



# DAYTON CHAPTER

ISSUE X | 2020

## CURRENT OFFICERS

### **PRESIDENT**

**Brian Turner**

BTurner@elitaircom  
ElitAire

### **PRESIDENT-ELECT**

**Matt Dill**

Matthew.dill@victaulic.com  
Victaulic

### **TREASURER**

**Jennifer Eller**

jmeller@heapy.com  
Heapy

### **SECRETARY**

**Trent Hayden**

thayden@energyoptusa.com  
Energy Optimizers, USA

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&

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**Facebook**

## **October 12th Meeting** **All are Welcome to join including Students**

**Social Hour: 11:30 AM to 11:45 AM**

**Chapter Business/Instructions: 11:45 AM—Noon**

**Main Presentation: Noon (Virtual Meeting, see below)**



David Schurk DES., CEM., LEED-AP., CDSM., CWEP., SFP., CIAQM., HCCC., ASHRAE Distinguished Lecturer, Director of Business Development for Global Plasma Solutions in Charlotte, NC. He is a Licensed Designer of Engineering Systems and has over 35-years of experience in the design and analysis of heating, ventilating, and air-conditioning systems for a variety of market sectors, with a special focus on healthcare facilities. David has authored various technical articles

for a number of industry trade journals and magazines and is a featured presenter at regional and national industry events. He can be reached at: David.schurk@globalplasmasolutions.com or 920-530-7677

### **Main Presentation:**

*Using Needlepoint Bipolar Ionization to Create  
Healthy Indoor Environments*

**Presenter: David Schurk**

### **Join Zoom Meeting**

[https://us02web.zoom.us/j/85229306013?  
pwd=UDMzTnlV1IHMGFmcWdRdmRBZjN4UT09](https://us02web.zoom.us/j/85229306013?pwd=UDMzTnlV1IHMGFmcWdRdmRBZjN4UT09)

Meeting ID: 852 2930 6013  
Passcode: 484969

One tap mobile  
+13017158592,,85229306013#,,,,,0#,,484969# US (Germantown)  
+13126266799,,85229306013#,,,,,0#,,484969# US (Chicago)

Find your local number: <https://us02web.zoom.us/u/ken4s6sjui>

# FROM THE PRESIDENT

Thank you to everyone who came out and played in the Dayton ASHRAE golf outing. The outing was one of the most well attended events we've had. We appreciate everyone's continued support.



**Congratulations to Evan Nutt for winning the Chapter Service Award. Evan has been involved with Dayton ASHRAE since 2009.**

We will be hosting our first virtual meeting of the year on October 12, starting at 11:30. David Schurk will be presenting on Using Needlepoint Bipolar Ionization to Create Healthy Indoor Environments. We hope you will all join us!

*Brian Turner* - President, Dayton ASHRAE

## Upcoming Events

**October 12th**  
ASHRAE Chapter Mtg.  
11:30 AM, Virtual Meeting

**October 21st**  
Board of Governors  
8:00 AM, Virtual Meeting

**November 9th**  
ASHRAE Chapter Mtg.  
11:30 AM, Virtual Meeting

**November 18th**  
Board of Governors  
8:00 AM, Virtual Meeting

**December 14**  
ASHRAE Chapter Mtg.  
11:30 AM, Virtual Meeting

[See Additional  
Events & Volunteer  
Opportunities Here](#)

# CHAPTER HISTORY (1985-1986)

<b>President:</b>	Dennis Lammlein	Monsanto Research
<b>Vice Pres.:</b>	Bill Bissmeyer	Lathrop Trotter
<b>Secretary:</b>	Rodger Hawkinberry	Delco Moraine, GM
<b>Treasurer:</b>	Tom Homan	Allied Supply

<b>Energy Mgt.:</b>	Robert Kyvik	DP&L
<b>Education:</b>	Alan Watton	Sinclair C.C.
<b>RP:</b>	James Albitz	Trane Co.
<b>Membership:</b>	Bill Bissmeyer	Lathrop Trotter

Meetings were held at the Ramada Inn.

CRC held in Indianapolis.

Reginal Director: Jim Kamm

**Received PAOE**

Had 214 Members



## Committee Chairs

### **MEMBERSHIP**

**Jeremy Fauber**

JPFauber@heapy.com  
Heapy

### **HISTORY**

**Bryan Schenck**

Brian.Schenck@waibelenergysystems.com  
Waibel Energy Systems

### **COMMUNICATIONS**

**Nathan Lammers**

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Waibel Energy Systems

### **RESEARCH PROMO**

**Tom Mastbaum**

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TEM Associates, LLC.

### **STUDENT ACTIVITIES**

**Russell Marcks**

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Sinclair Community College

### **CTTC**

**Evan Nutt**

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Elitaire

### **GOVERNMENT AFFAIRS**

**Paul Hawkins**

Paul.Hawkins@waibelenergysystems.com  
Waibel Energy Systems

**YEA (Chair)**

**Phillip Reid**

PAReid@heapy.com  
Heapy

## Board of Governors

**Jeremy Fauber**

Heapy

**Rick Pavlak**

Heapy

**Lorraine Kapka**

Sinclair College

# MEMBERSHIP

## **New Members**

**The Dayton Chapter is happy to welcome its newest members. If you see them please give them a warm welcome!**



**September**

Alasadi Habeeb

**Do you know a colleague that would benefit from joining ASHRAE?**

You can go to [http://web.ashrae.org/connect\\_a\\_colleague/](http://web.ashrae.org/connect_a_colleague/) and quickly sign up for ASHRAE to send an email to ask them to sign up on your behalf.

## **Membership Recognition**

We would like to recognize the following members who have been with ASHRAE for the following years! Thank you for all your contributions to the field!

**5 Years**

Ben Florkey

**15 Years**

Sheila Sagerer

**30 Years**

David Dexter



## **Membership Promotion Committee**

Looking for a way to get involved with your local ASHRAE chapter and meet new people? The membership promotion committee is looking for volunteers to join the committee. The committee's primary responsibility is to recruit new members and retain existing members. If you are interested in serving please contact Jeremy Fauber at [jpfauber@heapy.com](mailto:jpfauber@heapy.com). Or by calling 937-224-0861

**Membership Application Here**

# ASHRAE RP

After our Award-winning year in 2020, we are asked to step up to the plate with the same goal as last year's campaign. Given the Pandemic ASHRAE is not increasing Chapter Goals as it had done in the past. But we believe...if we did it last year, we can do it again this year. Our golf outing, scheduled on Oct 2 was very favorable as a source of a big chapter donation and as we get back to work it also looks very encouraging from the corporate and individual standpoint as well

**IMPORTANT:** One change that you need to know about: To achieve "Honor Roll" status this year the minimum donation level is **\$150**. Honor Roll means that your name is published in the ASHRAE Journal, and you receive a Commemorative Gold Coin of a Refrigeration or HVAC Pioneer. We appreciate all donations and a donor your name will appear as a donor in our local newsletter. But if you want to keep your "Coin Collection" going and be "Published," the **NEW MINIMUM** is \$150.

<b>2021 Goal =</b>	<b>\$ 19,680</b>
<b>YTD =</b>	<b>\$ 800</b>
<b>To go =</b>	<b>\$ 18,880</b>

## Partner Level

Your Company Here

## Honor Roll

**Larraine Kapka  
Steve Meier  
Tom Mastbaum  
Evan Nutt**

## Honorable Mention

**Joseph Ferdelman  
Brian Turner**

## Silver Level

Your Company Here

## Bronze Level

Your Company Here

If you would like to donate NOW  
simply click this link:

[Donate NOW](#)

And make your donation to help ASHRAE  
in its Research Efforts. Thank you so much!!



# ASHRAE News

## History for 70 year anniversary for Dayton ASHRAE

As the Dayton ASHRAE chapter started the 1980s the first few years meetings moved back to the Engineers Club of Dayton with ASHRAE officer and committee meetings generally being held in the basement of the club prior to meetings, however in 1983 meetings were moved to the Ramada Inn in Downtown Dayton before being moved back to the Engineers club in 1987/88. Highlights for the decade include starting the spouse Christmas/holiday party to replace the spring dinner dance in 1983/84, in the 1985/86 year the Dayton chapter managed to achieve the highest PAOE points for any chapter in all of ASHRAE that year, chapter membership had increased to 214 members (up from only 83 two years earlier), and in 1987/88 average meeting attendance was 122. While the chapter was thriving in this decade variable frequency drives and direct digital controls were technologies gaining acceptance in the industry.

Throughout the 1980s the various Dayton ASHRAE Chapter Presidents worked for a variety of companies beginning in 1980/81 with Bob Dickerson as a sales representative with Eaton Cutler Hammer, Mike Nauman a design Engineer with Heapy and Associates in 1981/82, Bob Stan a consulting engineer with Stan and Associates in 1982/83, and Jack Putnam with Lorenz and Williams in 1983/84. Mark Rae with Greater Dayton Heating and Cooling was Chapter president in 1984/85. To round out the decade the remaining presidents were Denny Lammlein with Monsanto Research Corporation in 1985/86, Bill Bismeyer with Lathrop Trotter, Tom Homan with Allied Supply, Rodger Hawkinberry with Delco, followed in 1989/90 by Dennis Helmig with Helmig Lienesch.

**Do you have any history for the Dayton ASHRAE chapter that you would like to share for between 1990-2007? If so please email it this month to Jeremy Fauber at [jpfauber@heapy.com](mailto:jpfauber@heapy.com). Thank you!**

### Phase-Change Materials Innovations

#### **Research: Walls That Can Help Suppress Outdoor Heat Penetration, Lower Cooling Loads**

A Korean research team has developed a new material for walls that can help reduce the penetration of heat from the outside by applying a phase-change material (PCM) with bubble injections. Insulation is currently the primary solution for blocking heat from entering a building. By applying an additional material that can delay heat penetration, the material can suppress the indoor temperature from rising, lowering the building's cooling load. [Read more](#)

#### **Adding Electric Power Capacity Without On-Site Generation**

*By Bass Abushakra, Ph.D., Member ASHRAE*

In this case study, power factor (PF) corrections were proposed to improve the energy performance at a college facility in New York. This article discusses potential savings methods that could enhance energy performance, increase grid reliability, alleviate a capacity issue and avoid some power generation costs.

[Download here](#)

#### **Balancing Damper**

The [Roto-Twist oval damper from Metropolitan Air Control](#) is designed for balancing linear slot plenum boxes. It allows for remote operation through the face of the diffuser. Dampers ship fully assembled and can be installed in 10 minutes.

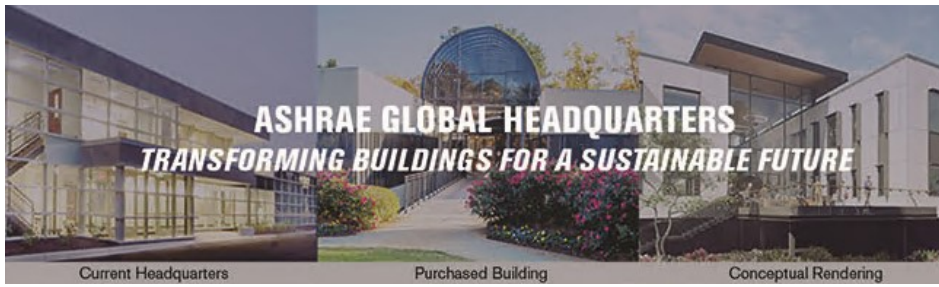
[Read more](#)

#### **Condensing Fire Tube Boiler**

[Navien's NFB-C commercial condensing fire tube boilers](#) deliver 97.5% thermal efficiency, 15:1 turndown ratio, 7 in. (178 mm) color touch screen, BMS communications and multiple venting options with PVC/CPVC/PP/SS-approved materials. [Read more](#)



# ASHRAE News



Even with everything that is going on in the world, our members, volunteers and staff are stepping up to the challenge and continuing to work diligently towards ASHRAE's vision of a **healthy and sustainable built environment for all**. In early 2020, ASHRAE developed proactive guidance to help address coronavirus disease (COVID-19) concerns with respect to the operation and maintenance of HVAC systems. Today, our virtual doors remain open, and ASHRAE's value to the world has never been more evident. While we do not know exactly what the coming months may hold, we do know that ASHRAE's work is vital and your involvement and support powers what we can do.

Over a year ago, we announced plans for ASHRAE's new [Global Headquarters](#) building in Atlanta. ASHRAE's new facility will soon become a hub for the development of solutions for a healthier world, serve as a vital training facility and it will be a catalyst for the advancement of building technologies for decades. **That's why we are reaching out to you** and all of our members to invite you to support this critical project underway at ASHRAE and to be listed among those who participated. The only way this can happen is because of the generosity of members like you.

As of today, many of your colleagues have already donated, including over \$170,000 in gifts from individuals. Join your fellow members today and support the future of your Society. **You are ASHRAE and this is your headquarters! Thank you for all you do!**

**The ASHRAE Building Campaign:**  
**Transforming Buildings for a Sustainable Future**

[DONATE NOW](#)

## House Passes Broad Energy Package

On September 24, the House of Representatives passed a [\\$135 billion legislative package](#) that covers a wide range of energy policy from energy efficiency, renewable energy, electric grid and cybersecurity, transportation, and environmental justice. The bill also includes a section that would require a phase-down of hydrofluorocarbon. The bill passed by a 220 to 185 vote, with seven Republicans voting for it and 18 Democrats voting against the measure. The White House announced that it would veto the measure if it reached President Trump's desk. A section-by-section of the bill can be found [here](#).

## Building Energy Codes Seminar Series

The U.S. Department of Energy will be hosting a series of virtual seminars on residential and commercial buildings to highlight recent updates, key issues and challenges related to building energy codes, as well as information concerning technical assistance available to state and local governments. Seminars will be held on a weekly basis. The first seminar, "Timely Tales of Energy Codes", will take place on Thursday, October 1, from 1-3pm ET. More information on the Energy Codes Seminar Series can be found [here](#).

## **2021 AHR Expo Postponed**

AHR Expo Show Management announced yesterday the postponement of the original planned Show dates of January 25–27 for the 2021 AHR Expo in Chicago. March 15–17, 2021 is being considered as a potential date to host the show. AHR Expo Show Management, along with co-sponsors ASHRAE and AHRI, will make the final determination and announcement on or before October 15th. [Read more](#)

## **DOE Announces \$80 Million for Innovative Building Technologies and Practices**

On September 25, the U.S. Department of Energy (DOE), through its [Building Technologies Office](#), announced that it will provide up to \$80 million for the Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) 2020. This funding opportunity supports projects that enhance energy demand flexibility across buildings, including advanced building construction, workforce development and a variety of building technologies, such as HVAC and thermal energy storage.

To be eligible for consideration, a concept paper must be submitted no later than November 5, 2020 by 5:00 p.m. ET. Full applications must be submitted by January 20, 2021 by 5:00 p.m. ET. More information on submittal requirements and instructions can be found on the [EERE Exchange website](#).

## **CDC Removes Guidance Regarding Airborne Transmission of COVID-19**

After being posted for three days on its website, the Centers for Disease Control and Prevention (CDC) has announced that it is removing [guidance](#) about the airborne transmission of the coronavirus. The CDC's spokesperson Jason McDonald said that "a draft version of proposed changes to these recommendations was posted in error to the agency's official website" and that updated language would be added when the recommendations are finalized. ASHRAE's position on possible airborne spread of the coronavirus can be found [here](#).

## **European Commission Pushes for Tougher Climate Targets**

The European Commission has stated that the European Union should reduce its greenhouse gas emissions by at least 55% by 2030, against 1990 levels. They argue the goal of reaching net-zero emissions by 2050 won't be possible with the EU's current 2030 emissions target of a 40% cut. To do this, the EU would expand carbon pricing including to buildings. Specific proposals will be debated further in summer 2021.

## **U.K. and U.N. Schedule Virtual Climate Summit**

The United Kingdom has announced it will hold a virtual summit on December 12 with United Nations in order to drive more ambitious national goals. The summit will coincide with the fifth anniversary of the Paris Climate Agreement and comes after the United Nation's decision to postpone this year's U.N. Climate Change Conference (COP 26) to November 2021 due to the ongoing pandemic.

# ASHRAE News

## Push for Legislation to Decarbonize the Power Sector

Congressmen David McKinley (R-WV) and Kurt Schrader (D-OR) have drafted bipartisan legislation to decarbonize the power sector. A [discussion draft](#) has been circulated that aims to create a clean energy standard for the electric power sector that would reduce carbon emissions by 80% by 2050, support carbon capture and storage, and provide tax credits for advancing renewables. A "Section-by-Section" of the discussion draft legislation can be found [here](#). The two Congressmen are members of the House Energy and Commerce Committee.

## Michigan Governor Signs Executive Order on Climate Change, Aiming for Decarbonization by 2050

On Wednesday, September 23, Michigan Gov. Whitmer signed an Executive Order combating climate change, aiming to make Michigan's economy carbon-neutral by 2050. The decarbonization-by-2050 goal includes an interim target of a 28% reduction from 1990 greenhouse gas emission levels by 2025. The Michigan Department of Environment, Great Lakes and Energy (EGLE) will be overseeing this effort with the help of a newly formed Council on Climate Solutions. The council will include the directors or director-designated representatives from nine state agencies and 14 state residents appointed by the governor. The council will advise EGLE in formulating and implementing a "Michigan Healthy Climate Plan," the state's action plan for greenhouse gas emissions. Gov. Whitmer also issued an accompanying executive directive requiring EGLE to provide her with the climate plan in draft form by Sept. 1, 2021, with a final plan by the end of that year.

### Learn from ASHRAE Experts!

ASHRAE Learning Institute's Fall Online Course Series offers a wide range of new and updated courses. The courses are instructor-led, taught live in real time, giving you an opportunity to learn from ASHRAE experts and earn PDHs right from your home computer!

#### Upcoming October courses include:

#### **NEW! Health Impacts of Indoor Air Extraction, Ventilation, and Filtration – Same or Different?**

08 Oct 2020, 11:00 a.m. – 1:00 p.m. EDT

#### **Updated! Fundamentals of Ultraviolet Germicidal Irradiation (UVGI) for Air and Surface Disinfection**

12 Oct 2020, 10:00 a.m. – 1:00 p.m. EDT

#### **NEW! The Commissioning Process and Stakeholder Management**

13 Oct 2020, 10:00 a.m. – 11:00 a.m. EDT

#### **NEW! Smart Grid Systems, Applications and Integration with the Built Environment**

14 Oct 2020, 1:00 p.m. – 4:00 p.m. EDT

#### **NEW! Hospital HVAC – Infection Mitigation, Comfort, Performance**

20 Oct 2020, 1:00 p.m. – 4:00 p.m. EDT

#### **Humidity Control II: Real-World Problems and Solutions**

22 Oct 2020, 1:00 p.m. – 4:00 p.m. EDT

View the full schedule at [www.ashrae.org/onlinecourses](http://www.ashrae.org/onlinecourses).



# More Education

## ASHRAE Learning Institute Announces 2020 Fall Online Course Series *Post COVID-19 Building Reopening Course Among New Training Offerings*

ATLANTA (August 21, 2020) – ASHRAE Learning Institute (ALI) has opened registration for its [2020 Fall Online Instructor-led Course Series](#). The series which begins on September 10 and concludes on December 15, features 18 new or updated courses.

"ASHRAE's online course series successfully engages built environment professional through in-depth, practical instruction on a wide variety of topics," said Charles E. Gullledge III, P.E. "This course series is structured to expand knowledge and provide professionals with an exceptional level of understanding to address today's building challenges."

[Evaluating Your HVAC System's Readiness to Mitigate the Spread of SARS-CoV-2](#) expounds on the online ASHRAE COVID-19 details for reopening buildings and the Building Readiness Plan for HVAC systems. The course will focus on the re-occupancy of existing buildings through the evaluation of HVAC systems and how they can be altered to improve their ability to mitigate the transmission of a virus, like SARS-CoV-2 that creates the COVID-19 disease and how to potentially future proof them for the next epidemic.

Three-hour short courses are \$299 (\$224 ASHRAE Member), two-hour courses are \$198 (\$149 ASHRAE Member) and one-hour courses are \$99 (\$74 ASHRAE Member).

The following is the full fall online course series schedule:

For more information and to register, please visit [ashrae.org/onlinecourses](https://ashrae.org/onlinecourses).

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Oct 6, 2020 [Variable Refrigerant Flow System: Design and Applications](#)

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Oct 8, 2020 [New - Health Impacts of Indoor Air Extraction, Ventilation, and Filtration – Same or Different?](#)

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Oct 12, 2020 [Updated - Fundamentals of Ultraviolet Germicidal Irradiation \(UVGI\) for Air and Surface Disinfection](#)

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Oct 13, 2020 [New - The Commissioning Process and Stakeholder Management](#)

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Oct 14, 2020 [New - Smart Grid Systems, Applications and Integration with the Built Environment](#)

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Oct 20, 2020 [New - Hospital HVAC – Infection Mitigation, Comfort, Performance](#)

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Oct 22, 2020 [Humidity Control II: Real-World Problems and Solutions](#)

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Nov 9, 2020 [Guideline 36: Best in Class HVAC Control Sequences](#)

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Nov 17, 2020 [Advanced Designs for Net Zero Buildings](#)

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Dec 3, 2020 [Updated - Laboratory Exhaust Stacks: Safe and Energy Efficient Design](#)

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Dec 8, 2020 [Updated - Successfully Managing the Risk of Legionellosis Using Standard 188-2018](#)

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Dec 15, 2020 [Avoiding IAQ Problems](#)

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