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VOLUME 2, ISSUE 8



APRIL 6, 2008

**ASHRAE Satellite Broadcast/Webcast**



**April 16, 2008**  
1:00– 4:00 P.M. EDT



**INTEGRATED BUILDING DESIGN:  
Bringing the Pieces Together to Unleash  
the Power of Teamwork**

This broadcast explains what you and other members of the building team must do to advance high-performance buildings with improved design, construction and operations processes. Buildings that meet the needs of occupants and truly achieve sustainability objectives can only be created if the building community shares its knowledge and experiences. Join ASHRAE in learning more about your role in integrated building design and helping to create a sustainable built environment.

This free program is sponsored by ASHRAE's Chapter Technology Transfer Committee. For complete details, visit our website at [www.ashrae.org/ibdbroadcast](http://www.ashrae.org/ibdbroadcast).

**How to Participate**

- You may host a broadcast site for your colleagues.
- You may register to view with others at a site near you.
- You may register to view the Webcast on your PC.

**PDH Credits**

Three (3) Professional Development Hours or three (3) AIA Learning Units will be awarded to viewers who complete the "Participant Reaction Form" following the broadcast.

Where: Bathtub Billy's Sports Bar & Restaurant  
630 West Ridge Road, Rochester, NY

Lunch at 12:00 PM, Telecast: 1:00 - 4:00 PM  
Menu: Chicken Parmesan w/ salad, cookies, beverages.

Price: \$30 / person. Reservations required by 4/11/08 to Lynne at RES (Phone: 585-254-2350).

\*\*\*\*\* 3 PDH Credits \*\*\*\*\*

**About the Presenters**

Kent Peterson, ASHRAE's 2007-2008 president, will introduce the broadcast program

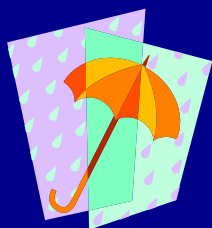
- Walter Grondzik, Architectural Engineer and Professor in the Department of Architecture, Ball State University, Muncie, Indiana—"What is Integrated Building Design?"
- Charles Gullede III, P.E., MAI, CSI, ASHRAE Distinguished Lecturer, Senior Mechanical Engineer, AC Corporation, Greensboro, North Carolina, "The Integrated Design Process"
- Drury B. Crawley, Technology Development Manager, U.S. Department of Energy, Washington, DC—"Achieving Net-Zero Energy Buildings Through Integrated Building Design?"
- Paul Torcellini, Team Leader for Commercial Buildings Research, National Renewable Energy Laboratory, Golden, Colorado—"Bringing the Pieces Together—Actual Applications"

**New Member Discount**

Non-member participants will be given a \$50 discount for applying for ASHRAE membership. A special membership application will be available at satellite broadcast sites or by request at [membership@ashrae.org](mailto:membership@ashrae.org).

**Registration**

Online registration for satellite site coordinators and Webcast viewers will begin March 1, 2008, at [www.ashrae.org/ibdbroadcast](http://www.ashrae.org/ibdbroadcast). Satellite viewer registration will begin March 15, 2008. There is no fee for registration. If you have any questions, call 678-539-1139 or email [ashrae-satellitebroadcast@ashrae.org](mailto:ashrae-satellitebroadcast@ashrae.org).



## Chapter Officers

### President

Casey Bernhard  
585-295-6209/454-3066(fax)  
cbernhard@labellapc.com

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## Board of Governors

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### Webmaster

Kevin Wind  
kwind@rochester.rr.com



## 2008 MEETING SCHEDULE

DATE	EVENT	LOCATION	SCHEDULE
4/16/2008	ASHRAE <b>Satellite Broadcast Luncheon</b> . Topic: "Integrated Building Design".	Bathtub Billy's	12:00 PM Lunch, 1:00-4:00 PM Program
5/20/2008	Annual ASHRAE <b>Golf Outing and Picnic</b>	Ravenwood Golf Club	11:00 AM Golf 5:00-8:00 PM Picnic and Dinner



*Save the Date...*

**ASHRAE Picnic & Golf Outing**

**Tuesday, May 20, 2008**

(See pages 6 and 7  
for full details.)



### 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.



### 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.

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

## President's Message by Casey Bernhard:



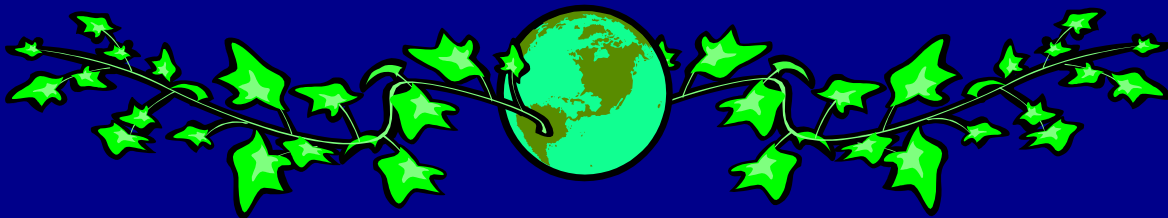
I have always been amazed at the people who seem to be able to do it all. These people have responsibilities something like the following: have families, are strong contributors at work, youth sports coach, cub scout/ brownie leader, work out at the gym, get the home improvement projects done and on top of all this they make time to volunteer. I'm not sure if I like these people or not because they make me look bad, but I really do respect them. One of the things that these people have in common is that they tend to be the ones that volunteer. A volunteer as defined on the website Wikipedia is, "someone who works for free for a community or for the benefit of natural environment primarily because they choose to do so. The word comes from Latin, and can be translated as 'will' (as in doing something out of ones own free will) ..... By definition a volunteer does not get paid or receive compensation for services rendered other than reimbursement for out-of-pocket expenses." Sounds great, doesn't it?

I happen to be surrounded by a group of volunteers like this in our local ASHRAE chapter. Being a volunteer with our local ASHRAE chapter has not always been easy but things worth doing in life usually aren't easy. My experience with ASHRAE has been very rewarding. I have met many people and made

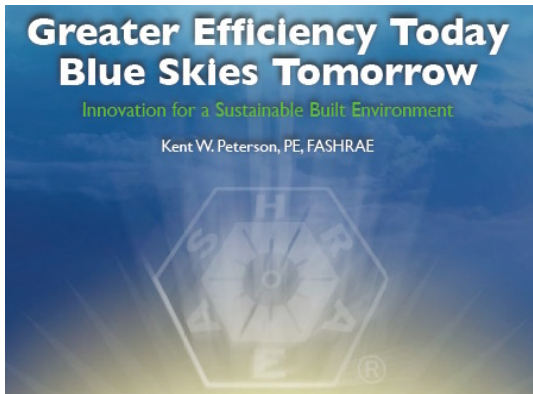
many friends, both members and non-members, that are part of our profession. I have traveled outside of our region to meet with other ASHRAE volunteers. I have been given great opportunity and exposure to the new things that are being done or published in the world of HVAC, energy conservation and sustainability. I have received free training in many different aspects of leadership and business associated with running a non-profit, grassroots organization. Out of this list of benefits, leadership training has been the most beneficial and rewarding. As I reflect on my time spent involved in our ASHRAE chapter, in many respects I realize that I have been compensated for my services rendered as a volunteer.

This coming year we will have openings for committee chairmen in our local ASHRAE chapter. Research promotion, membership, and website chairman positions will be open to anyone who is interested. If you would rather volunteer in a supporting role as opposed to filling a chairman role your participation would also be welcome. Please contact myself or Joe Van Cura [JVC@rpfedder.com](mailto:JVC@rpfedder.com) if you would like to get involved.

*Casey Bernhard, PE 2007-2008 President*



### Pictures from March Dinner Meeting:



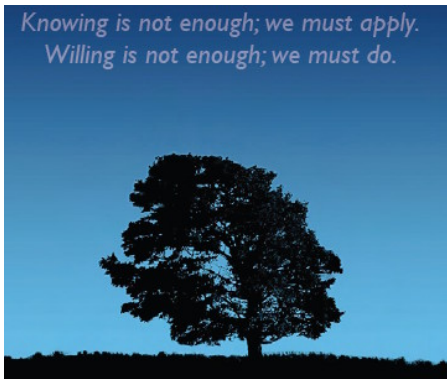
AHSRAE President, Kent Peterson

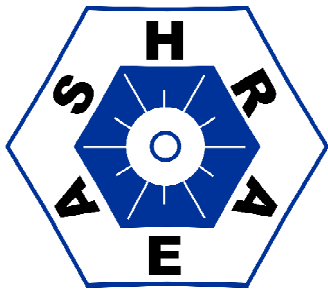


AHSRAE President, Kent Peterson giving the Golden Circle award to Richard Gray of Gray Metal Products for their continuous generosity in supporting ASHRAE. Richard made the contribution in memory of his father, Richard Gray, Sr.



AHSRAE President, Kent Peterson recognizing Rochester Chapter President Casey Bernhard with a presidential appreciation certificate.





**TUESDAY, MAY 20, 2008**

**Combined ASHRAE Golf Tournament/Picnic**  
**NEW LOCATION: The Entire Event to be held at**  
**Ravenwood Golf Course**

**Reservation Deadline is... May 12, 2008**

(There is a limited amount of tickets this year on a first come basis)

		
<p>Ravenwood Golf Course 929 Lynaugh Road Victor, NY 14564</p> <p><b>11:00 AM - 5:00 PM - Golf</b></p>	<p><b><u>Dinner:</u></b>  <b>5:00 PM - 8:00 PM</b>          Catered By:  <b>Dinosaur Barbeque</b>          at Ravenwood Golf Course</p> 	<p><b>Four Man Scramble and Optional Skins Game.</b></p> <p><u>Golf includes:</u></p> <ul style="list-style-type: none"> <li>➤ Golf</li> <li>➤ Cart</li> <li>➤ Driving Range</li> <li>➤ Prizes</li> <li>➤ On course beverages and food at the turn</li> </ul>

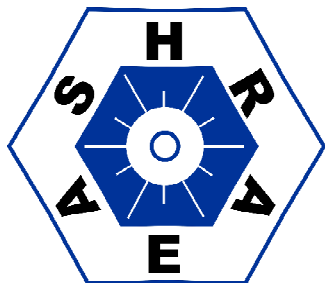
**NO TICKETS WILL BE SOLD OR DISTRIBUTED AT THE DOOR! RES HAS THE TICKETS THIS YEAR.  
 TICKETS WILL BE MAILED TO YOU OR CAN BE PICKED UP AT THE  
 ROCHESTER ENGINEERING SOCIETY.**

**Please include check and make payable to:  
 "ASHRAE – Rochester Chapter"**

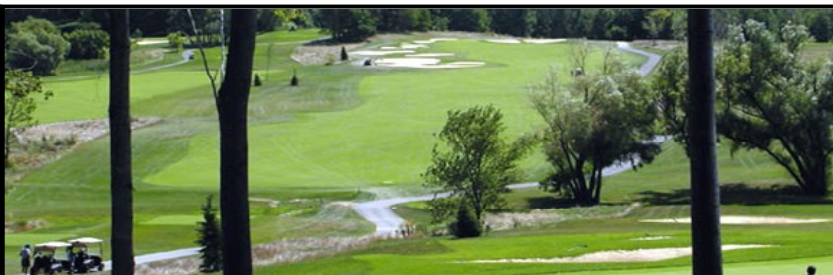
Return this form....  
 Mail prior to **May 12, 2008** to:  
 Attention: Reservation Clerk  
 Rochester Engineering Society  
 150 State Street  
 Rochester, New York 14614  
 Any questions, call (585) 254-2350  
 Email: [res@frontiernet.net](mailto:res@frontiernet.net)

Address where you would like your picnic tickets sent to:  
 Company: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: (Work) \_\_\_\_\_ (Home) \_\_\_\_\_

<b>Ticket Request Form</b>			
<b>Event</b>	<b>Fee Amount</b>	<b>No. Attending</b>	<b>Total</b>
Golf	\$80.00		\$
Picnic	\$40.00		\$
<b>OR:</b>			
Golf and Picnic <b>(SAVE \$10.00)</b>	\$110.00		\$
<b>Total amount enclosed:</b>			\$



# 2008 ASHRAE PICNIC SPONSORSHIP FORM



Ravenwood  
Golf Course  
929 Lynaugh Road  
Victor, NY 14564  
  
11:00 AM - 5:00 PM - Golf

**Dinner:**  
5:00 PM - 8:00 PM  
Catered By:  
**Dinosaur Barbeque**  
at Ravenwood Golf Course



*Four Man Scramble and  
Optional Skins Game.*

Golf includes:

- Golf
- Cart
- Driving Range
- Prizes
- On course beverages and food at the turn

*Please include check (on notes put what sponsorship you made) and make payable to:*

**ASHRAE Rochester Chapter**

and mail to:

**Attention: Mr. Joseph Pennise**

**R.P. Fedder Corporation**

**740 Driving Park Ave.**

**Rochester, New York 14613**

*Any questions, call Joe at (585) 288-1600 ext. 109*

*Email: joep@rpfedder.com*

Please fill out info so we can **correctly recognize you or your Company:**

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

**OR**

Individual Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: (Work) \_\_\_\_\_ (Home) \_\_\_\_\_

## Sponsorship Form

<b>Sponsorship Name</b>	<b>X here for your Sponsorship</b>	<b>Sponsorship Amt.</b>
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
<b>Total Check Amount:</b>		

Welcome to ASHRAE's Government Affairs Update. Along with the 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>).

Please 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](mailto:washdc@ashrae.org).

## ASHRAE Government Affairs Update, 03/21/08

- [Renewable Energy Continues Rapid Global Growth in 2007](#)
- [Funding Available for State Energy Programs](#)
- [Trends in ODS Emissions and Ozone Layer Recovery Open for Review](#)
- [Washington State Approves Bill Cutting Greenhouse Emissions](#)
- [EIA: New Energy Act to Yield More Renewable Energy by 2020](#)
- [EPA Establishes ODS Electronic Reporting](#)

### **Renewable Energy Continues Rapid Global Growth in 2007**

The global use of renewable energy sources continued its rapid growth in 2007, with 40 gigawatts of new renewable energy capacity added throughout the world, according to a new report. That capacity growth, which includes large hydropower, brings the world's renewable energy generating capacity to more than a thousand gigawatts. Excluding large hydropower, renewable generating capacity grew by 33 gigawatts to a total of 240 gigawatts, a 16% annual growth rate. At 95 gigawatts, wind power is the largest of the newer renewable energy sources, while grid-connected solar photovoltaic systems increased by 53%, reaching 7.8 gigawatts.

Among other renewable energy sources, ethanol production reached 12 billion gallons, biodiesel production exceeded 2 billion gallons, and there are now enough solar hot water systems to produce 128 gigawatts of thermal energy. The United States now leads the world in new wind capacity added each year and in annual ethanol production, and it also features the largest installed capacities for geothermal and biomass energy power plants. See the press release (<http://www.ren21.net/globalstatusreport/>) and report ([http://www.ren21.net/pdf/RE2007\\_Global\\_Status\\_Report.pdf](http://www.ren21.net/pdf/RE2007_Global_Status_Report.pdf)) from the Renewable Energy Policy Network for the 21st Century, or REN21.

While the REN21 report estimates last year's investments in renewable energy at \$71 billion, analysts at New Energy Finance have increased their estimate to \$148.4 billion, more than double the REN21 estimate and a significant increase from New Energy Finance's previous estimate of \$117.2 billion, which was released in January. The new figure includes transactions made near the end of the year but not disclosed until more recently, and it reflects a 60% increase over investments in 2006, according to New Energy Finance.

(continued on page 9)



## **Funding Available for State Energy Programs**

DOE's State Energy Program (SEP) provides grants to the states to design and carry out their renewable energy and energy efficiency programs in a way that makes the most sense for their resources and economies. For more information, see the SEP Web site and the SEP Strategic Plan at [http://www.eere.energy.gov/state\\_energy\\_program/pdfs/strategic\\_plan\\_0207.pdf](http://www.eere.energy.gov/state_energy_program/pdfs/strategic_plan_0207.pdf). DOE is seeking applications that support multi-state or regional advancements in the use of energy efficiency and renewable energy (EE/RE) technologies. SEP funds will accelerate market transformation for EE/RE technologies through such activities as the identification and dissemination of best practices, peer exchange, strategic planning, and technology specific training and evaluation. States may submit state specific applications for innovative projects that may be replicated by other states.

Partnering with other governmental and non-governmental organizations within the state is highly encouraged. The specific objectives are to: 1. Provide training and decision tools related to the use of EE/RE technologies, practices or policies through peer exchanges, workshops, or sponsorships/financing. 2. Develop multi-state or regional strategic plans for collaborative goals, policies and/or activities to increase the use of EE/RE technologies. 3. Develop and implement multi-state or regional activities that transform energy markets to accelerate the deployment of EE/RE technologies, products, and practices. 4. Increase stakeholder awareness and communication relating to best practices in market transformation policies and programs for EE/RE technologies, and technology specific deployment. Market transformation policies and programs include, but are not limited to: renewable portfolio standards, energy efficiency portfolio standards, renewable fuels standards, advanced energy efficiency codes and standards for buildings, appliances and equipment, tax incentives and performance contracting. 5. Develop training tools or systems for state officials and/or others on the evaluation and verification of state energy savings and carbon reductions using the best available models.

<http://www.grants.gov/search/search.do?&mode=VIEW&flag2006=true&opId=17154>

## **Trends in ODS Emissions and Ozone Layer Recovery Open for Review**

The National Oceanic and Atmospheric Administration published a notice to announce a 45-day public comment period for the draft report titled, U.S. Climate Change Science Program Synthesis and Assessment Product 2.4 "Trends in Emissions of Ozone Depleting Substances, Ozone Layer Recovery, and Implications for Ultraviolet Radiation Exposure." This draft report is being released solely for the purpose of pre-dissemination peer review under applicable information quality guidelines. After consideration of comments received on the draft report, a revised version along with the comments received will be published on the CCSP web site. Comments must be received by May 2, 2008.

The draft Synthesis and Assessment Product: 2.4 "Trends in Emissions of Ozone Depleting Substances, Ozone Layer Recovery, and Implications for Ultraviolet Radiation Exposure." is posted on the CCSP Web site at: <http://www.climate-science.gov/Library/sap/sap2-4/public-review-draft>.

The CCSP was established in 2002 to coordinate and integrate scientific research on global change and climate change sponsored by 13 participating departments and agencies of the U.S. Government. The CCSP is charged with preparing information resources that promote climate-related discussions and decisions, including scientific synthesis and assessment analyses that support evaluation of important policy issues.

(continued on page 10)



## **Washington State Approves Bill Cutting Greenhouse Emissions**

Washington Governor Chris Gregoire approved a climate change bill that will reduce the state's greenhouse gas emissions to half of its 1990 emission levels by 2050. The bill also includes interim limits of returning to 1990 emission levels by 2020 and reducing emissions to 25% below 1990 levels by 2035. The bill, House Bill 2815, leaves most of the details to the state's Department of Ecology, which has until December 1 to create a greenhouse gas reduction plan that achieves the bill's emissions targets. The department also has to develop a system for monitoring and reporting greenhouse gas emissions.

The bill acknowledges Washington's current commitment to the Western Climate Initiative, which has set a regional goal of reducing greenhouse gas emissions to 15% below 2005 levels by 2020, and the bill aims to take advantage of that initiative through participation in its regional market-based mechanism to reduce emissions. The initiative is currently planning to create a market-based mechanism, such as a cap-and-trade system, by August.

The bill acknowledges an important benefit of reducing greenhouse gas emissions: the likelihood of creating new "green" jobs in fields such as energy efficiency and renewable energy. The state estimates that it had 8,400 such "green economy" jobs in 2004, and the bill encourages the growth in that sector through a new green economy jobs growth initiative. The new initiative aims to expand the green economy sector to 25,000 jobs by 2020 through targeted financial incentives and comprehensive strategies to attract and expand industries and small businesses serving this sector. It will also include such measures as job training and curriculum development. The state has estimated that several of the recommended strategies for responding to climate change will have a net benefit to the state's economy of nearly \$1 billion by 2020. See the governor's press release (<http://www.governor.wa.gov/news/news-view.asp?pressRelease=817&newsType=1>) and the full text of the bill (<http://apps.leg.wa.gov/billinfo/summary.aspx?bill=2815>).

## **EIA: New Energy Act to Yield More Renewable Energy by 2020**

The U.S. outlook for the growth in renewable energy use by 2020 has improved considerably in just three months, thanks to the Energy Independence and Security Act of 2007, which President Bush signed into law in December. DOE's Energy Information Administration (EIA) is revising the early release of its Annual Energy Outlook to reflect the impact of the energy act, and the latest figures show renewable energy providing 13.7 quadrillion Btu (quads) of energy by 2030, up 12% from the 12.2 quads that EIA projected back in December. For comparison, the total U.S. energy use was 99.5 quads in 2006 and is expected to increase to 118 quads by 2030. That number is 5% lower than the EIA projected in December (123.8 quads), reflecting the impact of improved fuel economy standards and new product efficiency standards.

The new projections show biomass energy use increasing to 8.12 quads by 2030, nearly triple the biomass use in 2006 and a 47% increase over the December projections, reflecting significant growth in renewable fuels. But the projections for biomass power production are less optimistic, increasing by a factor of 7.5 by 2030, compared to a nine-fold increase in the December projections. The difference probably reflects the need to direct biomass towards fuel production, making less available for power production. Perhaps in compensation for that, the projections for geothermal power production are more optimistic in the revised analysis, showing it more than doubling by 2030, compared to only an 88.4% increase in the December projections. The other renewable electricity projections remain essentially the same. See the Tables A1, A16, and A17 from the EIA report (<http://www.eia.doe.gov/oiaf/aeo/pdf/appa.pdf>).

## **EPA Establishes ODS Electronic Reporting**

EPA is prepared to receive, in electronic form, certain documents required under the regulations at 40 CFR Part 82 for the Stratospheric Ozone Protection Program. EPA is launching an electronic reporting system that will allow producers, importers, and exporters of Class I ozone-depleting substances (except methyl bromide) and Class II ozone-depleting substances to submit quarterly reports electronically.

EPA believes that, for many users, electronic reporting will allow reporting to occur with greater ease, speed, and accuracy than the paper-based reporting systems.

Additional information, including the electronic reporting forms, training and guidance documents are found at <http://www.epa.gov/ozone/record/ereport.html>.



## ASHRAE Rochester Chapter 2008/2009 Election Ballot



As a member in good standing of the ASHRAE Rochester Chapter, you are invited to vote on the following candidates proposed by the 2008/2009 Nominating Committee for the positions of Chapter Officers and Board of Governors. Please vote for each position as listed. Write-in votes are also acceptable in the text field space provided.

**Please return the ballot by April 11, 2008 to:**

- 1) Email to: Phil Masters at [philm@rpfedder.com](mailto:philm@rpfedder.com)
- 2) Fax to: Phil Masters at (585) 288-2481

(Please check shaded box next to the individual's name or write in a name in the text field.)

### Chapter Officers

#### **President**

Joe Van Cura (Automatic succession, no vote required)

#### **President Elect**

Jeff Davis Write-in-vote

#### **Vice- President**

Jim Browe Write-in-vote

#### **Secretary**

Jeff Ellis Write-in-vote

#### **Treasurer**

Michelle Sommerman Write-in-vote

### Board of Governors

Gavin Brownlie (3rd year) Write-in-vote

Ed Burns (3<sup>rd</sup> year) Write-in-vote

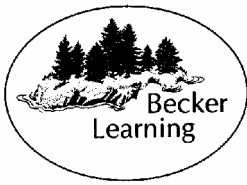
Robert Wind (2<sup>nd</sup> year) Write-in-vote

Trisha Jackson (2<sup>nd</sup> year) Write-in-vote

Jeffrey Close (1<sup>st</sup> year) Write-in-vote

Phil Masters (1<sup>st</sup> year) Write-in-vote

***Election results will be announced at the April 16<sup>th</sup> Chapter Meeting at Bathtub Billy's.***



Your technical training provider presents

# Air Conditioning Fundamentals 2008

**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.

## Comments from past attendees:

**“Practical, helpful, essential information** provided in a friendly and enthusiastic manner.”  
Bill Bishop, Mechanical Designer - Rochester, NY

“Joe really knows the details and step by step ways to teach a hard topic to understand.

**The best training I have had.** Joe is a great teacher.”  
Thomas Price - Estimator/Project Manager - Philadelphia, PA

“Joe has an effective teaching style that delivers a lot of technical information in an amount of time in a way that **everyone in the classroom can easily comprehend and understand to use in their field.**”

Andrew Davin - Mechanical Designer - Rochester, NY

“This was awesome! **Engineering made simple.** Joe Becker is one of the best!”  
Jamie Chudyke - HVAC Mechanic - Rochester, NY

## **2008 Course Offerings (Rochester, NY):** (all classes are 3-days; Tuesday – Thursday)

1. [ ] Apr 8-10 ‘**Energy Efficient Design Fundamentals**’ (Chilled Wtr, DX, VAV, Dehumidification)
2. [ ] Sep 9-11 ‘**Product Fundamentals**’ (Coil, AHU, FanCoils, UVs, WSHP, RTU, Chillers, Compressor Technologies)
3. [ ] Oct 7-9 ‘**Airside Fundamentals- I**’ (Load Design and Psychrometrics)
4. [ ] Nov 18-20 ‘**Airside Fundamentals- II**’ (Duct Design, Fans & Fan Laws, Acoustics and IAQ)

**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.

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

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

**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 after 6:00 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**

2008 Courses: 1.  Energy Eff. Design

(check all that apply) 2.  Product 3.  Airside-I 4.  Airside-II

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.

**The Rochester Section of the American Society of Mechanical Engineers (ASME  
with the support of the Rochester Chapters of ASHRAE and ASPE presents**

## **Insulation, the Forgotten Technology for Energy Conservation**

*In the Commercial, Industrial, HVAC & Mechanical Segments of the Construction Industry*

*How mechanical insulation can improve your business and benefit the economy and the environment.*

***April 22, 2008 at the Wishing Well Party House***

You may think you have heard this story before, but now you can get the “rest of the story.” Did you know that insulation is applied but rarely engineered? Did you know that it is estimated that between 10% & 30% of all installed mechanical insulation is damaged or missing? This presentation provides evidence as to the “Power of Insulation” in new construction, expansion and maintenance arenas when designed, installed and maintained properly, including an overview of some innovative initiatives and products - systems in the mechanical insulation industry – like nanotechnology and evolving web-based resources structured as a vertical portal to many aspects of the mechanical insulation industry.

*There has never been a more important time to think about insulation differently.*

**The Presentation will provide interactive  
discussion on a variety of subjects such as:**

- **Energy Conservation**
- **Process Control**
- **Moisture and Corrosion Under Insulation**
- **Reduction of Greenhouse Gas Emissions**
- **Work Place Environment – Improvements**
- **Sustainable Design Technology**
- **Life Safety**
- **Return on Investment Opportunities**

**Attendees will receive:**

- **A comprehensive Energy Management Software Program**
- **A list of available resources**
- **A subscription to the insulation industry premier publication, “Outlook”**
- **Professional Development Hours (PDH’s) may be available with the presentation**

### **Ron King**

His 40 year tenure in the industry has provided him with insight and practical knowledge in the fragmented insulation and construction industry. He recently retired as the Chairman, President and CEO of one of the nation’s largest diverse insulation and specialty distributors. He is a past President of the National Insulation Association (NIA), the Southwest Insulation Contractors Association and the World Insulation and Acoustic Organization. He has been honored with the “President’s Award” on three different occasions from two associations. He currently is a consultant to the National Insulation Association (NIA).

This is a dinner meeting at the Wishing Well Party House.  
1190 Chili Avenue  
Rochester, NY 14624  
585 328-4160

### Agenda

5:30 p.m. Registration  
6:00 p.m. Dinner  
7:00 p.m. Presentation by Ron King

The cost of this program is \$20. Please register by April 17, 2008.

To register, and for additional information, please visit the Rochester ASME website:

[http://sections.asme.org/rochesterny/2007\\_April\\_22.html](http://sections.asme.org/rochesterny/2007_April_22.html)

## *Design Engineers Take Notice!*

**Commercial Design Training Seminars:**  
Open Loop, Closed Loop & Standing Column Well

Boston, MA  
April 21-23

**Learn more and register at:**  
**<http://www.heatspring.com/design.html>**

## IAQ Discussion Board is Live

The spring 2008 membership ballot will include a series of five questions from the ASHRAE Board of Directors regarding Indoor Air Quality (IAQ) standards. An online discussion board is now available and you are encouraged to submit comments now!

The five IAQ ballot questions were first distributed to members at the plenary session of the ASHRAE January 2008 winter meeting in New York City. Here's some background. Following submission of a petition by a sufficient number of members, the ASHRAE membership voted to approve a policy statement related to ASHRAE indoor air quality or ventilation standards. Since approval of that petition in June 1999, it has become apparent that the policy may not have resolved the underlying concerns that led to its approval, and in fact has resulted in conflict and confusion regarding its interpretation. As a consequence, the Board of Directors has determined that we need to ask the members of ASHRAE to clarify their intent with respect to a number of issues related to the petition and the development of ASHRAE standards.

These new questions being posed to the membership have been very carefully worded to avoid any conflict with well-established ANSI requirements that the consensus body developing a standard (referred to as the Project Committee within ASHRAE) is responsible for determining the content of that standard. It would in fact violate ANSI requirements for the Board of Directors, or the membership through a vote such as this, to dictate the contents of a standard to the Project Committee. Of course, the Board, the membership and the public at large have ample opportunity to impact the content of a standard through the public review process, but ultimately it is the Project Committee that must determine the content.

I encourage you to voice your opinion! A prominent link now appears on the ASHRAE web site home page (<http://www.ashrae.org/>) to the discussion board. You need to log-in to the ASHRAE web site to participate in the discussion board.

Make your feelings known! Post your comments and encourage your ASHRAE member colleagues to do the same.

# 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 Wal-

ter (585.486.2148) or by email [cmwalter@trane.com](mailto:cmwalter@trane.com)

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



## LABELLA

Associates, P.C.

LaBella Associates, P.C. is a fast growing engineering, architecture, planning and environmental consulting firm with three office locations in New York State. We are a multi-disciplined firm dedicated to client satisfaction through teamwork, respect, and trust.

**We are currently looking to fill the following positions in our Rochester, NY office:**

**Mechanical Engineer: Junior Level (EIT):** Bachelor's degree in Mechanical Engineering with a focus in HVAC. Will work with Senior Engineers to develop project designs, drawings and specifications. Will grow into working more independently on projects with in house training and mentoring programs. AutoCad experience required. Prior experience working at an A/E consulting firm desired.

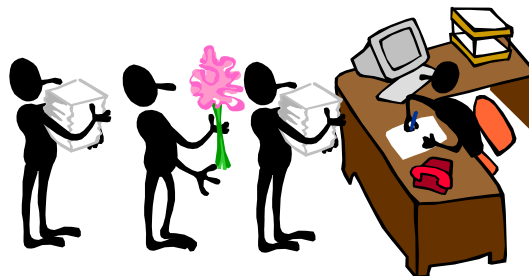
**Mechanical Engineer: Mid-Level (PE):** Bachelor's degree in Mechanical Engineering with a focus in HVAC and Energy Projects. Will work independently and with other Engineers as part of a Project Team to develop concepts, strategies, designs, drawings, specifications and reports. Will be part of the project brainstorming, peer review, and QA/QC processes. AutoCad experience required. Minimum of five years of experience working at an A/E consulting firm preferred.

If you are interested in any of these positions, please e-mail cover letter and resume to [hr@labellapc.com](mailto:hr@labellapc.com). For additional information about our firm, please visit our website at [www.labellapc.com](http://www.labellapc.com)

## 2007-2008 Presidential Award of Excellence Summary

Chapter #	Chapter Name	Chapter Members / Students	Member Promotion	Student Activities	Research Promotion	Chapter Technology Transfer	History	Chapter Operations	Chapter PAOE Totals
11	Rochester	218 /13	50	100	810	360	225	200	1745

*Administrative  
Professional's Day  
Wednesday, April 23*







Please apply on-line at:  
[https://sjobs.brassring.com/1033/asp/tg/cim\\_jobdetail.asp?partnerid=194&siteid=80&AReq=4732BR](https://sjobs.brassring.com/1033/asp/tg/cim_jobdetail.asp?partnerid=194&siteid=80&AReq=4732BR)

**AutoReqId** 4732BR

**Common Job Title** HVAC/Plant Operations Technician

**Primary Work Location** NY, Webster

**Employee Classification:** Regular Full-Time

**Job Description**

• At **Xerox**, where business runs on fresh ideas, staying on the crest of digital technology demands originality, creativity, and ingenuity. That's why Xerox recruits exceptional people, whose professional talents are fueled by imagination. We've created a workplace where inventiveness flourishes, where employees are encouraged to express their vision, their ideas, and their leadership. Our products and technology represent the leading edge of the industry. They integrate technology, the web, business process, and the way people work in order to deliver to our customers the best document solutions. **Position Summary:** This position in the Xerox Site & Facilities Services group is for a technician in the HVAC/R field. The person will work with an Engineer to perform all varieties of work within the HVAC/R trade, such as preventive maintenance, corrective maintenance and minor project work. The equipment serviced ranges from commercial to industrial in size and complexity and includes hot water and steam boilers, condensate returns, chillers and cooling towers, compressors (air and refrigeration), air handlers, Direct Digital Control, reverse osmosis and deionizers, water treatment, etc.

**Responsibilities:**

The successful candidate would be expected to work with the Engineer to perform all duties as required to maintain the equipment.

Some heavy lifting and working in sometimes awkward positions may be required.

- Some field experience field helpful, but not required.
- Work Schedule: Straight days but candidates must be flexible to work rotating shifts in the future.

Assisting Maintenance and Senior Maintenance Engineers with work assignments and supporting Watch Engineers as required.

**Requirements:**

- The position requires, at minimum, an two year (AS or AAS) or certificate in HVAC/R from an accredited institution.

- Computer literacy: Microsoft XP and Office products.

The successful candidate will be expected to become a member of the International Union of Operating Engineers IUOE Local 832s and, over time, to obtain a Universal Refrigerant license and a City of Rochester Steam-3 license.

**Drawing on diversity of a global workforce and offering an equal opportunity to achieve success. EOE M/F/D/V.**



## ASHRAE and USGBC Cosponsor Washington Fellowship

*Applicant to work in government advisory role: ASHRAE and USGBC Cosponsor Washington Fellowship*

**ATLANTA** – The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the U.S. Green Building Council (USGBC) have joined forces to sponsor a one-year fellowship in Washington, D.C., that will allow the participant to work in the federal government in a technical advisory role. Members of ASHRAE or USGBC may apply.

Possible placement areas include Congress, a federal agency such as the Department of Energy, Environmental Protection Agency or the General Services Administration, or the White House Office of Science and Technology Policy.

“Federal government fellowships provide a valuable public service to the nation while at the same time providing

engineers and scientists with a unique opportunity to participate directly in the policy-making process,” says Doug Read, ASHRAE program director of government affairs. “This is an exciting, rewarding, and educational period in their professional careers. This enriching experience enables fellows to bring back to their employers an insider’s perspective on government decision making that can contribute significantly to the mission and vision of the organization.”

“The fellowship is designed to educate participants on the inner workings of federal policy-making,” said Jason Hartke, director of public policy, U.S. Green Building Council. “The fellowship is an opportunity to provide scientific guidance and analysis to decision-makers, and to increase the visibility and involvement of scientists and engineers in the public policy arena.”

The fellowship runs from September through August 2009, and an orientation

is conducted through the American Association for the Advancement of Science. A \$50,000 stipend will be provided to the selected fellow.

Candidates should possess a doctoral or other terminal degree in engineering or another building-related scientific discipline. Final placement of the selected fellow depends on the needs of the government offices and agencies at the time as well as on the skills and experience of the applicant.

The deadline for applications is May 1, 2008. ASHRAE or USGBC members interested in applying for the fellowship should contact Doug Read, ASHRAE program director of government affairs, at 202-833-1830 or [dread@ashrae.org](mailto:dread@ashrae.org).

### 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 its 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, Suite 300, Rochester, NY 14623 or email to [cmwalter@trane.com](mailto:cmwalter@trane.com)

### **Reminder**

**Go to [www.ashrae.org](http://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.**



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



TWIN TIERS CHAPTER ([www.ashraetwintierschapter.org](http://www.ashraetwintierschapter.org))  
Co-Sponsor: Broome Area Chapter of NYSSPE

## Back to the Basics and Beyond Annual Spring Symposium and Professional Development Seminar Tuesday April 15, 2008 Owego Treadway Inn, 1100 State Route 17C, Owego, New York

### ***EARN PROFESSIONAL DEVELOPMENT HOURS***

The ASHRAE Twin Tiers Chapter 2008 Spring Symposium provides a local opportunity to bring together practicing professionals, engineers, academics, contractors, owners and others to discuss with respected experts issues and challenges that our industry faces. This year's symposium theme, "Back to the Basics and Beyond," offers attendees opportunities to explore a wide range of engineering topics, focusing on HVAC&R applications. Sessions address ethical and legal issues, changing NYS codes, sustainability, energy modeling, and engineering education.

### **Schedule of Events**

8:00—8:30 a.m.      **Registration, Owego Treadway Inn Starfire/Terrace Foyer**  
includes coffee, muffins, fruit

8:30–10:00 a.m.

Starfire East

Starfire West

<i>"Carbon and Energy"</i> Gregory Thomas, Performance Systems Development	<i>"Dedicated Outdoor Air Systems"</i> James Miller and John L. DiMillo, NuClimate Air Quality Systems, Inc.
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10:00--10:20 a.m.      **Morning Break – Starfire/Terrace Foyer**

10:20—11:50 a.m.

Starfire East

Starfire West

<i>"Fundamentals of Building Energy Prediction and Simulation – An Overview of Methodologies and Techniques"</i> Chris Balbach, P.E. Performance Systems Development	<i>"Engineering Education for the 21<sup>st</sup> Century"</i> Gerry Vance, Alfred State College
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Noon-1:30 p.m.

**Lunch and Monthly Chapter Meeting, Terrace**  
**Senior Project Presentation by Alfred State ASHRAE Student Chapter**  
***Lunch is included with Symposium Registration!***

1:30–3:00 p.m.

Starfire East

Starfire West

<i>"Pump Fundamentals and the Basics of Pump Selection"</i> Steve Krisko, Frank P. Langley Co, Inc.	<i>"Changes to the NYS Energy Code 2008 Edition"</i> Joe Hill, RA and Michael Burnetter, P.E. NYS Division of Code Enforcement & Administration
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3:00--3:20 p.m.      **Afternoon Break – Starfire/Terrace Foyer**

3:20—4:50 p.m.

Starfire East

Starfire West

<i>"Variable Volume Pumping "</i> Steve Krisko, Frank P. Langley Co, Inc.	<i>"Alternative Dispute Resolution: What It Is, How To Win It"</i> Mark Diamond, Esq. Diamond and Diamond, LLC ASHRAE Distinguished Lecturer
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Please Note: The ASHRAE Twin Tiers Chapter reserves the right to change the schedule, speakers and presentations without notice.

## Presentation and Speaker Highlights

### Carbon and Energy: Reducing Carbon Footprint

Traditionally, engineers often weigh design decisions by evaluating the energy and capital cost impacts of multiple design variants. As concerns of Global Warming and a focus on reducing carbon emission of buildings gain traction, engineers will need to develop new skills to evaluate design alternatives based on a new paradigm - evaluating alternatives for cost effective carbon emissions reduction. These evaluations can become more complex and non-intuitive when coupled with available federal/state/local subsidies and incentives. This presentation will begin with a national overview of carbon intensities (state by state) and will then demonstrate a methodology using a NY building to evaluate the return on investment of several building improvements (including renewables) for maximizing CO<sub>2</sub> reduction per investment dollar. The presentation will conclude with discussion of carbon reduction alternatives of states with different federal and state incentives than NY.

*Greg Thomas, is the President of Performance Systems Development of NY, LLC (PSD), an Ithaca, NY based company focusing on developing, implementing and evaluating market transformation and market development programs that change the marketplace for energy and building services. PSD specializes in developing market infrastructure that allows contractors to improve the efficiency and live-ability of existing commercial and residential buildings. Their clients include public funding sources, private companies, and not-for-profits.*

### Fundamentals of Building Energy Prediction and Simulation – An Overview of Methodologies and Techniques

There is a growing interest in the HVAC/R field around using Energy Simulation Software for predicting the energy use of design alternatives. Several approaches, from simple EFLH (equivalent full load hours), bin methods, spreadsheet analysis, and full blown hourly energy simulation can be applied. Which is the best tool? This interactive presentation will discuss a process for selecting the appropriate energy modeling tool for the situation at hand. Examples of differing energy simulation tools used to answer differing energy analysis questions will be shared. The presentation will also address the fundamental differences between modeling the energy use of an existing building and modeling the energy use of a building to be constructed. The presentation will conclude with a discussion of the future of whole building energy simulation, how it may influence the HVAC/R industry as a whole.

*Chris Balbach, PE, CEM, LEED AP, is VP of R&D at Performance Systems Development of NY, LLC (PSD), an Ithaca, NY based company focusing on developing, implementing and evaluating market transformation and market development programs that change the marketplace for energy and building services. PSD specializes in developing market infrastructure that allows contractors to improve the efficiency and live-ability of existing commercial and residential buildings. Their clients include public funding sources, private companies and not for profits. An HVAC design engineer, with a passionate interest in Energy Simulations, Mr. Balbach has modeled the energy use of several hundred buildings.*

### Pump Fundamentals and the Basics of Pump Selection

Understanding the basic elements of pump curves will lead to pump selections that satisfy the design criteria and priorities of the project. Topics we will discuss include the relationship between the system curve and pump performance, design vs. actual system conditions, effects of viscosity on the pump curve and power and Parallel Pumping. Pump cavitation and NPSH requirements are extremely important issues to consider when selecting a pump. We will show how to calculate the NPSH available from the system in order to make an appropriate selection.

*Steve Krisko has been a sales engineer in the HVAC and Industrial Pump market for 18 years. Steve is employed with the Frank P. Langley Co., Inc. the manufacturer's representative for ITT Bell & Gossett. He holds a B.S. in Mechanical Engineering from the Watson School of Engineering at Binghamton University.*

### Variable Volume Pumping

Primary / Secondary piping has paved the way for several energy saving design techniques. We will cover the fundamentals of hydraulic decoupling, temperature mixing and "Low  $\Delta T$  Syndrome" in chilled water systems. The relative cost of pumping using various designs will be explored. For a given load profile, what is the cost of constant volume, variable volume-constant speed, parallel pumping, and variable speed pumping?

*Steve Krisko has been a sales engineer in the HVAC and Industrial Pump market for 18 years. Steve is employed with the Frank P. Langley Co., Inc. the manufacturer's representative for ITT Bell & Gossett. He holds a B.S. in Mechanical Engineering from the Watson School of Engineering at Binghamton University.*

### Dedicated Outdoor Air Systems

This presentation is an in-depth look at designing Dedicated Outdoor Air Systems (DOAS) and the use of induction air units in these systems. DOAS is the delivery of conditioned outdoor air to multiple spaces within a building. While not a new concept, DOAS systems are increasingly popular to reduce energy consumption. A dedicated outdoor air system uses a separate unit to condition all the outdoor air brought into the building for ventilation, and then delivers it either directly to each occupied space or to the individual local units serving those spaces. Induction units in each space maintain space temperature by treating just recirculated indoor air. Treating the outdoor air separately from recirculated return air makes it easy to verify sufficient ventilation airflow. Examples of applications will be given. The benefits of using DOAS in Green Building Design and to gain LEED points will be discussed. Also included will be a look at a new linear induction unit.

*James Miller started his engineering career in 1956 helping to establish the electric heating market for United Illuminating Co. in New Haven Connecticut. In 1967 he went to work for Bristol Instruments as a Digital Instruments Product Engineer where he gave support to a national sales force on application design. In 1970 Jim accepted a job from a mechanical design build firm in Binghamton, NY, and in nine years became Vice President of the successor firm of Lees & Miller. For 17 years Jim designed industrial, commercial, and institutional HVAC systems. Some of his highlights include designing and installing one of the first hot gas reheat systems for humidity control, applying clean room technology to food processing plants to control mold and bacteria, and designing successful ground source geothermal systems for educational facilities. From 1987-2003 Jim worked as the Senior Mechanical Engineer for several consulting engineering firms with the primary focus being the education market. In 2003 Jim developed the total integrated induced ventilation system and patented an overhead induction unit which is the key stone of this system. He joined forces with John DiMillo and Edward Campagna to form NuClimate Air Quality Systems to further develop, market, and manufacture Indoor Air Quality products and their use in commercial applications.*

### Engineering Education for the 21st Century

Gerry Vance will present an overview of Alfred State College of Technology that will concentrate on the Mechanical Engineering Technology Department. He will walk us through the different laboratory areas and the state of the art equipment that is used in conjunction with classroom instruction. The Mechanical Engineering Technology Building has recently undergone a \$10 million renovation which has greatly enhanced the laboratory and classroom spaces. Gerry will explain the hands-on approach to engineering education that Alfred State focuses on. Of utmost importance is how the Alfred State faculty teaches engineering theory in the classroom, then takes it a step further and reinforces the theory in the laboratory utilizing real equipment. Engineering Technology Education is highly applications oriented, and is a much needed approach to prepare the next generation of engineers.

*Gerald A. Vance is the Laboratory Instructor in the Mechanical Engineering Technology Department at Alfred State College of Technology, Alfred NY. Gerry is the ASHRAE Student Chapter Advisor and was awarded Advisor of the year 2003-2004. As Senior Project Advisor, he has received several ASHRAE Senior Project grants for his students. Gerry is a member of the New York State Engineering Technology Association, is ARI Chief Examiner for EPA Section 608 Certification, and has developed and conducted several HVAC&R training programs. Gerry has participated in several research projects with NYSERDA, including the Freeze Separation Project and the Annual Energy Storage Project.*

## Changes to the NYS Energy Code 2008 Edition

The New York State Department of State Division of Code Enforcement & Administration has updated the Energy Conservation Construction Code New York State - ECCCNYS- 2007. The Energy Code, along with the entire Uniform Code was updated January 1, 2008. The purpose of this presentation is to outline the code amendments, to highlight code provisions that will remain the same, and to provide any potential code errata that may be applicable to the code user. The latest enhancements are to provide a smoother path of compliance while knowing the basic conforming design is energy efficient and begin with a base for which sustainable, "green" building design and construction can take place, and could otherwise be called "**The Foundation of Sustainable Building Design.**" For an understanding of the Energy Code structure and some new requirements, a review of code compliance paths and key technical provisions will be presented to help open the doors to greater energy efficiency.

*Michael Burnetter, P.E. is a Senior Mechanical Engineer with the Energy Services Unit of the Division of Code Enforcement and Administration. Michael has decades of applied experience in the design, utilization and conservation of energy systems in large-scale commercial and residential facilities. His experience has involved extensive management and design oversight for such buildings and their associated energy, HVAC, and insulation systems. He has been employed with the State of New York since 1986. During this time, he has been consistently involved with the field of energy systems design and requisite codes. As of January 1999, the Department of State – Codes Division became responsible for the existing and any revised New York State Energy Codes, and since that point, Michael has been deeply involved with all Energy Code policy initiatives. He has been an active member of the New York Energy Conservation Construction Code Technical Subcommittee and was elected a member recently of the International Energy Conservation Code Development Committee for five consecutive years.*

*Joseph Hill, RA is the Assistant Director for Energy Services for the New York State Department of State Division of Code Enforcement & Administration. Joe has thirty years experience in the A/E field in both the Public and private sector. He has a wide diversity of professional design and design review experience in architectural, structural and HVAC systems spanning nearly three decades. Joe has been with the Department of State Codes Division Technical Services unit since 1999, through early 2007, and has taken the lead on many technical services initiatives. Joe has served on the Technical Subcommittee for the Residential Code of New York State (2004), and also as the Chair for the Energy*

*Conservation Construction Code of New York State (2007). Joe is quite active in the ICC code change proposal process. Joe is a registered architect and a certified code enforcement official. His range of experience and judgment is often called upon for matters dealing with administration and enforcement of the Uniform Code.*

## Alternative Dispute Resolution: What It Is, How To Win It

Alternative dispute resolution (ADR) includes dispute resolution processes and techniques that fall outside of the government judicial process. Despite historic resistance to ADR by both parties and their advocates, ADR has gained widespread acceptance among both the general public and the legal profession in recent years. In fact, some courts now require some parties to resort to ADR of some type, usually mediation, before permitting the parties' cases to be tried. The rising popularity of ADR can be explained by the increasing caseload of traditional courts, the perception that ADR imposes fewer costs than litigation, a preference for confidentiality, and the desire of some parties to have greater control over the selection of the individual or individuals who will decide their dispute. This presentation will address how ASHRAE members are affected by ADR. The benefits and drawbacks of ADR will be discussed, as well as the factors that determine whether a dispute gets mediated or arbitrated. The general rules of arbitration will be explained. Attendees will learn what to expect when a dispute is mediated or arbitrated, how to win your arbitration or obtain satisfactory resolution from mediation, the cost of mediation and arbitration and how to reduce it. A review of commonly seen arbitration and mediation clauses, and their pros and cons will be explained.

*Mark Diamond, Esq. is a principal in the Manhattan law firm of Diamond and Diamond LLC. His firm practices in the fields of real property and commercial law as well as criminal and personal injury litigation and appeals. He has served as a neutral commercial and construction arbitrator with the American Arbitration Association and International Centre for Dispute Resolution in New York for over fifteen years and as a mediator with the Alternative Dispute Resolution Center in New Britain for five years. He is co-author of the ASHRAE publication "The Design Build Handbook."*

## Back to the Basics and Beyond -- Tuesday, April 15, 2008

### ASHRAE Twin Tiers Chapter Annual Spring Symposium and Professional Development Seminar

**A maximum of six (6) Professional Development Hours (PDH) towards the New York State Professional Engineering continuing education requirement will be available to attendees for an additional \$50 fee.**

**EARLY PRE-PAID REGISTRATION DEADLINE: TUESDAY, APRIL 8, 2008**

**Send Pre-Paid Registration by Mail or Pay on-line at [www.ashraetwintierschapter.org](http://www.ashraetwintierschapter.org)**

**Symposium Registration Includes Morning Refreshments, Buffet Lunch and Afternoon Refreshments**

**PLEASE REGISTER EARLY!! – SPACE MAY BE LIMITED!**

#### ASHRAE, NYSSPE or ASCE Members

\$75 with pre-paid registration by April 8, 2008

\$100 at the door or after April 8, 2008

#### Non-Members

\$100 with paid pre-registration by April 8, 2008

\$125 at the door or after April 8, 2008

Name		Member – Early Pre-paid Registration	\$ 75
Company/Affiliation		Non-Member – Early Pre-paid Registration	\$100
Address		Member – After April 8, 2008	\$100
City/State/Zip		Non-Member – After April 8, 2008	\$125
Preferred Email		Please sign me up for PDH credit	\$ 50

Pre-paid registration must be postmarked by Tuesday, April 8, 2008 to receive the discount. Pay by credit card using PayPal (no account required) at our chapter website [www.ashraetwintierschapter.org](http://www.ashraetwintierschapter.org)

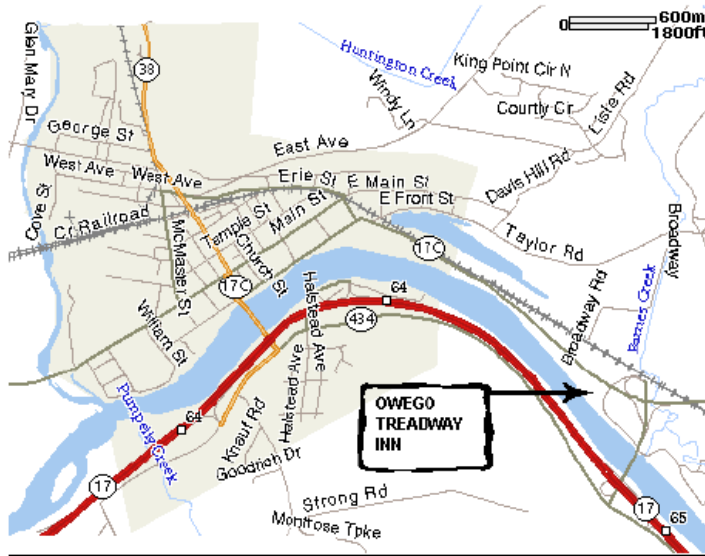
Or mail payment and registration to the following address. Make checks payable to "ASHRAE Twin Tiers Chapter". Please reply to: ASHRAE Twin Tiers Chapter, 2008 Spring Symposium, PO Box 6706, Ithaca, New York 14851-6706. Inquiries: Jason Gilbert (607-777-2240); Jay Green (607-755-9844)

# ASHRAE Twin Tiers Spring Symposium Back to the Basics and Beyond

April 15, 2008

## Hotel Reservations:

Please call the Owego Treadway Inn at (607) 687-4500 and identify yourself as part of the ASHRAE Twin Tiers 2008 Spring Symposium when making reservations.



**Driving Directions: (1100 State Route 17C, Owego, New York)**

**From the South (Binghamton):** Take Route 17 west to exit 65. Turn right at stop sign. Bear left at fork in the road, towards Route 17C west. At traffic light, turn right onto Route 17C west. Owego Treadway Inn and Suites is on the left.

**From the Northeast (Syracuse):** Take Route 81 south to Route 17 west. Then follow above directions.

**From the North (Ithaca):** Take Route 96 south to Owego, New York. Take Route 17C east for approximately 2 miles. Owego Treadway Inn and Suites is on the right.

**From the Northwest (Buffalo / Rochester):** Take Route 390 east to Route 17 east to exit 65. Turn right at the stop sign. Bear left at the fork in the road toward Route 17C west. At the traffic light, turn right onto Route 17C. Owego Treadway Inn and Suites is on the left.

**From the East (Albany):** Take Route 88 west to Binghamton to Route 17 west and then follow the directions from Binghamton (above).

ASHRAE Twin Tiers Chapter  
2008 Spring Symposium  
PO Box 6706  
Ithaca, NY 14851-6706



## Sustainable Business & Green Building Conference and Expo

April 29-30, 2008

Clarion Riverside Hotel  
Rochester, NY

**Building the Triple Bottom Line** is a two-day conference for building professionals and business leaders to explore the intricacies of green building practices and sustainable business operations. Green buildings and energy-efficient, sustainable business practices offer advantages over their traditional counterparts, a win-win-win situation known as the triple bottom line for **economic, environmental and social impacts**.

Hear from:

- **nationally recognized speakers** who will share innovative practices and lessons learned in implementing green
- vendors and others at a **two-day EXPO** featuring the latest green building products and services
- experienced **construction professionals** on implementing green projects
- state and local officials on **greening our communities**
- various **market sectors** — laboratories, schools, industry — about how green fits within their operations

### Who Should Attend?

- ✓ Architects, engineers, planners, contractors, property managers and other building industry professionals
- ✓ Business leaders and environmental professionals
- ✓ Elected officials and municipal engineers, planners and facilities managers
- ✓ Community-based organizations, educational institutions and advocates
- ✓ Developers, building owners, and area business people
- ✓ Others who want to learn more

### Why Should You Attend?

*This Conference gives you the edge you need to incorporate green, sustainable practices into your business.*

Hear from green building practitioners and business leaders who will share with you the opportunities for economic, environmental and social improvements associated with transforming business practices and our communities to energy-efficient and sustainable ones.

Learn about:

- available local and state incentives and resources
- financial benefits for green building
- what “sustainability” really means and how leading companies are incorporating it into their business practices
- green construction practices, methods and requirements
- case studies



The Rochester Green Business Network, a program of the Center for Environmental Information, is a network of businesses, institutions and organizations that share a mutual concern for the state of our environment. Our aim is to demonstrate that by integrating environmental criteria into decision-making, businesses can become more competitive — at the same time as doing what is right for the environment. *This brochure is printed on post-consumer recycled content paper.*



RGBN encourages you to travel green to the Conference. **Parking will be validated for those who carpool.** Ride share information is available at <http://rgbn.ridesshare.com/>  
Password: RGBN



# Sustainable Business & Green Building Conference and Expo

*Clarion Riverside Hotel Rochester, NY*

**How to Register:** You may register for the full two-day Triple Bottom Line Conference or for a single day. Full and Day 1 registrations include the Dinner with Keynote Speaker. Day 2 of the Conference runs concurrently with the LEED® NC training. If you plan to attend LEED® NC, register for Day 1 only of the Triple Bottom Line Conference using the registration form at right and register for LEED® NC at [www.usgbc.org/Workshops/Workshoplist.aspx](http://www.usgbc.org/Workshops/Workshoplist.aspx). Details about Conference sessions can be found at [www.rochesterTBLconference.org](http://www.rochesterTBLconference.org). Attendees should select one workshop during each timeslot. CEU credits are pending for some sessions.

## Day 1

Tuesday April 29, 2008

9:00 - 10:00 a.m.	Registration / Green Building Expo		
	Track 1	Track 2	Track 3
<b>Session A</b> 10:00 - 11:30 a.m.	<b>NYSERDA &amp; ESDC Programs &amp; Funding</b> Brian Platt, NYSERDA Amy Schock, Empire State Development	<b>DASNY: Greening NYS: What Are the Roles, Rigors &amp; Rewards?</b> Jodi Smits Anderson, AIA, LEED® AP	<b>What Does Sustainability Really Mean?</b> Tracie Hall, Exec. Dir. USGBC NY Upstate Nancy Jendryaszek, AIA, LEED® AP
11:30 a.m. - 12 noon	Networking / Green Building Expo		
12 noon - 1:30 p.m.	Luncheon/Speakers: Monroe County Executive Maggie Brooks and City of Rochester Mayor Robert Duffy		
<b>Session B</b> 1:30 - 3:00 p.m.	<b>Incorporating Sustainability Into your Business</b> Nixon Peabody, Wegmans, Xerox	<b>Local Municipal Green Initiatives</b> Monroe County, City of Rochester, Brighton & Irondequoit	<b>Greenwashing</b> Diane Brandli, ASID, CID, LEED® AP
3:00 - 3:30 p.m.	Networking / Green Building Expo		
<b>Session C</b> 3:30 - 5:00 p.m.	<b>Golisano Institute for Sustainability</b> Nabil Nasr, Director	<b>Green Issues in Real Estate</b> Enterprise, Haley & Aldrich, Flower City Management	<b>Green Schools</b> Rochester City School District, NYSERDA & Others
6 p.m.	Reception / Expo / Dinner      Keynote Speaker Ed Piñero, Director Pollution Prevention Center, Golisano Institute for Sustainability (GIS), Rochester Institute of Technology		


## Day 2

Wednesday April 30, 2008

8:00 - 8:30 a.m.	Registration / Green Building Expo / Breakfast		
	Track 1	Track 2	Track 3
<b>Session D</b> 8:30 - 10:00 a.m.	<b>Contractor Green Training Session 1</b>	<b>Energy Modeling &amp; Integrated Design</b> Lynn G. Bellenger, PE, LEED® AP	<b>Construction Waste Management</b> Buffalo Reuse, Eastman Kodak Company
10:00 - 10:30 a.m.	Networking / Green Building Expo		
<b>Session E</b> 10:30 - 12 noon	<b>Contractor Green Training Session 1 (Continued)</b>	<b>High Performance Laboratories</b>	<b>The Value of Commissioning Your Building</b>
12 noon - 1 p.m.	Lunch and Green Building Expo		
<b>Session F</b> 1:00 - 2:30 p.m.	<b>Contractor Green Training Session 2</b>	<b>Lighting for Sustainability</b>	<b>Stormwater Management Strategies for Saving Energy &amp; Water</b> Ram Shrivastava, PE, LEED® AP
2:30 - 3:00 p.m.	Networking & Green Building Expo		
<b>Session G</b> 3:00 - 4:30 p.m.	<b>Contractor Green Training Session 2 (Continued)</b>	<b>Green Case Studies</b>	<b>Green Case Studies</b>

## Day 2

Wednesday April 30, 2008

8:30 a.m. - 5:00 p.m.	 <b>New York Upstate Chapter</b> greenupstatenyc.org	<b>U.S. Green Building Council LEED® for New Construction v2.2 Technical Review Workshop (7.0 CEUs)</b> To register for this training you must register through : <a href="http://www.usgbc.org/Workshops/Workshoplist.aspx">www.usgbc.org/Workshops/Workshoplist.aspx</a>
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**KEYNOTE SPEAKER**



**Edwin Piñero** is the Director of the Pollution Prevention Center, Golisano Institute for Sustainability (GIS), Rochester Institute of Technology. The P2 Center provides cutting edge technology research and devel-

opment and assistance with sustainable practices for industry. Prior to coming to GIS, Piñero served in the Bush White House as the Federal Environmental Executive, where his responsibility was to promote sustainable environmental stewardship throughout the federal government. Prior to this appointment, Piñero was the President of Piñero Consulting, specializing in environmental management and environmental performance services. From 1998 to 2001, he was the Director for the Bureau of Environmental Sustainability for the Pennsylvania Department of Environmental Protection, as well as the State Energy Director. Piñero has taught environmental courses as an adjunct professor at Duquesne University. He has his Bachelor's Degree in Geology from the State University of New York at Brockport, and his Master's Degree in Geology from Texas A&M University.

**Conference Supports ACES Rochester Habitat for Humanity House**



Architects Collaborating with Engineers for Shelter (ACES) has

begun fundraising for their second Flower City Habitat for Humanity House. This house will be designed to achieve LEED® Gold certification. A raffle featuring amazing golf prizes is underway. Tickets will be sold for \$20 each on Day 1 of the TBL Conference. The prizewinners will be drawn at the Dinner/Keynote event of the TBL conference.

**LOCATION**

**Clarion Riverside Hotel**  
120 Main Street East Rochester, NY 14604  
TEL: (585) 546-6400 FAX: (585) 546-3908

**Reservations:**

[www.clarionhotel.com/ires/en-US/html/HotelInfo?hotel=NY241/](http://www.clarionhotel.com/ires/en-US/html/HotelInfo?hotel=NY241/)



**Sustainable Business & Green Building Conference and Expo**

**REGISTRATION**

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Name(s) of Attendee(s): \_\_\_\_\_

Conference registration includes meals, breaks, and admission to the Green Expo. Registration for the Conference and LEED® NC workshop are conducted separately. TBL Conference registration DOES NOT include LEED® NC. Complete and return this registration form. Please register for your desired attendance as follows:

- Full TBL Conference with Keynote Dinner (\$200)**
- TBL Day 1 with Keynote Dinner (\$150)**
- TBL Day 2 Conference Only (\$100)**
- Only Keynote Dinner (\$60)**

*Please register for your Day 1 and/or Day 2 sessions by checking a session for each track.*

DAY 1	Track 1	Track 2	Track 3
Session A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Session B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Session C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DAY 2	Track 1	Track 2	Track 3
Session D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Session E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Session F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Session G	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Session and speaker details available on the conference website.*

**Green Building Expo:** Vendors registration forms available at [www.rochesterTBLconference.org](http://www.rochesterTBLconference.org) or call (585) 262-2870.

**Sponsorship opportunities are also available.**

For details, please visit [www.rochesterTBLconference.org](http://www.rochesterTBLconference.org) or call (585) 262-2870.

Total enclosed: \$ \_\_\_\_\_

Checks payable to **Center for Environmental Information.**

**Mail to:** Center for Environmental Information  
55 St. Paul St., Rochester, NY 14604

# Sponsors



Sponsorship of this Conference is a terrific way for your company to show support for sustainable building design and business practices, and an effective way to reach a wide range of design professionals, business leaders and decision makers. Several different sponsorship levels are still available. For more information visit [www.rochesterTBLconference.org](http://www.rochesterTBLconference.org)

For more information about the Triple Bottom Line Conference, sponsorship or the Expo, visit [rochesterTBLconference.org](http://rochesterTBLconference.org)



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