

# CHAPTER

WWW.DAYTONASHRAE.ORG

**ISSUE VI | 2022** 

### **CURRENT OFFICERS**

### PRESIDENT Matt Dill

Matthew.dill@victaulic.com Victaulic

## PRESIDENT-ELECT Trent Hayden

thayden@netgainsengineering.com Netgains Engineering P.C.

## TREASURER Zak Schultz

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

### SECRETARY Kort Kugel

Kort.Kugel@aeroseal.com Aeroseal

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Us on Facebook



2022-2023

Dayton Chapter Elected Officers

Matt Dill—President
Trent Haden—President Elect
Zak Schultz—Treasurer
Kort Kugel—Secretary

Board of Governors

Rick Pavlak Lorraine Kapka Jennifer Eller

## FROM THE PRESIDENT

The 2021-2022 ASHRAE year has come to an end and it was a successful year. We were able to experience some normalcy during this ASHRAE year. We were able to be to hold our chapter meetings in person, we hosted a presentation from Mick Schwedler, and we held our first holiday party in 2 years. I'm happy to say that our membership and volunteering efforts remain strong.

As the new year begins, I'd like to welcome one new member to the Dayton Chapter Board of Governors. Kort Kugel – Chapter Secretary

I would like to say thank you to **Tom Mastbaum**. Tom is retiring from his position as Research Promotion Chair. He served in this position since 2014 and he did an incredible job raising money for RP. We wish you the best in retirement. **Brian Turner** will be taking over for Tom as Research Promotion Chair.

I would like to say thank you to Mike Weisman for organizing the Dayton ASHRAE Golf Scramble for the past 7 years. The golf scrambles are always well run and that is due to the time and effort Mike puts in each year organizing our chapter's golf outing.

If you are looking to get involved with ASHRAE, please reach out to any of the board members or committee chairs.

I look forward to serving as your president for the 2022-2023 year

Thank you, Matt Dill-President, Dayton ASHRAE

### **Upcoming Events**

July 20th
Board of Governors
8:00 AM, Virtual Meeting

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

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

See Additional

Events & Volunteer

Opportunities Here

## CHAPTER HISTORY

(1967 - 1968)

President: Gifford Solem Johnson Service

Vice Pres:Norman PleimannHughes BechtolSecretary:Thomas FerdelmanAhart & Assoc.Treasurer:Glenn BlackJohnson Service

BOD: John Patterson Trane Company

Regional Director: Don Phillips

Meetings were held at the Dayton Engineering Club. CRC held in Indianapolis, Indiana.

### **Committee Chairs**

## **MEMBERSHIP** Vincent Caudill

Vcaudill@ecomfortohio.com Environmental Comfort, LLC

### 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

tom.mastbaum@tem-associates.com TEM Associates, LLC.

## 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**

**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:



**Brandon Burns** 

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

You can go to <a href="http://web.ashrae.org/connect\_a\_colleague/">http://web.ashrae.org/connect\_a\_colleague/</a> 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!

1 Year: Austin Nutter

10 Years: Russell Morningstar

45 Years: Jack Putnam 50 Years: Mark Rapier



### **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 513-512-5359.

### **Membership Application Here**

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 2021-22 ASHRAE year. To all those have donated this year, we appreciate your support! We'd also like to send a special thank you to Tom Mastbaum for his service as the Dayton ASHRAE RP Chair for the last nine years. On behalf of the enitre board, thank you Tom for everything you have done over the last several years. Finally, for those looking to kick off the next 22-23 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!

2021 Goal = \$ 19,680 YTD = \$ 19,680 To go = \$ 0

% to GOAL: 100%

CONGRATULATIONS

Partner Level Honor Roll

Honor Roll

Steve Meier
Tom Mastbaum
Evan Nutt
Brian Turner

Bronze Level
Uptime Solutions
Russell Marcks

**Silver Level** 

Waibel Energy
Dayton ASHARE Chapter

Vince Caudill
Kyle Schroeder
Bryan Schenck
Zak Shultz

Zak Shultz Jennifer Eller Matt Dill Samuel Tobias Dennis Helmig

Larraine Kapka

**Trent Havden** 

**Honorable Mention** 

**Keith Strayer Jeremy Fauber** 

Thanks for all your help and support. 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 Jobs

Dayton ASHRAE Chapter is looking for an individual to fill the position of : **Government Affairs** 

### Description:

- ◆ For each joint chapter meeting to make sure to discuss a built environment or HVAC&R industry related topic
- Organize an activity for: National Engineer's week and/or World Refrigeration day
- Help promote ASHRAE's resources and standards
- Attend CRC Workshops

For more information or interest, please contact:
Matt Dill at Matthew.dill@victaulic.com
Or at 937-269-9116

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!



## ASHRAE Jobs



Heating, Ventilating, Air Conditioning & Refrigeration (HVAC-R) - Tenure Track Faculty

### Position summary:

Sinclair seeks to attract an academically and culturally diverse faculty that carries out the mission of the college with dedication, innovation, and a commitment to the success of each student. The Division of Science, Math & Engineering invites applications for a Tenure Track Faculty position in the HVAC&R Program and the Energy Management Program of the Built Environment department that will begin August 2022.

#### **Principal Accountabilities:**

The following are six critical performance areas that define a tenure-track faculty position:

- Scholarship and Professional Growth: Maintain and seek to improve currency and competence in the discipline and as a teacher.
- **Teaching and Learning Facilitation**: Participate in the continuing development and implementation of the department's curriculum through teaching that reflects a strong commitment to fostering student success.
- Assessment and Evaluation: Implement evaluations according to established standards and use assessment data to continuously improve teaching and learning.
- **Student Development**: Through in-class and out-of-class initiatives, actively seek to advance the development of individual students and their capacity to meet their educational goals.
- Curriculum Design: In collaboration with colleagues, actively contribute to the continuous review and revision of the department's curriculum.
- Workplace and Community Service: Contribute to the operation and advancement of the college through committee service and other activities. Extend professional expertise to the community served by the college.

For more information regarding this position or to apply Please click "Apply" button below.



## ASHRAE News

## A S H R A E J O U R N A L Podcast

### S2 | E12: Practical Energy-Efficient Best Practices for Hospitals

"Getting an efficient operating infrastructure does help, and it's always cheaper to do it on the initial build than it is to go back and retrofit," said Tim Peglow, P.E., Associate Member ASHRAE. Join Peglow and 2021–22 ASHRAE President Mick Schwedler, P.E., Fellow ASHRAE, as they discuss practical energy-efficient applications in hospitals and the 50% Advanced Energy Design Guide for Large Hospitals, a sensible approach for engineers and building owners and operators to easily achieve advanced levels of energy savings without having to resort to detailed calculations or analysis.





Guests, left, President Mick Schwedler, P.E., Fellow ASHRAE, Tim Peglow, P.E., Associate Member ASHRAE

Play Episode

SEPA
United States
Environmental Protection
Agency

Welcome to the CIAQ Webinar/Meeting Tuesday, June 21, 2022 1:00 p.m. – 4:30 p.m. EDT



Audio: (800) 207-0148 / Passcode: 902382

### ASHRAE IAQ Standards—Before, During and After COVID



William Bahnfleth, Ph.D., PE The Pennsylvania State University, Chair, ASHRAE Epidemic Task Force

## ASHRAE News

## ASHRAE Welcomes 2022-23 President, Officers and Directors

### Elected officers who will serve one-year terms are as follows:

- President: Farooq Mehboob, Fellow ASHRAE, Principal Consultant, Mehboob & Company Consulting Engineers, Karachi, Pakistan.
- President-Elect: *Ginger Scoggins, P.E., Fellow ASHRAE*, Principal, Engineered Designs Inc., Cary, N.C.
- Treasurer: *Dennis Knight, P.E., Fellow ASHRAE*, Principal, Whole Building Systems, LLC., Mount Pleasant, S.C.
- Vice President: *Billy Austin, P.E., BCxP, BEAP, BEMP, HBDP, HFDP, OPMP, Member ASHRAE*, Principal, Shultz Engineering Group, Charlotte, N.C.
- Vice President: *Dunstan Macauley III, Member ASHRAE*, Director of Mechanical Engineering, Setty & Associates, Rockdale, Md.
- Vice President: Sarah Maston P.E., BCxP, Member ASHRAE, Director, Commissioning & Energy Services at Colliers Project Leaders, Hudson, Mass.
- Vice President: Ashish Rakheja, Member ASHRAE, Director/Chief Operating Officer, Aeon, Noida, India.

### ASHRAE introduced its newest Directors and Regional Chairs who will serve three-year terms from 2022–25:

- Region IV Director and Regional Chair: *Bryan Holcomb, Member ASHRAE*, Vice President Sales & Preconstruction, Environmental Air Systems, Oak Ridge, N.C.
- Region V Director and Regional Chair: *James Arnold, P.E., Member ASHRAE*, engineer, Gutridge, Dublin, Ohio.
- Region VI Director and Regional Chair: *Susanna Hanson, Member ASHRAE*, Application Engineer, Trane, La Crosse, Wis.
- Region XII Director and Regional Chair: *John Constantinide, P.E., Member ASHRAE*, Energy Manager, Cape Canaveral Space Force Station, Merritt Island, Fla.
- Region XIII Director and Regional Chair: *Cheng Wee Leong, P.E., Member ASHRAE*, Director, Method Engineering Pte. Ltd., Singapore.

## ASHRAE News

### Energy Provider Aims To Convert Boston's Steam Network To Run on Clean Energy



Credit: Vicinity Energy

District energy provider Vicinity Energy is pursuing its <u>eSteam plan</u> for the nearly 90-year-old district steam system serving about 65 million square feet of buildings in Boston and Cambridge, Mass. Vicinity plans to augment its fossilgas-fired cogeneration plant in downtown Cambridge with electric-powered boilers and industrial-scale heat pumps. The plan could serve as a model for how some cities can move toward climate-friendly heating and cooling of buildings.

Read more This steam plant in downtown Boston could become the hub of an all-electric district energy system.

#### Present State and Future of Environmental Control Systems in Space

By John Constantinide, P.E., Member ASHRAE; Hamidreza Najafi, Ph.D., Associate Member ASHRAE The International Space Station is a working example of how to design for the temperature extremes of deep space. This article also presents the need for standards, guidelines and codes relating to the indoor environment for these applications. **Download here** 

#### **Heatwave Puts Europe's Energy Systems to the Test**

A heatwave in parts of Europe has piled pressure on energy systems as demand for air-conditioning risks driving prices higher and adding to the challenge of building up stocks to protect against any further cuts to Russian gas supplies. Sweltering temperatures have arrived earlier than usual this year, notably in <u>France and Spain</u>, prompting consumers to turn on air conditioning despite historically high power prices. To read more, please visit <u>here</u>.

### ASHRAE Referenced in New CDC Study on Ventilation Strategies in Public Schools

On June 10, the U.S. Centers for Disease Control and Prevention (CDC) issued a report titled "Ventilation Improvement Strategies Among K–12 Public Schools — The National School COVID-19 Prevention Study." The study found that in U.S. K-12 public schools, "higher-cost and resource-intensive ventilation improvement strategies...were less frequently reported" and that "focusing support on schools least likely to have implemented resource-intensive ventilation strategies might facilitate equitable implementation." The study noted that <u>ASHRAE's Guidance for Schools and Universities</u> emphasizes numerous ways to improve ventilation, with strategies varying in both financial cost and ease of implementation. The full study can be found on the CDC website here.

### Pushing the Boundaries of Air Cooling in High-Density Environments

Data centers have seen an ongoing increase in average power density over the past decade. During this time, many have wondered if air-cooled IT equipment (ITE) has reached its power limits and if liquid cooling is really the only long-term solution. Some high-performance computing (HPC) ITE is available as liquid- or air-cooled versions. However, the bulk of standard ITE is still air cooled, and most new mainstream data centers continue to be designed for air-cooled ITE. This has led to renewed efforts by ITE manufacturers and data center operators to push the boundaries of air cooling. **Read more** 



#### **HHS Addresses Greenhouse Gas Emissions in the Health Sector**

The Department of Health and Human Services (HHS) has called on health care providers to take a pledge to reduce greenhouse gas emissions by 50 percent by 2030 and to net zero by 2050. The U.S. health care sector contributes approximately 10 percent of U.S. greenhouse gas emissions. Health care providers that take the pledge will be recognized at a White House Ceremony later this month. HHS Secretary, Xavier Becerra, took the initiative to create a new Office of Climate Change and Health Equity to encourage all HHS departments to make efforts to address climate change and its health effects. Until now, only two HHS offices – the Centers for Disease Control and Prevention and the National Institutes of health – doing work related to climate change of Health. Earlier this month the HHS also announced a joint initiative with the National Academy of Medicine to form partnerships with private-sector health care providers to conduct research on reducing greenhouse emissions from the industry.

### DOE Announces \$39 Million to Study Converting Buildings into Carbon Storage Structures

The U.S. Department of Energy (DOE) announced it will support 18 projects aiming to develop decarbonizing building materials that can serve as net carbon storage structures. The Harnessing Emissions into Structures Taking Inputs from the Atmosphere (HESTIA) program is led by ARPAE and aligns with President Biden's goal to reach zero emissions by 2050. Awardees include:

- National Renewable Energy Lab cost-effective, bio-based insulation
- Purdue University transformational "living" wood with the strength of steel, a self-healing capability and carbon sequestering benefits
- SkyNano LLC composite panel that contains bio-derived fibers that are mechanical, functional and maintain a carbon-negative footprint

University of Pennsylvania – medium-sized buildings with high-performance floor system with carbon absorption

Find information on all 18 HESTIA projects that received funding <a href="here">here</a>.

### ASHRAE Joins in Message to Congress on the Importance of Keeping Building Provisions in any Climate and Energy Bill

ASHRAE joined the Building Action Coalition for Sustainable Buildings in sending a letter to congressional leadership, explaining the importance of keeping building provisions in any climate or energy legislation. The provisions of interest come from the Build Back Better Act (H.R. 5376) passed by the House, as well as the draft language from Senate Committees during earlier reconciliation negotiations. The provisions would improve buildings, save energy, build resilience to natural disasters and spur job creation. For example, there are proposals to expand financing for green buildings; provide rebates for home retrofits; assist in improving efficiency in schools, public and non-profit buildings; and train a workforce adept in energy efficient and healthy buildings. A copy of the letter can be found <a href="here">here</a>.



### July 7 EPA Webinar on National Academies Report on Indoor Chemistry

The National Academies of Sciences, Engineering and Medicine released a consensus report this month entitled, "Why Indoor Chemistry Matters," which explores how exposures to indoor chemicals from building materials, furnishings, occupants, cooking, consumer products and other sources affect human health. The report identifies research needs and priorities. On **Thursday July 7, 1pm-3pm Eastern Time**, EPA will be holding a webinar to take a closer look at the report. For more information and to register, please visit this page.



#### ASHRAE's Weather Data Viewer 2021

ASHRAE's Weather Data Viewer 2021 is now available for an annual subscription. The subscription includes cloud-based access to climatic design information for 9,237 weather stations worldwide, including quantities such as dry-bulb temperature, dew-point temperature, wet-bulb temperature, wind speed, and wind direction at various frequencies of occurrence over a long period (8+ years) as well as access to the underlying frequency data for further analysis and visualization. Learn more...

### ASHRAE Recognizes the Contributions of Members at the 2022 Annual Conference

ASHRAE recognized the outstanding achievements and contributions of members to the Society and the built environment industry during an Honors and Awards program at the 2022 Annual Conference in Toronto. "ASHRAE's Honors and Awards recipients exemplify excellence in our industry," said 2021-22 ASHRAE President Mick Schwedler, P.E., Fellow ASHRAE, LEED AP. "We appreciate your contributions to the global built environment and your commitment to our Society's mission to serve humanity by advancing the arts and sciences of HVAC&R." Read more

### ASHRAE ETF Chair Bahnfleth Addresses the Federal Interagency Committee on Indoor Air Quality

On June 21, ASHRAE Epidemic Task Force (ETF) Chair Bill Bahnfleth addressed the Federal Interagency Committee on Indoor Air Quality. Bahnfleth's presentation provided an overview of ASHRAE indoor air quality standards, primarily focused on non-residential/non-healthcare facilities, discussed the extent to which ASHRAE standards are adopted into building codes, summarized pandemic guidance as presented in the ASHRAE Epidemic Task Force Core Recommendations and elaborated in other guidance documents, and discussed how standards could change in the future because of the pandemic and in the context of heightened awareness of the need to improve indoor air quality.