THE LONG ISLAND SOUNDER

ASHRAE™

Long Island Chapter

2022-2023

IN THIS ISSUE

PRESIDENT'S MESSAGE

HAPPY THANKSGIVING

The fall holiday seasons give us a chance to reunite with our families. Thanksgiving is one of those days. I hope all our members had a chance to reunite and enjoy invaluable times with their families on Thanksgiving Day.

Mr. Stanly Funk presented to over thirty guests about Gasket Technology for the November meeting. We host new guests interested in the presentation topics each month to learn more about the latest or standard technologies. We'll maintain in selecting the best presentation topics for our guests and ourselves to reach out to more HVAC-R professionals. We deliver information about the monthly programs through e-mails. Check your inboxes and follow us through social media and our website for future events.

Last month we were, as Chapter, invited to join ASPE Long Island's monthly meeting at Four Points Sheraton in Plainview. It was a very informative presentation about the new Heat Pump Water Heating technology by Mr. Sean Dabrowski at the meeting. We were reminded that CO2 was the first refrigerant discovered along with ammonia in the 19th century. The CO2 refrigerant is bouncing back due to its low global warming impact and leading towards becoming one of the main refrigerant sources when the global warming impact of all other gasses is considered. Due to their unsafe transportation capacities, the industry discovered new refrigerants like freon (R22) in the early 20th century. Conversely, when heat pumps are used immensely for electrification purposes, it will have a negative impact on global warming with most existing refrigerants in case of refrigerant gas leakage or improper removal. We should immediately reverse global warming's impact before it reaches its tipping point for future generations. I am not an expert in refrigeration technology; however, using CO2 as a refrigerant seems like a more natural solution as we'll be harvesting CO2 for cooling.

ASHRAE-LI's Young Engineers traditional brewer tour includes a Bingo Night at Great South Bay Brewery. It's an excellent opportunity for us to engage with young engineers. None of us won the jackpot, but we had lots of beer and pizza.

Our student connections are not limited to college students. Jericho High School and Hewlett High School students are contacting the Student Activities committee to engage in more engineering practices and learn more about engineering. We will be visiting Jericho High School and talking about what HVAC-R engineering is about. It'll be great if we can lead more students into engineering grad schools.

We are running into the last meeting of the year on December 13th, 2022. Our next presentation is about "Extending Condensing Boiler Heat Exchanger Durability" by Kyle Bottorff. Operating the condensing boilers properly is critical to harvesting the best energy performance, and I believe Mr. Bottorff will touch base on the best operational and design practices. I hope to see you all at the last monthly meeting of 2022.

I wish all ASHRAE-LI members a happy fall season.

Murat Bayramoglu
Chapter President

Chapter Monthly Meeting - Program for 2022/2023

September 13, 2022 * At Westbury Manor Dinner Presentation – Heat Pump and Heat Recovery in Hydronic Systems Presenter: Albert Stark ****1 PDH****	**March 7, 2023** ** At Westbury Manor* Dinner Presentation— TBA ****1 PDH**** **Student Activities Night** **YEA Night**
October 11, 2022 ** At Westbury Manor* Dinner Presentations - HVAC Retrofit Best Practices for GHG Emissions Reduction to Meet the LL97 Mandate presented by Adrian Zebrowski The Impact of the Inflation Reduction Act (IRA) on the Energy Industry presented by Jacob Goodman ****1 PDH****	**April 11, 2023** Dinner Presentation— TBA ****1 PDH****
November 8, 2022 ** At Westbury Manor* Dinner Presentation— Gasket Technology presented by Stanley Funk ****1 PDH**** **Membership Promotion** **Student Activities Night and YEA Night** **Resource Promotion Night**	**May 2023** ** Cherry Valley Club, Garden City, NY* **ANNUAL GOLF OUTING**
December 13, 2022 ** At Westbury Manor* Dinner Presentation— Extending Condensing Boiler Heat Exchanger Durability *presented by: Kyle Bottorff* ****1 PDH****	**May 10, 2023** **Annual Field Trip**
January 10, 2023 ** At Westbury Manor* Dinner Presentation—TBA ****1 PDH****	**June 2023** ** At Westbury Manor* **Free Buffet Dinner for Members** **PAST PRESIDENTS NIGHT & OFFICER INSTALLATION** **STUDENT SCHOLARSHIPS TO BE AWARDED** **ASHRAE History Quiz and prize Give-A-Ways**
February 6-8, 2023 AHR Expo Location: Atlanta, GA	**June 2023 - TBD (4pm-8pm)** ** Dixie II @ Captree State Park Boat Basin, NY* **ANNUAL FISHING TRIP**
February 7, 2023 ** At Westbury Manor* Dinner Presentation— TBA ****1 PDH**** **Membership Promotion Night** **Resource Promotion Night**	**August 2023** **CHAPTERS' REGIONAL CONFERENCE (CRC) REGION I GRANIT STATE**
February 20-26, 2023 **NATIONAL ENGINEERS WEEK**	

Long Island Chapter Officers & Committees

ASHRAE 2022/2023 OFFICERS

POSITION	NAME	PHONE	EMAIL
President	Murat Bayramoglu	631.312.8818	c006@ashrae.net
President-Elect	Michael Nigro	516.241.7368	c006pe@ashrae.net
Vice President	Elizabeth Jedrlinic	516.490.1621	c006vp@ashrae.net
Treasurer	Michael Razzano	407.489.6684	c006tr@ashrae.net
Secretary	Matthew Catan	516.805.3084	c006sec@ashrae.net
Board of Governors	Zhigang Xu		c006bog1@ashrae.net
Board of Governors	Rich Smith		c006bog2@ashrae.net
Board of Governors	Michael S. Gerazounis	212.643.9055	c006bog3@ashrae.net
Board of Governors	Thomas DiBenedetto		c006bog4@ashrae.net
Board of Governors	Matthew J. Vitrano	631.694.4122	c006bog5@ashrae.net

ASHRAE 2022/2023 COMMITTEES

COMMITTEE	NAME	PHONE	EMAIL
Programs & Special Events	Michael Nigro	631.312.8818	c006pe@ashrae.net
Membership (MP)	Michael Razzano	516.805.3084	c006mep@ashrae.net
Refrigeration	Matthew J. Vitrano		c006ref@ashrae.net
Chapter Technology Transfer (CTTC)	Thomas DiBenedetto	631.312.8818	c006cttc@ashrae.net
Grassroots Government Activities (GGAC)	Rich Smith	718.269.3768	c006ggac@ashrae.net
Newsletter Editor	Alexis H. Smith	212.643.9055	c006ne@ashrae.net
Research Promotion (RP)	Peter Conte	212.643.9055	c006rp@ashrae.net
Historian	Chris Mackey	516.490.1621	c006his@ashrae.net
Student Activities (SA)	Zhigang Xu	407.489.6684	c006sa@ashrae.net
Young Engineers in ASHRAE (YEA)	Michael S. Gerazounis	212.643.9055	c006yea@ashrae.net
Webmaster	Frank Paradiso	631.632.2792	c006web@ashrae.net
Nominating	Michael Gerazounis, PE, LEED AP	212.643.9055	nominating@ashraeli.org
Reception & Attendance	Zhigang Xu / Matt Catan / Michael S. Gerazuonis		reception@ashraeli.org
PR & Engineering Joint Council of LI (EJCLI) Liaison	Andrew Manos, LEED AP	631.632.2792	pr@ashraeli.org
Golf Outing	Peter Gerazounis, PE LEED AP	212.643.9055	golf@ashraeli.org
Awards	Brian Simkins	203.261.8100	c006ha@ashrae.net
ASHRAE LI, P.O. Box 79, Commack, NY 11725			

Meeting Program

Dinner Presentation

Extending Condensing Boiler Heat Exchanger Durability

Presented by: Kyle Bottorff

Product Manager for Fulton's hydronic heating boilers and associated controls.

Meeting Sponsored by: ATI

Attendees Will Earn 1 PDH!

DATE:	**TUESDAY, NOVEMBER 8TH, 2022**		
Time:	6:00 PM - Cocktails and Hors D'ouevres 7:00 PM - Dinner Presentations 8:45 PM - Conclusion	**Fee:**	**Members - $50 pp** **Guests - $70 pp**
Location:	**WESTBURY MANOR** (516) 333-7117 1100 Jericho Tpke., Westbury, NY 11590 **Directions are posted at @ www.ashraeli.org**		
Presentation:	This month's presentation will review the following: Extending Condensing Boiler Heat Exchanger Durability This meeting is about: Exploring the fundamentals of combustion, excess air, and NOx emissions and the types of burner styles utilized. The course also compares and contrasts the different combustion control platforms available on the market, the unique benefits of each, and why precision combustion control results in lower emissions, reliable ignition, higher combustion efficiency, and greater condensing potential. **All attendees will receive 1 PDH.**		
About our Speaker:	Kyle Bottorff is the Product Manager for Fulton's hydronic heating boilers and associated controls. Kyle has a background in Mechanical Engineering with expertise in project management, product design and control systems. He is responsible for setting the product vision to best align Fulton in understanding customer needs and providing market driven solutions. This includes user experience, new product development, mid-cycle refreshes, marketing, technical documentation, applications engineering, and professional training. Kyle is passionate about adopting methods and technologies that reduce complexity by deleting parts and process to provide simpler, more efficient, and high reliability solutions.		

The Long Island Chapter is looking for presenters for the remainder of the year. Please contact us if you are interested in presenting to our membership.

Long Island Chapter - Past Presidents

1958	H. Campbell, Jr. PE	1990	Robert Rabell
1959	Clyde Alston, PE	1991	Gerald Berman
1960	Sidney Walzer, PE	1992	Donald Stahl
1961	Sidney Gayle	1993	Ronald Kilcarr
1962	William Kane	1994	Jerald Griliches
1963	Louis Bloom	1995	Walter Stark
1964	Milton Maxwell	1996	Joe Marino
1965	Will Reichenback	1997	Norm Maxwell, PE
1966	Joseph Minton, PE	1998	Alan Goerke, PE
1967	Irwin Miller	1999	Frank Morgigno
1968	Walter Gilroy	2000	Michael Gerazounis, PE, LEED AP
1969	Charles Henry	2001	Ray Schmitt
1970	William Wright	2002	Steven M. Stein, PE
1971	Louis Lenz	2003	Andrew Braum, PE
1972	Ronald Levine	2004	Claudio Darras, P.E.
1973	Henry Schulman	2005	Craig D. Marshall, P.E.
1974	Myron Goldberg	2006	John Nally
1975	John N. Haarhaus	2007	Peter Gerazounis, PE, LEED AP
1976	Richard K. Ennis	2008	Steven Friedman, PE, HFDP, LEED AP
1977	Kenneth A. Graff	2009	Steven Giammona, P.E., LEED AP
1978	Evans Lizardos, PE, LEED AP	2010	Nancy Román
1979	Albert Edelstein	2011	Carolyn Arote
1980	Ralph Butler	2012	Brian Simkins, LEED AP
1981	Robert Rose, PE	2013	Andrew Manos, LEED AP BD+C
1982	Timothy Murphy, PE	2014	Richard L. Rosner, P.E.
1983	Leon Taub, PE	2015	Thomas J. Fields, P.E., LEED AP
1984	Raymond Combs	2016	Donald Kane, P.E.
1985	Edward W. Hoffmann	2017	Andrew Dubel, P.E., LEED AP
1986	Jerome T. Norris, PE	2018	Richard Halley
1987	Abe Rubenstein, PE	2019	Frank Paradiso
1988	Michael O'Rourke	2020	James Hanna
1989	Mel Deimel	2021	Matthew J. Vitrano

PAOE

What is ASHRAE PAOE?

The ASHRAE Presidential Award of Excellence (PAOE) is a society-wide point system to track and reward chapter achievements.

Each year, the Society President establishes the point-earning activities. In this way, chapters are mobilized to work toward common Society goals. Chapters enter points they earn in our online system, and earn awards at the Region and Society level for their achievements and commitment to excellence.

PAOE POINTS FOR 2022/2023

Chapter Members	Chapter Operations	CTTC	Communi-cations	GGAC	History	Member-ship	Research Promotion	Student Activities	YEA	Chapter PAOE Totals
277	805	400	185	100	150	750	475	1000		

FROM: Farooq Mehboob SUBJECT: PRESIDENTIAL AWARD OF EXCELLENCE (PAOE)

I am writing to you on 'Securing our Future,' a subject near and dear to us for ourselves, our families, and our beloved Society ASHRAE. This is our theme for this society year. We stand today on the threshold of the new era with its challenges, climate, economic and cultural changes to name a few. Yet we have new opportunities which await us in this digital age by global collaboration using the power of our relationships, knowledge and a willingness to change. To secure our future, every one of us needs to participate passionately in a transparent ASHRAE. The bedrock on which we will build our secure future is Diversity, Equity and Inclusion. Only then will we be able to harness the power of our relationships, harvest information in the service of our members, and embrace changes by breaking down silos and overcoming resistance to change. The PAOE system was created to provide guidance to Chapter leaders in planning your chapter activities. The goal of the 2021-2022 PAOE system was to offer a roadmap for successful Chapter operation. This year's PAOE program is designed to move our Society forward as I have explained and help in securing our future.

Research Promotion From June Recap

"If we knew what we're doing it wouldn't be called research"
– Albert Einstein

I would like to thank the companies who have participated in the annual Product Directory of Manufacturers and their Representatives. The product Directory has been prepared as a service to all its members and as a service to the local HVAC industry. It will be made available to all ASHRAE and non-ASHRAE members at no -cost and can be obtained from our monthly meetings or directly from our website.

This year's overall research promotion goal is $2,593,341 with many research projects on board. Our chapter is expected to raise $20,400 towards the overall goal. I am hoping that I can count on the continued support of all our past contributors who have generously supported us over the years. I also look forward to gaining the support of new contributors this coming year.

Thank you to our contributors:

Individual	Companies
John D. Nally	H2M Architects + Engineers
Michael Gerazounis	Robert Half
Matthew K. Bendix	Trane
Elizabeth Jedrlinic	SRS Enterprises
Andrew E. Manos	Accuspec
Matthew Vitrano	Tower Enterprises
Michael Nigro	MV Controls
Murat Bayramoglu	Metro Air Products
Michael Steven Gerazounis	ADE Group
Richard W. Smith	Belimo Aircontrols (USA)
Michael H. Razzano	Miller Proctor Nickolas
James Hanna	Technical Air Systems
Frank Paradiso	Mitsubishi
Matthew Catan	Klima
Donald Kane	Gil-bar
John C. Cronin, Jr	Victaulic
	Catan Equipment Sales Rathe
	Associates Bush Sales Dagher
	Engineering

CONTRIBUTIONS CAN BE MADE IN THE FOLLOWING WAYS:

1) You can mail your checks, made out to ASHRAE Research Promotion:
Michael Nigro
ASHRAE Research Promotion Chair
PO BOX 79
Commack, NY 11725
2) You can bring your check to any of the meetings and hand to myself or Elizabeth.
3) You can contribute via PayPal from the ASHRAE LONG ISLAND web site, just click on the donate button.
4) You can contribute directly on-line. **www.ashrae.org**

**** Please make sure you accredit your contribution to the LONG ISLAND CHAPTER 006 ****

Thank you again for all of your support!

Michael Nigro
Research Promotion Chair

History From June Recap

These days, ductless air conditioning has been taking over the market. Leading ASHRAE and other professional organizations to focus on new standards and guidelines to keep up with its growth and popularity. But have you ever wondered where it all began?

"Since its introduction in the 1970s, the world has become more familiar with the concept of a ductless air conditioning system as an alternative heat source. Between 1954 and 1968, Japanese enterprises Mitsubishi Electric and Toshiba pioneered the technology. It was created as an upgrade from the window unit. The key objective was to offer cooling to houses and buildings where a more extensive, whole-system approach was either impractical because of space or monetary limitations, but subsequently offered far more pleasant cooling technology. Initially available only as a window air conditioner or a wall-mounted indoor unit option, the ductless air conditioning system provided enhanced performance, higher efficiency, and the ability to regulate separate zones. The possibility to remotely place the system's condensing outdoor unit and therefore relocate the sound-bearing components from the living area was a significant benefit in freeing up window space. The fact that the small, compact condensing units could be put in various locations, keeping up with the space-restricted Japanese building practices, while being energy efficient, was one of the major elements in the ductless system's early popularity. To this day, the worldwide baseline ductless product is a wall-mounted indoor unit, which accounts for approximately 75% of total global mini split system sales. Several manufacturers saw opportunities and introduced additional ductless indoor units, such as floor consoles and ceiling-suspended units to their existing HVAC systems. Concealed ducted-style and concealed ceiling cassette units have also been created, giving the ductless mini splits a new application."

If you are interested in learning more, you can find the full article here: **https://nordics.ca/ductless-air-conditioning/the-history-of-ductless-air-conditioning/**

Elizabeth Jedrlinic
History Chair

Michael Razzano
History Co-Chair

Refrigeration

Hello everyone and welcome to the last newsletter of 2022! The year has flown by but don't worry, the ASHRAE year continues on. I like to follow the Refrigeration Applications column in the monthly society Journal. October 2022 was a particularly interesting article to me about compressors and how they haven't really changed much since their inception in the 1800s. Obviously, different refrigerants are used now that might be safer and/or less harmful to use, but the basic principles are largely the same. Here is a link to the article if you would like to read it:

https://technologyportal.ashrae.org/Journal/ArticleDetail/2446

Pete Conte

Chairperson

CTTC

With December upon us, the heating season is in full swing. As economizers quickly ramp down to minimum ventilation, the risk of sick building syndrome and of respiratory infection increases. This past month's November 2022 issue of the ASHRAE Journal explored strategies that could be used to increase ventilation in under-ventilated buildings. "Increasing Ventilation in 1980s High-Rise Commercial Office Buildings" reviewed three distinct methods of increasing ventilation air in existing buildings.

New projects in NYC are now following the 2022 NYC Construction Codes as of November 7th, 2022 and are required to utilize relatively high ventilation rates. However, buildings built in the 1980s had less stringent ventilation requirements. Check out the November 2022 issue of the ASHRAE Journal for the full article or review the summary below to learn more about creative strategies to increase ventilation.

We look forward to seeing you at the next ASHRAE meeting on December 13th to learn more about condensing boiler heat exchanger durability.

Thomas DiBenedetto
CTTC Chairman

Murat Bayramoglu
CTTC Co-Chairman

Increasing Ventilation in 1980s High-Rise Commercial Office Buildings

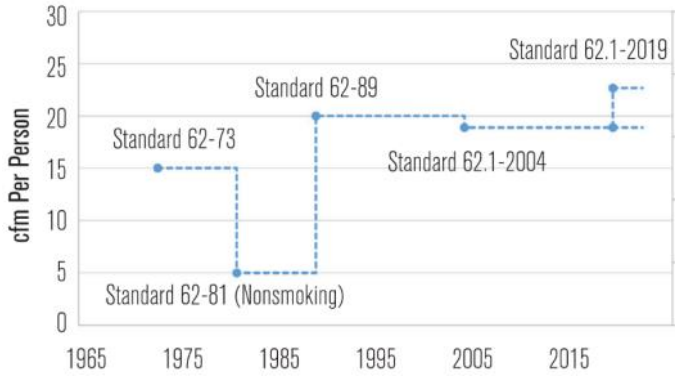
From the November 2022 ASHRAE Journal

Authored by Jamie Kono, PE; Jim Gieselman, PE; Meghan Kara McNulty, PE; Barry Abramson, PE

Article Summary

Building ventilation can vary significantly depending on when the building was constructed. In the first edition of ASHRAE Standard 62.1 in 1973, systems required an outdoor air flowrate of 15 cfm/person. Following the 1970s oil crisis, the 1981 edition of Standard 62.1 cut back the required ventilation to 5 cfm/person. In response to sick building syndrome concerns, the 1989 edition of Standard 62.1 brought required ventilation rates back up to 20 cfm/person. Today's effective ventilation rate works out to approximately 23 cfm/person.

CTTC



Ventilation air is required to avoid sick building syndrome, which causes occupant complaints of irritation in the eyes, nose, and throat, headaches, fatigue, and dry, itchy skin. Ventilation air also reduces the spread of respiratory infection, including the virus that causes COVID-19. Due to the relatively low ventilation air requirements throughout the 1980s, buildings built during that time may require significantly more ventilation air than they were originally designed for. This is a major obstacle in the U.S. where 17 percent of the 164,000 office buildings in use today were built in the 1980s.

This article assesses three strategies to increase ventilation air to an existing building. The first strategy is upsizing existing equipment. This strategy work best where only a relatively small increase in outside air is required, such as a 10 to 20 percent increase. This strategy may be as simple as increasing speeds of existing fans or selectively swapping out motors where feasible to increase airflow. This strategy requires designers to ensure that the existing ductwork and coils can handle the additional airflow and the additional heating/cooling load imposed by the increased ventilation.

The second strategy to increase ventilation air is implementing a “high- and low-rise split.” This strategy is best suited for a system where outside air needs to be increased by 100 percent or more. In this approach, the existing outside air system is reconfigured to only serve half of the building. A DOAS system and retrofitted duct system is installed to serve the lower half of the building. This approach limits tenant construction disruption to the lower half of the building.

The third strategy reviewed by the article to increase ventilation air is an incremental approach that increases ventilation on a floor-by-floor basis. In this method, a small supply fan brings additional required outdoor air to the mechanical room to serve a single air handling unit or floor. This strategy is optimal for buildings where the increase in ventilation needs to take place over an extended period due to budget constraints.

Choosing the right solution for a particular project requires a thorough analysis of the additional ventilation air requirements, budgetary needs, tenant disruption, and building aesthetics.

YEA

Hello everyone, I am your returning YEA chair, Michael Gerazounis. I hope you all are looking forward to another great upcoming year! For all the new members if you are unfamiliar with the YEA committee, its purpose is to provide ASHRAE members 35 years old or younger with opportunities to network, educate and grow themselves through chapter events. Please check back regularly to the newsletter and on ASHRAE's website for all the news and opportunities available. I look forward to seeing as many of you as possible in the upcoming months at AHRAE and YEA events!

https://www.ashrae.org/communities/young-engineers-in-ashrae-yea/yea-events-and-programs

Leadership Weekend 1.0

Thanks to everyone who registered for the first Leadership Weekend 1.0 of the year. If you missed out on the registration and still want to attend, please send an email to youngengineers@ashrae.org to be placed on the waitlist. The next 1.0 weekend will take place in the spring of 2023.

Leadership U

If you want the opportunity to participate and follow regional and society officers there are two great options to do so! With Leadership U (4) YEA members will be selected for the winter or annual conference and attend all of their respective society officers' events, board meetings and social activities. Applications for this program are open until November 13th. Please look under the YEA Events & Programs tab on the website for more details.

LeaDRS

Similar to the Leadership U program, LeaDRS, allows a region to select any ASHRAE member to shadow their Director and Regional Chair (DRC) at an ASHRAE Conference. To apply for this program you must contact the DRC directly. For Long Island that would be Steven Sill.

Region I : Mr. Steven C Sill Email: R01drc@ashrae.net

HVAC Design Scholarship

Are you looking for the chance to get a better grasp of the fundamentals and technical aspects to design, install and maintain HVAC systems? YEA has a fantastic program to cover all of those bases with an attendance scholarship for either level I or II training. Applications for this program will begin on October 10th so please be on the lookout to take advantage of this opportunity!

TechnicalCommittees

Are you looking to get more involved with your industry or ASHRAE as a whole? Take a look to see if there are any technical committees that interest you!

https://ashrae.org/technical-resources/technical-committees

YEA

Getting more involved gives you the opportunity to directly impact our industry and expand your knowledge base. To learn more about these committees you can also reach out via phone or email at:

404-636-8400

tcstaff@ashrae.net

YEA Awards

So many YEA members are deserving of awards for their hard work, dedication and faithful service to this society but don't receive them because people don't know they are eligible to be nominated. Please look into the numerous awards available for YEA members under the Honors and Awards tab.

https://www.ashrae.org/communities/young-engineers-in-ashrae-yea/honors-and-awards

For any awards that you cannot nominate yourself or another YEA member you may need to reach out to your YEA Regional Vice Chair, Society YEA Committee member or Director and Regional Chair to provide them with the information they require to submit a nomination form.

- Michael Steven Gerazounis

YEA

Student Activities

Welcome back! Hope everyone has enjoyed the nice weather in the past weeks. As the clock is ticking, we have a couple of due dates around the corner.

First, the ASHRAE Student Activities Committee is offering two $1,000 USD **Travel Grants** to help subsidize students to travel to the Winter Conference in Atlanta, Georgia in February 2023.

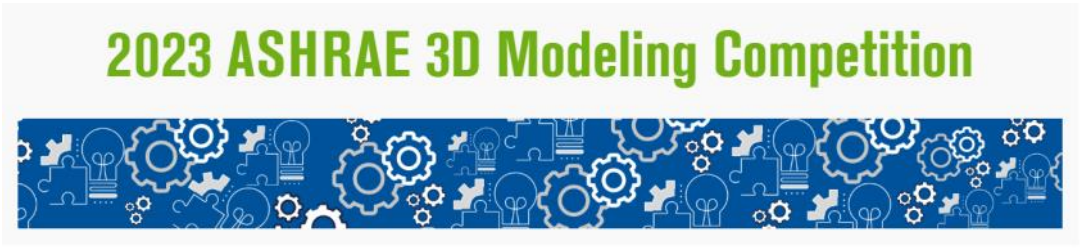
Applications are due by **September 30, 2022**. So, if interested, apply online NOW:

https://www.ashrae.org/communities/student-zone/scholarships-and-grants/student-activities-travel-grant

Second, the **ASHRAE Undergraduate Program Equipment Grants Program** provides grants to engineering, technical and architectural schools worldwide with the goal of increasing student knowledge, learning and awareness of the HVAC&R industry. Grants shall be used to fund equipment and supplies for undergraduate projects and 2-year technical school projects that focus on ASHRAE-related topics. Grants may cover projects lasting from one academic term up to one year.

Early-bird deadline for Undergraduate Equipment Grant Applications are **November 15, 2022.**

Third, the **ASHRAE 3D Modeling Competition** will provide students with the opportunity to take the first steps in designing a building's HVAC system. This competition will expose students to the process that designers and engineers go through when designing building systems.



Registration Deadline for Modeling Competition is the **November 30, 2022.**

Please reach out for more information if you are interested in participating of any of the above programs. I look forward to seeing you in the 2023 ASHRAE Winter Conference!

- Zhigang Xu

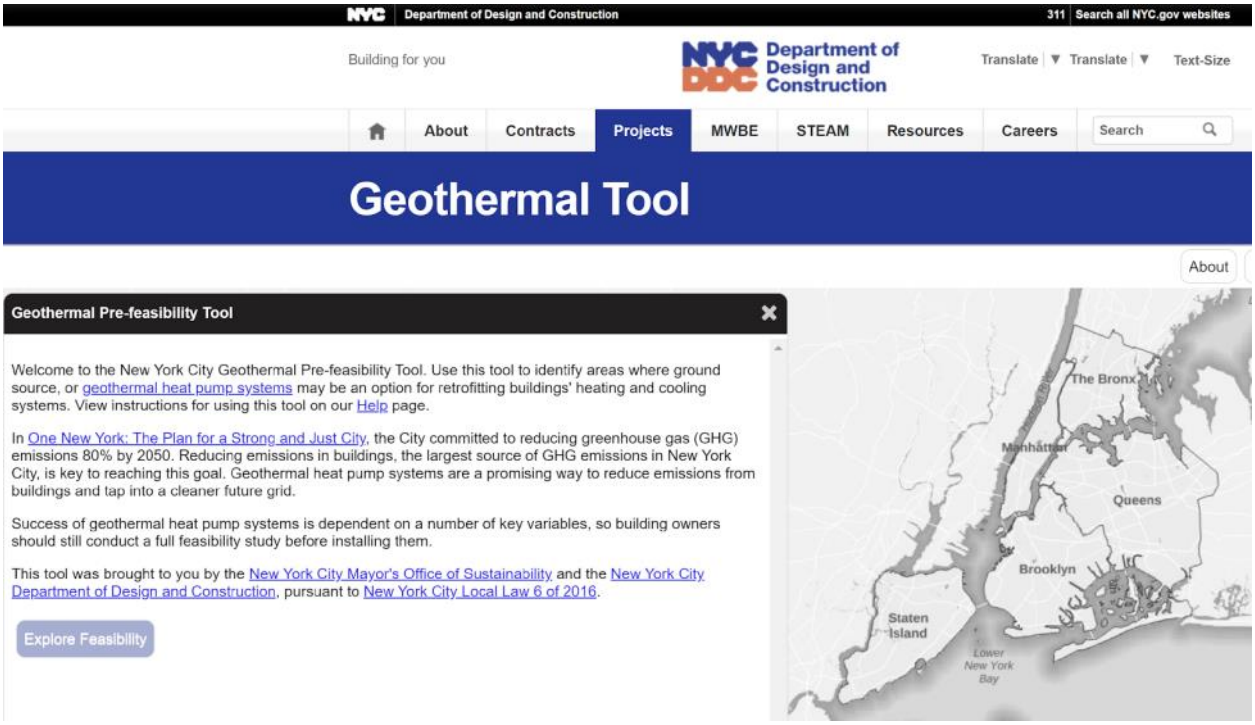
Student Activities Chair

Sustainability Committee

If I had to pick the most popular word used in 2022 HVAC Design, it would be “electrification”. Due to legislative tightening on a local level as well as incentive on a national level, our community has been obsessed. One of the key pillars of HVAC electrification is use of geothermal heat-pumps to extract and dump energy into the earth. In contract to air-source equipment, ground-source generally has much higher efficiencies at the cost of design complexity.

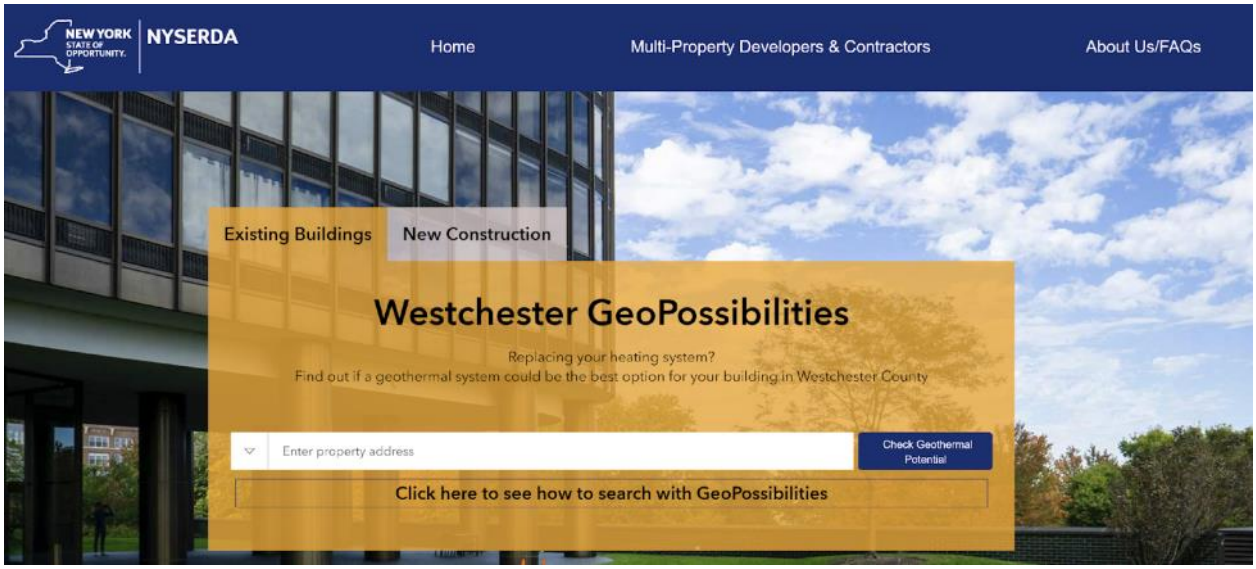
Unfortunately the complexities of geothermal require feasibility studies, and often serve as an undesired barrier of entry. To address this, in 2016 NYC passed Local Law 6 mandating the NYC DDC to create a publicly available geothermal screening tool to assess geothermal feasibility on a given lot, commercial or residential. The tool is very interesting, and I encourage everyone to check it out.

NYC Geothermal Tool: https://www1.nyc.gov/assets/ddc/geothermal/index.html



Later, NYSERDA helped fund and develop a very similar tool for Westchester County, named “Geo Possibilities”. This helps illustrate the replicability of the tool creation process.

Westchester NY Geo Tool: https://geopossibilities.ny.gov/ .



Using the NYC Tool, Charles Copeland estimates that 90% of feasible geothermal lots in Staten Island will have a payback period of <12 years using a closed-loop geothermal system. You can read more about his assumptions and inputs in the ASHRAE August 2022 article titled: *Developing Geothermal Screening Web Tools. (I mention Staten Island because it has the most comparable urban density to Long Island).*

The engineering community of Long Island would look forward to development of a similar tool for use in our backyards.

Government Affairs Committee (GAC)

COP27 in Sharm el-Sheikh, Egypt

Looking to our Past for inspiration to reach our Climate Goals.

ASHRAE President Farooq Mehboob and Treasurer Dennis Knight presented at COP27 in Sharm el-Sheikh, Egypt. Along with Architecture 2030 and International Network of Women Engineers + Scientists (INWES), ASHRAE participated in an official side event titled “Planning, Design and Development in the Global South: The ‘How To’ for People + Planet”.

Mehboob displayed a series of passive design approaches from the past that are still applicable to today’s designs, including the Mughal Fort Lahore (**1556 A.D**.), the Statues of Seema Malakaya at the Gangaramaya Temple in Beira Lake, Sri Lanka, and Telenor office campus in Islamabad, Pakistan.

“Sustainability is not a concept we’ve invented today—it has existed for long periods of time,” said Mehboob. “We must not forget these approaches, and we can develop them in ways in which they can be adapted and incorporated into modern buildings.”

Past, present and future regional examples from Africa and the Global South and their goals of building better buildings to make them safer and more affordable, resilient and energy efficient were also shared by Dennis Knight.

Knight highlights ASHRAE’s Africa Chapter in their participation in the UN Global Alliance for Building Construction (GABC) creating the Africa roadmap for Buildings and Construction as well as the ASHRAE Indonesia and Latin America Chapters.

“Our chapters in Indonesia and Latin America are all working with the United States Department of Energy through their net-zero world initiative to work all over the global to accelerate clean energy and climate goals and transition and transfer technology to each other and share ideas,” said Knight.

Knight also highlights how the international standard task force is working to maximize the international impacts of our [ASHRAE] standards and the involvement Farooq and he have had in developing roadmaps for a healthy, sustainable planet.

The presentation is still available to watch free, with no registration required, at ashrae.org/COP27.

Some Key Takeaways from this event:

Africa is going to be Implementing a strategy to incorporate the design of cooling in all new buildings and food refrigeration and storage requirements which will increase the electrical requirements and require more electricity production.

Nuclear power is back in the spotlight as a viable energy resource:

"Nuclear energy as a clean energy source has a very important role to play to help us get to net zero faster," said IAEA Director General Rafael Mariano Grossi ahead of the COP. "Nuclear techniques are also helping accelerate adaptation and provide the climate monitoring data we need to make science-based decisions," he added. "We are providing the tools for countries to protect their water and food security, develop smarter agriculture, and fight ocean acidification and other global climate problems."

As always, I'm sure there is more to come from this meeting that hasn't been covered yet. I am particularly interested in the commitment percentages to the goals that were presented the countries of China and India are at.

In the past they were just lip service, in agreement, but not committed to change actual behavior. Now with actual supply issues they may look for alternatives to the bulk power requirements needed in the large manufacturer regions. I would think Nuclear would make the most sense especially if they can be incentivized to move that way.

Richard Smith – GAC Chair.

MEMBERSHIP PROMOTION

For this month's meeting, we would like to thank each one of our Long Island Chapter's members for their consistent sacrifices to support our great organization. YOUR membership and continued involvement in ASHRAE are our highest priorities. Our responsibility to you, our loyal members, is bringing your input, experience & expertise together. This is all accomplished in an open forum & with our ACTIVE members. Our forum or meetings are not just where the true benefits of being an ASHRAE member stops. ASHRAE as a whole is more than our local chapter and is a worldwide membership that is working towards the advancement of our industry to provide a more sustainable & healthier environment. The one key aspect is being an ACTIVE member & while we understand that it can be a hassle when your membership expiration approaches, our board has to make every effort to ensure you stay aware of your status. This status could be if you're membership is past due & we try to offer frequent reminders.

Here's how it works:

When someone joins ASHRAE & Society has received their dues payment, their annual membership year begins and continues on a 12-month billing cycle.

1. Three (3) months prior to the one-year anniversary of the original billing, we contact you to renew your dues for the following year. If you choose not to renew, you become "unpaid" the first day after the expiration date.

2. For the first three (3) months (0-90 days past due) after the anniversary date, we will continue to send friendly reminders while your membership remains active.

3. After the three (3) months following the expiration date (91-180 days past due), your membership expires, and you enter into a "grace" period. At this point we can no longer offer member benefits.

4. Six (6) months after the expiration date (181 days past due), we "cancel" your membership, and subsequently remove you from our member roster.

Fortunately, even cancelled members can reinstate their membership and keep their original election dates by catching up on their dues or you can rejoin as a new member. From our understanding, must be processed manually by staff. "Renewals" and "Rejoins" can be done anytime on the website by re-applying as a "new" member.

If you would like, you can check on your membership status and renew online at www.ashrae.org.

Moving onto this month's meeting, which is our chapter's first membership promotion night. Membership is teaming up with YEA for our 1st Student Activates Night. This is an excellent opportunity for all to network and make acquaintances.

Being it's Student Activates Night, please let all students know that it is **FREE** and to have them attend. Please also let each of our students know about the Smart Start Program. This is a great way for ASHRAE student members to continue receiving the many member benefits of ASHRAE after finishing college. The Smart Start is a 3-year program that allows Student members to transfer to Associate grade membership at a rate that is recent-graduate friendly. This program allows new graduates to pay only $60 for the first year of associate membership after college, $85 for the second and $115 for the third. When moving from student to associate member, the participant is allowed access to all ASHRAE has to offer, including annual copies of the ASHARE Handbook, the ASHRAE Journal, and various other publications and services.

As mentioned in last month's membership article, our chapter will be having a "Membership Battle" this year. For the new members & a refresher for current members, this "Membership Battle" will be an employer recognition program that's meant to thank employers for supporting ASHRAE membership. The goal of the membership battle is to:

1. Create a competition among employers to help increase membership
2. Recognize employers that support ASHRAE
3. Promote continued support

This "Membership Battle" is simple since we will have (3) categories that will be based on your firm's size & the "winner" will be based on your percentage growth at the end of the year. The three (3) categories are:

- Small Firms - 20 employees of less
- Medium Firms - 21 to 60 employees
- Large Firms - over 61 employees

Again, the plan is to encourage membership growth while having published updates within each monthly newsletter & make announcements at each of our monthly meetings. In order for a firm to be enrolled, please reach out to me to enroll. Please note the enrollment is open to engineering firms, manufacturers, mechanical contractors, architect firms, etc. I will ask you to **PLEASE UPDATE YOUR ASHRAE PROFILE INFORMATION & RESPECTIVE EMPLOYER** since this is critical for verification. From there, I will work with the board to see the actively enrolled members at each firm & access your monthly percentage growth. At the end of the year, the employers with the highest percentage growth in each size category will be presented an ASHRAE plaque & recognized at our final meeting.

I would like to informally welcome our new members this month:

1. Joe R. O'Leary
2. Katherine Gezina van Daatsellaar

Lastly & for anyone dealing with any hardships, please reach out to me since ASHRAE does have a membership hardship program that is dealt with on a case-by-case basis.

Please contact me with any questions regarding the Smart Start Program and/or ASHRAE membership needs.

Looking forward to another great month and thank you in advance for your support, time & guidance.

Michael Razzano
Membership Promotion Chair

ASHRAE CERTIFICATIONS

Certification

ASHRAE Certified

ASHRAE, accredited by ANSI under ISO/IEC 17024 for the High-Performance Building Design Professional (HBDP) program, has certified more than 2,000 Built Environmental Professionals.

ASHRAE certification programs:

- Are developed by industry practitioners who understand the knowledge and experience that are expected for superior building design and system operation
- Assure employers and clients of subject mastery
- Serve as a springboard for continued professional development
- Offer an easy-to-apply process

FOR MORE INFORMATION GO TO - https://www.ashrae.org/education--certification/certification

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ASHRAE Social Media

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Most Popular Tweets

Does It Cost More To Build Green? Benefits include reduced operating costs & construction waste.

Online Thermal Comfort Compliance Tool Included In New ASHRAE User's Manual.

87% of households in the US have #AC, 5% do in India. India's tough choice on air-conditioning and climate.

The November issue of the Journal is tested for binding strength to see how many times a page can be turned before the binding would fail.

Harvard & SUNY Upstate Medical University find that workers are healthier and happier in certified green buildings.

ASHRAE Standard 90.1 has been redefining energy savings since 1975. A new version is available now.

Adapting historical buildings for sustainable reuse.

Get To Know ASHRAE

ASHRAE Conferences

ASHRAE 2023 ASHRAE WINTER CONFERENCE
ATLANTA, Feb 4-8 | AHR Expo, Feb 6-8

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