



Giga-Joule

Greenville
Chapter of
ASHRAE

February 2006

Meeting Announcement

This month's meeting will be held on **Tuesday, February 21, 2006, from 11:30 a.m. to 1:00 p.m.** at the **Roper Mountain Science Center** located at the intersection of I-385 and Roper Mountain Road. For directions, please contact Programs Chairman, Eric Scott, by phone at (864) 232-6633 x21, email at programs@ashrae4greenville.com or by visiting <http://www.ropermountain.org>.

A Message from the President

The Greenville chapter would like to thank Jamie Fry and Shawn McLaughlin for the presentation on Warehouse and Industrial Heating/Make-Up Air. We had a very good turnout and the material was informative. This month's meeting will be on Ductwork for Pharmaceutical/Biological Facilities coupled with High Velocity Dust Collection Systems for Potent Compounds by Manuel del Valle of Fluor. Even if you do not work in the pharmaceutical or biological industries, you should attend this session since the design fundamentals are similar to other industries. Manuel is an ASHRAE distinguished lecturer (DL) and has presented to our chapter for several years now. You don't want to miss this presentation!



If you or someone you know wants to join ASHRAE, then go to www.ashrae.org and click the quick link on the left side to "Join ASHRAE". You can fill out an application on-line using the interactive Membership Application Form or fill an application out by hand from a printed pdf format.

ASHRAE, founded in 1894, is an international organization of 55,000 persons. It is the world's foremost technical society in the fields of heating, ventilation, air conditioning and refrigeration. Through its meetings, research, standards writing, publishing and continuing education, the Society helps keep indoor environments comfortable and productive, deliver healthy food to consumers and preserve the outdoor environment.

If you have any questions or comments, please feel free to contact me.

James Bryan, P.E.
Greenville ASHRAE President
president@ashrae4greenville.com

Officer Nominations

It's time to elect our officers for 2006-2007. The Greenville Chapter Nominating Committee is currently accepting nominations for new officers, committee chairmen, and committee members. If you would like to participate in any level of leadership, please contact me, and we'll discuss where you can fit in. Nominated officers will be listed in next month's Giga-Joule, and elections are scheduled for April's Meeting.

Karl Counts, P.E.
Nominations Committee Chairman
sa@ashrae4greenville.com

Chapter Programs

Program: Ductwork for Pharmaceutical / Biological Facilities

- Ductwork Basics – Do's and Don'ts
- Mechanical Room Layouts
- Duct Collection for Potent Compound, High Containment Pharmaceutical Facilities



Presenter: Manuel A. del Valle, P.E. Director of HVAC Design @ Fluor Daniel



Manuel del Valle has 37 years of experience in HVAC design, specializing in pharmaceutical and biotech facilities in the United States and Puerto Rico. Manuel earned his Bachelor of Science in Mechanical Engineering from the College of Engineering at the University of Puerto Rico, Mayaguez Campus in 1964. He joined Daniel Construction Company International in 1969 as Field Mechanical Engineer in Puerto Rico. In 1971 Manuel became Manager HVAC Design at Scovil Engineers. Manuel came to Fluor Daniel Greenville in 1987 as Lead HVAC Engineer and served later as Manager HVAC in San Francisco, California. He is currently Director of HVAC Design in Fluor's Greenville office.

Manuel is a Registered Professional Engineer in Puerto Rico, South and North Carolina, Pennsylvania, New Mexico, California, and Colorado. He is a member of ASHRAE and the International Society for Pharmaceutical Engineering. He is a frequent speaker at conferences for associations such as ISPE, ASHRAE, Parenterals Drug Association, American Society of Mechanical Engineers, Barnett International, and the Institute of International Research. He has published a number of articles in trade publication such as *Pharmaceutical Engineering; Biopharm, Heating, Piping, & Air Conditioning;* and *CleanRooms Magazine*.

Location: Roper Mountain Science Center - Auditorium
(See front page for directions)

Date: Tuesday, February 21, 2006

Schedule: 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. Main Program

Cost: \$10/person - Lunch is included & guests are welcome

RSVP REQUIRED TO ENSURE LUNCH

Please reply to programs@ashrae4greenville.com no later than Friday, February 17th.

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

Don't forget to RSVP!

Eric Scott
Programs Chairman
programs@ashrae4greenville.com

Research Promotion



Breakout the new driver you got for Christmas and start practicing! We've got our spring golf outing set for April 28th, at Woodfin Ridge in beautiful Inman, SC. Plan on getting there around 11:00 am, hit a few range balls, and eat your box lunch before the 12:00 pm shotgun start.



I received a lot of feedback about not having the fall golf outing on Friday afternoon, so no excuses this time. Mark your calendars now; tell your friends, coworkers, customers, and anyone who owes you a favor. I expect to fill the place up. Remember this is a fundraiser so rather than play with the ASHRAE members that you always play with, be responsible for a foursome, preferably people who aren't members, and show them what a good time we have.

Sponsorships will be doubly important as this place is a little more expensive and they won't let us bring in our own beer. We'll need as many players as possible to help keep the average cost down. If you're trying to decide what to do with your windfall check from your Exxon stock, how about sponsoring the beverage carts.

I know I can count on the usual suspects for hole sponsorships, but let's take the burden off of them and let your boss know that he/she needs to be sponsoring this event. We need to get on this right away so let me know who can sponsor what. As usual, all donations/prizes/giveaways are appreciated, so if you've got some tees left over from the ASHRAE show, bring 'em. Thanks!

Dennis O'Keefe
Research Promotion Chairman
rp@ashrae4greenville.com

GreenExpo 2006 at Clemson University

Clemson University invites you to visit or exhibit at their inaugural GreenExpo 2006 on March 2nd in the Hendrix Center. This full day expo will include companies from all over the country representing all areas of sustainable design. Companies attending this expo will gain valuable exposure to students, professors and local professionals. Please do not miss out on this opportunity to present your product or service to future industry leaders!

For information and registration forms please contact:
Kelly Caudill by phone at (864) 247-2408 or email to kahodge@clemson.edu.

Student Activity

National Engineers Week will be celebrated February 19-25, 2006! Thousands of your fellow colleagues from all engineering disciplines throughout the country will be taking part in this exciting event. Many of the outreach programs emphasize the importance of math and science to the “next generation” of children and young adults. Please see you company’s HR staff to volunteer your time to assist in this worthy effort.



The sixth annual **Introduce-a-Girl-to-Engineering Day** is February 23, 2006. Hundreds of organizations worldwide will mobilize tens of thousands of women engineers – along with support from their male colleagues – to reach one million girls that day and throughout the year with direct, hands-on mentoring activities. "Girl Day" is the centerpiece of Engineers Week's annual outreach to encourage underrepresented groups to consider a career in engineering. See the attached PDF file for programming ideas.

Visit the EWeek site at: www.eweek.org for **National Engineers Week** information and specifically this page: <http://www.eweek.org/site/News/Eweek/girlsday.shtml> for additional Girl Day resources. **ASHRAE is offering free buttons and certificates for any girls who participate in programs offered by ASHRAE chapters** in support of Introduce-a-Girl-to-Engineering Day. Chapter officers can request them by sending an email to apruett@ashrae.org. Include your name, member number, mailing address and phone number, and quantity needed of each item. On the EWeek site, chapters can purchase general EWeek buttons and certificates.

Please also check the EWeek site for information about the Global Marathon! The "Global Marathon For, By and About Women in Engineering" running continuously from Noon (EST) Thursday, March 23 through Noon (EST) Friday, March 24 at the Engineers Week web site – www.eweek.org. Dozens of presentations and question and answer sessions originating from points around the globe will heighten awareness of science, technology, engineering and mathematics issues among pre-college, college and young career women, and examine issues such as retaining women in college engineering programs and the workplace.

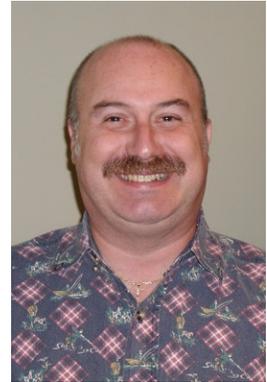
Students are always searching for career ideas so don't waste this chance to tell them what engineering is all about. Please contact me if you are interested. If your company and/or you participate in a program for engineer's week, then please let me know what that program is (i.e. engineer's breakfast, Discover "E", etc.). Your local ASHRAE chapter can receive credit and recognition from the national society by participating in programs during engineer's week.

Karl Counts, P.E.
Student Activity Chairman
sa@ashrae4greenvill.com

Membership Corner

February will be our last membership promotion emphasis meeting for this year. Remember that **if you bring someone ready to fill out an application to join then you and they eat free at this meeting.**

Attendees at the last meeting were Casey Lynn, Peter Henn, Devon Cortright, Eric Scott, Jim Reeves, Paul Jensen, Manuel del Valle, Bill Knight, Walter Tuttle, Caroll Suttles, Bob Speer, Karl Counts, Graham Fizer, John Adams, Jay McCutcheon, Greg Kyzer, James Bryan, James McCarter, Gene Adams, Chris Adams, Bill Carnes, Steve Abernathy, Lee McElrath, Jack E., Lawrence Pittman, Andrew Shive, Lee Chapman, Jon Henson, Ken Clark, Scott Houston, Kevin Wilson and Andrew Evans.



New member applications can be obtained at our regular meetings or call me at (864) 233-7966.

Caroll Suttles
Membership Chairman
membership@ashrae4greenville.com

Greenville Chapter Social Events



I hope that by the time you read this, the weather will have turned colder and there will be snow at the North Carolina ski areas. We are still planning on a ski and snowboard outing to Sugar Mountain Friday February 17 for family and friends. Depart from Greenville Mall at 6 AM with a return of 8 PM +/- . Meet near the old Montgomery Wards and car pool up to Sugar with a brief breakfast stop en route. We are asking those who end up as passengers to pay the drivers \$15 for the ride.

Once at Sugar the cost is \$36 for a lift ticket and \$17 for ski rental or \$30 for snowboard rental. If we get 15 participants group rates go in effect and the price drops to \$28 for a lift ticket and \$12 for ski rental, \$24 for snowboard rental. If we have enough participants for group rates, be prepared to pay the chapter for your lift ticket and rental via personal check or cash. If we have fewer than 15, each individual will be responsible for making their purchases from the mountain upon arrival.

So far the response on a request to send a deposit of \$15 per person has been underwhelming. I have not deposited the checks that I have received and they will be returned, should the trip be canceled. A Liability Release form will be required of each participant, but you can bring it and your \$15 ride fee with you. I do need to establish a contact list to update participants on changes in plans, so send an e-mail to the address below if you plan on attending. Also, send your Liability Release Form to the address below. Call or e-mail me for details.

Devon Cortright, P.E.
H2L Consulting Engineers
122 Edgeworth Street
Greenville, SC 29607
864-233-8844
treasurer@ashrae4greenville.com

Greenville Chapter ASHRAE

2004-2005 Chapter Officers

| Office | Officer | Company | Phone | Fax | email |
|--------------------|-------------------|------------------------|-------------------|----------|--|
| President | James Bryan | O'Neal, Inc. | 298-2148 | 298-6330 | president@ashrae4greenville.com |
| Programs/ PE | Eric Scott | Carrier Carolinas | 232-6633 x21 | 242-0290 | programs@ashrae4greenville.com |
| Secretary | Scott Houston | Thermal Resource Sales | 250-2822 | 250-0585 | secretary@ashrae4greenville.com |
| Treasurer | Devon Cortright | H2L | 233-8844 | 232-2679 | treasurer@ashrae4greenville.com |
| Membership | Caroll Suttles | Piedmont Natural Gas | 235-5844 x3055 | 233-6104 | membership@ashrae4greenville.com |
| Resource Prom. | Dennis O'Keefe | Piedmont Natural Gas | 250-2822 | 250-0585 | rp@ashrae4greenville.com |
| CTT | Jamie Porterfield | Waldrop Heating & Air | 578-7252 | 578-3414 | ctt@ashrae4greenville.com |
| Student Activities | Karl Counts | Day & Zimmermann | 241-8335 | 241-6750 | sa@ashrae4greenville.com |
| Historian | Paul Jensen | Trane Upstate Carolina | 672-6130 | 672-6001 | history@ashrae4greenville.com |
| Webmaster | Karl Counts | Day & Zimmermann | 241-8335 | 241-6750 | webmaster@ashrae4greenville.com |

Tentative Meeting Dates for 2005-2006

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|-----------------|--|--|
| Tues 9/20/2005 | Radiant Cooling Panels | Dr. Stanley Mumma PhD, P.E., Penn State |
| Tues 10/18/2005 | Why Water Source Heat Pumps? | Chris Edmondson, P.E., James M Pleasants |
| Tues 11/15/2005 | Controls Protocols and Interpretation | Jeff Swiderski, Carrier Controls |
| Tues 12/13/2005 | Interpretation of Mold Analysis | John McNamara CIAQP, AAA Environmental |
| Tues 1/17/2006 | Warehouse and Industrial Heating & Make-Up Air | Jamie Fry, Faulkner/Haynes & Associates |
| Tues 2/21/2006 | Ductwork for Pharmaceutical/Biological Facilities | Manuel Del Valle, P.E., Fluor |
| Tues 3/7/2006 | Joint Meeting with Mechanical Contractors Asso. | David Hensley, Hosted by GM Mechanical |
| Tues 3/21/2006 | Acoustics | TBD |
| Tues 4/4/2006 | Understanding Waterhammer in Steam Systems | Wayne Kirshner, P.E. |
| Wed 4/19/2006 | Green Buildings: Sustainability and the Building Environment | ASHRAE Satellite |
| Tues 5/16/2006 | Humidity Control for Commercial Buildings | Mark Nunnelly, P.E., Nunnelly & Associates |

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Technology for a Better Environment