

CHAPTER

WWW.DAYTONASHRAE.ORG

ISSUE VII | 2023

CURRENT OFFICERS

PRESIDENT
Jennifer Eller
jmeller@heapy.com
Heapy

PRESIDENT-ELECT Kevin Sturm

ksturm@uptime-inc.com
Uptime Solutions

TREASURER Zak Schultz

zak.schultz@ferguson.com Ferguson Enterprises, Inc.

SECRETARY Mark Mehicic

mmehicic@ketchum-walton.com Ketchum-Walton

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2023-2024
Dayton Chapter Elected Officers

Jennifer Eller—President
Kevin Sturm—President Elect
Zak Schultz—Treasurer
Mark Mehicic —Secretary
Jennifer Butsch—Government Affairs
Andrew Chiasson—Student Activities

Board of Governors

Rick Pavlak Larraine Kapka Brian Turner



As you can tell that this year has some New faces to some of our posisition within the Dayton Chapter. I'm so excited to see how this next chapter year 2023-3024 will continue to thrive. So a very BIG Welcome to you all and thank you for stepping up to help make this coming year a great one!

I would also like to extend another big Thank You to Matt Dill (out-going President) for his devotion and leadership for the past two year. We appreciate you stepping in and your leadership.

The ASHRAE Region V Chapter Regional Conference is being held this year in Akron, Ohio. This year's conference is being held July $27^{th} - 29^{th}$.

We are still looking for someone to take over the Annual Dayton ASHRAE Golf Scramble. So, please reach out to a member of the board if you are interested in getting involved with the **Dayton ASHRAE Chapter..**

I look forward to serving as your president for the 2022-2024 year and seeing what all I can contribute to our Chapter!

Thank you, Jennifer Eller - President, Dayton ASHRAE

Upcoming Events

July 19th **Board of Governors** 8:00 AM, Virtual Meeting

August 16th **Board of Governors** 8:00 AM, Virtual Meeting

Sept. 20th **Board of Governors** 8:00 AM, Virtual Meeting

See Additional **Events & Volunteer Opportunities Here**

(2002 - 2003)

President: Russ Marcks

Vice Pres: J. Bart Grunewald

Secretary: Loren Free

BOD:

Membership:

Mike Kirchens Treasurer:

All officers & Committee Members

Education: Russ Marcks Research Pro.:

Dennis Lammlein

Brian Isaacs

Sinclair Community Coll. Babcock & Wilcox of OH

Sinclair Community Coll.

Heapy Engineering

Rieck Mechanical

Dayton Trane

York International

Regional Director: Jim Escamelia

Meetings were held at the Dayton Engineering Club.

CRC was held in Evansville, Indiana

Awards Received: PAOE, Honor Roll & Full Circle

Committee Chairs

MEMBERSHIP Vincent Caudill

Vcaudill@ecomfortohio.com Environmental Comfort, LLC

HISTORY Bryan Schenck

Brian.Shenck@GoWaibel.com Waibel Energy Systems

COMMUNICATIONS Nathan Lammers

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RESEARCH PROMO Brian Turner

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STUDENT ACTIVITIES Andrew Chiasson

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CTTC Evan Nutt

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GOVERNMENT AFFAIRS Jennifer Butsch

Jennifer.butsch@emerson.com
Emerson

YEA (Chair) Phillip Reid

PAReid@heapy.com Heapy

Board of Governors

Rick Pavlak

Heapy

Larraine Kapka

Sinclair College

Jennifer Eller

Heapy

MEMBERSHIP

New Members

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

June: No new members

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: David Erwin





10 Years: Brad Hess

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 Vincent Caudill at vcaudill@ecomfortohio.com or by calling 740-971-7795.

Membership Application Here

Hopefully, everyone is enjoying the start of summer. Thank you to all those who helped us meet our goals for the RP campaign. With your support, we were able to meet 100% of our goal for the 2022-23 ASHRAE year. To all those have donated this year, we appreciate your support! Finally, for those looking to kick off the next 23-24 season, please consider donating to ASHRAE RP / Education / Scholarships. See the link BELOW to donate today!

Please note again that in order to be recognized with a commemorative coin, and have your name published in the ASHRAE Journal, the minimum donation is \$150 for individuals and \$500 for Corporate Donors.

2022 Goal = \$ 19,680 YTD = \$ 19,790 To go = \$ 0

% to GOAL: 100%





Partner Level	Honor Roll	Bronze

Emerson Steve Meier Russell Marcks
Larraine Kapka Uptime Solutions

Brian Turner Sam Tobias

Jennifer Eller Evan Nutt Bryan Schenk Matt Dill

<u>Silver Level</u>

Matt Dill

Rick Pavlak

Honorable Mention

Dave Waibel David Crosley Zak Schultz

Jeremy Fauber Kort Kugel

Kyle Schroeder Vincent Caudill

Thanks for all your help and support. If you would like to donate NOW simply click this link:

DONATE NOW

ASHRAE RP

Level

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



ASHRAE News

The Dayton Chapter is always looking for creative individuals To help volunteer for different positions or events.



Please make sure to let us know
If you are willing to help our and
Share your ideas to help
Shape the world of
HVAC-R!



We are extending our **20% discount** until June 30, 2023. Enter the code **June2023** to enjoy this discount on any **eLearning course offering**, including individual courses, course packages, and libraries.

Enroll Now



ASHRAE Completes Draft of First-Ever Pathogen Mitigation Standard

ASHRAE announced the completion of the first draft of its standard for maintaining healthy indoor air quality (IAQ), with final approval expected in June and publication anticipated in July. ASHRAE Standard 241P, *Control of Infectious Aerosols* provides minimum requirements for HVAC-related measures to reduce the risk of transmission of COVID-19, influenza, and other airborne viruses in homes, offices, schools, hospitals during periods of high risk. The standard offers guidance for creating healthier environments in the buildings where we work, live, and play. **Read more**

Wildfires



The Chicago skyline is bathed in an orange haze from wildfire smoke on June 8. Credit: Jamie Kelter Davis/Bloomberg

The Quest for the Smoke-Proof Building

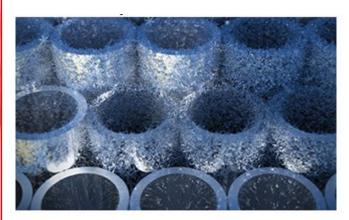
Efforts to improve indoor air quality (IAQ) have taken on fresh urgency as more cities experience intense pollution from climate change-fueled wildfires. The still-burning fires, fueled by drought and high temperatures across Canada, also provided a stark new illustration of the importance of IAQ—an issue that rose to prominence during the COVID-19 pandemic amid new research on the poor quality of many indoor environments. The Centers for Disease Control has issued a new health-based standard for indoor clean air, while ASHRAE has in the past released a guideline for emergency air quality events. This article discusses the impact of the fires on IAQ, occupant health and resiliency in the built environment. Read more

DOE Launches \$4 Million Effort to Modernize Wood Heating

The U.S. Department of Energy's Bioenergy Technologies Office announced the launch of a \$4 million initiative that aims to accelerate wood heater innovation and support the development of the next generation of efficient and clean wood heaters. The DOE notes that approximately 11 million U.S. homes currently use cordwood or wood pellets for spacing heating. At least \$4 million will be made available for the competitively selected CRADA call, and up to four projects will be selected to participate in the initiative, with a project duration of 12 to 18 months. Read more

ASHRAE News

Elastocaloric Cooling System Opens Door to Climate-Friendly AC



Metallic solid-state refrigerant tubes used for elastocaloric cooling, an environmentally friendly refrigeration technology. Credit: Jiaai Dai/Maryland Engineering

In a <u>recent study</u> in *Science*, a team of University of Maryland researchers introduced a high-performance elastocaloric cooling system that could represent the next generation of cooling devices. Caloric materials—including magnetocaloric, electrocaloric and elastocaloric materials—can undergo phase transition, release and absorb heat upon application of various fields and mechanical forces. A current prototype can produce 200 watts of cooling capacity, enough to power a compact wine fridge, with plans to expand to window units, whole-house cooling systems, and commercial HVACs eventually. Read more

The conference is organized by ASHRAE, American Institute of Architects (AIA), International Facility Management Association (IFMA), APPA and Building Owners and Managers Association (BOMA).

"The goal of this conference is to bring persons who work in all

2023 Decarbonization Conference for the Built Environment

October 25-27, 2023

Renaissance Arlington Capital View Washington D.C. Metro Area

Submit a Proposal

Industry Leaders Seek Presentations for 2023 Decarbonization Conference for the Built Environment

aspects of building design, construction, operation, ownership and management into the same room to address how the building industry as a whole can improve the impact buildings have on the global climate crises," said ASHRAE President-Elect Ginger Scoggins. "Since building design, construction and operation contribute close to 40% of total global emissions of carbon, it is imperative that we all work together to develop a path forward to address our impact".

The deadline to submit is May 1, 2023. If accepted, presentations will be due September 01, 2023. All speakers are expected to present their work in person at the conference venue. Learn more about the conference at ashrae.org/2023BuiltEnvironment.

ASHRAE News

U.S. Department of Energy Issues Notice of Petition for Waiver, Grants Interim Waiver, and Requests Comments Pertaining to Test Procedures for Central Air Conditioners and Heat Pumps

The U.S. Department of energy has issued a <u>pre-publication</u> and is <u>accepting comments</u> to the Federal Register regarding a potential testing waiver for Samsung HVAC products. Samsung has asked for an exemption to newer test procedures set forth at 10 CFR part 430 subpart B, appendix M1. In their petition Samsung notes that some of their models will categorically be unable to meet these new standards because they are meant to be used with short ducts and low static pressures, rather than be used in a more traditional central ducted home. Samsung is requesting to use an alternative test procedure, and also requested and was granted an interim waiver based on the argument that the final waiver is likely to be granted. You can read the full notice on the Federal Register here.

Global Carbon Dioxide Levels in Atmosphere at Record High

Carbon dioxide levels in the atmosphere reached 424 parts per million (ppm) in May, an increase of 3ppm from the previous year and 50 percent higher than at the beginning of the industrial era. While actions are being taken around the world to address climate change, these measurements demonstrate that current actions are insufficient to curb the catastrophic consequences of climate change. For more details about these measurements, along with projections, please visit this.page.

Without Air Conditioning, Students and Staff Suffer

According to the U.S. General Accounting Office, roughly 36,000 schools across the country need to replace or update their heating, ventilation and air conditioning systems. In the Pacific Northwest, where early summer temperatures don't often exceed 70°F, that's usually not much of a concern. In May 2023, however, the region was gripped by a stifling heat wave that brought with it record-shattering temperatures. Many schools are still ill-equipped to deal with the effects of extreme heat and poor air quality on students and educators. This article dives into the ramifications of uncontrolled heat and poor indoor air quality in classrooms, with a case study of a Washington state school that weathered the recent heat wave without a functioning HVAC system. **Read more**

New rules for all new buildings to have zero direct emissions heating systems

Scotland's Heat in Buildings Strategy sets out the Scottish Government's intention to develop regulations to ensure that new buildings, applying for a building warrant from 2024 onwards, use zero direct emissions heating (ZDEH) systems. A "direct emission heating system" means a system (other than a heat network) by which the building is heated or is cooled, or by which hot water is made available in the building, which uses thermal energy produced by a source of production which during normal operation produces more than a negligible amount of direct greenhouse gas emissions at the point of use. Read more

Factors Influencing Face Velocity for Fume Hood Containment

Although there is a growing consensus that face velocity cannot be applied as a sole evaluation indicator of fume hood containment performance, face velocity measurement is still of importance in hood performance evaluation because of its convenience and simplicity. The work reported in this article aims to understand the impact of various influential factors on the robustness of face velocity for fume hood performance evaluation through comprehensive field tests. Download here



YOUR COMPANION TO STANDARD 62.1

Standard 62.1 User's Manual—Based on ANSI/ASHRAE Standard 62.1-2019, Ventilation for Acceptable Indoor Air Quality has been updated to align with the 2019 edition of ANSI/ASHRAE Standard 62.1. This user's manual provides examples, sample calculations, and best practices to aid users in designing, installing, and operating systems for ventilation in buildings. Read more...



ASHRAE's Refrigeration Safety Standards

ASHRAE's key standards guiding refrigerant identification and usage have been revised to meet governmental regulation and achieve improved performance. Standards 15 and 34 provide essential guidance to manufacturers, design engineers and operators who need to stay current with new air conditioning and refrigerating requirements. Learn More

ASHRAE Job Board

Mechanical Engineer EEA Consulting Engineers;

Austin, Texas

Welder - 2nd Shift AMETEK Aerospace & Defense;

Garden City, N.Y.

Director of Mechanical Engineering One Source of

NC, LLC; N.C.

Atlanta, Ga.; Boise, Idaho; Houston, Texas

Senior Mechanical Engineer OCI Associates, Inc.;

Orlando, Fla.; West Palm Beach, Fla.; Fort Myers, Fla.;

Ft. Pierce, Fla.; Washington, D.C.

Project Manager/Senior Project Manager Watry

Design, Inc.; Long Beach, Calif.; San Jose, Calif.

Global Automation Manager ABEC, Inc.; Bethlehem,

Pa.

Plant Engineer American Packaging Corporation;

Cedar City, Utah

Project Manager/Project Engineer POWER Engineers; Electrical Designer Fluor; Hoofddorp, Netherlands

Civil CAD Designer Atkins North America, Inc.; Austin,

Texas

View All