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VOLUME 7, ISSUE 5

JANUARY 9, 2013

# Please join us for our Valentine's Dinner Dance

You are cordially invited to the

# 56th Annual Valentíne Dínner Dance

Fríday, February 8, 2013

Colgate Rochester Crozer Dívíníty School 1100 South Goodman Street Rochester, New York

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

Menu Selections 8 oz beef filet with burgundy reduction Cranberry sage stuffed chicken Jumbo shrimp in white butter sauce

## (refer to page 9-11 for more details)

The American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE), has provided the information, text, graphics and links herein as a convenience for informational purposes only. Persons accessing this information assume full responsibility for its use.

#### PAGE 2



# Chapter Officers

President Michelle Sommerman (585) 272-4650 msommerman@nrg-concepts.com

President Elect Robert Wind 585-341-3172 rwind@ibceng.com

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

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

**Treasurer** Jeff Close 585-289-6816/218-0737(fax)

# Committee Chairs

CTTC/Programs Robert Wind 585-341-3172 rwind@ibceng.com

CTTC/TEGA Derrick Day 585-489-7502 Derrick.W.Day@jci.com

CTTC/ Refrigeration Michael Nohle 585-216-9016 mikenohle@aol.com

Historian Lee Loomis 585-262-2870/262-4156(fax) leeloom@aol.com

Membership Bill Clark 585-507-1961 wjclark@dayasi.com

#### YEA

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

# Board of Governors

Eric C. Smith (3rd year) 585-381-3360 esmith@turnerengineering.com

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

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

# SAVE THE DATE

ASHRAE 2012-2013 Meeting Schedule

ASHRAE 2012-2013 Meeting Schedule						
Date	Event	pdh / Theme	Location	Schedule		
09/10/12	Matt Hurlbutt of Greater Rochester Enterprise		Burgundy Basin	5:00 PM		
10/09/12	Dave Gordon of Green Building Partners - "Challenges in Applying Traditional Sensors in Ventillation Applications"		Mario's	12:00 PM		
11/12/12	Mike Waller of Ravi Engineering & Land Surveying - "Asbestos Recognition and Abatement Techniques" Joint meeting with ASPE Rochester Chapter		Mario's	12:00 PM		
12/10/12	Jerome Meyer Sr. of MIS - "ASHRAE Standard 188P on Legionella"		Mario's	12:00 PM		
01/14/13	Jeff Day of Day Automation - "The Road Ahead for Facilities Automation" Joint A/E Meeting Student Night Research Promotion Meeting		Mario's	12:00 PM		
02/08/13	Annual ASHRAE Valentines Dinner Dance		Inn on Broadway	7:00 PM		
02/20/13	Eli Howard of SMACNA - "Duct leakage Manual - 2nd Edition & How it Ties into ASHRAE 90.1" Joint meeting with SMACNA Student Night		TBD	Dinner Meeting Time TBD		
03/18/13	Refrigeration Night		TBD	TBD		
04/18/13	(Topic TBD) - Tom Watson (President of ASHRAE) Joint meeting with ASHRAE Buffalo Chapter		Holiday Inn Batavia, NY	5:00 PM		
05/13/13	Annual ASHRAE Golf Outing and Picnic		Ravenwood Golf Club	9:30 AM Golf 4:30 - 8:00 Picnic		

Updated 1/9/2013

# 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

Our meeting this month will be on **Monday January 14th**. Our speaker will be **Jeff Day** of Day Automation and he will be speaking on **"The Road Ahead for Facilities Automation"**.

Join the Society as it returns to **Dallas** for the **2013 ASHRAE Winter Conference**, **January 26-30!** The co-sponsored **AHR Expo®** will be held in conjunction with the conference, **January 28-30**. This is a great opportunity for you to:

- Stay informed on the latest advancements in the industry while earning PDHs during technical sessions
- Network and reconnect with other members and old friends
- Examine new and innovative technology at the AHR Expo
- Relax and mingle at social events and general tours.
- Get away from the cold Rochester weather for a few days.

Visit <u>www.ashre.org</u> for more information on the conference or refer to the flyer that came with your latest ASHRAE Journal mailing.

The **Region 1 Dinner** will be held that Sunday evening, **January 27<sup>th</sup>** at Sonny Bryan's Smokehouse, a Texas BBQ.

If you are interested in attending, contact Heather Platt (Region 1 officer) at <u>hplatt@SeneceCM.com</u> or 716-255-1462 for reservations

(\$30 adults, kids 12 and under \$21).

Please contact me @ <u>msommerman@nrg-</u> <u>concepts.com</u> or 585-272-4650 if you have any ASH-RAE chapter questions.

Thanks to ALL of the devoted officers and committee chairs in this chapter for volunteering their time and Thanks to YOU for the continued Michelle support this local chapter of ASHRAE!



Michelle Sommerman, PE, 2012-2013 President

# Monthly Meeting

## January ASHRAE Meeting (1 PDH pending for attendees)

Monday, January 14, 2013

Location:Mario's Italian Steakhouse 2740 Monroe Ave, RochesterTime:12 PM with Buffet Lunch ServedCost:\$25.00Speaker:Jeff Day, Day Automation

# **The Road Ahead for Facilities Automation**

This presentation will be given by Jeff Day, director of Business Development for Day Automation.

Mr. Day has 20 years of experience in the fields of energy management and security systems. The presentation will cover trends in the computing industry, modern IT infrastructure, communication protocols, and features to expect in a modern energy management system. He will close with the skills a facility staff will need moving into the future.

Remember, as an option, we now have on-line payments available via PayPal.

## << Pay for Meeting Registration online via PayPal (no PayPal account required) >> Use the following link: <u>http://rochester.ashraechapters.org/meetings.html</u>

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

Please RSVP no later than noon Friday, January 11<sup>th</sup> to Tim Duprey Phone: 585.259.0559 or <u>tduprey@pascobas.com</u>

Respectfully,

Tim

#### **Attention Members:**

Just a reminder that all members that reserve a spot for the monthly meeting will be responsible for that reserved space.

Members have until 12:00 pm the day of the RSVP deadline to cancel their meeting reservation.

Failure to comply with this rule will result in the attendee being responsible for the payment of that reservation. ASHRAE Rochester Chapter Officers

# Job Postings & Help Wanted



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, Michelle Sommerman (585.957.1942) or by email msommerman@nrg-

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



# **Mechanical Designer - Plumbing / Fire Protection**

Turner Engineering is a multi-disciplined consulting engineering company based in East Rochester, NY. We provide HVAC, plumbing, fire protection, electrical, and communications engineering services for the construction industry. <u>www.TurnerEngineering.com</u>. We design the systems that make health care, institutional, commercial, educational, municipal, and mission-critical facilities efficient, comfortable, and safe.

We are a growing firm and require a Mechanical Designer in Plumbing / Fire Protection with 4+ years of related experience. Ideal candidates are detailed orientated and able to manage multiple tasks. Candidates must possess leadership abilities to take charge of design software, Microstation, AutoDesk and REVIT MEP. Responsibilities include, but are not limited to: creating detailed drawings with limited input from engineers, performing calculations and creating major layouts under engineering supervision. This position requires interaction with clients. A detailed job description can be found at <u>www.turnerengineering.com</u>.

Apply on line or Email resumes to <u>bpitts@turnerengineering.com</u>

# Want <u>Regional</u> and <u>National Recognition for:</u>

- Yourself?
- Your Company?
- Your Customers?

# ASHRAE

# Let ASHRAE help!!

# **Overview:**

Effective energy utilization is just one of several aspects of facility and building design. The ASHRAE Technology Awards program recognizes, on an international scale, successful applications of innovative design, which incorporate ASHRAE standards for effective energy management, indoor air quality, and good mechanical design. The purpose of the ASHRAE Technology Awards is threefold:

1) To recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven through actual operating data.

2) To communicate innovative systems design to other ASHRAE members.

3) To highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners.

# **Categories:**

ASHRAE Technology Award applications are accepted in each of the following categories:

- I. Commercial Buildings (New and Existing)
- II. Institutional Buildings (New and Existing)
  - Educational Facilities
  - Other Institutional
- III. Health Care Facilities (New and Existing)
- IV. Industrial Facilities or Processes (New and Existing)
- V. Public Assembly Facilities (New and Existing)
- VI. Residential (New and Existing)



Please Visit <u>www.ASHRAE.org</u> Honors & Awards for more information or Contact: Derrick Day Phone: 585-489-7502 E-mail: Derrick.W.Day@jci.com

#### PAGE 8

# ASHRAE—Student Zone

# Building the Future with People

ASHRAE offers a strong membership program for qualified students: those who are enrolled in an approved course of study in Society-related field and who are attending school full time. The Society has more than 5,000 student members world-wide.

By joining ASHRAE, you gain access to:

- · Support through chapters or student branches
- · Professional development opportunities
- Networking opportunities with established leaders of the industry
- Access to conferences, publications and educational courses
- Opportunity to earn funds for college from more than 20 scholarships

ASHRAE also offers a variety of programs to help students further their educational career while also learning more about technology in today's marketplace. These include:

- · Senior Undergraduate Project Grant program, which provide grants to engineering, technical and architectural schools worldwide with the goal of increasing student knowledge, learning and awareness of the HVAC&R industry through the design and construction of senior projects.
- Graduate Grants-in-Aid encourages outstanding graduate students to become involved in ASHRAE research and establish careers that include active engagement within and continued contributions to Society activities.
- · Student Design Competition, which recognizes outstanding student design projects, encourages undergraduate students to become involved in the profession, promotes teamwork and allows students to apply their knowledge of practical design.

# For more information, go to: http://ashrae.org/membership--conferences/student-zone



You are cordially invited to the

# 56th Annual Jalentíne Dínner Dance

Fríday, February 8, 2013

Colgate Rochester Crozer Dívíníty School 1100 South Goodman Street Rochester, New York

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

Menu Selections 8 oz beef filet with burgundy reduction Cranberry sage stuffed chicken Jumbo shrimp in white butter sauce

For reservations, please mail or fax this registration form by January 31, 2013.

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 \$65\* per person = \$\_\_\_\_\_ (enclosed) \*Special price of \$50 per person for members of the Y.E.A.



October 18, 2012

Dear ASHRAE Members,

On Friday, February 8, 2013, ASHRAE will be hosting its 56th Annual Valentine Dinner Dance. ASHRAE is asking for your corporate support to donate \$325.00, billed to you as an advertising expense, to help defray the cost of this event. We know that it has been a challenging year, but 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.

As always, we will be offering two complimentary dinners to corporate sponsors. 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!

ery truly yours, lody McCa Valentine Dance Committee

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



### <u>Invoice</u>

Advertising for February 2013 Promotion

\$325

Please make check payable to: **<u>ROCHESTER CHAPTER ASHRAE</u>** 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 2013 Promotion and agree to fulfill our commitment by March 1, 2013.

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

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

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

Please return your check or commitment to ABR Wholesalers, Inc. Thank you.

\*Don't forget...you will receive two complimentary dinners to attend our Valentine Dinner Dance!

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

AN INTERNATIONAL ORGANIZATION

# Rochester Chapter Announcements



Thank you to Spencer Morasch for visiting our Chapter last month



Thank you to last month's speaker, Jerome Meyer, Sr



Congratulations on your Student Activities Award, Al Rodgers. Thank you for your service to ASHRAE.



Congratulations on your Membership Promotion Award, Bill Clark. Thank you for your service to ASHRAE.

# 2012-2013 Presidential Award of Excellence Summary

Chapter #	Chapter Name	Chapter Members	Member Promotion	Student Activities		Chapter Technology Transfer	5	Chapter Operations	Chapter PAOE Totals
11	Rochester	244	0	0	290	200	450	100	1040

# Region 1 Announcements



302 N. Market St. In The Historic West End, Dallas, Tx.

# ASHRAE Winter Meeting 2013 REGION I DINNER Sunday, January 27, 2013 Cocktails: 6-7pm

Dinner: 7pm

Welcome to Sonny Bryan's Smokehouse, a Texas BBQ legend serving up century-old recipes and friendly service. From brisket to homemade BBQ sauce to famous onion rings, there's nothing more authentic than Sonny Bryan's barbecue. Please join the members of Region I for an evening of dining adventure... Texas style.



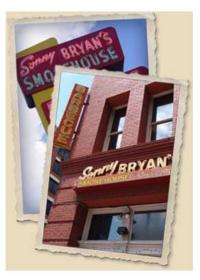
In 1910 Elias Bryan moved his family to Dallas from Cincinnati and opened the first Bryan's Barbecue. His son, William Jennings Bryan, (known as Red for his hair) opened his own restaurant in Oak Cliff, Texas in 1935. William Jennings Bryan Jr., known as "Sonny" opened his own restaurant on February 13th, 1958 the same day his Daddy and Granddaddy opened their restaurants. The Maverick Room is located downtown in the West End restaurant - in Dallas' premier entertainment district. Join us for the ultimate Texas experience! Each attendee will participate in a buffet style dinner and will be responsible for their own check.

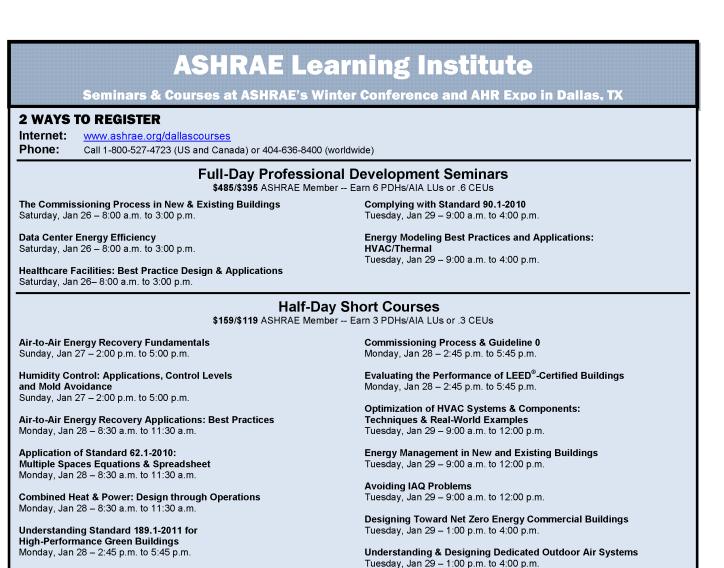
Dinner will be an all you can eat buffet meal stating with an appetizer of Onion Rings followed by Pork Ribs, Beef Brisket, Pulled Chicken, Fried Okra, Baked Potato & Garden Salad. Peach Cobbler will be served for dessert... Buffet will include coffee, tea, and soft drink. Adults \$30.00, Kids 12 and under \$21.00. Costs are per person and include dinner, tax and gratuity. Cocktails are not included, but available and will be billed individually.

http://www.sonnybryans.com/restaurants/dfw/west-end.html

RSVP: Heather Platt by January 22, 2013 hplatt@SenecaCM.com, Tel: 716-255-1462

Sonny Bryan's, 302 N. Market St., Dallas, Tx.





Introduction to Ultraviolet Germicidal Irradiation (UVGI) Systems Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

**Laboratory Design: The Basics and Beyond** Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

# **HVAC Design Training**

Jan 14-18, 2013 • Jan 30-Feb 1, 2013 (Level I only) • Mar 18-22, 2013 • Jun 3-7, 2013 • Aug 12-16, 2013

## HVAC Design: Level I - Essentials

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

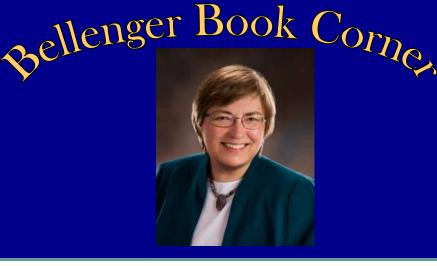
## HVAC Design: Level II - Applications

Developed by industry-leading professionals, the workshop provides participants with advanced level information about designing, installing and maintaining HVAC systems that can be put to immediate use. Participants will gain an in-depth look into Standards 55, 62.1, 90.1, and 189.1 and the Advanced Energy Design Guides, as well as a range of other HVAC topics including: HVAC equipment and systems; energy modeling; designing mechanical spaces; designing a chiller plant; and BAS controls.

## Visit www.ashrae.org/hvacdesign to register

# WELCOME

# TO THE BELLENGER BOOK CORNER



### IN THIS ISSUE: ENVIRONMENTAL QUALITY

Mrs. Lynn G. Bellenger was an avid reader and supporter of continuing education. She encouraged local firms to create internship opportunities for aspring 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.

Environmental quality is a critical area to the health and well being of the built environment. Office buildings, hospitals, schools, retail buildings, residential homes and more, all need to function utilitizing the industry best practices set forth to make the quality of their environments as healthy as possible. Below is a list of ASHRAE resources available at the ASHRAF bookstore.

For more information, go to:

## Environmental Quality Publications of Interest

#### Best Sellers

- Standard 18-2008, Methods of Testing for Rating Drinking-Water Coolers with Self-Contained Mechanical Refrigeration (ANSI approved)
- Standard 171-2008, Method of Testing Seismic Restraint Devices for HVAC&R Equipment (ANSI/ASHRAE Approved)
- Standard 145.1-2008, Laboratory Test Method for Assessing the Performance of Gas-Phase Air-Cleaning Systems: Loose Granular Media (ANSI/ASHRAE Approved)
- ASHRAE HandbookCD+ 2005-2008
- 2005 ASHRAE Handbook—Fundamentals
- 2007 ASHRAE Handbook—HVAC Applications
- 2008 ASHRAE Handbook—HVAC Systems and Equipment
- ASHRAE IAQ Applications
- ASHRAE Pocket Guide for Air-Conditioning, Heating, Ventilation and Refrigeration, 2005

#### http://environmentalquality.myashrae.org/

If you know of a good manual that you would like to share with us, please send it to the newsletter editor Jaimee Wilson at jwilson@pathfinder-**ea.com.** In order to keep with ASHRAE's goal of supporting continuing education without commercialization, we ask all reading materals recommended for this section be either ASHRAE sponsored or non-vendor specific.

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



# Your technical training provider presents... Air Conditioning Fundamentals 2013

**Target Audience:** Essentially anyone who wants to broaden their base in fundamentals will greatly benefit.

- Sales, Consulting, Designer, Draftsman
- Non-Engineer: Technical Assistant, Application Specialist, Project Manager, Technician, Contractor, Estimator

**<u>Primary Benefit</u>**: Students will enjoy learning as much practical knowledge as possible about Air Conditioning Fundamentals. Students won't waste a great deal of time in theory. The typical student can immediately apply what he/she learns upon returning to their office. Past attendees have enhanced their overall confidence and found many ways to apply their recently acquired knowledge.

2013 Course Offerings (Rochester, NY): (these classes are 3-days; Tuesday - Thursday)

[ ] Feb 19-21 'Refrigeration Fundamentals' (Refrig Basics, Refrig Piping, Refrig & Our Environment)

[ ] May 21-23 'Energy Efficient Design Fundamentals' (Chiller-Side, Air-Side, System Controls, Energy Recovery)

[ ] Jun 18-20 'Product Fundamentals' (AHU, WSHP, RTU, Chillers, Fan Coils, UV)

2013 Course Offerings (Harrisburg, PA): (these classes are 3-days; Tuesday - Thursday)

[] Mar 19-21 'Airside Fundamentals-I' (Load Design and Psychrometrics)

[ ] Apr 16-18 'Airside Fundamentals-II' (Duct Design, Fans & Fan Laws & Acoustics)

[ ] Sep 17-19 'Systems Fundamentals' (HVAC Systems, Dehumidification, IceStorage-LowTempAir, Bldg Pressurization)

2013 Fall Intro Series (Harrisburg, PA): (these classes are held from 5:00 - 8:00 pm Thursdays)

[ ] Sep 26 - Oct 31 'Introduction to Air Conditioning Fundamentals' (6-Thursday evening series covering each of the above topics in a 3-hour 'big-picture overview')

Note: For more information about each of these classes, log onto BeckerLearning.com

**<u>Registration Deadline</u>**: Each course will be filled on a first-come-first-reserved basis (established by receipt of payment).

Contact:Joe Becker, Becker Learning / 106 Needlewood Drive / Harrisburg, PA 17112Phone: (585) 317-0000Email: Joe@BeckerLearning.com

#### More Details for 3-day courses:

Where: We will hold the 3-day classes at the local hotels listed below. These hotels will hold a block of rooms at the Becker Learning discounted price up until 30-days before the class – so please make your reservations right away. All you need to do is let them know that you are part of the Becker Learning group.

\* Rochester, NY (Greece): Homewood Suites at 400 Center Place Drive, Rochester, NY 14615 - (585) 865-8534 at the Becker Learning rate of \$109/night

\* Harrisburg, PA: Holiday Inn Express at 4021 Union Deposit Road, Harrisburg, PA 17109 - (717) 561-8100 at the Becker Learning rate of \$99/night (for Air-1 & Air-2) and \$109/night (for Systems)

Time: We will start each morning at 8:00 AM and end by 5:00 PM (except Thursday when we end by 4:00 PM for travelers)

Food: Lunch, mid-morning and mid-afternoon snacks & drinks are provided.

What is not included: Transportation, other meals & lodging.

Travel: Arrival: Since the seminar starts at 8:00 a.m., plan to arrive the night before.

Departure: You can book flights out of Rochester or Harrisburg International Airports as early as 5:30 p.m. on Thursday since both of our Hotel locations are less than 10-miles from their airport.

#### More Details for 6-night Fall Intro Series (Harrisburg, PA):

Where: This class will be held at the local Trane Office: 3909 TecPort Drive, Harrisburg, PA 17111. The class will run from 5:00 - 8:00 pm. A light meal is provided for your convenience.

**<u>Registration</u>**: Please fill out this form for each person attending, and mail it along with a **Check** or **Purchase Order** (made out to 'Becker Learning') to:

#### Becker Learning / 106 Needlewood Drive, Harrisburg, PA 17112

**Payment Deadline:** Complete Payment must be received prior to the start of the class.

2013 Courses: Rochester, NY [] Refrigeration	
Harrisburg, PA [] Airside-I [] Airside-II	[ ]Systems [ ]Fall 6-night Intro Series
(check all that apply)	
Name:	Title:
Company Name:	
Address:	
Phone:() Email:	

Туре	# of Courses	\$/course	Total Cost \$	Check# or PO#
3-day		\$1,100		
6-night		\$550		

#### Authorizing Person

Printed Name	Signature	Date

\*\*\*If a PO is given, full payment must be received prior to the first day of class.

#### Cancellation Policy:

- If someone cancels 60-days prior to the start of the class => no cancellation charge.
- If someone cancels 30-60 days prior to the start of class => 50% cancellation charge
- If someone cancels less than 30-days before the start of class, or simply doesn't show up => charged the full amount

#### **Teaching Methodology:**

Similar to the way Joe taught nine classes in the Graduate Training Program of The Trane Company, students will learn a concept and then immediately apply this new knowledge with an application problem. Quiz/testing will also be used to measure the overall effectiveness of the teaching. In this way, the program receives continual improvement through direct feedback.

#### About the Instructor:

Joe Becker is a graduate of the University of Wisconsin-Madison with degrees in Naval Science and Industrial Engineering (1979). He is also a Graduate from the U.S. Naval Nuclear Power School at Mare Island, California (1975). Joe is a registered Professional Engineer (Wisconsin 1990).

After nine years in the Navy, Joe resigned his Commission in the Civil Engineer Corps. Since graduating from Trane's GTP class of 83-II, he worked as a Systems Engineer in C.D.S., Marketing Engineer in the Variable Air Volume Product Group, Manager of Technical Training in GTP, Sales Engineer, Sales Manager in Rochester/Syracuse & Regional Sales Manager for the NE Territory.

Joe currently works part-time for Trane's East Territory & provides technical training through Becker Learning. BL2013NT.121015



## AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS

## ROCHESTER, NEW YORK CHAPTER

#### December 10, 2012

## LOCATION: Marios Rochester, NY

President	Michelle Sommerman	X
President Elect/Program	Robert Wind	X
Vice President/Tech/Picnic Co-Chair	Ed Burns	X
Secretary	Christina Walter	X
Treasurer	Jeff Close	
Immediate Past President/CRC	Jeff Ellis	
Attendance	Tim Duprey	
Awards/Student Activities	Al Rodgers	X
Buyers Guide	Chuck White	
Historian	Lee Loomis	X
Board of Gov. (3)	Eric Smith	
Board of Gov. (3) Newsletter	Jaimee Wilson	X
Board of Gov. (2) Membership	Bill Clark	X
Board of Gov. (2)	Beth Smith	
Board of Gov. (1) Research	Paul Kenna	X
Board of Gov. (1) CTTC Chair	Derrick Day	X
Website	Kevin Wind	
Refrigeration	Michael Nohle	
Nominating / Picnic Co-Chair	Jim Browe	
Valentine's Dinner Dance	Jody M. McGarry	
YEA Chair	Chris Lukasiewicz	X
Education	Bill Murray	X
Publicity	Mark Kukla	
ARC Assistant Regional Chair & Treasurer, Region I	Spencer Morasch	X

Roll Call: The above noted individuals were present.

# **Meeting Minutes**

Call to Order: 10:05 am

#### Minutes:

- Previous Meeting Minutes Motion made and accepted to receive previous meeting minutes (Approved 1<sup>st</sup> by Lee Loomis, and 2<sup>nd</sup> by Paul Kenna). Notes made to 11/12 meeting minutes were: (1) To remove Eric Smith from the 11/12 meeting attendance, as he was not there, (2) That the next BOG meeting was switched from 12/7 12:00 pm VP Supply, to 12/10 10:00 am at Marios.
- Today we were visited by Region I, ARC Assistant Regional Chair, Spencer Morasch.
- > Treasurer's Report : Jeff Close
  - See attached Treasurer's report (Account balances, Funds vs. cd's, Budget vs. Actual)
- Program/ Tech Session: Rob Wind / Ed Burns
  - Joint mtg w/ SMACNA Feb 20<sup>th</sup>. Checking venue's for an evening meeting. Eli Howard, Nat'l Tech Director SMACNA, will be the speaker.
  - Possible Student Nights: Jan 14, Feb 20.
  - Speaker Gifts: Gift Card with Thank-you note.
- Refrigeration: Mike Nohle (not present)
  - March tour
- > Tech Awards: Derrick Day
  - To start pushing for Technology Award submissions.
- Membership: Bill Clark
  - 2 new members for December:
    - Ryan Voorhees, CHA Inc.
    - Roger Zaccour, R P Fedder Corp.
- Attendance: Tim Duprey (not here)
  - December meeting: 55 RSVP's
  - November meeting: 66 RSVP's
  - See attached report for November breakdown
- > Awards / Student Activities: Al Rodgers
  - Has not received any updates to local ASHRAE Bio's. Send to Al.
  - Realto P. Cherne award: need nominations. Must have a name by March, award to be handed out in May.
  - William 'Bill' Schmitt, how can we honor him? Ed Burns to research.
  - AI, Jaimee (re: Modeling careers) and Chris L (for YEA) to meet with Carl Lundgren at RIT, student liaison, to discuss the RIT student group and the changes that have occurred. Possibly Jan 11<sup>th</sup>.
  - No local student(s) to be sent to the ASHRAE Winter meeting this year. No time. We sent 2 to Chicago last year.

# Meeting Minutes

- We are disputing the 'eligibility' of a local submission for the Lynn Bellenger Scholarship. The ABET accredited Mechanical Engineering Technology (MET) degree is not being recognized as Undergrad (Engineering vs. Technology). The local Chapter will dispute the eligibility in a letter to Nat'l, as well as make a motion to correct the language.
- > YEA: Chris Lukasiewicz
  - The Fundamental Design YEA 'group learning' Tech Sessions are complete, but there will be 1 extra session added in January for VFD's.
- > Research: Paul Kenna
  - Donor Recognition to occur at today's December meeting (3 coins to be given out)
  - Grey Sheet Metal consistently has been a huge financial supporter for ASHRAE, and they will be recognized and thanked for their generosity.
- > Newsletter: Jaimee Wilson
  - Requested President's letter as well as the January meeting write-up for the RES to be submitted by December 10<sup>th.</sup>
  - The December 20<sup>th</sup> submission deadline has been extended to January 1<sup>st</sup> for the Jan electronic newsletter.
- > Historian: Lee Loomis
  - If you have any historical HVAC 'stuff' in your possession and you would like to share it with us, please contact Lee L (leeloomis46@gmail.com).
  - Lee will start putting together a monthly 'history' report for the chapter newsletter which will consist of history interviews of retired members.
- > Website: Kevin Wind (not present)
  - Updates continue to be made to the website.
- Valentine's Dinner Dance: Jody McGarry (not present)
  - VDD to be held Friday, Feb 8<sup>th</sup> at the Colgate Divinity School
  - We plan to recognize Past President's at this event
- > Old Business:
  - MOPS updates for committee chairs
  - Monthly PAOE updates should be completed
- > New Business:
  - Community Sustainability project (ie: Habitat for Humanity)
  - Tim Duprey is announced as the Chapter Electronics Chair
- > Next Meeting: Friday, January 11<sup>th</sup>, 12:00 PM at VP Supply

The meeting was adjourned at 11:15 am

# Society News-Moisture Removal

#### Is Moisture an Unwanted 'Occupant' In your Building? ASHRAE Seminar Shares how to Remove It

ATLANTA – No designer wants to see the unwelcome guests of mold and mildew show up in their building. Guidance on how to prevent moisture that causes their appearance is offered in several sessions at ASHRAE's 2013 Winter Conference in Dallas.

"Sooner or later, HVAC professionals throughout Texas and the Gulf Coast come up against the problem of preventing or getting rid of mold," Lew Harriman, a speaker at the Conference and author of ASHRAE's "ASHRAE Guide for Buildings in Hot and Humid Climates," said. "In June 2012, the ASHRAE Board of Directors approved a totally revised and updated Position Document on Indoor Mold and Dampness in Buildings. The Dallas Conference includes a comprehensive briefing on what ASHRAE experts have found to be the HVAC-related causes of mold in buildings, and what owners, contractors and designers can do to prevent the problem."

The 2013 Winter Conference takes place Jan. 26-30 at the Sheraton Dallas. To register and for complete Conference information, visit <u>www.ashrae.org/dallas</u>. The International Air-Conditioning, Heating, Refrigerating Expo, held in conjunction with the Winter Conference, will run Jan. 28-30. The Expo, <u>www.ahrexpo.com</u>, is held at the Dallas Convention Center.

The technical program features more than 200 sessions addressing energy conservation; facility management: operations, technology and energy improvements; large building design; standards, guidelines and codes; HVAC&R systems and equipment; HVAC&R fundamentals and applications; and refrigeration. The full Technical Program offers the opportunity to earn a year's worth of PDHs, NY PDHs, AIA LUs and LEED AP credits and runs Jan. 27-30.

A seminar, Diagnosing and Fixing Building Moisture Problems – Case Histories from Hot and Humid Climates, takes place 8-9:30 .m. Sunday, Jan. 27.

Moisture and humidity problems are often a complex mixture of decisions made by different professionals at different times about HVAC systems, architecture and building operations. Untangling the causes of problems and planning solutions requires understanding of the typical interactions between the building and its HVAC systems plus an appreciation of the practical aspects of operating buildings with limited budgets.

Case histories presented in this seminar can help building owners and facility managers avoid classic moisture problems and solve them when they occur.

Speakers and presentations are:

Diagnosing and Fixing a Major Mold Growth Problem in a Health Clinic, Lew Harriman, Mason Grant, Portsmouth, N.H.
 The Unintended Consequences of the New International Green Construction Code on HVAC and Mold Problems in Humid Climates,

George Dubose, Liberty Building Forensics Group, Zellwood, Fla.

• Sources and Solutions of Classic Moisture Problems—Lessons Learned in Hot and Humid Climates, Raoul A. Webb, P.E., ENVIRON International Corp., Tampa, Fla.

A seminar, "Moisture Control in Commissioning of New and Existing Buildings," takes place 11 a.m.-12:30 p.m., Sunday, Jan. 27. Moisture control in the commissioning process is based on project requirements for moisture problem avoidance, building assessment, field testing, and building science. This seminar focuses on the interaction of building systems that affect moisture in buildings and demonstrates important lessons learned by use of case studies.

• Providing Moisture Control Solutions in Building Commissioning, Donald Snell and George Dubose, Liberty Building Forensics Group, Zellwood, Fla.

The Art and Science of Building Enclosure Commissioning, Fiona Aldous, Wiss, Janney, Elstner Associates, Inc., Irving, Texas.

A seminar, ASHRAE Position on Limiting Indoor Mold and Dampness in Buildings, Unvented Combustion Devices and Indoor Air Quality: Review of Three Recently Published ASHRAE Position Documents, takes place from 11 a.m.-12:30 p.m., Wednesday, Jan. 30.

The seminar reviews three recently published Position Documents from ASHRAE, including "Limiting Indoor Mold and Dampness in Buildings." The paper describes 64 specific decisions that have been observed to either minimize or increase the risks associated with indoor moisture accumulation.

• The Revised ASHRAE Position Document on Limiting Indoor Mold and Dampness in Buildings, Lew Harriman, Mason Grant, Portsmouth, N.H.

ASHRAE Position Document on Unvented Combustion Devices, Paul W. Francisco, University of Illinois, Champaign, Ill.

ASHRAE Position Document on Indoor Air Quality, Chandra Sekhar, Singapore.

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## **Chiller Efficiency Improvements Proposed for Standard 90.1**

ATLANTA – Chiller efficiencies for air and water cooled chillers would be boosted to more than 20 percent under a proposed addendum to the ASHRAE/IES energy standard.

Proposed addendum ch to ANSI/ASHRAE/IES Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, changes the requirements for air and water cooled chillers as defined in section 6.4.2.1 and the efficiency requirements listed in table 6.8.1C. This change is a continuation of the efficiency improvements that were implemented in 2010 by further improving the efficiency requirements, according to Dick Lord, a member of the committee who developed the proposal through a working team of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) chiller section.

Addendum ch is open for public review from Nov. 30, 2012-Jan. 14, 2013. For more information, visit <u>www.ashrae.org/publicreviews</u>.

In 2010, a Path B was added to the standard for part load intensive water cooled chillers. Proposed addendum ch would expand Path B by adding requirements to include air cooled chillers. Also as part of this change, efforts were made to bring the efficiency requirements for water cooled positive displacement and centrifugal chillers together while considering the available technology, and to chillers to be applied at other application conditions where one technology may better suited than the other. If approved, the new efficiency requirements would go into effect on Jan. 1, 2015.

The proposed efficiency requirements in addendum ch increase annual energy savings to 23.1 percent vs. Standard 90.1-2004 and 8.3 percent vs. Standard 90.1-2010. In 2010, the overall weighted average savings resulted in a 16.2 percent improvement in chiller annualized energy use vs. Standard 90.1-2004.

Lord noted the average payback was calculated at 6.3 years, given some units that exceed the scalar limits. Chiller manufacturers are aware of this and know that redesign and cost reduction will be required, but do support the proposal, he said. Lord also noted that we are reaching maximum technological limits at a component level and that in the future the industry will have to look at the full HVAC system for further improvements. AHRI is in the process of forming a new working group to address systems approaches for efficiency improvements and will work closely with Standard 90.1.

In addition, improvements also were made to the requirements to clarify their use. AHRI has recently updated the AHRI 550/590 rating standard that is used for the rating of chillers and its certification program. As part of this effort, AHRI developed a hard metric standard with slightly different rating conditions than the inch pound (I-P) ratings and have released it as AHRI 551/591. For the International System of Units (SI) rating, the change was reflected in the ratings as well as revising the reference to the AHRI rating standard to include AHRI 551/591.

The Standard 90.1 committee also opted to exclude chillers when the leaving condensing temperatures are greater than 115F from the equipment efficiency requirements of Table 6.8.1C. This proposed clarification stems from the fact that high-lift, heat reclaim chiller applications often use a different compressor and sometimes a different refrigerant. The intention of using heat reclaim chillers is to increase system efficiency, but the effect on overall system efficiency cannot be assessed at standard cooling design conditions, Lord said. AHRI is developing rating requirements, test procedures and certification for heat reclaim chillers as well as heat pump chillers.

# Society News—Chilled Efficiency (cont'd)

Also open for public comment from Nov. 30-Jan. 14 is addendum aq that makes minor changes to improve clarity and to address issues identified in sections 6.5.1.3.a and 6.5.3.2.1.

In addition, 15 proposed addenda also are open for public review from Nov. 30 until Dec. 30. They are:
Addendum bs reduces occupancy threshold for demand controlled ventilation from greater than 40 people per 1000 ft2 to equal to or greater than 25 people per 1000 ft2 with exemptions for certain occupancies.

• Addendum ca requires that vestibule heating be locked out when outside air is above 45F, the same temperature that lockout of freeze protection or ice melting systems is required in section 6.4.3.8.

• Addendum cb to removes the 10,000 cfm threshold for optimum start and adds a threshold for systems controlled by DDC. The addendum also expands the requirement beyond air-based systems so that convectors and radiant systems would be included.

• Addendum cc adds minimum efficiencies for both axial and centrifugal fan evaporative condensers with R-507A as the test fluid to Table 6.8.1G.

• Addendum cd clarifies what to do with piping system accessories that are not in series with the piping circuit that do not have the same heat losses/gains and pressure drop

• Addendum ce establishes package single zone systems as the baseline HVAC system type for all retail occupancies of two stories and less.

• Addendum cf enables the establishment of a window-to-wall ration for retail strip mall buildings.

• Addendum ck requires the use of dual maximum control for variable air volume zone control when the building has DDC controls.

• Addendum cl updates the IEER values for air-cooled and water-cooled air conditioners and heat pumps above 65,000 Btu/h. Depending on the cooling capacity and product classes, the new IEERs are between 7 and 13 percent better than the values they are replacing. The new IEERs will become effective on Jan. 1, 2016. Note the IEER is a new metric that was developed by AHRI and first implemented in the 2010 standard and is a better representation of the annualized refrigeration system energy use of a typical commercial packaged air conditioner.

• Addendum cn allows laboratory designs that incorporate strategies to reduce peak airflows and minimum unoccupied airflows to document energy savings associated with reduced outside air volumes.

• Addendum co modifies the Lighting Power Densities in Table 9.5.1 to match the recommended light levels in the 10th Edition of the IES Lighting Handbook.

• Addendum cp corrects a value in table 5-5 for steel joist floors.

• Addendum cr modifies Table 9.6.1 to correct the required light levels for hospital corridors, assisted living dining spaces and retail sales spaces.

• Addendum an allows the option to use energy rates either from actual local rates or EIA state data, where approved by the building official when using Appendix C.

• Addendum ar corrects the definitions for walk-in coolers and walk-in freezers.

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# Society News—Water Conservation

## Proposals to Keep Water from "Going Down the Drain" Made for Green Building Standard

ATLANTA – Measures to improve water efficiency, including limitations on full-flush volume for toilets and use of municipal reclaimed water for irrigation, are being proposed for a green building standard.

ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, provides a design standard for those who strive for high performance buildings. It covers key topical areas of site sustainability, water-use efficiency, energy ef<sup>-</sup>ficiency, indoor environmental quality and the building's impact on the atmosphere, materials and resources.

The changes regarding water are proposed via addendum v, which is open for public review from Nov. 30-Jan 14, 2012. To comment on the proposed changes or for more information, visit <u>www.ashrae.org/publicreviews</u>.

The addendum would limit the full-flush volume for all toilets to 1.28 gal per flush and limit kitchen faucet capacity to 1.8 gpm. Research shows that dual-flush toilets in non-residential settings are not used in the 2:1 full-flush to partial-flush ratio as anticipated. Instead, the full-flush option is almost always employed.

"There is no evidence that the dual-flush toilets use significantly less water than the full-flush in commercial settings," Thomas Pape, a member of the Standard 189.1 committee, said. "We have found that 90 percent of the flushes from dual flush toilets are full flushes. Since many models of dual-flush toilets would meet a maximum of 1.28 gal for the full flush, the maximum volume for dual-flush toilets has been decreased to match the maximum volume for single-flush toilets."

The kitchen faucet maximum capacity is being changed to reflect the current water efficiency standard of 1.8 gpm established by various green codes.

Proposed addendum v also would set limits on the use of municipal reclaimed water for irrigation. Municipal reclaimed water is highly treated, usually to drinking water standards, and often in short supply. Furthermore, the growing use of municipal reclaimed water for groundwater recharge of potable water supplies increases its value.

"It is unreasonable to allow the unfettered use of reclaimed water, considered a precious resource, as a means to save energy when there are more viable alternatives," Pape said. "Therefore, the use of municipal reclaimed water would be prohibited for roof-cooling applications and for permanent irrigation of vegetated roofs using either in-ground or above-ground irrigation systems. There are many other alternative water sources that can be used for this puppose, including graywater, condensate recovery, rainwater and cooling tower discharge."

Its temporary use in above-ground irrigation systems is allowed, however, during the vegetation establishment period required for vegetated roofs.

Also open for public review is proposed addendum z, which changes minimum efficiency requirements for open display cases, recently included with other commercial refrigeration equipment under federal control. The addendum adds efficiency requirements in Table C-16 in Appendix C, which covers efficiency requirements for commercial refrigeration equipment. The current Table C-13 for commercial refrigerators and freezers remains unchanged.

It also clarifies the requirements for field installed covers, curtains or doors on open display cases. Finally, it includes changes to section 7.4.7.4, which were not included in the first public review version of the addendum.

Addendum z is open for public review from Nov. 30-Dec. 30, 2012.

Two additional addenda are open for public review from Nov. 30-Dec. 30, 2012. They are:

- Addendum b, which clarifies requirements on flooring systems proposed by addendum b during the first public review.
  - Addendum r, which adds references to ANSI/ASHRAE 170, Ventilation of Health Care Facilities.

In addition, one other addendum is open for public comment from Nov. 30-Jan. 14, 2012. Addendum u significantly expands and strengthens the standard's stormwater management requirements.

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