ASHRAE

www.daytonashrae.org

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ISSUE XI | 2021

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November 10th New Hybrid Chapter Meeting!!!

Chapter meeting are now on Wednesday's and you have a choice to join in person or virtual!!



Main Presentation: Fundamentals of Thermal Displacement Ventilation Presenter: Andrey Livchak, Ph.D., Director of Global R&D for Halton Group Americas ASHRAE Distinguished Lecturer

FR

Social Hour: 11:30 AM to 11:45 AM Chapter Business/Instructions: 11:45 AM—Noon

Topic Description:

Thermal displacement ventilation (TDV) is a unique system that saves energy and, at the same time, improves indoor environmental quality of HVAC systems in cooling applications. This presentation will give classification of air distribution systems in terms of temperature and CO_2 concentration; it will describe fundamental differences between TDV and Mixing Ventilation. It will explain how ASHRAE Standard 62.1-2010 impacts TDV system design and describe benefits and limitations of TDV. It will also cover TDV performance when space heating is provided by secondary heating systems and when displacement diffusers are used for space heating in all-air systems.

Please email Vincent Caudill at <u>vcaudill@ecomfortohio.com</u> or by calling 740-971-7795 to <u>sign up by November 8th</u>. Please indicate if you are joining in person or by zoom. The meeting information will be sent out again closer to the meeting date.

Join Zoom Meeting Information: Click picture for Meeting Link

Meeting ID: 835 6391 7108 Passcode: 722449

With this months meeting being hybrid, we appreciate your understanding while we work out any bugs on the technology side of things.



FROM THE PRESIDENT

Thank you to everyone who joined our first hybrid meeting. It was great having Marti Ogram give her presentation "More Than A Boost To Your Bottom Line". It was also our Membership Promotion and Research Promotion meeting. Congratulations to everyone that was recognized for their contributions.

Our next hybrid meeting is scheduled for Wednesday, November 10th. This month's presentation will focus on the Fundamentals of Thermal Displacement Ventilation, presented by Andrey Livchak, PH.D.

Please reach out to a member of the board if you are interested in getting more involved with the Dayton Chapter

Matt Dill-President, Dayton ASHRAE

Upcoming Events

Nov 10th ASHRAE Chapter Mtg. 11:30 AM, Virtual Meeting

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

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

Dec 15th Board of Governors 8:00 AM, Virtual Meeting

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

See Additional Events & Volunteer Opportunities Here

<u>(2007-2008)</u>

President:Greg CohronPresident:Elect:Lorraine KapkaSecretary:Colleen HaunTreasurer:Jeremy Fauber

Membership: Historian: RP: Student Act.: Colleen Haun Jeremy Fauber Joe Ferdelman Tom Ferdelman

Joe Ferdelman Tom Ferdelman Dennis Lammlein Russell Marcks Ramsey Cohron Sinclair Community College Ramsay Cohron Heapy Engineering

Heapy Engineering Heapy Engineering Signature Technologies Sinclair Community College

Meetings were held at the Dayton Engineers Club. CRC Held in Grand Rapids, Michigan Tour & Refrigeration Night: EJ Nuitter Center & Hockey Game

Committee Chairs

MEMBERSHIP Vincent Caudill

Vcaudill@ecomfortohio.com Environmental Comfort, LLC

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YEA (Chair) Phillip Reid PAReid@heapy.com Heapy

Board of Governors

Rick Pavlak Heapy

Larraine Kapka Sinclair College

> Evan Nutt Elitaire

MEMBERSHIP

New Members

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

WELCOME

October

Robert Stohr Mike Oakley

Eva McLaughlin

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

You can go to <u>http://web.ashrae.org/connect_a_colleague/</u> 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!

<u>1 Year:</u>Abinesh SelvacanabadyMichael AyetteTanner AyersKatherine Kamfe

<u>5 Years</u> Andrew Tudor Matthew Kremer



<u>25Year</u> John Grunenwald Theresa Root

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

Thanks to all '20-'21 who were honored at our October meeting at the Engineer's club of Dayton. It was great to have an actual in person meeting again, and hopefully this is the start of "normalcy" moving forward. Hoe everyone has a great Thanksgiving. We are thankful for all the generous donors in the Dayton Area who have exceeded goal for the past 10 + Years. Let's keep up the good work!! 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 .

2021 Goal =	\$ 20,000
YTD =	<u>\$ 2,170</u>
To go =	\$ 17,510

% to GOAL: 11%

Partner Level

Honor Roll

Steve Meier Tom Mastbaum Evan Nutt Brian Turner Lorraine Kapka Trent Hayden Russell Marcks

Silver Level



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!!







Thursday, November 18, 2021, 10:00 am – 12:00 pm EST Watch the event via <u>Facebook Live</u>

If your travels will bring you to Atlanta during this time and you wish to attend in person, please <u>RSVP</u> by November 3, 2021*



*all events will be taking place at 180 Technology Parkway NW, Peachtree Corners, GA 30092



Schedule of Events 10:00 am Ribbon Cutting Remarks from ASHRAE Leadership and Special Guests

11:00 am – 12:00 pm Tours of the New Headquarters Building *Refreshments Provided Business/Business Casual Attire Is Recommended*

All attendees and guests must provide proof of COVID-19 vaccination or a negative SARS-CoV-2 PCR test within 72 hours of travel. Masks are required for all events.

ASHRAE will adhere to CDC guidelines. Watch the event via Facebook Live

New! 2021-2022 Society Year ASHRAE Member Benefits

An exciting *new* selection of benefits is available to qualifying members joining the Society and renewing into the new 2021-2022 Society Year. The new expanded benefit options are a direct result of member feedback and volunteer effort, to provide the best possible service to ASHRAE members, and the industry.



As volunteer leaders of ASHRAE it is important that you are familiar with and communicate the benefits of ASHRAE membership. Please take a moment to familiarize yourself with the benefits and resources available to current and potential members. We encourage you to check the Membership section of ashrae.org and use the information provided to update your chapter and region websites and other communications if necessary.



How Decarbonization Could Affect Tomorrow's Built Environment

As jurisdictions implement low-carbon and net zero policies, these could affect new building design and construction and require retrofits of existing buildings. *ASHRAE Journal* spoke with Daniel Nall, P.E., BEMP, HBPD, Fellow/Life Member ASHRAE, a member of the Vision 2030 Built Environment team, to help explain how building decarbonization fits into the Vision 2030 initiative and the future of the built environment. **Read more**

How To Design Efficient, Comfortable Buildings for Cold Climates

A cold climate is "anywhere you feel cold," according to the second edition of *Cold-Climate Buildings Design Guide*. But feeling cold is different for everyone. The updated publication addresses thermal comfort and other common challenges designers face with cold-climate buildings, such as water freezing issues and providing energy-efficient design while still maintaining a high standard of indoor air quality. **Read more**

ASHRAE Signs Letter Supporting the Inclusion of Energy Efficiency Criteria for Buildings in Congressional Budget Bill

ASHRAE signed onto a letter with 21 other organizations addressed to Congressional leadership calling for the inclusion of energy efficiency criteria around new construction and major renovation building projects in the Budget Reconciliation package. The letter emphasizes that they should "require that projects funded in this package at least meet the most recent applicable building energy code or standard, with preferences in grant programs and other appropriate sections for projects that demonstrate that they exceed the model code or standard." To read the letter, click <u>here</u>.

New Report: Global Greenhouse Gas Emissions Reached Record High in 2020

On October 25, the World Meteorological Organization reported that greenhouse gas concentrations hit a new record high last year of 413.2 parts per million, and also increased at a faster rate than the annual average for the last decade. This occurred despite a temporary emissions reduction of 5.6% during lockdowns due to the COVID-19 pandemic. At this rate of increase in GHG concentrations, the world is on track for a temperature increase sometime this century in excess of the Paris Agreement targets of 1.5 to 2 degrees Celsius above preindustrial levels. Another issue of global importance in this report is that portions of the Amazon rainforest have recently changed from a carbon sink to a source of carbon emissions, due to deforestation and reduced humidity throughout the region. The report was issued less than a week before the Conference of the Parties, or COP 26, will begin in Glasgow, Scotland. The full report can be found at the World Meteorological Organization website here.

Mark your Galendar!! ASHRAE Holiday Party Olaturday January 22, 2022 More Details to come.....



2021 ASHRAE Handbook Fundamentals Update

The 2021 ASHRAE Handbook—Fundamentals was published in June without the intended updates to the following chapters:

- Ch. 13, Indoor Environmental Modeling
- Ch. 14, Climatic Design Information
- Ch. 18, Nonresidential Cooling and Heating Load Calculations
- Ch. 19, Energy Estimating and Modeling
- Ch. 23, Insulation for Mechanical Systems
- Ch. 24, Airflow Around Buildings

We apologize for this delay and inconvenience, and appreciate your patience as we work to update these chapters and make them available to eligible ASHRAE Members and the public. The additional updates to the Handbook include extensive updates to tables for nonresidential load calculations, new and expanded climatic design guidance, and important new information on insulation for mechanical systems.

ASHRAE expects to have the chapter updates and the complete, updated 2021 ASHRAE Handbook—Fundamentals PDF available in the ASHRAE Technology Portal in August 2021. We will alert you via email as soon as it is available in the Technology Portal.

Additionally, members who were eligible to receive the 2021 *Handbook Fundamentals* will receive complimentary access to ASHRAE Handbook Online now through July 31, 2022. The Handbook Online contains the four most recent volumes of the Handbook, plus supplemental features including videos, spreadsheets, and case studies. Learn more and <u>login here</u> with your member credentials for access.

Once again, we appreciate your patience and will be in touch with those members who were eligible to receive it as soon as the updates are available.



Welcome Alexandria Chapter!

Members Council is pleased to announce the charter of a new chapter, the Alexandria Chapter located in Alexandria, Egypt. There are now three ASHRAE chapters in Egypt which includes the Cairo and Pyramids Chapters. This brings the total number of ASHRAE chapters to 199 globally.



Register for ASHRAE 2022 Winter Conference



Register now for the 2022 Winter Conference and AHR Expo taking place January 29 - February 2, 2022 in Las Vegas, NV. The conference will be held at Caesars Palace. Join us in-person or virtually for this highly anticipated conference offering the latest industry updates, a chance to reconnect with peers, attend the AHR Expo, and more. For more information, click **here**.

Register Now

UPCOMING ASHRAE LEARNING INSTITUTE CORSES:

- Health Impacts of Indoor Air Extraction, Ventilation and Filtration Same or Different? | 05 October 2021
- Soft Skills Essentials for Engineers | 06-08 October 2021
- An Introduction to ASHRAE Existing Building Commissioning Process | 07 October 2021
- The Commissioning Process and Stakeholder Management | 12
 October 2021
- Variable Refrigerant Flow Systems: Design and Applications | 13 October 2021
- Save 40% by Complying with Standard 90.1-2019 | 14 October 2021
- Humidity Control II: Real-World Problems and Solutions | 21 October 2021
- HVAC Design Training: Tools for High Performance Building Design | 18-29 October 2021
- Combined Heat and Power: Creating Efficiency through Design & Operations | 02 November 2021