



# *Giga-Joule*

November 2018

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

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*Meeting Announcement...*

*Research Promotion Meeting!*

*Topic: MODULAR CHILLER DESIGN*

*Presented by: Peter Fung with Artic Chiller Group*

The **Greenville Chapter Meeting** will be held on **Tuesday, November 13th, 2018 at 11:30 AM**

Please RSVP to the Outlook Meeting by Noon on Monday, November 12th

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

**PLEASE NOTE: We are in Conference Room B, but we will need to enter through main door at the front and check in**

Program Cost includes catered lunch!

- \$15 via website: <http://www.ashrae4greenville.com/next-greenville-meeting>
- \$15 at door for chapter members, \$20 for non-chapter members

Education Credit: This Seminar qualifies for 1.0 PDH each (including NC PE).

If you have any questions, contact: Carson Carpenter at 864.527.0311 or [ccarpenter@devitainc.com](mailto:ccarpenter@devitainc.com)

Meeting Sponsor: **Sponsorships available!** Contact our Research Promotion officer Will Bailey at [will.bailey@trane.com](mailto:will.bailey@trane.com) for more information on Company Meeting Sponsorships!!!

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## *Message from the President*

**Jeremy Butdorf** – President  
**ASHRAE – Greenville Chapter**  
**864-270-3909**  
[jeremyb@jmpco.com](mailto:jeremyb@jmpco.com)

Being an engineer is no laughing matter... ASHRAE is a global society advancing human well-being through sustainable technology for the built environment. ASHRAE members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry and write standards, research and publish continuing education to help shape tomorrow's-built environment. Our friends and families look at engineers as stereotypical nerds.

I bring all of this up because our ASHRAE Meetings are important from an industry advancement point of view but are also important to be among our peers. You've heard my spiel on fellowship, so I won't beat a dead horse, but how nice is it to come to a room one day out of the month and be among friends in the industry, peers who know what it is like day in and day out of the office life, or life outside those doors...

I heard this before from a fellow ASHRAE member - the optimist sees the glass half full, the pessimist sees the glass as half empty, but the engineer sees the glass as twice as big as it needs to be. If we apply this to our ASHRAE meetings, is the room half full, half empty, or just too big? Let's push hard to fill our space! The more members we have, the more opportunities for fellowship and interaction with individuals who make up our industry!

I'll leave you with this, when it comes to more fellowship at chapter meetings, I take the route of renewable energy...



I look forward to seeing you at our November Chapter Meeting!!!

## *November Chapter Meeting - Presenter Spotlight*

Presenter: **Peter Fung – Arctic Chiller Group**

Program: **Modular Chiller Design**



Peter Fung is the East Region Sales Manager for Arctic Chiller Group. Peter's role is the promotion and application of chillers in environments of Healthcare, University, Education K-12, Data Centers, Laboratory, Commercial, and High Tech Manufacturing facilities through the support of mechanical consulting engineers, mechanical contractors and end users.

Arctic Chiller Group is a leading manufacturer of high efficiency chillers offering configurable modular chiller design with options for heat recovery, air and water cooled centrifugal chillers using the latest industry technology in magnetic bearing compressors. This is innovative compressor technology that does not require lubricating oil and yields the highest IPLV efficiency rating among centrifugal chillers. Arctic manufactures in Toronto, Canada and Newberry, SC in a manufacturing facility that is designed to produce some of the industry's highest quality, most durable and best performing products.

Prior to Arctic, Peter Fung held the position of Eastern Regional Sales Manager for Climate Craft and prior to that, Nortek Air Solutions. He has over 15 years of experience in air handling design with a focus on DOAS, Dedicated Outdoor Air Systems, with heat and energy recovery heat exchangers.



## *Research Promotion*



**Will Bailey**

Research Promotions Chair

[will.bailey@trane.com](mailto:will.bailey@trane.com)

Greetings from ASHRAE Research Promotion and we look forward to seeing you at our November meeting for RP DAY!!! For those of you that don't know me, my name is Will Bailey. Be on the lookout for updated sponsorship levels – the push for our RP Campaign will begin this month! Also, we will be announcing the Golf Tournament dates in the next week or two.

I look forward to working with each of you this year, and I hope to see you at our next chapter meeting!

We appreciate your continued support for our local ASHRAE Chapter.

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## *YEA - Young Engineers in ASHRAE*



YEA Chair

**Brandon Guy**

[bguy@greenville.k12.sc.us](mailto:bguy@greenville.k12.sc.us)

Greetings from Young Engineers in ASHRAE! If you are a new member and under the age of 35, please come see me at the next meeting! I look forward to meeting all our younger members, both at our meetings and at upcoming social events. I am happy to help with all ASHRAE questions to allow you further develop professionally in our industry and to understand our organization. If you have any specific needs or suggestions do not hesitate to let me know and I will do all I can to see they are addressed.

I am looking for ideas for social events and outings for this year. Right now, we are looking into another Brewery Tour, a Swamp Rabbits Tour and Hockey Game, as well as a Gun Range Tour. If you have any other events you are interested in, please let me know!

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## *Government Affairs Committee*



**Rodney Hinton**

GAC

[rhinton@palmettoairbalance.com](mailto:rhinton@palmettoairbalance.com)

Greetings from ASHRAE GAC! Chapter Government Affairs has gone through some recent changes - **The Grassroots Government Advocacy Committee officially changed its name to the Government Affairs Committee.** This name change came after discussions were held within the Committee and with ASHRAE leadership. This is a Society-wide change so we look forward to working with the Chapter Government Affairs Committees.

Thank you, I look forward to seeing you at our next meeting.

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## *Treasury*



**Ryan Tonnsen**

Treasurer Greenville ASHRAE

[wtonnsen@greenville.k12.sc.us](mailto:wtonnsen@greenville.k12.sc.us)

Our finances remain stable and we continue to provide a great menu during our meetings. We voted during the BOG Meeting to increase the cost of meals for members to help cover the rising meal costs – but we will continue to offer quality lunches. Please continue to support ASHRAE by becoming a “Presenting Sponsors” - if you are interested in being a presenting sponsor, please let me know!

## *Membership*



**Brandon Dillard**

Membership Promotion Greenville ASHRAE

[wtonnsen@greenville.k12.sc.us](mailto:wtonnsen@greenville.k12.sc.us)

Greetings ASHRAE Greenville! I am your Membership promotion chair for the year. Please continue to support ASHRAE by becoming a member if you aren't currently and also invite new potential members from your offices or someone you work with. If you would like to join, please let me know!!!

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### *In efforts to keep you updated, visit us at:*

WEBSITE: [www.ashrae4greenville.com](http://www.ashrae4greenville.com)

LINKEDIN: [https://www.linkedin.com/groups?home=&gid=8154388&trk=anet\\_ug\\_hm](https://www.linkedin.com/groups?home=&gid=8154388&trk=anet_ug_hm)

EVENTCALENDR: [View ASHRAE Greenville Chapter Meetings calendar](#)



# *ASHRAE Winter Conference*

Registration is now open so Start Planning for 2019 ASHRAE Winter Conference, Jan. 12 – 16 in Atlanta, GA



**2019 ASHRAE WINTER CONFERENCE**  
JANUARY 12–16 // **AHR EXPO** JANUARY 14–16

The **2019 ASHRAE Winter Conference & AHR Expo** is your can't-miss industry event of the year. Join the world's brightest thinkers and most influential sustainability leaders for a closer look at today's demanding challenges, emerging trends, and biggest opportunities in the HVAC&R industry.

If you'd like to register now, please click the link below:

<https://www.ashrae.org/conferences/winter-conference>

## *2018-2019 ASHRAE Greenville Chapter Board*

Chapter President	Jeremy Butdorf
Chapter President Elect / VP	Tigue Garick
Chapter Secretary	Alan King
Chapter Treasurer	Ryan Tonnsen
Chapter Board of Governors	Devon Cortright
Chapter Board of Governors	Karl Counts
Chapter Board of Governors	Bill Knight
Chapter Board of Governors	Brandt H Williams
Chapter Board of Governors	Myrna Dayan
Chapter Technology Transfer Chair	Carson Carpenter
Chapter Membership Promotion Chair	Brandon Dillard
Chapter Research Promotion Chair	Will Bailey
Chapter Student Activities Chair	Daniel Lowe
Chapter Government Affairs Committee Chair	Rodney Hinton
Chapter Historian	Alan King
Chapter Honors and Awards	Devon Cortright
Chapter Webmaster	Karl F Counts
YEA Chair	Brandon Guy



**POWER GRIDS**

**ORNL Develops Means to Control Heating, Cooling of Large Network of Buildings**

*OAK RIDGE, Tenn.*—Oak Ridge National Laboratory has developed a method to control the heating and cooling systems of a large network of buildings for power grid stability. "We developed control schemes that don't require a large number of calculations and can be implemented easily on existing HVAC systems that have simple on-off controls," said ORNL's Mohammed Olama. Simulations found that the controls are successful in providing frequency regulation from 50 buildings, while keeping indoor temperatures within 0.5°C (0.9°F) of a set range.



PHOTO: Schematic of the control architecture for a fleet of HVAC units to harness the demand from multiple buildings to help balance the power grid.

CREDIT: Andy Sproles/ORNL

**Siemens Completes Shallow Water Test of Subsea Power Grid**

**RESIDENTIAL**

**Arizona Utility, NREL Launch Large-Scale Home Energy Storage Study**

*TEMPE, Ariz.*—An Arizona utility is collaborating with the National Renewable Energy Laboratory (NREL) on one of the largest battery energy systems (BES) studies to date, involving up to 4,500 of its customers. Salt River Project (SRP) is providing qualified customers financial incentives to purchase a residential battery system. Select customers will participate in a research study to provide a large-scale analysis of the impacts of BES technologies. NREL will assist the utility throughout the three-year program by evaluating battery technologies and interpreting data about customer battery use.



PHOTO: Households in central Arizona will participate in the study. CREDIT: NREL

ALL THIS AND MUCH MORE ON THE LINK BELOW:

[ASHRAE HVAC&R INDUSTRY NEWS LINK](#)

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# ASHRAE JOURNAL



## **November 2018** **Digital Journal**

This month's cover article compares exhaust efficiencies for wall-mounted and single island ventilation hoods in commercial kitchens. Other articles discuss best practices for OA economizers in hospitals, water-side economizers for data centers, and avoiding centrifugal chiller surge.

The November 2018 issue of the ASHRAE Journal is available now online! All of these products can be accessed and request from the ASHRAE Website at the link below:

[ASHRAE JOURNAL ONLINE](#)



Mark your calendars! November 27 is #GivingTuesday, a global day of giving fueled by social media and donors just like you!

You can take part in supporting ASHRAE's mission to improve lives through a healthier, more energy efficient built environment on #GivingTuesday November 27 - **make a gift using the links below.**

<https://www.ashrae.org/make-a-gift>



## Earn Continuing Education Credits in Atlanta



**2019 ASHRAE WINTER CONFERENCE**  
JANUARY 12–16 // **AHR EXPO** JANUARY 14–16

### Full-day Seminars

*Earn 6 PDHs / AIA LUs*

Saturday, January 12  
& Tuesday, January 15

Georgia World Congress Center

\$510 (\$415 ASHRAE Member)

### Half-day Courses

*Earn 3 PDHs / AIA LUs*

Sunday, January 13 –  
Tuesday, January 15

Georgia World Congress Center

\$184 (\$139 ASHRAE Member)

[CLICK HERE TO REGISTER!](#)