ASHRAE

ISSUE II | 2021

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February 8th Meeting

FR

Main Presentation: Future of Refrigerants Presenter: Ben Schlinsog, Regional Equipment Sales Manager for Daikin Applied

Ben has over 40 years of experience in sales management, national accounts, corporate communications, marketing, and product management. He has an Associate of Art degree in Air conditioning and refrigeration as well as a Bachelor of Arts degree in Marketing. He is currently serving as the Chairman of the SMACNA Associate Member Committee.

This is also membership promotion and a Joint meeting with HARDI

Social Hour: 11:30 AM to 11:45 AM Chapter Business/Instructions: 11:45 AM—Noon Main Presentation: Noon (Virtual Meeting, see below)

Join Zoom Meeting

Zoom Meeting Link: <u>https://us02web.zoom.us/j/86373192419?</u> pwd=T2RZZlpwZDJ5MlhOL2xWdmx3RktzUT09

Meeting ID: 863 7319 2419 Passcode: 872492

One tap mobile +13126266799,,86373192419#,,,,,0#,,872492# US (Chicago) +16465588656,,86373192419#,,,,,0#,,872492# US (New York)

Find your local number: https://us02web.zoom.us/u/kcKsQQSgm

**Please login/display your first and last name when joining the meeting to help with attendance and sending out PDH certificates.

WWW.DAYTONASHRAE.ORG

Thank you to everyone who joined us in January for our meeting on AHSRAE Guideline 36. Ken Gilbert's presentation was focused on High Performance Sequences of Operation for HVAC Systems as described in ASHRAE Guideline 36-2018.

We look forward to having you join us this month on February 8th. Ben Schlinsog will be presenting on the Future of Refrigerants. The February meeting will be a joint meeting with HARDI.

We're looking for feedback with regard to how we can direct funds normally used for meetings since we are currently unable to meet in person. Keep an eye out for a survey in the near future.

Finally, keep in mind that we have our 2021 Golf Outing scheduled for May 28th at Pipestone Golf Course. The website is open for registration at Daytonashraegolf2021.eventbrite.com .

Brian Turner - President, Dayton ASHRAE

Upcoming Events

February 8th ASHRAE Chapter Mtg. 11:30 AM, Virtual Meeting

February 17th **Board of Governors** 8:00 AM, Virtual Meeting

March 8th ASHRAE Chapter Mtg. 11:30 AM, Virtual Meeting

March 17th **Board of Governors** 8:00 AM, Virtual Meeting

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

> See Additional **Events & Volunteer Opportunities Here**

(2007 - 2008)

President: President Elect. Lorraine Kapka Secretary: Treasurer:

Greg Cohron Colleen Haun Jeremy Fauber

Historian.: Education: RP: Membership: Newsletter:

Tom Ferdelman **Russ** Marcks Dennis Lammlein Joe Ferdelman Lorraine Kapka

Ramsay Cohron Sinclair Community College Ramsay Cohron Heapy Engineering

Heapy Engineering Sinclair Community Col. Signature Technologies Heapy Engineering Sinclair Community College

Meetings were held at the Dayton Engineers Club. CRC held in Grand Rapids, MI. Tour: Dayton Bombers vs Cincinnati Cyclones Game

Committee Chairs

MEMBERSHIP Jeremy Fauber JPFauber@heapy.com Heapy

HISTORY **Bryan Schenck**

Brian.Shenck@waibelenergysystems.com Waibel Energy Systems

COMMUNICATIONS

Nathan Lammers Nathan.Lammers@waibelenergy systems.com Waibel Energy Systems

RESEARCH PROMO Tom Mastbaum

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STUDENT ACTIVITIES **Russell Marcks**

Russell.marcks@sinclair.edu Sinclair Community College

CTTC **Evan Nutt** ENutt@elitaire.com 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

Larraine Kapka Sinclair College

SFKS

New Members

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



January



Nicholas Anderson Nadya Bochenek

Heather Shumaker

Robert Durham Andrew Heflin

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

You can go to 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 Paul Hawkins

10 Years Rajan Rajendran



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 or by calling 937-224-0861

Membership Application Here

Happy Valentines Day to all!! WE are all still "in this together...separately. As we have pointed out in this section of the Newsletter ASHRAE is out on the front lines working to combat transmission of **COVID** as well as other airborne and waterborne diseases. ASHRAE Research is a very important component of this and your donations go a long way in funding research aimed at combating disease. ASHRAE Research also helps to finance research aimed at energy efficiency, and innovation in the fields of HVACR, and health.

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.

2021 Goal YTD = To go =	= \$19,680 \$6,100 \$13,580	2021 Goal! 100% 90% 80% 70% 60% 50% 40% 30%	
Partner Level	Honor Roll	10%	Honorable Mention
Your Company Here	Larraine Kapka Steve Meier Tom Mastbaum Evan Nutt Trent Hayden Nathan Lammer Brian Shenck Brian Turner Kyle Schroeder Jennifer Eller Sam Tobias		Joseph Ferdelman Jeff Turner Jeremy Fauber Thomas Monnig Mike Weisman Matt Dill
<u>Silver Level</u>	Bronze Level		
Dayton ASHRAE Chapter	Uptime Solution	s, Inc.	
	If you would like to donate NOW simply click this link: Donate NOW		Endowed Research
APHKAE	Donate M	<u> </u>	

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

RP





2021 Annual ASHRAE Golf Outing!!

Click on the ASHRAE logo below for more information and to sign up as a single, Foursome or to Sponsor a hole.

> Friday, May 28th At Pipestone

Golf Course 4344 Benner Road, Miamisburg

ASHRAE Jobs

Wis.

Master HVACR Technician Little Rock Water Reclamation Authority; Little Rock, Ark. Energy Modeling Specialist HGA; Madison, Wis. HVAC Mechanical Design Engineer Hargrove Engineers Inc.; Frederick, Md. + Constructors; Philadelphia, Pa. HR Generalist Cushing Terrell; Austin, Texas Maintenance-Refrigeration Supervisor Rader Farms; Lynden, Wash. Commissioning Engineer HGA; Milwaukee or Madison, 3nd Shift JLL; Kings Mountain, N.C.

ASHRAE

Electrical Engineer III Jemez Mountains Electric Cooperative, Inc.; Espanola, N.M. Electrical Engineer STULZ Air Technology Systems, Assistant Professor, Teaching Stream - Electrical and Computer Engineering University of Toronto; Toronto,

Ontario, Canada Facility Engineer (Data Center) Electrical Specialty-

View All

ASHRAE News

What It's Like Opening a Building During a Pandemic

The new ASHRAE headquarters showcases more than innovative HVAC&R technology. The renovation also displayed how to open a building during a pandemic. ASHRAE began renovating a 66,700 ft² building, originally built in 1978, in January. Ten months later during the COVID-19 pandemic, the building opened to staff. Ginger Scoggins, P.E., Fellow ASHRAE, chair of the Building Ad Hoc Committee, talked with *ASHRAE Journal* about what it was like to open the new headquarters during a pandemic. Read more

Take a Virtual Technical Tour of the New HQ

Scoggins and 2020-21 ASHRAE President Charles Gulledge III, P.E., HBDP, Fellow ASHRAE, are leading a behind-the -scenes virtual technical tour of the new HQ during <u>ASHRAE's 2021 Virtual Winter Conference</u>. The tour is scheduled for 4:30 p.m. ET on February 10. <u>Read more</u>

Research: Energy Harvesting Made Possible Using Skin Temperature

The Korea Institute of Science and Technology (KIST) announced that a collaborative research team has developed flexible thermoelectric devices with high power generation performance by maximizing flexibility and heat transfer efficiency. Flexible thermoelectric devices could generate energy in close contact with various heat sources such as human skin and hot-water pipes. <u>Read more</u>

ASHRAE Epidemic Task Force Publishes New Guidance

The ASHRAE Epidemic Task Force has released two new pieces of guidance. The first, <u>ASHRAE's Core Recommendations for Reducing Airborne Infectious Aerosol Exposure</u>, summarizes the main points found in the detailed guidance documents produced by the ETF. Second, <u>Communities of Faith Buildings guidance</u>, offers recommendations on conducting worship services under epidemic conditions. <u>Read more</u>

Air Diffusion Performance Index Method Update

By David John, P.E., Member ASHRAE; Shichao Liu, Ph.D., Associate Member ASHRAE

The air diffusion performance index (ADPI) was developed in the 1970s as a tool for design engineers to maximize comfort in an overhead mixed air system. A recent ASHRAE Research Project was conducted to update and expand the range of outlets types. The tool described in this January 2020 article works well to optimize selection and placement of air outlets and is recommended for critical spaces. **Download here**

ASHRAE Member Holds Meetings with Virginia State Assembly Member and Senator

RJ Hartman, who is a licensed engineer, ASHRAE member, and the Government Affairs Committee Chapter Chair for the Richmond Chapter, met recently with two Virginia state legislators. The meetings were with Delegate Dawn M. Adams (House District 68) and Senator Ghazala Hashmi (Senate District 10). The brief meetings were held virtually over videoconference and served to introduce these legislators to ASHRAE, as well as introduce them to RJ as the point of contact in the local ASHRAE chapter. Holding brief introductory meetings like these can be a foundation for ASHRAE members to build relationships with legislators, staff or other public officials in their area.

UNEP Publishes 2020 Adaption Gap Report

The UNEP Adaptation Gap Report 2020, released on January 14, states that 72% of countries have adopted a climate adaption strategy or policy at the national level, while another 9% are in the process of developing one. However, additional financing is critical to enhance adaptation and limit losses, especially in the developing countries. More information can be found in the report <u>viewed here</u>.



DOE Announces Federal Energy and Water Management and Director's Award Winners

The Department of Energy's Federal Energy Management Program (FEMP) has announced 27 winners of the 2020 Federal Energy and Water Management Award Competition and the two winners of the FEMP Director's Award. <u>Click here</u> to see the list of winners.

Energy Department Announces Winners of the Fall 2020 Geothermal Design Challenge

The U.S. Department of Energy's Geothermal Technologies Office has announced latest winners of the Fall <u>2020 Geothermal Design Challenge™</u>. Student team winners include:

- <u>1st place: University of North Dakota for their submission: "Geothermal Applications for</u> <u>the World"</u>
- <u>2nd Place: University of California Santa Cruz for their submission: "Green & Unseen: The</u> <u>Future of Geothermal Power"</u>
- <u>3rd Place: Antelope Valley College for their submission:</u> "The Heat Beneath Our Feet"

New York Requesting Input on NYStretch Energy Code

The New York State Energy Research and Development Authority (NYSERDA) is seeking input that will support and inform the state's efforts to update the existing NYStretch 2020 Energy Code, through the development of NYStretch 2023. This update will support the climate and clean energy agenda outlined in the *Climate Leadership and Community Protection Act*, which requires New York to reduce greenhouse gas emissions 40% by 2030 and no less than 85% by 2050, from 1990 levels. NYSERDA developed NYStretch as a statewide model code for use by municipalities to meet their energy and climate goals by accelerating the savings obtained through their local building energy codes. NYSERDA seeks to make modifications and create new measures that will cost-effectively improve building performance while reducing energy and cutting greenhouse gas emissions. This includes input on code changes regarding priority topics, such as decarbonization, electrification and HVAC system performance, including Total System Performance Ratio (TSPR), indoor air quality and others. Responses to this Request for Information are due **February 16, 2021** by 3:00 p.m. ET. For additional details, please visit NYSER-DA's <u>RFI 4590 Detail Page</u>.

ACEEE Releases Clean Energy Study of 30 U.S. Cities

The American Council for an Energy-Efficient Economy (ACEEE) conducted an analysis of clean energy efforts by 30 small cities. It found that several leaders are taking significant steps to cut energy waste and embrace clean energy. The American Council for an Energy-Efficient Economy examined cities' efforts to make homes and buildings more energy efficient, to scale up the use of renewable energy and to ensure community involvement in developing equitable clean-energy policies. The cities analyzed, with populations generally between 16,000 and 100,000, are in California, Connecticut, Maryland, Minnesota and New Jersey. San Luis Obispo, California received the top score of the group for its policy incentivizing allelectric equipment and appliances in new buildings, and for participating in a program that offers carbon-free electricity to residents. The 30 cities volunteered to be evaluated as part of the Community Energy Challenge sponsored by ACEEE, the Sustainable States Network, Sustainable CT, Green Cities California, Sustainable Maryland, Minnesota GreenStep Cities and Sustainable Jersey. More on the Community Energy Challenge can be found here.





Applying VRF Systems in Cold-Climate Applications

Today's VRF systems are an effective heating and cooling solution for a multitude of applications, including cold climates. This presentation is an overview of design considerations, methods and insights to help HVAC contractors, engineers and developers ensure comfort, efficiency and resilience when applying heat pumps in cold-weather climates.

Available now. Click here for more info.

U.N. & GlobalABC Report Shows Increase in World-Wide Building Emissions

According to a <u>new report</u> from the Global Alliance for Buildings and Construction (GlobalABC) and the U.N. Environment Programme (UNEP), buildings and construction accounted for 38% of global greenhouse gas emissions worldwide in 2019. The report highlights the use of carbon-intensive electricity in parts of the world and that decarbonization for these sectors have slowed down considerably. The report also states that buildings account for nearly 55% of total electricity consumption worldwide. To read the full report, <u>click here</u>.

DOE Releases Energy Storage Grand Challenge Roadmap

On December 21, the U.S. Department of Energy (DOE) released the <u>Energy Storage Grand</u> <u>Challenge Roadmap</u>, the Department's first comprehensive energy storage strategy. The Roadmap, which was originally announced in January 2020, aims to aid in the development of energy storage technologies by 2030. <u>Click here</u> to read more.



90.1 Portal

This all-in-one interactive tool includes ASHRAE Standard 90.1, User's Manual, and version control redlines. View the standard and User's Manual side-by-side, copy, paste, print, and annotate content with one click, and see interpretations, addenda, and errata in context. Subscribe now for special introductory pricing. Click here for more information.



Guidance to Help Reduce the Risk of Legionellosis

Standard 188-2018 establishes minimum legionellosis risk management requirements for building water systems, clarifies compliance requirements, and is updated throughout with enforceable language to facilitate adoption of the standard for code and regulatory purposes. Click here for more information.

DOE's Better Buildings Webinar Schedule

The U.S. Department of Energy has released the schedule for its Better Buildings Webinar Series:

- RISK ASSESSMENTS: EVALUATING BUILDINGS SITES FOR PORTFOLIO RESILIENCE February 2, 2021 from 3:00 - 4:00 PM ET
- PERSPECTIVES ON RESILIENCE: INSURANCE AND CREDIT UNDERWRITING February 9, 2021 from 3:00 - 4:00 PM ET
- SMART TOOLS FOR SMART LABS March 2, 2021 from 3:00 4:00 PM ET
- LEVELING THE SLOPE: HELPING STATE AND LOCAL GOVERNMENTS REACH THEIR ENERGY GOALS – March 16, 2021 from 3:00 - 4:00 PM ET
- YOU HAVE A DATA CENTER NOW WHAT? STORIES FROM THE FIELD April 6, 2021 from 3:00 - 4:00 PM ET

Learn from ASHRAE Experts via Live, Instructor-led Online Training

Registration opens this week for the 2021 online course series. View the scheduled courses, including CoV-2 mitigation topics, at <u>www.ashrae.org/onlinecourses</u>. Individual and group rates are available. Contact <u>edu@ashrae.org</u> to bring a live online course to your Chapter or organization.

New dates are regularly added to the online ASHRAE HVAC Design and Operations training. View the latest training schedule at www.ashrae.org/HVACDesign.

View more ASHRAE courses by topic at www.ashrae.org/ali.



CELEBRATING 125 YEARS