



Giga-Joule

Greenville Chapter

February, 2009

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

Meeting Announcement

The February meeting will be held on Wednesday, February 11th at the Roper Mountain Science Center. 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 Chris Edmondson of James M. Pleasants on speaking about pressure independent control valves. Just getting back from the AHR Expo this past week, there seemed to be several companies expanding their lines to include these valves. Be on the lookout from your sales representatives to get information from them.

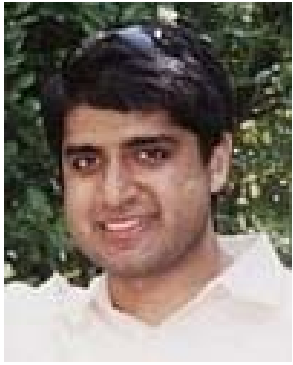
I look forward to seeing all of you at our next meeting on Feb. 11th, when we welcome out Distinguished Lecturer from Egypt, Prof. Dr. Essam E Khalil. Please see Davin's message for any questions.

I look forward to seeing you on Wednesday, Feb. 11th.

Best regards,

Will Thomason
Greenville ASHRAE President
president@ashrae4greenville.com





Davin Sandhu
Programs Chairman
programs@ashrae4greenville.com

Chapter Programs

This month our meeting will be held at the Roper Mount Science Center. We will have the honor of having Professor Dr. Essam E Khalil, an ASHRAE Distinguished Lecturer. He has come all the way from Cairo, Egypt to come and speak at our program.

The program will consist of an hour lunch program followed by a three hour afternoon program. The lunch session will cost the normal \$10 for chapter members and \$15 for non-chapter members. The following three hour session will cost \$15 for chapter members and \$20 for non-chapter members.

The lunch session will work the same as all previous chapter programs with a business section followed by the program. After the lunch session we will take a short break for the members who do not attend the three hour seminar to step out. The three hour session will consist of three 50 minute lectures with time to take bathroom and coffee breaks.

This is your chance to receive up to 4 PDHs!!! Please join us for what promises to be an interesting program!!

Please note that the program is on a WEDNESDAY this month:

February 11, 2009

Student Activities

Remember February 15-21 is National Engineer's Week. Go to <http://www.eweek.org/> to find out more about how you can participate. Also, February 19 is "Introduce a Girl to Engineering Day". So if you intend to introduce a girl to engineering but haven't gotten around to it yet, February 19 is the perfect time! Don't put it off any longer!



February Meeting

Program:

Lunch Program:

Air Flow, Thermal and Humidity Patterns in
Ventilated Archaeological Tombs, Valley of the Kings,
Luxor

Afternoon Program:

Energy Performance of Buildings
&
Air-Conditioning for Improved Comfort and Air
Quality



Presenter:

Professor Essam Eldin Khalil, Ph.D.
Vice Dean for Graduate Studies & Research
Professor of Mechanical Engineering
Cairo University
Cairo, Egypt

Prof. Dr. Essam E. Khalil is a Professor of mechanical engineering, Faculty of Engineering, Cairo University, Egypt. He has a Ph.D. from Imperial College, London University, England 1977. He is the author and co-author of several international researches in Mechanical Engineering fields. He has many years of experience in delivering courses in thermo fluids and Heat transfer to University, college students and to building managers and maintenance staff in both the industrial and commercial environments.

He has been selected by various universities and international organizations to lecture to graduate and post graduate level engineers, managers, supervisors and operating personnel on the subjects of power plant design and optimization, HVAC system management, energy utilization, waste heat recovery, plant management and other related subjects.

This has been ongoing for over 35 years and very well received. Prof. Khalil is the Fellow ASME – Fellow AIAA and Full Member ASHRAE. He is the chairman of National HVAC Committee of Egypt, Member National Energy Code Committee of Egypt and the chair of the HVAC sub-group. He is practicing Mechanical Engineering and air conditioning design and maintenance consultancy over the past 30 years, a registered Consultant and the Chairman of Arab Air Conditioning Code Committee. Prof. Dr. Khalil is the Convenor of ISO TC205 WG2 (Design of Energy Efficient Buildings) and Chairman of Consulting Engineering Bureau, CEB.

Location:

Roper Mountain Science Center (www.ropermountain.org)

Date:

Wednesday, February 11, 2009

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 a.m. to 1:00 p.m.	Main Lunch Program
1:00 p.m. to 1:15 p.m.	Short Break
1:15 p.m. to 4:15 p.m.	Main 3 hour Program with Intermittent Breaks (coffee and small snacks will be provided for second session)

Cost:

Lunch Program: \$10/chapter member \$15/non-chapter member (catered lunch)
Afternoon Program: \$15/chapter member \$20/non-chapter member (coffee included)

Education Credit:

This program qualifies for up to 4.0 PDHs (including NC PE)

*Please RSVP to programs@ashrae4greenville.com
no later than Noon Monday, February 9, 2009*

Membership Corner

Happy New Year from the ASHRAE Membership Committee – We would like to welcome our newest member Mr. Brian S. Kagey with Honeywell Environmental & Combustion Controls as well as several returning members. It was a pleasure to see you all at our January meeting.



Upcoming Membership Promotion Meeting is being planned for March 13th 2009 – INVITE, INVITE, INVITE...ALL Members are encouraged to invite new potential members. Each current member that brings a guest who completes an ASHRAE application is eligible for a free lunch ~ for themselves and their guest(s). So, mark your calendars for March 13th and start telling your friends and colleagues how your affiliation with ASHRAE has been a benefit to your career in the HVAC industry.

Reminder as of 1/1/2009 Monthly Chapter Meeting Charges will be as follows:

ASHRAE Greenville Chapter Members - \$10.00 per meeting (includes lunch)
Non-Chapter Members - \$15.00 per meeting (includes lunch)

Please see information below and be sure that you are current with your ASHRAE Society and local Chapter dues and discover how easy it is to manage through the new ASHRAE website. As always, I am available to assist in anyway regarding your membership status.

Be Green, Save Time, and Manage Your Membership Online!

You're probably doing it already – using the internet to pay your bills, stay in touch and read emails. ASHRAE wants you to join your colleagues who are already managing their membership online. When you use the ASHRAE website to renew your membership, purchase products, or attend meetings/events, you are doing your part to cut down on printing and postage costs.

ASHRAE provides you with a toolkit to do your job – your membership is packed full of technical, networking and professional development benefits, and it is all just a click away at ASHRAE.org. And did you know you can print a confirmation of your order online? If your company requires an invoice or receipt, print your confirmation and submit it.

ASHRAE is committed to promoting sustainable, efficient and renewable best practices. Make that commitment this year, too. When the time approaches for you to renew your membership, do it early and online.

So update your toolkit, and be green, save time, and manage your membership online through ASHRAE.org today!

Chapter Technology Transfer

2006 Energy Code Changes

Back in September I wrote an article highlighting some of the changes in the 2006 International Mechanical Code; now I take a stab at the 2006 International Energy Conservation Code. Please do not assume this is a comprehensive list of the changes – just my opinion on some of the more interesting ones. And no comments on what I think is interesting! This is the International Energy Code, not ASHRAE 90.1.



Devon Cortright PE
Chapter Technology
Transfer Chairman
ctt@ashrae4greenville.com

One of the most significant changes to the 2006 code is the reduction in the number of climate zones from 19 to 8. Whereas Greenville used to be 7A, we are now 3A. The whole state is 3 with the coastal region adding additional requirements as a “Warm-Humid.” The new Climate Zone Map is Figure 301.1.

The building envelope requirements have changed. Prescriptive requirements for buildings with less than 40% wall area for windows are now all identical. In the 2003 version there were differences at 10%, 25%, 40% and 50%. In the 2006 version everything is the same for less than 40% window wall area. If you have more than 40% windows you are referred to ASHRAE 90.1. Below is a table with a few select envelope changes.

	2006 IECC	2003 IECC
Climate Zone	3A	7A
Continuous Roof Insulation	R-15	R-19
Framed Walls	R-13	R-11
U Metal Frame Windows	0.60	0.70
SHGF (No Shade)	0.40	0.50 (<40% window area)
SHGF (No Shade)	0.40	0.70 (<25% window area)
SHGF (No Shade)	0.40	No requirement (<10% window area)

Energy recovery is required for systems of 5000 cfm or greater and minimum outdoor air supply of 70% or greater. (Section 503.2.6) This one has numerous exceptions.

Duct systems operating at 3” w.g. or greater air pressure are required to be leak tested. (Section 503.2.7.1.3)

As with all of the codes you need to read the fine print.

Research Promotion

Spring golf date is planned for **Thursday, April 16th**. Mark your calendars. More details to follow.

Anyone who did not receive their ASHRAE coins, plaques or certificates, please contact me.

Stay tuned for our upcoming Research Promotion meeting.



Brian Alexy
Research Chairman
rp@ashrae4greenville.com

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 04/14/2009	Joint meeting with Mechanical Contractors Association (MCA)	Location: GM Mechanical
Thursday 03/12/2009	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



ASHRAE
Technology for a Better Environment

Region IV
Greenville Chapter

Dear ASHRAE Members,

RE: REGION IV and REGION XII CRC – August 6-8, 2009

The Atlanta Chapter is hosting our CRC jointly with the Florida West Coast Chapter (FWC) of ASHRAE in August of 2009. If you are not familiar with the CRC, the acronym stands for Chapters Regional Conference. The CRC serves multiple purposes including Chapter Motions for society consideration, technical training seminars and workshops for all incoming ASHRAE Chapter Chairpersons and Board of Governors. We are extremely excited to host this event, as some of its distinguished attendees will be ASHRAE Society Officers, Regional Officers and the Delegates and Alternates for this joint CRC which includes all 7 chapters in Region IV (North Carolina, South Carolina and Georgia) and 11 chapters of Region XII (Florida, Puerto Rico and South America). We anticipate having over 120 attendees from both regions.

Hosting the CRC is both an honor and a challenge as it requires a significant amount of planning, coordination and money to fund the event. This year's event is being held at the TradeWinds Beach Resort in St. Petersburg Beach, Florida. The attendees pay for their own rooms and workshop/social event fees; however there is still a huge deficit to cover items such as meeting rooms for business operations and training, audio visual equipment, the Presidential Luncheon, Awards, printing, office supplies and social events for the attendees. This huge financial responsibility falls on the hosting chapters.

Region IV of ASHRAE is asking for your help with a TAX DEDUCTIBLE monetary contribution to make this event possible. All sponsors will be well represented at the conference with their names displayed on meeting agendas, location signs, directories and several huge banners that will be hung at advantageous spots in the hotel. Complete packages of sponsorship "perks" are attached. Any company who sponsors \$2500 or more will get their name posted on the official CRC2009 letterhead which will be used for every communication, letter and announcement that is made by the CRC Committee. As a sponsor you will be invited to the Presidential luncheon of the conference where you will have the opportunity to meet Society Officers and be recognized by the President of ASHRAE for your generosity and support. We would also be happy to include any promotional items to be placed in the registration bags given to each participant to further advertise your contribution.

As, with every CRC, events and seminars are open to ASHRAE members and their guests. This is particularly useful for our Technical Seminar during the CRC for CEU's/PDH's. More information about the speaker and the topic will be announced at a later date.

We want to make this a truly remarkable learning experience for the CRC attendees. For more information on sponsorship, please do not hesitate to call Debie Horsey at (813) 879-5790 x2231. Checks made to: ASHRAE Region IV CRC Fund and mailed to Sunbelt Engineering Group, Inc./975 Cobb Place Blvd. Ste. 302/ Kennesaw, Ga. 30144. This is also the address to send promotional items. We thank you for your help and consideration.

Gratefully,

Will Thomason
Cc:Pam Immekus, Region IV CRC Chair

Are You Ready!

CRC 2009 is coming to the Florida West Coast Chapter!

This August, the FWC Chapter will be hosting the Chapters Region Conference for two regions – Region IV and XII. This will be quite the event. ASHRAE members and Society dignitaries will come from all over Florida, Georgia, North Carolina, South Carolina, Puerto Rico, Argentina, Brazil and other areas of Central and South America.

CRC 2009 will take place August 6-8, 2009, but our local chapter will be hosting events throughout the week including fishing charter, golf scramble, technical seminars and much more. The conference will be held at the Tradewinds Beach Resort in lovely St. Pete Beach.



If you are interested in volunteering and being part of the fun, we welcome you. Please feel free to contact me at 813-731-2203 (jisenbec@admin.usf.edu) for more details.

We are also looking for sponsorships. This will be an ideal opportunity to get your name out to over 200 ASHRAE participants! Please contact Debie Horsey 813-748-9406 (dhorsey@carrollair.com) if you are interested.

Jennifer Isenbeck
CRC 2009 Chair
FWC Honors and Awards Chair

ASHRAE CRC 2009 Sponsorship Packages

Platinum Palm - \$5000

- Full size logo on Sponsor Recognition Board at all events
- 4 Tickets to Opening Sunset Reception (Thursday night)
- 4 ASHRAE President and Sponsor Recognition Luncheon Tickets, Tabletop display (Friday)
- 4 Tickets to Special Event (Friday night)
- 4 Golf tickets
- Recognition on President/Sponsor and Awards Luncheon Program (Friday/Saturday)
- Bonus goodie pack (drink tickets to Sunset reception, ASHRAE logo items, snacks and promo items)

Pirate's Gold - \$2500

- 3/4 size logo on Sponsor Recognition Board at all events
- 4 Tickets to Opening Sunset Reception (Thursday night)
- 4 ASHRAE President and Sponsor Recognition Luncheon Tickets (Saturday)
- Recognition on President/Sponsor and Awards Luncheon Program (Friday/Saturday)
- Bonus goodie pack (drink tickets to Sunset reception, ASHRAE logo items, snacks and promo items)

Sunset Silver - \$1000

- Half size logo on Sponsor Recognition Board at all events
- 2 Tickets to Opening Sunset Reception (Thursday night)
- 2 ASHRAE President and Sponsor Recognition Luncheon Tickets (Friday)
- Recognition on President/Sponsor and Awards Luncheon Program (Friday/Saturday)
- Bonus goodie pack (drink tickets to Sunset reception, ASHRAE logo items, snacks and promo items)

Breezy Bronze - \$750

- Company name on Sponsor Recognition Board at all events
- Choice of Fishing Charter or Golf Scramble Sponsor (first come/first serve choice)
- 1 ASHRAE President and Sponsor Recognition Luncheon Ticket
- Recognition on President/Sponsor and Awards Luncheon Program

Lanyard Sponsor - \$750 (first come first serve)

- Name and/or logo on all lanyards given out to participants
- Awards Luncheon Program
- Company name on Sponsor Recognition Board

Seaworthy Sponsor - \$500

- Awards Luncheon Program
- Company name on Sponsor Recognition Board

Luau Sponsor - \$250

- Recognition on President/Sponsor and Awards Luncheon Program
- Submit your vendor logo items to be placed in Registrant SWAG bags, minimum 200 items.

Goodie Bag Sponsor –

- Provide vendor logo items to be placed in the registrants SWAG bags, minimum of 200 items. First come first serve limited offer. Contact Pam Immekus at 770-419-7533 to make arrangements.



2009 Joint CRC

By signing below, _____ agrees to provide

(Company name or person)

the following value of \$ _____ Dated _____

- | | |
|--------------------------------------|--------------------------------------|
| _____ \$5,000.00 Platinum Palm Level | _____ \$2,500.00 Pirate's Gold Level |
| _____ \$1,000.00 Sunset Silver Level | _____ \$750.00 Breezy Bronze Level |
| _____ \$500 Seaworthy Sponsor | _____ \$250.00 Luau Sponsor |
| _____ \$750.00 Lanyard Sponsor * | |

*Company logo will be on all lanyards for nametags. Only one Lanyard Sponsorship is available. The first payment received will get this sponsorship opportunity.

_____ I can provide a minimum of promotional items for goodie bags. No company brochures or literature will be accepted.

Fill out this sponsorship form and mail it along with your check made payable to the FWC ASHRAE to:

Debie Horsey
Carroll Air Systems, Inc.
3711 W. Walnut Street
Tampa, Florida 33607

For eligible sponsors, Debie Horsey will contact you regarding recommended logo file type and size for printed format for webpage recognition.

Authorized signature _____

Please provide contact information:

Address: _____

Phone _____ Fax _____

Email: _____

Thank you for your generous contribution.

Sun, Sand and Sustainability