



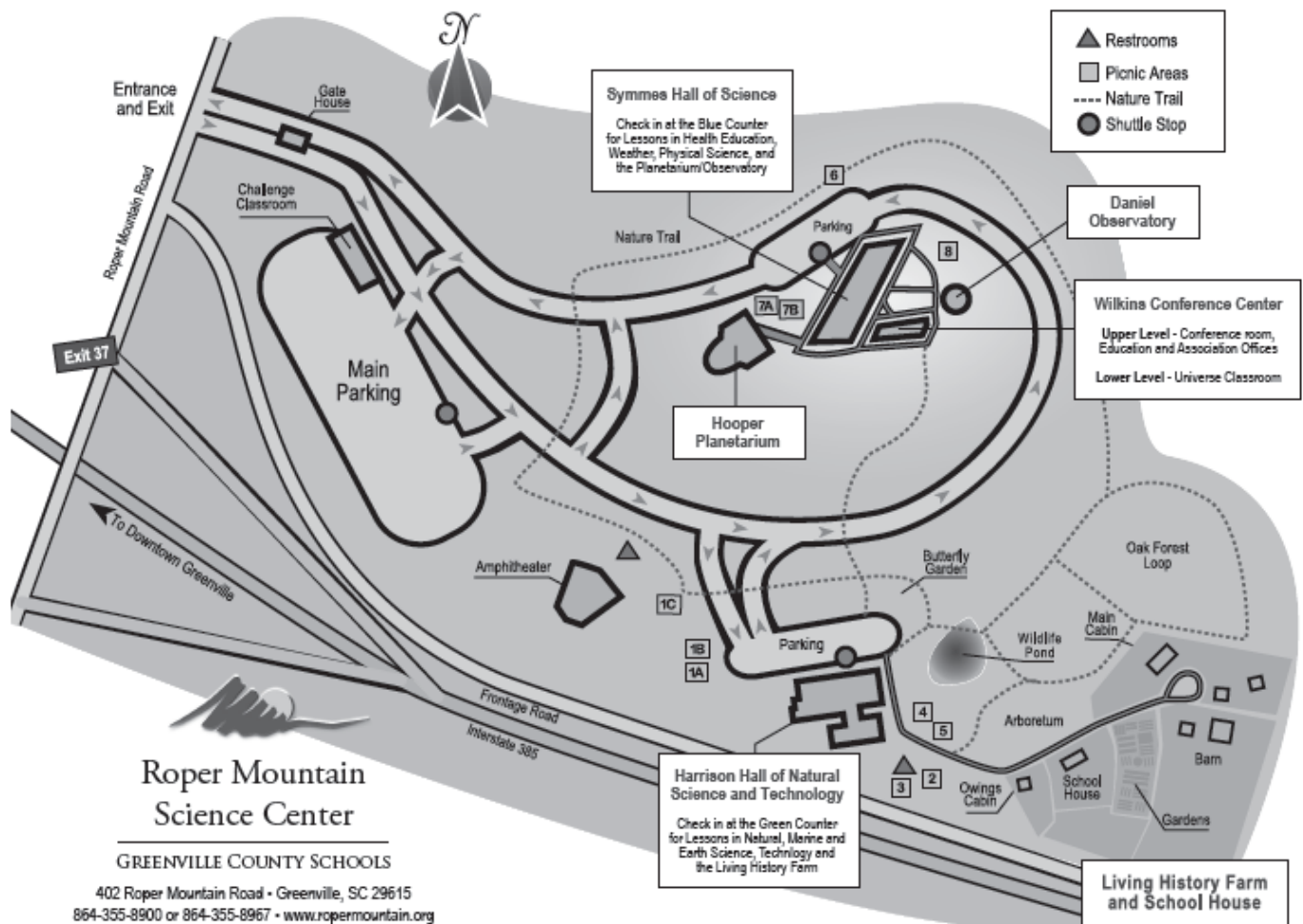
Giga-Joule

February 2013

<http://www.ashrae4greenville.com/newsletter.php>

Meeting Announcement

The February meeting will be held on Thursday, February 14, at the Roper Mountain Science Center, in **Harrison Hall of Natural Science/Technology in the Ecology Lab rather than the normal location**. Please see the map below for location. The details are listed on the Programs Page. For more information, please contact our Secretary, Liz Ambrose, at secretary@ashrae4greenville.com



A Message from the President

Last month we had an Introduction to Mold led by Andrew Schauder. Thanks to all who attended. This month will be discussing the acoustics/vibration best practices for HVAC equipment. Dwight Landry will be speaking about this topic and I am sure it will be a good one.

Roper Mountain Science Center will be undergoing construction in our normal meeting location, Wilkins Conference Center. For this reason, we will be meeting in different locations for the February and March meetings. Please refer to the Giga-Joule for more information on these changes. We apologize for any inconvenience.

Please be sure to take a look at our spring golf tournament, planned for May 10th at Furman University Golf Course. The forms will be included with the Giga-Joule email, and please contact Lee Chapman (lee.b.chapman@jci.com or 864-234-3802) to RSVP.

We are always looking for new faces to participate on a committee or serve on the Board of Governors. If you would like to hear more information on what this would entail, please let me know.

All presentation slots for this ASHRAE year have been filled, so please take a look at the schedule and attend as many as possible. We still like to hear of ideas for future meetings, so please let me know if you have a topic that would make for a good meeting.

Ryan Tonnsen
Greenville ASHRAE President
president@ashrae4greenville.com



Membership Corner

Big thanks to ALL who attended our first meeting of the New Year...

We have many things planned for achieving continued growth in our Greenville Membership and need your help and participation to get there...on the horizon are some great programs, some social events, golf tournaments etc. being planned throughout the season to encourage you invite your friends and colleagues. If you wish to volunteer to help in anyway, please speak with one of the many Board of Governor members, who are generally in attendance at each meeting.



Thanks all members who recently joined via a Membership Promotion Meeting, a transfer in, or just the desire to be a Member, we appreciate your support. Welcome back to our existing members, and especially those who serve on the board...we could not do this without everyone's participation. Our 2nd and final Membership Promotion meeting for this year will be in the SPRING of 2013.

Don't forget about those Young Engineers – ASHRAE offers a special membership for engineers currently under the age of 35 to encourage them to be involved...these are our future leaders.

Existing MEMBERS – Ask me about upgrading your membership by going online to www.ASHRAE.org to update and complete your BIO...this process will automatically upgrade your membership based on the information that you supply...it's quick, and it's easy ~ After all, it's all about YOU!

Just a reminder:

Chapter Members in good standing (paid dues) **\$10.00** per meeting – lunch included.

Non-Chapter Members **\$15.00** per meeting – lunch included.

I am always available to discuss your questions and concerns, or if you have a good idea or suggestion on how we can increase membership – We are interested!

Drop me an email Membership@ASHRAE4GREENVILLE.COM or call me at 444-0219

Best Regards,
Dorothy Bertolini
Membership Chair – ASHRAE Greenville SC
membership@ashrae4greenville.com

Chapter Programs

This month, the technical presentation is entitled “Acoustics/Vibration Best Practices for HVAC Equipment.” Please RSVP so that we can make arrangements to have the appropriate amount of food available.

February Meeting

Program: “Acoustics/Vibration Best Practices for HVAC Equipment”

The program will be compressed detailed discussion of the best practices of applied acoustics for large HVAC equipment (Air and Water Cooled Chillers, AHU’s and RTU’s) including discussions on:

1. A brief tutorial on the basics of sound and noise
2. A brief discussion of current construction standards in the HVAC market
3. A brief discussion of current specification practices for acoustics in the HVAC market
4. Generic Acoustical Treatment recommendations for Large Applied HVAC Equipment

Presenter: Dwight D. Landry

Dwight David Landry, Sr. has 24 years experience in the acoustical design, consulting and manufacturing field. Listed below are his qualifications:

Education & Training

Civil Engineering Degree – 1982, Nicholls State University

Received Certificate of Completion for “Fundamental Acoustical Design and Engineering” – John Bodely (PHD Acoustics) - (United McGill Corporation) – 1984

Received Certificate of Achievement for “Noise Control for Buildings, Manufacturing Plants, Equipment, and Products” – Laymon Miller (PHD Acoustics) – Orlando, FL – 1989

Received Certificate of Completion for “Exploring New Perspectives in Acoustics” – Ohio State University – 1990

Received Certificate of Completion for “Modern Design of Acoustical Solutions for HVAC Equipment” – Ohio State University – 1994

Experience

Designed, manufactured and consulted on thousands of solutions for the HVAC, Industrial, Architectural and Environmental markets.

Presented over 100 seminars, lunch and learn presentations and training classes on the design and application of acoustics and noise control measures for groups including:

ASA – Acoustical Society of America, AIA Presentations, CSI Presentations, ASHRAE, Air Handling Equipment Manufacturers, OEM Manufacturers, Engineering Firms, Environmental Firms, Architectural Firms, Contractors for all disciplines and many Industrial & Pharmaceutical Manufacturing companies.

Location: Roper Mountain Science Center (www.ropermountain.org)

Date: Thursday, February 14, 2013

Time: 11:30 a.m. Doors Open
11:35 a.m. Lunch Served
11:45 a.m. to 12:00 p.m. Chapter Business
12:00 p.m. to 1:00 p.m. “Acoustics/Vibration Best Practices for HVAC Equipment” Program

Cost: Lunch Program: \$10/chapter member \$15/non-chapter member (catered lunch)

Education Credit: The Technical Program qualifies for 1.0 PDH (including NC PE)

**Please RSVP to secretary@ASHRAE4greenville.com
No later than Noon Tuesday, February 12, 2013**

Chapter Technology Transfer

ASHRAE Webcast to Focus on Building Energy Performance

ASHRAE's upcoming webcast, titled **Assessing Building Energy Performance: From Principles to Practice**, will broadcast live on **April 18, 2013, from 1:00 – 4:00 pm EDT**.



“This webcast will focus on the importance of building energy performance and its far reaching implications in both new and existing buildings,” said Andy Cochrane, Chair of the CTTC Webcast Ad Hoc Committee. “This program will help participants to recognize the opportunities that Assessing Building Energy Performance (ABEP) presents. From recognizing the different approaches, team skills, and knowledge needed to properly assess building energy performance, to the application of ASHRAE building audit levels, this webcast will provide viewers with an understanding of ABEP principles and practical application knowledge.”

The webcast presenters are:

- Christopher Mathis, President, MC Squared, Asheville, NC
- Drury Crawley, Ph.D, Director of Building Performance, Bentley Systems, Washington, DC
- Jim Kelsey, LEED AP, PE, BEAP, Principal, kW Engineering, Oakland, CA

Online registration for the webcast will begin on March 18, 2013.

Participants may earn 3 PDHs or 3 AIA Learning Units by completing the Participant Reaction Form by May 3, 2013

Can't watch it on April 18th? The webcast archive will be available to registered participants between April 19th and May 3rd. Continuing education credits will also be available for the archive.

For more information on the webcast program, sponsorship opportunities, continuing education credits, and ASHRAE resources related to assessing building energy performance, visit www.ashrae.org/ABEPwebcast. If you have questions about the webcast, call 678-539-1200 or email ashrae-webcast@ashrae.org.

Progress Energy Carolinas Energy Efficiency for Business Incentives

Progress Energy Carolinas offers cash incentives to non-residential customers for installing energy conservation measures, including high performance and reduced wattage lighting, high efficiency HVAC systems, and other prescriptive and custom measures, for both new construction and retrofit projects. Incentives are also available for Technical Assistance, including comprehensive energy audits, retro-commissioning, and feasibility studies for existing facilities, and building design assistance and building energy modeling for new construction.

Example incentives:

Retrofit T12 to high performance (CEE listed) T8: \$0.35 per watt reduced.

HID to T5 or high performance T8: \$0.35 per watt reduced.

5-ton 15 SEER air cooled heat pump: \$45 per ton.

New construction lighting: \$0.35 per watt reduced compared to the energy code allowed light power density.

Occupancy sensors to control lighting: \$0.06 per watt controlled.

VSD for HVAC fan or pump motors: \$45/hp

Custom measures, including LED or induction lighting, daylighting controls, or other non-prescriptive measures: \$0.08/kWh reduced (1-year).

Technical Assistance (retrofit): One-half the cost of energy audit, retro-commissioning, etc. capped at \$10K or \$20K based on existing annual electricity consumption.

New Construction Whole Building: \$0.09 or \$0.14/kWh reduced (1-year) based on comparison to energy code base building.

Visit the website at www.progress-energy.com/CarolinasBusiness, call the EEB Hotline at 1-866-326-6059, or contact Greenville chapter member Kevin Brock at 1-828-772-6956 for more details and information.

Breathing Skyscraper

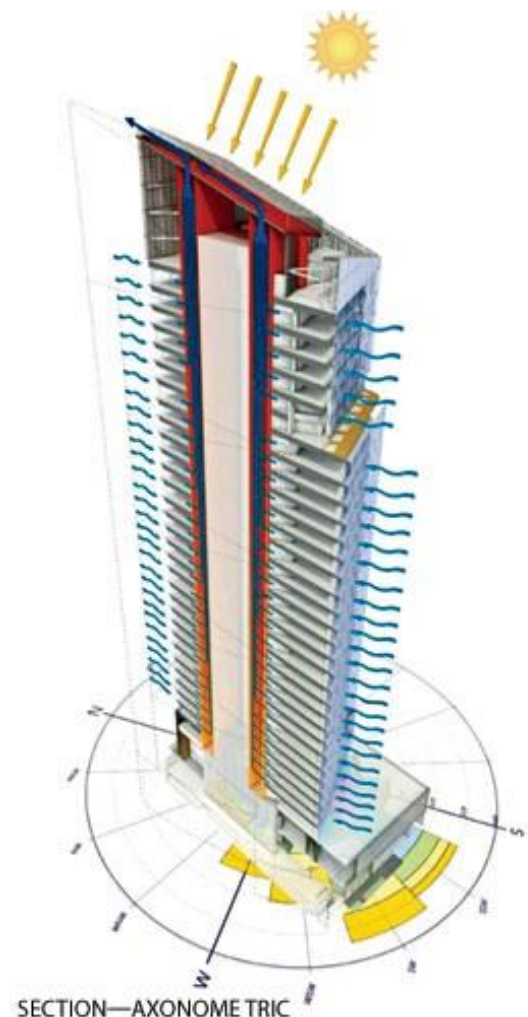
The new \$240 million PNC Tower in downtown Pittsburgh will be approximately 800,000 ft² (74 322 m²). It features a "breathing" design created by architecture firm Gensler, instead of the closed air-conditioned environment. This building is touted as the greenest skyscraper in the world.

The building takes advantage of natural light onto the floor space along with improved regulation of temperatures for much of the year without using traditional, energy-intensive HVAC systems. This is achieved by using a double-skin facade consisting of two panes of glass separated by an enclosed cavity, which will allow external air inside. The facade will feature operable doors and windows that admit fresh air into the building during optimal conditions, which is effectively when the building is "breathing." A solar chimney is another component of the structures passive system: it pulls air in through the open windows, rather than sucking air out as usually occurs in a high rise building, the air then travels across the floors, is heated and exhaled through the roof shaft.

The PNC tower has smaller floor plate, about a quarter of the typical U.S. skyscraper's floor plate. Using a smaller plate brings more light and ventilation further into the interior. Employees will sit within 30 feet of the double skin's outdoor porches and will have the ability to adjust lighting and temperature. It is predicted the design will significantly reduce lighting and cooling consumption and exceed LEED platinum requirements.

The building will also reduce water use by installing low flow fixtures and rainwater harvesting to irrigate the green roofs whilst treating grey and black water wherever possible.

Myrna Dayan
Chapter Technologies Transfer Chair, Greenville
Region IV
myrna@mail.ashrae.org



Event Dates for 2012-2013

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| Thursday 09/13/2012 | LEED Litigation | Presenter: Stephanie Burton |
| Thursday 10/11/2012 | Today's Project Design Challenges A Contractor's Perspective | Presenter: Bill Caldwell |
| Thursday 11/8/2012 | Building Energy Quotient (BEQ) | Presenter: Thomas Phoenix |
| Thursday 12/13/2012 | Solar Thermal Additional Seminar: Primary Secondary vs. Variable Primary debate | Presenter: Chris Edmondson, Distinguished Lecturer |
| Thursday 01/10/2013 | Mold Control | Presenter: Andy Schauder |
| Thursday 02/14/2013 | Acoustics/Vibration Best Practices for HVAC Equipment | Presenter: Dwight Landry |
| Thursday 03/14/2013 | Residential Energy Efficiency | Presenter: James Groman |
| Thursday 04/11/2013 | Responsible Use of Refrigerants Additional Seminar: Thermal Storage-Peak Load Avoidance | Presenter: Julian De Bullet, Distinguished Lecturer |
| Friday 4/26/2013 | ASHRAE Golf Tournament | |
| Thursday 05/9/2013 | HVAC Equipment Research at Oak Ridge National Laboratories | Presenter: Heather Buckberry |



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Technology for a Better Environment

Region IV
Greenville Chapter