

# ASHRAE Rochester



VOLUME 11, ISSUE 6

JANUARY 2017

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## January ASHRAE Meeting

**Topic:** Cleanroom Design Considerations for a  
Certifiers Perspective

**Presenters:** Ralph R. Kraft, Inc.

**When:** Monday January 9th, 2016

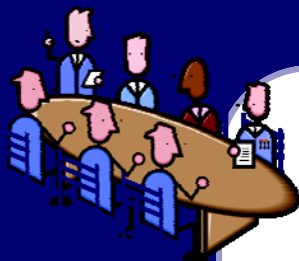
**Where:** City Grill  
384 East Ave, Rochester

**Cost:** \$25.00



Please RSVP by noon Thursday, January 5th to Tim Duprey  
[tim.duprey@pres-services.com](mailto:tim.duprey@pres-services.com)

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## Chapter Officers

### President

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

### President Elect

Bill Clark, PE  
(585) 303-0729  
william.clark@DayAutomation.com

### Treasurer

Paul Kenna, PE  
(585) 261-0558  
pkenna@nrg-concepts.com

### Secretary

Tom Streber, PE  
(585) 272-9450  
tstreber@jswanson.com

## Committee Chairs

### CTTC

Jeff Wiedrick (585) 325-8354  
jwiedrick@bergmannpc.com

### Grassroots Government Advocacy

Tom Burke, PE (585) 429-3594  
tom.burke@wegmans.com  
George Herman (585) 219-5908  
George@hermanhvac.com

### Refrigeration Co-Chairs

Michael Nohle (585) 545-5522  
mnohle@meiersupply.com  
Sam Scorsone, PE (585) 232-5135  
sscorsone@bergmannpc.com

### Historian

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

### Membership

Mike Benedict (585) 490-2661  
mike@airsystemsbalancing.com

### YEA

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

### Student Activities

Rob Hudson, PE (585) 341-3187  
rhudson@ibceng.com

## Board of Governors

Tim Duprey (3)  
(585) 330-6430  
tduprey@rochester.rr.com

Branden Farnsworth-Weinblatt, PE (3)  
(585) 364-1628  
bfweinblatt@popligroup.com

Steve Dear (2)  
(585) 325-1290  
sdear@crosbybrownlie.com

Sam Scorsone, PE (2)  
(585) 232-5135  
sscorsone@bergmannpc.com

Mike Benedict (1)  
(585) 490-2661  
mike@airsystemsbalancing.com

George Herman (1)  
(585) 219-5908  
george@hermanhvac.com

### Education

Bill Murray, PE (585) 641-7121  
bmurray@ec4b.com

### Newsletter Editor

Scott Edwards (585) 301-6591  
ashraerocnews@gmail.com

### Attendance

Timothy Duprey (585) 330-6430  
tduprey@rochester.rr.com

### Publicity

Mark Kukla (585) 232-3440  
mark@airsystemsbalancing.com

### Research Promotion

Matt Devlin (585) 232-5135  
mdevlin@bergmannpc.com

### Webmaster

Steve Dear (585) 325-1290  
sdear@crosbybrownlie.com

### Nominating / Past President

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

### Buyer's Guide

Branden Farnsworth-Weinblatt, PE  
(585) 364-1628  
bfweinblatt@popligroup.com

ASHRAE 2016-2017 Meeting Schedule			
Date	Event	Theme	Location
Monday, 1/9/2017	Cleanroom Design Considerations from a Certifiers Perspective (presented by Ralph Craft, R. Kraft, Inc)	<i>(PDH Approved)</i>	City Grill @ 12:00 PM
Friday, 2/10/2017	ASHRAE Valentines Dinner Dance	60th Anniversay	TBD
Monday, 2/13/2017	Data center and Critical space cooling technology advancements (presented by Mike DeGaetano, RL Kistler Inc)	Membership Promotion <i>(PDH Pending)</i>	City Grill @ 12:00 PM
Monday, 3/13/2017	ASHRAE Building Energy Quotient (bEQ) (presented by Hoy Bohanon, PE, President, Hoy Bohanon Engineering, PLLC)	Resource Promotion <i>(PDH Pending)</i>	City Grill @ 12:00 PM
Monday, 4/10/2017	Refrigeration Tour	Refrigeration Night <i>(PDH Pending)</i>	TBD
Monday, 5/8/2017	Annual ASHRAE Golf Outing and Picnic <i>(Ravenwood Golf Course)</i>	---	9:30 AM Golf 4:30 - 8:00 Picnic

Note: Dates, topics and presenters are subject to change, but if this happens we will post any updates to the calendar on our website.

## 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 January Message

January Newsletter 2017  
President's Message

Our meeting in December was on "Impact of new EPA and DOE Regulations on Refrigeration and Cooling" presented by Mike Nohle. Prior to the Chapter meeting the Young Engineers of ASHRAE (YEA) hosted a technical session on "Fundamentals of Refrigeration" presented by Sam Scorsone, PE. That you to everyone that attended.

The ASHRAE Winter Conference and AHR Expo is quickly approaching on January 30<sup>th</sup> through February 1<sup>st</sup> in Las Vegas, Nevada. This show is expected to be the largest ASHRAE show in history. The ASHRAE Learning Institute is offering many courses during the conference. If you would like to attend the conference or any of the courses, more information can be found at <http://ahrexpo.com>.

On Friday, February 10<sup>th</sup>, 2017 the Rochester ASHRAE Chapter will be hosting is 60<sup>th</sup> Annual Valentine Dinner Dance. Jody and Matthew McGarry put on a fantastic event. Please consider contributing to this event and joining us. It is a terrific time with fantastic food, music and fun.

Please continue to check out our website at [www.rochester.ashraechapters.org](http://www.rochester.ashraechapters.org) for information on upcoming chapter meetings, current officer list and contact information, chapter newsletters, and more! Also take a minute and like us on Facebook at [www.facebook.com/#!/ashraerochester](http://www.facebook.com/#!/ashraerochester).



*Jeff Close, 2016-2017 President*

Jeffrey Close, P.E.  
2016-2017 President  
Rochester Chapter

# January Meeting Info

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

## January ASHRAE Meeting << PDH APPROVED>>

**Date:** Monday, January 9th, 2017

**Location:** City Grill **\*\*OUR NEW LOCATION\*\***

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

**Cost:** \$25.00

**Speaker:** Ralph R. Kraft, Inc.

**Topic:** Cleanroom Design Considerations for a Certifiers Perspective

**Note:** (1) PDH {Approved}

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

<< Pay for Meeting Registration online via PayPal >>

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

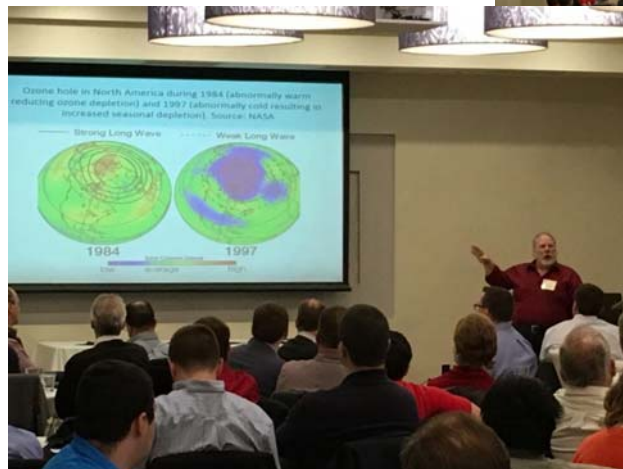
Cash or check payment is still accepted at the door with your reservation.

Please RSVP no later than noon Thursday January 5th to Tim Duprey  
Phone: 585.330.6430 or e-Mail ... [ASHRAERochester@gmail.com](mailto:ASHRAERochester@gmail.com), [tim.duprey@pres-services.com](mailto:tim.duprey@pres-services.com) or [tduprey@rochester.rr.com](mailto:tduprey@rochester.rr.com).

# Highlights from December ASHRAE Meeting



December's ASHRAE Meeting featured two PDH Topics: Technical Session on "Fundamentals of Refrigeration: Principles and Common Components", presented by Sam Scorsone (above) and "Impact of new EPA and DOE Regulations on Refrigeration and Cooling, led by Mike Nohle (below).






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, Jeff Close at (585) 289-6816 or by email [jeff.close@pres-services.com](mailto:jeff.close@pres-services.com).

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

Job ID / Location	2016-25804: US-NY-Rochester (1 position) 2016-25927: US-NY-Endicott (1 position)	
Minimum Experience (Years)	7	
Discipline	Buildings Engineering	

**Your Opportunity:**

Our Buildings Engineering group specializes in the design and development processes unique to buildings. Working closely with our clients, our dedicated professionals help to establish and understand the needs of a range of building projects. This is where great ideas and rewarding careers are built. For both public and private sector clients, we provide unique plan checking capabilities as well as energy engineering and performance engineering services, covering each of the major engineering disciplines-structural, mechanical, and electrical. In addition, we bring together innovative and functional design solutions for companies involved in the discovery, research and development, and commercial scale manufacturing of pharmaceuticals, biotechnology, and medical device products. Focused on providing cost-effective solutions to engineering challenges, we are involved in a diverse range of projects from the initial planning stages to design, construction, and commissioning. Our structure cultivates career growth and provides opportunities as unique as you are.

**Your Duties:**

- Duties will include but are not limited to preparation of project proposals and resulting contracts, project implementation plans, resource planning, quality control and design review, project team review and coordination, client, and financial management.
- May assist as mechanical engineering lead overseeing the engineering & design of plumbing / fire protection / HVAC and other mechanical systems for new and renovated buildings.
- Mechanical engineering - actual designs including the completion of code reviews, preparation of the basis of design, system calculations, mark-up of drawings, specification preparation, field investigations, construction estimating and site inspections and other such design as required to execute the mechanical construction for new or renovated buildings.
- May perform project manager duties as needed.
- Some travel to site locations or other Stantec offices may be required.

**Your Capabilities and Credentials:**

The successful candidate will possess:

- Requires a B.Sc. Mechanical Engineer
- NYS PE desired, registration in other states a plus
- 7+ years' experience required
- Must have strong Mechanical Engineering skills in Plumbing, Fire Protection, HVAC, and related mechanical systems
- Prior management experience is a plus
- Prior consulting engineering experience is required
- Experience using Autocad, Revit, Trane Trace or Equest is a plus
- Excellent verbal and written communication skills
- Excellent interpersonal skills with team members and clients

We put people first, and it shows. We're proud to be one of New York's Best Places to Work, as named by The Business Council of New York and NYS-SHRM.

Please apply online directly at:

- (Rochester) <https://jobs-stantec.icims.com/jobs/25804/senior-mechanical-engineer---buildings/job>
- (Endicott) <https://jobs-stantec.icims.com/jobs/25927/senior-mechanical-engineer---buildings/job>

## Presidential Award Of Excellence



Download



Achievements



Report

Chapter:

Fiscal Year:

▶ Chapter Operations	Par: 1200	Min Points: 600	<b>Total Points: 1455</b>
▶ Chapter Technology Transfer	Par: 1050	Min Points: 450	<b>Total Points: 475</b>
▶ Grassroots Government Advocacy	Par: 650	Min Points: 500	<b>Total Points: 300</b>
▶ Historical Criteria	Par: 300	Min Points: 100	<b>Total Points: 485</b>
▶ Membership Promotion	Par: 800	Min Points: 500	<b>Total Points: 1400</b>
▶ RP	Par: 1050	Min Points: 800	<b>Total Points: 790</b>
▶ Student Activities	Par: 500	Min Points: 300	<b>Total Points: 900</b>

## 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.



# Rochester Chapter

## Committee Chairs Updates

### YEA

Young Engineers (YEA)

#### YEA Leadership Weekend

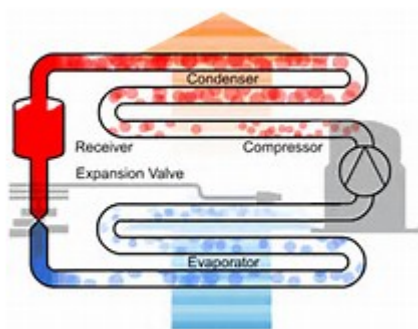
YEA Leadership weekend March 3-5 in Denver. This is an excellent opportunity to interact with other young engineers from throughout the country, and to develop skills to further your career. All registration and travel expenses will be paid! Contact Matt Kremers at [mkremers@mcsmms.com](mailto:mkremers@mcsmms.com).

## Refrigeration



#### Refrigeration Night

Save the date! Plans are underway for “Refrigeration Night” on Monday April 10th at Allied Frozen Storage on State Street in Brockport. The focus will be on a group of beet warehouses with equipment varying from a 140 HP dual Blitzer Compact Screw compressor unit to a packaged chiller with glycol as a secondary coolant. There is also a variety of evaporator types and technologies and electronic control systems . Our host will be Peter Brennan, VP, Crosby-Brownlie, Inc.



Dinner plans still to be determined ... more information to follow in the February and March newsletters.



You are cordially invited to the  
*60th Annual  
Valentine's Dinner Dance*

Hosted by ASHRAE Rochester

Friday, February 10, 2017

The Century Club  
566 East Ave  
Rochester, New York

7:00pm Reception - Hors d'oeuvres & cocktails  
8:00pm Dinner - As you select  
9:15pm Dessert, Coffee and Dancing

Menu Selections

Roasted Soy-Miso & Maple Glazed Chilean Sea Bass  
Herb Roasted Free Range Chicken Breast  
Wood Roasted 4oz. Filet & Red Wine Beef Shortrib  
Chef's Choice Vegetarian Option Available



For reservations, please mail or fax this registration form by January 23, 2017.

Make checks payable to Rochester Chapter ASHRAE and mail to:

Jody McGarry  
ABR Wholesalers, Inc.  
510 North Goodman Street  
Rochester, New York 14609  
Phone (585) 482-3601 | Fax (585) 482-6698

Name: \_\_\_\_\_ Beef · Chicken · Fish · Vegetarian

Name: \_\_\_\_\_ Beef · Chicken · Fish · Vegetarian

Number of people \_\_\_ x \$75\* per person = \$\_\_\_\_\_ (enclosed)

\*Special price of \$50 per person for members of the Y.E.A.

**Stay at The Strathallan for \$159 a night!**



December 29, 2016

Dear ASHRAE Members,

On Friday, February 10, 2017, ASHRAE will be hosting its 60th Annual Valentine Dinner Dance at The Century Club. ASHRAE is asking for your corporate support to donate \$375.00, billed to you as an advertising expense, to help defray the cost of this event. Your sponsorship will enable us to provide you with lively entertainment, a delicious meal, special desserts, and an evening with friends and colleagues you won't soon forget.

Your \$375 sponsorship comes with two complimentary dinners to the event, but this year, we're giving our sponsors a chance to save on more tickets! If you would like to sponsor the event and reserve a table for 10, consider becoming a gold-level sponsor. For \$825, you'll receive a reserved table, 10 dinners, and special "gold-level" sponsor designation.

As always, your sponsorship will be listed in the dinner program and dance flyers, as well as being listed in a full-page advertisement in the R.E.S monthly publication. You will certainly be recognized by your peers as an ASHRAE supporter.

An invoice is attached for your convenience. We thank you for your support and look forward to sharing this fantastic evening with you!

Very truly yours,

Jody McGarry  
Valentine Dance Committee



Invoice

Advertising for February 2017 Promotion

*(Check One)*

Sponsor: \$375

Gold-Level Sponsor: \$825

Please make check payable to: ROCHESTER CHAPTER ASHRAE and mail to:

Rochester Chapter ASHRAE  
c/o ABR Wholesalers, Inc.  
ATTN: Jody McGarry  
510 North Goodman Street  
Rochester, NY 14609

Commitment

We would like to support the Rochester ASHRAE 2017 Promotion and agree to fulfill our commitment.

Company Name\_\_\_\_\_

Signed by\_\_\_\_\_

Date signed\_\_\_\_\_

Please return your check or commitment no later than January 23, 2017 to ABR Wholesalers, Inc. Thank you for your support.

*American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.*

# Board of Governors Meeting Minutes



Rochester Chapter - ASHRAE

Board of Governors Meeting

December 9, 2016 @ 7:30 AM

Day Automation, 7931 Rae Blvd, Victor, NY 14564  
(Call in #1-712-432-0360, Access: 137504#)

President / CRC Delegate	Jeff Close	X
President Elect / Program/ CRC Alternate	Bill Clark	X
Treasurer	Paul Kenna	
Secretary	Tom Streber	X
Immediate Past President & Nominating	Chris Walter	X
Board of Gov. (3) & Attendance Chair	Tim Duprey	X
Board of Gov. (3) / Buyers Guide	Branden Farnsworth-Weinblatt	
Board of Gov. (2) & Refrigeration Co-Chair	Sam Scorsone	
Board of Gov. (2) & Website Chair	Steve Dear	X
Board of Gov. (1) & Membership Promotion (MP)	Mike Benedict	X
Board of Gov. (1)	George Herman	X
Historian Chair	Jake Hall	
Newsletter Editor	Scott Edwards	X
Resource Promotion Chair (RP)	Matt Devlin	
Awards & Recognition Chair	Al Rodgers	
Chapter Technology Transfer Chair (CTTC)	Jeff Wiedrick	
Education	Bill Murray	
Publicity	Mark Kukla	
YEA Chair (Young Engineers in ASHRAE)	Matt Kremers	X

# Board of Governors Meeting Minutes



Rochester Chapter - ASHRAE

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Student Activities Chair (SA)	Rob Hudson	X
Picnic/Golf Chair & CRC 2016 Committee Chair	Jim Browe	
Valentine's Dinner Dance	Jody McGarry	X
Grassroots Government Advocacy Chair	Tom Burke	
Refrigeration Co-Chair	Mike Nohle	
Women in ASHRAE	Jaimee Wilson	
Attendance Co-Chair	Brett Fryover	X

## AGENDA

1. Call to Order Jeff Close
2. Roll Call Tom Streber
3. Review and Approval of Previous Meeting Minutes All
4. Treasurer Paul Kenna
  - Current Statement Balances
  - 2016-2017 P&L Update
5. President Elect/Program Bill Clark
  - Schedule Update
    - i. Looking for April tour (Refrigeration)
6. Attendance Tim Duprey/Brett Fryover
  - Previous meeting summary.
    - i. (57) Attendees, 12 non-members.
    - ii. (58) Paid, (1) no show.
    - iii. (56) Attendees Nov. 2015.
    - iv. 9 first time visitors.
  - 76 confirmed for 12/12 meeting.

# Board of Governors Meeting Minutes



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Board of Governors Meeting

December 9, 2016 @ 7:30 AM

Day Automation, 7931 Rae Blvd, Victor, NY 14564  
(Call in #1-712-432-0360, Access: 137504#)

- |  |               |
|--|---------------|
| 7. CTTC Report   | Jeff Wiedrick |
| <ul style="list-style-type: none"> <li>• Project submission by April 1, 2017.</li> <li>• Submit newsletter article on submission categories.</li> </ul>  |               |
| 8. Membership Report   | Mike Benedict |
| <ul style="list-style-type: none"> <li>• 264 Total members (245 non-student, 19 student)</li> <li>• Membership upgrades - 35 associates to member.</li> <li>• New members (YEA vs. Associate vs. Full)</li> <li>• "Membership Promotion" business cards are available.</li> </ul>  |               |
| 9. Student Activities Report   | Rob Hudson    |
| <ul style="list-style-type: none"> <li>• Student chapter status (MCC or RIT).</li> <li>• Reaching out to high schools and Boy Scouts of America (STEM program)</li> <li>• Engineer's week volunteers.               <ul style="list-style-type: none"> <li>i. Solicitation through newsletter, email and monthly meeting.</li> </ul> </li> </ul> |               |
| 10. Education Report   | Bill Murray   |
| <ul style="list-style-type: none"> <li>• Scholarship.</li> <li>• Jeff C. to contact Society again as to how to distribute funds.</li> </ul>  |               |
| 11. YEA Report   | Matt Kremers  |
| <ul style="list-style-type: none"> <li>• Leadership weekend (Mike Dobbleton &amp; Nick Volker).               <ul style="list-style-type: none"> <li>○ Dave Zimmer and Biranna Stephenson also invited to attend.</li> </ul> </li> <li>• Dec. technical session.</li> <li>• Future site visit - UL Lab in Cortland. Spring 2017.</li> </ul>      |               |
| 12. Awards & Recognition Report  | Al Rodgers    |
| <ul style="list-style-type: none"> <li>• Lynn Bellinger HOF resubmission application has been completed.</li> </ul>  |               |
| 13. Resource Promotion Report  | Matt Devlin   |
| <ul style="list-style-type: none"> <li>• Current (\$11,000) vs. Goal (\$19,000)</li> <li>• "Full Circle" contributions achieved!</li> </ul>  |               |

# Board of Governors Meeting Minutes



Rochester Chapter - ASHRAE

Board of Governors Meeting

December 9, 2016 @ 7:30 AM

Day Automation, 7931 Rae Blvd, Victor, NY 14564  
(Call in #1-712-432-0360, Access: 137504#)

- |   |                              |
|---|------------------------------|
| 14. Refrigeration Report  | Mike Nohle/Sam Scorsone      |
| • Tour options - LiDestri Foods.  |                              |
| 15. Grassroots Government Advocacy Report   | Tom Burke/George Herman      |
| • Chris Roth, Henrietta Inspector, to speak at future meeting.  |                              |
| 16. Newsletter Report   | Scott Edwards                |
| • Committee submissions.  |                              |
| • Newsletter deadline (12/26).  |                              |
| • RES deadline.   |                              |
| 17. Buyers Guide  | Branden Farnsworth-Weinblatt |
| • Transition from Marianne.   |                              |
| • Plan/schedule for this year.  |                              |
| • Potential for business card ads.  |                              |
| 18. Historian Report  | Jake Hall                    |
| • Digitizing archive status.  |                              |
| • Invite life members to meetings.  |                              |
| 19. Publicity Report  | Mark Kukla                   |
| • Facebook & Linked In.   |                              |
| 20. Website Report  | Steve Dear/Kevin Wind        |
| • Monthly updates (schedule, newsletter, BOG MM's).   |                              |
| 21. Nominating Report   | Chris Walter                 |
| • (5) Past presidents have accepted to join the nominating committee (Michelle Sommerman, Jeff Ellis, Jeff Davis, Al Rodgers, Casey Bernhard) |                              |
| 22. Women in ASHRAE   | Jaimee Wilson                |
| • Social hour last month with 6 attendees.  |                              |
| • Discussed ways for women to get involved with ASHRAE.   |                              |



# Board of Governors Meeting Minutes



Rochester Chapter - ASHRAE

Board of Governors Meeting

December 9, 2016 @ 7:30 AM

Day Automation, 7931 Rae Blvd, Victor, NY 14564  
(Call in #1-712-432-0360, Access: 137504#)

23. Valentines Dinner Dance Report Jody McGarry
- Friday 2/10, 7:00 pm.
  - Century Club
    - i. \$75.00 per person (\$50.00 per YEA member).
    - ii. Valet parking.
    - iii. \$159/night at Strathallen.
    - iv. Admin fee to be waived (approx. \$2,000 cost).
24. Golf/Picnic Report Jim Browe
25. Presidential Award of Excellence (PAOE) Jeff Close
- 7 categories: 4 par, 3 at min but likely to hit par.
26. New Business:
- BAS Stem program (see Students Activities).
  - 4/18 Engineering Symposium
    - i. Responsible for (3) presentations.
    - ii. Looking for topics/ presenter.
27. Old Business:
- 2015-16 Audit and Audit Committee = COMPLETE
  - Lynn Bellenger Hall of Fame Award Nomination = COMPLETE
28. Set next BOG Meeting date / time / place.
- Friday, January 6th @ 7:30 AM, Day Automation Office
29. Adjourn - 8:25 a.m.



# ASHRAE Student Membership Application

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

### What's "Cool" In ASHRAE

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

### How Can ASHRAE Help You?

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

### Student Member Benefits

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

### ASHRAE Student Member Opportunities

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

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

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



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](http://www.ashrae.org/privacy-policy).

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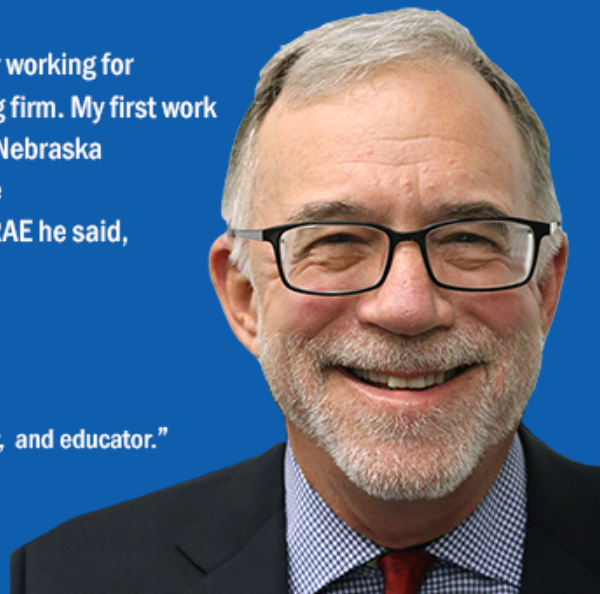
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"I started in this industry 40 years ago by working for our family-owned mechanical contracting firm. My first work assignment from my Dad was to join the Nebraska Chapter of ASHRAE. When I asked why he wanted me to drive 60 miles to join ASHRAE he said,

**'Timothy, you need to  
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This one simple assignment, joining ASHRAE, transformed my life as a contractor, engineer, and educator."

~Timothy Wentz, P.E., HPBD  
ASHRAE President 2016-2017



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# News

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For Release:  
Dec. 5, 2016  
Contact: Jodi Scott  
Public Relations  
678-539-1140  
[jscott@ashrae.org](mailto:jscott@ashrae.org)

## Overview of New Classes of Refrigerants Offered at ASHRAE 2017 Winter Conference

ATLANTA – More than 160 refrigerants are maintained under ASHRAE’s refrigerant classification standard, and that list continues to grow as the industry’s need for new refrigerants increases.

A review of the new classes of lower global-warming potential (GWP) refrigerants within the context of legacy refrigerants and the forces that drive the development of new refrigerants is the focus of a new educational course from ASHRAE Learning Institute (ALI).

The course is being introduced at the ASHRAE 2017 Winter Conference, Jan. 28-Feb. 1, at Caesars Palace, Las Vegas, with ASHRAE co-sponsored AHR Expo being held Jan. 30-Feb. 1 at the Las Vegas Convention Center.

“ASHRAE-Classified Refrigerants to Meet Society’s Changing Needs” takes place Jan. 29. It is offered by ALI as one of 20 courses at the Conference. For more information or to register, visit [www.ashrae.org/lasvegascourses](http://www.ashrae.org/lasvegascourses).

ANSI/ASHRAE Standard 34, *Designation and Safety Classification of Refrigerants*, maintains a list of refrigerants with a standardized system of assigned refrigerant numbers and well-defined safety classifications, including toxicity and flammability ratings. This ever growing list of refrigerants currently includes 161 chemicals and chemical blends that have been proposed for use as refrigerants.

“There has long been use of flammable and toxic materials as refrigerants, such as propane and ammonia, but their use has been restricted to appropriately designed industrial systems, as prescribed in ANSI/ASHRAE Standard 15, *Safety Standard for Refrigeration Systems*, and other safe use guidelines,” Thomas Leck, Ph.D., course instructor, said. “Currently, concern about global climate change is driving the cooling industry to consider new classes of chemicals to be used as refrigerants. With the new chemicals are new safety classifications for flammability, including ‘Class 2L.’”

Leck is a chemist who spent the majority of his working career with the DuPont and Chemours companies.

The course explains how the changing needs of society are creating requirements for new refrigerants to be developed and used. The course also explains the new safety classifications that are being proposed and some of the ramifications of these new classifications.

“The refrigerant industry, more than any other industries, has been driven by changing needs and understanding of environmental and product safety issues,” Leck said. “Parties who are passionate about issues such as stratospheric ozone protection and global climate change have influenced manufacturers and regulators to create new products and new regulations around properties of refrigerants and how those refrigerants can be used. Sometimes there are consequences and compromises that must be considered. This short course attempts to explain some of these issues and how the resulting changes impact the cooling industry and people who work in this industry.”

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

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

## Smart Grid Standard Adopted by International Organization for Standardization

ATLANTA – A smart grid standard published earlier this year by ASHRAE and the *National Electrical Manufacturers Association* (NEMA) has been approved as an International Organization for Standardization (ISO) standard.

ANSI/ASHRAE/NEMA Standard 201-2016, *Facility Smart Grid Information Model (FSGIM)*, provides a common basis for electrical energy consumers to describe, manage and communicate about electrical energy consumptions and forecasts.

On Nov. 17, ISO/TC 205 Building Environment Design unanimously approved the FSGIM standard in a draft international standard ballot. Because there were no negative votes and no comments to resolve, the standard can move directly to the publication process without an additional international vote, according to Standard 201 committee chair Steve Bushby. The standard will soon be published as ISO 17800.

“This approval is important given that the standard provides one piece of a larger ecosystem of standards that support the global transformation of the current electric grid into a new smart grid,” Bushby said. “This grid will support the two-way flow of both information and electricity as well as widespread use of distributed, renewable generation sources.”

The FSGIM standard builds upon the work of the Smart Grid Interoperability Panel (SGIP) Priority Action Plan 17 and several other smart grid standards, including the standards that support Green Button. The FSGIM standard defines key information that must be shared between electricity providers and electricity consumers along with internal operational and control information needed to control loads and generation sources in facilities (from homes to manufacturing plants) in cooperation with a smart grid.

The FSGIM is a seed standard intended to guide the evolution of control technology specific standards, such as ANSI/ASHRAE Standard 135, *BACnet – A Data Communication Protocol for Building Automation and Control Networks*, for use in various locations.

Standard 201 joins three other ASHRAE standards that have been adopted by ISO. Two of these standards, both direct adoptions, ISO 16484-5, a direct adoption of Standard 135, and ISO 16484-6, ANSI/ASHRAE Standard 135.1, *Method of Test for Conformance to BACnet*, are already being modified to include new features that would support the functionality defined in FSGIM.

Standard 201 is part of ASHRAE’s efforts to support SGIP in accelerating the development of interoperability for a nationwide smart electric power grid.

***See next page for continuation***



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

**Smart Grid Standard Adopted by International Organization for Standardization**

***See previous page for continuation***

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Since being named in the Energy Independence and Security Act of 2007 as a participant in federal efforts to enhance the productivity, efficiency, and sustainability of the electric grid NEMA and its members are leading the way in Smart Grid Technologies by encouraging investment in the national electricity grid, research and development, and developing new product standards. This was first evidenced when NEMA developed a standard describing requirements for Smart Meter upgradeability as well as a recent standard that contains testing and certification recommendations and best practices that promote the introduction of interoperable products in the marketplace.

NEMA represents nearly 400 electrical, medical imaging, and radiation therapy manufacturers at the forefront of electrical safety, reliability, resilience, efficiency, and energy security. NEMA's combined industries account for more than 400,000 American jobs and more than 7,000 facilities across the U.S. Domestic production exceeds \$117 billion per year.

SGIP is an industry consortium representing a cross-section of the energy ecosystem focusing on accelerating grid modernization and the energy Internet of Things through policy, education, and promotion of interoperability and standards to empower customers and enable a sustainable energy future. SGIP's members are utilities, vendors, investment institutions, industry associations, regulators, government entities, national labs, services providers, and universities. A nonprofit organization, SGIP drives change through a consensus process. Visit [www.sgip.org](http://www.sgip.org). Follow SGIP on [LinkedIn](#) and [Twitter](#).

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

## New Duct Sizing Calculator Available

ATLANTA – A new duct sizing calculator from ASHRAE and the Air Distribution Institute (ADI) allows HVAC air distribution system designers to more accurately size ducts, especially flex ducts under varying amounts of compression, based on research results.

The Duct Size Calculator is a quick reference tool for approximating duct sizes and equivalent sizes of sheet metal duct vs. flexible duct. The calculator uses information from ASHRAE Research Project 1333, HVAC Duct Efficiency Measures, and was developed with funding support from ASHRAE and ADI. ASHRAE Technical Committee 5.2, Duct Design, sponsored the project.

“While the calculator resembles a wheel type ductulator similar to those used during the days of slide rules, it incorporates three new fields for equivalent duct sizing,” Chris Van Rite, developer of the calculator, said. “These new fields help demonstrate the significant loss of airflow due to improper installation of flexible ducts.”

The calculator includes fields for 4, 15 and 30 percent compression in flexible ducts. Van Rite notes that the calculations used to create these size references are based on straight line compression as performed in the laboratory on a flat surface. Field installed flexible ducts with bends, kinks and excessive lengths will have additional resistance, which will result in diminished airflow.

“The use of this tool allows duct designers to account for less than optimum installation and gives a more accurate design to installed performance correlation,” Van Rite said.

ASHRAE research has quantified the effects of compression (not stretching) flexible duct, which increases the roughness and therefore the friction loss inside a flexible duct. Airflow testing follows protocols prescribed by ANSI/ASHRAE Standard 120-2008, *Method of Testing to Determine Flow Resistance of HVAC Ducts and Fittings*.

Testing at Lawrence Berkeley National Laboratory and at Texas A&M University along with data analysis by Tennessee Technical University has quantified the adverse effects of compression on airflow. Those correlations agreed closely with the equations published in Chapter 21 of the 2013 ASHRAE Handbook, Fundamentals, so the equations were used to create the new calculator, he said.

The Duct Size Calculator features inch-pound (I-P) units on one side and the International System of Units (SI) on the other.

The cost of the calculator is \$34, ASHRAE members (\$40, non-members). To order, visit [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore) or contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide) or fax 678-539-2129.

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