ASHRAE Rochester

VOLUME 3, ISSUE 1 AUGUST 28, 2008

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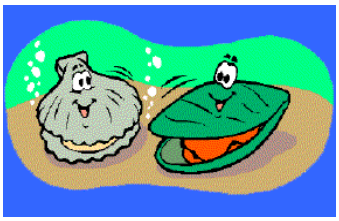
ASHRAE Clambake Meeting info



Topic: "University of Rochester/ Strong - Campus Development"

When: September 8, 2008 at 5:00 PM

Where: White House Lodge at Webster Park

Cost: $25.00 plus $5.00 per dozen clams (No limit, Pre-order as many dozens as you want)

Tickets must be purchased by September 1st. No tickets sold at the door. See clambake announcement on page 5 of this issue for specifics on how to make your reservation.

Reservations are Required

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ASHRAE 2008/2009 MEETING SCHEDULE

DATE	EVENT	LOCATION	SCHEDULE
9/8/2008	Annual Clambake—A representative from Strong U of R will discuss current and upcoming projects at their several campuses.	Webster Park White House Lodge	5:00 PM
10/13/2008 Membership Night	Distinguished Lecturer—Gordon Holness Mr. Holness is an expert on energy efficiency in existing buildings. Building retro for energy efficiency.	Mario's	12:00-2:00 PM Lunch
11/10/2008	Sustainable Design and the use of Standard 189—Thomas Lawrence, Phd Tech Session: Applications for custom air handlers	Mario's	12:00-2:00 PM Lunch
12/8/2008 Student Night	Student Night: Using the updated ASHRAE standard 62.1—Mini Seminar	Wishing Well Party House	5:30 PM Tech Session Dinner 7:00 PM Main Speaker
1/12/2009 Student Night	LEED and Green Building Design with Building Tour Tech Session: Non chemical water treatment	Wishing Well Party House	5:30 PM Tech Session Dinner 7:00 PM Main Speaker
2/9/2009 Membership Night	Using the updated ASHRAE Standard 90.1 (Bing Liu, PE, CM, LEED AP DL Topic) Mini seminar	Wishing Well Party House	5:30 PM Tech Session Dinner 7:00 PM Main Speaker
2/14/2009	Valentine's Dance	Lodge at Woodcliff	6:30 PM Reception 8:00 PM Dinner 9:15 PM Dessert
3/9/2009 Joint Mtg w/ ASPE	Commissioning of Refrigeration with Mike Nohle	Mario's	12:00-2:00 PM Lunch
4/15/2009	ASHRAE Satellite Broadcast Luncheon. Topic: TBD	Bathtub Billy's	12:00 PM Lunch, 1:00-4:00 PM Program
5/19/2009	Annual ASHRAE Golf Outing and Picnic	Ravenwood Golf Club	8:00 AM Golf 2:00 PM Picnic 6:45 PM Dinner

Mission Statement

ASHRAE will advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related human factors to serve the evolving needs of the public and ASHRAE members.

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

Vision Statement

- will be the global leader in the arts and sciences of heating, ventilation, air conditioning and refrigeration.

- will be the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines.

- will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.

President's Message

As my Presidential year begins, I look back on my last 25 years as a member, and marvel at all the knowledge and growth that comes from ASHRAE. It has been truly amazing and continues to drive the industry through sustainability, green building design and energy conservation, to name just a few. Add to this the exceptionally talented people that make this all possible, and you have wonderful combination that keeps ASHRAE on the leading edge of technology.

Speaking at the local level, I would be remiss if I did not thank the outgoing President, Casey Bernhard, and his exceptional board for a very successful year.

Most of these individuals will, again, be volunteering their time and talents to drive the upcoming year.

Please join me in welcoming the 2008-2009 slate of officers:

Jeffrey Davis- President Elect/Program
Jim Browe- Vice President/Tech
Jeffrey Ellis- Secretary
Michelle Sommerman- Treasurer
Casey Bernhard- Past President
Jeffrey Ellis- Board of Governors
Ed Burns- 3rd yr Board of Governors
Gavin Brownlie- 3rd yr Board of Governors
Robert Wind- 2nd yr Board of Governors
Trisha Jackson- 2nd Board of Governors
Jeff Close- 1st year Board of Governors
Phil Masters- 1st year Board of Governors
Robert Wind- Attendance Chair
Lee Loomis- Historian
Phil Masters- Membership Chair
Christina Walter- Newsletter Chair
Barb Herl- Nominating Chair
Mike Nohle- Refrigeration Chair
Kevin Wind- Website
Al Rodgers- Student Activities Chair
Joe Pennise- Picnic Chair
Jody McGarry- Valentine Dance Chair
Chuck White- Buyers Guide Chair

Our Chapter is in the process of planning next year's program. Our President Elect, Jeff Davis, and Technical Program Chair, Jim Browe, are hard at work putting together topic of interest. Feedback received from our young engineers luncheon suggested that we hold some lunch meetings in place of dinner. Another suggestion called for change in the location of the meetings. We have therefore scheduled three noon meetings to be held at Mario's Via Abruzzi restaurant.

Last year we were successful in increasing meeting attendance by offering quality programs that had PDH hours associate with at least half of them. This year we hope to continue this growth by again offering topics as a result of a survey that cater to the needs of the professional engineer.

It is my goal as President to increase interest in participation, not only at monthly meetings but also on committees within the board.

If anyone has any interest in contributing at any level, please feel free to contact me at jvc@rpfedder.com .

It is with great please that I have the opportunity to serve a society that has provided for myself and my family for the past 25 years.

We will kick off the year with our first meeting with the Clam Bake at the Webster Park White House lodge 9/8/08 at 5:00 PM. This year we will feature a speaker from Strong/UofR who will discuss current and upcoming projects in what is now the largest employer in Monroe County. More information to follow, we hope to see you there!

Joseph R. Van Cura, 2008-2009President

ASHRAE CLAMBAKE

Membership Promotion Night

White House at Webster Park

When: September 8, 2008

Where: Webster Park White House Lodge

Time: 5:00 P.M.

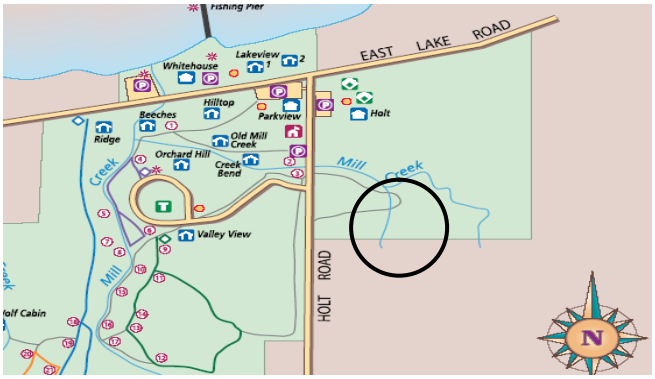
Cost: $25.00 plus $5.00 per dozen clams

(No Limit, Pre-Order as Many Dozen as You Want)

Tickets must be purchased by September 1st. No tickets sold at the door.

A REPRESENTATIVE FROM THE UNIVERSITY OF ROCHESTER WILL SPEAK ON CAMPUS DEVELOPMENT.

WHAT'S GOING ON NOW AND WHAT'S IN THE WORKS FOR THE FUTURE.



Take 104E towards Webster. Take Holt Rd exit. Turn left on Holt Rd. and take to end. Turn left on Lake Rd & enter park. Whitehouse Lodge is on the right hand side of Lake Rd. on the shores of Lake Ontario.

Buffet Menu: Marinated Split Roast Chicken; 20 hr Slow Cooked Pulled Pork, Baked Beans, Salt Potatoes, Corn on the Cob, Tossed Green Salad, Rolls/ Butter, Pop, Beer, Coffee and Dessert.

Catered by: Hegedorn's Inc.

Non- ASHRAE Members are Welcome!

If you have questions contact Lisa at R.P. Fedder at (585)288-1600x0 or E-mail to lisa@rpfedder.com

Cut Here

Make check out to Rochester Chapter of ASHRAE and mail with completed form to:
ASHRAE Clambake, Attn: Lisa R.P. Fedder, 740 Driving Park Ave., Rochester, NY 14613

Name: _____ ASHRAE Member Yes No (Circle one)

Company: _____

Address (where tickets are to be sent): _____

City: _____ State: _____ Zip Code: _____

Number of Buffet Tickets: _____ x $25.00 = Total $ _____

Number of Dozen Clams: _____ x $5.00 = Total $ _____

Total Check Amount: $ _____

Reservations must be mailed in by September 1st.

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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. **[ ]** Sep 9-11 '**Product Fundamentals'** (Coil, AHU, FanCoils, UVs, WSHP, RTU, Chillers, Compressor Technologies)
2. **[ ]** Oct 7-9 '**Airside Fundamentals- I'** (Load Design and Psychrometrics)
3. **[ ]** 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.

Contact: Joe Becker, Becker Learning / 5980 Sheppard Road / Dansville, NY 14437

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: (check all that apply) 1. [ ] Product 2. [ ] Airside-I 3. [ ] 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.

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.

ASHRAE Government Affairs Update, 08/15/08

DOE to Save $13 Million in Annual Energy Costs at Four National Labs

DOE announced that it has signed contracts for $140 million in energy efficiency improvements at four of its national laboratories: Idaho National Laboratory, Lawrence Livermore National Laboratory, the National Energy Technology Laboratory, and Oak Ridge National Laboratory. The energy efficiency improvements will help DOE save about $13 million on energy and energy-related costs per year. The contracts are the first ones signed under DOE's Transformational Energy Action Management (TEAM) initiative, which aims to have 7.5% of the energy used at all DOE facilities supplied by renewable sources by 2010. The TEAM initiative also seeks to reduce energy intensity by 30% and reduce water consumption intensity by 16% in all DOE facilities by 2015.

At Idaho National Laboratory, the energy source for the boiler will be changed, eliminating 600,000 gallons per year of fuel oil purchases to yield an annual savings of $1.7 million. Lawrence Livermore National Laboratory will receive an upgraded energy management control system, which will result in $1.3 million in savings per year. The National Energy Technology Laboratory will receive a variety of green upgrades, including biogas boilers, green roofs, hybrid lighting, advanced metering, solar lighting, rooftop wind turbines, and natural gas well dewatering, which will reduce energy consumption by more than 27 billion Btu per year and reduce water use by more than three million gallons, resulting in approximately $800,000 in savings per year. And on top of implementing other general energy conservation measures, a biomass steam plant will be built at Oak Ridge National Laboratory, allowing for nearly $8.7 million in savings per year.

The energy efficiency improvements will be installed under Energy Savings Performance Contracts (ESPCs), under which energy service companies or utilities provide the funding required to purchase equipment and system enhancements for an organization, and are paid back from the energy savings that result from increased energy efficiency. Over one billion pounds of carbon dioxide can be avoided by the potential ESPC projects currently in development at DOE. This is equivalent to the annual greenhouse gas emissions from more than 83,000 vehicles. See the DOE press release.

DOE Pursues Zero-Net Energy Commercial Buildings

DOE launched the Zero-Net Energy Commercial Building Initiative (CBI), with the goals of developing new commercial buildings that produce as much energy as they use and making these buildings marketable by 2025. Such zero-net energy commercial buildings will minimize their energy use through cutting-edge energy efficiency technologies and will meet their remaining energy needs through on-site renewable energy generation. To help with the CBI, DOE has also formed the National Laboratory Collaborative on Building Technologies (NLCBT), which will allow DOE and five of its national laboratories to work closely on the research, validation, and commercialization priorities that are critical to the success of zero-net energy buildings. Argonne National Laboratory, Lawrence Berkeley National Laboratory, the National Renewable Energy Laboratory (NREL), Oak Ridge National Laboratory, and the Pacific Northwest National Laboratory will be working together under the NLCBT.

The Energy Independence and Security Act of 2007, signed by President Bush in December 2007, authorized DOE to collaborate with its national laboratories, other federal agencies, non-governmental organizations, and the private sector to advance high-performance commercial green buildings. With help from the NLCBT, DOE's Building Technologies Program will carry out the intent of that act through the new CBI and its existing partnerships, including such efforts as developing new technologies, sponsoring pilot and demonstration projects, providing technical assistance, developing training materials, working with organizations that set building codes, analyzing incentives, developing ways to measure energy savings, and educating the public. In 2005, commercial buildings accounted for 18% of U.S. energy use as well as 18% of the nation's greenhouse gas emissions.

See the DOE press release (http://www.energy.gov/news/6454.htm).

San Francisco Imposes New Green Building Requirements

Mayor Gavin Newsom signed San Francisco’s groundbreaking green building ordinance that imposes strict new green building requirements on newly constructed residential and commercial buildings, and renovations to existing buildings. The ordinance specifically requires newly constructed commercial buildings over 5,000 sq ft, residential buildings over 75 feet in height, and renovations on buildings over 25,000 sq ft to be subject to an unprecedented level of LEED and green building certifications, which makes San Francisco the city with the most stringent green building requirements in the nation.

The City's Climate Action Plan found that energy use in buildings and facilities is responsible for approximately 50 percent of San Francisco's greenhouse gas emissions. In 1990, San Francisco's energy use resulted in a total of approximately 4.5 million tons of CO2 emissions released into the atmosphere, making green building a critical component in the fight against climate change.

Some of the significant cumulative benefits this ordinance is expected to achieve through 2012 are: reducing CO2 emissions by 60,000 tons, saving 220,000 megawatt hours of power, saving 100 million gallons of drinking water, reducing waste and storm water by 90 million gallons of water, reducing construction and demolition waste by 700 million pounds, increasing the valuations of recycled materials by $200 million, reducing automobile trips by 540,000, and increasing green power generation by 37,000 megawatt hours.

This ordinance also continues San Francisco's efforts to reduce the City's greenhouse gas emissions to 20 percent below 1990 levels by the year 2012, a goal outlined in the City's 2004 Climate Action Plan. In addition, by reducing San Francisco's emissions, this ordinance also furthers the State's efforts to reduce greenhouse gas emissions statewide as mandated by the California Global Warming Solutions Act of 2006.

In 2007, Mayor Gavin Newsom established a Task Force on Green Buildings for the City comprised of ten members from San Francisco's ownership, developer, financial, architectural, engineering, and construction community. The mission of the Task Force was to advise and recommend to the City's policy makers: mandates, incentives, education, and outreach in order to increase the number and improve the quality of green buildings in San Francisco, and to assess the impacts of the Task Force's recommendations.

Governmental Affairs Update (continued)

New York Expands Renewable Net Metering and Green Roof Incentives

New York Governor David Paterson signed a legislative package that will encourage people throughout the state to install grid-connected solar and wind power systems, systems that generate power from farm wastes, and green roofs. Most of the bills relate to net metering, which allows homeowners and businesses to earn credit for any excess power that they feed back into the electric grid. Senate Bill 7171 (http://assembly.state.ny.us/leg/?bn=S07171&sh=t) expands net metering to include non-residential solar power systems up to 2 megawatts in capacity, or equal in size to the customer's peak load, whichever is less, and increases the maximum solar power system size for residential customers to 25 kilowatts, up from 10 kilowatts. The bill also attempted to increase the limit for farm-based anaerobic digesters to 1 megawatt, but a separate bill, S. 8415 (http://assembly.state.ny.us/leg/?bn=S08415&sh=t), knocked the limit down to 500 kilowatts, which is still an improvement over the previous limit of 400 kilowatts. S. 7171 also requires each utility to develop a model contract and reasonable rates, terms, and conditions for net metering of non-residential customers, and to develop safety standards for interconnecting these customers. It also includes a requirement for an external disconnect switch, which is rarely needed for modern grid connection equipment.

Senate Bill 8481 (http://assembly.state.ny.us/leg/?bn=S08481&sh=t) applies similar changes to net-metered wind power generators, allowing farms to net meter wind turbines as large as 500 kilowatts, up from 25 kilowatts, and expanding net metering of wind turbines to include non-residential customers, who can net meter wind turbines as large as 2 megawatts or the customer's peak load, whichever is less. As with S. 7171, S. 8481 requires utilities to develop model contracts and reasonable rates, terms, and conditions for non-residential customers wishing to net meter their wind turbines.

Two additional bills relate to tax abatements for buildings in New York City with solar power systems and green roofs. S. 8145 (http://assembly.state.ny.us/leg/?bn=S08145&sh=t) creates a four-year real property tax abatement of up to $62,500 per year for buildings owners that install solar power systems, with a greater tax abatement available for systems installed before 2011, and a lesser tax abatement for systems installed in 2011 or 2012. S. 7553 (http://assembly.state.ny.us/leg/?bn=S07553&sh=t) creates a similar tax abatement for buildings that install green roofs. The one-year tax abatement applies to buildings that cover at least half of their rooftop space with vegetation and is equal to $4.50 per square foot of green roof, up to the tax liability on the building or $100,000, whichever is less. The green roof tax abatement is in effect from 2009 through 2013. Both laws apply only to properties located in cities with populations of one million or more, which limits them to New York City. See the governor's press release (http://www.ny.gov/governor/press/press_0808083.html).

California Air Resources Board Introduces GHG Control Database

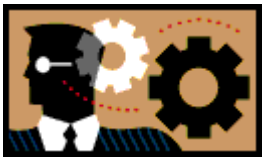
The California Air Resources Board's clearinghouse of non-CO2 greenhouse gases (GHG) control technologies is now available online. ARB has developed a clearinghouse of available technologies that can be used to reduce emissions of non-CO2 greenhouse gases, such as methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and black carbon (BC). You can access this information at http://www.arb.ca.gov/cc/non-co2-clearinghouse/non-co2-clearinghouse.htm.

Job Postings & Help Wanted

This section of the newsletter is reserved for those firms wishing to advertise their desires to hire from the Chapters Membership.

If you are interested in utilizing this FREE service provided by the Rochester Chapter, please contact our Newsletter Editor, Christina Walter (585.486.2148) or by email cmwalter@trane.com

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



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	218 /26	0	0	0	0	0	0	0

$E=MC^2$

ASHRAE
American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
Chapter 11 - Rochester, New York

Society News:

Recreation Center Focus of ASHRAE Student Design Competition

ATLANTA – Healthy bodies and a healthy building go hand-in-hand in the winning entries for ASHRAE's 2008 Student Design Competition.

This year's competition featured architectural design as well as selection and design of HVAC&R systems for a 60,000-square-foot community recreation center. The center features a gym with two full-size basketball courts and a running track, a wellness center with fitness equipment room and aerobics room, a natatorium with a six-lane swimming pool and indoor racquetball courts.

First place in the HVAC system selection category is awarded to Alyssa Adams, James Gawthrop Jr., Amy Leventry, Gregory Smithmyer, Calvin Douglass, Justin Herzing and Michael Smith of The Pennsylvania State University, University Park, Pa. Their advisor is William Bahnfleth, Ph.D., P.E.

The students chose a ground-source heat pump with active chilled beams or fan coils in a four-pipe system configuration for both heating and cooling and a dedicated outdoor air system for all spaces with an enthalpy wheel for energy recovery and a solar assisted LiCl dehumidification unit in the natatorium space.

"This solution was found to be the most sustainable of all the systems considered," the students wrote. "It uses heat transfer from the earth as opposed to burning fossil fuels and utilizes solar energy from the solar thermal collection panels, reducing the amount of energy supplied to the building and the energy footprint of the facility. Electricity used by the facility is directly translated into emissions at the power plant. Therefore, minimizing the onsite energy consumption not only saves energy but also reduces carbon emissions."

First place in the HVAC system design category goes to Chaowanaphan Lekkham, Patarapol Puangkum, Pakorn Nontiwatwanich, Wiroj Ekwongmunkong and Supayos Suveepattananont of Chulalongkorn University, Bangkok, Thailand. Their faculty advisor is Chirdpun Vitooraporn, Ph.D.

The students chose an electric air-cooled chiller system with 134a as a primary refrigerant and water as a secondary refrigerant. Elements of the system include variable-speed drives, outside air units, CO2 sensors, and heat pipe and heat recovery wheel units.

"The relative energy consumption as well as relative operating and maintenance costs determined that the system is not only beneficial for the building owner and users but for the environment as well," the students wrote. "We believe our design provides a functional, economical, environmentally friendly and sustainable HVAC system for serving the center."

First place in the architectural design category is awarded to Alexandra Gibson, Justina Jones, Bryan Quarles and Bazigha Tufail of The University of Kansas, Lawrence, Kan. Their advisor is Brian A. Rock, Ph.D., P.E.

Their design was based on their goal of using sustainable technologies for HVAC&R, lighting, energy supply and water use. Key features include a green roof to combat the urban heat effect and to provide extra roof insulation as well as contributing to CO2 absorption/oxygen output; rainwater harvesting; development of proper lighting controls detecting the amount of daylight penetration, efficient illumination fixtures and the use of light shelves for indirect lighting; and photovoltaic panels to minimize electricity use.

"To produce a building that includes all of these ideas while remaining beautiful and also acting as an educational tool, integration of these systems from the beginning from the design was a key element," the students wrote.

Awards will be presented at ASHRAE's 2009 Winter Meeting Jan. 24-28 in Chicago. Winning student groups will each have a poster presentation to display their projects at the meeting.

The competition recognizes outstanding student design projects, encourages undergraduate students to become involved in the profession, promotes teamwork and allows students to apply their knowledge of practical design.

ASHRAE, founded in 1894, is an international organization of 50,000 persons. Its mission is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration (HVAC&R) to serve humanity and promote a sustainable world.

From the Editor's Desk

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

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

Reminder

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