <input type="checkbox"/> 11 Manufacturer of HVAC&R & other Allied Equipment and Components (OEM) | <b>Business Focus</b>   |
| <input type="checkbox"/> 4 Other Primary Contractor/Contracting Firm            | <input type="checkbox"/> 12 Building/Facility/Plant Management or Operations                     | <input type="checkbox"/> 1 Residential                            |
| <input type="checkbox"/> 5 Consulting Engineering Firm or Individual Consultant | <input type="checkbox"/> 13 Public Utility or Government Agency                                  | <input type="checkbox"/> 2 Commercial                             |
| <input type="checkbox"/> 6 Architectural & Architectural/Engineering Firm       | <input type="checkbox"/> 14 Publishing   | <input type="checkbox"/> 3 Industrial                             |
| <input type="checkbox"/> 7 Design/Build Firms                                   | <input type="checkbox"/> 15 Education  | <input type="checkbox"/> 4 Institutional                          |
| <input type="checkbox"/> 8 Wholesaling/Distribution                             |  | <input type="checkbox"/> 5 Guest/spouse/other                     |

**MEMBER #** \_\_\_\_\_

Member # must be supplied to receive member pricing.

**NON-MEMBER** (Registrants paying the non-member registration fee receive first year of membership free. Completed membership application form must be submitted by March 27, 2015).

If you have a disability which requires special assistance, please attach a description of your requirements with your registration form to enable us to make appropriate arrangements. Contact the hotel for wheelchair availability at the Palmer House.

**CONFERENCE REGISTRATION** Includes technical program and AHR Expo. \*\*Includes virtual.

**Early Bird** ..... **Advance** ..... **Full Registration**

Sept. 1-Nov.3    Nov. 4-Dec.31    Jan. 1-28

- |                                |                                |                                |   |
|--------------------------------|--------------------------------|--------------------------------|---|
| <input type="checkbox"/> \$425 | <input type="checkbox"/> \$450 | <input type="checkbox"/> \$580 | ASHRAE MEMBER**                                     |
| <input type="checkbox"/> \$400 | <input type="checkbox"/> \$425 | <input type="checkbox"/> \$555 | ASHRAE MEMBER-1ST TIME ATTENDEE**                   |
| <input type="checkbox"/> \$635 | <input type="checkbox"/> \$660 | <input type="checkbox"/> \$780 | NON-MEMBER**  |
| <input type="checkbox"/> \$610 | <input type="checkbox"/> \$635 | <input type="checkbox"/> \$755 | NON-MEMBER-1ST TIME ATTENDEE**                      |
| <input type="checkbox"/> \$115 | <input type="checkbox"/> \$115 | <input type="checkbox"/> \$115 | SPEAKER**(includes session chairs forum moderators) |
| <input type="checkbox"/> \$115 | <input type="checkbox"/> \$125 | <input type="checkbox"/> \$135 | LIFE MEMBER**                                       |
| <input type="checkbox"/> \$25  | <input type="checkbox"/> \$25  | <input type="checkbox"/> \$25  | ASHRAE STUDENT MEMBER                               |
| <input type="checkbox"/> \$25  | <input type="checkbox"/> \$25  | <input type="checkbox"/> \$25  | ASHRAE STUDENT BRANCH ADMISOR                       |
| <input type="checkbox"/> \$55  | <input type="checkbox"/> \$55  | <input type="checkbox"/> \$55  | FULL TIME STUDENT NON-MEMBER                        |
| <input type="checkbox"/> \$0   | <input type="checkbox"/> \$0   | <input type="checkbox"/> \$0   | CHICAGO HOST COMMITTEE                              |
| <input type="checkbox"/> \$0   | <input type="checkbox"/> \$0   | <input type="checkbox"/> \$0   | CHICAGO-MONITORS                                    |
| <input type="checkbox"/> \$0   | <input type="checkbox"/> \$0   | <input type="checkbox"/> \$0   | PRESS**   |
| <input type="checkbox"/> \$55  | <input type="checkbox"/> \$55  | <input type="checkbox"/> \$55  | SPOUSE  |
| <input type="checkbox"/> \$249 | <input type="checkbox"/> \$249 | <input type="checkbox"/> \$249 | ASHRAE MEMBER-VIRTUAL                               |
| <input type="checkbox"/> \$445 | <input type="checkbox"/> \$445 | <input type="checkbox"/> \$445 | NON MEMBER-VIRTUAL                                  |

**SOCIAL EVENTS** All social events and tours will increase by approximately \$5 each Jan. 2.

QTY.	TOTAL	
20	@ \$55	<b>Saturday, January 24</b> Welcome Party, 6:30pm
21	@ \$45	<b>Monday, January 26</b> President's Luncheon, 12:15pm
38	@ \$0	Women in ASHRAE Breakfast, 7-8:30am
22	@ \$55	<b>Tuesday, January 27</b> Members Night Out, 6:15pm
23	@ \$35	Life Members Lunch, 12noon

**TOURS** (limited space per tour)

QTY.	TOTAL	
24	@ \$55	<b>Sunday, January 25</b> City of Chicago 8am-Noon
25	@ \$55	Devil in the White City 1pm-5pm
26	@ \$50	<b>Monday, January 26</b> Immigrant to Elite, 2:30-5:30pm
27	@ \$50	Lifestyles of the Rich & Famous, 2:30-5:30pm
28	@ \$100	<b>Tuesday, January 27</b> Chicago Film Tour, 11:30am-2:30pm

**TECHNICAL TOURS** (limited space per tour)

QTY.	TOTAL	
29	@ \$30	<b>Monday, January 26</b> Walgreens Net Zero Store, 2:30-4:30pm
30	@ \$30	Refrigeration for Craft Brewing, 2:30-5:00pm
31	@ \$15	<b>Tuesday, January 27</b> McCormick Place Campus Tour, 2:30-3:30pm
32	@ \$30	Motorola Mobility Corp. Hdqtrs, 2:00-4:00pm

**RESEARCH** \_\_\_\_\_ 95 Research Promotion Contribution

**ASHRAE CONFERENCE PUBLICATIONS**

Code # _____	Quantity _____	@Price _____	Total _____
Code # _____	Quantity _____	@Price _____	Total _____

**GRAND TOTAL \$** \_\_\_\_\_ (Registration fees, social events, tours, publications)  
Payment must accompany registration form. ASHRAE reserves the right to charge the correct amount if different from the total listed above.

**ASHRAE LEARNING INSTITUTE**

**Full Day**  \$395 ASHRAE Member  \$485 Non-member

- |  |  |
|--|--|
| <b>Saturday, January 24, 8am-3pm</b>   | <b>Tuesday, January 27, 9am-4pm</b>  |
| <input type="checkbox"/> 60 Designing HVAC Systems to Control Noise & Vibration                                | <input type="checkbox"/> 74 Introduction to Building Enclosure Commissioning                       |
| <input type="checkbox"/> 61 The Commissioning Process in New & Existing Bldgs                                  | <input type="checkbox"/> 75 Energy Modeling Best Practices and Applications                        |
| <input type="checkbox"/> 62 Commercial Building Energy Audits  |  |
| <b>Half-Day Courses</b> <input type="checkbox"/> \$119 ASHRAE Member <input type="checkbox"/> \$159 Non-member |  |
| <b>Sunday, January 25, 8:30am-6:30pm</b>   | <b>Monday, January 26, 2:45pm-5:45pm</b>   |
| <input type="checkbox"/> 63 Air-Air Energy Recovery Applications: Best Practices                               | <input type="checkbox"/> 71 Complying with Std 90.1-2013: HVAC/Mechanical                          |
| <input type="checkbox"/> 64 Fundamentals of Risk Management <b>NEW</b>   | <input type="checkbox"/> 72 Commissioning for High-Performance Buildings                           |
| <input type="checkbox"/> 65 Laboratory Design: The Basics and Beyond   | <input type="checkbox"/> 73 Building Demand Response & the Coming Smart Grid                       |
| <input type="checkbox"/> 66 Energy Management Best Practices   |  |
| <b>Monday, January 26, 8:30am-11:30am</b>  | <b>Tuesday, January 27, 9am-12pm</b>   |
| <input type="checkbox"/> 67 Designing High-Performance Healthcare HVAC Systems                                 | <input type="checkbox"/> 76 Combined Heat & Power: Creating Efficiency through Design & Operations |
| <input type="checkbox"/> 68 App. of Standard 62.1-2013: Multiple Spaces Equations and Spreadsheets             | <input type="checkbox"/> 77 Commissioning Process & Standard 202 <b>NEW</b>                        |
| <input type="checkbox"/> 69 Energy Efficiency in Data Centers  | <b>Tuesday, January 27, 1pm-4pm</b>  |
| <input type="checkbox"/> 70 Design of Commercial Ground Source Heat Pumps                                      | <input type="checkbox"/> 78 Fundamentals and Applications of Std. 55                               |
|  | <input type="checkbox"/> 79 Advanced High-Performance Building Design                              |

**METHOD OF PAYMENT:**  CHECK ENCLOSED-(Payable to ASHRAE/CHICAGO15) U.S. FUNDS ONLY. CHARGE:  MasterCard  AMEX  Diners Club  VISA

CARD NO. \_\_\_\_\_ EXP. DATE \_\_\_\_\_ SIGNATURE \_\_\_\_\_

Send registration form and payment to: Meetings Section, ASHRAE, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone (404) 636-8400. FAX (678) 539-2219. Deadline: Dec. 31.

Under proper safeguard ASHRAE will provide names of conference registrants to both sponsors of the ASHRAE conference and AHR exhibitors. If you do not wish to have your name and mailing address provided, please check the appropriate box.  No information from sponsors  No information from AHR exhibitors