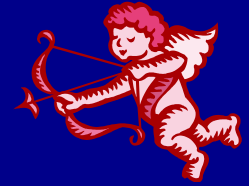


ASHRAE Rochester



VOLUME 4, ISSUE 6

FEBRUARY 1, 2010

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February ASHRAE Meeting (Student Night)

Monday, February 8, 2010

Location: RIT Slaughter Building (CIMS) RIT Campus, Rochester (Parking Lot T)

Time: 5:30 – 8:30 PM with Buffet Dinner Served

Cost: \$25.00

Moderator: Professor Carl Lundgren, RIT Mechanical Engineering Technology

Please join us for our monthly ASHRAE meeting. This month we are pleased to welcome students from the RIT Student Chapter of ASHRAE.

RSVP by noon Thursday, February 4th to Ed Burns, Phone: 585-872-6681 or ejb@mechtechvac.com

Topic: RIT Energy Related Research and Course Developments in Energy

This evening will be devoted to a presentation of the various RIT energy related research projects currently underway, along with tours of the lab facilities. These facilities were funded in part by ASHRAE Research dollars.

5:30 Check-in, hospitality, and lab tours

6:30 Cajun buffet dinner – by Brick City Catering

7:00 RIT Student Chapter Introductions – Al Rodgers
RIT Student Chapter presentation on ASHRAE Grants.

7:15 Brief presentations on RIT energy related research and course developments in energy

Carl Lundgren, Professor in the Mechanical Engineering Technology Department will moderate presentations by the following:

Mike Hasselkorn (Hydrogen and Fuel Cell Projects)

Jim Lee (Micro Internal Combustion Engines for UAVs)

Rob Garrick (Solar Performance of RIT's LEED Buildings)

Paul Stiebitz (MS and PhD in Sustainability)

Carl Lundgren (PV, Wind, and Fuel Cell Courses in Development)

8:15 Second chance lab tours

Please don't miss this opportunity to see first-hand what ASHRAE and RIT are doing in the area of Energy Research.

RSVP by noon Thursday, February 4th to Ed Burns, Phone: 585-872-6681 or ejb@mechtechvac.com



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ASHRAE 2009/2010 MEETING SCHEDULE

| DATE | EVENT | LOCATION | SCHEDULE |
|------------------------------|--|---------------------------------------|--|
| 2/5/2010 | Valentine's Dinner Dance | Inn on Broadway | 7:00 PM |
| 2/8/2010 Student Night | Carl Lundgren—RIT CIMS Building Tour and Presentation on RIT Energy Related Research Projects | RIT - Dinner through RIT Food Service | 5:30 PM |
| 3/8/2010 Membership Night | Hoy Bohanon, PE ASHRAE Distinguished Lecturer How to implement Demand Control Ventilation and comply with ASHRAE Standards | Mario's | 12:00-2:00 PM Lunch |
| 4/19/2010** | Refrigeration Night—Tour of Perry's Ice Cream | Perry's Ice Cream—Akron Dinner | TBD |
| 5/18/2010 | Annual ASHRAE Golf Outing and Picnic | Ravenwood Golf Club | 8:00 AM Golf 2:00 PM Picnic 6:45 PM Dinner |

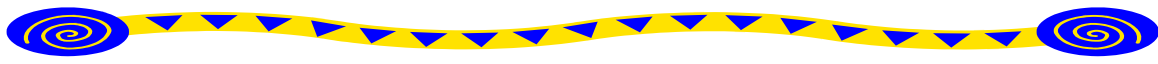
** Date Change from previous calendar



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



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.



“Advancing HVAC&R to serve humanity and promote a sustainable world”

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 by: Jeff Davis

When those of us in the mechanical trades think of Commissioning, what we think of first and foremost is, naturally the mechanical systems. We've all been involved with commissioning process to varying degrees. Remember that punchlist walk-through reviews are the most basic level of commissioning. Recently, I had the good fortune to be part of the commissioning team on a building mechanical system that I had designed. It was shocking how many issues we found in the process! I kept reminding myself that this was a building that I had punched out, and found very few items to correct. What I took away from this experience was that we had a very professional team of mechanical and controls contractors. The group dynamic was such that the contractors appreciated our oversight and provided the engineers with much needed "street sense" in the field.

The Rochester Chapter meeting this month was a joint meeting with the Upstate Chapter of the USGBC. Once again, turnout was outstanding. Thank you to Nancy Jendryaszek, AIA, LEED®AP and all of the USGBC members who joined us for our meeting. Nancy is the Chair of the Upstate Chapter of USGBC. The meeting featured Jerry Boddy, PE and Joe VanCura, Jr., LEED®AP from LeChase Construction Services. Jerry is the Operations Manager of Commissioning Services and Joe is a Project Engineer, and is involved with building commissioning. The topic of the presentation was Total Building Envelope Performance Process. Commissioning of the building envelope bridges the mechanical and building disciplines, so it was good to see USGBC and ASHRAE folks together on this presentation. To most mechanical engineers and contractors, the building envelope does exactly what we tell it to do in the heat load calculations. Quite often, that's the last time we think of the building envelope. Several years ago, I was called to review a building heating system that I had designed. The complaint was that the building was not maintaining temperature. I walked around this building with the Owner, the general contractor, and the mechanical contractor secretly wondering if I had goofed on the calculations when we came to one room where I could see daylight around the window unit sleeve. When I put my hand on the window jamb and header, I could feel cold air rushing in. It happened to be about 10°F out that day, so the evidence of poor envelope performance was stark. I found it interesting that the heating system was the perceived culprit, and what was lost was that

the mechanical systems and the building envelope are absolutely integrated and depend heavily on each other. There are other implications to a poorly performing building envelope that Jerry and Joe pointed out. A building with an insufficient moisture barrier can result in excessive moisture inside the building, mold growth, and ultimately poor indoor environmental quality. This is important in all buildings, but even more so in occupancies such as health care, schools, and senior living. The case study that Joe presented was a small health care facility in the Rochester area. Moisture probes, moisture scanning, and concrete slab moisture tests are some of the tools of the trade used to determine the effectiveness of an envelope's moisture barrier. Joe and Jerry reinforced the concept that the commissioning process begins at the early stages of design and involves the entire design team. Envelope performance requirements must be incorporated into the design documents in the form of drawings, specifications AND details. A benefit of engaging in the commissioning process, whether intended or not, is that when the project team knows there will be performance testing of assemblies, attention to details usually is more strictly followed. I found it fascinating that the infrared scans and blower door test results could be entered into a program that is able to determine the amount of energy wasted with infiltration or exfiltration through the envelope. Joe pointed out that this information can be used to determine the level of corrective action. Are we going to open up a wall to add caulk or insulation in a building assembly that is fairly tight, and only wastes say \$15 per year in energy costs? Probably not. In the end, commissioning of the building envelope is an essential part of improving productivity, reducing absenteeism, and improving occupant comfort. These are all concepts near and dear to the hearts of all mechanical engineers. Thank you Joe and Jerry for a very informative presentation on building envelope commissioning.



Jeff Davis, PE, 2009-2010 President

ASHRAE's 3rd Annual Valentine's Dinner Dance

Indulge your senses at the enchanting...

Inn on Broadway
26 Broadway
Rochester, NY 14604

Date: Friday, February 5, 2010
7:00 p.m. Reception – Hors d'oeuvres
8:00 p.m. Dinner – as you selected
9:15 p.m. – Dessert and Coffee

Menu Selections:

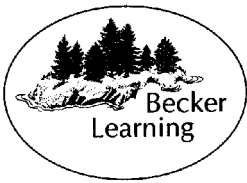
- Grilled 8 oz Beef Tenderloin with Béarnaise Sauce
- Chicken French, Egg battered boneless breast of chicken with Sherry-Lemon-Butter sauce
- Grilled Swordfish topped with Honey-Lemon Butter
- Pasta Primavera, Sautéed seasonal vegetables tossed with garlic, fresh basil, olive oil and penne pasta

For reservations, please mail or fax the below registration form.

Please make checks payable to: **Rochester Chapter ASHRAE** and mail to: ABR Wholesalers, Inc., Attn: Jody McGarry, 510 North Goodman St, Rochester, NY 14609
Phone: (585) 482-3601 Fax: (585) 482-6698

PLEASE CIRCLE ONE MEAL SELECTION:

1. Name: _____ Beef – Chicken – Fish – Vegetarian
 2. Name: _____ Beef – Chicken – Fish – Vegetarian
- Number of people ____ x \$60.00 per person = \$_____ (enclosed)



Your technical training provider presents

Air Conditioning Fundamentals 2010

6

Target Audience: Any engineer, designer, technician, or assistant who wants to broaden their base in the fundamentals, will greatly benefit from this training.

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. Past attendees have boosted their overall confidence and found many ways to apply their recently acquired knowledge.

2010 Course Offerings (Rochester, NY): (all classes are 3-days; Tuesday - Thursday)

- [] Feb 16-18 'Airsides Fundamentals- I' (Load Design and Psychrometrics)
- [] Mar 16-18 'Airsides Fundamentals- II' (Duct Design, Fans & Fan Laws, Acoustics and IAQ)
- [] Apr 13-15 'Refrigeration Fundamentals' (Refrig Basics, Refrig Piping, Refrig & Our Environment)
- [] May 11-13 'Systems Fundamentals' (HVAC Systems, Dehumidification, Ice Storage, Heat Recovery, etc...)
- [] Aug 10-12 'Energy Efficient Design Fundamentals' (Chilled Wtr, DX, VAV, Dehumidification)
- [] Sep 14-16 'Product Fundamentals' (AHU, WSHP, RTU, Chillers, Fan Coils, UV)

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.

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

Contact: Joe Becker, Becker Learning / 5980 Sheppard Road / Dansville, NY 14437
Phone: (585) 317-0000 Email: Joe@BeckerLearning.com

More Details for 3- day courses:

Where: The specific Henrietta, NY location (immediately south of Rochester, NY) will be decided at least 30-days before the class & all attendees will be emailed all appropriate information in time to make hotel reservations.

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)

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 International Airport as early as 5:15 p.m. on Thursday since our Henrietta, NY location is less than 10-minutes from the airport.

The current registration allows us to hold the Airside Fundamentals-I class at the comfortable & convenient Homewood Suites Hotel (behind Cracker Barrel) in Henrietta, NY.

We have a few seats still open for anyone who wants to join us.

Please RSVP by next Tuesday, February 9, 2010.

Registration: Please fill out this form for each person attending, and mail along with a **Check or Purchase Order** (made out to 'Becker Learning') to: **Becker Learning / 5980 Sheppard Road / Dansville, NY 14437**

2010 Courses: Airside-I Airside-II Refrigeration

(check all that apply) Systems Energy Eff. Design Products

Name: _____ Title: _____

Company: _____

Address: _____

Phone: () Email: _____

| # of Courses | \$/course | Total Cost \$ | Check # or PO # |
|--------------|-----------|---------------|-----------------|
| | \$1,000 | | |

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 2-weeks 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.

After nine years in the Navy, Joe resigned his Commission in the Civil Engineer Corps. He joined The Trane Company as a Systems Engineer in the C.D.S. computer software design group where he spent a great deal of time running Trace Building Energy Analysis programs as well as teaching others how to use a variety of powerful C.D.S. software tools. He also worked as a Marketing Engineer in the Variable Air Volume Product Group. During his last 5 years in Trane Headquarters, he served as the Manager of Technical Training, where his primary responsibility was to teach the technical subjects to those attending Trane's premier six month long Graduate Training Class. Joe left Headquarters in 1990 to join the Rochester, NY field sales office as a sales engineer. He distinguished himself by earning Trane's coveted Top-10 Club three years in a row before being promoted to the Rochester Sales Manager in 1997. The following year he was given the Syracuse sales management responsibilities as well. Joe was the Regional Sales Manager of the Northeast Territory from January 2005 through March 2007.

Joe currently works part-time for Trane's NE Territory and provides technical training through Becker Learning.

A little humor to help break up the day...

You might be an engineer if ...

- ... choosing to buy flowers for your girlfriend or upgrading your RAM is a moral dilemma.
- ... you take a cruise so you can go on a personal tour of the engine room.
- ... in college you thought Spring Break was metal fatigue failure.
- ... the salespeople at the local computer store can't answer any of your questions.
- ... at an air show you know how fast the skydivers are falling.
- ... you bought your wife a new CD-ROM drive for her birthday.
- ... you can quote scenes from any Monty Python movie.
- ... you can type 70 words per minute but can't read your own handwriting.
- ... you comment to your wife that her straight hair is nice and parallel.
- ... you sit backwards on the Disneyland rides to see how they do the special effects.
- ... you have saved every power cord from all your broken appliances.
- ... you have more friends on the Internet than in real life.
- ... you know what http:// stands for.
- ... you look forward to Christmas so you can put the kids' toys together.
- ... you see a good design and still have to change it.
- ... you spent more on your calculator than you did on your wedding ring.
- ... you still own a slide rule and know how to use it.
- ... you think that people yawning around you are sleep deprived.
- ... you window shop at Radio Shack.
- ... your laptop computer costs more than your car.
- ... your wife hasn't the foggiest idea of what you do at work.
- ... you've already calculated how much you make per second.
- ... you've tried to repair a \$5 radio.



Commissioning Webcast - April 21, 2010, 1pm - 4pm EDT

Why do I need Commissioning? Why should Commissioning start in the design phase? How can I avoid or reverse building performance decay? How does Commissioning improve ROI? Get answers to these questions and tools to commission your next building by participating in the ASHRAE Webcast, **“Right from the Start—Commissioning for High Performing Buildings.”** Register and access this free webcast via the Internet on April 21, 2010, from 1 to 4 p.m. EDT. The program is sponsored by ASHRAE’s Chapter Technology Transfer Committee with support from the ASHRAE’s *High Performing Buildings Magazine*.

Online registration begins **March 2nd** at www.ashrae.org/Cxwebcast.

Three (3) Professional Development Hours (PDHs) or three (3) AIA Learning Units (LU’s) may be awarded to viewers who complete the “Participant Reaction Form” online by **April 30, 2010**.

Chapters may also earn 100 Presidential Award of Excellence (PAOE) points for hosting the webcast.

Information about the program and a media kit to assist chapters with promotion are available at www.ashrae.org/Cxwebcast. Please watch for updates via *ASHRAE Insights* and www.ashrae.org.

If you have questions, call (678) 539-1200 or email ashrae-webcast@ashrae.org.

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 Newsletter Editor, Christina Walter (585.486.2148) or by email cmwalter@trane.com

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



ASHRAE Jobs is the Society's Online employment resource

With an exceptionally difficult recruitment market, the ASHRAE Jobs Career Center has been averaging 55 active job postings per month and just over 5,000 monthly job seeking visitors. Recruiters are experiencing, on average, 12 online applications per job posting and have access to just over 1200 resumes that have posted its launch on June 15.

ASHRAE Jobs is not only about the hire. It is the path to a hire. By visiting www.ashraejobs.com, you can search for certain skill sets and demographics that you are "always looking for". It is the place to capture high performers you can use to replace underperformers. Is this the place to see if your competitors people are out searching and interested in you. It is also the place to capture candidates for your Q1 hires because we are only 45 days away.

ASHRAE Jobs understands you do not want to be sold to. But you still have opportunities and problems, and may need a professional to discuss those with. That is what you can expect from ASHRAE Jobs: a no-strings-attached conversation where a representative listens and then makes recommendations whether they include ASHRAE Jobs or not. For more information, visit www.ashraejobs.com, call 888-482-2562 or e-mail John VonHarz at jvonharz@ashraejobs.com. An ASHRAE Jobs representative is available during business hours to discuss your firm's needs and make recommendations on next steps.



2009-2010 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 | 241 | 0 | 0 | 345 | 100 | 0 | 0 | 445 |



Society News: **ASHRAE Specialty Conference to Focus on Improving School Facilities, Young Minds**

ATLANTA—Maximizing facility performance, and thereby students' potential, is at the heart of the ASHRAE High Performance K-12 School Facilities conference, to be held Mar. 1-2, 2010 in Atlanta, Ga.

The conference will present an integrated approach to complying with codes and standards while achieving a cost effective high performance solution to K-12 facility design, construction and operation. Its goal is to bring together administrators, design professionals, policy makers and other stakeholders to learn about the many ways to improve these facilities on operational, fiscal, engineering and administrative levels.

"Sixteen percent of schools districts' controllable costs are spent on energy," Ben Leppard, a member of the conference steering committee and track chair, said. "By focusing on energy efficiency

and high-performance goals a school's energy bills can be lowered, saving millions of dollars each year which can be redirected into facilities, teachers' salaries, computers and textbooks."

Experts in the fields of acoustics, lighting, ventilation, system controls, energy efficiency and operation and maintenance will lead the stakeholders through the complex integration of systems, policies and legislation on a straightforward path to achieving high performance new and existing K-12 facilities and higher performing students.

"Improved indoor air quality, acoustically designed indoor environments and high-performance lighting systems have the potential to increase student productivity," Leppard said.

Attendees of the conference may attend sessions that focus on three key areas of high-performance school facilities: ventila-

tion systems, building systems control and acoustics.

Advance conference registration is \$450 (\$350 member price) and \$500 onsite (\$400 member price). More information can be found at www.ashrae.org/highperformanceschools.

ASHRAE, founded in 1894, is an international organization of 55,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.



Disclaimer

"ASHRAE has compiled this publication with care, but ASHRAE has not investigated, and ASHRAE expressly disclaims any duty to investigate any product, service, procedure, design or the like which may be described herein.

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From the Editor's Desk

The ASHRAE Chapter Bulletin should reflect the opinions, activities and needs of it's members. We represent an active membership and the Bulletin can provide a valuable and enjoyable forum for news of our individual members.

Any announcements of interest, as well as letters, opinions, questions or comments, should be addressed to Christina Walter, Trane, 75 Town Centre Drive, Rochester, NY 14623 or email to cmwalter@trane.com

Reminder

Go to www.ashrae.org to update your personal information. Keeping your information current helps us to find you. Please add email, phone number, fax number, address correction, etc.

