



Twin Tiers Chapter

American Society of Heating, Refrigerating, and Air Conditioning Engineers Inc.

Special points of interest:

- President Message
- Twin Tier News
- Monthly Meetings
- Society News
- Scholarships
- Business Card Advertisements
- Employment

ASHRAE 2022-2023



Shaping Tomorrow's Built Environment Today

Spring Symposium April 18, 2023

Earn Up to 6 PDH!
Holiday Inn Binghamton
8:00am - 4:30pm

To register, visit the Chapter website:
<http://twintiers.ashraechapters.org>

Please send all newsletter comments to:
Andrew Nice, Newsletter Editor
c/o Meier Supply Co.
275 Broome Corporate Parkway
Conklin, NY 13748
[Email the Editor](#)

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Corner

President's

Dear Twin Tiers Chapter Members,

Thank you to all who have joined us virtually in March for the presentation on R-32 by Eric Kravitz with HVAC Distributors! The refrigerant transition will impact most of the industry in the near future, so it was interesting to hear the changes already in motion on the application side. Adam Keller, our Government Affairs Committee chair, regularly participates in meeting with NYSERDA and the DEC and keeps our chapter up to date on upcoming regulation changes.

Our Annual Spring Symposium is coming up soon – Tuesday, April 18th at the Holiday Inn in Binghamton. We are excited to welcome over 60 participants to this event. Sign up is still open for both in-person and virtual attendance. There are two presentation tracks to choose from and 6 PDHs are available for the day. This year we're featuring a vendor display session during break time – if you are interested in participating in this sponsorship opportunity, please reach out to our VP and Symposium Chair, Alison Kran (akran@binghamton.edu) At lunch time, the HO Ward Scholarships will be presented to three deserving students. Please consider joining us in person or via Zoom!

Our May dinner meeting and technical presentation will take place at Cornell University. We'll be touring the Energy Recovery System at Olin Hall and welcoming Nicole Tyler, from M/E Engineering in Rochester, as the presenter.

Save the date for the Golf Tournament – June 13th at the Links at Hiawatha. Registration information will be available in the coming weeks.

As always, thank you to the volunteers who dedicate their time to the successful and efficient operation of our chapter. We're actively recruiting new volunteers for the next Society Year (starts July 1, 2023). If you're interested in learning more about a new volunteer opportunity, please speak with any member of the board.

See you at the Symposium!

Sincerely,
Victoria Kramer, PE
Twin Tiers Chapter President

Chapter President



Victoria Kramer
(607) 321-6127
[Email Me!](#)

2022-2023 Chapter Officers

President-Elect
Dana Ehrets
(315)920-0487
[Email Me!](#)



Vice President
Alison Kran
(631)806-5977
[Email Me!](#)



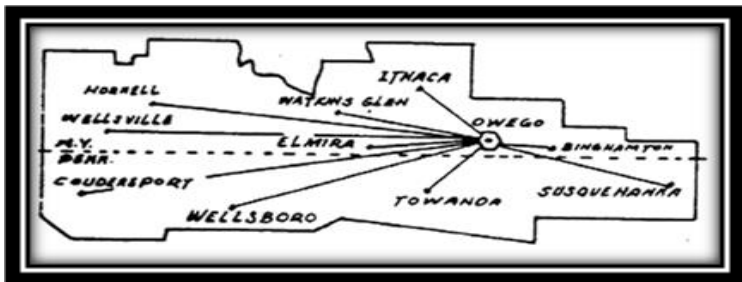
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[Email Me!](#)

Secretary
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Twin Tiers Chapter

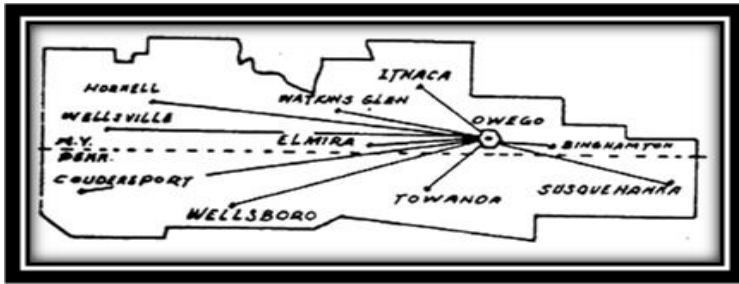
Presidential Award of Excellence (PAOE)

	Chapter Operations	Chapter Technology Transfer	Electronic Communications	Grassroots Government Activities	Historical	Membership Promotion	Research Promotion	Student Activities	Young Eng. In ASHRAE
MIN/ PAR	600/1200	550/1050	300/700	500/650	100/300	500/800	800/1050	500/800	300/800
Current	2190	1810	895	1000	615	1505	1395	795	1425

POINTS CURRENT AS OF 4/14/2023

Chapter Committee Chairs

Technology Transfer Dana Ehrets (315) 920-0487 Email Me!	Government Activities Adam Keller (315) 484-9526 Email Me!	Refrigeration Rob VanSkiver (585) 591-8168 Email Me!	Golf & Clambake Outing Michael McGinnis (607) 727-3168 Email Me!
Membership Promotion Chris Wolak (484) 350-1954 Email Me!	Nominating Victoria Kramer (607) 321-6127 Email Me!	Meeting Reception Rob VanSkiver (585) 591-8168 Email Me!	H.O. Ward Scholarship Richard Sanguinito (607) 231-6605 Email Me!
Research Promotion Michael McGinnis 607.727.3168 Email Me!	Student Activities Jason Gilbert (607) 777-2240 Email Me!	Membership Directory Chris Wolak (484) 350-1954 Email Me!	Albern Education Fund Jason Gilbert (607) 777-2240 Email Me!
Honors & Awards Victoria Kramer (607) 321-6127 Email Me!	Historian Richard Sanguinito (607) 231-6605 Email Me!	Symposium– Fall/Spring Alison Kran (631)806-5977 Email Me!	Auditing Rick Sanguinito & Andrew Nice (607) 231-6605 / 607-760-5960 Email Me!
Webmaster Petros Papathomopoulos (607) 723-9421 Email Me!	Newsletter Editor Andrew Nice 607-760-5960 Email Me!	YEA: Young Engineers Kyle Nedlik (607) 321-6100 Email Me!	Sustainability Kevin McKeon & Makayla Jackson (607)834-0734 / Email Me! / Email Me!



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

Twin Tiers Chapter– Monthly Meeting Information

2022-2023 Meeting Dates:

Date:	Speaker	Tech Session Topic, Tour or Meeting Info	Attendance:
20-Sep	David Bennett, Dristeem	Presentation: Humidification 101 Theme: YEA Bingo & RP	-
Oct-18	Andrew Taranto Jason Gilbert	Tour of BU Baseball Complex Theme: Student Night	-
15-Nov	Cornell University Team	District Hot Water Conversion & Cornell University Borehole Observatory Theme: Past President’s Night, Donor Recognition, & History Night	-
20-Dec	Distinguished Lecturer: Luke Leung. P.Eng., Fellow ASHRAE, LEED® Fellow, BEMP	The New Carbon Standards: Net Zero Operational, Em- bodied, Whole Life and Upfront Energy (Carbon). Theme: Sustainability	-
17-Jan	Nick Goldsmith	Ithaca Green New Deal & Energy Code Supplement Theme: Government Affairs & Environmental	-
28-Feb	Ray Hickey, Efficient Air Systems	HVAC Pool Dehumidification Theme: YEA & Student Night	-
28-Mar	Eric Kravitz, HVAC Distributors	New Refrigerant (R-32) Training Theme: Membership Promotion	-
18-Apr	Multiple/TBD	Spring Engineering Symposium—Daytime	-
16-May	Cornell University	Duffield or Olin Hall Tour Theme: Refrigeration	-
13-Jun	None	Golf Tournament	-

American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.



Thank you Sponsors!

2023 Business Cards



Richard R. Sanguinito, PE, LEED AP
Vice President/Director of MEP Services

o 607-231-6605
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f 607-231-6650
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www.delta-eas.com



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Fax: 315-468-1561
Mobile: 315-727-2302
Email: joe.o'hara@camfil.com
www.camfil.com

Joe O'Hara, NCT
Branch Sales Manager



Joseph Parisella, PE, CPD
Sr. Mechanical Engineer

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main: 607.238.5888
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Howard Cabezas, PE | President

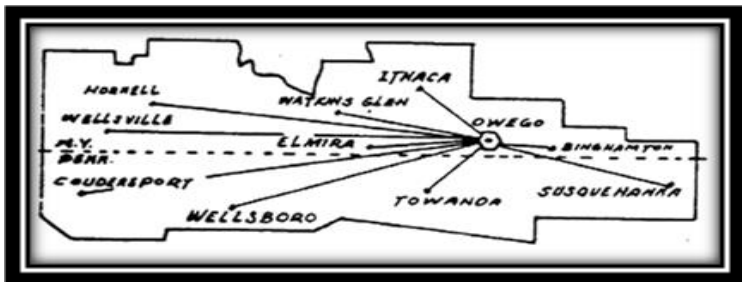
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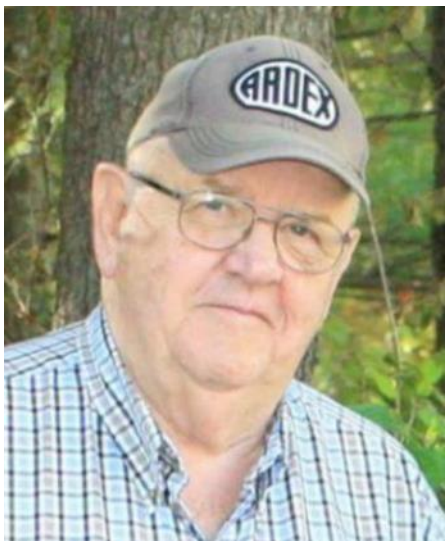
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REMEMBERING GARY HILTON

Gary Hilton

1941 - 2021

Gary Hilton, long time member of the ASHRAE Twin Tiers Chapter passed away peacefully on Monday, December 10, 2021. Gary's obituary is copied below.



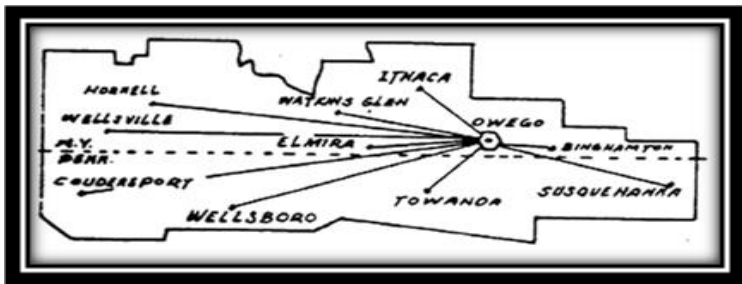
I, Gary Hilton, left this world on December 10th, 2021. To join with my wife and the Heavenly choir in singing praises to the Lord. I was born in November 1941 and grew up in the Triple Cities area. I attended Vestal Central High School graduating in June of 1960. I served in the US Army from January of 1964 to January of 1966 and worked in the HVAC industry for over 61 years.

I was preceded in death by wife Sandra, my brother James, my father Howard, and my mother Anastasia. I am survived by my two children, Kyle (Heather) and Kris, and four grandchildren, Emily, Owen, Caleb, and Kaitlyn.

As a born-again Christian, I did not consider myself a part of any denomination, but rather a believer in the Bible, the Word of God.

There will be a celebration of life service to be announced later.

So, with malice towards none and best wishes to all, I bid you all farewell.



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RESEARCH PROMOTION



Dear ASHRAE Twin Tiers Member or Research Promotion (RP) Supporter,

As the RP Chair and a fellow member of the Twin Tiers Chapter, I wanted to personally ask you for your help in supporting ASHRAE Research. ASHRAE's research program, established in 1912, supports 140 research projects with a combined value of more than \$15 million. Research focus includes energy and resource efficiency, indoor environmental quality, design, operation and management tools, alternative technologies, and materials and equipment. The past three years in particular, research dollars have been used to help study and provide recommendations to prevent the transmission of COVID-19.

For Research Information please see the following flyer:

[ASHRAE RP Informational Flyer](#)

You can either donate directly with a credit card, see link below:

[ASHRAE RP: https://xp20.ashrae.org/secure/researchpromotion/rp.html](https://xp20.ashrae.org/secure/researchpromotion/rp.html)

or send a check to:

ASHRAE Research Promotion
Attn: Julia Mumford
180 Technology Parkway
Peachtree Corners, GA 30092

Make check payable to "RP Donation-ASHRAE Twin Tiers"

The chapter sends a huge **Thank You** to the following who have donated for the 2021-2022 chapter year:

Company Donations:

- *Southern Tier Custom Fabricators – Honor Roll*
- *Trane Company*

Individual Donations:

- | | |
|--|------------------------------------|
| • <i>Victoria Kramer – Full Circle</i> | • <i>Adam Keller - Full Circle</i> |
| • <i>Alison Kran – Full Circle</i> | • <i>Ray Millard</i> |
| • <i>Andy Gimbar</i> | • <i>Glenn Roberts</i> |
| • <i>Dana Ehrets – Full Circle</i> | • <i>Louis Vogel</i> |
| • <i>Mike McGinnis – Honor Roll, Full Circle</i> | • <i>Mark Mattina</i> |
| • <i>Devin Shapley – Full Circle</i> | |

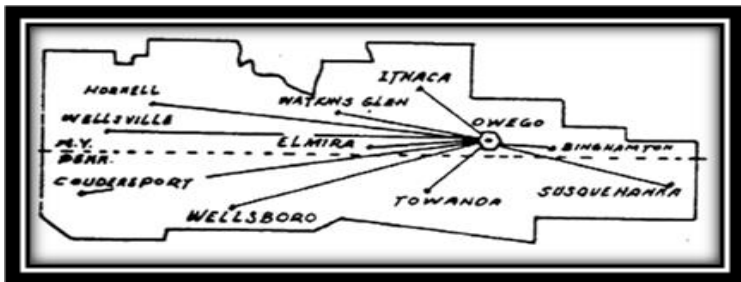
As a reminder, starting 7/1/2019, Honor Roll level contributions listed in ASHRAE's October Journal Issue start at \$150.00 for individuals and \$500.00 for companies. Honor Roll level is required to achieve the ASHRAE coin.

Email me or come see me (virtually) at a Chapter Meeting if you have any questions.

Mike McGinnis

Twin Tiers Research Promotion Chair

[Email Me](#)



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

ASHRAE
TWIN TIERS CHAPTER

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Annual Spring Symposium and Professional Development Seminar
Tuesday, April 18, 2023, 8:30 A.M. – 4:30 P.M.

Holiday Inn Binghamton: 2 Hawley Street Binghamton, NY 13901

EARN UP TO 6 Professional DEVELOPMENT HOURS!

The ASHRAE Twin Tiers Chapter 2023 Spring Symposium provides a local opportunity to bring together practicing professionals, engineers, academics, contractors, owners, and others to discuss with respected expert's issues and challenges that our industry faces. This year's symposium offers attendees opportunities to review some of the industry's latest technologies as well as techniques, methods, and systems that employ them.

SCHEDULE OF EVENTS

8:00-8:30 A.M. Registration, Holiday Inn Binghamton - Foyer
Includes: Sweet & Savory Baked Goods, Coffee, Hot Tea

8:30-10:00 A.M.

Binghamton Room	Endicott Room
"Building Automation Systems 102 Building Automation Systems and Control Basics" 1.5 PDH Scott Edwards, Johnson Controls	"NYStretch for Commercial Buildings" 1.5 PDH Chris Whittet, Performance Systems Development

10:00-10:10 A.M. Morning Break – Foyer

10:10-11:40 A.M.

Binghamton Room	Endicott Room
"Creating a World of Zero Energy Buildings" 1.5 PDH Paul Torcellini, Ph.D., ASHRAE DL	"Deliver Clean Healthy Air with UV-C" 1.5 PDH Steve Mongeau, UV Resources

11:40-1:20 P.M. Lunch & Presentation – Johnson City Room
Lecturer: Dr. Theresa Weston, Ph.D, ASHRAE DL
Virtual Presentation: "Women and STEM: Enhancing Innovation and Sustainability through Diversity"
 Monthly Chapter Meeting
 HO Ward Scholarship Recipients – to be announced

1:20-2:50 P.M.

Binghamton Room	Endicott Room
"Basic Air Management & System Pressurization" 1.5 PDH Steve Krisko, Bell & Gossett - Xylem	"Desiccant Dehumidification" 1.5 PDH Steve Brandt, P.E. – D.F. Brandt, Inc.

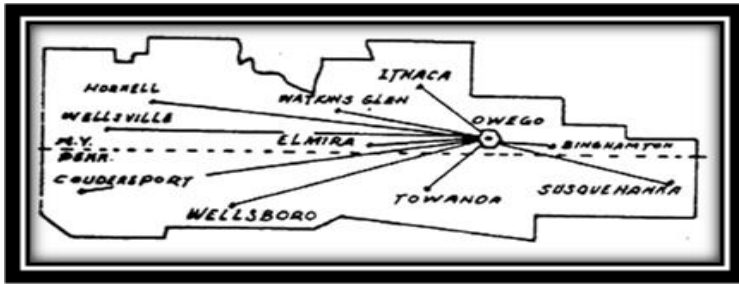
2:50-3:00 P.M. Afternoon Break – Foyer
Includes: Queso, Guacamole, Chips, Bottled Water, Coffee, Hot Tea

3:00-4:30 P.M.

Binghamton Room	Endicott Room
"Smart Buildings" 1.5 PDH Rob Alix, Siemens	"Airflow Control Devices" 1.5 PDH Rob VanSkiver, H&V Sales Group

Please Note: The ASHRAE Twin Tiers Chapter reserves the right to change the schedule, speakers, and presentations without notice.

REGISTER HERE!



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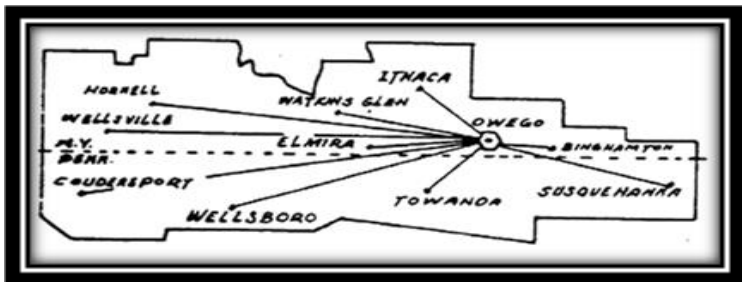
What Were They Thinking???



The good ol' Housefire-o-matic 9000!

Do you have a funny, "unique", or just plain horrible installation picture?
Please send them to the Editor at anice@meiersupply.com

*** All names/brands are removed to protect the guilty. ***



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

[Twin Tiers Annual Golf Tournament!](#)



Annual Golf Tournament and Clambake

The date for the annual golf tournament and clambake is **Tuesday, June 13.** The event, both golf and clam bake, will be held at **The Links at Hiawatha Landing**. The day will begin with a 10:30am shotgun start. As in past years, the round will include lunch at the turn and keg beer all day. With its great success over the past few years, the putting contest (sponsored by Meier Supply & LG) will also be returning.

The clambake will take place immediately after golf, approximately 4pm. The menu will include 2 dozen steamed clams per person, thin sliced ribeye steak sandwiches with sautéed onions/peppers/mushrooms, chicken spiedies, salt potatoes, corn on the cob, garden salad, soft drinks, and beer. There will be door prizes. Our hope is to see lots of non-golfers join all the golfers from earlier in the day.

As always, the golf committee is looking for donations for door prizes and giveaways. Please contact [Travis Fisher](#) with any questions.

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2023 Business Cards

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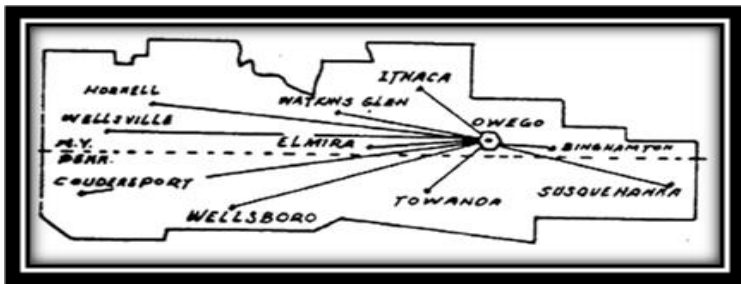
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ASHRAE ANNOUNCEMENT

DOE FUNDING FOR K-12 SCHOOL ENERGY IMPROVEMENTS

I want to inform your chapter about funding opportunities that your members can pursue with local school districts to improve school energy performance. As a supporter of the [U.S. Department of Energy's \(DOE\) Efficient and Healthy Schools initiative](#), ASHRAE wants to ensure that funding for this initiative is executed with engineers, contractors, and design and construction professionals who have the expertise to help school districts reduce energy costs and improve both energy performance and indoor air quality.

As part of this effort, I want to inform you of funding opportunities that your members can pursue with your chapter's local school districts:

1. [DE-FOA-0002756: 2022 Funding Opportunity Announcement \(FOA\) for Energy Improvements at Public K-12 School Facilities - Bipartisan Infrastructure Law \(BIL\) - Renew America's Schools](#)
DOE expects to make a total of approximately \$80 million of federal funding available for new awards under this FOA, subject to the availability of appropriated funds. DOE anticipates making approximately 20-100 awards, which may vary between \$500,000 and \$15 million.
2. [American Rescue Plan \(ARP\) Act Elementary and Secondary School Emergency Relief \(ARP ESSER\) Fund](#)
\$122 billion of ARP ESSER funds "are provided to SEAs (State Educational Agencies) and LEAs (Local Educational Agencies) to help safely reopen and sustain the same operation of schools and address the impact of the coronavirus pandemic on the Nation's students."

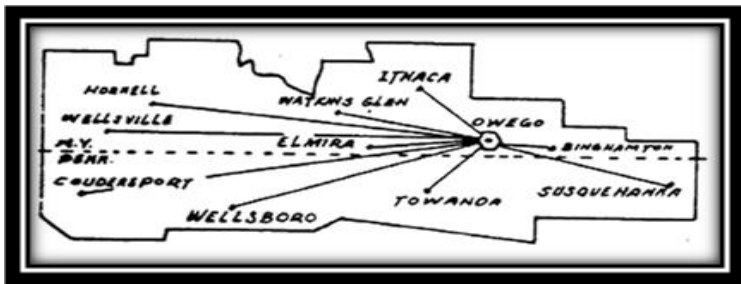
Furthermore, I want to inform you of ASHRAE's and DOE's partnership to create a pilot program for ASHRAE Chapters to educate and work with school districts on identifying and implementing energy improvements that can be funded by these opportunities. Your chapter has been identified as a prospective chapter to take part in the pilot, and more information will be provided to you as soon as we finalize pilot program details with DOE.

Thank you for your time with this letter and service to your chapter. We hope this information helps add value to your chapter's membership and empowers your members to work with their local school district on creating a sustainable and healthy built environment for teachers and students.

Sincerely,

John Constantinide

John Constantinide, P.E.
Chair, ASHRAE's Efficient and Healthy Schools Program Partnership with DOE



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TRAINING



New York State Professional Engineers Self Study Ethics PDH Available!

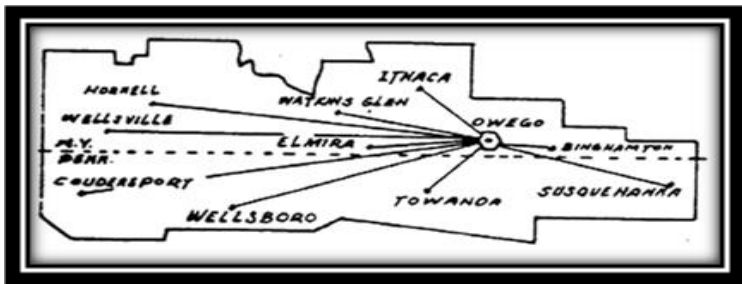
As a licensed professional in New York State, it is your professional responsibility to know the legal and ethical requirements governing the practice of your profession and to be alert to changes in those requirements. The New York State Board for Engineering and Land Surveying, in an effort to help you stay abreast of your professional responsibilities, has developed this short, self-study educational activity in ethics.

This educational activity is based on the New York State Education Law Articles 130 and 145, the Rules of the Board of Regents Parts 1, 3, 17, 18, 28, 29, 31, and the Regulations of the Commissioner of Education Parts 59 and 68. It is strongly recommended that, prior to taking the self test, you review these [foundational materials](http://www.op.nysed.gov/prof/pels/pelaw.htm) (<http://www.op.nysed.gov/prof/pels/pelaw.htm>) on the engineering web site.

Once you have reviewed the foundational materials, proceed to complete the self test below. When you have completed the self test, click the "Get your score" button at the bottom of the page. You should print this screen and save it as evidence of satisfactory completion of this educational activity. A score of 90% or greater will allow you to claim 1 Professional Development Hour (PDH) of educational activity credit in ethics ONCE in each three-year registration period. Retain your printed screen for no less than 6 years from the date of completion.

Take Your PE Ethics Self Test Here!

<http://www.op.nysed.gov/prof/pels/peceselftest.htm>



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TRAINING



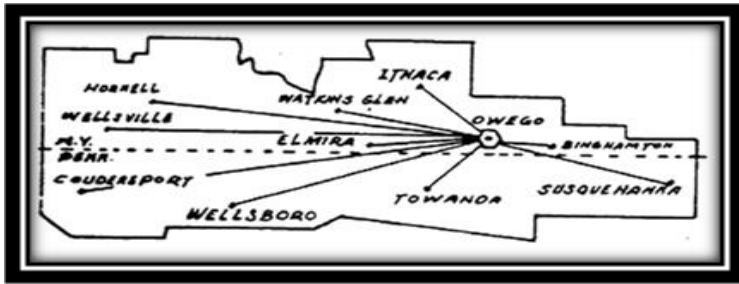
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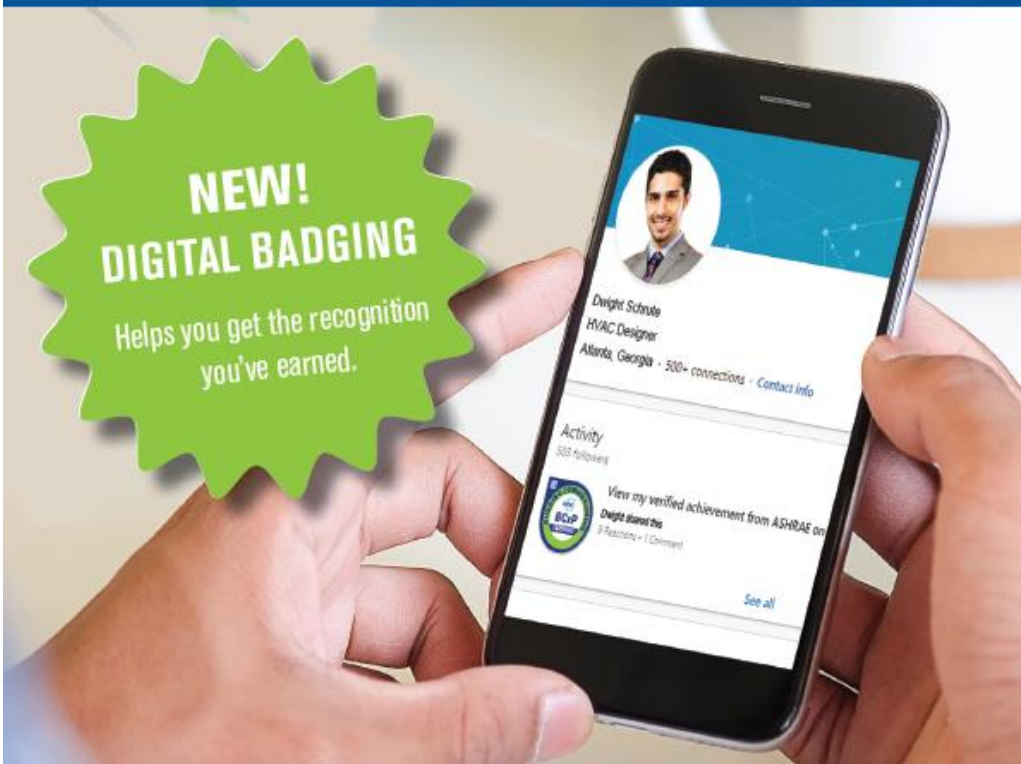


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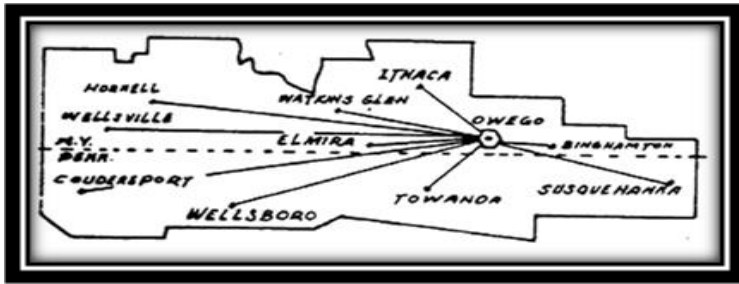
ASHRAE Certification

Advance Your Career Today!



With already more than 3,000 certifications earned to-date, ASHRAE programs were founded to meet the industry needs of today and provide value to thousands of built-environment professionals, employers and building owners.

ashrae.org/certification



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

Certified HVAC Designer (CHD)



- The CHD certification validates competency of an HVAC Designer, working under the responsible charge of an engineer, to design HVAC systems to meet building/ project requirements, including load calculations, equipment selection and sizing, mechanical equipment room design, duct and piping design and layout for the development of HVAC plans for permit and construction.
- In an Industry Need survey, ASHRAE member respondents who influence the hiring decision agree the CHD is a tool to identify competent new hire prospects.

High-Performance Building Design Professional (HBDP)



- The HBDP certification validates competency to design and integrate sustainable HVAC&R systems into high performing buildings.
- Today's building design market requires use of ground-breaking technologies in new and existing structures to meet the need of building owners.

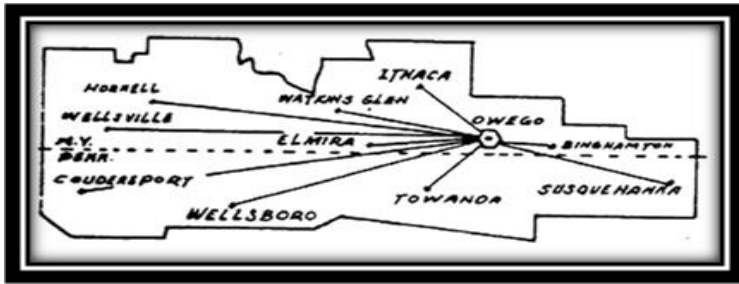
Building Energy Modeling Professional (BEMP)



- The BEMP certification validates competency to evaluate, select, implement, calibrate and interpret the results of energy modeling software when applied to new and existing building and systems energy performance.
- The BEMP certification complements ASHRAE's Building Energy Quotient (BuildingEQ) program by helping to ensure that only qualified practitioners can submit As Designed Workbooks to receive building ratings from ASHRAE.

"Because of the high level of expertise, professionalism and ethics demonstrated by ASHRAE, achieving certification under their established requirements implies one of the highest levels of competence and knowledge available in the industry."

Jeffrey G Ross-Bain, BCxP, BEMP, Ross-Bain Green Building, LLC



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Building Commissioning Professional (BCxP)



- The BCxP certification validates competency to lead, plan, coordinate and manage a commissioning team to implement commissioning processes in new and existing buildings.
- Recognized by the U.S. Department of Energy (DOE) as meeting the Better Buildings Workforce Guidelines (BBWG).

Healthcare Facility Design Professional (HFDP)



- The HFDP certification validates competency to incorporate standards, guidelines as well as unique healthcare facility requirements and design principles in HVAC system design.
- Advances in technology, shifting environmental requirements and an increasingly older population have created a critical need for expansion and renovation of healthcare facilities.

Building Energy Assessment Professional (BEAP)

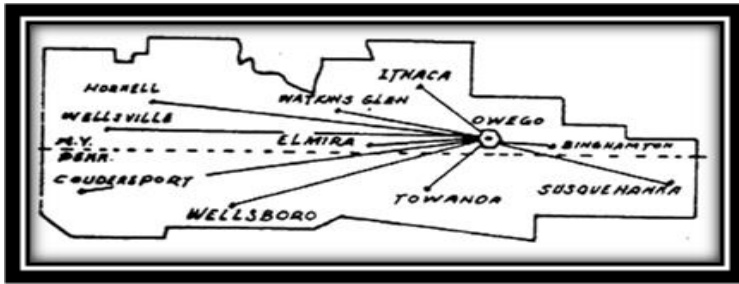


- The BEAP certification validates competency to assess commercial building systems and site conditions, analyze and evaluate equipment and energy usage, and recommend strategies to optimize building resource utilization.
- The BEAP certification is integral to ASHRAE's Building Energy Quotient (BuildingEQ) program by helping to ensure that only qualified practitioners can submit In Operation Workbooks to receive building ratings from ASHRAE.
- Recognized by the U.S. Department of Energy (DOE) as meeting the Better Buildings Workforce Guidelines (BBWG).

Operations & Performance Management Professional (OPMP)



- The OPMP certification validates competency to manage facility operations and maintenance to achieve building performance goals, including those related to indoor environmental quality, health and safety.
- Staying current with the latest facility operation strategies and technologies can reduce energy use in buildings by 10% to 40%.



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The Benefits of an ASHRAE Certification

Value for Certification Earners

- ✓ Validation of specialized knowledge, skills and ability
- ✓ Unparalleled recognition
- ✓ Career development

Value for Employers

- ✓ Identify and recruit qualified professionals
- ✓ Elevated credibility among customers
- ✓ Greater employee job satisfaction

Easy Steps to ASHRAE Certification

1. Read the *Candidate Guidebook*

Visit ashrae.org/certification and download the guidebook for the program in which you are interested.

2. Complete the Application

The ASHRAE Member discounted application fee is \$395 (non-member – \$545).

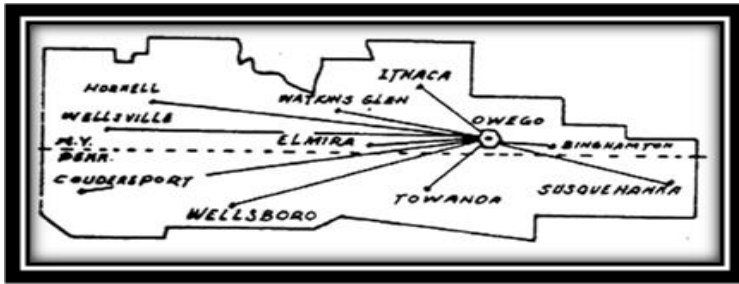
3. Schedule an Examination

Certification examinations are offered at over 300 conveniently located computer-based testing centers worldwide.

4. Renew the Certification

Each certification is renewable every three years.

Certification@ashrae.org | 1-678-539-1105



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.



Very High Efficiency HVAC—NYERDA Pilot Program

Opportunity to Participate

NYERDA has created a program to demonstrate extremely advanced HVAC systems in 15 existing small and medium commercial buildings in New York State. Administered by the Institute for Market Transformation, the program is actively seeking participants for 2021. NYERDA funds HVAC demonstration programs to find practical solutions for building owners that will help New York meet its climate commitments.

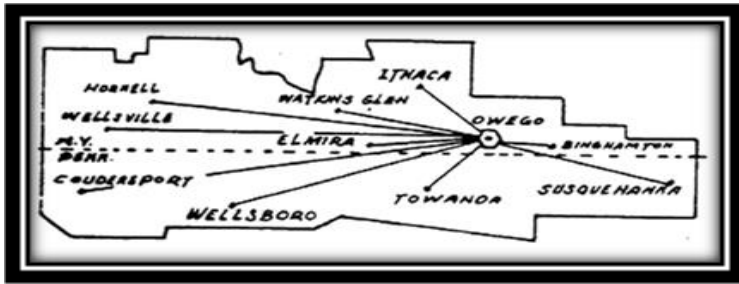
Why Participate?

Right now, tenants, staff, and customers are demanding increased ventilation to feel safer in buildings. In most HVAC systems, this means a tradeoff between fresh air and operating costs. With Very High Efficiency HVAC (VHE HVAC), the system provides 100% highly filtered outside air, improving air quality while also dramatically reducing energy bills.

How Does It Work?

VHE HVAC is a systems approach that combines high-efficiency equipment with heat recovery, a dedicated outdoor air system, advanced filtration, and airflow segregation that limits the spread of contaminants. Developed by the Northwest Energy Efficiency Alliance, VHE HVAC was tested between 2015 and 2018 in eight, [rigorously-documented](#) demonstration sites in the Pacific Northwest. The resulting HVAC savings ranged from 48%–89%.

Building Type	Energy Savings
Airport terminal office	89%
Government district office	73%
Government dorms	77%
Law office	75%
Pizza restaurant	51%
Restaurant	77%
Seattle office	69%
Utility district office	48%



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

“There was definitely a noticeable difference—this was a much more comfortable environment. Other people in areas that hadn’t yet been converted kept asking ‘When are we getting our air fixed?’”

Ryan McCormick
 Chief Engineer
 Oregon Department of Fish & Wildlife

What Buildings Are Eligible?

VHE HVAC is a total system replacement. The pilot is open to commercial buildings six stories or less with heating and cooling provided by packaged rooftop or small unitary systems that are at the end of their service life and planning to be replaced. Buildings higher than six stories with floors that have self-contained HVAC systems will also be considered as will multifamily residential buildings with construction suitable for installing ductwork to distribute ventilation air through chases and plenums. Excellent applications for VHE HVAC are office, retail, lodging and educational buildings.

What Do Participants Receive?

Participants will receive applicable utility incentives, 15% discounts on equipment, technical assistance from start to finish, detailed monitoring data, increased net operating revenue, and brand and media recognition. VHE HVAC also helps ensure compliance with current and planned building regulation, such as New York City’s Local Law 97.

What Are Participants Obligated to Do?

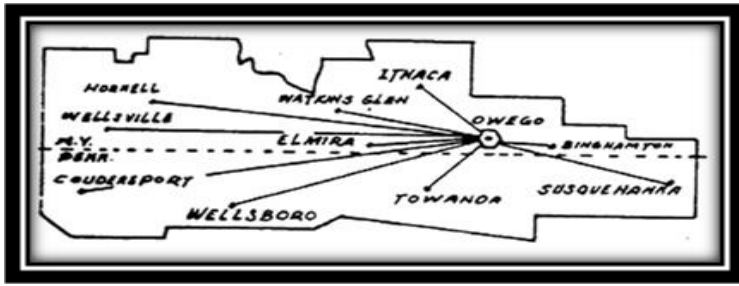
- Meet all VHE HVAC specifications
- Provide access to design and installation teams
- Allow installation of NYSERDA-provided monitoring equipment
- Provide pre- and post-installation utility bills, the cost of installation and alternate bids, and access to facility maintenance staff and selected tenants for interviews

Partners

The Institute for Market Transformation is partnering with manufacturers Fujitsu and Ventacity Systems to procure the equipment for this pilot program.

For details on the pilot program and how to participate, contact vhehvac@imt.org.

Learn more at www.imt.org/very-high-efficiency-hvac/.



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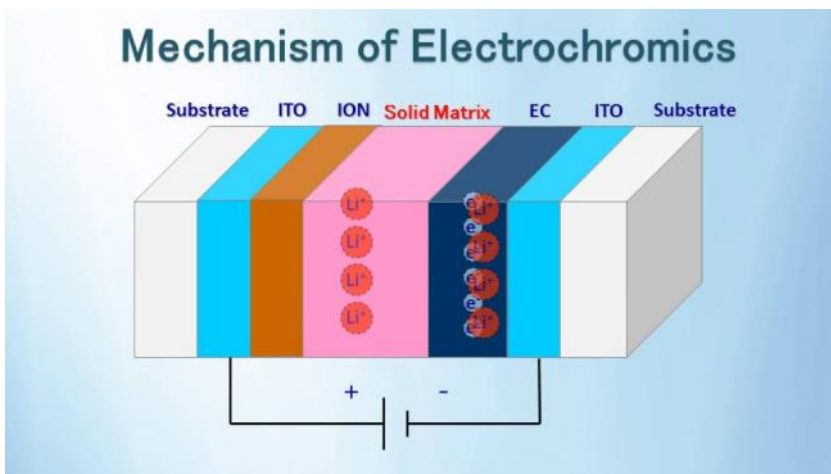
SUSTAINABILITY ARTICLE



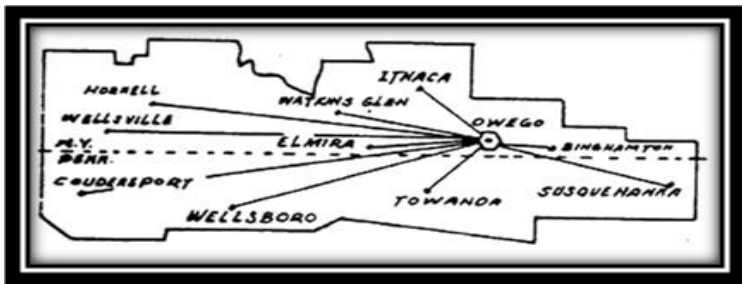
Have you heard how electrochromic materials applied to a building envelope could improve energy efficiency? Recently scientists published a study on a color-changing coating and the impact it could have on regulating the heating and cooling loads of a building. Electrochromic materials can control the heat or light that passes through them by changing colors or transparency when provided with a small amount of electricity.

In the study, by using a small electrical stimulus to initiate a reversible copper deposition, they caused the emissivity of the electrochromic device to change. This change allows the device to switch between a state of solar heating and radiative cooling. When the copper is deposited, the coating has a low emissivity and is in heating mode. When the copper is stripped, the emissivity is high and the coating is in cooling mode.

In addition to materials for new building envelopes, this coating could offer possible retrofitting opportunities for existing buildings. While the researchers state that there is still work to be done to make this type of material long-lasting, scalable, and cost-efficient, the future looks bright, and hope-



ASHRAE
Releases
Expanded,
Revised
Version of
Standard
90.1



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

Twin Tiers Chapter– Employment Opportunities



Cornell University

Central Energy Plant Engineer

Position Summary

The purpose of this position is to provide support to the central energy plants to ensure reliable, safe and efficient operation. This support includes: project management, engineering, and technical oversight for the highly complex maintenance and operation of Cornell’s electric, steam, chilled water, and potable water production facilities, and the associated distribution systems. All work is conducted within the context of systems which must remain in continuous operation at all times.

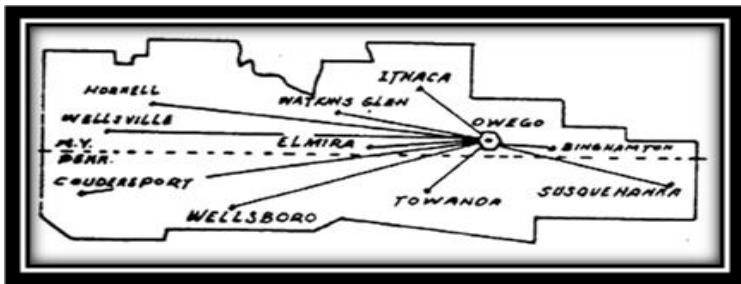
Work closely with the central energy plant manager, other thought leaders, and technical specialists in support of all maintenance and operations activities to assure continued reliable operation of equipment, effective processes and reliable delivery of all utilities. Perform periodic inspections of central plant equipment and systems, document conditions and communicate necessary maintenance or recommended upgrades. Conduct or manage studies, surveys, and analyses of plant and distribution systems. Provide designs for repairs requiring engineering input, monitor and check the designs being performed by others, prepare instructions and documentation of work to be performed, coordinate and oversee the scheduling, layout, and installation of mechanical, electrical, and control systems. Prepare commissioning plans and supervise the commissioning of systems. Assist with management of plant documents and drawings to ensure access to records for all systems and structures. Provide staff training as necessary. Provide engineering support as needed for other department initiatives. Be available on a 24/7/365 basis for emergencies.

Required Qualifications:

- Bachelor of Science in Engineering or related field.
- Ability to secure the New York State Professional Engineering license (after obtaining necessary experience).
- Demonstrates the divisional values of truth, respect, teamwork, integrity, and excellence. This includes such behaviors as the demonstrated ability to give and receive feedback, communicate honestly, listen, respect others, learn from mistakes, set high goals and achieve them, overcome obstacles, uses time effectively, sets priorities, and participates effectively on teams.
- Is highly motivated and exhibits innovation, good judgment and reliability in the workplace.
- Ability to work in an environment that includes high ambient temperature, noise, and dust.
- Ability to safely work with chemicals, high temperature/pressure steam, confined spaces, and other potential hazards.
- Must be able to climb stairs, ladders, and work with heights.

For more information please follow the link below:

[CLICK HERE!](#)



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

Twin Tiers Chapter– Employment Opportunities



Cornell University

Senior Mechanical Designer

Position Summary

This job provides the opportunity to work in a team environment with staff who take great pride in the work that they perform on projects that keep Cornell at the cutting edge of research and education. This includes the opportunity to be involved at the building level through the design of new sustainable facilities and building deep energy retrofits. The position includes, but is not limited to, design of HVAC, plumbing and fire protection systems, as well as upgrades to building controls and other infrastructure.

The Sr. Mechanical Designer (Facilities Designer II) designs HVAC, fire protection, and plumbing systems, as well as generates plans and specifications for maintenance, repair, and alteration projects within the Facilities Engineering Mechanical Design Section. The Sr. Mechanical Designer also estimates costs for mechanical systems designs, and organizes design and drafting efforts to deliver designs within project budgets and schedules.

The Sr. Mechanical Designer will perform design construction administration of projects by attending job meetings, facilitating communication and conducting field inspections. They will also initiate vendor contacts as required to select and specify equipment. Assist with the preparation of the mechanical Engineer's reports to present results to clients. The Sr. Mechanical Design manages design of mechanical and multidisciplinary projects of low to medium complexity.

The Sr. Mechanical Designer will review consultant designs, to ensure adherence to Cornell Design and Construction Standards.

The Sr. Mechanical Designer will provide technical and financial analysis, including design reviews, for projects managed throughout the University. The Sr. Mechanical Designer will develop and/or update University design and construction standards related to their field of expertise.

All employees are accountable for supporting the organization's values of truth, respect, excellence, teamwork, and integrity, as well as supporting inclusive and sustainable practices in carrying out everyday responsibilities.

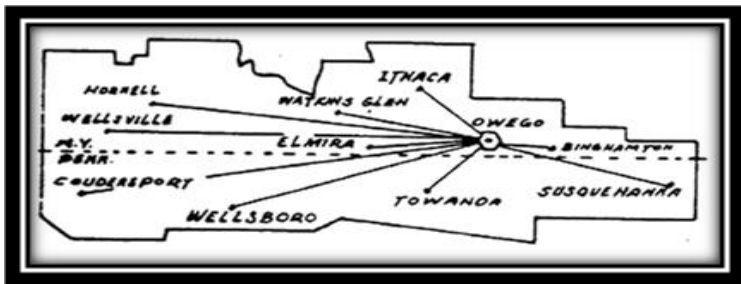
Cornell University provides excellent benefits that include professional development, access to many wellness programs, employee discounts with local and national retail brands, health care options, and generous paid leave provisions: 3 weeks of vacation, health leave, personal leave, 13 paid holidays (including end of year winter break), and great retirement options. Cornell has also been nationally recognized as an award-winning workplace for our health, wellbeing, sustainability, and diversity initiatives.

Required Qualifications:

Associate's Degree (2 years minimum) in mechanical engineering technology, construction technology or related field and at least 5 years relevant experience in design of HVAC, plumbing, and fire protection systems, or equivalent combination of education and experience. Working knowledge of current codes and industry standards in discipline (NYS Building Codes, ASHRAE, ASME, NFPA). Technical knowledge of design and construction industries. Must be knowledgeable of building mechanical systems and construction estimating. Ability to comprehend construction drawings and specifications. Experience with writing technical specifications. Ability to participate effectively in teams, set priorities, and exercise good judgment. Ability to participate in multiple projects with varying scope. Must possess effective organizational, prioritization and multi-tasking skills. Must possess effective oral & written communication, interpersonal, and organizational skills. This position does not have assigned supervisory authority; however, will work directly with support personnel (outside consultants, other FE Design Sections) while providing functional direction on designs. The position requires frequent construction site visits where odors, dust, noise or physical hazards are present. Must have and maintain a valid driver's license; may be required to operate a motor vehicle (your own vehicle or Cornell-owned) to travel to/from job sites.

For more information please follow the link below:

[CLICK HERE!](#)



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

Twin Tiers Chapter– Employment Opportunities



McFarland Johnson

100% Employee Owned

Mechanical Design Engineer

McFarland Johnson (MJ) is a 100% employee-owned, innovative infrastructure consulting firm, specializing in planning, design, environmental services, technology, and construction services. Recently named a 2022 Best Firms to Work For and a 2022 Hot Firm by the Zweig Group for being one of the top 100 fastest-growing A/E/C firms, MJ currently has more than 180 employees across 14 offices. MJ's employee-owners seek to change our world for the better through sustainable and innovative infrastructure solutions. We are a people-centric company guided by the belief that employee owners are more committed to delivering quality services.

MJ currently has opportunities for a Mechanical Engineer or Mechanical Designer with proven skills and design experience in HVAC, fire protection, plumbing and commissioning systems.

Primary responsibilities involve working on a diverse spectrum of projects ranging in size and complexity from small commercial, health care, educational and industrial projects to large public and private building engineering projects.

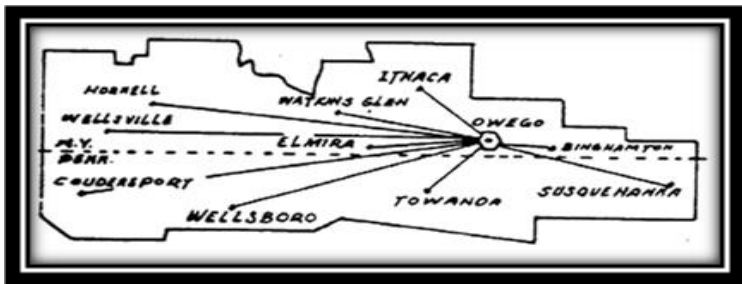
Successful candidate will have:

- 1-5 years of HVAC, plumbing & fire protection design experience in commercial, industrial & institutional building facilities
- Revit/2D-3D CAD design/drafting experience required
- Technical skills in design, heat loss/gain calculations (Trane Trace a plus) & experience using various building codes including: IBC, BOCA, ASME, ANSI, ASHRAE & NFPA codes.
- Sustainable design experience with LEED accreditation are assets
- Excellent organizational & interpersonal communication skills required in order to understand client needs, work effectively in a team setting & meet project schedules
- Must be results oriented, with strong problem solving & decision making skills Mechanical Engineering Degree, minimum of an AAS required, BS with PE track preferred.

For more information please follow the link below:

[CLICK HERE!](#)

[Click Here to Email for More Info!](#)



American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

**Twin Tiers Chapter–
Business Cards Advertisement for Newsletter**

ADVERTISE your business card:

- Current business card adds will expire at the end of this year, December 31, 2022.
 - New subscription will run the calendar year 2023.
 - Cost to advertise for the 2023 year is \$50.
- Sign up now for the 2023 year On Pay Pal <http://twintiers.ashraechapters.org/page-newsletter.html>

Or Send Check and copy of business card to Twin Tier News Letter Editor:
 Meier Supply Co.
 Attn: Andrew Nice
 275 Broome Corporate Parkway
 Conklin, NY 13748

- Email a copy of your business card to [Twin Tier Newsletter Editor Email](mailto:Andrew.Nice@meiersupply.com).

From Web site please visit: <http://twintiers.ashraechapters.org/page-newsletter.html>

Go to the News Letter tab, and place your order to advertise your business card.

Business Card Advertising 2023

The Twin Tiers Chapter of ASHRAE can accept business card advertising with the following provisions:

- The company must be associated with HVAC&R technology.
- The company must be a local service provider, a local manufacturer, or a manufacturer's representative serving the area.

If you aren't sure, just ask.

We are now accepting business card advertisements for the newsletters that will be published in 2023. This is a great opportunity to get your name and business in front of the over 250 subscribers to our chapter newsletter. The price for the newsletter only is \$50 for the entire 2023 year.

Business card ads can be placed using a scanned electronic copy of your business card, or you can mail your card to me (please no staples or paper clips).

Questions? Call or email
 Thank you for your support!
 Andrew Nice
[Twin Tier Newsletter Editor Email](mailto:Andrew.Nice@meiersupply.com)

Comments? Suggestions?

Andrew Nice, Editor
c/o Meier Supply Co.
275 Broome Corporate Parkway, Conklin, NY 13748
anice@meiersupply.com

We welcome your feedback!



ASHRAE Mission Statement

ASHRAE will advance the arts and sciences of heating, ventilation, air conditioning, refrigerating and related human factors to serve the evolving needs of the public and ASHRAE members.

Ethics Requirement for PE

PE's in NYS will be required to have one hour of Ethics within their 36 hours of continuing education for registration periods beginning August 1, 2011 and after.

ASHRAE Vision Statement

ASHRAE will be the global leader in the arts and sciences of heating, ventilation, and air conditioning.

ASHRAE will be foremost authoritative, timely, and responsive source of technical and education information, standards and guidelines.

ASHRAE will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.

***Advancing HVAC&R to
serve humanity and pro-
mote a sustainable world"***

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Ithaca, NY 14851-6706