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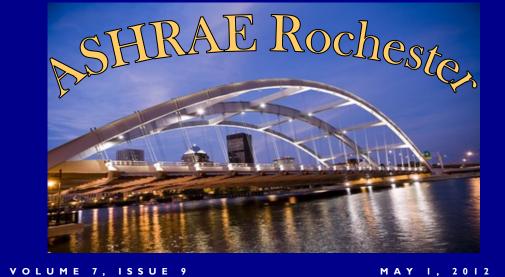
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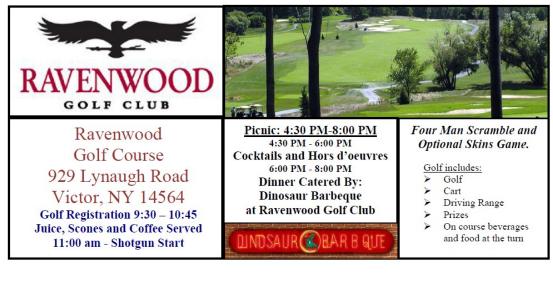
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Society News

Education



<u>TUESDAY, MAY 15, 2012</u> ASHRAE Picnic / Golf Tournament



Reservation Deadline is... <u>May 8th, 2012</u>

There is a limited amount of tickets this year

Refer to page 6 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.



Chapter Officers

President Jeffrey Ellis 585-232-3440 ellis@airsystemsbalancing.com

President Elect Michelle Sommerman 585-232-5135 msommerman@bergmannpc.com

Vice President/Tech Robert Wind 585-341-3172 rwind@ibceng.com

Secretary Edward J. Burns (585) 872-6681 ejb@mechtechhvac.com

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

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

YEA

Chris Lukasiewicz 585-381-3360 (135) clukasiewicz@turnerengineering.com

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Tim Duprey (3rd Year) 585-924-9360 tduprey@pascobas.com

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

Jeff Close (2nd year) 585-289-6816 Jeff.close@pres-services.com

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

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Research Promotion Jeff Close 585-289-6816 Jeff.close@pres-services.com

Beth Smith 585-272-0110(3010) bsmith@vpsupply.com

Date	Event	pdh / Theme	Location	Schedule
Dale	Event	Membership	Location	Schedule
09/12/11	Annual ASHRAE Clambake James Bittker, NYSERDA New Construction Program	Promotion	Burgundy Basin	5:00 PM
10/10/11	Dick Sherren Rooftop Wind Restraints	(1) pdh available	Mario's	12:00 PM
11/14/11	Stanley Mumma, DL Region III Chilled Surfaces and DOAS	(1) pdh available	Mario's	12:00 PM
12/12/11	BIM - Joint ASPE Meeting John Jansen, Imaginit Technologies	Research Recognition (1) pdh available	Mario's	12:00 PM
01/09/12	Tribute to Lynn Bellenger Enid Cardinal, Director of Sustainability at RIT Topic, TBD Bill Bishop - 5 min on BSUG	Awards Student Night	RIT	Dinner (Time, TBD)
02/10/12	Annual ASHRAE Valentines Dinner Dance		Inn on Broadway	7:00 PM
02/13/12	Steve Beck ASHRAE IAQ Guide, current work on Building Performance Metric	Membership Promotion () pdh available	Mario's	12:00 PM
03/12/12	Drury Crawley, DL Region III AEDG's to Net-Zero Buildings and Future Trends in Simulation	Research Promotion (1) pdh available pending	Mario's	12:00 PM
04/09/12	Refrigeration Meeting Ron Vogl, Honeywell Refirgerants Group Update on R-22	Student Meeting (1) pdh available pending	Mario's	12:00 PM
05/15/12	Annual ASHRAE Golf Outing and Picnic		Ravenwood Golf Club	9:30 AM Goli 4:30 - 8:00 Pic

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



I would like to thank Ron Vogl, Technical Marketing Manager for Honeywell Refrigerants Group, for his presentation on Refrigerant Selection at our April Meeting. This was our final lunch meeting on the ASHRAE calendar for this year. Many kudos go out to Mario's Italian Steakhouse for hosting our events this year. They always do an excellent job keeping us fed.

I would also like to thank Tim Duprey for his "persistence" in sending out e-mail invites for our meetings each month. He has taken the attendance chair position to a whole new level and I really appreciate everything he has done this year.

We are hoping for a good turnout (and great weather) for our final event of the year, our annual picnic and golf tournament May 15th at Ravenwood Golf Club. Dinosaur BBQ will be catering.

Please take time to explore the updated Rochester ASHRAE Chapter website at <u>http://rochester.ashraechapters.org/</u>

Thanks for the continued support of YOUR local chapter of ASHRAE.

Jeff Ellis, 2011-2012 President

STUDENTS of ASHRAE UPDATE



The students at RIT are still in need of old ASHRAE Guide and Data books.

If you have any, especially Fundamentals, please email Al Rodgers to make arrangements to pick up. Thanks!

arodgers@pathfinder-ea.com

Monthly Meeting

May ASHRAE Golf/Picnic

se, 929 Lynaugh Rd, Victor, NY 14564
Dinosaur BBQ
ic

See following pages for sponsorship forms and YEA activities for the 2012 ASHRAE Golf / Picnic Outing at Ravenwood Golf Club.

We are looking for any and all door prize donations your company, vendors or affiliates would be willing to donate.

Please contact Ed Burns or Jim Browe directly regarding the door prize donations.

Ed Burns Mech Tech Inc. ejb@mechtechhvac.com

Jim Browe R.F. Peck jbrowe@rfpeck.com

As an option, we now have on-line payments available via PayPal. Please indicate your team names in the 'Instructions to Seller'

Pay for Meeting Registration online via PayPal (no PayPal account required)

Go to the following website: <u>http://rochester.ashraechapters.org/meetings.html</u>

With the great weather we've been having this winter and spring, we anticipate an AWESOME Outing!

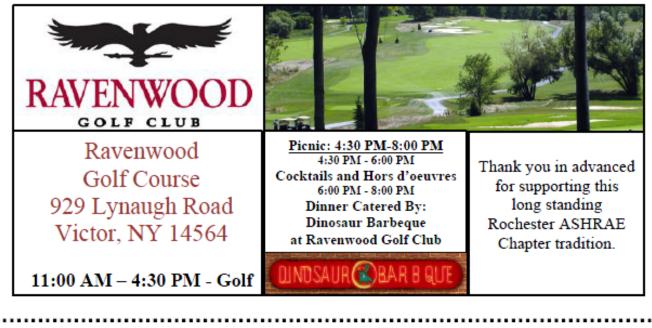
Have a great day we look forward to hearing from you soon!

Respectfully,

Tim, Attendance Chair

2012 ASHRAE PICNIC SPONSORSHIP FORM

Tuesday, May 15, 2012



Please include check (on notes put what sponsorship you made) and make payable to: <u>ASHRAE Rochester Chapter</u> and mail to: Attention: Edward J. Burns Mech Tech HVAC, Inc. 1805 Tebor Road Suite 8 Webster, NY 14580 Any questions, call Ed at (585) 872-6681 Email: <u>ejb@mechtechhvac.com</u>

ASHRAE >

Please fill out so we can correctly recognize you or your company:

OR	
Address:	
City:	State: Zip:
Phone: (Work)	(Home)

Sponsorship Form					
Sponsorship Name	X here for Sponsorship	Sponsorship Amt.			
Major Door Prize Sponsor – Gift/Item or Cash Donation- \$200 or more.					
Gold - \$250.00 - Hole Sponsorship and Recognition at Picnic		\$250.00			
Silver - \$150.00 - Hole Sponsorship		\$150.00			
Bronze - \$100.00 - Recognition at Picnic		\$100.00			
Prize Sponsor - \$175.00 - Longest Drive		\$175.00			
Prize Sponsor - \$175.00 - Closest to Pin		\$175.00			
Total Check Amount:					



<u>TUESDAY, MAY 15, 2012</u> ASHRAE Picnic / Golf Tournament To be held at <u>Ravenwood Golf Course</u>

Reservation Deadline is... <u>May 8th, 2012</u> (There is a limited amount of tickets this year on a first come basis)



NO TICKETS WILL BE SOLD OR DISTRIBUTED AT THE DOOR! RES HAS THE TICKETS THIS YEAR. TICKETS WILL BE MAILED TO YOU OR CAN BE PICKED UP AT THE ROCHESTER ENGINEERING SOCIETY.

Please include check and make payable to: <u>"ASHRAE – Rochester Chapter"</u>

> Return this form.... Mail prior to May 8th, 2012 to:

Attention: Reservation Clerk Rochester Engineering Society

150 State Street

Rochester, New York 14614 Any questions, call (585) 254-2350

Email: res@frontiernet.net

Address where you would like your picnic tickets sent to:

Company: _____

Contact Name:

Address: _____

City: _____ State: _____ Zip: _____

Phone: (Work) _____ (Home) _____

Entry Form							
Ticket Request Form							
Event	Fee Amount	No. Attending	Total				
Golf	\$90.00		\$				
Picnic	\$50.00		\$				
OR:							
Golf and Picnic (SAVE \$10.00)	\$130.00		\$				



YEA - Rochester Chapter of ASHRAE FRISBEE GOLF TOURNAMENT/PICNIC

All members of ASHRAE – Rochester Chapter are invited to join YEA at Ellison Park Frisbee Disc Golf Course. Afterwards, we can head over to Ravenwood Golf Course to join the rest of the chapter for Dinosaur BBQ. If you have them, please bring your own frisbee golf discs or regulation size frisbees. A few spare discs will be available for your use or you can team up with someone.

When: Tuesday, 15 May 2012 ROWNCROFT BOULEVARD Location: Ellison Park Landing Rd N and Ellison Park Rd Rochester, NY 14625 Schedule: D 3:00 P.M. First Throw Disc Galf ROAD 4:30 P.M. Picnic at Ravenwood Cost: Frisbee Golf – FREE DUGHAY ROAD Picnic - \$50.00 (reserved in advance)

For more information, contact: Chris Lukasiewicz (clukasiewicz@turnerengineering.com)

YEA RESEARCH CAMPAIGN 2012

YEA – Rochester is joining with Sustainable Performance Consulting, Inc. (SPC) once again for the YEA Research Campaign 2012. Any donations raised by YEA members will be matched dollar-for-dollar (100%) by Sustainable Performance Consulting, Inc. (SPC) to provide funding towards new research projects and research projects already underway. From now until Friday, May 11, 2012 your dollar will provide twice as much research funding thanks to the generosity of SPC. Our total research contributions will be recognized at the May ASHRAE Golf/Picnic held at Ravenwood Golf Club. Even a small contribution will help and your contribution to ASHRAE Research is also tax deductible. Please visit www.ashrae.org (Research Promotion Quicklinks) to make your donation.

Together, if we reach a goal of \$500, YEA can be added to the Major Donor - Bronze Level.

For questions regarding your contribution, please contact our Chapter Research Promotion Chair Jeff Close (jeff.close@pres-services.com or 585-289-6816).





COMING SOON IN FALL 2012

YEA TECHNICAL SESSION

FUNDAMENTALS OF AIR SYSTEM DESIGN

- Fundamentals of Air Flow Static and dynamic compressible fluid (air) laws, friction effects, the friction chart, and density and altitude effects.
- Air Distribution System Components System overview, air handling units, ducts, controls, air distribution devices, and sound absorbers.
- Human Comfort and Air Distribution Principles of human comfort, principles of space air distribution, and types of air distribution devices.
- Relationship of Air Systems to Load and Occupancy Demands Operating system selection criteria, system types by heating/cooling equipment type, system type by duct configuration, economizers and outdoor air intakes.
- Exhaust and Ventilation Systems Design considerations, system types, and energy recovery.
- Air Movers and Fan Technology Fan principles, fan drives, fan selection, fan installation design, fan controls and the effect of variable resistance devices.
- Duct System Design Design overview, materials, construction, design and sizing, and sample systems.
- Codes and Standards Building code requirements, ASHRAE Standard 90.1-2007, ASHRAE Standard 62.1-2007, other codes and standards, and sources of information.
- Air System Auxiliary Components Dampers, air filters, humidifiers, duct heaters and duct insulation.
- Sound and Vibration in Fan Systems Fundamentals of sound, sound and vibration sources, sound attenuation, and vibration control.
- Air System Start-Up and Diagnostics Design considerations, air volumetric measurement methods, balancing procedures for air distribution systems, and noise and vibration diagnostics.
- An Actual Duct Design Problem Duct design procedures, building and system, and working through the problem.

Brought to you by the ASHRAE - Rochester Chapter YEA Committee

Contact Chris Lukasiewicz, clukasiewicz@turnerengineering.com, for more information.



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, Jeff Ellis (585.232.3440) or by email ellis@airsystemsbalancing.com

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



R.F. PECK CO., INC

889 ATLANTIC AVE ROCHESTER, NEW YORK 14629 Phone: (585) 697-0836 Fax: (585) 697-0839

Engineered Products Salesman

The R.F.Peck Company is a commercial HVAC manufacturer's representative firm serving Upstate New York, Vermont and Western Massachusetts for over fifty years. We are looking for an energetic, self-starting, Engineered Products Salesman for the Greater Syracuse Area. A mechanical engineering degree is preferred but not required.

Email resume to jbrowe@rfpeck.com.



<u>Senior Mechanical Engineer (HVAC)/ Department Manager</u>

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 Senior Mechanical HVAC Engineer with 8+ years of related experience to lead and manage the mechanical HVAC department. Ideal candidates are energetic, driven, efficient and looking to grow with the organization. Candidates must also be willing to perform the responsibilities associated with a senior engineer. Responsibilities include, but are not limited to: design, calculations, and coordination of HVAC systems for new construction, renovations, and energy upgrades. Responsibilities also include managing, leading and training junior staff. We offer competitive compensation packages and benefits. A detailed job description can also be viewed at www.turnerengineering.com/careers/open-positions

PAGEII

Job Postings & Help Wanted (Cont'd)



Carrier Enterprise has an opening in the Rochester Sales Office for an Inside Sales Engineer. Position will be responsible for engineering and sales activities for Commercial HVAC Equipment, including equipment take-off, equipment selections, generating on-time proposals, working with suppliers, and day to day customer interface. Preferably an Associate's Degree or Bachelor's in Mechanical Engineering (other engineering fields or equivalent experience will also be considered). Candidate must communicate effectively, possess ability to interact with customers, and be thorough, accurate, and well organized. Forward resumes to <u>timothy.goetzman@carrierenterprise.com</u>



Are you looking for a firm where you can grow? Do you want to work with a company that values your contributions? CHA, an ENR Top-85 Engineering Firm, is currently seeking a **Mid Level Mechanical Engineer** to join our Rochester, NY office.

The responsibilities include, but are not limited to:

- HVAC design for governmental, commercial and industrial facilities, including Analysis, Equipment selection, Layout design and specifications.
- Responsible for preparation of proposals, design development and implementation, client interaction and QA/QC.

Qualifications include:

8-12+ years of Mechanical Consulting Engineering/Design experience is required.

BSME required.

Must be proficient in MS Office (Word, Excel and Powerpoint). Experience with Trane Trace 700 and AutoCAD are a plus but not required.

EIT License is required, PE is preferred.

Analytical skills, report writing and oral communication skills a must.

As a CHA employee you have options!

Experience career growth within your field, attend trainings & seminars, or expand your horizons into new areas. Participate in the Mentoring program.

Further your career with professional licensing reimbursement.

Continue networking with paid dues to technical societies.

To apply, please visit our website at <u>www.chacompanies.com</u> referencing job #2070.

Additional exciting career opportunities in the areas of engineering, landscape architecture, survey, construction, planning and many other professional disciplines available within all of our office locations may also be found on our website.

AA/EOE, M/F/V/D. Women and Minorities are encouraged to apply.

FROM THE HISTORIAN

REQUEST FOR ASSISTANCE WITH ASHRAE/ROCHESTER HISTORY PROJECT



ASHRAE Rochester Chapter Historian, Lee Loomis is embarking upon a project to develop a written history of our Chapter, and he needs your help. If you have any pieces of ASHRAE/ Rochester Chapter history; photos, slides, reports, meeting minutes (Committee Meetings, Chapter Meetings or Board of Directors Meetings), event programs (seminars, trade shows, workshops, etc.), please consider offering them to Lee for his project. You may have any of this material returned, if you'd like, otherwise Lee will inventory it, saving that which is memorable, and digitizing some of it, as necessary. So, as you search through your attics, basements and garages, looking for whatever Santa might have hidden for you, and you stumble across some old "ASHRAE Treasures", please drop Lee an e-mail (leeloom@aol.com), telling him of your discovery, and how he might retrieve it for his project. Remember, in this quest for ASHRAE/Rochester history, there is NO SUCH THING AS JUNK; it's all "TREASURE" until he's had a chance to sort it out. Thanks for your help with this important ASHRAE/ Rochester history project.

Lee Loomis, Chapter Historian, is hoping that you'll bring your "ASHRAE Treasures" (photos, reports, memorabilia) to the ASHRAE Golf Picnic, or else make an appointment to let him pick these things up. He's assembling a Rochester ASHRAE Chapter History, and needs these items for the collection.

> Lee M. Loomis, Historian ASHRAE/Rochester Chapter

RESEARCH PROMOTION

ASHRAE Research Promotion

The 2011-2012 campaign has two months remaining and Rochester is making good strides to achieve this year's goal. With the investment support of individuals and companies locally we can show ASHRAE our commitment to growing our industry through research.

This year's HONOR ROLL contributors will receive a special ASHRAE Commemorative Coin honoring Lynn Bellenger. Minimum contribution to achieve Honor Roll status for an individual = 100 and for a company = 150. Contributions can also be made to the Lynn Bellenger Endowment.

A special thank you to all of this year's contributors:

2011-12 Rochester Chapter Research Donors					
Gray Metal Products, Inc.	ASHRAE Golden Circle	ABR Wholesalers Incorporated	Honor Roll Donor		
Lynn Bellenger Memorial	ASHRAE Associate	Day Automation Systems Inc.	Honor Roll Donor		
R.L. Kistler Inc.	Major Donor - Bronze	Mr Lee M Loomis	Honor Roll Donor		
R.P. Fedder Corporation	Major Donor - Bronze	Mr Edward Burns	Honor Roll Donor		
SMACNA - Rochester	Major Donor - Antique	Ms Michelle Sommerman	Honor Roll Donor		
Turner Engineering	Major Donor - Antique	Mr Jeffrey Close	Honor Roll Donor		
Guckian Energy Systems LLC	Major Donor - Antique	Mr Robert Wind, Jr	Honor Roll Donor		
Slater Equipment Company Inc.	Major Donor - Antique	Mr Peter Oppelt	Honor Roll Donor		
Air Systems Balancing & Testing	Honor Roll Donor	Ms Christina Walter	Honor Roll Donor		
Erdman Anthony & Associates	Honor Roll Donor	Mr Ronald Mead	Honor Roll Donor		
Genesee Heating	Honor Roll Donor	Mr Robert Moyer	Honor Roll Donor		
Mr Jeffrey Ellis	Honor Roll Donor	Ms Jamie Reynolds	Honor Roll Donor		
Mr Thomas Piekunka	Honor Roll Donor	* Updated 04-25-2012			

If anyone is interested in contributing and would like to learn more, please contact me.

Jeffrey Close - Research Promotion Chair jeff.close@pres-services.com or 585-289-6816





Chapter Technology Transfer Committee

It's time to start thinking about the ASHRAE technology awards! The purpose of the tech awards program is threefold:

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

2. Communicate innovative systems designs to other ASHRAE members;

Highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners.

There are six categories, with awards in each category for new and existing buildings. The categories include Institutional (Educational and other Institutional), Commercial, Health Care, Industrial, Public Assembly, and Residential Buildings.

For each category, first, second, and honorable mention winners may be named. Also, one of the category first place winners may be selected to receive the ASHRAE Award of Engineering Excellence.

In addition to the technology awards program, ASHRAE awards the Milton Garland Commemorative Refrigeration Award for Project Excellence and the Comfort Cooling Award for Project Excellence. The Milton Garland award is for non-comfort cooling applications which highlight new or innovative technologies. As the name implies, the Comfort Cooling award is for comfort cooling applications which highlight innovative or new technologies.

If you have worked on a project that you believe fits into any of these categories, email me at <u>idavis@turnerengineering.com</u> and I will be happy to assist you with the submittal process.

Jeff Davis, CTTC Chair



AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS

ROCHESTER, NEW YORK CHAPTER

April 5, 2012

LOCATION: Trane Headquarters Rochester, NY

President	Jeffrey Ellis	Х
President Elect/Program	Michelle Sommerman	
Vice President/Tech Session	Robert Wind	
Secretary Picnic/Golf	Ed Burns	
Treasurer	Christina Walter	Х
Immediate Past President/CRC	Jim Browe	
Awards/Student Activities	AI Rodgers	
Buyers Guide	Chuck White	
Hiistorian	Lee Loomis	
Board of Gov. (1) Membership	Bill Clark	Х
Board of Gov. (1)	Beth Smith	Х
Board of Gov. (1) Newsletter	Jaimee Reynolds	
Board of Gov. (2)	Eric Smith	
Board of Gov. (2) Research	Jeff Close	
Board of Gov. (3)	William Murray	
Board of Gov. (3) Attendance	Tim Duprey	
Website	Kevin Wind	
Refrigeration	Michael Nohle	
Nominating	Jeff Davis	
Valentine's Dance	Jody M. McGarry	
Publicity	Mark Kukla	
YEA	Chris Lukasiewicz	Х

Meeting Minutes

Call to Order: 12:00 am by Jeff Ellis

Minutes:

- **Previous Meeting Minutes -** Motion made move to receive. Previous meeting minutes approved by Michelle.
- **Treasurer Reviewed Budget –** PayPal contact info. How to change to a business for when Jeff's term is over.
- Program PDH for Monday, is golf tournament set?, can pay for the golf tournament via PayPal, last BOG meeting will be in May.
- **Membership –** Current 248 members * 2 new members last month. Is membership promo training required?
- **Attendance –** Report submitted by Tim. 61 attendees at March meeting. YEA members to come to more meetings.
- **Student Activities –** How many graduating Seniors? Invite them to picnic? Give them a gift card for the ASHRAE Bookstore?
- Website Going well updated quickly.
- Nominating No additional information.
- Publicity Going well.
- **Picnic –** On track
- Next Meeting May 11th at 12:00 pm Location: Trane

The meeting was adjourned



WELCOME TO OUR NEW MEMBERS

Ms. Karen Pembroke

Eastman Kodak Company

Mr. Cristopher Smith

Mr. Brian Somers

Monroe Piping & Sheet Metal

Mr. Richard J Wohaska, PE

Erm Northeast

2011-2012 Presidential Award of Excellence Summary

Chapter #	Chapter Name	Chapter Members	Member Promotion	Student Activities	Research Promotion	Chapter Technology Transfer	5	Chapter Operations	Chapter PAOE Totals
11	Rochester	243	210	175	705	50	110	50	1300

<u> Target Audience:</u>

- Any Direct or Indirect AM who has not had the opportunity to attend GTP
 - Perhaps a local new hire that can't commit to 6-months at GTP
 - \circ Someone who was promoted from within
 - A new hire that came from outside our industry
- o Any BAS AE, PM, PA, Application Specialist or Estimator who wants to broaden their base in the fundamentals

<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 boosted their overall confidence and found many ways to apply their recently acquired knowledge.

2012 Course Offerings (Rochester, NY): (these classes are 3-days; Tuesday - Thursday)

[×] Feb 14-16 'Airside Fundamentals-I' (Load Design and Psychrometrics)

[×] Mar 13-15 'Airside Fundamentals-II' (Duct Design, Fans & Fan Laws & Acoustics)

[X] Apr 17-19 '**Refrigeration Fundamentals'** (Refrig Basics, Refrig Piping, Refrig & Our Environment)

[] May 15-17 'Systems Fundamentals' (HVAC Systems, Dehumidification, IceStorage-LowTempAir, Bldg Pressurization)

] Jun 12-14 'Energy Efficient Design Fundamentals' (Chiller-Side, Air-Side, System Controls, Energy Recovery)

[] Aug 7-9 'Product Fundamentals' (AHU, WSHP, RTU, Chillers, Fan Coils, UV)

[] Sep 18 & Oct 2-30 'Introduction to Air Conditioning Fundamentals' (6-Tuesday 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 <u>BeckerLearning.com</u>

<u>Registration Deadline</u>: Each course will be filled on a first-come-first-reserved basis.

<u>Payment Deadline</u>: Complete Payment must be received prior to the start of the class.

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

More Details for 3-day courses:

Where: We will hold the 3-day classes at a Homewood Suites Hotel in the greater Rochester area - exact location to be determined no later than 2-weeks prior to the start of class. You will be able to reserve a room for the Becker Learning rate of \$104/night if you tell them you are part of the Becker Learning group.

* Class Registration: 10 or less, Henrietta - 2095 Hylan Drive, Rochester, NY 14623 - (585) 334-9150

* Class Registration: >10, Greece - 400 Center Place Drive, Rochester, NY 14615 - (585) 865-8534

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: <u>Arrival:</u> 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 both of our Hotel locations are less than 10-minutes from the airport.

More Details for 6-night Fall Intro Series:

Where: The specific Henrietta, NY location will be decided no later than 2-weeks before the class & attendees will be emailed the appropriate information with plenty of notice. The class will run from 5:00 - 8:00 pm. No meal is provided, so attendees should catch dinner before the class starts.



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						
2012 Courses:	[] Airside-I	[] Airside-II	[] Refrig	eration	[] Systems	
(check all that apply)	[] Energy Eff. D	Design [] Prod	lucts []	Fall 6-nigl	nt Intro Series	
Name:		Ti	itle:		 	
Trane Sales Offi	ce:					
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 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. Since graduating from GTP's 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 & ISL for NE Territory. Joe currently works part-time for Trane's NE Territory and provides technical training through Becker Learning.

ASHRAE Student Membership Application

What You'll Get With Your ASHRAE Student Membership!

What's "Cool" In ASHRAE

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

How Can ASHRAE Help You?

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

Student Member Benefits

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

ASHRAE Student Member Opportunities

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

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

Join ASHRAE students on Facebook Visit www.ashrae.org/students to join!

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All student applicants must have the name and member number of an ASHRAE member serving as their student sponsor. If your Student Branch Advisor is an active Associate or Full member, he/she can serve as your sponsor. If you need assistance locating a sponsor, please email students@ashrae.org or call 678-539-1212. Also, you must list the name, phone and email address of your faculty advisor or course instructor. Sponsor Name: ASHRAE Member #: Advisor/Instructor: Phone: Phone:	qu con Wi 11, 12, 15, 21, 26, 31, 41, 42, 43,	urnal, p estions des in t nich be . Cons . Archit . Desig . Contr . Prope . Indus . Comr . Gove . Utility	by the st d altir tect rty trial nen	enter space lescrib g Eng /Arch kuild ar Mgm/ Facill cial Fa went, h	ing th s pro- bes yo gineer itectur tectur & De ty cility iealth	ie aș vide iur f ing ral 8 rv care	aprop d. irm? Eng	Sen	vices
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Society News— Refrigerants Conf.

ASHRAE, NIST to Host Conference on Refrigerants

ATLANTA – A joint conference focused on refrigerants and hosted by ASHRAE and the National Institute of Standards and Technology (NIST) has been announced for October 2012.

The ASHRAE/NIST 2012 Refrigerants Conference: "Moving toward Sustainability" takes place Oct. 29 -30, 2012, at NIST in Gaithersburg, Md.

"This conference addresses international concerns about the impact of refrigerants on climate change, which inevitably lead to increased focus on refrigerants with a low global warming potential (GWP) applied in high-efficiency systems," Piotr Domanski, conference co- chair, said. "This includes new generations of unsaturated flourochemicals and expanded use of 'natural' refrigerants."

This is the fourth jointly sponsored refrigerants conference sponsored by ASHRAE and NIST. Past conferences provided information and updates on the phase-out of chlorofluorocarbon (CFC) and hydrochlorofluorocarbon (HCFC) refrigerants, which were implicated in destruction of the stratospheric ozone layer.

The conference provides the latest information on alternative refrigerants, likely time schedules, transition requirements, environmental effects of refrigerants, new refrigerant performance considerations and what will be required to phase-out the use of high-GWP refrigerants with other refrigerant alternatives and technologies.

All those involved in the different aspects of refrigerants and refrigeration technology - policymakers, manufacturers, researchers and government officials - will receive an opportunity to learn about the latest developments and directions going forward.

The conference features invited papers from leading global experts who will cover a broad range of topics, including:

- Status of current environmental, scientific and regulatory activities
- Potential applications of "natural" refrigerants
- Technical developments on new low GWP flourochemical refrigerants
- Equipment applications using low GWP alternatives
- The opportunities for reducing refrigerant emissions
- Panel discussions by industry experts at the end of each day.

The focus of the conference is on technical issues and the longer term opportunities for success from a global perspective. Experts of every facet of the issues to be covered in the conference are going to be available during the two days of the sessions for an information exchange with an evening dinner on Monday for more informal discussions.

Registration is slated to open in June 2012. The cost is \$390 (\$340, ASHRAE members). For more information, visit www.ashrae.org/refrigerants2012.

Commercial Buildings Energy Consumption Survey (CBECS)

ATLANTA – An update on the Commercial Buildings Energy Consumption Survey (CBECS) – one of the United State's most essential building energy use surveys – is featured at a luncheon hosted by ASHRAE next month.

Tom Lecky, director of the Energy Information Administration (EIA)'s Energy Consumption and Efficiency Statistics, which administers CBECS, will serve as guest speaker at the May 4 event at the National Press Club in Washington, D.C. ASHRAE President Ron Jarnagin will serve as moderator. The luncheon is part of the American National Standards Institute (ANSI) monthly Caucus luncheon services. As an ANSI member, ASHRAE is sponsoring the May event.

"The luncheon provides a great opportunity for ANSI Federation members and others in the built environment industry to hear about CBECS and how important it is to building performance benchmarking," Jarnagin said.

CBECS is a national sample survey that collects baseline information on the stock of U.S. commercial buildings, their energy-related building characteristics and their energy consumption and expenditures.

Last year, EIA announced it would not be releasing the results of the 2007 CBECS due to data collection errors. As a result of appropriations reductions, EIA also announced that it would halt work on the 2011 edition of the Survey. Currently, the latest version of CBECS data is from 2003. ASHRAE and other groups in the built environment industry asked the agency and Congress to reconsider, and allow work on the Survey to continue.

As a result, funding was restored, and CBECS is being conducted for reference year 2012. Data collection is slated to begin April 2013, with the first data releases expected in spring 2014. According to EIA, its focus is on collaboration with stakeholders to develop the CBECS questionnaire. ASHRAE has provided feedback on the document, which can be found at www.ashrae.org/government-affairs.

To obtain the data used in CBECS, interviews are conducted for a sample of commercial buildings representing the 50 States and the District of Columbia. For buildings in the survey, data are collected on the types, amount and cost of energy consumed in the building, how the energy is used, structural characteristics of the buildings, activities conducted inside the buildings that relate to energy use, building ownership and occupancy, energy conservation measures and energy-using equipment.

CBECS data are critical to the building community because they help form the basis for understanding patterns of energy use, informing the decisions of the industry and key policymakers and government programs, according to Jarnagin.

"For instance, CBECS data are used by ASHRAE in the development of its building energy efficiency standards, which are used by the federal government and most states," Jarnagin said. "CBECS data are also used by many federal and private sector programs in their efforts to promote building efficiency."

Society News— AEDG for Hospitals

ATLANTA—A dose of guidance to help save energy in hospitals is prescribed by the newest Advanced Energy Design Guide (AEDG), written by a group of leading building industry organizations.

The AEDG for Large Hospitals is the fourth in the series, designed to provide recommendations for achieving 50% energy savings when compared with the minimum code requirements of ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings.

The book was developed by a committee representing a diverse group of energy professionals drawn from ASH-RAE, the American Institute of Architects (AIA), the Illuminating Engineering Society (IES), the Department of Energy (DOE) and the United States Green Building Council (USGBC).

"Most important in the Advanced Energy Design Guide for Large Hospitals is the recognition that patient outcomes, safety and experience trump all cost- and energy-saving strategies," Shanti Pless, chair of committee that wrote the guide, said. "However, a well designed, constructed, operated and maintained facility is a major contributor to the environment of care and can improve patient outcomes, safety and comfort."

The Guide focuses on standard mid-to-large-size hospitals that would typically be at least 100,000 square feet in size but the strategies apply to all sizes and classifications of large hospitals. Space types covered include conference, lobby, lounge and office areas; reception/waiting areas and examination and treatment rooms; clean and soiled workrooms; nurse stations, nurseries, patient rooms; operating rooms, procedure rooms, recovery rooms and sterilizer equipment areas; pharmacies and laboratories; triage, trauma and emergency rooms; physical therapy and radiology/imaging rooms; and storage, receiving and mechanical/ electrical/telecom rooms.

Included in the Guide are recommendations for the design of the building opaque envelope; fenestration; lighting systems; HVAC systems; building automation and controls; outdoor air requirements; service water heating; measurement and verification; and plug and process loads, including kitchen equipment.

Along with whole building and technology case studies, the Guide highlights that existing reliable technologies and design philosophies can be used to reduce energy, according to Pless. Some of the technologies and philosophies highlighted in the book include:

• Use of shape and form to give access to daylighting in spaces that usually have no windows

• Daylighting of staff areas and publics spaces while at the same time specifying proper glazing to control solar gain

• Elimination of reheat, which is the largest energy saver from the HVAC system. Other HVAC savings comes from the de-coupling of ventilation air treatment and space conditioning and the elimination of steam boilers

Recommendations to reduce and control plug and process loads including commercial kitchen equipment

• Reductions in interior and exterior lighting

• Recommendations involving LED surgery lights, which have the added benefit of allowing surgeons to set the thermostat higher in the operating rooms

• Measurement and verification recommendations to demonstrate savings are being realized with the added benefit of helping solve operational issues

The 50% Advanced Energy Design Guide series follows an earlier series that provided guidance to achieve 30% savings. The ultimate goal is to provide guidance to achieve net zero energy buildings; that is, buildings that, on an annual basis, produce more energy than they consume.

Other books in the 50% savings series deal small to medium office buildings, K-12 schools and medium to big box retail buildings. Since the Guides first began to be offered as free downloads at the beginning of 2008, more than 400,000 have been downloaded.

For more information on the entire Advanced Energy Design Guide series, or to download a free copy, please visit <u>www.ashrae.org/freeaedg</u>. A print version of the Guide may be purchased for \$82 (\$69, ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.