



Giga-Joule

Greenville Chapter

December, 2008

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

Meeting Announcement

The December meeting will be held on Thursday, December 11th at the QS-1 building in Spartanburg (directions included below). The details are listed on the Programs Page. For more information, please contact our Programs Chairman, Davin Sandhu, by phone at 864-234-3819 or, email at programs@ashrae4greenville.com

A Message from the President

I would like to thank Skip Lewis with H2L speaking on mediation and arbitration. In today's business world, we all need to be prepared to handle all aspects of business, from engineering the job, working with the contractors, owners and architects, and finally getting paid to close out the job. With Skip's helpful knowledge of arbitration and mediation, we all have another tool in our toolbox to ensure that the cycle continues.



I look forward to seeing all of you in Spartanburg at QS1 for our next meeting on Dec. 11th. We will be having a tour of the facility and Lee Chapman of DeVita will be speaking on LEED. See Davin's column for more details.

We are going to be using the 5 for 4 meal cards again this year, for every 4 meetings you come to, you will get a free 5th meal. Please see Dorothy when you sign in and ask her about the meal cards. We are going to start something new in January, the rates for the lunches are going to change. If you are a chapter member, the rate will remain the same at \$10. If you are a non-chapter member, the rate will be \$15. There is a box on the ASHRAE renewal form that you need to check to pay the local chapter dues of \$25. If you are not a chapter member, you can join for \$25 and get your lunch for that meeting free. What does the \$25 go to you ask? The chapter has expenses that we have to pay for, i.e. food for Board of Governor's meetings that are held monthly, any honorariums and travel expenses by the speakers and making a donation to the Roper Mountain Science Center for the Science Expo Award that we sponsor. So please join the chapter and help us offset the expenses. Besides, 9 PDH's for \$25 is not a bad deal either.

If anyone is interested in going to Chicago to the national ASHRAE show held Jan. 24-28, 2009, please see me; I have free registration forms. I look forward to seeing all of you next week for our December meeting. If you have any comments or suggestions, please feel free to contact me.

Best regards,

Will Thomason
Greenville ASHRAE President
president@ashrae4greenville.com

Chapter Programs



Davin Sandhu
Programs Chairman
programs@ashrae4greenville.com

This month we will be having our meeting including a tour of the facilities at the **QS/1 Headquarters** located in **Spartanburg, SC**. Come and join us for this tour!!

The QS/1 Headquarters Building is a facility that was awarded a Silver rating under the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) program. This meeting will consist of a LEED presentation by Mr. Lee Chapman followed by a description of QS/1 Building by Mr. Wade Crow and a tour of the QS/1's facilities. Afterwards we will all head to Sonny's Brick Oven Pizza for your choice of pasta or pizza with a salad and drink. Sonny's is located right next to the QS/1 Headquarters Building.

Please notice that our **February Meeting** has changed from a Thursday to a Wednesday of the Second Week. This is to cater to our Distinguished Lecturer, Essam Eldin Khalil, Ph.D., that will be coming all the way from Cairo, Egypt. This meeting may also run into a dinner depending on Dr. Khalil's schedule.

Student Activities

Application deadline for graduate student grants and undergraduate senior project grants is December 15. For more info, visit:

<http://www.ashrae.org/students/page/704>



December Meeting

Program: LEED Presentation & QS/1
Building Description & Tour

Presenter: Lee Chapman, P.E., LEED AP
General Manager of
DeVita and Associates'
Commercial Division



Lee Chapman is the General Manager of DeVita and Associates' Commercial Division. Chapman has previously worked for Mustang Engineer in Greenville, S.C. and Industrial Design & Construction (IDC) in Greenville S.C.

Lee Chapman is a graduate of Clemson University where he earned his Bachelor of Science degree in Mechanical Engineering. Chapman is a Registered Professional Engineer (P.E.) and a LEED Accredited Professional. He holds a position on the USGBC (U.S. Green Building Council) Upstate Steering Committee and is the Chair of the USGBC Upstate's Research Committee. He is also a member of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) and NSPE (National Society of Professional Engineers.)

After Lee Chapman's Presentation on LEED, Mr. Wade Crow of Wade Crow Engineering (WCE) will talk directly about QS/1 Building and its design process. Wade Crow Engineering designed the mechanical systems of the QS/1 Building responsible for earning 14 of the 33 points attributing the LEED Silver rating. We will then all take a tour of the facilities followed by lunch at Sonny's Brick Oven Pizza next door.

Location: QS/1 Headquarters Building in Spartanburg (http://www.qs1.com/qs1_locations.html)
201 West Saint John Street
Spartanburg, SC 29306
Parking will be allotted for in the Parking Garage.
[Directions from Greenville Hyperlink](#)

Date: Thursday, December 11, 2008

Time: 11:30 a.m. Doors Open
11:35 a.m. to 11:40 a.m. Chapter Business
11:40 a.m. to 12:30 p.m. Main Program and Tour
12:30 a.m. to Close Lunch at Sonny's Brick Oven Pizza
(<http://www.sonnysbrickoven.com>)

Cost: \$10/person (includes a lunch afterwards at Sonny's Pizza) Guests are welcome!
Read about our new lunch packages in the Membership Corner

Education Credit: This program qualifies for 1.0 PDH (including NC PE)

*Please RSVP to programs@ashrae4greenville.com
no later than Noon Tuesday, December 9, 2008*

Membership Corner

Thanks to all who attended our 1st of two ASHRAE Membership Promotion Meetings – Our next Membership Promotion Meeting is scheduled for March 12, 2008 at Roper Mountain Science Center. Take some time over the next few months to help promote our local chapter of ASHRAE by sharing how your affiliation with ASHRAE has benefited you over the years. We are hoping for a huge turnout of new members and returning members in the spring. Again we will offer free lunch to those who complete and application as well as the members who encourage those to join.



ASHRAE Chapter in Greenville would like to send a special thank you to Mr. Drayton Stott, Regional Vice Chairman for Society Membership who made the trip from Greensboro NC to join us last month. We appreciate the support of society with our efforts to increase the membership of our local chapter.

Merry Christmas and Happy New Year to all!

For questions and applications, contact me. membership@ashrae4greenville.com or (864) 469-9913

Greenville Chapter offers the following discounts to paid Chapter Members:

Package A: Discount Card

If you are a Society Member in good standing (society dues paid up) and have your Chapter Dues paid up, we will issue you a card at your first meeting of the year. Each time you pay for a meeting this card will be punched/notarized. When you have four (4) meetings paid for, the fifth is free.

Package B: Prepaid Year

If you are a Society Member in good standing (Society Dues Paid Up) and a Chapter Dues (Paid Up), you will be offered the option of paying one charge of \$75 for the entire years programs (\$90 value).

ASHRAE Membership Applications can be obtained at our regular meetings.

Chapter Technology Transfer

QS-1 LEED Silver

The next chapter meeting will be a tour of the QS-1 facility in Spartanburg. This LEED Silver building's mechanical systems were designed by Wade Crow Engineering, and they won an ASHRAE Region IV Technology Award for the design. The mechanical and plumbing systems were responsible for earning 14 of the 33 points generated towards the Silver rating.

The building is 30% more efficient than the minimum established by ASHRAE Standard 90.1. The mechanical systems utilize high efficiency boilers and chillers with variable speed fans and pumps. One of the building's unique features is the demand controlled ventilation system with the use of energy recovery of the exhaust to precondition the outside air.

Achieving this level of performance is a collaborative effort. The building's architect, McMillan, Smith & Partners, incorporated a reflective roof, high performance glass, and additional insulation in the walls and roof.

The building will cost is estimated to be 15% to 20% higher than a more standard building. The incremental cost of construction has a simple payback of 3 to 5 years.

Below are a couple of links to more information on the building.

http://www.upstateforever.org/newsviews_ufnnews/UFN_2008/ufn080611SCBiz_GreenIsGood.pdf

<http://www.usgbcsc.org/CaseStudies/QS1/QS1Poster.pdf>

http://www.johnsoncontrols.com/publish/etc/medialib/jci/be/case_studies.Par.81308.File.tmp/QS-1%20Data%20Systems%20CS.pdf

Research Promotion

Thanks to our platinum sponsors:

Caviness-Lambert Engineering
James M. Pleasants
Johnson Controls
Trane Company

All ASHRAE plaques, coins & certificates should be on their way out to all donors of \$100 or more, if not received already.

Stay tuned for our upcoming Research Promotion meeting.



Devon Cortright PE
Chapter Technology
Transfer Chairman
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Brian Alexy
Research Chairman
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Tentative Event Dates for 2008-2009

Thursday 09/11/2008	Seismic design of pumps	Harry King James M. Pleasants
Thursday 10/09/2008	100% DX-DOAS Control Strategy	Jeffrey Hughes Desert Aire Corp.
Thursday 10/23/2008	Fall Golf Tournament	Verdae
Thursday 11/13/2008	Mediation and Arbitration	Skip Lewis H2L Consulting Engineers
Thursday 12/11/2008	LEED Presentation at QS-1	Lee Chapman, Devita & Assoc. Wade Crow, Wade Crow Engr.
Thursday 01/08/2009	Pressure Independent Control Valves – Why you need them	Chris Edmondson
Wednesday 02/11/2009	Issues for International Collaboration OR Air Flow, Thermal and Humidity Patterns in Ventilated Archaeological Tombs, Valley of the Kings, Luxor	Cairo Distinguished Lecturer Essam Eldin Khalil, Ph.D
Tuesday 03/10/2008	Joint meeting with Mechanical Contractors Association (MCA)	
Thursday 03/12/2008	Field Erected Cooling Towers	Frank Bowman CCS
Thursday 04/16/2009	TBD	
Wednesday 04/22/2009	Satellite Broadcast: Indoor Air Quality	
Thursday 05/14/2009	Project Management	Distinguished Lecturer Barry Benator, P.E., CEM



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Region IV
Greenville Chapter