



Giga-Joule

May 2014

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

Meeting Announcement

The May meeting will be held on Thursday, May 8 at M.T. Anderson Support Center. For more information, please contact our Secretary, Ryan Tonnsen, at secretary@ashrae4greenville.com.

A Message from the President

We are pleased to welcome Chuck Gullidge to discuss Integrated Building Design for our May meeting. See the schedule below for more details on these events and all our 2013-2014 meetings.

The big event coming up is our Golf Tournament! There was some confusion about this event recently but hopefully everyone knows it's still on and is scheduled for May 16.

We are always looking for new faces to participate on a committee or serve on the Board of Governors. If you would like to hear more information on what this would entail, please let me know.

Daniel Lowe
Greenville ASHRAE President
lowed@cxconsultants.com



Membership

Greenville ASHRAE Members:

Hello from Membership Promotion! This month I'd like to take a minute to focus on YEA (Young Engineers in ASHRAE). The only qualification to be a member of YEA is that the member be 35 years old or younger. Our YEA members are vital as they provide the next generation of leadership for our chapter. That being said, we need more YEA members. To date, approximately 15% of our chapter members are younger than 35. If you can think of anyone in our industry (YEA qualified or not) that you would like to see involved with ASHRAE, please reach out to them and/or forward me their name. I'll be happy to invite them to join us at our next meeting and answer any questions they may have about ASHRAE. Thank you for all you do for our chapter, and we look forward to seeing you at our next meeting!

Tigue Garick
Membership Promotion Chair
Greenville ASHRAE
C: 864-616-0592



May Meeting

Presenter: Charles E. (Chuck) Gulledge III, P.E.

Charles E. Gulledge III, PE, HBDP, LEED AP is a past Director-at-Large for ASHRAE, serving on the Board of Directors. He has served as Chair of the ASHRAE 2011 Energy Modeling Conference, Chair of the Chapter Technology Transfer Committee (CTTC), Chair of Technical Committee 7.1: Integrated Building Design, member of the Handbook Committee, CTTC-RVC for Region IV, and President of the North Piedmont Chapter. He has received the Distinguished Service Award, Regional Award of Merit, Chapter Service Award, and the Dan Mills Technical Award.

Mr. Gulledge has presented multiple presentations on the Integrated Building Design topic as an ASHRAE Distinguished Lecturer at chapter meetings and at society meetings for the ASHRAE Learning Institute. He has also conducted Integrated Building Design training for the ASHRAE Learning Institute at industry organizations such as the New York City Transit Authority and NAVFAC. Additionally, he participated as a speaker for the ASHRAE Satellite Broadcast on Integrated Building Design.

Mr. Gulledge is a Senior Mechanical Engineer with the design/build firm of AC Corporation in Greensboro, NC. He has over 29 years of experience in the HVAC industry; including four years as manager of Project and Energy Management for the City of Greensboro, NC. A licensed professional engineer in the states of North Carolina, Georgia, Kentucky, and South Carolina; he received his B.S. in Mechanical Engineering from North Carolina State University.

Programs: Integrated Building Design – 1 PDH

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

Date: Thursday, May 8, 2014

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 to lowed@cxconsultants.com
No later than Noon Tuesday, May 6, 2014**

Chapter Technology Transfer

School Energy Efficiency Bill Approved By U.S. House Committee

From: ASHRAE Government Affairs Committee

In a rare display of bipartisanship, earlier this week the U.S. House Committee on Energy & Commerce unanimously approved the Streamlining Energy Efficiency for Schools Act ([H.R.4092](#)). This bill would help improve energy efficiency in schools by creating an online clearinghouse to disseminate information to schools on federal programs and financing mechanisms that may be used to help initiate, develop, and finance energy efficiency, distributed generation, and energy retrofitting projects in schools. Because these efficiency projects may involve the HVAC&R systems in schools, this bill could also help improve the indoor air quality in schools, and thus result in better learning environments and reduced risks of health concerns such as asthma and airborne infectious diseases.



*Myrna Dayan, PE
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Region IV
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The Streamlining Energy Efficiency for Schools Act is a bipartisan bill that was introduced by Representative Matt Cartwright (D-PA) and is supported by over 39 other Representatives, including Energy & Commerce Committee Chairman Fred Upton (R-MI). ASHRAE and a large number of other organizations support this bill and have been active in promoting it on Capitol Hill. Earlier this year the bill's Senate counterpart was incorporated into the new version of Shaheen-Portman (S.2262), which is considered to be the most prominent piece of Congressional energy efficiency legislation in seven years.

“This common-sense legislation will ensure that schools can more easily take advantage of energy-efficiency programs,” [said Representative Cartwright](#). “The bill is a strategic and cost-saving investment to relieve the fiscal pressure felt by schools across the country while bringing us closer to energy security.”

“According to Energy Star, school districts spend billions on their energy bills each year, approximately \$6 billion, second only to personnel costs,” [continued Cartwright](#). “Yet, an estimated 14 million American children attend deteriorating public schools. According to a Department of Education survey, 43 percent of schools indicated that the poor condition of their facilities interferes with the delivery of instruction. Energy expenses are one of the few costs that can be reduced while at the same time improving classroom instruction.”

At present, the outlook of this bill is positive, as it is a likely candidate for passage when the House considers its next package of energy bills, which is expected later this year.

To view video highlights of the Streamlining Energy Efficiency for Schools Act's consideration in the Energy & Commerce Committee, including summary statements, <https://www.youtube.com/watch?v=Gsd13dk2ORk&feature=youtu.be>. For full information on the Energy & Commerce Committee's consideration of this bill, <http://energycommerce.house.gov/markup/committee-consider-hr-6-hr-2689-and-hr-4092>

Archibot to Print CAD Data “Error Free” onto Construction Sites

From: Taylor-Foster, James. "Archibot to Print CAD Data “Error Free” onto Construction Sites" 20 Apr 2014. ArchDaily. Accessed 02 May 2014. <http://www.archdaily.com/?p=498092>

Archibot, a project currently being developed by South Korean architectural designer Han Seok Nam, aims to “revolutionize” how architects and contractors work on construction sites by printing digital CAD plans onto the ground “error free.” Having recently been granted a patent, the robot seeks to avoid the human errors associated with interpreting information from construction documents.

According to Nam, a contractor “will be able to grasp exactly where the door and the wall needs to be constructed by having the construction documents be printed directly onto the site without measurements. Errors will be easily detectable since the construction document can be directly compared to a life-size print out directly on



the construction site.” It would be “just like following a map and driving towards a destination.”

Nam is currently collaborating with industry experts and academics who have the necessary technology to develop and produce the machine. Whilst in the process of making a prototype, he is still looking for industry experts or companies with the latest technology and knowledge available so that “the very best version can be produced.” This technology, he hopes, might also be applied to fields beyond architecture such as civil engineering or ship building.

Does this sound too good to be true? Could this be the future? What do you think? Will it work?

Nominations for Chapter Board

- President: Myrna Dayan
- Vice President: Daniel Lowe
- President elect: Tigue Garick
- Chapter Technology Transfer Chair: OPEN
- Programs: OPEN
- Secretary: Melissa Angulo
- Treasurer: Jeff Beard
- Student Activity Chair: Grant Wiegmann
- Membership: Kevin Brock
- Research: Tigue Garick
- Website: Karl Counts
- Historian: Bill Knight
- Young Engineers in ASHRAE (YEA) Chair: Jeremy Butdorf
- Grassroots Government Activities Committee (GGAC): OPEN

Full details of the positions are available in the Manual of Chapter Operations, <https://www.ashrae.org/society-groups/chapters/manual-for-chapter-operations>

There are still opportunities to serve with the chairs on the various committees, and we need volunteers!

Please email nominations or present to meeting next Thursday. Elections will be held at the meeting. If unable to attend, please send email by 9am Thursday 5/8/2014.

Event Dates for 2013-2014

Thursday 09/12/2013	Meet and Greet MEMBERSHIP PROMOTION MEETING	
Wednesday 10/09/13	ASHEVILLE Meeting @ Lenoir-Rhyne University Center for Graduate Studies of Asheville 36 Montford Ave., Asheville noon-1:30pm ASHRAE 90.1 - 2010 Waterside Economizer Standards	Presenter: James C. ("Chris") Edmondson, Jr. Distinguished Lecturer
Thursday 10/10/2013	ASHRAE 90.1 - 2010 Waterside Economizer Standards	Presenter: James C. ("Chris") Edmondson, Jr. Distinguished Lecturer
Thursday 11/14/2013	Liquid Desiccant Technology	Presenter: Steve Blinn
Thursday 12/05/2013	ASHRAE Greenville 50th Anniversary Party Greenville Hyatt 5pm-12am Featured Program: Climate Change	Presenter: Thomas E. Werkema, Jr Distinguished Lecturer
Thursday 01/09/2014	Thermally Active Structures for Green Buildings Joint meeting with USGBC	Presenter: Daniel Nall, PE Distinguished Lecturer
Thursday 02/13/2014	Ammonia Refrigeration Systems	Presenter: Doug Reindl, Ph.D Distinguished Lecturer
Thursday 03/13/2014	<i>Tentative</i> The Art and Science of Building Enclosure Commissioning	Presenter: Fiona Aldous
Thursday 04/10/2014	Variable Volume Pumping	Presenter: David McDaniel
Thursday 05/08/2014	Integrated Building Design	Presenter: Charles E. ("Chuck") Gulledge III, PE Distinguished Lecturer



Unless otherwise stated meetings are:
 2nd Thursday of the Month
 11:30am – 1pm
 MT Anderson Support Center