



JANUARY - VOLUME LV ISSUE 05

# THERMOGRAM

**Main Meeting: The Evolution Of Air-Handling Systems: From Air Conditioning To DOAS To Post-COVID IAQ**

**Virtual Tech Session: Heat Pump Water Heating For Commercial Domestic Hot Water Applications**

## ASHRAE January 5th Meeting Details:

Lunch Virtual Meeting:  
Tech Session (GoToMeeting) 12:00—1:30pm

Main Meeting at Engineer's Club:  
Network Hour (ESB): 5:00 pm—6:30 pm  
Dinner (ESB): 6:30 pm—7:00 pm  
Main Speaker (ESB): 7:00 pm—8:15 pm

### **Main Meeting: The Evolution Of Air-Handling Systems: From Air Conditioning To DOAS To Post-COVID IAQ**

There have been a number of advancements in HVAC since the invention of the Air Conditioning Systems by Willis Haviland Carrier in 1902, driven by AC Induction Motors patented by Nikola Tesla in 1888, however over the last 20 years or so we have seen greater advances than had been seen in the prior 100 years. Join us for an opportunity to dig deeper into the advancements made to the Air Handling Systems over the last decade. Advancements which provide better comfort levels for the occupants, improve indoor air quality and lower the risk of infection due to airborne transmission of viruses, all while using the least amount of energy possible.

#### **Speaker: Harry Topikian, P.E., Multistack**

Harry Topikian is the Director of the Air Treatment Division for Multistack. He has over 30 years of experience in energy recycling and engineered air treatment solutions for diverse applications including the Hong Kong water treatment plant, Burj Khalifa in Dubai, Memorial Sloan Kettering Cancer Center in New York, and the post-COVID design of new Fastenal headquarters in Winona, Minnesota. Harry is a graduate of the building engineering program at Concordia University, Montreal.

### **Tech Session: Heat Pump Water Heating For Commercial Domestic Hot Water Applications**

Local regulations are quickly changing to prioritize electrification of heating equipment, including domestic water heating. Join us to learn how heat pump water heaters (HPWHs) work, the benefits of using HPWHs, sizing HPWH systems, and the constraints associated with HPWH designs.

**Speakers: Chris Terranova and George Wehnert, Mitsubishi Electric Trane**

# PRESIDENT'S PEN

A decorative graphic of green holly leaves and red berries, arranged in a curved path from the top left towards the center of the page.

Dear Members,

Winter is almost here, and we've officially kicked off the holiday season with our 72nd annual Christmas Party at the Maryland Fairgrounds! I want to give a huge thanks to everyone who attended the Christmas Party, it was another memorable year for all. Also, a special thanks to all of our board members and committee chairs to worked hard to make the party such a success. I hope some of you reading this were able to snag a gift for someone special (or yourself!) at our first ever silent auction. We also raised over \$1,000 for ASHRAE Research Promotion with our first ever putting competition!

Our next meeting will be held back at the Engineer's Club, once again with a virtual tech session during lunch with an in-person meeting in the evening.

If you are traveling during the holidays, I wish you and your family safe travels. I hope everyone gets to spend some time with loved ones over the next few weeks and I look forward to seeing everyone in the New Year!

Cheers,

A handwritten signature in a cursive script that reads "Nancy Neely".

*Nancy Neely*

Nancy Neely  
ASHRAE President



## 2022-2023 Chapter Leadership Roster

### Board of Governors

	<b>President</b> Nancy Neely	president@ashrae-balto.org, P:410.746.4168 Johnson Controls, Inc.		<b>Governor/Asst. Secretary</b> Simona Georgiev	asstsecretary@ashrae-balto.org, P:410.316.2263 JMT
	<b>President-Elect</b> Theresa Schroeder	vp@ashrae-balto.org, P:443.224.1594 Whitman Requardt		<b>Governor</b> Robert Broczkowski	gov2@ashrae-balto.org, P:571.318.7310 ETC
	<b>Treasurer</b> Kevin Lindemann	treasurer@ashrae-balto.org, P:410.561.1655 Chesapeake Systems		<b>Senior Advisor</b> Brad Watkins	senioradvisor@ashrae-balt.org, P:240.542.5523 Cummins-Wagner
	<b>Secretary</b> Kaylee Haupt	gov2@ashrae-balto.org, P:443.789.0188 Baltimore County Public Schools		<b>Past President</b> Sam Philipp	pastpresident@ashrae-balto.org, P:410.316.2485 JMT

### Committee Chairs

Attendance/Recpt. Co-Chair: Luis Belisario, WRA reservations@ashrae-balto.org	Government Affairs: Tyler Brown, ATS gga@ashrae-balto.org	Research Promotion Co-Chair: Joe Petty, ATS research@ashrae-balto.org
Attendance/Recpt. Co-Chair: Elyas Khan, JCI reservations@ashrae-balto.org	Golf Outing: Tyler Lee, Chesapeake Systems golf@ashrae-balto.org	Scholarship: Robert Broczkowski, ETC scholarship@ashrae-balto.org
Christmas Party: Wade Myers, JMT christmas@ashrae-balto.org	Historian Hailey Brennan, Spectrum Energy historian@ashrae-balto.org	Student Activities: Nick Spicher, Chesapeake Systems studentacts@ashrae-balto.org
Chapter Programs: Theresa Schroeder, WRA programs@ashrae-balto.org	Historian Co-Chair: Jennifer Leach, BR+A historian@ashrae-balto.org	Thermogram: Kelly Brennan, Schneider Electric newsletter@ashrae-balto.org
CTA (Tech Awards): Theresa Schroeder, WRA cta@ashrae-balto.org	Membership: Rich Girard, RMF membership@ashrae-balto.org	Young Engineers: Co-Chair: Matt Francis, ATS yea@ashrae-balto.org
Diversity in ASHRAE Co-Chair: Patrick Harrilal, JMT dia@ashrae-balto.org	Membership Co-Chair: Ben Joel, WSP membership@ashrae-balto.org	Young Engineers Co-Chair: Matt Hart, ATS yea@ashrae-balto.org
DIA Co-Chair: Ashleigh Newman, The Morin Company dia@ashrae-balto.org	Refrigeration: Jon Olmstead, Hobbs & Associates refrigeration@ashrae-balto.org	Web Technician: Vikas Kiran, Prime Engineering ashtech@ashrae-balto.org
Engineers Week: Robert Broczkowski, ETC engweek@ashrae-balto.org	Research Promotion: Michael Poe, WSP research@ashrae-balto.org	Women in ASHRAE: Nicole Harshbarger, Schneider Electric wia@ashrae-balto.org

# Thank you to our 2022-2023 Chapter Sponsors!

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# MEETING SCHEDULE

## ASHRAE Baltimore Programs 2022-2023

Meeting Date	Topics/Speakers	Location
September 8, 2022	12:00 PM - Main Meeting: Hot Water Solutions 5:30 PM - Summer Social at Tiki Lee's Dock Bar	Main Meeting - Virtual Summer Social - Tiki Lee's
October 6, 2022 Research Promotion Night	12:00 PM - Tech Session: Heat Exchanger Sizing & Selection 5:30 PM - Main Session: Maryland's Climate Solutions Now! Act	Tech Session: Virtual Main Meeting: ESB
November 3, 2022 Membership Promotion Night	12:00 PM - Tech Session: Valves, Actuators, & Dampers 101 5:30 PM - Main Session: Ethics Case Studies	Tech Session: Virtual Main Meeting: ESB
December 2, 2022	72nd Annual Christmas Party	Timonium Fairgrounds, 4H Building
January 5, 2023	12:00 PM - Tech Session: Heat Pump Water Heating for Commercial Domestic Hot Water Applications 5:30 PM - Main Session: The Evolution Of Air-Handling Systems: From Air Conditioning To DOAS To Post-COVID IAQ	Tech Session: Virtual Main Meeting: ESB
February 2, 2023	12:00 PM - Tech Session: Refrigerant Update	Tech Session: Virtual
February 9, 2023	1:00 PM Laurel Gardens Ice Rink Tour with Networking at Jailbreak Brewing to Follow	Laurel Gardens, Jailbreak Brewing
March 2, 2023 Membership Promotion Night	12:00 PM - Tech Session: New ASHRAE Guidelines for High-Sensible Spaces 5:30 PM - Main Session: Updates to ASHRAE 62.1 in 2022	Tech Session: Virtual Main Meeting: ESB
April 6, 2023 Former Presidents' Night Research Promotion	12:00 PM - Tech Session: TBD 5:30 PM - Main Session: TBD	Tech Session: Virtual Main Meeting: ESB
May 4, 2023 Student Night	12:00 PM - Tech Session: TBD 5:30 PM - Main Session: TBD	Tech Session: Virtual Main Meeting: TBD
June 2023	Golf Outing	TBD



# GET RECOGNIZED!

Have an innovative project that has been in operation for 1 year? Apply for the Chapter Technology Award!

Awards are given in 6 categories:

- Commercial Buildings
- Institutional Buildings
- Health Care Facilities
- Industrial Facilities/Processes
- Public Assembly
- Residential

For additional information  
and application visit



[www.ashrae-balto.org/CTA](http://www.ashrae-balto.org/CTA)

# 2022-2023 Scholarship

**Multiple Winners:**  
**\$750-\$1500**



**Applications Accepted  
Until - March 31, 2023**

**[Click here](#) to learn more  
and apply today!**

Questions? Email Us!  
[scholarship@ashrae-balto.org](mailto:scholarship@ashrae-balto.org)

# The Baltimore Chapter is hosting the 2023 Chapter Regional Conference!

Region III CRC  
Baltimore, Harbor East  
August 9-13th 2023



## We're looking for volunteers!

The Baltimore Ashrae Chapter would not be such a success without a team of dedicated volunteers supporting our mission. Join us!

 [bwatkins@cummins-wagner.com](mailto:bwatkins@cummins-wagner.com)

Please contact Brad Watkins for more information. Committee and Chair positions available!

# NOT A MEMBER? BECOME ONE TODAY!



**What is the value of ASHRAE Membership?**  
Free products new, full dues paying Members and Associates receive.  
[ashrae.org/membership](http://ashrae.org/membership)

Members select one of three as an annual benefit:



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One eLearning Course

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Science and Technology for the Built Environment

\$390 value



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One Free Society Conference

\$750 avg. value

**\$2,074**  
in free ASHRAE products + membership discounts



Technology Portal Member Access

\$289 value



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25% Off



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avg \$200 savings



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\$200 savings