



DAYTON CHAPTER

ISSUE XI | 2020

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November 12th Meeting

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

Chapter Business/Instructions: 11:45 AM—Noon

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

Ethical and moral issues that are connected, with the development and maintenance of the built environment, became recently, the concerns of many professional organizations and their membership. Such development and maintenance include among other things, buildings, engineering structures and the space.

Synthesis of ASHRAE Code of Ethics and sample of CSR guidelines will equip engineers and enable them to gain deeper understanding of the relationships between ethics and the built environment, and the ethical principles and their impact on built environment. It will help to determine the structural decision for an ethical problem. Also, it will allow them a better understanding of professional and ethical responsibilities.

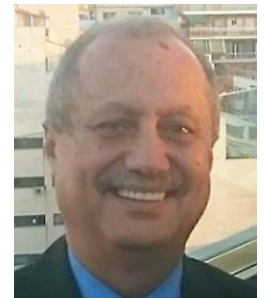
Engineers are expected to know the moral and immoral principles and be able to examine cases and use the different ethical theory tools and come up with optimal moral judgements.

Remember, PE license renewal in Ohio requires licensees to complete two of thirty required continuing professional development hours in professional ethics or rules relevant to the practices of engineering and surveying.

Main Presentation:

Ethics & The Built Environment

Presenter: Samir Traboulsi, Ph.D., P.E



Join Zoom Meeting

Zoom Meeting Link: <https://us02web.zoom.us/j/89653857141?pwd=TzV5U1QzenpSaiswRWZLcDFraFJHZz09>

Meeting ID: 896 5385 7141

Passcode: 951297

One tap mobile

+13017158592,,89653857141#,,,,,0#,,951297# US (Germantown)

+13126266799,,89653857141#,,,,,0#,,951297# US (Chicago)

Find your local number: <https://us02web.zoom.us/j/ken4s6sjuj>

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

Membership Promotion & Donors Recognition Day

FROM THE PRESIDENT

Thanks you to everyone who joined us for our first virtual monthly meeting. We were fortunate to have David Schurk present Using Needlepoint Bipolar Ionization to Create Healthy Indoor Environments. We learned that determining attendance was a bit tricky, so if you have not received a certificate of attendance, please let us know.

Next months meeting will include our Membership Promotion and Research Promotion. Don't forget the meeting has been switched to Thursday, November 12 at 11:30. This month's presentation will focus on Ethics & The Built Environment, presented by Samir Traboulsi, Ph.D., P.E.



I would also like to pay our respects to William Bissmeyer. We learned that Bill passed away on Sunday, October 25, 2020 in Naples, Florida. Bill was active in the Dayton ASHRAE community during the 1980s including serving as Chapter President from 1986-1987. During this time, Bill's commitment helped Dayton double its membership as well as being the top ranked PAOE Point chapter in Society. May he rest in peace.

Brian Turner - President, Dayton ASHRAE

Upcoming Events

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

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

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

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

CHAPTER HISTORY (1986-1987)

President:	Bill Bissmeyer	Lathrop Trotter
President Elect.	Tom Homan	Allied Supply
Vice Pres.:	Rodger Hawkinberry	Delco
Secretary:	Phil Van Styn	Heapy Engineering
Energy Mgt.:	Phil Van Styn	Heapy Engineering
Education:	Lorraine Kapka	EG&G Mound Applied Tech
RP:	James Albitz	Trane Co.
Membership:	Mark Neiheisel	Uptime Solutions
Gov. Affairs:	Dennis Gullette	Gullette Air Enterprises

Meetings were held at the Ramada Inn.
CRC held in Cleveland.
Reginal Director: Bob Crosby

Committee Chairs

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Board of Governors

Jeremy Fauber

Heapy

Rick Pavlak

Heapy

Larraine 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!

October

Tanner Ayers

Michael Ayyette

Abinesh Selvacanabady



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!



20 Years

Gregory Stanaford

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

ASHRAE RP

Please plan to attend our **VIRTUAL DONOR'S NIGHT**, Thursday, Nov 12 at 11:30 AM – 1:00 PM It will be our honor to recognize all of you who made our 2019-20 Campaign a raging success despite the challenges with COVID-19. 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 HVCR, 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 =	\$ 19,680
YTD =	\$ 1,750
To go =	\$ 17,930

Partner Level

Your Company Here

Honor Roll

Larraine Kapka
Steve Meier
Tom Mastbaum
Evan Nutt
Trent Hayden
Nathan Lammers
Brian Shenck
Brian Turner

Honorable Mention

Joseph Ferdelman
Jeff Turner
Jeremy Fauber

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

Throughout the 1990s the various Dayton ASHRAE Chapter Presidents were beginning in 1990/91 with Rick Huff, Phil Van Styn in 1991/92, David Schmenk in 1992/93, Chris Hampel in 1993/94, and Mark Neiheisel in 1994/95. To round out the decade the remaining presidents were John Mosgo in 1995/96, Dennis Lewis in 1996/97, David Deger in 1997/98, Jim Hocker in 1998/99, who was followed in 1999/2000 by David Patterson.

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. Thank you!

Take a Virtual Tour of the Society's New HQ

ASHRAE has a new global headquarters. The Society posted a virtual tour of its new HQ, as it appeared in late August, that leads viewers through the building's three levels. The video includes footage of some of the building's systems and work areas. Watch the video [here](#). [Read more](#)

ASHRAE Announces 2020–21 Society Scholarship Recipients

ASHRAE has announced the recipients of 30 Society scholarships, totaling \$167,000, for the 2020–21 academic year. “We are extremely proud of the 2020–21 ASHRAE Scholarship recipients,” said Michel Hayek, chair of the ASHRAE scholarship trustees. “These individuals represent the future of the HVAC&R industry, and ASHRAE is pleased to support this bright future by providing scholarship opportunities to students each year.” [Read more](#)

Color-Changing Window Could Reduce AC Need

NREL scientists are developing a thermochromic window that reduces the need for air conditioning while simultaneously generating electricity. A technology allows the window to change color to block glare and reduce unwanted solar heating. The researcher's latest breakthrough enables myriad colors and a broader range of temperatures that drive the color switch. [Read more](#)



NREL's thermochromic window technology has advanced to have more tint colors.
Credit: Dennis Schroeder, NREL

NBI: Zero-Energy-Verified Buildings Increasing

New Buildings Institute's report shows the total number of verified and emerging zero energy buildings in North America has grown to nearly 700—representing a 42% increase since 2018. The number of verified zero energy buildings in the U.S. and Canada more than doubled between 2018 and 2020. Download the report [here](#). [Read more](#)

Material Concerns for HVAC Products

By Erin McConahey, P.E., HBDP, Fellow ASHRAE

Material transparency continues gaining traction in design standards of practice. The HVAC industry, however, has been a slow adopter, even with green building rating systems and codes and standards that encourage or require some level of documentation. In this Engineer's Notebook column, from the October *ASHRAE Journal*, McConahey discusses ways the industry can begin to mature toward use of healthy materials. [Read more](#)

IEA Releases "World Energy Outlook 2020"

Yesterday, the International Energy Agency released its flagship publication, "The World Energy Outlook 2020." The report focuses on forecasts over the next decade: strong growth in renewables are expected, but these investments need to be paired with investment in electricity grids to ensure reliability and security of the electricity supply. The COVID-19 pandemic has triggered deep cuts in energy demand, with an expected global drop of 5 percent this year. To view the full report [click here](#).

Canada Infrastructure Bank Announces \$10 Billion in Infrastructure Investments

On October 1, Canadian Prime Minister Justin Trudeau announced the creation of an infrastructure program called the "Canada Infrastructure Growth Plan," which will invest in high-speed internet, renewable energy generation, agriculture improvements, low-carbon transportation and building retrofits. Specifically, \$2 billion from the fund will be used for large-scale building retrofits to increase energy efficiency and improve community sustainability. More information about the program can be found [here](#).

Rep. Williams Introduces Bill to Permanently Extend Energy Efficiency Tax Deduction 179D

On October 6, Rep. Roger Williams (R-TX) introduced H.R. 8547, the [Incentivize Energy-Saving Improvements Act](#), which would make the Section 179D tax deduction permanent. The 179D tax deduction sets incentives for building owners that reduce their building's total energy and power cost by 50% or more in comparison to past versions of [ASHRAE Standard 90.1](#). 179D needs to be reauthorized by Congress annually and is currently set to expire on December 31, 2020. To learn more about 179D, [click here](#).

Las Cruces, New Mexico Climate Plan Includes Building Decarbonization Targets

The Las Cruces Climate Action Plan, approved unanimously by the City Council on October 5, requires the city to reduce emissions by 19 percent by 2030, and by 73 percent by 2050, from a 2018 baseline. The plan says the city will achieve this by increasing renewable energy usage and alternative, cleaner forms of transportation, such as electric cars and buses, as well as by minimizing waste and updating buildings to run more efficiently. The goal of reducing greenhouse gas emissions by 73% or greater includes a reduction from decarbonizing energy in buildings, amounting to 16.7% of the total reduction. The city resolved in 2018 that the government would run completely on renewable energy by 2050 and at least 25% on renewable energy by 2022. The city also plans to set similar or more ambitious emissions reduction goals by 2030 and 2050. The new Climate Action Plan can be found [here](#).

ASHRAE Member speaks at ASBO Roundtable on HVAC in School Facilities

On October 1, ASHRAE member Corey Metzger spoke at a virtual roundtable hosted by the Association of School Business Officials (ASBO) that focused on HVAC and Air Quality during the pandemic. Mr. Metzger leads the Schools Team for ASHRAE's Epidemic Task Force. To learn more about ASHRAE's technical resources for schools and universities, [click here](#).



ASHRAE ETF Schools Team Lead Presents at NASEO Annual Conference

On October 7, Corey Metzger, ASHRAE Member and the Schools Team Lead of ASHRAE's Epidemic Task Force, served on an expert panel at NASEO's Annual Meeting during a session entitled, "Schools, Efficiency, COVID and Long-Term Indoor Air Quality: What We Know, What Can Be Done and What is the Next Step." Metzger provided a technical viewpoint that discussed ventilation, filtration, air-cleaning and HVAC maintenance needs. Metzger responded to a number of questions from session participants and represented ASHRAE wonderfully. Thank you!

CDC Adds Back Guidance Regarding Airborne Transmission of SARS-CoV-2

The Centers for Disease Control and Prevention (CDC) has updated its website to acknowledge possible airborne transmission of the coronavirus, especially in enclosed spaces. This information was published after similar guidance was initially removed a few weeks ago since the language was not yet finalized. To read the updated guidance from the CDC, [click here](#). ASHRAE's position on possible airborne spread of the coronavirus can be found [here](#).

Show Management: 2021 AHR Expo Cancelled

The 2021 AHR Expo has been cancelled, according to [ASHRAE](#) and [Show Management](#). "With roadblocks set in place by the ongoing COVID-19 pandemic and current state and local restrictions that prohibit mass gatherings over 50 people, an in-person event will not take place in 2021," according to a statement from Show Management. Now, the focus is shifting to prepare for an in-person 2022 AHR Expo in Las Vegas. [Read more](#)

White Paint That Could Reduce Need for AC

Purdue University engineers have created radiative cooling white paint that can keep surfaces up to 18° F (10°C) cooler than their ambient surroundings. According to the researchers, the paint would replace the need for air conditioning by absorbing almost no solar energy and sending heat away from the building and into deep space. Compared with commercial white paint, Purdue's paint maintains a lower temperature under direct sunlight and reflects more ultraviolet rays, according to the researchers. [Read more](#)

Rising Water Levels in the Great Lakes Pose Threat to Buildings on Shoreline

Over the past five years, the Great Lakes region, which includes eight states, has seen record amounts of rainfall. Even before that surge, the basin had a 10% increase in precipitation since 1900. Officials at every level along the 4,500 miles of coastline are currently working to save structures from the rising water and competing for scarce state and federal dollars, as well as approving an unprecedented number of permits to build private seawalls. The COVID-19 pandemic has slashed city and state revenue, making the necessary investments less likely, even as state and federal regulators have recently seen an unusual surge in shoreline protection permits from residents who want to build seawalls. In just 30 relatively small communities in Michigan, \$70 million is currently needed in repairs. The Great Lakes and St. Lawrence Cities Initiative, a coalition of 131 mayors in the region, has released an estimate of costs to local governments in the U.S. and Canada. These cities are spending more than \$450 million on short-term fixes, with another \$865 million needed for future planning and mitigation.

NYC Launches Building Energy Efficiency Grading Program

New York City's annual energy efficiency letter grade sign program officially went into effect on Oct. 1. Going forward, all NYC buildings over 25,000 ft² will receive a letter grade reflecting their city-verified energy efficiency. Building owners must display the letter grades at every public entrance of the building by the end of the month. [Read more](#)

Exploring the Pros and Cons of Seawater Air-Conditioning

Seawater air-conditioning systems (SWAC) have higher initial investment costs but lower operation costs, compared to conventional air-conditioning systems, says a new International Institute for Applied Systems Analysis study. In the study, the researchers developed a computational model and methodology to estimate the cost of cooling with SWAC around the world and evaluated the possibility of using this system as an alternative for energy storage from variable renewable energy sources like wind and solar. Click [here](#) for the research. [Read more](#)

ASHRAE Endorsed Conferences & Events

Because of the impact that COVID-19 is having on conferences, please check each conference's website for the most up-to-date information.

[Indoor Air 2020](#) — November 1–5, 2020 (**will now be held online**)

[Outlook 2020](#) — Nov. 10, 2020 (**will now be held online on Nov. 10**)

[2020 IEA Heat Pump Conference](#) — April 26–29, 2021, Jeju-si, Jeju-do, Korea Heat pumps are the key equipment for energy savings and greenhouse gas reductions. This conference will serve as a forum to discuss the latest technologies in heat pumps and exchange valuable knowledge in market, policy and standards information on related technologies. Exhibitions at the conference will share products and technologies. [Click here](#) for more information.

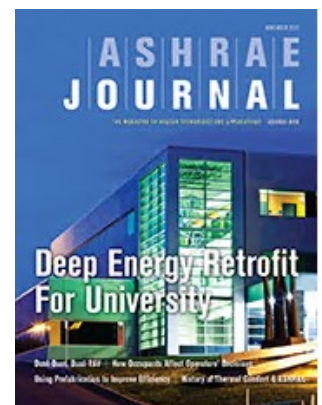
[THERMAG IX - International Conference on Caloric Cooling](#) — June 6–10, 2021, University of Maryland

[IBPC 2021](#) — Aug. 25–27 2021, Danish Technical University, Copenhagen, Denmark

[Explore ASHRAE Conferences & Events](#)

[November 2020 Digital Journal](#)

A deep energy retrofit of a Canadian university campus significantly reduced its site EUI and greenhouse gas emissions. Other articles include using dual-duct, dual-VAV to reduce loads, and prefabrication to improve efficiency.



More Education

ASHRAE Winter Conference Goes Virtual

The Winter Virtual Conference will include a mixture of live, pre-recorded and on-demand sessions on February 9–11, 2021. "The 2021 Winter Conference attendees will be given a great opportunity to learn from some of the leaders of the industry with a focus on the foundations of the HVAC&R industry along with specialty topics like international design and the future of HVAC work," said Maggie Moninski, P.E., Member ASHRAE, chair of the 2021 conference. The conference is usually held in conjunction with the AHR Expo. The Expo has been cancelled for 2021, according to [Show Management](#). [Read more](#)

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.

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

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

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

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

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



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