

ASHRAE Rochester



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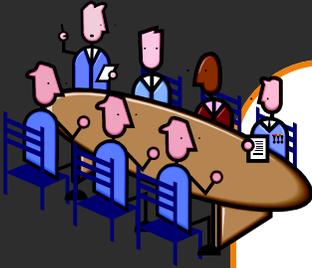
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ASHRAE 2014 Winter Conference Jan. 18-22, 2014 New York City, New York



New York City's iconic skyline serves as the perfect backdrop for the 2014 Winter Conference. In one of the world's top cities for most skyscrapers—nearly 600—it's only appropriate that the Conference puts a special focus on the design, development and operation of tall buildings. And they say if you can make it in New York City you can make it *anywhere*, so ASHRAE is also taking a look at new and innovative *international* design strategies for meeting environmental, geographical and cultural factors. Join the Society—along with the ASHRAE co-sponsored AHR Expo—as it returns to the Big Apple for the 2014 Winter Conference.



Chapter Officers

President

Robert J. Wind, Jr. PE
585-341-3172
rwind@ibceng.com

President Elect

Edward J. Burns
585-739-7548 / 872-9172(fax)
ejb@mechtechhvac.com

Vice President/Tech

Christina Walter
585-486-2148
cmwalter@trane.com

Secretary

Jeff Close, PE
585-289-6816 / 218-0737(fax)
jeff.close@pres-services.com

Treasurer

William J. Clark
585-303-0729
william.clark@DayAutomation.com

Committee Chairs

CTTC / Programs

Jeff Wiedrick 585-232-5137 x354
jwiedrick@bergmannpc.com

CTTC / TEGA

Tom Burke
amtburke@yahoo.com

CTTC / Refrigeration

Michael Nohle 585-216-9016
mikenohle@aol.com

Historian

Lee Loomis 585-262-2870/262-4156(fax)
leeloomis46@gmail.com

Membership

Jake Hall 585-869-5125
jhall@proairplus.com

YEA

Matt Kremers 585-398-8018
mkremers@mcsmms.com

Board of Governors

Jim Browe (3)
585-697-0836
jbrowe@rfpeck.com

Beth Smith (3)
585-272-0110
bsmith@vpsupply.com

Eric Smith (2)
585-381-3360
esmith@turnerengineering.com

Paul Kenna, PE (2)
585-295-3114
Paul.Kenna@carrierenterprise.com

Scott Edwards (1)
585-486-2156
scott.edwards@trane.com

Mike Benedict (1)
585-490-2661

Student Activities

Chris Lukasiewicz 585-381-3360
clukasiewicz@turnerengineering.com

Newsletter Editor

Scott Edwards
scott.edwards@trane.com

Attendance & Reception

Timothy Duprey 585-205-0073
dupreyt@ifsinc.net

Building Simulation User's Group (BSUG)

Bill Bishop 585-325-6004
wbishop@pathfinder-ea.com

Research Promotion

Paul Kenna 585-295-3114
Paul.Kenna@carrierenterprise.com

Webmaster

Kevin Wind 585-263-1280
kwind@rochester.rr.com

ASHRAE 2013-2014 Meeting Schedule				
Date	Event	pdh / Theme	Location	Schedule
11/11/13	Mr. Nick Gangemi Current State of Data Center Industry and Overview of TC 9.9 ASHRAE Technical Committee for Datacom Facilities	Available	Mario's	12:00 PM
12/09/13	VRF "ASHRAE 15" - Variable Refrigerant Flow Systems & ASHRAE 15 Mr. Ed Ferrier, PE LG Commercial Air Conditioning	Available	Mario's	12:00 PM
01/13/14	NYS Building Department - NYS Code Updates and Changes NYS Energy Conservation Code/ NYS Mechanical Code		Mario's	12:00 PM
02/07/14	Annual ASHRAE Valentines Dinner Dance	---	Inn on Broadway	7:00 PM
02/10/14	Joint Meeting with AEE	Available	Mario's	12:00 PM
03/10/14	Jerry M. Sipes, Ph.D., P.E. Fundamentals of Displacement Ventilation	Available	Mario's	12:00 PM
04/07/14	Refrigeration Tour Allied Frozen Foods in Brockport, NY		TBD	TBD
05/12/14	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

The ASHRAE Conference, which takes place Jan. 18–22 at the New York Hilton, allows you to network with your fellow ASHRAE members from around the world and shape the future of the built environment industry. The Technical Program has a building-oriented theme and seeks papers on building information systems; environmental health; international design; HVAC&R applications and systems; and, featured for this Conference, tall building performance. Nearly the entire technical program is approved for NY PDHs, AIA LUs and LEED® AP credits. Also offered are ASHRAE Learning Institute courses, social events and the opportunity to take part in more than 600 committee meetings.

Of course, you don't want to miss the ASHRAE co-sponsored AHR Expo, which allows you to see, touch and compare the newest products representing the most innovative technology in the HVAC&R marketplace. This year, the show takes place Tuesday, Wednesday and Thursday, Jan. 21–23 at Javits Convention Center, a change from its traditional Monday, Tuesday and Wednesday. The Expo will feature nearly 2,000 leading manufacturers displaying thousands of products. Also be sure to check out AHR Expo's comprehensive program of over 100 educational sessions, workshops and new product presentations offered at the Show.

Rob Wind, PE, 2013-2014 President

Trends in Hydronic Heating Highlight Rochester ASHRAE's October Meeting

On Tuesday October 9th, the ASHRAE Rochester Chapter October meeting was a joint Dinner Meeting with ACCA (Air Conditioning Contractors of America). This meeting was held at the Burgundy Basin Inn with dinner. The guest speaker was Mr. John Siegenthaler, P.E., and the topic was "Ten Trends in Modern Hydronic Heating." Equipment selection and relationship between proper piping, pumps and performance, Hydraulic separation – beyond primary/secondary pumping, distribution efficiency and low power pumping and low temperature distribution systems, was presented. "Inefficiency in High Efficiency" or how to know the truth about condensing boilers was also discussed.

John is a mechanical engineering graduate of Rensselaer Polytechnic Institute, a licensed professional engineer, and Professor Emeritus of Engineering Technology at Mohawk Valley Community College. "Siggy" has over 33 of experience in designing modern hydronic heating systems. He is a hall-of-fame member of the Radiant Panel Association, and a presenter at national and international conferences on hydronic and radiant heating. John is principal of Appropriate Designs – a consulting engineering firm in Holland Patent, NY. The 3rd edition of his textbook - Modern Hydronic Heating was released in January 2011. John currently writes about hydronic heating and solar thermal system design for several trade publications including: Plumbing & Mechanical, PM Engineer, Supply House Times, and Heating, Plumbing, and Air Conditioning (Canada).

November's Meeting will be Monday November 11th at Mario's, 12pm. Our guest speaker will be Nick Gangemi and the topic will be "Current State of Data Center Industry and Overview of TC 9.9 ASHRAE Technical Committee for Datacom Facilities ". 1.0 PDH credit will be available.



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, Rob Wind (585.341.3172) or by email rwind@ibceng.com.

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



City of Rochester, NY
Thomas S. Richards, Mayor

The City of Rochester (www.cityofrochester.gov) is seeking a highly qualified and motivated candidate for the position of Engineer Mechanical in the Department of Environmental Services' Bureau of Architecture & Engineering. The incumbent in this title will be responsible for the design, review, and approval of plans for new construction and alteration work, ensuring that the plans are in compliance with applicable building codes, conform with City standards, and address the City's needs.

The ideal candidate will be currently licensed as a Professional Engineer in the State of New York and have at least two (2) years of experience preparing construction contract documents and performing field administration to ensure compliance with contract documents.

All applications **MUST** be submitted on the City of Rochester's website www.cityofrochester.gov/jobs no later than November 1, 2013. The candidate chosen for this position will be required to establish and maintain City residency. If you have any questions regarding this employment opportunity with the City of Rochester, please feel free to contact Thomas Miller at (585) 428-7596.

Rochester Chapter

Committee Chairs Updates

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. 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

2013-2014 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	239	200	0	0	0	0	0	200

Research Promotion

On behalf of ASHRAE and the Rochester Chapter, I would like to thank all donors for their generous support of ASHRAE Research during the 2012-13 campaign. ASHRAE Research benefits us all, from energy efficiency to indoor air quality to green solutions and more.

Thank you to everyone for your donations! We all win.

2012-13 Campaign

Golden Circle (\$10,000 - \$19,999)

Gray Metal Products

ASHRAE Associate (\$2,500 - \$4,999)

ASHRAE Rochester Chapter

Major Donor – Bronze (\$500-\$999)

R L Kistler Inc.

Major Donor – Antique (\$250-\$499)

Mr. Richard Barrett

Genesee Heating

Mech Tech HVAC, Inc.

RF Peck Co.

Slater Equipment Company

SMACNA Rochester

Trane Matching Funds

ASHRAE Supporters

Casey Bernhard

James Ormond

Kevin Canaan

Mark Snyder

Robert Moyer

Robert Walton

Company Honor Roll (\$150-\$249)

Lynn G. Bellenger Memorial

(Established by Pathfinder Engineers)

Air Systems Balancing

Day Automation Systems

Erdman Anthony & Associates

Individual Honor Roll (\$100-\$249)

Charles White

Christina Walter

David Meyer

Ed Burns

Jim Browe

Jeff Bidell

Jeff Ellis

Jeff Close

Michelle Summerman

Paul Kenna

Pete Oppelt

Rich Morelle

Rob Wind

Tom Piekunka

Thanks Again for a Successful Year!

Paul Kenna, ASHRAE RP Chair

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



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 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 to join!**



ASHRAE
STUDENT MEMBERSHIP APPLICATION

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.
ASHRAE • 1791 TULLIE CIRCLE NE • ATLANTA, GA 30329-2305 • FAX: 678-539-2212

FIRST NAME:

LAST NAME:

DATE OF BIRTH (mm/dd/yyyy)

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/privacy-policy.

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
- P. Research/Development Engineer
- R. 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 IP 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 \$195)

Student Member Price: \$49.00 USD \$ _____ 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 _____ CW 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: Tuesday, October 8, 2013

Location: Trane Office, Rochester, NY

President / CRC Alternate	Rob Wind	X
President Elect / Program	Ed Burns	X
Vice President /Tech Session	Christina Walter	X
Secretary	Jeff Close	X
Treasurer	Bill Clark	
Immediate Past President / CRC Delegate	Michelle Sommerman	
Board of Gov. (1)	Mike Benedict	X
Board of Gov. (1)	Scott Edwards	X
Board of Gov. (2)	Eric Smith	X
Board of Gov. (2)	Paul Kenna	X
Board of Gov. (3)	Jim Browe	
Board of Gov. (3)	Michelle Sommerman	
Attendance	Tim Duprey	
Historian	Lee Loomis	X
Membership Promotion	Jake Hall	X
Newsletter Editor	Scott Edwards	X
Research Promotion	Paul Kenna	X
Awards	Al Rodgers	
CTTC	Jeff Wiedrick	
Education	Bill Murray	X
Publicity	Mark Kukla	
Website	Kevin Wind	
YEA Chair	Matt Kremers	X
Student Activities	Chris Lukasiewicz	
Nominating (2 nd Past President)	Jeff Ellis	
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: 7:43 am

Minutes:

- **Previous Meeting Minutes** – Minutes were distributed electronically and comments received were incorporated. FYI, no copies will be available at the BOG meetings.
- **Treasurer's Report** : Bill Clark
 - See attached Treasurer's report dated 10/7/13.
- **Program/ Tech Session:** Ed Burns
 - See attached Preliminary Meeting Schedule dated 10/8/13.
- **Refrigeration:** Mike Nohle (not present) – no report.
 - Ed to contact Mike about a refrigeration tour.
- **Tech Awards:** Jeff Wiedrick (not present) – no report.
- **Attendance:** Tim Duprey (not present)
 - September Clambake = 94 RSVP / 83 attended
 - October Meeting w/ ACC = 34+ RSVP
- **Membership:** Jake Hall
 - Current membership: 234, Student members: ~5
 - March = Membership Promotion Night
 - (4) new members joined
- **Awards:** Al Rodgers (not present) – no report
- **Student Activities:** Chris Lukasiewicz (not present) – no report
 - Suggestion to reach out to Alfred, MCC, and UofR on interest level for a student chapter. Possibly joint chapter with AEE.
- **YEA:** Matt Kremers
 - Discussed Leadership U and New Faces in ASHRAE
 - Planning tech classes for this winter
- **Research:** Paul Kenna
- **Newsletter:** Scott Edwards
 - RES deadline = 10/10/13
 - Electronic Newsletter deadline = 18th of each month

Board of Governors Meeting Minutes

- **Buyer's Guide:** Stephanie Dempsey / Chuck White (not present) – no report

- **Historian:** Lee Loomis (not present)
 - Planning on setting up display for the November meeting

- **Website:** Kevin Wind (not present) – no report.

- **Nominating:** Jim Browe – no report.

- **Publicity:** Mark Kukla (not present) – no report.
 - Discussed looking into social media as an avenue to get chapter information out to more people (i.e. LinkedIn)

- **Valentine's Dinner Dance:** Jody McGarry (not present) – no report

- **Old Business:**
 - Jim Browe agreed to be the CRC2016 committee chair (Rob Wind, Lee Loomis, Bill Clark, Paul Kenna, Michelle Sommerman and Jeff Close to support).
 - Michelle will facilitate audit committee to include; Jeff Bidell, Barb Herl, and Steve Maybeck to meet with Jeff Close and Bill Clark.

- **New Business:**
 - Regional visit scheduled for 3/10/14, Steve Stil (Regional Membership Chair)
 - Scholarship – Rob to send out draft outline requirements for a vote in Nov.

- **Next Meeting:** Wednesday, November 6th @ 7:30am – Trane Office

- The meeting was adjourned at 8:21 am

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 6.1—HYDRONIC STEAM & HEATING EQUIPMENT & SYSTEMS

This technical committee is concerned with all aspects of hydronic and steam systems. This includes the application of boilers, chillers, terminal units, and all accessories and controls making up the total system as well as the design of the integrated system. In addition to comfort, applications of both heating and cooling, snow melting systems are included. Cooperation with other TC's is recognized in areas such as control, noise and vibration, refrigeration, pumps and hydronic and service water piping.

The website is: <http://tc61.ashraetcs.org/>

PERFORMANCE OF COMBINATION HYDRONIC SYSTEMS

This technical feature was published in the December 2011 issue of the ASHRAE Journal, authored by Thomas Butcher, PhD. Link to the article is below:

<http://www.energykinetics.com/documents/architectsAndEngineers/ASHRAE-PerformanceOfCombinationHydronicSystemsButcher.pdf>

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 scott.edwards@trane.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.

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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.

ASHRAE Region I 2013-2014

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
Thermco
228 Scoles Ave
Clifton, NJ 07012
w: (973) 777-6700
chrishphelan@thermcoreps.com

RECC & Newsletter Judge

Kevin Gallen
Gallen Engineering
228 Arborlea Avenue
Yardley, PA 19067
w: (917) 428-6396 (mobile)
kevin@gallenengineering.com

ARC—Ass't Reg Chair & Treasurer

Heather L. Platt, P.E.
SCMC, LLC.
PO Box 1031
Niagara Falls, NY 14304
w: (716) 255-1462
HPlatt@Seneca-SCMCLLC.com

RVC Chapter Technology

Alexander Weiss, PE
8 Bergan Beach Pl
Brooklyn, NY 11234-5743
w: (718) 251-1154
weisseng@gmail.com

Regional Representative

Garry N. Myers
WSP Flack + Kurtz
73 Bonnie Way
Allendale, NJ 07401-1127
w: (212) 951-2815
Garry.myers@wspfk.com

Nominating Committee Member

Russell J Stuber
U&S Services, Inc.
233 Fillmore Ave Suite 11
Tonawanda, NY 14150-2316
w: (716) 693-4490
stuberr@usservicesinc.com

RVC Student Activities

Ralph Draper
31 Gebig Rd
Nottingham, NH 03290-6107
w: (603) 608-8600
rwd@cisunix.unh.edu.com

Regional Young Eng. in ASHRAE

Frank Rivera
Mechanical Heating Supply
476 Thompson Pl
Bronx, NY 10455
w: (718) 402-9765
frivera@mechheat.com

Nominating Committee Alternate

Darcy A Carbone
Stebbins-Duffy, Inc.
6 Damon Road
Medford, MA 02155-2903
w: (617) 957-2567
dcarbone@stebbinsduffy.com

Regional Chapter Programs Chair

Peter Oppelt
R.F. Peck Co.
191 Moorland Rd.
Rochester, NY 14612-3421
w: (585) 227-1720
poppelt@rfpeck.com

CRC 2013 General Chair

Tom Zoller, PE
Trane-Burlington
175 Leroy Rd
Williston, VT 05495
w: (802) 383-6444
tzoller@trane.com

RVC Membership Promotion

Steven Sill
C & S Mechanical
2930 State Route 104A
Sterling, NY 13156-4253
w: (718) 494-5133
stevesill1966@hotmail.com

Regional Refrigeration Chair

Mark Cambria, PE
Fusion Systems Engineering
PO Box 1522
Clifton Park, NY 12065
w: (518) 621-0533
mcambria@fusionsystemseng.com

Director of Member Services

Joyce Abrams
ASHRAE
1791 Tullie Circle, N.E.
Atlanta, GA 30329
w: (404) 636-8400
jabrams@ashrae.org

RVC Grassroots Gov't Affairs

Richard E Vehlow, PE
NYS OGS BU1
33rd Corning Tower
Albany, NY 12242-0001
w: (518) 474-2471
rev1969@gmail.com

Regional Historian

Alexander Weiss, PE
8 Bergan Beach Pl
Brooklyn, NY 11234-5743
w: (718) 251-1154
weisseng@gmail.com

Director of Comm. & Publications

Jodi Scott
ASHRAE
1791 Tullie Circle, N.E.
Atlanta, GA 30329
w: (404) 636-8400
jscott@ashrae.org

Refrigerants Update and Forecast

Monday, December 16

12:00 – 1:30 pm

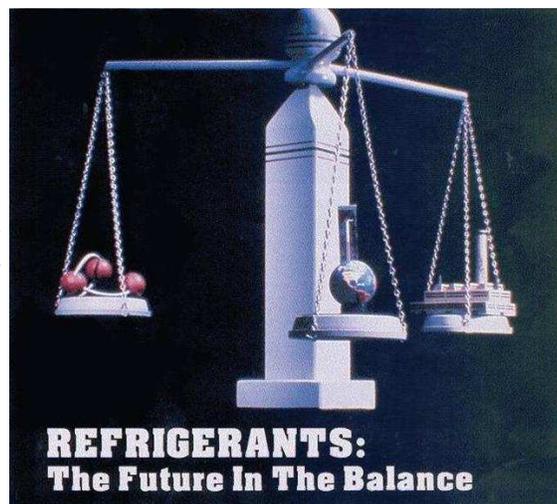
Lunch included

Mario's

Rochester, NY

Continuing education credits available

Come to hear the latest information on U.S. laws and regulations, proposed U.S. legislation and regulation, international agreements, and proposed international agreements that will impact the future use and phase out of HCFC (R-22 and R-123) and HFC (R-134a, R-410a, and R-407c) refrigerants. The presentation will include current requirements of the Montreal Protocol, Kyoto Protocol, the Clean Air Act, and U.S. EPA regulations, and proposed U.S. legislation and amendments to the Montreal Protocol that would phase down the production and use of HFCs such as 134a. Information will also be provided on the availability and projected cost of current HCFCs and HFCs plus forecast for new alternative refrigerants such as HFOs.



Topics covered:

- Update your knowledge of important environmental regulations.
- Acquire detailed knowledge of phase-out schedules and future refrigerant price forecasts.
- Gain knowledge of the proposed international and domestic actions to phase down production and use of HFCs.

Presenter:

James Wolf, President, Global Policy Associates

With more than 43 years of industry experience, Jim spent many years with Trane. He is well known in the HVAC industry, having served as the Society President of ASHRAE in 2000-2001. Jim has served as President of the Washington Industrial Round Table, President of the Washington Appliance Round Table, Chairman of the Alliance for Responsible Atmospheric Policy, and is currently Chairman of the International Policy Committee of the Business Council for Sustainable Energy. He is actively involved as a business advisor at the Montreal Protocol and Kyoto Protocol meetings. Jim received his Bachelors of Science degree in Electrical Engineering from the University of Arizona and his MBA degree from the American University. He is currently Chairman of the Climate Change Task Force, Treasurer, and serving on the Board of Directors of the Business Council for Sustainable Energy and represents the Business Council for Sustainable Energy as Head Delegate at the at the United Nations Framework Convention on Climate Change (UNFCCC) negotiations.

To Register: *Deadline to register Tuesday, December 10*

Call or email Meghan Gallagher at 585-256-2500 or meghan.gallagher@trane.com with the names of those attending.

Space is limited.

Visit mariosit.com for directions.

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Jan. 21-23, 2014 | AHR Expo

www.ashrae.org/newyork

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ASHRAE 2014 WINTER CONFERENCE

New York, NY January 18-22

Last Name _____ First _____ Initial _____

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Mailing Address _____

City _____ State/Province/Country _____ Zip/Postal Code _____

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

- 01 HVAC&R Contractor/Contracting Firm
- 02 Plumbing Contractor/Contracting Firm
- 03 Mechanical Contractor/Contracting Firm
- 04 Other Primary Contractor/Contracting Firm
- 05 Consulting Engineering Firm or Individual Consultant
- 06 Architectural & Architectural/Engineering Firm
- 07 Design/Build Firms
- 08 Wholesaling/Distribution
- 09 Manufacturer's Agent/Representative
- 10 Importer/Exporter
- 11 Manufacturer of HVAC&R & other Allied Equipment and Components (OEM)
- 12 Building/Facility/Plant Management or Operations
- 13 Public Utility or Government Agency
- 14 Publishing
- 15 Education

- 16 Other Allied to Field (specify) _____
- 17 Guest/Spouse/Other _____

Business Focus

- 1 Residential
- 2 Commercial
- 3 Industrial
- 4 Institutional
- 5 Guest/spouse/other

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Register by November 3 and SAVE!
Advance registration deadline December 31.
Full registration opens January 1, 2014.

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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 28, 2014).

Please send hotel information (provide email address).

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 New York Hilton.

E-mail _____

Which of the following best describes your job function? (check only one)

- 1 Owner, President, Partner
- 2 Other Senior Management (VP, General Mgr, etc.)
- 3 Engineer
- 4 Architect
- 5 Technician
- 6 Operations/Maintenance
- 7 Purchasing
- 8 Sales/Marketing
- 9 Research/Product Design & Development
- 10 Consultant
- 11 Faculty/Student
- 12 Editor/Publisher
- 13 Other Allied to Field (specify) _____
- 14 Guest/Spouse/Other _____

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

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Sept. 1-Nov. 3 Nov. 4-Dec. 31 Jan. 1-22
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<input type="checkbox"/> \$705 <input type="checkbox"/> \$735 <input type="checkbox"/> \$860 NON-MEMBER-1ST TIME ATTENDEE**
<input type="checkbox"/> \$130 <input type="checkbox"/> \$130 <input type="checkbox"/> \$130 SPEAKER** (includes session chairs/forum moderators)
<input type="checkbox"/> \$155 <input type="checkbox"/> \$160 <input type="checkbox"/> \$165 LIFE MEMBER**
<input type="checkbox"/> \$55 <input type="checkbox"/> \$55 <input type="checkbox"/> \$55 ASHRAE STUDENT MEMBER
<input type="checkbox"/> \$55 <input type="checkbox"/> \$55 <input type="checkbox"/> \$55 ASHRAE STUDENT BRANCH ADVISOR
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<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. 1.

QTY.	BY DEC. 31	TOTAL
20	@ \$75	_____
21	@ \$45	_____
22	@ \$55	_____
23	@ \$35	_____

- Saturday, January 18**
Welcome Party, 6:30pm
- Monday, January 20**
President's Luncheon, 12:15pm
- Tuesday, January 21**
Members Night Out, 6:15pm
- Life Members Lunch, 12noon

TOURS (limited space per tour)

QTY.	BY DEC. 31	TOTAL
24	@ \$38	_____
25	@ \$35	_____
26	@ \$55	_____
27	@ \$30	_____
28	@ \$70	_____

- Sunday, January 19**
NY TV & Movie Sites 1:00-4:00pm
- Monday, January 20**
Ground Zero, 2:15-6:00pm
- Tuesday, January 21**
Grand Central Terminal, 9am-12noon
- Financial District, 1:30-5:00pm
- Lincoln Center, 1:30-4:30pm

TECHNICAL TOURS (limited space per tour)

29	@ \$15	_____
30	@ \$25	_____
31	@ \$25	_____
32	@ \$15	_____
33	@ \$25	_____
34	@ \$25	_____
35	@ \$15	_____

- Sunday, January 19**
NY Hilton, 3:30-4:30pm
- Monday, January 20**
Rockefeller Center, 3:30-5:00pm
- Penn Plaza, 2:15-5:00pm
- NY Hilton, 2:30-3:30pm
- Tuesday, January 21**
Penn Plaza, 12:15-3:00pm
- New School Univ. Ctr., 12:15-2:45pm
- NY Hilton, 3:00-4:00pm

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

ASHRAE LEARNING INSTITUTE

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

- Saturday, January 18, 8am-3pm**
 - 60 Commercial Bldg Energy Audits NEW
 - 61 Healthcare Facilities: Design & Applications
- Tuesday, January 21, 9am-4pm**
 - 72 Energy Modeling Practice & Applications
 - 73 Changes to 90.1-2010 & IECC 2012 NEW
- Wednesday, January 22, 9am-4pm**
 - 77 Energy Mgmt in New & Existing Bldgs
- Thursday, January 23, 8am-3pm**
 - 80 Complying with Std 90.1-2013 NEW
 - 81 OS&I of High-Performance Bldgs
 - 82 Bldg Enclosure Commissioning NEW

Half-Day Courses \$119 ASHRAE Member \$159 Non-member

- Saturday, January 18, 12pm-3pm**
 - 62 Electric Rates, Rules & Regulations NEW
- Sunday, January 19, 2pm-5pm**
 - 63 Air/Air Energy Recovery Applications
 - 64 Lab Design: Basics & Beyond
 - 65 Optimization to HVAC&R Systems & Components
- Monday, January 20, 8:30am-11:30am**
 - 66 CHF Efficiency Design & Operations
 - 67 High-Performance Bldg Design Applications & Trends
 - 68 IAD Design, Construction & Commissioning NEW
- Monday, January 20, 2:45pm-5:45pm**
 - 69 Commissioning High-Performance Bldgs
 - 70 High-Performance Healthcare Facilities NEW
 - 71 Succeeding Std 90.1-2013 to Meet LEED+ NEW
- Tuesday, January 21, 1pm-4pm**
 - 74 Fundamentals & Applications of Std 55 NEW
 - 75 Commercial SSP+ NEW
 - 76 Data Center Energy Efficiency
- Wednesday, January 22, 9am-12pm**
 - 78 Application of Std 62.1-2013 NEW
- Wednesday, January 22, 1pm-4pm**
 - 79 Troubleshooting Humidity Control Problems

METHOD OF PAYMENT: CHECK ENCLOSED—(Payable to ASHRAE/NYC14) 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

Your advance conference registration will be confirmed by email within 2 weeks of receipt. If you do not receive a confirmation, please contact the ASHRAE Conferences Section.

ASHRAE Certification Programs

Receive the recognition you deserve by earning an ASHRAE Certification at the 2014 ASHRAE Winter Conference and AHR Expo.

Take advantage of ASHRAE's special administration of the certification examinations on January 23, 2014. All exams will begin at 9:00 a.m. (candidates must report to the testing room at 8:30 a.m.). These exams are being offered in conjunction with the 2014 ASHRAE Winter Conference and AHR Expo in New York City. Refresh your knowledge in preparation of earning an ASHRAE certification with learning opportunities at the show and conference.

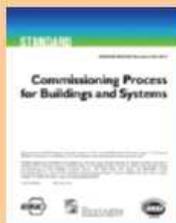


For more information, visit www.ashrae.org/NYCExams

Hot Products from ASHRAE

A leader in HVAC&R technology, ASHRAE publications cover topics that impact every facet of the environment, both indoors and out.

Commissioning Essentials Provided in New Standard



New ASHRAE Standard 202-2013, *Commissioning Process for Buildings and Systems*, describes how to plan, conduct, and document this vital part of a successful project. Informative appendices provide sample documentation, including checklists, systems manual, reports, training plans, and more. Supplementary ASHRAE Guidelines 0, 1.1 and 1.5 provide specific and detailed information on how to implement the commissioning process for each major building/facility, system or assembly, and for various stages of facility development and operation.

\$72 (\$61 ASHRAE Member) / 50 pages / 2013

Comprehensive Coverage of All Aspects of District System Design



The *District Heating Guide* and *District Cooling Guide*, now bundled for one low price, fulfill a worldwide need for modern and complete design guidance for district systems. Expanded from the District Heating and Cooling chapter in the *2012 ASHRAE Handbook*, these guides provide in-depth coverage, additional topics, and case studies. The *District Heating and Cooling Guides* draw on the expertise of an extremely diverse international team with current involvement in the industry and hundreds of years of combined experience.

\$179 (\$152 ASHRAE Member) / Softcover Bundle / 2013

Visit www.ashrae.org/bookstore to learn more about these and other outstanding ASHRAE publications!

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New York, NY | January 18–23, 2014

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Full-Day Professional Development Seminars:
Sat., Jan. 18—Thurs., Jan. 23
\$485 (ASHRAE Member: \$395)

Half-Day Short Courses:
Sat., Jan. 18—Weds., Jan. 22
\$159 (ASHRAE Member: \$119)
Earn 3 PDHs/AIA LUs or .3 CEUs

3 Ways to Register

1. Internet: www.ashrae.org/newyorkcourses
2. Phone: call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)
3. On-site: New York Hilton or Javits Center

(Online registration will close at midnight before the start of each seminar and course. After that, please register onsite at the ASHRAE registration booth at the New York Hilton or Javits Center.)

Full-Day Courses

NEW! Commercial Building Energy Audits

Saturday, Jan.18, 2014 | New York Hilton | 8:00 am-3:00 pm
Instructor: Jim Kelsey, P.E., Member ASHRAE, BEAP, LEED® AP

Healthcare Facilities: Best Practices for Design & Applications

Saturday, Jan.18, 2014 | New York Hilton | 8:00 am-3:00 pm
Instructors: Robert Cox, P.E., Member ASHRAE; Daniel Koenigshofer, P.E., Member ASHRAE, HFDP; and Michael Sheerin, P.E., Member ASHRAE

Energy Modeling Best Practice and Applications ES Practices

(Co-sponsored by IBPSA-USA and RMI)

Tuesday, Jan.21, 2014 | Javits Center | 9:00 am-4:00 pm
Instructors: Erik Kolderup, P.E., Member ASHRAE, BEMP, LEED® AP and Annabel Marston, Ph.D., BEMP, LEED® AP

NEW! Significant Changes to Standard 90.1-2010 and IECC 2012

Tuesday, Jan.21, 2014 | Javits Center | 9:00 am-4:00 pm
Instructor: Mack Wallace, P.E., Member ASHRAE, LEED® AP

Effective Energy Management in New and Existing Buildings ES Practices

Wednesday, Jan.22, 2014 | Javits Center | 9:00 am-4:00 pm
Instructor: Richard Pearson, P.E., Fellow/Life Member ASHRAE

NEW! Complying with Standard 90.1-2013 ES Practices

Thursday, Jan.23, 2014 | Javits Center | 8:00 am-3:00 pm
Instructors: Mack Wallace, P.E., Member ASHRAE, LEED® AP and Joseph Deringer, Member ASHRAE, AIA, LEED® AP

Operations & Maintenance of High-Performance Buildings

Thursday, Jan.23, 2014 | Javits Center | 8:00 am-3:00 pm
Instructors: Angela Lewis, Ph.D., P.E., Member ASHRAE, LEED® AP and Laurie Gilmer, P.E., Member ASHRAE, LEED® AP

NEW! Introduction to Building Enclosure Commissioning

Thursday, Jan.23, 2014 | Javits Center | 8:00 am-3:00 pm
Instructors: Fiona Aldous, P.E., Member ASHRAE; Jay Enck, P.E., Member ASHRAE, HBDP, CPMP, BEAP, LEED® AP and William Nash, Member ASHRAE

NEW! Electric Rates, Rules and Regulations

Saturday, Jan.18, 2014 | New York Hilton | 8:00 am-3:00 pm
Instructor: Frank Pucciano, P.E., Member ASHRAE

Half-Day Short Courses

Air-to-Air Energy Recovery Applications: Best Practices ES Practices

Sunday, Jan.19, 2014 | Javits Center | 2:00 pm-5:00 pm

Instructor: Paul Pieper, P.Eng., Member ASHRAE

Laboratory Design: The Basics and Beyond

Sunday, Jan.19, 2014 | Javits Center | 2:00 pm-5:00 pm

Instructor: John Varley, P.E., Member ASHRAE, HBDP, LEED® AP

Mathematical Optimization Techniques and their Applications to HVAC&R Systems and Components

Sunday, Jan.19, 2014 | Javits Center | 2:00 pm-5:00 pm

Instructors: Reinhard Radermacher, Ph.D., P.E., Fellow ASHRAE and Vikrant Aute, Ph.D., Member ASHRAE

Combined Heat & Power: Design through Operations ES Practices

Monday, Jan.20, 2014 | Javits Center | 8:30 am-11:30 am

Instructor: Lucas Hyman, P.E., Member ASHRAE, LEED® AP

High-Performance Building Design: Applications & Future Trends ES Practices

Monday, Jan.20, 2014 | Javits Center | 8:30 am-11:30 am

Instructor: Tom Lawrence, Ph.D., P.E., Member ASHRAE, LEED® AP

NEW! IAQ Best Practices for Design, Construction and Commissioning IAQ Practices

Monday, Jan.20, 2014 | Javits Center | 8:30 am-11:30 am

Instructor: Hoy Bohanon, P.E., Member ASHRAE, BEAP, LEED® AP

Commissioning for High-Performance Buildings

(Co-sponsored with BCA, IES, NEBB)

Monday, Jan.20, 2014 | Javits Center | 2:45 pm-5:45 pm

Instructor: Walter Grondzik, P.E., Fellow/Life Member ASHRAE, LEED® AP

NEW! Designing High-Performance Healthcare Facilities

Monday, Jan.20, 2014 | Javits Center | 2:45 pm-5:45 pm

Instructor: Daniel Koenigshofer, P.E., Member ASHRAE, HFDP

NEW! Exceeding Standard 90.1-2013 to Meet LEED® Requirements ES Practices

Monday, Jan.20, 2014 | Javits Center | 2:45 pm-5:45 pm

Instructors: McHenry Wallace, P.E., Member ASHRAE & Joseph Deringer, AIA, Member ASHRAE, LEED® AP

Half-Day Short Courses (continued)

NEW! Fundamentals and Applications of Standard 55

Tuesday, Jan.21, 2014 | Javits Center | 1:00 pm-4:00 pm

Instructors: Robert Bean, P.Eng., Member ASHRAE; Lawrence Schoen, P.E., Fellow ASHRAE; and Peter Alspach, P.E., Member ASHRAE, LEED® AP

NEW! Designing Commercial Ground Source Heat Pumps

Tuesday, Jan.21, 2014 | Javits Center | 1:00 pm-4:00 pm

Instructor: Kirk Mescher, P.E., Member ASHRAE

Data Center Energy Efficiency ES Practices

Tuesday, Jan.21, 2014 | Javits Center | 1:00 pm-4:00 pm

Instructors: Don Beaty, P.E., Member ASHRAE and Roger Schmidt, Ph.D., P.E., Member ASHRAE

NEW! Application of Standard 62.1-2013: Multiple Spaces Equations and Spreadsheets

IAQ Practices

Wednesday, Jan.22, 2014 | Javits Center | 9:00 am-12:00 pm

Instructor: Hoy Bohanon, P.E., Member ASHRAE, BEAP, LEED® AP

Troubleshooting Humidity Control Problems

Wednesday, Jan.22, 2014 | Javits Center | 1:00 pm-4:00 pm

Instructor: Lew Harriman, Fellow ASHRAE

ES Practices—This training applies to the Energy Savings Practices Career Enhancement

IAQ Practices—This training applies to the IAQ Practices Career Enhancement Curriculum

Join
ASHRAE
at its

2014 Winter Conference and AHR Expo in New York!

Conference Jan. 18–22 | AHR Expo Jan. 21–23

www.ashrae.org/newyork



Special first timer registration fee available!

Technical Program—features a building-oriented theme, featuring tracks on building information systems; environmental health; international design; and, featured for this Conference, tall building performance.

AHR Expo—The ASHRAE co-sponsored AHR Expo takes place Jan. 21–23 (NOTE DAY CHANGE: Tuesday, Wednesday, Thursday) at Javits Convention Center. www.ahrexpo.com

ASHRAE Certification—all six certification programs are being offered: Building Energy Assessment Professional; Building Energy Modeling Professional; Commissioning Process Management Professional; High-Performance Building Design Professional; Healthcare Facility Design Professional; and Operations & Performance Management Professional.

ASHRAE Learning Institute—23 Professional Development Seminars and Short Courses are offered, including 11 new courses that include Standards 55 and 90.1, electric rates and regulations, health care facilities, building energy audits and ground source heat pumps.






ASHRAE, AHR Expo Return to New York City for 2014 Winter Conference



ATLANTA— New York City's iconic skyline serves as the perfect backdrop for the 2014 ASHRAE Winter Conference. With a special focus on the design, development and operation of tall buildings, the Conference's Technical Program examines themes relevant to NYC, as well as the basics of HVAC systems, refrigeration and many other topics significant to the building industry.

The 2014 Winter Conference takes place Jan. 18-22 at the New York Hilton. To register and for complete Conference information, visit www.ashrae.org/newyork.

The International Air-Conditioning, Heating, Refrigerating Expo®, held in conjunction with the Winter Conference, runs Jan. 21-23. The Expo, held at the Javits Convention Center, takes place Tuesday, Wednesday, Thursday as opposed to the traditional Monday, Tuesday, Wednesday. More information is available at www.ahrexpo.com. More than 100 New York PDHs, AIA LUs, PDHs and LEED AP credits are available through ASHRAE Learning Institute courses and Technical Program sessions.

The Technical Program features more than 200 sessions addressing building information systems; hydronic system design; improving building performance; indoor environmental air health/IEQ; refrigeration; HVAC&R systems and equipment; and HVAC&R fundamentals and application.

Two particular tracks of note are Tall Buildings, which examines opportunities in the design, development and operation of tall and super-tall buildings, and International Design, addressing innovative design strategies to meet environmental elements, geography and cultures.

Also, choose from 23 Professional Development Seminars and Short Courses to help you stay current on HVAC trends. The ASHRAE Learning Institute offers new updates to Standards 90.1 and 62.1, in addition to 11 new courses that include Standard 55, building enclosure commissioning, electric rates and regulations, health care facilities, building energy audits and ground source heat pumps. All courses are approved for renewal of professional engineer and professional architect licenses, as well as for industry certification programs. For a list of all courses, visit www.ashrae.org/newyorkcourses.

Additionally, ASHRAE offers a special administration of all six certification examinations on Thursday, Jan. 23: Building Energy Assessment Professional (BEAP), Building Energy Modeling Professional (BEMP), Commissioning Process Management Professional (CPMP), High-Performance Building Design Professional (HBDP), Healthcare Facility Design Professional (HFDP) and Operations & Performance Management Professional (OPMP). More information on each certification can be found at www.ashrae.org/certification.

ASHRAE Conference technical tours give you a first-hand look at technology developed by members to further the industry. Tours include the Tishman Speyer Rockefeller Center central refrigeration plant, building management system and ice storage facility; the cogeneration project at One Penn Plaza; and the cooling system of the New York Hilton, to name just a few.

The Conference's Plenary will feature Mark Sanborn, president of Sanborn & Associates, Inc., an idea lab for leadership development. In addition to his experience leading at a local and national level, Sanborn has written or co-authored eight books, and is the author of more than two dozen videos and audio training programs on leadership, change, teamwork and customer service. He has presented over 2,400 speeches and seminars in every state and a dozen countries. The Plenary takes place on Saturday, Jan. 18.

ASHRAE/IES Publish 2013 Energy Standard: Changes for Envelope, Lighting, Mechanical Sections

ATLANTA – Major changes to requirements regarding building envelope, lighting, mechanical and the energy cost budget are contained in the newly published energy standard from ASHRAE and IES. ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, incorporates 110 addenda, reflecting changes made through the public review process. Appendix F gives brief descriptions and publication dates of the addenda to 90.1-2010 reflected in this new edition.

“While many things have changed since the first version of Standard 90 was published in 1975, the need to reduce building energy use and cost has not,” Steve Skalko, chair of the committee that wrote the 2013 standard, said. “This standard represents many advances over the 2010 standard, as we worked toward our goal of making the standard 40 to 50 percent more stringent than the 2004 standard.”

“Achieving the stringency goals established for the 2013 standard presented a challenge in reducing the requirements for lighting,” Rita Harrold, director of technology for the Illuminating Engineering Society of North America, said. “While interior lighting power densities (LPD) were re-evaluated and most lowered, there continues to be an ongoing concern about maintaining quality of lighting installations for occupant satisfaction and comfort while achieving energy savings. The focus in the 2013 standard, therefore, was not just on lowering LPDs but on finding ways to achieve savings by adding more controls and daylighting requirements as well as including lighting limits for exterior applications based on jurisdictional zoning.”

The most significant changes are:

- **Building Envelope.** Opaque elements and fenestration requirements have been revised to increase stringency while maintaining a reasonable level of cost-effectiveness. Opaque and fenestration assemblies in Tables 5.5-1 through 5.5-8 are revised in most climates. These changes include:
 - o Criteria requiring double glazed fenestration in many climates
 - o Minimum visible transmittance/solar heat gain coefficient (VT/SHGC) ratio to enable good daylighting with minimum solar gain, while not restricting triple- and quadruple-glazing.
 - o Simplification of the skylighting criteria.
- **Lighting:** These changes include improvements to daylighting and daylighting controls, space-by-space lighting power density limits, thresholds for toplighting and revised controls requirements and format.
- **Mechanical:** Equipment efficiencies are increased for heat pumps, packaged terminal air conditioners, single package vertical heat pumps and air conditioners evaporative condensers. Also, fan efficiency requirements are introduced for the first time. Additional provisions address commercial refrigeration equipment, improved controls on heat rejection and boiler equipment, requirements for expanded use of energy recovery, small motor efficiencies and fan power control and credits. Control revision requirements have been added to the standard such as direct digital controls in many applications. Finally, the 2013 edition completes the work that was begun on equipment efficiencies for chillers in the 2010 edition.
- **Energy Cost Budget (ECB) & Modeling:** Improvements were made to the ECB and Appendix G provisions to clarify the use of the prescriptive provisions when performing building energy use modeling. In addition, these sections were revised to enhance capturing daylighting when doing the modeling calculations.

(Continued on Next Page)

ASHRAE/IES Publish 2013 Energy Standard: Changes for Envelope, Lighting, Mechanical Sections (continued)

(From Previous Page)

Another important change for the 2013 standard is the first alternate compliance path in Chapter 6. Section 6.6 was added to the 2010 edition to provide a location for alternate methods of compliance with the standard. The first such alternate path has been developed for computer room systems and was formulated with the assistance of ASHRAE technical committee 9.9, Mission Critical Facilities, Data Centers, Technology Spaces and Electronic Equipment. This path uses the Power Usage Effectiveness (PUE) metric established by the datacom industry. This alternate efficiency path format provides a framework that could be considered for other energy using facets of buildings not easily covered in the prescriptive provisions of the standard.

Also new to the standard are requirements for operating escalators and moving walkways at minimum speed per ASME A17.1 when not conveying passengers.

The cost of ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, is 135 (\$115, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit www.ashrae.org/bookstore.

ASHRAE 2013-2014 Conference Lineup

ATLANTA—Mark your calendars now because ASHRAE's conference schedule for 2013-2014 is widespread in both dates and global reach.

ASHRAE conferences present the latest developments in the industry and fundamental tried and true practices. Topics range from high performance buildings to buildings that have combustion with low-grade fuels.

- Jan. 18-22, 2014, [ASHRAE Winter Conference](#); Jan. 20-23, AHR Expo, New York, New York
- Feb. 24-26, 2014, [First International Conference on Energy and Indoor Environment for Hot Climates](#), Doha, Qatar
- April 7-8, 2014, [High Performance Buildings Conference](#), San Francisco, Calif.
- April 24-25, 2014, [Efficient, High Performance Buildings for Developing Economies](#), Manila, Philippines
- June 28-July 2, 2014, [ASHRAE Annual Conference](#), Seattle, Wash.
- September 10-12, 2014, [ASHRAE/IBPSA-USA Building Simulation Conference](#), Atlanta, Ga.

The conferences feature peer-reviewed papers, presentations with hands-on information presented in a non-commercial format, Professional Development Hours and networking opportunities.

ASHRAE IAQ 2013 in October 2013 reviews the state of knowledge on the balance between environmental health and energy efficiency in the pursuit of low energy buildings and covers a range of topics: residential and commercial buildings, new construction and retrofit, active and passive approaches, design and operation.

What better city than New York for ASHRAE to host a **Winter Conference** in January 2014 with a Technical Program focused on buildings? The Conference has a building-oriented theme with papers and presentations related to building information systems; environmental health; international design; HVAC&R applications and systems; and, of course, tall building performance.

The First International Conference on Energy and Indoor Environment for Hot Climates in February 2014 tackles energy and indoor environmental quality issues in humid and arid hot climates, providing a forum for discussion of the latest research and developments.

Building upon its 2012 High Performance Buildings Conference and 2009 Net Zero Conference, the **High Performance Buildings Conference** in April 2014 seeks to advance the industry's efforts to accomplish a true high-performance built environment. The tracks include building performance modeling, envelope strategies, lighting/daylighting strategies, indoor environmental quality strategies, building occupant behavior, market value, new building technologies and case studies and lessons learned.

The design, construction and operation of energy efficient, high performance buildings in developing economies have been identified by the building industry and policymakers as key areas where technology, standards and investments are needed. The **Efficient, High Performance Buildings for Developing Economies Conference** in April 2014 will address a number of themes on this topic.

The **2014 ASHRAE Annual Conference** takes place in Seattle, Wash., June 2014. The Conference addresses broad topics in the application of technology to practice, specific applications in ground source heat pumps, operations and maintenance and indoor environmental quality as well as new reports on research taking place worldwide.

Finally, ASHRAE and IBPSA-USA have created a new jointly co-sponsored **Building Simulation Conference** taking place in September 2014 that encompasses the ASHRAE Energy Modeling and IBPSA-USA SimBuild Conferences. The conference is a first for the industry and focuses on "BIM, BEM and SIM – Integrated Building Design and Modeling," addressing building information modeling, building energy modeling and building simulation.

Society News

ASHRAE New York Tech Program Puts Special Focus on Tall Buildings, International Design, Building Performance

ATLANTA—It's only appropriate that in a city known for skyscrapers—home to nearly 600—that the 2014 ASHRAE Winter Conference Technical Program puts a special focus on the design, development and operation of tall buildings when it visits New York City, Jan. 18-22.

"The ASHRAE Technical Program offers a great opportunity to learn from fellow professionals and experts," Jon Cohen, New York Conference program chair, said. "Also, ASHRAE is continuously improving the Conference experience to incorporate additional networking opportunities, in addition to focusing on technical content."

The Technical Program begins Sunday, Jan. 19, and will follow the successful new format introduced earlier in the year at the 2013 Annual Conference: special hour-long interactive sessions with audience participation, followed by a networking coffee break.

The Technical Program features more than 200 sessions and offers dozens of opportunities to earn New York PDHs, AIA LUs and LEED AP credits.

In a nod to New York City, with its instantly recognizable skyline of towering buildings, the Tall Buildings: Performance Meets Policy track looks at opportunities in the design, development and operation of tall and super-tall buildings. The track also presents the measured and measurable use of utilities, envelope (infiltration and exfiltration), building pressure, waste handling, elevators, carbon and adaptive reuse. Sessions of interest include "Is

ASHRAE Tall Enough for Tall Buildings?;" "Linking Tall Buildings' Energy Use to Tenant Contribution to Economy;" and "Life Safety Issues with Tall Buildings." The innovative features in tall buildings offer attendees design ideas for applications in smaller-sized buildings.

Additionally, as New York is a city on the world stage, the International Design track addresses innovative design strategies to meet environmental elements, geography and cultures. Examine "Energy Saving Strategy of Large-Scale University Facilities;" several sessions on "Cutting Edge Japanese Technologies;" "Sustainable Development in Africa;" and "European Union: Practical Benchmarking of HVAC System Energy Efficiency," to name just a few.

Building Information Systems investigates how building control technologies are integrated and used for building management, operation and efficiency. An interesting session of note is "App, App and Away: Enabling Meaningful Work for the Building Professional with the Development of Quality Apps for Smartphones and Tablet Computers," which explores the evolution of apps; the methods for developing and establishing a reliable app to provide an accessible and verifiable way for building professional to solve practical problems; and looks at areas of potential app development.

Hydronic System Design addresses innovative design, system components and research and case studies of their application, including unintended consequences. Sessions include the three part session "Efficient Technologies that are Also Economically Sustainable;" "Hydronic System Acoustics;" and "Energy Efficient Single Pipe Hydronic System Design for Large and Tall Buildings."

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Society News

ASHRAE New York Tech Program Puts Special Focus on Tall Buildings, International Design, Building Performance (continued)

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The Environmental Health through Indoor Environmental Quality track includes developing, evaluating and predicting optimal indoor environmental conditions, and features case histories, lessons learned and advice to operators and designers about IEQ, as well as disaster recovery in buildings affected by hurricanes and floods. A few of the track offerings include “Indoor Air Environment and Heat Recovery Ventilation in a Passive School Building;” “A Comprehensive Look at Infectious Disease and Air Filtration in Healthcare Facilities: Energy Saving, IAQ Performance, and What Makes You Sick;” and “Lessons Learned from Storm Recovery.”

Additional tracks include Building Performance and Commissioning, Systems and Equipment and Fundamentals and Applications.

The Technical Program runs Sunday through Wednesday, Jan. 19-22, at the New York Hilton. Advance registration closes Dec. 31, after which registration fees increase to “onsite” pricing. Register for the Conference at www.ashrae.org/newyork.

The International Air-Conditioning, Heating, Refrigerating Expo®, held in conjunction with the Winter Conference, runs Jan. 21-23. The Expo, held at the Javits Convention Center, takes place Tuesday, Wednesday, Thursday as opposed to the traditional Monday, Tuesday, Wednesday. More information is available at www.ahrexpo.com.

ASHRAE Publishes 2013 Version of IAQ Standard

ATLANTA – The 2013 version of ASHRAE’s indoor air quality standard contains several revisions to help users better meet its requirements.

Newly published, ANSI/ASHRAE Standard 62.1-2013, *Ventilation for Acceptable Indoor Air Quality*, sets minimum ventilation rates and other requirements for commercial and institutional buildings.

The 2013 standard combines the 2010 standard and 10 published addenda to that edition, providing an easy-to-use consolidated standard. Specific information on the contents of each addendum and approval dates for each addendum are included in Informative Appendix J at the end of the standard.

“The 2013 version of Standard 62.1 continues the trend of increasing clarity while adding flexibility,” Roger Hedrick, Standard 62.1 committee chair, said. “These changes will allow designers and building operators to meet the requirements of the standard and provide adequate ventilation airflow to occupants while reducing excess ventilation and the associated energy consumption. “

The 2013 edition of the standard revises and improves the standard in several ways. A number of changes remove inconsistencies within the standard and improve clarity. Significant changes include:

- Table 6-2, Zone Air Distribution Effectiveness is modified to increase the ventilation effectiveness of underfloor air distribution systems that meet certain conditions.
- Requirements for the quality of water used in humidification systems are modified and clarified.
- Building level pressurization requirements were clarified, including adding a definition of “exfiltration.”
- A performance alternative to the prescriptive exhaust rates is added. This approach differs from the Indoor Air Quality Procedure, the existing performance-based method for setting supply ventilation rates, in that monitoring of the concentrations of contaminants of concern is required and provides the basis for control of exhaust flow rates.
- Some changes to the ventilation rates and space types in Table 6-1 are made. These add refrigerated warehouses and change the ventilation rate for sports related spaces to include a per occupant component which then allows the use of demand controlled ventilation in these spaces.
- The filtration requirement on air entering wetted cooling coils has been modified to change the MERV rating from 6 to 8. This change will reduce potential for particulate deposition on the coils that could lead to biological or other contamination on the coils.
- Toilet exhaust air that is cleaned to Class 1 may be recirculated.

The cost of ANSI/ASHRAE Standard 62.1-2013, *Ventilation for Acceptable Indoor Air Quality*, is \$79 (\$67 ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit www.ashrae.org/bookstore

Society News

Building Energy Disclosure Session Offered by ASHRAE at AHR Expo

ATLANTA – Disclosure requirements and transparency through programs such as fuel efficiency in automobiles and calorie labeling in restaurants have been shown to shift producer and consumer behavior.

The same principles are also being applied to building energy use, where energy use reporting and open data impact market behavior and drive energy efficiency. The implications of the growing trend in disclosure policies are examined in a free session offered by ASHRAE at the 2014 AHR Expo.

ASHRAE's 2014 Winter Conference takes place Jan. 18-22, 2014, New York City, N.Y. Held in conjunction with the 2014 Winter Conference is the International Air-Conditioning, Heating, Refrigerating Exposition, Jan. 21-23, 2014.

ASHRAE's AHR Expo Session, "Trends in Building Energy Disclosure: Increasing Energy Efficiency without Retrofits," takes place from 3-4 p.m., Tuesday, Jan. 21, in the South Concourse, second level. No badge or ticket required. Attendees will earn 1 NY PDH, 1 AIA Learning Unit and 1 LEED AP credit.

Energy disclosure requirements, now required in seven U.S. cities and numerous European Union countries, require periodic reporting of energy consumption for certain buildings.

"The speakers will tackle the issue of building energy use on the large scale and what major cities are doing about it," Mike Eardley, P.E., seminar chair, said. "A cost effective solution is not major construction and new efficient equipment, but tuning up existing HVAC&R systems and verifying they are operating correctly. Occupant behavior also has a major impact. Attendees will learn the energy penalties associated with these issues. We also will discuss how city level energy disclosure requirements take a necessary first step in communicating energy use information in buildings so that corrective action can be taken."

The seminar presents a new energy benchmarking model to support comparative energy performance evaluation across commercial buildings.

The study analyzes patterns of energy consumption across New York City buildings and models the determinants of building energy efficiency to establish a robust model for normalization across multiple characteristics. Energy efficiency has traditionally been achieved through physical retrofits. An alternative approach is presented that harnesses data from smart meters in an eco-informatic system and provides feedback to building occupants on their energy consumption.

Eardley said use of eco-informatic/eco-feedback systems offer a mechanism to close the feedback loop between occupants and energy consumption. Reductions of 5 to 15 percent have been noted with such systems.

"Most importantly, the use of such systems has been shown to be extremely cost effective in comparison with other energy efficiency initiatives," he said.

Presentations are:

- "Building a Better Benchmark: Lessons from New York City's Local Law 84 Energy Disclosure Data," Constantine Kontokosta, Ph.D., P.E., NYU Center for the Sustainable Built Environment, New York, N.Y.
- "Encouraging Energy Efficient Behavior of Building Occupants through Contextualized Feedback and Social Network Dynamics," Rishee Jain, Ph.D., NYU Center for Urban Science and Progress, Brooklyn, N.Y.



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- [Building Energy Modeling Professional \(BEMP\)](#)
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- [Healthcare Facility Design Professional \(HFDP\)](#)
- [High-Performance Building Design Professional \(HBDP\)](#)
- [Operations & Performance Management Professional \(OPMP\)](#)

To participate in this exam administration, applications must be submitted by **January 3, 2014** for the program in which you're interested. There will be no on-site registration and seating is limited. For eligibility requirements and applications, go to www.ashrae.org/NYCEXams.

An ASHRAE certification is a distinct honor held by top professionals in HVAC&R and allied fields and is recognized as a standard of excellence worldwide. Take advantage of the opportunity to earn an ASHRAE certification while you're attending ASHRAE's Winter Conference and AHR Expo.

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ASHRAE Remaining Fall Online Courses

The 13 ASHRAE Learning Institute courses provide professional development through in-depth information that is timely, practical and targeted to provide engineers in consulting practices, facility management or supplier support with instruction on applying ASRHAE standards and employing new technologies essential for advanced building performance. The online courses allow attendees to learn from anywhere with an Internet connection. Course participants earn continuing education credits and qualify for Professional Development Hours for each course completed. Courses are instructor-led, drawing upon professional knowledge of leading practitioners. The courses are:

- **NEW!** Commercial Building Energy Audits - Parts 1 and 2, **Nov. 4**
- IAQ Best Practices for Design, Construction, and Commissioning, **Nov. 13**

For registration costs and to register, visit www.ashrae.org/onlinecourses. Site licenses are available to organizations that have five or more course participants. For more information, e-mail edu@ashrae.org or call 678-539-1146.