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Greenville
Chapter of
ASHRAE

October 2005

Meeting Announcement

This month's meeting will be held on **Tuesday, October 18, 2005 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

James Bryan PE
Greenville
Chapter President



The Greenville chapter would like to thank Dr. Stanley Mumma, P.E., for his 4-hour presentation on Dedicated Outdoor Air Systems. The presentation was well received from all the participants I spoke with. One of the topics was ASHRAE Standard 62.1-2004 in a discussion regarding energy. I encourage all members to make a concerted effort to attend all of our meetings this year since the topics directly relate to code changes, specific system design and the equipment available to implement these changes. Generally, the principles for a specific design apply to other industries and markets, so the important piece is getting knowledge to our members.

I encourage you to attend the October meeting since we are fortunate to have another ASHRAE Distinguished Lecturer (DL): Chris Edmondson.

With regards to membership, please remember to ask people you come in contact in our industry if they are an ASHRAE member. If not, then tell them about our organization and what we do. Have them come with you to one of our monthly meetings. Their lunch will be free, plus your lunch will be free if they fill out a membership application form.

History fact: ASHRAE was formed by the merger of two societies, American Society of Heating and Ventilating Engineers (ASHVE), known after 1954 as American Society of Heating and Air-Conditioning Engineers (ASHAE) and the American Society of Refrigerating Engineers (ASRE). The two merged in 1959.

Remember to turn your teams in for the Golf Tournament coming up on October 11th. Come out and enjoy an afternoon before the cold settles in.

James Bryan PE
Greenville ASHRAE President
president@ashrae4greenville.com

Chapter Programs



ASHRAE Distinguished Lecturer, Chris Edmondson Why Water-Source Heat Pumps?



Chris received his B.S. degree in Mechanical Engineering from North Carolina State University in 1967. During the summers, he worked at Barber Coleman and Jay Johnson Controls. After graduation, he spent four and a half years as a salesman with the Trane Company. In 1971, he came to work for the James M. Pleasants Company, Inc. (Manufacturer's Representative for the ITT Fluid Handling Division). He worked as an outside salesman until 1978, when he was promoted to Vice President and Sales Manager until 1987. Since 1987 to the present time, he has served as President of the James M. Pleasants Company, Inc.

Mr. Edmondson has served many years in the ASHRAE organization, holding positions such as Secretary/Treasurer, Vice President and President of the North Piedmont Chapter. For the fiscal year, 1985-86, he received the Rudy Ferguson Memorial Award (Presidential Award of Excellence). In 1985, he became a technical speaker to various ASHRAE chapters and continued through 1989. He spoke at the ASHRAE Region VII CRC in 1992 and also at the Birmingham Region VII CRC. He also held the position of Educational Activities Vice Chair for Region IV from 1992-1994. In 1994, he was the Chapter Programs Chair for Region IV. In 1998-2000, he was Region IV ARC and during 2001-2003 Chris served as Region IV DRC. He currently serves as Region IV ARC.

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

Date: Tuesday, October 18, 2005

Schedule:	11:30 a.m.	Doors Open
	11:35 a.m.	Lunch served
	11:50 a.m.	Chapter Business
	12:00 p.m. to 1:00 p.m.	Main Program

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

Education: This program qualifies for 1.0 PDH credit.

Eric Scott
Programs Chairman

RSVP REQUIRED TO ENSURE LUNCH

Please reply to programs@ashrae4greenville.com no later than Thursday, October 13th.

Research Promotion

Society has changed the name back to Research Promotion and I couldn't be happier. The name "Resource Promotion" always made me feel like some kind of environmental activist – not that there's anything wrong with that.

I'm looking forward to another productive year as RP Chairman for the Greenville Chapter. Like most things, it gets a little easier each time and as this is my 4th time out, I'm hoping I won't lose too much sleep this year. In previous years, I've always been a committee of one and this has hampered my efforts. I'll need some volunteers for calling campaigns, etc., so if you're interested in helping out the Chapter, RP is the way to go.



We raised \$8,082.50 last year, which was fair considering I didn't have a calling campaign, (this will change!) and a sluggish local economy. Our goal for 2005-2006 is \$10,000. I hope to accomplish this by getting most, if not all, members to commit to at least par, which is \$50. This is only \$0.27/day, most of you spend four times that in your breakrooms each day. If you haven't filled out your membership renewal yet, please consider adding that \$50 with your renewal fee and remember to check off the donation to RP.



Date: October 11th, 2005, 12:30 P.M.

Location: Willow Creek Golf Club, Greenville.

Information: <http://www.willow-creekgolf.com/>
(864) 476-6492

To kick off our RP fund raising campaign, we'll be holding our Fall ASHRAE Golf Outing on Tuesday, October 11th, 12:30 p.m., at Willow Creek Golf Club. Details and signup forms for golfers & sponsors will be available soon, in the meantime start recruiting your winning foursomes now! We'll be having a shotgun start with a box lunch, so come around 11:30 a.m. to sign-up and get out onto the range to warm up. \$60 fee includes range balls, greens fees, cart, lunch, beverages and all the fellowship you can stand! Driving range and registration desk will open at 7:30 am. A \$50 gift certificate will be given for the 1st and 2nd place teams, closest to the pin, and longest drive.

This will be a major fundraising effort so I'm counting on our proud sponsors to fill up the course with sponsorship signs. Please make sponsorship checks out directly to ASHRAE Research Promotion. If you or your company can sponsor the event let me know.

I want to thank all of you who have worked for and contributed to, Resource Promotion in the past. We'll be having an RP night in November to recognize individual donors (\$50 and up) and companies (\$150 and up) who have helped make ASHRAE what it is today.

If anyone has any ideas on fundraising events that we could apply to this Chapter please see me after the meeting. Thanks!

Dennis O'Keefe
Research Promotion Chairman

Membership Corner

October is our membership emphasis night, please bring a friend that's ready to join ASHRAE and you and they eat free.

New members since our May meeting are Sam Strickland, Mark Rosenfeld, Ron Brewton, Jason Moody and Will Thomason.

I need assistance in following-up with new members. This entails a phone call to welcome them to the chapter and see if they have any questions. If you would be willing to help with this effort, please call me.

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

Caroll Suttles
Membership Chairman



Technology, Energy, & Government Activities

Satellite Broadcast --- Topic of Sustainability

ATLANTA – A satellite broadcast is being offered by ASHRAE to fulfill its goal of promoting building sustainability as a means to provide a safe, healthy, comfortable environment while simultaneously limiting the impact on the Earth's natural resources.

Information about building sustainability principles, practices and emerging concepts will be presented in the free April 19, 2006, satellite broadcast and Webcast, Sustainability and the Building Environment. The program is sponsored by ASHRAE's Chapter Technology Transfer Committee (CTTC).

“This broadcast will benefit all of the team members involved in the design, construction, start-up, and operation phases of a facility,” said Jon Christopher Larry, chair of CTTC. “Viewers will be given information and sources to assist them when they are faced with the situation where a green design must be done. The green building industry will also benefit from the engineering input from ASHRAE.”

The speakers for the broadcast will provide guidance on how to practice green building design. They are: Joe Van Belleghem, president, BuildGreen Developments, Victoria, Canada; Hal Levin, Fellow ASHRAE, research architect, Building Ecology Research Group, Santa Cruz, Calif.; Jean Lupinacci, director, ENERGY STAR commercial and industrial branch, Climate Protection Partnerships Division, U.S. Environmental Protection Agency; Kevin Hydes, P.E., P.Eng., president and CEO, Keen Engineering, Montreal, Canada; and Malcolm Lewis, Ph.D., P.E., president, CTG Energetics, Irvine, Calif.

The broadcast will be similar to the April 2005 Mold in the Building Environment Broadcast/Webcast viewed by some 16,000 viewers at 1,700 locations. Visit www.ashrae.org/greenbuildingsbroadcast for the latest information regarding the broadcast/Webcast and ASHRAE's work on sustainability.

ASHRAE.org Earns Award of Excellence

ATLANTA - ASHRAE.org, the Web site of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, has earned an award of excellence from the Web Marketing Association.

The association's Standard of Excellence WebAward recognizes the best Web sites in a variety of industry categories. Past Standard of Excellence sites include The American Water Works Association, ABC News, and Abercrombie and Fitch.

Judges noted that ASHRAE.org is "easy to navigate and easy to find your contact information." Entries are judged on design, innovation, content, technology, interactivity, copywriting and ease of use.

The site exceeds 6,000 unique visits per day and hosts 8,000 documents. ASHRAE.org was launched in 1995 to deliver information to the HVAC&R industry, including authoritative, in-depth technical information, information on Society activities, updates on emerging trends in new technologies, and information on HVAC&R products, companies and organizations.

"ASHRAE.org is designed to make it easy for visitors to find the information they need in order to help fulfill their obligation to their clients and customers as well as to the Society," David McAlister, ASHRAE's manager of electronic communications, said. "For Internet professionals to judge our site a Standard of Excellence in Web design is encouraging. But the usability and friendliness of a site depends on member feedback and constant study of industry best practices. We see this award as confirmation that we're on the right path."

Services of the site include:

- Discussion boards to enable practitioners to share expertise & opinions in a variety of technical areas.
- Online meetings for committees.
- An interactive membership application form.
- A career services center where members can post resumes and search for jobs.
- Enewsletters, The HVAC&R Industry, which provides weekly industry update to subscribers, and Society Connections, which provides discussion forums on technical issues and Society news.

The Web Marketing Association was founded in 1997 to help set a high standard for Internet marketing and corporate Web development on the World Wide Web.

ASHRAE, founded in 1894, is an international organization of 55,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.

STANDARDS --Proposed ASHRAE Standard Proper Ventilation Integral Part of Patient Care

ATLANTA – Just as the right dose of medication can improve their health, proper ventilation is an integral part of patients’ well-being in health care facilities.

Requirements to ensure high quality ventilation can be found in ASHRAE’s proposed standard 170P, Ventilation of Health Care Facilities. The proposed standard is open for public comment from Sept. 23-Nov. 7, 2005. The standard is being developed by ASHRAE and the American Society for Health Care Engineering.

“Without high quality ventilation, patients, health care workers and visitors can become infected through normal respiration of particles in the air,” Richard Hermans, P.E., chair of the committee writing the standard, said. “Poorly ventilated health care facilities are places where the likelihood of pathogenic particles occurring in the air is quite high. Because such pathogens can be found everywhere in health care facilities and because patients are susceptible to them, additional care should be taken in the design of ventilation systems.”

The proposed standard will define requirements for ventilation system design intended to provide environmental control for comfort, as well as infection and odor control.

It addresses systems and equipment, space ventilation for a variety of areas in health care facilities, including airborne infection isolation rooms, critical care units, burn units, surgery rooms, and Class B and C operating rooms, and planning, construction and system startup.

Drafts of ASHRAE’s proposed standards and guidelines are available only during their related public review periods. To obtain electronic draft versions of the Standard 170P during the comment periods, visit ASHRAE.org at www.ashrae.org/standards.

CODES -- ASHRAE Implements New Process to Update Code-Intended Standards

ATLANTA – As part of ongoing efforts to increase use of its standards, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has announced a major change to availability of addenda to code-intended standards. The move puts ASHRAE in line with issuance of model building codes.

In the past, addenda for code-intended standards on continuous maintenance were posted individually on ASHRAE.org after being approved by the Board of Directors for publication. Now, Board-approved addenda to code-intended standards will be published in a supplement. The supplements for each standard will be published on a regular schedule halfway between the three year publication of each standard. The addenda also will be incorporated into each standard when it is reissued after its last publication.

Richard Hermans, P.E., chair of ASHRAE’s Standards Committee, acknowledges the change is significant. “Our whole approach to how we relate to the building code industry is changing,” Hermans said. “We are seeking more involvement with the model code development community to assist us in our code proposals. We are responding to member concerns over the cost of keeping up with our code-intended standards. By cost, I am not referring to the dollars spent for obtaining the updated documents but rather the cost in time to train employees about the new requirements contained in addenda. And we are aligning our release of certain standards to coincide with the model code schedules for code change proposals.”

All of these actions point to a policy of releasing addenda on a predictable schedule spaced out over years, he said. "In this way, we will develop our code-intended standards in the same way that groups such as the International Code Council and the National Fire Protection Association, both of which incorporate ASHRAE standards, maintain their model codes," he said.

The change applies only to code-intended standards that are on continuous maintenance. These are:

- Standard 15, Safety Standard for Refrigeration Systems;
- Standard 34, Designation and Safety Classification of Refrigerants;
- Standard 52.2, Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size;
- Standard 62.1, Ventilation and Acceptable Indoor Air Quality in Commercial, Institutional, Industrial and High-Rise Residential Buildings;
- Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings;
- Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings;
- Standard 90.2, Energy Efficient Design of Low-Rise Residential Buildings;
- Standard 140, Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs.

The first supplements for standards published will be available in March 2006. For more information on ASHRAE's work in standards, visit www.ashrae.org/standards.

Handbook --Interactive CD Provides Greater Access to ASHRAE

ATLANTA – An enhanced CD-ROM provides greater access to the technical guidance in the ASHRAE Handbook. The ASHRAE HandbookCD+ 2002-2005 is the Society's first four-volume HandbookCD with electronic enhancements.

"The CD provides users with the most complete and useful HVAC&R reference available," Mark Owen, ASHRAE Handbook editor, said. "The CD+ contains all Handbook chapters with the latest updates in a searchable electronic format, featuring interactive and supplemental tools."

These tools include:

- Spreadsheets demonstrating the radiant time series (RTS) method of load calculation;
- Greatly expanded climatic design data tables from the 2005 Handbook, Fundamentals;
- NAIMA 3E Plus software for calculating insulation thickness;
- A desiccant wheel performance estimator;
- Video clips of kitchen hood airflows;
- Equipment animations;
- Interactive charts and spreadsheets;
- Supplemental examples and text;
- More links to organizations and data;
- Color graphics for improved understanding, surpassing the presentation possible in the black-and-white print volumes;
- Links to commercial resources that allow users to source products and services related to the topic of each chapter.

The CD+ contains PDF files of chapters in all four current volumes: 2005 Fundamentals; 2004 HVAC Systems and Equipment; 2003 HVAC Applications; and 2002 Refrigeration. The 3,100+ pages of PDFs are searchable across all the volumes, in both the I-P and SI unit editions.

The cost of the Handbook CD+ is \$499 (\$249, ASHRAE members). Prices are for a single user. A multi-user network license and a network HandbookCD+ also are available.

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, by mail at 1791 Tullie Circle NE, Atlanta, GA 30329, or visit the ASHRAE.org Bookstore at www.ashrae.org.

Know of an innovative project that may be award worthy? If so, submit it for an ASHRAE Technology Award. Contact me or visit: <http://www.ashrae.org/standcom/tegaward.htm> for forms and more information.

- Complete the "Short Form" and use it as the cover page.
- Provide a system schematic/diagram not larger than 11" x 17" in size. In addition, attach a brief narrative (maximum of 2 pages). The narrative should include the gross and net building areas applicable to the project, a description of the major building areas (i.e., operating rooms, laboratories, computer rooms, industrial processes, offices, warehouses) and a brief discussion regarding the following five criteria (if a criterion is not applicable, state accordingly):
 - Energy Efficiency
 - Indoor Air Quality
 - Innovation
 - Operation & Maintenance
 - Cost Effectiveness
- Submit your schematic, brief narrative, and completed form to me for judging at the Chapter level.

Applicants will receive recognition and qualify for a chance to advance to Regional & Society level competition.

Jamie Porterfield
CTT (Chapter Technology Transfer) Chairman

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

Tues 9/20/2005	Radiant Cooling Panels	Dr. Stanley Mumma PhD, PE; Penn State
Tues 10/18/2005	Why Water Source Heat Pumps?	Chris Edmondson PE, 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 PE, Fluor
Tues 3/7/2006	Joint Meeting with Mechanical Contractors Asso.	David Hensley, Hosted by GM Mechanical
Tues 3/21/2006	Natural Gas Piping 101	Steve Abernathy, Piedmont Natural Gas
Tues 4/18/2006	Understanding Waterhammer in Steam Systems	Wayne Kirshner PE
Wed 4/19/2006	Green Buildings: Sustainability and the Building Environment	ASHRAE Satellite
Tues 5/16/2006	Humidity Control for Commercial Buildings	Mark Nunnely PE, Nunnely & Associates

Greenville Chapter of ASHRAE



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Technology for a Better Environment