



# Giga-Joule

Greenville Chapter

December, 2009

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

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## *Meeting Announcement*

The December meeting will be held on Thursday, December 10<sup>th</sup> at Furman University. The details are listed on the Programs Page. For more information, please contact our Programs Chairman, Manuel del Valle, by phone at 864-234-3802 or email at [programs@ashrae4greenville.com](mailto:programs@ashrae4greenville.com)

## *A Message from the President*

Since we did not have a Gigajoule from last month I will speak on the previous two month's developments. Our Golf Tournament in October had to be canceled due to a lack of interest and we are looking into different events in the Spring to help raise money for Research Promotion. Ideas on the table include a social gathering or even hosting a shooting completion at one of the local ranges. If this or other ideas interest you please let me know.

This month's presentation promises to be a great one with a site visit to Furman's Campus!! We will be looking at a chilled beam system design. Please see Manuel's Program section below for more details.

On another note, if you have not renewed your Chapter Memberships lately or would like to do so early, please see Dorothy. Remember that Chapter Membership Dues will go up by \$5 starting January 1, 2009. Again this was a raise as voted on by the chapter in October's Meeting from \$25 per chapter member to \$30 per chapter paying member.



**Davin Sandhu**  
President

[president@ashrae4greenville.com](mailto:president@ashrae4greenville.com)

### **This year's officers:**

President:	Davin Sandhu
Vice-President:	Will Thomason
President-Elect:	Manuel del Valle
Treasurer:	Rodney Hinton
Secretary:	Grant Wiegmann
Governor/ Historian:	Paul Jensen
Governor:	Bill Knight
Governor:	Carroll Suttles

### **This year's Committee Chairmen:**

Programs:	Manuel del Valle
Membership:	Dorothy Bertolini
Research:	Ryan Deter
Chapter Technology:	Devon Cortright
Student Activities:	Hamp Crow

*Call or email me with any comments or suggestions. I am always open to new ways to improve the ASHRAE experience for our members*

## *Chapter Programs*

This month we have a chance to see this chilled beam system that we have all heard about in action. Furman has been gracious enough to welcome us onto their campus for lunch, a presentation and tour. Tom Rice from SEMCO will be teaching us a bit about the chilled beam application and taking us on a tour. Also, some of the facilities crew from Furman will be available for questions throughout the tour. I hope to see you all out there next week.



### *October Meeting*

**Program:** Chilled Beam System at Furman University's Science Building

**Presenter:** Tom Rice, SEMCO

Tom Rice received a double Bachelor's degree in Marketing and Management from Columbia College in 1998. He followed that degree with a Masters in Business Administration in 2000 from William Woods University. Tom has spent the last 9 years working for SEMCO/FlaktWoods as Inside Sales Technical Support and Southeast Applied Products Regional Sales Manager for the Desiccant Wheel Products division. Through those 9 years, Tom has been a part of hundreds of Enthalpy Wheel energy recovery projects and several high profile dehumidification projects worldwide.

Since SEMCO was acquired in 2007, SEMCO has become the domestic supplier of chilled beams for Flaktwoods. Tom has been a part of implementing the product in the southeast territory of the United States, which traditionally has not been thought a market for the application of chilled beams. Nearly 100 chilled beam projects are currently applied, in construction, or in design in the southeast region alone in the past year - a geographic range as far north as Kentucky, and as far south as Miami, Florida.

**Location:** Furman University – Trustee Dining Hall  
\*(I will be sending out a map with details)

**Date:** Thursday, December 10, 2009

**Time:** 11:30 a.m. Lunch Served  
11:30 a.m. to 11:45 p.m. Chapter Business  
11:45 a.m. to 1:30 p.m. Main Program and Tour

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

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

***Please RSVP to [programs@ashrae4greenville.com](mailto:programs@ashrae4greenville.com)  
no later than Noon MONDAY, December 7, 2009***

## *Student Activities*

We are looking forward to another exciting year of excellence in student activities at the Greenville Chapter. We plan to promote engineering and science to students throughout the region in many ways, such as participation in Engineer's week and providing a special award to high school students at the regional science fair. And, as always, there are many regional and Society level scholarships available for four-year college students, two-year college students, and graduate students. In addition, ASHRAE awards grants for undergraduate senior projects. ASHRAE is currently accepting applications for the 2009-2010 school year. Find out more at <http://www.ashrae.org/students/page/704>



Hamp Crow  
Student Activities Chair – ASHRAE Greenville SC  
[sa@ashrae4greenville.com](mailto:sa@ashrae4greenville.com)

## *Membership Corner*

Thanks to all who came out for our last meeting – it was the 1<sup>st</sup> of 2 Membership Promotion Meetings to be held this year. Our next Membership Promotion meeting will be held in March – Please help us to get the word out. We passed out a couple of applications and are hopeful that we will have some new members to introduce soon.

### **3 Reasons Why ASHRAE Membership is Invaluable Right Now!**

#### **Number 1 – Technology**

ASHRAE creates the technology that the entire HVAC industry uses! Membership provides you cost effective access to these resources and an opportunity to be part of the research and development of them.

#### **Number 2 – Networking**

In a time of an economic decline you need to stay connected to the movers and shakers in your local HVAC community. You will never know when you will be looking for a job.

#### **Number 3 – Professional Development**

Now is the time to be a leader in the industry. Take a course on line or an ASHRAE certification exam. Market yourself the best and stand out from the crowd.

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.

Thinking about upgrading your Membership from Associate to Member, etc. – go to [www.ASHRAE.org](http://www.ASHRAE.org) to complete your BIO to be eligible.

Want to join ASHRAE – go to [www.ASHRAE.org](http://www.ASHRAE.org) to complete and online application (Be Green, and save time – do it online)

I am available to answer any questions regarding ASHRAE Membership – NEW or EXISTING at 864-444-0219 or email me at [membership@ashrae4greenville.com](mailto:membership@ashrae4greenville.com)

Best Regards,  
Dorothy Bertolini  
Membership Chair – ASHRAE Greenville SC  
[membership@ashrae4greenville.com](mailto:membership@ashrae4greenville.com)



# *Chapter Technology Transfer*

## **Changes in the 2009 ASHRAE Fundamentals Handbook**

I received my 2009 ASHRAE Fundamentals Handbook this summer and quickly noticed that the newest volume lacks some of the mass of the previous addition. I was curious as to what has changed. It has taken me this long to make a cursory review of the table of contents and compare it to the 2005 handbook.

A major restructuring occurred in the three 2005 chapters on thermal and moisture control. The data previously presented in 23, “Thermal and Moisture Control in Insulated Assemblies” and 25, “Thermal and Water Vapor Transmission Data” has been moved to chapters 25, 26, and 27 of the 2009 handbook. These three chapters in the 2009 handbook share a similar title “Heat, Air, and Moisture Control in Building Assemblies” with an additional phrase to clarify the differences; Fundamentals, Material Properties, and Examples.

I have not identified a clear destination for the material previously in chapter 24 of the 2005 Fundamentals, “Thermal and Moisture Control in Insulated Assemblies – Applications”, but I did note selected items appearing in other chapters. The 2009 handbook lacks “Environmental Control for Animals and Plants” and “Physiological Factors in Drying and Storing Farm Crops”, Chapters 10 and 11 in the 2005 Fundamentals. Just in case you missed it - like I did - both of these chapters appear in the 2007 Applications Handbook.

A chapter on Sustainability has been added to the 2009 handbook.

The arrangement of the chapters in the 2009 handbook is significantly different from 2005. Although most of the old favorites still exist, they are in a different order. The Fundamentals is the single most important reference on my bookshelf and I have mixed emotions with each new addition. Confusion over the revised locations of commonly used tables, and relief that some of the information published in the ASHRAE Journal has finally found its way into a more permanent home. In spite of the mixed emotions, I am grateful to the volunteers who keep the content current and applicable.

ASHRAE is always looking for volunteers to serve on the committees that edit the handbooks. Contact information is located at the end of the Preface.

Devon Cortright, P.E., LEED AP  
Chairman Chapter Technologies Transfer, Greenville Region IV  
ASHRAE Member Since 1982



**Devon Cortright PE**  
**Chapter Technology**  
**Transfer Chairman**  
[ctt@ashrae4greenville.com](mailto:ctt@ashrae4greenville.com)

## Tentative Event Dates for 2009-2010

Thursday 09/10/2009	September Chapter Meeting: Wastewater Treatment	Presenter: Victor Walker
Thursday 10/08/2009	October Chapter Meeting: SC Energy Office – ARRA (Stimulus Funding)	Presenter: Trish Jerman
Thursday 11/12/2009	November Chapter Meeting: Electrical Design Issues for the Mechanical Engineer	Presenter: Bob Bruns, PE
Thursday 12/10/2009	December Chapter Meeting: Chilled Beams @ Furman University	Presenter: Tom Rice
Thursday 01/14/2010	January Chapter Meeting: Legal Aspect of Industry	Presenter: Ward Lambert
Thursday 02/11/2010	February Chapter Meeting: Building Information Modeling	Presenter: Dennis Knight *
Wednesday 03/11/2010	March Chapter Meeting: Ethical Decision Making	Presenter: Barry Benator *
Thursday 04/08/2010	April Chapter Meeting: Hydronic Systems	Presenter: Chris Edmunds *
Thursday 05/14/2010	May Chapter Meeting: Variable Frequency Drives	Presenter: Greg Heartman



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Technology for a Better Environment

**Region IV**  
**Greenville Chapter**