

Upcoming Events!

Monthly Meeting -  
Wednesday,  
January 12th,  
2022

January 2022 Edition

## SWFL ASHRAE Chapter Meeting Announcement

\*\*\*History Night\*\*\*

**Date:** Wednesday, January 12th, 2022

**Location:** Crowne Plaza at Bell Tower Shops  
13051 Bell Tower Road  
Fort Myers, FL 33907

**Time:**

**5:30 - 6:30 - Networking**

**6:30 - 8:30 - Dinner and Main Program**

**In-Person Cost:** \$35.00 per attendee - Reservations are a must

**Virtual Cost:** No cost, donations to Research Promotion are encouraged. To donate please contact Gena Knight (gknight@bandiflorida.com).

### Virtual Instructions:

If you are planning on attending virtually, please RSVP using the link below. Be sure to indicate that you will be participating remotely.

You will be provided a viewing link by 3pm on the day of the meeting, please check your email.

**No cost** for college students with a valid student ID.

**Pre-Pay** via [www.paypal.com](https://www.paypal.com) to swfl.ashrae@gmail.com.

[RSVP Link](#)

## Presentation: Pumping System Efficiency

Selecting pumps to operate at maximum efficiency at their duty point has been the industry standard but does that really produce the best efficiency across the entire operating range. What about the Preferred Operating Range as defined by ANSI & the Hydraulics Institute? Selecting pumps based solely on duty point and the best efficiency at the duty point doesn't guarantee that your selection will meet the requirements of ASHRAE 90.1, this program will show you how to achieve greater performance and reduced energy costs while improving hydronic system performance.

**Presenter: Tony Furst MSED, CPD, LEED AP**

RSEC Manager Application Engineering – US - Armstrong Fluid Technology

In his role, Tony works with the regional sales managers across all US business units to drive complex technical solutions utilizing all of Armstrong's products in controls and equipment. Additionally, he provides high level technical applications support and training to our channel partners.

Tony holds a Bachelor of Science in Mechanical Engineering and a Master of Science in Education and has earned his Certified in Plumbing Design credential from the American Society of Plumbing Engineers as well as being a USGBC LEED AP. Tony is extremely active in ASPE at the local and society level and ASHRAE at the local level.

Tony has extensive knowledge in large commercial chilled water systems from his years with Trane Company as a failure analysis and applications engineer in applied systems. He was also a senior forensic engineer specializing in system analysis and performance evaluation for a large Midwest consulting engineering firm, along with experience as a design build engineer with a large mechanical contractor.



Shaping Tomorrow's  
Built Environment Today

## 2021-2022 SWFL ASHRAE Team

**President** - James Martin

**Vice President/Secretary/Refrigeration** - David Moorhead

**Treasurer** - Woody Wilson

**Research Promotion** - Gena Knight

**Membership Promotion** - Trey Dougherty

**Sustainability** - Justin Holland

**C.T.T.C.** - John Stischok

**Y.E.A.** - Dave Jaworski

**Student Activities** - Bill Boga

**Historian / Reception** - Sidney Feldman

**Honors and Awards** - Kathy Schmitt

**G.A.C. / B.O.G.** - Kathleen Simpson

**B.O.G.** - Pat Graef

**B.O.G.** - Bill Malphus

**B.O.G.** - Jason Hardman

**Newsletter/E.C.** - Tony Amitia

## *A Letter from President James Martin, PE*

Greetings SWFL Chapter,

I hope that you all had a peaceful holiday season with your loved ones. The holidays are always a wonderful time to think back on all of the good times throughout the past year.

I want to take this opportunity to thank all of the volunteers who help support this chapter and help to make our yearly tournaments and monthly meetings happen. I am truly thankful for your service, without your support this chapter would not be here.

I am excited about the possibilities and opportunities that 2022 has in store for our SWFL ASHRAE Chapter. Looking forward to making the journey with all of you!

Thank you all again for your contributions,

James Martin, PE

SWFL Chapter President 2021-2022



**Refrigeration****A Look at Data Center Cooling Technologies**

The sole purpose of data center cooling technology is to maintain environmental conditions suitable for information technology equipment (ITE) operation. Achieving this goal requires removing the heat produced by the ITE and transferring that heat to some heat sink. In most data centers, the operators expect the cooling system to operate continuously and reliably.

I clearly recall a conversation with a mechanical engineer who had operated data centers for many years. He felt that most mechanical engineers did not truly understand data center operations and design. He explained that most HVAC engineers start in office or residential design, focusing on comfort cooling, before getting into data center design. He thought that the paradigms they learn in those design projects don't necessarily translate well to data centers.

**Credit : Kevin Heslin**

**Full Article**

**Research Promotion****Research & Development Roadmap: Emerging HVAC Technologies**

The Research and Development (R&D) Roadmap for Emerging Heating, Ventilation, and Air-Conditioning (HVAC) Technologies provides recommendations to the Building Technologies Office (BTO) on R&D activities to pursue that will aid in achieving BTO's energy savings goals. For HVAC, BTO targets 12% and 24% primary energy savings by 2020 and 2030, respectively. The recommended initiatives in the report each target one or more R&D needs for residential and commercial HVAC technologies and related systems, such as controls, distribution systems, and design, installation, operation, and maintenance practices. Each recommendation is built on direct input from industry stakeholders and research on the key challenges that must be addressed to achieve the specified savings targets.

**Full Article**

**Sustainability****The Ultimate Guide to HVAC Performance and Sustainability****Trends Happening Now**

HVAC systems function in a critical role in any building. Everyone becomes acutely aware of HVAC performance when malfunctions occur. The level of interest has only increased today. Whether concerns about energy efficiency, building sustainability, operations and maintenance, or indoor air quality (IAQ), more visibility is required.

A comprehensive discussion of the various stakeholder interests that impact the HVAC industry are detailed below. Change has arrived, whether overdue or not. Let's take a tour of the broader dynamics and trends that will dictate the future of the HVAC service market.

Benchmarking represents an example of a broader asset digitization trend occurring within the CRE market. Buildings represent hard assets, the performance of which can be measured, tracked and classified for comparative purposes.

[Full Article](#)**Editors' Choice****The Sunshield****Provided by Tony Amitia**

The James Webb Space Telescope will observe primarily the infrared light from faint and very distant objects. In order to be able to detect those faint heat signals, the telescope itself must be kept extremely cold. To protect the telescope from external sources of light and heat (like the Sun, Earth, and Moon) as well as from heat emitted by the observatory itself, Webb has a 5-layer, tennis court-sized sunshield that acts like a parasol providing shade. [Actual dimensions: 21.197 m x 14.162 m (69.5 ft x 46.5 ft)]

This sunshield will always be between the Sun/Earth/Moon and the telescope. It's able to be positioned this way because JWST will be orbiting the Sun 1.5 million kilometers away from (but approximately in line with) the Earth.

[Full Article](#)

**Government Activities****DOE Establishes the Office of Clean Energy Demonstrations****Provided by Kathleen Simpson**

On December 21, the U.S. Department of Energy announced the establishment of a new office: the Office of Clean Energy Demonstrations. The Infrastructure Investment and Jobs Act, which was signed into law on November 15, authorizes and appropriates more than \$20 billion for the new office to speed the commercialization of emerging clean energy technologies in partnership with the private sector, including clean hydrogen, carbon capture, grid-scale energy storage, small modular reactors, and other key technologies. The office intends to include a focus on deploying projects in rural and economically distressed communities, which is motivated by President Biden's Justice40 initiative that aims at delivering 40% of clean energy investment benefits to disadvantaged communities and those that are experiencing the first and worst impacts of climate change.

[Full Article](#)**Government Activities****Global Survey: Women in Refrigeration****Provided by Kathleen Simpson**

Women are already making a tremendous contribution to the Refrigeration, air-conditioning, and heat pumps (RACHP) field globally; however, in some cases their role has been overlooked or under-appreciated. Additionally, women only comprise a small percentage of the total RACHP workforce.

The survey seeks to better understand the background, motivation, challenges, and opportunities faced by women working in the RACHP sector. The results will be used to inform decision-makers inside and outside of the sector about ways to further enhance women's contribution to the field, in line with the UN Sustainable Development Goal # 5 on achieving Gender Equality by 2030.

The survey is officially launched on 21st Dec 2021 in 7 languages

[Survey Link](#)



## **SWFL ASHRAE Chapter MEETING ANNOUNCEMENT**

**DATE: Wednesday, January 12<sup>th</sup>, 2022**

**LOCATION: CROWNE PLAZA AT BELL TOWER SHOPS**

**\*\*HISTORY NIGHT\*\***

**TIME 5:30 – 6:30 NETWORKING**  
**6:30 – 8:00 DINNER MEETING AND MAIN PROGRAM**

**In-Person Cost: \$35.00 PER ATTENDEE – RESERVATIONS ARE A MUST**

**Online Cost: No cost, donations to RP are encouraged, contact [gknight@bandiflorida.com](mailto:gknight@bandiflorida.com)**

**If viewing online, you must RSVP using the link below and, indicate you will be attending online**

**A viewing link will be provided by 3PM on 12JAN22.**

**NO COST FOR COLLEGE STUDENTS WITH A VALID STUDENT I.D.**

**Pre-Pay via [www.paypal.com](http://www.paypal.com) to [swfl.ashrae@gmail.com](mailto:swfl.ashrae@gmail.com).**

**RSVP by 11JAN22 via the following link: <https://forms.gle/9GmJrBLbGnAFZc43A>**

### **Main Program: Pumping System Efficiency**

Selecting pumps to operate at maximum efficiency at their duty point has been the industry standard but does that really produce the best efficiency across the entire operating range. What about the Preferred Operating Range as defined by ANSI & the Hydraulics Institute? Selecting pumps based solely on duty point and the best efficiency at the duty point doesn't guarantee that your selection will meet the requirements of ASHRAE 90.1, this program will show you how to achieve greater performance and reduced energy costs while improving hydronic system performance.

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## Directions

**Crowne Plaza Fort Myers at Bell Tower Shops**  
**Shops 13051 Bell Tower Road**  
**Fort Myers, FL 33907**  
**(239) 482-2900**

The Crowne Plaza at Bell Tower Shops is located in the Northeast corner of the Bell Tower Shops, on the corner of US-41 and Daniels Parkway.

### **From Hwy I-75 North**

Head South on I-75. Take exit 131 for Daniels Pkwy. Turn right (West). Continue on Daniels Parkway for 4.6 miles. Turn right onto Bell Tower Dr. Continue on Bell Tower Dr. for 0.3 miles. Destination on right.

### **From Hwy I-75 South**

Head North on I-75. Take exit 131 for Daniels Pkwy. Turn left (West). Continue on Daniels Parkway for 4.6 miles. Turn right onto Bell Tower Dr. Continue on Bell Tower Dr. for 0.3 miles. Destination on right.

### **From Cleveland Ave (US-41) North**

Head South on US-41. Turn left onto Daniels Pkwy. Continue 0.2 miles. Turn left onto Bell Tower Dr. Continue on Bell Tower Dr. for 0.3 miles. Destination on right.

### **From Cleveland Ave (US-41) South**

Head North on US-41. Turn right onto Daniels Pkwy. Continue 0.2 miles. Turn left onto Bell Tower Dr. Continue on Bell Tower Dr. for 0.3 miles. Destination on right.





# ASHRAE Membership

ashrae.org/benefits

## Your (NEW!) Membership Benefits

A NEW selection of complimentary ASHRAE products is now available to new and renewing, full dues paying Member and Associate grade members.

Full Members and Associates can now select

**1** of the following:

eLearning Course



**150** to select from

OR

ASHRAE Standard



**100+** to choose from

OR

ASHRAE Handbook



PDF version of the most recent Handbook

## Additional Member Benefits by the Numbers

**12**

month subscription to ASHRAE Journal



&

**25 %**

discount

On

**400**

publications in the Bookstore

&

**2000+**

free resources for members in the ASHRAE Technology Portal



## Get Discounted Pricing on:

**350+**



ASHRAE Learning Institute (ALI) Courses held annually

&

**7**



ASHRAE Certifications

&

**6+**



Conferences held annually

**50,000+**

Members



**190+**

Chapters

**15**

Regions across the world



WE'D LOVE TO  
HEAR FROM YOU!

## YOUNG ENGINEERS IN ASHRAE (YEA)

### What is ASHRAE?

ASHRAE is a global technical society that provides essential resources for sustainable design, construction and operation of buildings and their systems. Our technical foundation is built by our 56,000+ volunteer members in over 130 countries who dedicate their time and knowledge to moving the industry forward. The Society's members influence the direction of HVAC&R technology by creating industry standards, recommending procedures and guidelines, and developing research.

### What is YEA?

To ensure a bright future for ASHRAE and the industry, the Young Engineers in ASHRAE (YEA) Committee was developed to create programs and develop a path for our young professional members. Any current ASHRAE Affiliate, Associate or Member who is 35 years of age or younger is considered a YEA member, and automatically has a wide variety of programs, events, and opportunities at their fingertips!



[ashrae.org/YEA](http://ashrae.org/YEA)



[Facebook.com/ashraeYEA](https://Facebook.com/ashraeYEA)



Young Engineers Group



[YoungEngineers@ashrae.org](mailto:YoungEngineers@ashrae.org)



(678) 539-1178



1791 Tullie Circle NE  
Atlanta, GA 30329



To join ASHRAE and become a YEA member,  
visit [www.ASHRAE.org/join](http://www.ASHRAE.org/join)



# FUN FACTS

56,000+  
members

190  
Chapters

130+  
Countries

YEA makes up 18% of all ASHRAE members, and that number continues to grow!

Some ASHRAE Chapter Boards are made up of all YEA members

YEA Leadership Weekend has hosted over 700 YEA members since its start in 2007

## What can YEA do for me? We're glad you asked!

### PROFESSIONAL GROWTH & EXPERIENCE

In addition to your technical expertise, we want to be sure you have the tools you need to succeed. The **YEA Leadership Weekend** and **YEA Leadership International** events focus on personal development and allow you to interact with YEA members from around the world. If you want to find out how an association like ASHRAE operates, the **Leadership U** program gives you the chance to shadow an ASHRAE Vice President at one of our conferences.

### TECHNICAL CONTRIBUTION

Getting involved with **ASHRAE Technical Committees (TCs)** provides you the opportunity to help guide the future of our industry. Find a TC that focuses on your area of interest, get involved, and help to make a difference! You can find a list of all TCs and a sign-up form at [ashare.org/TCs](http://ashare.org/TCs).

### EDUCATION & RECOGNITION

To make sure you've got the latest and greatest education, YEA offers 10 scholarships to the **ASHRAE HVAC Design Essentials Training**. And since you've put in the hard work, why not be recognized for it and apply for the **YEA Award of Individual Excellence** or the **Developing Leader Award**.

### NETWORKING

It's all about who you know, right?! Join us at our **YEA Hospitality Suite** at the ASHRAE Annual and Winter Conferences to meet fellow YEA members, as well as many ASHRAE leaders who stop by. And to keep you up to speed on all things YEA, we publish a quarterly **YEA Connections** e-newsletter that goes straight to your inbox.





Certified

# ASHRAE Certification

Advance Your Career Today!

**NEW!**  
**DIGITAL BADGING**

Helps you get the recognition  
you've earned.



With already more than 3,000 certifications earned to-date, ASHRAE programs were founded to meet the industry needs of today and provide value to thousands of built-environment professionals, employers and building owners.

[ashrae.org/certification](http://ashrae.org/certification)