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Time:

Cost:

Presenter:

ARCH

March ASHRAE Meeting Monday, March 9, 2009

Location: Mario's via Abruzzi, Monroe Ave, Rochester 12:00-2:00 PM Lunch Program \$25.00

Tom Lawrence, PE, LEED-AP



Using the updated ASHRAE Standard 90.1

We are honored to host Dr. Thomas Lawrence, an ASHRAE Distinguished Lecturer for a discussion on ASHRAE Standard 189.1, Standard for High Performance Green Buildings. Dr. Lawrence has over 25 years of experience in the engineering and energy related fields. He is chair of ASHRAE TC 2.8 "Building Environmental Impact and Sustainability." Sustainability in building design has risen to the forefront of the collective conscience of today's designers, so please join us for this very important topic.

Please RSVP by noon Thursday, March 5th to Rob Wind, Phone: 585-341-3172 or rwind@ibceng.com

Dr. Tom Lawrence, P.E. and LEED-AP: Dr. Lawrence is a Public Service Associate with the University of Georgia, and has over 25 years of professional experience in engineering and environmentally related fields. Before going back for his Ph.D. in Mechanical Engineering at Purdue, he spent approximately 20 of those years in progressively more responsible engineering and management positions in industry and consulting. He is the chair of ASHRAE Technical Committee 2.8, "Building Environmental Impact and Sustainability", and is a member of the committee writing an ASHRAE standard on high-performance green buildings (Standard 189.1).

Dr. Lawrence has presented papers on building energy usage and indoor air quality at conferences in the U.S. and Europe, and has published papers on sustainable design and energy usage in buildings in journals such as ASHRAE Journal, Solar Today, and Buildings and Environment. As an ASHRAE Distinguished Lecturer, he has given presentations and workshops on green building design at venues around the world. At the University of Georgia, Dr. Lawrence teaches or has taught courses in Building Environmental Control, Green Building Design, Industrial Ventilation, Residential Building Design, Heat Transfer and Thermodynamics, and in these courses he works to bring in sustainable design concepts practices. As part of the Engineering Outreach program, he is helping to coordinate building energy reduction activities within the state university system. Dr. Lawrence is also a consultant to Commissioning and Green Building Solutions in the Atlanta, Georgia area. He is an active volunteer with Habitat for Humanity, currently serving as President of the board of directors for the Athens, Georgia chapter while working to introduce sustainable design practices in the houses built there.

Dr. Lawrence has a B.S. with Highest Distinction honors in Environmental Science from Purdue University (1978), a M.S. in Mechanical Engineering from Oregon State University (1982) and a second M.S. degree in Engineering Management from Washington University earned in 1989. He received a Ph.D. in Mechanical Engineering from Purdue University in the spring of 2004 researching the impacts of demand-controlled ventilation on energy consumption and indoor air quality in smaller commercial buildings. Dr. Lawrence is a member of the American Society of Heating, Refrigeration and Air Conditioning Engineers; the American Society for Engineering Education and is a Phi Beta Kappa.

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ASHRAE 2008/2009 MEETING SCHEDULE

DATE	EVENT	LOCATION	SCHEDULE
3/9/2009 Resource Promotion	Sustainable Design and the use of Standard 189 Thomas Lawrence, PhD, PE, LEED AP—ASHRAE DL Tech Session—Applications for custom air handlers	Mario's	12:00-2:00 PM Lunch
4/13/2009	Refrigeration Tour	To be determined	5:30 Dinner 7:00 Tour
4/22/2009	ASHRAE Satellite Broadcast Indoor Air Quality	Bathtub Billy's	12:00-1:00 Lunch 1:00-4:00 Broadcast
5/19/2009	Annual ASHRAE Golf Outing and Picnic	Ravenwood Golf Club	8:00 AM Golf 2:00 PM Picnic 6:45 PM Dinner

2008-2009 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	240 /26	0	0	400	0	100	60	560

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

President's Message by: Joseph Van Cura



Once again, I would like to extend greetings to all members and friends of ASH-RAE.

February is now behind us and I am sure we are all looking forward to greeting the warm weather.

Our February activities were outstanding with a very successful Valentine Dance. Jody and Matt McGarry once again did a wonderful job.

The engineering community had the opportunity to display some of the outstanding local projects. The Hyatt provided a wonderful meal, while 100 plus ASHRAE members danced to an outstanding band.

Thank you, to all who attended.

February's dinner meeting held at the Wishing Well Party House also proved to be a success with over 50 members attending a presentation on using the updated ASHRAE 90.1 standard.

Mr. Mick Schwedler PE, manager of applications engineering for the Trane

company addressed the group. We were fortunate to have Mick as he is the chair of SSPC 90.1 responsible for ASHRAE/ IESNA 90.1

Mick did a fine job condensing a very lengthy standard as well as fielding a large volume of questions from the attending engineering community.

Jeff Davis, our President Elect and program chairman, also deserves KUDO's for obtaining 1 profession development hour for the engineering community in attendance. Thank you Jeff.

I would like to thank the ASHRAE Board of Governors for all their support and the membership for their increased attendance this year. ASHRAE is always looking for people to assist with the planning of yearly events. If you have any interest in getting involved please e-mail me at jvc@rpfedder.com.

Joseph Van Cura, 2008-2009 President

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ASHRAE History Article

Rochester, NY - A Historic Leader in District Heating

It was June of 1934 and the state of America's economy was at an all-time low. Nevertheless, there was something to be proud of about Rochester, NY, as RG&E hosted the 25th annual convention of the National District Heating Assn. at the Sagamore Hotel, 111 East Ave. Rochester's central station steam system, only the third one ever constructed, was now the sixth largest in the World. It burned 100,000 tons of coal per year, producing 1,200,000.000 lbs of steam to serve its 300+ industrial. municipal, commercial and residential customers.

Over the years, the system, begun in 1899, had systematically eliminated chimneys & smokestacks, curb-side ash barrels, air-borne soot and much unsightly residue from Rochester's urban environment. By applying developing technologies in transmission piping, insulation and steam control. an early system with as many as seven steam plants, scattered around the central city area, could now be served by just three steam plants. In 1934, the newest plant, Station #8, on Lawn St. between Broadway & Chestnut St., burned powdered coal, in the most efficient boilers of the time.

Curiously enough, the concept of central station steam systems had been developed in nearby Lockport, NY, in 1876. The inventor was Birdseye Holley, an engineer whose plan for that city was to bring steam to the fire hydrants in order to simultaneously power the steampowered fire engines and to deliver water for quenching the fires. The experiment was a success, and soon led to the idea of generating steam, not so much for powering fire engines, but rather for heating buildings. Holley's name appears on the Rochester fire hydrant water system, as well as many other municipal boiler/ water pumping systems across America.

As the result of his work, Lockport, NY became the home of the Holley Steam Combination Company, Ltd. In 1877, it became the first US city to have a central steam system, providing service to churches, homes and public buildings. The company soon expanded and began the manufacture of steam heating equipment. It's successor, American District Steam Co., eventually established a large manufacturing facility in Tonawanda, NY.

Meanwhile, investors in New York City recognized the potential this concept offered for reducing pollution in that large city. Soon, the New York Steam Corporation was formed, becoming the largest of its kind in the World. Architects began planning their buildings without boiler rooms and smokestacks. Even buildings, previously constructed with smokestacks, began to dismantle them in favor of this new, cleaner system of central heating. Customers of this system now include Rockefeller Center, Empire State Building, Chrysler Building and Grand Central Terminal, and many others.

In Rochester, NY, the system grew to the point that a hospital Genesee), a community auditorium/theater (Shrine Auditorium), government centers (Civic Center Plaza), numerous small industries and commercial businesses all became customers of this safer and more efficient method of providing space heating and power within a city. Eventually, the Rochester Gas & Electric Corp. central station steam system, in the 26th largest American city, provided service to the largest group of industrial customers of any steam system in the World.

Today, the Rochester District Heating Cooperative, successor to the former RG&E system, still serves a small but loyal group of steam customers, from the original Lawn St. Station, now converted to natural gas.

Lee Loomis, 2008-2009 Chapter Historian



Nominating Committee

The potential candidates for BOG changes next year, have been discussed at the February board meeting and we will present the following candidates names at the March meeting for future electronic ballotting:

- Treasurer-Rob Wind
- BOG 1st year- William Murray & Tim DuPrey
- BOG and attendance chair-Ed Burns

Nominations can come from the floor at the March meeting. An electronic ballot will go out in April and the new officers will be installed at the picnic.



Student Activities Student ctivities The students at RIT are still looking for (2) 12" x 12" dampers with hand quadrants and some round diffusers. If you have some you would like to donate to the duct lab project, please contact me. We are also looking for ASHRAE Fundamentals volumes, any year except 2005. If you have some to donate (yes, older ones are needed too!) contact me. arodgers@pathfinderengineers.com TEL (585)218-0730, Ext. 108 Al Rodgers, 2008-2009 Student Activities Chair **Attention Members:** Just a reminder that all members that reserve a spot for the monthly meeting will be responsible for that reserved space. Members have until 12:00 pm the day of the RSVP deadline to cancel their meeting reservation. Failure to comply with this rule will result in the attendee being responsible for the payment of that reservation. **ASHRAE** Rochester Chapter Officers





A special thank-you to our corporate sponsors for supporting the 52nd Annual ASHRAE Valentine's Dinner Dance which was held on February 6, 2009 at the Downtown Hyatt!

American Metal Products ABR Wholesalers, Inc Crosby-Brownlie Day Automation Systems, Inc. R. P. Fedder Corporation Gray Metal Products Isaac Heating & Air Conditioning LaBella Associates, PC M/E Engineering, PC Mech Tech HVAC, Inc Monroe Piping & Sheet Metal, LLC Pathfinder Engineers R. F. Peck Co., Inc V. J. Stanley

























Your technical training provider presents

Air Conditioning Fundamentals 2009

<u>Target Audience</u>: 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 boost ed their overall confidence and found many ways to apply their recently acquired knowledge.

2009 Course Offering (Rochester, NY): (This class is 3-days; Tuesday – Thursday)

- 1. [] Feb 10-12 'Refrigeration Fundamentals' (Refrig Basics, Refrig Piping, Refrig & Our Environment)
- 2. [] Mar 10-12 'Energy Efficient Design Fundamentals' (Chilled Wtr, DX, VAV, Dehumidification)
- 3. [] Apr 14-16 'Product Fundamentals- I' (a brief 1-2 hour summary of the top 12-15 products in HVAC)
- 4. [] May 12-14 'Product Fundamentals- II' (more in-depth look at AHU, WSHP, RTU, Compressor Technologies)
- 5. [] Jun 9-11 'Airside Fundamentals- I' (Load Design and Psychrometrics)
- 6. [] Jul 14-16 'Airside Fundamentals- II' (Duct Design, Fans & Fan Laws, Acoustics and IAQ)
- 7. [] Aug 11-13 'Systems Fundamentals' (HVAC Systems, Ice Storage, Heat Recovery, etc...)

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: BeckerLearning@yahoo.com

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

<u>Registration</u>: 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

2009 Courses:	1. [] Refrigeration 2. [] Ene	rgy Eff. Design	3. [] Product-I	4. [] Product-II
(check all that apply)	5. [] Airside-I	6. [] Airside-II Title:	7. [] Systems	s Fundamentals
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. Since graduating from GTP's class of 83-II, he worked as a Systems Engineer in C.D.S., Marketing Engineer in the Variable Air Volume Product Group, Manager of Technical Training in GTP, Sales Engineer, Sales Manager in Rochester/Syracuse & ISL for NE Territory.

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

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 (<u>http://www.ashrae.org/advocacy</u>).

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 <u>washdc@ashrae.org</u>.

ASHRAE Government Affairs Update, 2/20/09

- Tennessee: Renewable Energy and Energy Efficiency Creates Jobs
- <u>Michigan Governor Pushes Fossil Fuel Use Cuts</u>
- President Obama Orders Swift Action on Appliance Efficiency Standards
- DOE Awards \$40 Million for Industrial Use of Alternative Fuels, CHP
- U.S. Wind Power Capacity Takes Top Spot due to Rapid Growth
- DOE and ASHRAE Establish Washington Fellowship

Tennessee: Renewable Energy and Energy Efficiency Creates Jobs

The State of Tennessee released a report that says the state could reduce its unemployment rate, reduce manufacturing job losses, and increase income growth by investing in energy efficiency and renewable energy.

The report *Growing Green: The Potential for Green Job Growth in Tennessee* was prepared by the Research and Statistics Unit of the state's Department of Labor and Workforce Development's Employment Security Division and submitted to the Governor's Task Force on Energy Policy.

Five energy efficiency and renewable energy sectors within the state were analyzed in the report: "green" building, biofuels, wind, solar, and geothermal energy. In those sectors, the report identified 162 occupations representing employment potential in Tennessee.

Many of the potential gains would be in the same categories of jobs people work in today. For example, construction and modification of green buildings requires electricians, roofers and carpenters. Expansion in biofuels requires chemical engineers, agricultural equipment operators and truck drivers. Construction of wind energy sources requires tool and die makers, metal fabricators, and industrial production managers, among many others.

The report states:

- By spending \$1.9 billion to expand energy efficiency and renewable energy production over two years, Tennessee could create about 45,000 new jobs.
- By accelerating its investment effort, the state could gain more than 4,200 full-time jobs in wind and nearly 400 in solar components manufacturing by 2015.
- Among the 162 occupations related to green jobs in Tennessee, 75 percent do not require a college education.

For more information, read the full report. (<u>http://www.state.tn.us/labor-wfd/Publications/EmploymentSecurity/</u> <u>GrowingGreenInTN2008.pdf</u>).

Michigan Governor Pushes Fossil Fuel Use Cuts

In her State of the State speech, Michigan Governor Jennifer Granholm set a goal of reducing the state's reliance on fossil fuels for generating electricity by 45 percent by 2020. Reaching that goal, she said, will require more growth in the state's renewable energy and energy efficiency industries, which will create more jobs. She also praised the economic benefits that those industries have already brought to Michigan.

Granholm said the state could reach the "45-by-20" goal and gain jobs by "spending our energy dollars" on Michigan-produced wind turbines, solar panels, and energy efficiency devices, instead of spending nearly \$2 billion per year importing coal or natural gas from other states.



Governmental Affairs Update (continued)

In October 2008, Michigan enacted a renewable energy standard, requiring the state's investor-owned utilities, alternative retail suppliers, electric cooperatives, and municipal electric utilities to generate 10% of their retail electricity sales from renewable energy resources by 2015. Since then, Granholm said, four wind manufacturers announced expansions or new plants and three solar panel facilities or major expansions are planned.

To help reach the 45-by-20 goal, Granholm said she would:

- Ask the legislature to make Michigan the first state in the nation to allow every homeowner and business to make money by installing wind turbines and solar panels on their property and then selling the energy back to their utilities. Such legislation, she said, would create a new market for large and small wind turbines and solar panels made in the state.
- Ask the Public Service Commission to change how rates are set, so that utilities make money by helping customers conserve energy.
- Create a Michigan Energy Corps to put unemployed people back to work weatherizing buildings, installing renewable energy technology and processing natural resources into renewable fuels.
- Launch a program called Michigan Saves, in conjunction with utility companies, which would allow families and businesses to weatherize their homes and buildings and install Michigan-made energy efficiency technology with no upfront costs. The monthly savings, she said, will pay for the cost of the improvements.

These efforts will lessen the need for new coal power plants, Granholm said. She has directed the Department of Environmental Quality to work with the Public Service Commission in evaluating the need for additional electricity generation and "all feasible and prudent alternatives" before approving new coal-fired power plants in the state.

To learn more, read the governor's State of the State speech (<u>http://www.michigan.gov/documents/gov/</u>SOS2009_265915_7.pdf).

President Obama Orders Swift Action on Appliance Efficiency Standards

President Barack Obama issued a memorandum that instructs the Department of Energy (DOE) to take all necessary steps to finalize new appliance efficiency standards as quickly as possible. As noted by the president, the Energy Policy and Conservation Act of 1975 (EPCA) set certain deadlines for DOE to set energy efficiency standards for a broad class of residential and commercial products, and in 2005, DOE was sued for allegedly failing to meet the deadlines and other requirements of the EPCA. In November 2006, DOE entered into a consent decree, under which DOE agreed to publish the final rules for 22 product categories by specific deadlines, the latest of which is June 30, 2011. In addition, the Energy Independence and Security Act of 2007 (EISA) directed DOE to establish energy standard for additional product categories.

Although DOE has made progress on meeting its consent decree, the agency remains subject to deadlines on 15 of the 22 product categories, as well as a number of additional product categories added by EISA. President Obama directed DOE to focus its efforts on the five energy efficiency rules with deadlines prior to August 8, and then to prioritize its efforts, tack-ling first the standards that will result in the greatest savings, while still meeting all applicable deadlines. The president announced the new memorandum on a visit to DOE, during which he spoke primarily about his economic stimulus plan. See the presidential memorandum at http://www.whitehouse.gov/the-press-office/ApplianceEfficiencyStandards/.

DOE Awards \$40 Million for Industrial Use of Alternative Fuels, CHP

DOE announced its award of nearly \$40 million to support the industrial use of alternative fuels and combined heat and power (CHP) technologies. The two separate award announcements included \$30.7 million over the next four years, subject to congressional appropriations, for cost-shared research and development of industrial systems capable of using alternative fuels. The seven alternative fuel projects selected for more than \$9 million in funding this year primarily involve the development of fuel injectors, nozzles, fuel-handling systems, and entire integrated systems for gas turbines, boilers, and other combustion systems. The systems will need to handle fuels with high hydrogen content or with low energy content, such as those produced by anaerobic digesters, as well as fuels containing reactive species that can cause corrosion or generate pollutants. The systems will draw on such sources as wood waste and tire-derived fuel, and one project will use an anaerobic digester to convert cow manure into methane, which will fuel an engine connected to a generator.

An additional 10 alternative fuel projects have also been selected for awards of roughly \$19 million later this fiscal year, including projects involving internal combustion engines, microturbines, a hazardous waste incinerator, a fuel cell that runs on carbon particles (known as a "direct carbon fuel cell"), and a high-temperature solid oxide fuel cell, which can produce power from the hot gas produced by gasifying biomass and other fuels. Projects will also develop burners for viscous fluids, such as glycerin, and thermal oxidizers that can convert a variety of fuels into a combustible gas.

Such alternative fuel systems can also function as CHP systems by producing both electrical power and industrial process heat. DOE has selected six CHP projects for \$9.1 million in funding over the next three years, subject to congressional approval, including four projects that will receive \$4 million in funds this year. Those four projects will examine an automated control system, waste heat recovery from reciprocating engines, a chiller that runs on waste heat, and a system that combines a microturbine and a chiller. Two more projects are slated to receive more than \$3 million later this fiscal year, and will develop a heat recovery system for fuel cells and a control system for combined cooling, heating, and power systems.

See the announcement at <u>http://www1.eere.energy.gov/industry/newsandevents/news_detail.html?news_id=12201</u>.

U.S. Wind Power Capacity Takes Top Spot due to Rapid Growth

The U.S. wind energy industry broke all previous records in 2008, installing 8,358 megawatts (MW) of new generating capacity and placing the United States above all other nations in terms of installed wind power capacity. U.S. wind capacity increased by 50%, bringing it to a total of 25,170 MW, according to the American Wind Energy Association (AWEA). That's enough to push the United States above Germany, the previous leader for installed wind power capacity. According to the Global Wind Energy Council (GWEC), Germany had 22,247 MW of wind capacity at the start of the year, but added only 1,665 MW in 2008, bringing it to 23,903 MW, more than 2,000 MW short of the new U.S. total. Overall, global wind power capacity increased by 28.8% in 2008, with more than 27,000 MW of new generating capacity, increasing the global wind power capacity to 120,791 MW, according to the GWEC.

Currently, only China appears able to challenge the U.S. lead, as the rapidly growing country added 6,300 MW of wind turbines in 2008 to more than double its installed wind power capacity for the fourth year in a row. China's total wind power capacity is only 12,210 MW—less than half of the U.S. wind capacity—but if the country continues to accelerate in its pursuit of wind power, it could quickly catch up to the U.S. total. See the press releases from GWEC (<u>http://www.gwec.net/index.php?</u> <u>id=30&tx_tnews%5d=177</u>), as well as the GWEC's country-by-country compilation of wind power capacity totals (<u>http://www.gwec.net/fileadmin/documents/PressReleases/PR stats annex table 2nd feb final final.pdf</u>).

DOE and ASHRAE Establish Washington Fellowship

ASHRAE is sponsoring a 12 to 18 month fellowship program with placement at the Department of Energy in the Office of Building Technologies, Building Energy Codes Program. This fellowship will enable a selected ASHRAE member to assist DOE in one of the following code deployment activities:

- 1. Code Compliance
- 2. Residential Duct Test Training
- 3. Assessment of the Impact of Updating State Energy Codes
- 4. Advanced Energy Code Training

The Department will consider candidates for 12 to 18 months for work in these areas, commensurate with the experience of the applicant. A stipend of \$50,000/year will be provided. Applications are now being accepted for this open position.

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. 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.

ASHRAE members interested in applying for the Fellowship should contact Doug Read, ASHRAE Program Director of Government Affairs, (202) 833-1830, <u>dread@ashrae.org</u>.



Buffalo Niagara Convention Center

Full information on the conference is at <u>www.ases.org</u> and then access the SOLAR 2009 link.

SOLAR 2009 is America's leading conference on the emerging trends, technology, and opportunities shaping the new energy economy. SOLAR 2009, introduces you to the leaders, innovators, and entrepreneurs moving the industry forward.

ASHRAE Satellite broadcast/webcast



April 22, 2009 1:00-4:00 p.m. edt



Using the guidance provided by the IAQ Guide: Best Practices for Design, Construction, and Commissioning developed through collaboration with ASHRAE, AIA, BOMA, EPA, SMACNA and USGBC, this broadcast will challenge the building community to use enhanced IAQ practices to create a more sustainable built environment. Join ASHRAE in learning more about your role in transforming mid-range practice into best practice for healthy, productive, sustainable indoor environments.

This free broadcast/webcast is sponsored by the ASHRAE Chapter Technology Transfer Committee with support from the United States Environmental Protection Agency. For complete details, visit our website at **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 may be awarded to viewers who complete the "Participant Reaction Form" following the broadcast.

About the Presenters

- Martha Hewett, Director of Research, Center for Energy & Environment, Minneapolis, MN
 "Practical, Proven Strategies to Deliver Better IAQ"
- Hoy Bohanon, P.E., Owner and Manager of Bohanon Engineering, PLLC, Winston-Salem, NC "Improving Your IAQ and Reducing Your Energy Costs through HVAC Design"
- H.E. Barney Burroughs, Owner and CEO of Building Wellness Consultancy, Inc, Atlanta, GA "Keeping Buildings Clean: Avoiding and Building Control of Contaminants to Attain and Maintain IAQ Acceptability"
- George DuBose, Certified General Contractor, Liberty Building Forensics Group, Orlando, FL "Avoiding Costly IAQ Problems in the Building Envelope"
- John McFarland, P.E., Director of Engineered Systems, WorkingBuildings, LLC, Atlanta, GA, "Integrating Good IAQ into the Design & Construction Process"

Registration

There is no fee for registration. Online registration for satellite site coordinators and Webcast viewers will begin March 2, 2009, at www.ashrae.org/iaqbroadcast. Satellite viewer registration will begin March 16, 2009. If you have any questions, call 678-539-1206 or email ashrae-satellitebroadcast@ashrae.org.

PLACE:	Bathtub Billy's Restaurant 630 West Ridge Road, Rochester
TIME:	12:00 Noon Lunch (Chicken Parmesan, family-style)
COST:	\$30 Per Person
PDHs:	3 PDH Credits 11,010101010101010101010101010101010101

Reservations REQUIRED: Contact the RES office, res@frontiernet.net or 585-254-2350 by noon April 17, 2009. Checks (payable to ASHRAE Rochester Chapter) should be mailed to the Rochester Engineering Society, c/o ASHRAE Broadcast, 150 State Street, 3rd Floor, Rochester, NY 14614.



Job Posting

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

<u>Sr. Mechanical Engineer (HVAC) – DIRECT HIRE –</u> <u>Rochester, NY</u>

This client is an International A&E Consulting Firm with 150 offices globally and over 10,000 associates. They provide professional consulting services in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics for infrastructure and facilities projects.

This client's Buildings Engineering group specializes in the design and development processes unique to buildings. Working closely with our clients, our dedicated professionals help to establish and understand the specific needs of a range of building projects. They have a need for a Sr. Mechanical Engineer who is experienced to perform as a group leader for mechanical/HVAC building project consulting.

Responsibilities:

Mechanical Engineer designing HVAC Systems, including system selection, heating and cooling load calculations, equipment selection, sizing, preparation of drawings and specifications, and assist in marketing and business development for the mechanical engineering group. Direct and supervise a group of mechanical, plumbing and fire protection engineers. Perform construction administration and site observation services as required. Must be team oriented. Energy Analysis and Building Modeling experience a plus.

Qualifications:

- 10 + Years Experience in Mechanical / HVAC Design
- Bachelor's Degree in Mechanical Engineering or Related.
- P.E.'s License Preferred.

The recruiting team of Kelly Engineering Resources is actively reviewing resumes received through the online application process. To be considered for this position, as well as future opportunities, please contact: Jake Briggs <u>briggjk@kellyengineering.com</u>





Society News: ASHRAE/AIRAH Issue Joint Resolution on Climate Change

ATLANTA – Use of renewable energy, education of the building industry and responsible refrigerant use are encouraged in a new joint statement on climate change issue by ASHRAE and the Australian Institute of Refrigeration Air Conditioning and Heating (AIRAH).

"The use of HVAC&R technologies is an essential element of contemporary life," Bill Harrison, ASHRAE president, said. "Yet, HVAC&R systems contribute to greenhouse gas releases through energy-related effects and through the effects of refrigerant losses. ASHRAE and AIRAH are emphasizing a variety of measures to decrease emissions associated with energy use and its effect on global climate."

"I see this joint statement as an acknowledgement of the role we affiliated organizations must play to address the complex challenges we collectively face," John Bosci, AIRAH president, said. "AIRAH is committed to creating awareness and acceptance through further education and to the promotion of sustainable building practices and the responsible development of alternative technologies within the Australian market." By signing the statement, ASHRAE and AIRAH resolve to:

- Support research and development activities designed to reduce buildings' energy use and greenhouse gas emissions
- Educate building owners, operators, users, designers, and constructors on the importance of building energy efficiency, corresponding climate change impact, and proper operations and maintenance measures
- Encourage the supply of renewable energy into buildings and building engineering systems when economically feasible
- Develop and implement sustainable building designs, materials, components, systems, and processes that minimize environmental impacts, including climate change, while maintaining indoor environmental quality
- Provide advice, information, and assistance to governments and other influential bodies on energy efficiency and climate change emissions in both new and existing buildings
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influential bodies on energy efficiency and climate change emissions in both new and existing buildings

- Support the development and implementation of standards, building codes, incentive programs, and voluntary initiatives aimed at reducing building environmental impacts
- Implement holistic and coordinated approaches to identifying and resolving environmental issues at all stages of a building's life cycle—from conception, design, and construction through operation, maintenance, refurbishment, and deconstruction



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From the Editor's Desk

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

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



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.

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