

ASHRAE Rochester



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NOVEMBER 1, 2012

2013 Winter Conference | Dallas, Texas

Deep in the heart of Texas, where the stars at night are big and bright, ASHRAE is convening for its 2013 Winter Conference to corral energy use and blaze the way in high performing building design.

The 2013 Winter Conference takes place **Jan. 26-30** at the Sheraton Dallas. To register and for complete Conference information, visit www.ashrae.org/dallas.

The International Air-Conditioning, Heating, Refrigerating Expo®, held in conjunction with the Winter Conference, will run **Jan. 28-30**. The Expo, www.ahrexpo.com, is held at the Dallas Convention Center.

Registration fees are as follows:

Early bird (until Nov. 4): \$345, ASHRAE member, (\$535, non-member)

Advance until Dec. 31: \$370, member (\$560, non-member)

Fees beginning Jan. 7: \$485, ASHRAE member (\$675, non-member)

First-time Conference attendee:

Early bird (through Nov. 4): \$320, ASHRAE member, (\$510, non-member)

Advance (through Dec. 31): \$345, ASHRAE member, (\$535, non-member)

Fees beginning Jan. 7: \$460, ASHRAE member (\$650, non-member)

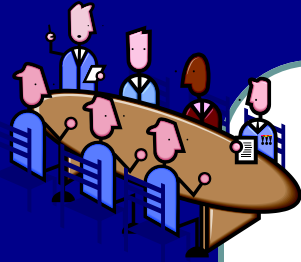
Note: ASHRAE has instituted new registration fees for speakers, student branch advisors and students. The fees are as follows:

Speakers: \$95

Student branch advisors: \$25

Students: \$25, ASHRAE student member (\$55, full-time student non-member)

(refer to page 19 for more details)



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

Jaimee Wilson(3rd year)
585-325-6004
jreynolds@pathfinder-ea.com

William J. Clark (2nd Year)
585-507-1961
wjclark@dayasi.com

Beth Smith (2nd year)
585-272-0110
bsmith@vpsupply.com

Derrick Day (1st Year)
585-489-7502
Derrick.W.Day@jci.com

Paul Kenna (1st Year)
585-295-3114
Paul.Kenna@carrierenterprise.com

Student Activities
Al Rodgers 585-325-6004
arodgers@pathfinder-ea.com

Newsletter Editor
Jaimee Wilson 585-325-6004
jwilson@pathfinder-ea.com

Attendance & Reception
Timothy Duprey 585-924-9360
tduprey@pascobas.com

Building Simulation User's Group (BSUG)
Bill Bishop 585-325-6004
wbishop@pathfinder-ea.com

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

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

ASHRAE 2012-2013 Meeting Schedule

Date	Event	pdh / Theme	Location	Schedule
11/12/12	Mike Waller of Ravi Engineering & Land Surveying - "Asbestos Recognition and Abatement Techniques" Joint meeting with ASPE Rochester Chapter	1 PDH Pending Awards Research Promotion	Mario's	12:00 PM
12/10/12	Jerome Meyer Sr. of MIS - "ASHRAE Standard 188P on Legionella"	1 PDH Pending	Mario's	12:00 PM
01/14/13	Jeff Day of Day Automation - "The Road Ahead for Facilities Automation"	1 PDH Pending	Mario's	12:00 PM
02/09/13	Annual ASHRAE Valentines Dinner Dance	---	Inn on Broadway	7:00 PM
02/11/13	(Topic and speaker TBD) Joint meeting with SMACNA		Mario's	12:00 PM
03/08/13	Refrigeration Night		TBD	TBD
4/18/2013 Thursday!	(Topic TBD) - Tom Watson (President of ASHRAE) Joint meeting with ASHRAE Niagara 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

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

Thank you! To all attendees of the lunch meeting last month at Mario's and to everyone that helped orchestrate the event as well.

Also, Congratulations to our raffle winner! We have a 50/50 raffle at each monthly meeting – with half going towards ASHRAE research promotion or scholarships AND the other half to the winner. Maybe it will be YOU at this month's meeting!

Our meeting this month will be on **Monday November 12th**. We have many things planned for the meeting...**awards** from the CRC this past August will be presented to some of the officers of the chapter, a **visitor** will be here from ASHRAE Region 1 with the latest news from the Region and Society, it will be a **joint meeting** with ASPE, and last but not least...Mike Waller of Ravi Engineering & Land Surveying will be speaking on "**Asbestos Recognition and Abatement Techniques**".

Please take time to explore the Rochester ASHRAE Chapter website at

<http://rochester.ashraechapters.org/>.

There is a great deal of information there...chapter officer listing with contact info, meeting information and PayPal registration, chapter newsletters and more!

Please contact me @ msommerman@nrg-concepts.com or 585-272-4650 if you have any ASHRAE chapter questions.

Thanks for the continued support of YOUR local chapter of ASHRAE!
See you at the next meeting!

Some upcoming National ASHRAE sponsored events:

7th International Cold Climate HVAC Conference
November 12-14, 2012 | Calgary, Alberta
www.ashrae.org/coldclimate

Annual Winter Conference and AHR Expo
January 28-30, 2013 | Dallas, Texas

Welcome to our New Members	
Mrs Sheryl Dill	Wegmans Food Markets
Mr Timothy Howe	Stantec
Mr Hendrikus V Shank	RIT Student
Mr Philip J Viruso II	E.D.S. Mechanical Services
Mr Michael Zaremski	V.J. Stanley Inc

Michelle Sommerman, PE, 2012-2013 President

Monthly Meeting

November ASHRAE Meeting (1 PDH pending for attendees)

Monday, November 12th 2012

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

Time: 12 PM with Buffet Lunch Served

Cost: \$25.00

Speaker: Mike Waller, Ravi Engineering & Land Surveying

Asbestos Recognition and Abatement Techniques

This presentation will be given by Michael Waller, a Senior Environmental Manager with OSO.

Mr. Waller will be discussing what to look for when determining if material is suspect of being an **A**sbestos **C**ontaining **M**aterial (ACM) and different techniques that can be utilized to remediate the material, should it test positive.

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: <http://rochester.ashraechapters.org/meetings.html>

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

Please RSVP no later than noon Friday, November 9th to Tim Duprey
Phone: 585.259.0559 or tduprey@pascobas.com

Respectfully,

Tim, Attendance Chair

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



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.

The Laboratory for Laser Energetics (LLE) at the University of Rochester is a unique national resource with the premier high-power laser facility for research in Inertial Confinement Fusion (ICF), High Energy Density Physics (HEDP) and Basic Science. The Laboratory is a key partner in the National Ignition Campaign (NIC) with the National Ignition Facility (NIF) where LLE scientists have been instrumental in the development of experimental techniques and diagnostics. LLE scientists collaborate with scientists at Lawrence Livermore and the other National Laboratories on the key science campaign leading to Ignition.

LLE is home to both the OMEGA and OMEGA EP laser systems. OMEGA is a 60-beam solid-state laser system capable of delivering 30kJ, nanosecond, UV pulses to a target. OMEGA EP is a short-pulse laser system capable of delivering up to 1PW intensities (700J in 700fs). Research is conducted for LLE, National Laboratories and Universities. Information regarding the Laboratory for Laser Energetics can be found at www.lle.rochester.edu. The University of Rochester is an equal opportunity employer.

FACILITY MANAGER

The Laboratory seeks an experienced candidate to manage a 300,000 sq. ft. state-of-the-art research complex. This includes responsibility for HVAC, electrical systems, facility modifications, capital projects, as well as general upkeep. Also supervises a staff of mechanics, electricians, custodians and contractors. The successful candidate must have knowledge of mechanical and electrical plant systems, be able to plan and manage preventive and corrective maintenance activities, and support the research staff with laboratory modifications. The successful candidate must have solid project management skills and the ability to clearly communicate with internal researchers, University facility counterparts, mechanic/electrical trades, and external vendors. Bachelor's degree in engineering and 5 years experience in similar experience is required. Professional Engineer certification is a plus.

Qualified candidates please send resumes to:

Human Resources Manager
University of Rochester/LLE
250 E. River Road
Rochester, NY 14623
email: jobs@lle.rochester.edu
fax to: 585-276-2420





Technology Awards Programs

Program Overview

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)



ASHRAE honors only buildings and industrial facilities or processes that are outstanding in design innovation. An award in a category is not given if entries do not meet the highest standards. The "ASHRAE Award of Engineering Excellence" is given at the judges' discretion. The first-place Society Technology Awards and the "ASHRAE Award of Engineering Excellence" are presented during the Plenary Session at ASHRAE's Winter Meeting.



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

Student Activities



College Campuses

The local chapter is working on plans for joint meetings with RIT's ME Department, Society of Women Engineers and Industrial Engineering groups. If you have a contact you can share at other schools, we would appreciate it. Help us share information about College Engineering New Faces, The 2013 ASHRAE Design Project Competition, Senior Undergraduate Projects Grants and ASHRAE Scholarships.

Student Co-Ops

Students are looking for co-ops as well as permanent placements. If you are considering hiring, please let Al Rodgers know. He will be compiling a list of students looking for co-op positions, as well as graduating seniors. Students will also be looking for mentoring and/or shadowing placements. Please consider helping a potential employee.

K-12

Involved in K thru 12 school functions? Working at a Career Day? Need a speaker? Do you need some props or documents to help explain what your job consists of to your child's class? We have materials for use. Let us know.

ASHRAE Handbooks Wanted!

Handbooks are always needed, especially Fundamentals. Please contact Al Rodgers if you would like to donate. Email: arodgers@pathfinder-ea.com

Awards

Awarding Excellence in Service

Please consider a nominee for the Realto P. Cherne Award. Must be a Chapter member in good standing, and demonstrate service to the Rochester Chapter by supporting Chapter functions, educating Chapter members as well as the public in ASHRAE's mission statement and goals. Send nominations to Al Rodgers.

Keep your ASHRAE Biography Updated

If you are a chapter officer, please keep your ASHRAE biography up to date. I will be sending out the qualifications for a Chapter and Regional Service Award soon.



College Engineering New Faces

Is one of these students the next New Face of Engineering: College Edition...or is it you?

All the late nights, long hours and tough assignments really do pay off.

Earn recognition for your dedication as you work toward your degree: Become ASHRAE's college New Face of Engineering



November 16 is the deadline to apply!

About Senior Undergraduate Project Grants

The ASHRAE Senior Undergraduate Project Grant Program provides 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. Grants are to be used to fund equipment and supplies for senior projects and 2-year technical school projects that focus on ASHRAE-related topics. Grants may cover projects lasting from one academic term up to one year.

2013 Student Design Project Competition



Dallas Power & Light

For more information:

<http://ashrae.org/membership--conferences/student-zone>



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!

Very truly yours,



Jody McGarry
Valentine Dance Committee



Invoice

Advertising for February 2013 Promotion

\$325

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 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.

A N I N T E R N A T I O N A L O R G A N I Z A T I O N

ASHRAE Learning Institute

Seminars & Courses at ASHRAE's Winter Conference and AHR Expo in Dallas, TX

2 WAYS TO REGISTER

Internet: www.ashrae.org/dallascourses

Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Full-Day Professional Development Seminars

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

The Commissioning Process in New & Existing Buildings

Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

Complying with Standard 90.1-2010

Tuesday, Jan 29 – 9:00 a.m. to 4:00 p.m.

Data Center Energy Efficiency

Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

Energy Modeling Best Practices and Applications:

HVAC/Thermal

Tuesday, Jan 29 – 9:00 a.m. to 4:00 p.m.

Healthcare Facilities: Best Practice Design & Applications

Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

Half-Day Short Courses

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

Air-to-Air Energy Recovery Fundamentals

Sunday, Jan 27 – 2:00 p.m. to 5:00 p.m.

Commissioning Process & Guideline 0

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Humidity Control: Applications, Control Levels and Mold Avoidance

Sunday, Jan 27 – 2:00 p.m. to 5:00 p.m.

Evaluating the Performance of LEED®-Certified Buildings

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Air-to-Air Energy Recovery Applications: Best Practices

Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

Optimization of HVAC Systems & Components: Techniques & Real-World Examples

Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

Application of Standard 62.1-2010: Multiple Spaces Equations & Spreadsheet

Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

Energy Management in New and Existing Buildings

Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

Combined Heat & Power: Design through Operations

Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

Avoiding IAQ Problems

Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

Understanding Standard 189.1-2011 for High-Performance Green Buildings

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Designing Toward Net Zero Energy Commercial Buildings

Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

Introduction to Ultraviolet Germicidal Irradiation (UVGI) Systems

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Understanding & Designing Dedicated Outdoor Air Systems

Tuesday, Jan 29 – 1:00 p.m. to 4:00 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**

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.

IN THIS ISSUE: DEMAND CONTROL VENTILATION

ASHRAE Fundamentals 2009

Chapter 16 "Ventilation and Infiltration"

ASHRAE HVAC Applications 2011

Chapter 31 "Ventilation of the Industrial Environment"

Chapter 33 "Kitchen Ventilation"

ASHRAE 62.1-2007

"Ventilation for Acceptable Indoor Air Quality"

ACGIH Industrial Ventilation: A Manual of Recommended Practice

Lawrence Berkeley National Laboratory (LBNL) -61862

"Accuracy of CO₂ sensors in Commercial Buildings: A Pilot Study"

Website Link:

<http://eaei.lbl.gov/accuracy-co2-sensors-commercial-buildings-pilot-study>

National Building Controls Information Program (NBCIP)

"Product Testing Report—Wall Mounted CO₂ Transmitters"

Website Link:

<http://www.iowaenergycenter.org/grant-and-research-library/product-testing-report-wall-mounted-carbon-dioxide-co2-transmitters/>

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 materials recommended for this section be either ASHRAE sponsored or non-vendor specific.

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



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

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

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

Primary Benefit: 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

Registration Deadline: 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 17112
Phone: (585) 317-0000 Email: 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.

Registration: 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 <input type="checkbox"/> Refrigeration <input type="checkbox"/> Energy Eff. Design <input type="checkbox"/> Products Harrisburg, PA <input type="checkbox"/> Airside-I <input type="checkbox"/> Airside-II <input type="checkbox"/> Systems <input type="checkbox"/> Fall 6-night Intro Series (check all that apply)			
Name: _____		Title: _____	
Company Name: _____			
Address: _____			
Phone: ()		Email: _____	

Type	# 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.



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

ROCHESTER, NEW YORK CHAPTER

October 8, 2012

LOCATION: VP Supply Rochester, NY

President	Michelle Sommerman	X
President Elect/Program	Robert Wind	
Vice President/Tech/Picnic Co-Chair	Ed Burns	
Secretary	Christina Walter	X
Treasurer	Jeff Close	X
Immediate Past President/CRC	Jeff Ellis	X
Attendance	Tim Duprey	
Awards/Student Activities	Al Rodgers	X
Buyers Guide	Chuck White	
Historian	Lee Loomis	X
Board of Gov. (3)	Eric Smith	X
Board of Gov. (3) Newsletter	Jaimee Wilson	X
Board of Gov. (2) Membership	Bill Clark	
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	

Meeting Minutes

Roll Call: The above noted individuals were present.

Call to Order: 12:08 pm

Minutes:

- **Previous Meeting Minutes** - Motion made and accepted to receive previous meeting minutes.
- **Treasurer's Report** : Jeff Close
 - David Hartman to review our financial accounts in a few weeks, and then discuss our options
 - All CRC reimbursements should have been submitted
 - Budget report to be emailed
- **Program/ Tech Session:**
 - Updated calendar was provided
 - Nat'l ASHRAE President, Tom Watson to visit April 18th
 - Refrigeration tour possibly in March?
 - Spencer Morasch to visit next meeting, Monday November 12th. Plan to have 10:30 am BOG meeting beforehand that day at Mario's.
- **Tech Awards:** Derrick Day
 - Requirements for Technology Awards appeared in the Newsletter. Ideas for Technology Submissions are requested.
- **Membership:** Bill Clark
 - 253 current Members, of which 4 are new members
 - Delinquency report to be distributed amongst BOG for help making calls. 25-30 delinquents.
- **Attendance:**
 - September Clambake had 75 attendees
 - October meeting: 48 RSVP's
- **Student Activities:** Al Rodgers
 - Carl Lundgren is the student liaison at RIT
 - Al and Jaimee present to Carl L regarding YEA (maybe 10/19?)
 - Discuss the RIT student group and the changes that have occurred
 - Bring used ASHRAE Standards books to RIT. Thanks to all for donating these!
 - Working with the guidance offices to provide HVAC presentation to secondary schools on 'Career Day'.
- **Awards:** Al Rodgers
 - Keep track of points and update Bios on ASHRAE website
 - Region 'chapter service' awards are provided at 15 points?
 - Jeff Ellis has CRC awards
 - Realto P. Cherne 'Member of the Year' award due in April. Any recommendations? Requirements:

- i. Must have provided volunteer services to the Chapter
- ii. Supporting ASHRAE through their community
- iii. Having an active approach on educating people

- **YEA:** Chris Lukaszewicz
 - Fundamental Design YEA Tech Sessions have started. They will go through December (no class on Thanksgiving)
- **Research:** Paul Kenna
 - January 14th will be research promotion night
 - Lynn Bellenger Scholarship award payment due, \$250
 - Full Circle deadline November 15th (minimum \$100 each) – this is required of all local chapter officers and the Research Promotion chair
- **Newsletter:** Jaimee Wilson
 - Requested President's letter to be submitted by October 10th , as well as the November meeting write-up for the RES
 - October 22nd is the November newsletter deadline
- **Buyer's Guide:** Chuck White not present.
 - No report
- **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.
 - Lee hopes to start putting together a monthly 'history' report for the chapter newsletter
- **Website:**
 - Virus was detected at the society level, this effected out PayPal meeting reservations/payments locally
- **New Business:**
 - CRC Awards will be handed out at our November meeting
 - Display of Chapter banners. We are missing 3 black metal fold-up collapsible easels.
- **Old Business:**
 - Chapter audit complete
 - PIE reviewer
 - Privacy Option
- **Next Meeting:** November 12th, 10:30 AM at Mario's
- The meeting was adjourned at 1:24 pm

2012-2013 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	244	0	0	0	200	0	100	300

ASHRAE, AHR Expo Return to Dallas, Texas for 2013 Winter Conference

In keeping with ASHRAE's goal of continuing education the Conference offers some 200 Professional Development Hours, as well as Continuing Education Units, which can be applied toward a professional engineering license.

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. One particular track of note is Industrial and Transportation Ventilation, focusing on the industrial and manufacturing sector prevalent in Texas. 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.

Five Professional Development Seminars and 15 Short Courses are offered to help industry professionals stay current on HVAC technology, including how to apply the newest ASHRAE standards. The ASHRAE Learning Institute (ALI) is offering five new half-day short courses on everything from the basics of laboratory design to techniques for optimizing HVAC systems and components. The full-day professional development seminars focus on the commissioning process; data center energy efficiency; healthcare facilities; complying with Standard 90.1-2010 and energy modeling best practices. ALI courses are approved for renewal of professional engineer and professional architect licenses, as well as for industry certification programs. www.ashrae.org/Dallascourses.

The Conference's Plenary will feature former Pittsburgh Steelers quarterback Rocky Bleier. Despite being wounded in both legs during the Vietnam War, he embarked on a two-year road to recovery, and eventually pressed on to become one of the Steelers' top leading ground-gainers, passing the 1,000-yard rushing mark in one season, and contributing to four Super Bowl victories. Bleier's speech, "Be the Best You Can Be," motivates audiences to keep on striving for greater accomplishments. He shares his remarkable story during the Plenary, 3:15 p.m., Saturday, Jan. 26.

Additionally, ASHRAE offers a special administration of all six certification examinations on Wednesday Jan. 30: 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). ASHRAE's certification program recognizes industry professionals who have mastered knowledge and skills reflecting best practices in certain aspects of building design and operations. 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 Southern Methodist University, the Baylor Charles A. Sammons Cancer Center and Cowboys Stadium.

Mandatory Commissioning for All Buildings Proposed for Green Building Standard

ATLANTA - Commissioning for all buildings designed and built under a green building standard from ASHRAE, the U.S. Green Building Council (USGBC) and the Illuminating Engineering Society (IES) would become mandatory under a new proposal open for public input.

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 efficiency, indoor environmental quality and the building's impact on the atmosphere, materials and resources.

Proposed addendum p would remove the "Acceptance Testing" provision (Section 10.3.1.1 Building Acceptance Testing) for small buildings. The proposed addendum is open for public review from Oct. 19-Nov. 18, 2012. To comment on the proposed changes or for more information, visit www.ashrae.org/publicreviews.

Currently the standard implies that when a building area is less than 5,000 square feet it is considered to have simple building systems, and thus requires a reduced level of commissioning effort, referred to as Acceptance Testing, according to Jeff Ross-Bain, a member of the Standard 189.1 committee. However, building area does not relate to complexity as many buildings less than 5,000 square feet can be complex.

Under the proposed addendum, building commissioning per Section 10.3.1.2 becomes mandatory for all buildings that are designed and built under the requirements of the standard.

"Commissioning is a robust and well supported discipline with established guidelines (ASHRAE and others), a long history of use and with many practitioners," he said. "The commissioning process is one that adapts to the specific attributes of a given building. A 'simple' building would only require 'simple' commissioning regardless of size."

Ross-Bain noted that "Acceptance Testing" is not a universally defined activity nor does there appear to be specific instructions or guidelines within the industry detailing how this activity is formally completed. Also, a review of the mandatory requirements of Standard 189.1 could be interpreted as producing a relatively complex building (i.e. consumption measurement, on-site renewable energy, daylighting control, outdoor air delivery monitoring, economizers, condensate recovery, etc.), which requires a higher degree of commissioning activity.

Finally, under the current "Acceptance Testing" section, Standard 189.1 would not meet the minimum commissioning prerequisite of the Leadership in Energy and Environmental Design (LEED) rating system, which requires all buildings to undergo the commissioning process.

ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.

Additional Compliance Path Proposed for ASHRAE/IES Energy Standard

ATLANTA – A proposed optional third path for compliance with the ASHRAE/IES energy standard would provide more flexibility for the industry.

Addendum bm to ANSI/ASHRAE/IES (Illuminating Engineering Society) Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, is currently open for public review from Oct. 12 until Nov. 26, 2012. For more information, visit www.ashrae.org/publicreviews.

The proposed addendum would add a compliance path to Standard 90.1 to allow modeling in accordance with Appendix G (Performance Rating Method), provided the percentage improvement of at least 45 percent over a baseline design. In addition, this addendum proposes to make the baseline consistent with the prescriptive requirements of 90.1-2004, and it will remain that way in future versions of the standard.

The current paths in the standard – the Energy Cost Budget method and the Performance Rating Method – can lead to different modeling protocols for different functions, according to Michael Rosenberg, a member of the Standard 90.1 committee. All require slightly different rules, and a single project could require two or more different baselines.

“By allowing an additional compliance option, the standard provides more credit for integrated design resulting in energy savings such as efficient use of building mass, optimized building orientation, efficient HVAC&R system selection and right sizing of HVAC&R equipment,” Rosenberg said.

The baseline could stay the same for beyond code programs as well such as the U.S. Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED®) rating program, ANSI/ASHRAE/USGBC/IES Standard 189.1, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, and the federal tax incentive programs. Each simply chooses their own “% better than” target, according to Rosenberg.

“In addition, the performance path will no longer lag behind the prescriptive path as in the past it was not possible to incorporate prescriptive changes that occurred near publication date into the performance path,” he said. “It also allows for a deliberate and consistent trend for energy reduction in each version of the standard, instead of just following the prescriptive path.

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Society News—Engineering for Change

ASHRAE Brings Technology, People Power in Support of Engineering for Change

ATLANTA – ASHRAE has joined forces with an international engineering program to encourage its members to use their knowledge and technology to meet humanitarian challenges across the globe.

ASHRAE is now a network supporter of Engineering for Change (E4C). E4C is a growing community of engineers, technology professionals, designers, scientists, non-governmental organizations (NGOs) and local community advocates who are working together to design, apply and share innovative and sustainable technical solutions to a broad range of humanitarian challenges in local communities around the world.

“By partnering with Engineering for Change, our members can contribute their knowledge and our technology to help improve the quality of life for people around the world,” ASHRAE President Tom Watson said. “Our involvement allows us to match the technology to the need, to find affordable solutions that benefit communities and ourselves.”

“We are delighted to welcome ASHRAE to the E4C coalition,” Noha El-Ghobashy, president of Engineering for Change, said. “ASHRAE’s longstanding commitment to the promotion of engineering excellence in the service of sustainability and humanity makes it a natural ally for the work of the E4C coalition. We look forward to working together with ASHRAE and its distinguished membership for years to come.”

The initiative is part of Watson’s presidential theme Broadening ASHRAE’s Horizons, which emphasizes the role of ASHRAE members as leaders in the application of sustainable design and practices in our communities worldwide.

Under E4C (www.ashrae.org/e4c), ASHRAE members can get involved with existing projects or start new ones. Watson noted that there is a wide range of projects – from refrigeration to hospitals to indoor air quality – to which members could contribute their technical expertise.

Watson also is encouraging ASHRAE members and chapters to examine ways to get more involved in their local communities. Another effort underway is ASHRAE’s Community Sustainability Project program (www.ashrae.org/community), which is designed to encourage members to volunteer with local non-profits or other associations for activities such as engineering and installation of energy efficiency measures for their facilities.

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Groundbreaking Information for Data Center Energy Efficiency Guidance

ASHRAE Releases Third Edition of Thermal Guidelines for Data Processing Environments

ATLANTA – Four new data center classes that can enable fulltime economizers for a number of applications in many climates are contained in the latest edition of the principal book in the ASHRAE Datacom Series of publications.

Since its first edition in 2004, ASHRAE’s “Thermal Guidelines for Data Processing Environments,” published by ASHRAE’s Technical Committee (TC) 9.9, Mission Critical Facilities, Technology Spaces and Electronic Equipment, has become the de-facto reference material for unbiased and vendor-neutral information on the design and operational parameters for the entire datacom (data centers and telecommunications) industry.

Based on the latest information from major IT equipment manufacturers, which are an integral part of the committee, it has never been easier to obtain the most meaningful data to guide data center designers and operations staff to design and run their facilities in the most energy efficient manner possible, including how to operate in a completely “chillerless” environment. Further, the guidance enables a more energy efficient operation without compromising the reliability or “mission” of the data center.

“This third edition creates more opportunities to reduce energy and water consumption but it is important to provide this information in a manner that empowers the ultimate decision makers with regards to their overall strategy and approach,” Don Beaty, chair of the Publications Subcommittee of TC 9.9, said. “The idea is to provide objective data, methodology and guidance, but at the same time, respect the right of the data center designers, owners and operators to optimize the operating environment of their data center based on the criteria most important to their business needs.”

Highlights in this third edition include new air and liquid equipment classes and expanded thermal envelopes for facilities that are willing to explore the tradeoffs associated with the additional energy saving of the cooling system through increased economizer usage and what that means in terms of the impact to IT equipment attributes such as reliability, internal energy, cost, performance, contamination, etc.

“The most valuable update to this edition is the inclusion of IT equipment failure rate estimates based on inlet air temperature,” Beaty said. “These server failure rates are the result of the major IT original equipment manufacturers (OEM) evaluating field data, such as warranty returns, as well as component reliability data. This data will allow data center operators to weigh the potential reliability consequences of operating in various environmental conditions vs. the cost and energy consequences.”

The book is part of the ASHRAE Datacom Series, developed to provide a more comprehensive treatment of datacom cooling and related subjects. Other books in the series are “Green Tips for Data Centers,” “Particulate and Gaseous Contamination in Datacom Environments,” “High Density Data Centers – Case Studies and Best Practices,” “Design Considerations for Datacom Equipment Centers,” “Best Practices for Datacom Facility Energy Efficiency,” “Datacom Power Trends and Cooling Applications,” “Real-Time Energy Consumption Measurements in Data Centers,” “Liquid Cooling Guidelines for Datacom Equipment Centers” and “Structural and Vibration Guidelines for Datacom Equipment Centers.”

The cost of “Thermal Guidelines for Data Processing Environments, Third Edition,” is \$54 (\$46, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.