

A HAPPY
NEW YEAR

INSIDE
THIS ISSUE:

Officer / Committee List	2
Events Calendar	3
President Msg	4
YEA	5
Valentine's Dinner	6-7
Buyer's Guide	8
Winter Conference AHR Expo	9
Air Conditioning Fundamentals	10- 11
Governmental Affairs	12- 16
Jokes & Laughs	16
Job Postings	17
PAOE Summary	17
Society News	18

ASHRAE Rochester



VOLUME 4, ISSUE 5

JANUARY 4, 2010

January ASHRAE Lunch Meeting (Joint Meeting with the USGBC)

Monday, January 11, 2010

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

Time: 12:00 - 2:00 PM with Lunch Served

Cost: \$25.00

Presenters: Stephen Beck, Jerold Boddy, and Joseph VanCura Jr, all of LeChase Construction Services LLC

Please join us for our monthly ASHRAE meeting. This month we are pleased to welcome our friends from the USGBC for a joint meeting.

Topic: TBE (Total Building Envelope) Performance Process

The presentation will review the process of Envelope Commissioning including: Integrated Design Approach, Value of TBE Performance, TBE Components, Performance Testing, and the Quantified Output Document at project completion. A case study will also be included in the presentation.

Steve Beck, LEED AP, IAQCP, is the Chief Sustainability Officer, Director of Science & Technology/ Commissioning Services at LeChase Construction LLC based in Rochester NY.

Mr. Beck plays a key role working directly with project management teams and clients focusing on cleanrooms, sustainable construction, commissioning and process systems. As Director of the Project Solutions and Commissioning Services Groups, Steve and his team are responsible for the turnkey delivery of cleanrooms and contamination controlled facilities, internal and outsourced commissioning services and support for all sustainable and/or LEED certified projects.

Mr. Jerold Boddy, PE is the Operations Manager for Commissioning Services at LeChase Construction Services LLC. Jerry has over thirty years of experience in the Industrial and Pharmaceutical markets as a project, construction, and engineering manager as well as director of commissioning and validation.

Mr. Joseph VanCura Jr, LEED AP, has been with LeChase Construction Services, LLC since 2006 and has played an integral role in the commissioning and retro-commissioning of several facilities including Johnson and Johnson, Holy Sepulchre, and the University of Rochester.

Please RSVP by noon Thursday, January 7th to Ed Burns, Phone: 585-872-6681 or ejb@mechtechvac.com. Also, this will be an ASHRAE Student night.



Steve Beck



Jerold Boddy



Joseph VanCura Jr.



Chapter Officers

President

Jeffrey Davis, PE
585-381-3360/381-3368(fax)
jdavis@turnerengineeringpc.com

President Elect

Jim Browe
585-697-0836/697-0839
jbrowe@rfpeck.com

Vice President/Tech

Jeffrey Ellis
585-334-7710/334-7738(fax)
ellis@airsystemsbalancing.com

Secretary

Michelle Sommerman
585-232-5135/232-4652(fax)
msommerman@bergmannpc.com

Treasurer

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

Board of Governors

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

Trisha Jackson
585-272-4650/272-4676(fax)
tjackson@nrg-concepts.com

Jeff Close
585-289-6816/218-0737(fax)
Jeff.close@pres-services.com

Phil Masters
585-288-1600/288-2481(fax)
philm@rpfedder.com

William Murray
585-272-4650/272-4676 (fax)
bmurray@nrg-concepts.c0m

Tim Duprey
585-402-5285/315-423-5408 (fax)
DupreyT@ifsinc.net



Committee Chairs

CTTC/Programs

Jim Browe
585-697-0836/697-0839
jbrowe@rfpeck.com

CTTC/TEGA

Carlos Dachary 585-671-8110
cdachary@spc-ny.com

CTTC/ Refrigeration

Michael Nohle 585-216-9016
mikenohle@aol.com

Historian

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

Membership

Phil Masters 585-288-1600/288-2481(fax)
philm@rpfedder.com

Research Promotion

Jeff Close 585-289-6816/218-0737(fax)
Jeff.close@pres-services.com

Student Activities

Al Rodgers 585-218-0730/218-0737(fax)
arodgers@pathfinderengineers.com

Newsletter Editor

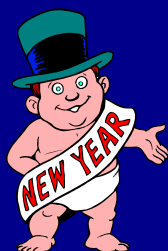
Christina Walter 585-486-2148/256-0067(fax)
cmwalter@trane.com

Attendance & Reception

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

Webmaster

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



ASHRAE 2009/2010 MEETING SCHEDULE

DATE	EVENT	LOCATION	SCHEDULE
1/11/2010 Student Night	Steve Beck—Envelope Commissioning Joint Meeting with USGBC 1 PDH available	Mario's	12:00-2:00 PM Lunch
2/8/2010 Student Night	RIT CIMS Building—Thermal Fluids Lab Al Rodgers & Carl Lundgren	RIT - Dinner through RIT Food Service	5:30 PM
2/5/2010	Valentine's Dinner Dance	Inn on Broadway	7:00 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
4/12/2010	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



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

The purpose of a Chapter's Research Promotion Committee is to raise funds that can be used by ASHRAE Society for research projects related to the fields of HVACR and energy. To get my facts straight for this article, I thought I would search the Society website for a list of projects currently being funded. I'll be honest, I gave up after ten pages of scrolling. The number and diversity of the projects are truly staggering. For instance, I found projects on fungal growth and how it relates to indoor air quality, cable fires in plenums, grease ducts, a study on olfactory adaptations in humans. Yes, they are studying the smelling of odors. This represents a tiny fraction of the research effort going on right now. It's important to remember that this is the research that helps shape the very foundation of our industry. Over the years, Research Promotion in the Rochester Chapter has benefited from the repeated generosity of many companies. Equally as important is that Jeff Close has knocked on several new doors in the Rochester area since taking over our Chapter's Research Promotion Committee. The following donors have made notable contributions to research in the past year:

ASHRAE Partner: Gray Metal Products.

Major Donor—Bronze: R. L. Kistler, Inc., R. P. Fedder Corporation, Rochester.

Major Donor—Antique: Lynn Bellenger, Slater Equipment Company, Mech Tech HVAC, Inc., Turner Engineering, PC.

Honor Roll Donor: Air Systems Balancing, Richard Barrett, Jeffrey Bidell, James Browe, Jeffrey Close, Jeffrey Davis, Day Automation Systems, Jeffrey Ellis, Erdman Anthony & Associates, Donald Fisher, Joseph Gangemi, Guckian Energy Systems, H. M. Cross & Sons, Theodore Knowles, Jr., Lee Loomis, Ronald Mead, Thomas Piekunka, SMACNA—Rochester, William Schmitt, Michelle Sommerman, William Tallie, Joseph VanCura.

To all of you, I offer a sincere thank you. I would also like to note that each year, ASHRAE chapters whose officers and Research Promotion Chair make a donation of \$100 are recognized with the Full Circle Award. Since I began my involvement with Board activities over 8 years ago, we have received this distinction. This year once again, the Rochester Chapter has received the Full Circle Award. I'm very proud to be part of a group that takes on the obligation of giving back to the industry in which we make our living. You all are truly leaders in this effort!

The December meeting featured Lynn Bellenger, PE, FASHRAE, LEED® AP from Pathfinder Engineers. To have the Society President Elect, and one of Rochester's own present to us was indeed an honor. Standard 189.1 is a consensus standard, co-sponsored by ASHRAE, the USGBC, and IESNA. I have had conversations with several different people about the motivation for writing such a standard when the USGBC already has the LEED rating system. In fact all of the same categories covered by LEED are present in the Standard, and the compliance paths are similar (mandatory provisions, and prescriptive or performance based requirements). The major difference is that LEED is simply a rating system and not an enforceable standard. It's significant to note that Standard 189 is not intended to compete with LEED. I believe it took real vision on the part of the Standards committee to use model code language, similar to Standards 90.1 and 62.1. As you know, both of these have been adopted by many model Codes as their basis for energy efficiency and ventilation.



Jeff Davis, PE, 2009-2010 President





YEA ROCHESTER

If you are 35 or younger, welcome to Young Engineers in ASHRAE (YEA). Our primary objective is to enhance member benefits by identifying activities and services focused on the needs of young professionals in the industry of HVAC and energy.

Announcements:

Become a Fan of YEA FACEBOOK: "YEA-Young Engineers in ASHRAE Rochester Chapter". On this site, you will find updates for upcoming YEA events and technical resources for young professionals in the HVAC industry.

Upcoming Events:

Tuesday, 5 January 2010

Merchants Grill

881 Merchants Rd Rochester, NY

4:00 pm Planning Committee

5:00 pm Happy Hour

If you would like to help us plan activities and services for YEA, please join us at 4:00pm at Merchants Grill on Tuesday, January 5. We hope to see everyone at the happy hour at 5:00pm. Significant others and spouses are welcome and encouraged to attend. For more information, contact:

Eric Smith: esmith@turnerengineering.com

Jaimee Reynolds: jreynolds@pathfinder-ea.com

Nominating Committee:

The following is a list of proposed nominating committee members. At the January meeting the membership will be asked to vote their approval of the following list of nominating committee members.

Stephen Maybeck
Kevin Gottermeier
Joe Van Cura
Casey Bernhard



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

On Friday February 5, 2010 ASHRAE will be hosting its 53rd Annual Valentine's Dinner Dance at The Inn on Broadway.

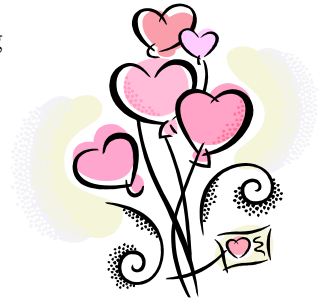
ASHRAE is once again asking for your corporate support to donate \$325.00 billed to you as an advertising expense to help defray the cost of this special event. We know that it has been a challenging year, but your sponsorship will enable us to provide you with special entertainment, a delicious meal, special desserts and an evening with special friends.

As always, we will be offering two complimentary dinners to corporate sponsors. Your sponsorship will be listed in the dinner program and dance fliers, 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 and as an ASHRAE supporter.

We thank you for your support, look forwards to sharing this fantastic evening with you!

Very truly yours,

Jody McGarry
Valentine Dance Committee



Save the date...

ASHRAE 53rd Annual Valentine's Dinner Dance

Date: February 5, 2010 at 7:00 PM

Place: Tournedos at the Inn on Broadway

Sit down dinner, music, chocolates, flowers, desserts

See page 7 for details...



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)



2010 ASHRAE Buyer's Guide

Please take the opportunity to promote your company's products and services in the 2010 ASHRAE Buyer's Guide.

This valuable guidebook is distributed to each Rochester Chapter ASHRAE member and is one of the best resources of HVAC product and service listings in this region.

You can make your ASHRAE Buyer's Guide submission by emailing a black & white 5 ½" x 8 ½" or 8 ½" x 11" page as you would like your ad to appear.

Ad Format options for submission include:

- **Best:** pdf print file
- **Good:** word file
- **Least:** other

The cost will remain the same as last year at \$125.00. It is our intent to release the Buyer's Guide in February 2010 so the deadline to receive your ad is January 15, 2010.

Email your ad to: cwengineering@rpa.net.

Please send your \$125.00 check payable to ASHRAE Rochester Chapter to:

Charles White
128 Hogan Road
Fairport, NY 14450

If you have any questions, please call me at (585) 223-2462.

Thank you for your support.
Charles White,
Chairman, ASHRAE Rochester Buyer's Guide Committee.





ASHRAE Inside

Building Sustainability from the Inside Out

Register
and save
before Oct. 31

Orlando, FL

2010 Winter Conference

January 23 - 27

ASHRAE's 2010 Winter Conference

January 23-27, 2010

Rosen Shingle Creek

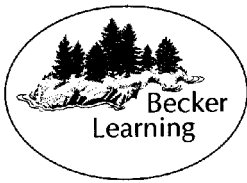
Orlando, Florida

"It's not the heat, it's the humidity," is often used to explain the less-than-comfortable temperatures in tropical Florida. While the water-saturated air is perfect for hibiscus and alligators, humans have had to find their own ways to deal with the Sunshine State's humid conditions. What better place to discuss this year's conference theme: Building Sustainability from the Inside Out. Whenever the temperatures outside are too hot or humid to handle, ASHRAE ensures that indoor environments are comfortable and, most important, sustainable.

January 25-27, 2010 • Orange County Convention Center • Orlando, Florida

About the Expo

The AHR Expo attracts tens of thousands of attendees from all facets of the industry, including contractors, engineers, dealers, distributors wholesalers, OEMs, architects and builders, industrial plant operators, facility owners and managers, agents and reps. Since 1930, the AHR Expo has been the HVAC&R professional's best resource for new products, new ideas and new services. It's a hands-on, interactive event that showcases a wide spectrum of equipment, systems, and components. This unique industry forum creates a dynamic marketing environment unequaled in size and scope by any other industry event. The event is co-sponsored by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), and the Air-Conditioning, Heating and Refrigeration Institute (AHRI). It is held every year in conjunction with the ASHRAE Winter Conference. [Visit the AHR Expo Web site.](#)



Your technical training provider presents

Air Conditioning Fundamentals 2010

10

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.

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.

Governmental Affairs Update

Welcome to ASHRAE's Government Affairs Update. Along with the redeveloped Government Affairs webpage, these periodic e-mail updates feature information on government affairs related activities of interest to ASHRAE members and others interested in the built environment. Archives of previous updates are available from the government affairs webpage (<http://www.ashrae.org/advocacy>).

You are encouraged to pass this information on to interested colleagues who also may subscribe from the ASHRAE Government Affairs webpage. Should you wish to unsubscribe, information appears at the end of this e-mail.

If you have any recommendations regarding content, or have questions about or would like to participate in Washington Office activities, please contact ASHRAE Government Affairs staff at (202) 833-1830 or washdc@ashrae.org.

ASHRAE Government Affairs Update, 12/18/09

- [President Obama Proposes Home Energy Retrofit Program for Job Creation](#)
- [Commerce Department to Speed Review of Green Technology Patents](#)
- [EIA: U.S. Greenhouse Gas Emissions Decreased by 2.2% in 2008](#)
- [EPA Declares Greenhouse Gases Threaten Health](#)
- [Maine Requires Default Green Power Offer](#)
- [NY Approves Property Assessments for Solar and Energy Efficiency](#)
- [Existing Energy Efficiency Technologies Could Provide Major Savings](#)
- [EPA Signs Two Rules Addressing HCFCs and the Ozone Layer](#)
- [New Category of Geothermal Heat Pumps Can Earn Energy Star](#)
- [NIST Offers Funds for Research](#)
- [California Releases Preliminary Rules for GHG Cap-and-Trade Program](#)
- [DOE Launches Public Web Site for Energy Technology Information](#)



[President Obama Proposes Home Energy Retrofit Program for Job Creation](#)

President Barack Obama proposed a new rebate program to reward homeowners for making their homes more energy efficient, while also proposing additional federal investments in energy efficiency and renewable energy. As part of a speech about jobs and the economy, the president noted that home energy retrofits create jobs, save money for families, and reduce the pollution that threatens our environment. President Obama also called for aid to small businesses and new investments in infrastructure. Most of the president's proposals will require congressional approval.

President Obama's job plan calls for an expansion of select American Recovery and Reinvestment Act initiatives that promote energy efficiency and clean energy jobs. The president noted that one-third of the Recovery Act is intended for investments "to put Americans to work doing the work that America needs done," such as doubling the U.S. capacity for producing power from renewable energy. But most of those initiatives are oversubscribed, causing many strong ideas to go unfunded. With that in mind, the Obama Administration is supporting the expansion of programs for which additional federal dollars will leverage private investment and create jobs quickly, such as investments in industrial energy efficiency, as well as new or extended tax incentives for investing in U.S. manufacturing facilities for renewable energy technologies. See the White House press release (<http://www.whitehouse.gov/the-press-office/president-obama-announces-proposals-accelerate-job-growth-and-lay-foundation-robust>) and a transcript of the president's remarks (<http://www.whitehouse.gov/the-press-office/remarks-president-job-creation-and-economic-growth>).

[Commerce Department to Speed Review of Green Technology Patents](#)

The U.S. Commerce Department announced that its U.S. Patent and Trademark Office (USPTO) will pilot a year-long program to accelerate the examination of certain "green" technology patent applications by as much as one year. The new initiative is designed to speed the development and deployment of green technology, create green jobs, and promote U.S. competitiveness. In particular, the program focuses on patents for renewable energy and energy efficiency technologies, plus other environmental technologies. The program rules spell out 29 categories of renewable energy technologies and 23 categories of energy efficiency technologies that are eligible. Pending patent applications in these technologies will be eligible for special status and given expedited review. Earlier patenting of these technologies enables inventors to secure funding, create businesses, and bring vital green technologies into use much sooner.

(continued on page 13)

Governmental Affairs Update (continued)

Patent applications are normally taken up for examination in the order that they are filed. It typically takes the USPTO two and a half years to start taking action on a patent application, and it takes another 10 months to reach a final decision on the patent. Under the pilot program, the office will examine patent applications on an accelerated basis for the first 3,000 applications related to green technologies for which a petition is filed. Petitions are currently being accepted, and the program will accept petitions through December 8, 2010. If the trial is successful, the USPTO will consider ways to expand the initiative. See the Commerce Department press release (http://www.commerce.gov/NewsRoom/PressReleases_FactSheets/PROD01_008680); the USPTO Web site (<http://www.uspto.gov/>); the full details on the pilot program as published in the Federal Register (<http://www.uspto.gov/patents/law/notices/74fr64666.pdf>); and the petition form for the pilot program (<http://www.uspto.gov/forms/sb0420.pdf>).

EIA: U.S. Greenhouse Gas Emissions Decreased by 2.2% in 2008

The total U.S. emissions of greenhouse gases dropped to the equivalent of 7,053 million metric tons of carbon dioxide in 2008, a 2.2% decrease, according to a new report from DOE's Energy Information Administration (EIA). The drop was largely due to a 2.9% decrease in energy-related carbon dioxide emissions, which the EIA attributes to record-high oil prices for much of the year, followed by a decline in economic activity. That decline is expected to continue this year, as the EIA's "Short Term Energy Outlook," released on December 8, projects a 6.1% decrease in energy-related carbon dioxide emissions, which are the largest source of greenhouse gas emissions in the United States. But a healthier economy tends to bring increases in such emissions, and the EIA projects a 1.5% increase in energy-related carbon dioxide emissions in 2010. Since 1990, U.S. greenhouse gas emissions have grown at an average annual rate of 0.7%. See the EIA press release (<http://www.eia.doe.gov/neic/press/press333.html>), the greenhouse gas report (<http://www.eia.doe.gov/oiaf/1605/ggrpt/index.html>), and the "Short-Term Energy Outlook (<http://www.eia.doe.gov/emeu/steo/pub/contents.html>)."

EPA Declares Greenhouse Gases Threaten Health

U.S. Environmental Protection Agency (EPA) has officially declared that greenhouse gases threaten the public health and welfare of the residents of the United States, which means that they fit within the Clean Air Act's definition of air pollutants and are subject to regulation. The so-called endangerment finding covers six key greenhouse gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The finding does not in and of itself impose any emissions requirements, but it does allow the EPA to finalize its proposed greenhouse gas standards for light-duty vehicles. Although it opens the six greenhouse gases to regulation under the Clean Air Act, the Obama Administration prefers a legislative solution to the problem of climate change. See the EPA press release (<http://yosemite.epa.gov/opa/admpress.nsf/0/08D11A451131BCA585257685005BF252>) and the endangerment finding (<http://www.epa.gov/climatechange/endangerment.html>).

The EIA reports and the EPA endangerment finding also come as international negotiations on a climate change pact are underway in Copenhagen, Denmark. The United Nations (U.N.) climate change conference, technically known as the 15th Conference of the Parties (COP) to the U.N. Framework Convention on Climate Change, or COP 15 for short, runs through December 18. The president's arrival near the end of the negotiations allows him to potentially play a role in achieving an international agreement. See the White House press release (<http://www.whitehouse.gov/the-press-office/statement-press-secretary-united-nations-climate-change-conference>), the official U.N. COP-15 Web site (<http://en.cop15.dk/>), and the official U.S. COP-15 Web site (<http://cop15.state.gov/>).

Maine Requires Default Green Power Offer

Governor Baldacci of Maine signed into law a bill requiring the Maine Public Utilities Commission (PUC) to develop a default green power option for all residential and small commercial electricity consumers. The PUC is directed to include community-based renewable energy to the maximum extent possible. Community-based energy includes generation facilities that are at least 51% owned by an individual, a political subdivision, a State entity, a federally recognized Indian tribe located in Maine, a nonprofit corporation, or a business corporation which has at least 51% ownership by one or more residents of Maine. The PUC is charged with adopting rules to implement the requirement.

For additional information see http://www.mainelegislature.org/legis/bills/bills_124th/chapters/PUBLIC329.asp.

[NY Approves Property Assessments for Solar and Energy Efficiency](#)

The New York legislature passed a law authorizing municipal loan programs for renewable and energy efficiency improvements to homes and businesses. The measure allows municipalities to use Property Assessed Clean Energy (PACE) financing. Under PACE, cities or counties set up special clean energy finance districts capable of issuing low-interest bonds to participants. The bonds are used to cover the costs of renewable energy and efficiency improvements on private property, and participants pay the loans back through a 20-year assessment on their property taxes.

PACE programs are entirely voluntary. There are no requirements for municipalities to set them up for homeowners to take out loans from the programs. They are now allowed by state law in California, Colorado, Florida, Louisiana, Maryland, Nevada, New Mexico, New York, Ohio, Oklahoma, Oregon, Texas, Vermont, Virginia, and Wisconsin.

Recently, DOE announced \$454 million in Recovery Act funds to help set up programs such as PACE. For more information, read the New York governor's press release (http://www.ny.gov/governor/press/press_1116091.html), and the DOE Energy Efficiency and Conservation Block Grant Program application (http://www.eecbg.energy.gov/about/competitive_grants.html).

[Existing Energy Efficiency Technologies Could Provide Major Savings](#)

Energy efficiency technologies that exist today or that are likely to be developed in the near future could save considerable money as well as energy, says a new report from the National Research Council. Fully adopting these technologies could lower projected U.S. energy use 17 percent to 20 percent by 2020, and 25 percent to 31 percent by 2030.

Achieving full deployment of these efficiency technologies will depend in part on pressures driving adoption, such as high energy prices or public policies designed to increase energy efficiency. The energy savings from attaining full deployment of cost-effective, energy-efficient technologies in buildings alone could eliminate the need to add new electricity generation capacity through 2030, the report says. New power generation facilities would be needed only to address imbalances in regional energy supplies, replace obsolete facilities, or to introduce more environmentally friendly sources of electricity.

Many cost-effective efficiency investments in buildings are possible, the report says. For example, replacing appliances such as air conditioners, refrigerators, freezers, furnaces, and hot water heaters with more efficient models could reduce energy use by 30 percent. Opportunities for achieving substantial energy savings exist in the industrial and transportation sectors as well. For example, deployment of industrial energy efficiency technologies could reduce energy use in manufacturing 14 percent to 22 percent by 2020, relative to expected trends. Most of these savings would occur in the most energy-intensive industries, such as chemical manufacturing, petroleum refining, pulp and paper, iron and steel, and cement.

Although there is great potential, many barriers exist to widespread adoption of energy efficiency technologies, the report points out. The upfront costs can be high, which can deter investment despite the possibility of long-term cost savings. Volatile energy prices can cause buyers to delay purchasing more efficient technology due to a lack of confidence that they will see an adequate return on their investment. In addition, there is a shortage of readily available, trustworthy information for consumers hoping to learn about the relative performance and costs of energy-efficient technology alternatives. Investments in energy-efficient infrastructure are particularly important, as these can lock in patterns of energy use for decades. Therefore, taking advantage of windows of opportunity for infrastructure is crucial.

Overcoming these barriers will require significant public and private support, and sustained effort. Many energy efficiency initiatives have been successful, such as the U.S. Department of Energy and U.S. Environmental Protection Agency's Energy Star labeling program. Efforts undertaken by California and New York have yielded large energy savings for those states. These experiences provide valuable lessons for national, state, and local policymakers on enacting effective energy efficiency policies.

Copies of Real Prospects for Energy Efficiency in the United States are available from the National Academies Press (http://www.nap.edu/catalog.php?record_id=12621).

[EPA Signs Two Rules Addressing HCFCs and the Ozone Layer](#)

The U.S. Environmental Protection Agency has announced two final rules that will further cut ozone-depleting pollutants, protecting the Earth's ozone layer and reducing harmful greenhouse gases. The rules reduce the availability and use of hydrochlorofluorocarbons (HCFCs).

The first rule prohibits the use of specific HCFCs to manufacture new air-conditioning and refrigeration equipment beginning in 2010, while allowing limited HCFC use to service existing equipment. The second rule prohibits the sale, distribution, and import of air-conditioning and refrigeration appliances and their components containing certain HCFCs that are manufactured or imported after January 1, 2010. More information on the two rules: <http://www.epa.gov/ozone/title6/phaseout/rulesoverview.html>

Governmental Affairs Update (continued)

[New Category of Geothermal Heat Pumps Can Earn Energy Star](#)

The U.S. Environmental Protection Agency is announcing new requirements for residential geothermal heat pumps (GHPs), enabling water-to-water geothermal heat pumps to earn the Energy Star label for the first time. EPA's stringent specifications for this new category of geothermal heat pumps will help protect the environment and reduce energy costs, because GHPs that meet the new standards will be up to 45 percent more efficient than conventional pumps.

EPA worked with industry stakeholders to revise the requirements in response to growing consumer demand for water-to-water geothermal heat pumps. The new requirements for water-to-water equipment complements existing efficiency and performance requirements for water-to-air and direct geothermal GHP models. Homeowners who install geothermal heat pumps with the Energy Star are eligible for a 30 percent federal tax credit.

More information on the heat pumps see <http://www.energystar.gov/ghp>. For more information on the tax credit see <http://www.energystar.gov/taxcredits>.

[NIST Offers Funds for Research](#)

The National Institute of Standards and Technology (NIST) announces that the following programs are soliciting applications for financial assistance for FY 2010: (1) The Electronics and Electrical Engineering Laboratory Grants Program; (2) the Manufacturing Engineering Laboratory Grants Program; (3) the Chemical Science and Technology Laboratory Grants Program; (4) the Physics Laboratory Grants Program; (5) the Materials Science and Engineering Laboratory Grants Program; (6) the Building Research Grants and Cooperative Agreements Program; (7) the Fire Research Grants Program; (8) the Information Technology Laboratory Grants Program; (9) the NIST Center for Neutron Research Grants Program; (10) Center for Nanoscale Science and Technology Grants Program; and (11) the Technology Services Grants Program.

Each program will only consider applications that are within the scientific scope of the program as described in this notice and in the detailed program descriptions found in the Federal Funding Opportunity (FFO) announcement for these programs. Prior to preparation of a proposal, it is strongly suggested that potential applicants contact the Program Manager for the appropriate field of research, as specified in the FFO announcement found at <http://www.grants.gov>, for clarification of the program objectives and to determine whether their proposal is responsive to this notice.

For more details, see the Federal Register notice at <http://edocket.access.gpo.gov/2009/pdf/E9-29825.pdf>.



[California Releases Preliminary Rules for GHG Cap-and-Trade Program](#)

The California Air Resources Board (ARB) released a preliminary draft version of California's greenhouse gas (GHG) cap-and-trade regulation. As proposed, the cap-and-trade regulations will take effect in 2012 and will apply to 605 of the state's largest stationary emitters of GHGs, including industries and power plants, along with electricity imports. Starting in 2015, the regulations will also apply to fuel suppliers, to help address emissions from vehicles and from smaller stationary emitters of GHGs, such as homes and commercial businesses. The regulations will set a cap on GHGs emissions that will decline each year through 2020, in order to help bring the state's GHG emissions back to 1990 levels, which represents a decline of about 15% from today's emission levels. The cap-and-trade program is just one part of achieving this goal; other measures include building and appliance efficiency standards, strong energy efficiency programs, a statewide renewable energy requirement, clean car standards, a low-carbon fuel standard, and targeted usage fees. The goal was set by the state's Global Warming Solutions Act, which was signed by Governor Schwarzenegger in 2006.

Under the proposed cap-and-trade program, covered entities will receive a declining number of tradable emissions credits, a portion of which will be available through an auction. A trading system will allow entities with higher emissions to buy credits from entities that have reduced their emissions. This effectively sets a market-based price on GHG emissions, which encourages companies to invest in ways to reduce their emissions. However, the program is not prescriptive; it allows each company to find the most cost-effective means of cutting emissions, while allowing companies that lack cost-effective approaches to buy emission credits. The proposed program includes the limited use of offsets, which allow companies to invest in other ways to reduce GHG emissions. When fully in place, the program would cover 85% of California's GHG emissions. For flexibility, the trading program is intended to be linked to the Western Climate Initiative, which includes a large portion of Canada and the western United States. See the ARB press release (<http://www.arb.ca.gov/newsrel/nr112409b.htm>), the draft cap-and-trade regulation (<http://www.arb.ca.gov/cc/capandtrade/meetings/121409/pdr.pdf>), and for background, the scoping plan for achieving the state's GHG goal (<http://www.arb.ca.gov/cc/>

Governmental Affairs Update (continued)

DOE Launches Public Web Site for Energy Technology Information

DOE has unveiled Open Energy Information, an open-source Web platform that will make DOE resources and energy data widely available to the public. The data and tools housed on the free, editable, and evolving wiki platform will help deploy clean energy technologies across the country and around the world. The site currently houses more than 60 clean energy resources and data sets, including maps of worldwide solar and wind potential, information on climate zones, and best practices. OpenEI.org also links to the Virtual Information Bridge to Energy (VIBE), which serves up Web gadgets that display energy data. See the DOE press release (<http://www.energy.gov/news2009/8381.htm>), the OpenEI.org Web site (http://en.openei.org/wiki/Main_Page), and the VIBE Web site (<http://vibe.nrel.gov/>).

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

The Top 10 Things Engineering School Didn't Teach

10. There are about 10 types of capacitors.
9. Theory tells you how a circuit works, not why it doesn't work.
8. Not everything works according to the specs in the databook.
7. Anything practical you learn will be obsolete before you use it, except the complex math, which you will never use.
6. Always try to fix the hardware with the software.
5. Engineering is like having an 8 a.m. class and a late afternoon lab every day for the rest of your life.
4. Overtime pay? What overtime pay?
3. Engineers rule the world until the next revision.
2. If you like junk food, caffeine, and all-nighters, then you should go into architecture.
1. Dilbert is a documentary.



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: IAQ 2010 Examines Impact of HVAC on Airborne Infectious Disease

ATLANTA – The role of HVA&R in airborne infectious disease transmission, design and control strategies and technology, pandemic preparedness and airborne infection control will be examined at the IAQ 2010 conference sponsored by ASHRAE.

Co-organized by CIBSE and ISIAQ, IAQ 2010: Airborne Infection Control – Ventilation, IAQ & Energy, takes place Nov. 10-12, 2010, in Kuala Lumpur, Malaysia. This is the first time the conference is being held outside of the United States.

“The building industry is increasingly faced with the challenge of providing a healthy indoor environment,” Dr. Chandra Sekhar, conference chair, said. “The SARS episode, the current H1N1 pandemic and fears of avian flu have transformed the built environment landscape, raising not only significant public health concerns but also economic implications on a global scale. Airborne infection and its control in the built environment have tremendous impact in the design, operation and maintenance of buildings and other enclosed environments. IAQ 2010 will review the state of knowledge about airborne infection and help define future directions.”

The conference will feature peer-reviewed technical papers, workshops and tutorials. Abstracts are invited in the following subject areas:

Is airborne infection in enclosed environments emerging as a primary IAQ and health concern?

- What is our current understanding of the airborne infection route in enclosed environments, including buildings and transportation conveyances?
- What is the status of airborne infection control techniques adopted in different types of enclosed environments and our knowledge about their effectiveness?
- How do mechanical systems and other building and enclosure characteristics contribute to healthy environments in an energy-efficient manner?
- How can we create and sustain healthy enclosed environments through design, construction, commissioning, operation and maintenance?
- What metrics and tools can be used to quantify the degree to which an enclosed environment is healthy and

energy-efficient?

- What are the costs and quantifiable benefits of airborne infection control strategies?
- What government and private sector programs exist or are proposed, including standards and guidelines for infection control and pandemic-preparedness in enclosed environments?
- How well are the existing programs working and what roles can ASHRAE and other organizations in the field of building science and conveyance design play?

The deadline for abstracts is Jan. 15, 2010. Abstracts, containing titles and maximum 400-word summaries, should be submitted at www.ASHRAE.org/IAQ2010. For more information, email IAQ2010@ashrae.org or visit www.ASHRAE.org/IAQ2010.

ASHRAE, founded in 1894, is an international organization of some 50,000 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.

The appearance of any technical data, editorial material, or advertisement in this publication does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, procedure, design or the like. ASHRAE does not necessarily agree with any statement or opinion in this publication. The entire risk of the use of any information in this publication is assumed by the user. Statements made in this publication are not expressions of the Society or of the Chapter and may not be reproduced without special permission”.

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.

