Meeting Announcement

The March meeting will be held on Tuesday, March 8, 2016 at M.T. Anderson Support Center. For more information, please contact our Secretary, Melissa Angulo, at secretary@ashrae4greenville.com.

A Message from the President

Greetings ASHRAE Members,

I hope this finds you all well. Please take a moment to review the below list of upcoming activities. We hope to see you at some or all of these future events.

1st Annual Greenville ASHRAE Oyster Roast – Monday, March 7th – 6:00 PM to 9:00 PM at Bimini’s Oyster Bar and Seafood Café
March ASHRAE Meeting - HVAC Systems for Pharma/Bio Facilities – Tuesday, March 8th – 11:30 AM to 1:00 PM – MT Anderson Career Center
ASHRAE Spring Golf Tournament – Monday, April 18th – 11:00 shotgun start - Musgrove Mill Golf Club
MCA Clay’s for College – Friday, April 22nd – 11:30 to 5:30 – The Clinton House

Also, if you are interested in serving on any of our chapter committees, then we need you! Contact me or any other BOG member to express your interest.

Please don’t hesitate to email or call if you have any questions, comments, or concerns.

Tigue Garick – President
ASHRAE – Greenville Chapter
tigueg@jmpco.com
864-616-0592
**Membership Promotion**

Our next membership promotion meeting will be on Wednesday, April 13 in Asheville. Any member who brings a prospective member will get a $25 American Express gift certificate.

*Kevin Brock*
*Membership Chairman, Greenville Chapter, ASHRAE Region IV*
*Kevin.Brock@dnvgl.com*

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**Chapter Board of Governor special message**

Air Conditioner Efficiency is going up.

The middle of last year I wrote an article on how the new SEER 14 efficiency requirement had caught me by surprise. This is a warning to those of us in business for the next rounds of increases in 2018 and 2023. Residential unit SEER will increase to either 14.5 or 15, depending on size, in 2018. Commercial air conditioning standards will increase in 2018 by about 13 percent. In 2023 an additional 15 percent increase in efficiency is required for new commercial units.

Fan Efficiency Standards are Coming.

AMCA has established a means of grading the efficiency of fans. ASHRAE 90.1-2013 uses the AMCA 205 standard to establish minimum fan efficiency for some applications. The AMCA standard is based on a number of parallel rating curves. Although each curve is linked to an efficiency point at a fan wheel size, the curve alters the efficiency requirements as size changes. Thus a smaller FEG67 fan does not have to be as efficient as a larger FEG67 fan. The link below is to an HPAC article on the subject.


The International Code Council is discussing incorporating fan efficiency requirements based on this system. This would be in addition to a requirement to right size the fan minimizing the option of using a smaller, less expensive, and less efficient fan. In general, provisions are being written requiring fans are to be selected to operate within 15 percentage points of their peak efficiency. Fan efficiency standards has a way to go. Manufacturers have to test their products, revise catalogues, and educate a lot people on how to apply the standards, but it is on its way.

Thank you,

*Devon Cortright*
*VP of Mechanical Engineering*
*H2L Consulting Engineers Inc.*
*gov6@ashrae4greenville.com*
Greenville Chapter
RP Golf Tournament

Monday, April 18th, 2016
Musgrove Mill Golf Club
9:30 a.m. Registration
11:00 a.m. Shotgun Start

*Platinum Corporate Sponsor (2 Available)*
$1500.00 each
Includes Cabin for 6 - Sunday Night Before the Event, one team, and hole sponsorship

*Gold Corporate Sponsor (2 Available)*
$850.00 each
Includes 2 Bed Room in Clubhouse Sunday Night before the Event, one team, and hole sponsor.

*TEAM Sponsor – Includes Foursome, lunches, range balls, drinks & hors d'oeuvres*
$550.00

*Individual Player – Grouped in a Team with other individual players.*
$150.00

*Hole Sponsor - $200.00*

*Drink Sponsor - $200.00 – (3 Available)*

Proceeds Support
Chapter Programs and
ASHRAE Research Promotion

Registration Information:
Hole Sponsor Name/Address/Phone Number:

__________________________________________

__________________________________________
Registration includes prizes, range balls, golf cart, course fees, limited drinks, lunch before, and hors d’oeuvres afterwards.

Team Contact Name & email:

________________________________________________________________________

Golfer Names
1)________________________________________
2)________________________________________
3)________________________________________
4)________________________________________

Platinum Sponsorship includes recognition of your company at the event, hole sponsorship (1st choice of location), designation as Major Donor-Silver in ASHRAE Investor Honor Roll, and silver ASHRAE commemorative coin and plaque.

Gold Sponsorships includes recognition of your company at the event, hole sponsorship, designation as Major Donor-Bronze in ASHRAE Investor Honor Roll, and bronze ASHRAE commemorative coin and plaque.

Registration Costs:

<table>
<thead>
<tr>
<th>Sponsorship Type</th>
<th>Cost</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Platinum Tournament Sponsor</td>
<td>$1500</td>
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<tr>
<td>Silver Tournament Sponsor</td>
<td>$850</td>
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<tr>
<td>Four Person Team</td>
<td>$550</td>
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<tr>
<td>Individual Player</td>
<td>$150</td>
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<tr>
<td>Hole/Drink Station</td>
<td>$200</td>
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</tbody>
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Total Enclosed = ______

Please complete and return registration form by March 15th, 2016 with your check payable to ASHRAE Greenville Chapter to the address below, pay for TEAM Sponsor or Individual Payers online at the Next Golf Tournament tab at www.ashrae4greenville.com or call Tigue Garick with Credit Card Payment Information:

Jeremy Butdorf – Research Promotion Chair
James M. Pleasants Co
103 Smith Hines Rd.
Greenville, SC 29607
1-864-940-4169
Our Clemson ASHRAE student chapter is holding a job fair and needs help from the Greenville ASHRAE chapter. The ASHRAE & ASME student job fair will be held on March 30, 2016 at Clemson University in the Fluor Daniel Building. Engineering students who are already involved with ASHRAE and others who have expressed interest in our industry will be looking for internships and long term positions. Please contact Daniel Lowe if your company would like to attend this event.

Sincerely,

Daniel Lowe, PE, CxA
Student Activity Chair, Greenville Chapter, ASHRAE Region IV
Phone: 864.877.8047

Informing colleagues about ASHRAE takes less than 1 minute now with Connect-a-Colleague. During #MarchIntoMembership contest you could win a $500 American Express gift card when your colleagues join ASHRAE through your customized email referral. Connect-a-Colleague simply creates an automated email on your behalf and the more people you invite during the month of March; the more chances you have to win.

ASHRAE member referrals continue to be the top reason new members join. As an ASHRAE member, your referral is a very powerful tool that can benefit your colleagues, your Society, and the HVAC&R industry. Please take a minute to Connect-a-Colleague today.

Get started now: Connect-a-Colleague
For #MarchIntoMembership contest rules please visit ahsrae.org/connect
In efforts to keep you updated, visit us at:

WEBSITE: www.ashrae4greenville.com
LINKEDIN: https://www.linkedin.com/groups?home=&gid=8154388&trk=anet_ug_hm
EVENTCALENDAR: View ASHRAE Greenville Chapter Meetings calendar
March Meeting

Presenter: Manuel A. del Valle

Mr. del Valle holds a Bachelor’s Degree in Mechanical Engineering from the University of Puerto Rico, and has held PE licenses in Puerto Rico, South Carolina, and North Carolina. He has over 43 years’ experience in the design, field supervision, and troubleshooting of HVAC design systems. He retired from Fluor Daniel after 26 years as Director, HVAC Design. The bulk of his work was designing HVAC systems for Pharm/Bio Facilities. He has a number of articles published in ASHRAE and Pharmaceutical magazines, both in the USA and in Europe. As a member of ASHRAE and ISPE (International Society of Pharmaceutical Engineering), he has presented numerous talks in Pharmaceutical conferences in Puerto Rico, USA, Canada, South America, and Europe. He is also a past ASHRAE Distinguished Lecturer.

LECTURE TOPIC:

HVAC Systems for Pharma/Bio Facilities

This presentation includes the description of HVAC system components, examples of typical flow diagrams for Class 100 and 10,000 Cleanrooms, and example layouts of MERs and catwalks to access reheat coils, dampers, and other air system accessories.

Program: HVAC Systems for Pharma/Bio Facilities – 1 PDH

Location: M.T. Anderson Support Center
100 Blassingame Road
Greenville, SC 29605

Date: Tuesday, March 8, 2016

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 p.m. to 1:00 p.m. Program

Cost: Lunch Program: $13 in advance $15 at door for chapter member (catered lunch)
$20 for non-chapter member (catered lunch)

Education Credit: The Technical Programs qualify for 1.0 PDH (including NC PE) for each program attended.

Please RSVP by going to the following link
http://goo.gl/forms/hXuUJ5MvgV
No later than Noon Monday, March 7, 2016
# ASHRAE Greenville Chapter Board
## 2015-2016 Committee

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tbody>
<tr>
<td>Chapter President</td>
<td>Tigue Garick</td>
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<tr>
<td>Chapter President Elect</td>
<td>Rodney Hinton</td>
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<tr>
<td>Chapter Vice President</td>
<td>Myrna Dayan Daniel Lowe</td>
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<tr>
<td>Chapter Secretary</td>
<td>Melissa Angulo</td>
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<tr>
<td>Chapter Treasurer</td>
<td>Jeff B Beard</td>
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<td>Chapter Board of Governors</td>
<td>Devon Cortright</td>
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<td>Chapter Board of Governors</td>
<td>Karl Counts</td>
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<td>Chapter Board of Governors</td>
<td>Bill Knight</td>
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<td>Chapter Board of Governors</td>
<td>Carol Suttles</td>
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<td>Chapter Board of Governors</td>
<td>Brandt H Williams</td>
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<td>Chapter Board of Governors</td>
<td>Rodney Hinton</td>
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<tr>
<td>Chapter Technology Transfer Chair</td>
<td>Dorothy Bertolini</td>
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<tr>
<td>Chapter Membership Promotion Chair</td>
<td>Kevin Brock</td>
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<tr>
<td>Chapter Research Promotion Chair</td>
<td>Jeremy Butdorf</td>
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<tr>
<td>Chapter Student Activities Chair</td>
<td>Daniel Lowe &amp; Ryan Tonnsen</td>
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<tr>
<td>Chapter Grassroots Government Activities Chair</td>
<td>Bill Knight</td>
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<tr>
<td>Chapter Historian</td>
<td>Daniel Lowe</td>
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<tr>
<td>Chapter Honors and Awards</td>
<td>Devon D Cortright</td>
</tr>
<tr>
<td>Chapter Webmaster</td>
<td>Karl F Counts</td>
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<tr>
<td>YEA CHAIR</td>
<td>Jeremy Butdorf</td>
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<tr>
<td>Tuesday 10/13/2015</td>
<td>Condensing Boiler Applications &amp; Venting</td>
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<tr>
<td>Wednesday 10/14/2015</td>
<td>Condensing Boiler Applications &amp; Venting</td>
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<tr>
<td>Tuesday 11/10/2015</td>
<td>Fundamentals of Building Envelopes in Hot &amp; Humid Climates</td>
</tr>
<tr>
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<td>Fundamentals of Building Envelopes in Hot &amp; Humid Climates</td>
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<tr>
<td>Tuesday 12/15/2015</td>
<td>Modern Pump Selection</td>
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<tr>
<td>Tuesday 12/16/2015</td>
<td>Modern Pump Selection</td>
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<tr>
<td>Tuesday 01/12/2016</td>
<td>Permanent Magnet Motors</td>
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<tr>
<td>Tuesday 02/9/2016</td>
<td>DOE Recommended Details for Chiller Plant Optimization</td>
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<tr>
<td>Tuesday 03/8/2016</td>
<td>HVAC Systems for Pharmo/Bio Facilities</td>
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<tr>
<td>Tuesday 04/12/2016</td>
<td>Strategic Energy Management – Applying principles of continuous improvement to energy use</td>
</tr>
<tr>
<td>Wednesday 04/13/2016</td>
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<tr>
<td>Monday 04/18/2016</td>
<td>Research Promotions Golf Tournament</td>
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<tr>
<td>Tuesday 05/10/2016</td>
<td>AHRI ratings for Energy Recovery &amp; DOAS equipment</td>
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</tbody>
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Unless otherwise stated meetings are:
2nd Tuesday of the Month
11:30am – 1pm
MT Anderson Support Center
100 Blassingame Road. Greenville, SC 29605
Each program provides at least 1 PDH
## Networking/ Social Events for 2015-2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Organizer</th>
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<tbody>
<tr>
<td>Wednesday 09/16/2015</td>
<td>Willis Carrier Student Scholarship Presentation</td>
<td>Greenville, SC</td>
<td>Clemson University</td>
</tr>
<tr>
<td>Monday 11/09/2015</td>
<td>ASHRAE Fall Fishing Trip</td>
<td>Elizabethton, TN</td>
<td>Watauga River</td>
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<tr>
<td>Monday 04/11/2016</td>
<td>ASHRAE Spring Fishing Trip</td>
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