April Meeting
April 17, 2018

ANNUAL SPRING SYMPOSIUM
AND
PROFESSIONAL DEVELOPMENT SEMINAR

EARN UP TO 7.5 PDH!

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

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

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Dear Twin Tiers Chapter Members,

It is officially spring and although it still doesn't quite feel like it, it's just a matter of time before better weather finally arrives.

Last month’s tour of Sullivan Park Science & Technology Center in Corning, NY gave us the opportunity to take a closer look at Corning’s main research facility. We were given a brief overview of the HVAC infrastructure that supports the needs of more than 2 million square feet of lab and research space, and saw how even small changes in operational procedures can have a dramatic impact in overall energy and cost savings. A big thank you goes to Ernie Nitsche and the rest of the Corning staff for being gracious hosts as well as Mike McGinnis for coordinating this great event.

April is the month of our chapter’s spring symposium. This year’s event will take place on Tuesday April 17th at the DoubleTree by Hilton Hotel in Downtown Binghamton. Even though we had a last-minute change of venue, Kyle Nedlik has done a terrific job in securing an alternative location and putting together this year's line-up. This is a great opportunity to earn 7.5 PDHs and network with peers, vendors and potential employees or new hires. The event will be held at the lower level of the hotel. The most convenient parking option is at the back side of the hotel, from where you can walk directly to the meeting area.

As previously mentioned in March’s newsletter, our chapter will be participating in the Canstruction of the Southern Tier competition that is scheduled to take place from April 8-15 at the Oakdale Mall in Johnson City. If you find yourself in the area, stop by, and take a look at our attempt to make the ASHRAE logo out of cans.

Following April’s events, we only have one more regular meeting left in May, before concluding the season with our Annual Golf and Clambake tournament, scheduled for June 19 at the Links as Hiawatha Landing. More details will become available as we get closer to the scheduled date and will be included in our newsletter in addition to being posted on our website.

Sincerely,

-Petros Papathomopoulos
Twin Tiers Chapter President
American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

Twin Tiers Chapter

Presidential Award of Excellence (PAOE)

<table>
<thead>
<tr>
<th></th>
<th>MIN/ PAR</th>
<th>Chapter Operations</th>
<th>Chapter Technology Transfer</th>
<th>Electronic Communications</th>
<th>Government Activities</th>
<th>Grassroots Government Activities</th>
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<th>Membership Promotion</th>
<th>Research Promotion</th>
<th>Student Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>945</td>
<td>1525</td>
<td>379</td>
<td>700</td>
<td>685</td>
<td>760</td>
<td>600</td>
<td>800/1050</td>
<td>300/500</td>
<td></td>
</tr>
</tbody>
</table>

Points current as of 4/11/2018

Chapter Committee Chairs

- **Technology Transfer**
  - Michael McGinnis
  - (607)727-3168
  - Email Me!

- **Government Activities**
  - Adam Keller
  - (315) 487-8791
  - 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**
  - Andrew Nice
  - 607-760-5960
  - Email Me!

- **Meeting Reception**
  - Devin Shapley
  - (607)723-4979
  - Email Me!

- **H.O. Ward Scholarship**
  - Richard Sanguinito
  - (607) 231-6605
  - Email Me!

- **Research Promotion**
  - Glenn Roberts
  - (315)234-1527
  - Email Me!

- **Student Activities**
  - Victoria Kramer
  - (607) 321-6127
  - Email Me!

- **Membership Directory**
  - Chris Wolak
  - (484) 350-1954
  - Email Me!

- **Albern Education Fund**
  - Jason Gilbert
  - (607) 777-2240
  - Email Me!

- **Honors & Awards**
  - Petros Papatheomopoulos
  - (607) 723-9421
  - Email Me!

- **Historian**
  - Richard Sanguinito
  - (607) 231-6605
  - Email Me!

- **Symposium—Fall/Spring**
  - Kyle Nedlik
  - (607) 321-6100
  - Email Me!

- **Auditing**
  - Rick Sanguinito & Andrew Nice
  - (607) 231-6605 / 607-760-5960
  - Email Me!

- **Webmaster**
  - Mike Colwell
  - (570) 706-0690
  - Email Me!

- **Newsletter Editor**
  - Andrew Nice
  - 607-760-5960
  - Email Me!

- **YEA: Young Engineers**
  - Devin Shapley
  - (607)723-4979
  - Email Me!

- **Publicity**
  - Andrew Nice
  - 607-760-5960
  - Email Me!
### Twin Tiers Chapter—Monthly Meeting Information

#### 2017-2018 Meeting Dates:

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Tech Session Topic, Tour or Meeting Info</th>
<th>Attendance</th>
</tr>
</thead>
</table>
| 19-Sep   | Adam Keller, Pro Air Plus Jerry Meyer Jr., MIS of America | Cooling Tower Basics  
Cooling Tower Shut-down and NSF Legionella Guideline                                              | 27         |
| 17-Oct   | Multiple/TBD                                  | Fall Engineering Symposium—Daytime                                                                    | 67         |
| 21-Nov   | Michael Collins, Eagle Bay Refrigeration     | TOUR Cornell University Lynah Ice Rink  
Refrigerant Update                                                                                     | 12         |
| 19-Dec   | William P. Bahnfleth, Ph.D., P.E., ASHRAE Distinguished Lecturer | Integrating Indoor Air Quality and Energy Efficiency in Buildings                                      | 31         |
| 16-Jan   | Lanny Joyce, Mark Howe, Lou Damiani, Pete Meenan, Cornell University | TOUR Upson Hall Cornell University  
High performance building design - Sibley School of Mechanical and Aerospace Engineering building   | ?          |
| 20-Feb   | Jason Gilbert                                 | TOUR Binghamton University Heating Plant                                                               | ?          |
| 20-Mar   | Ernie Nitsche                                 | TOUR Corning Inc. Sullivan Park  
**NOTE**  
A SIGNED NDA WILL BE REQUIRED FOR THIS TOUR                                                        | ?          |
| 17-Apr   | Multiple/TBD                                  | Spring Engineering Symposium—Daytime                                                                  |            |
| 15-May   | Doug Clay, Sack Engineering                  | TOUR Tompkins Trust Building  
New Tompkins Trust HQ Project – Water Source  
VRF, DOAS, Cooling Tower, Boilers                                                                   |            |
| 19-Jun   | None                                          | Golf Tournament                                                                                       |            |

**NOTE:** Speakers and topics are subject to change based on availability.
I want to thank the many applicants that applied for the H.O. Ward Scholarship this year. They were all qualified applicants and the selection process was challenging given the quality of all of the applicants.

The Twin Tiers Chapter of ASHRAE is pleased to announce the following Scholarship recipients for 2018.

- Tara Dulak: $1,000 Scholarship
- Brandon Link: $500 Scholarship
- George Pappas: $500 Scholarship

Scholarships will be presented at the April 17th Spring Symposium Lunch Meeting at DoubleTree By Hilton: 225 Water St, Binghamton, NY 13901.
Thank you Sponsors!

2018 Business Cards

Chris Devins
Sales Engineer

15 Technology Place
Syracuse, NY 13057
Office (315) 234-1501  Cell (315) 313-3848
Fax  (315) 433-9120
chris.devins@trane.com
www.trane.com

Joseph Parisella, PE, CPD
Sr. Mechanical Engineer

direct: 607.338.1284
email: jparisella@popligroup.com

main: 607.238.5888
fax: 607.338.1288

45 Lewis Street • Binghamton, NY 13901

Your business card could be seen by hundreds of potential clients every month!

Contact Andrew Nice for more Info!
607-760-5960
anice@meiersupply.com

Only $50 per Year!
Annual Spring Symposium and Professional Development Seminar

Tuesday, April 17, 2018, 8:30 A.M. – 4:30 P.M.

DoubleTree by Hilton Binghamton: 225 Water St, Binghamton, NY 13901

EARN UP TO 7.5 Professional DEVELOPMENT HOURS!

The ASHRAE Twin Tiers Chapter 2018 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, DoubleTree by Hilton
Includes: Sweet & Savory Baked Goods, Whole Fresh Fruit, Coffee, Juice, Hot Tea

8:30-10:00 A.M.

<table>
<thead>
<tr>
<th>Carlton Room</th>
<th>Arlington Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Krisko, Frank P. Langley Co.</td>
<td>1.5 PDH</td>
</tr>
<tr>
<td>1.5 PDH</td>
<td>Norman Nowosielski, P.E. - Nilfisk</td>
</tr>
</tbody>
</table>

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

10:10-11:40 A.M.

<table>
<thead>
<tr>
<th>Carlton Room</th>
<th>Arlington Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Accommodating Pipe Movement - Noise &amp; Vibration Attenuation”</td>
<td>“HVAC Renovation Measurement &amp; Verification, and Continuous Commissioning”</td>
</tr>
<tr>
<td>1.5 PDH</td>
<td>1.5 PDH</td>
</tr>
<tr>
<td>Chris Wolak, Victaulic</td>
<td>Michael Kingsley, PhD, P.E., CPMP, LEED AP – OBG</td>
</tr>
</tbody>
</table>

11:40-1:20 P.M.  Lunch & Presentation, Followed by Monthly Chapter Meeting – Zone 225 Room
Lecturer: Daniel Noll, P.E., FASHRAE, FAIA, BEMP, HBDP, ASHRAE DL - Syska Hennessy Group
Presentation: “Energy Policy: An Engineering Perspective”

1:20-2:50 P.M.

<table>
<thead>
<tr>
<th>Carlton Room</th>
<th>Arlington Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>“VRF Features, Design Considerations, and Codes”</td>
<td>“Healthy, Airside Solutions to Significantly Reduce Your Building’s Carbon Footprint”</td>
</tr>
<tr>
<td>1.5 PDH</td>
<td>1.5 PDH</td>
</tr>
<tr>
<td>Peter Yarema, Johnson Controls</td>
<td>Gordon Sharp, ASHRAE DL – Aircuity, Inc.</td>
</tr>
</tbody>
</table>

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

3:00-4:30 P.M.

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<tr>
<th>Carlton Room</th>
<th>Arlington Room</th>
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</thead>
<tbody>
<tr>
<td>1.5 PDH</td>
<td>1.5 PDH</td>
</tr>
<tr>
<td>James Tauby, P.E., ASHRAE DL – Mason Industries, Inc.</td>
<td>Leandro de la Torriente, IMI Flow Design</td>
</tr>
</tbody>
</table>

Please Note: The ASHRAE Twin Tiers Chapter reserves the right to change the schedule, speakers and presentations without notice.
Annual Spring Symposium and Professional Development Seminar

Tuesday, April 17, 2018
ASHRAE Twin Tiers Chapter Annual Spring Symposium and Professional Development Seminar

A maximum of seven and a half (7.5) Professional Development Hours (PDH) towards the New York State Professional Engineering continuing education requirements will be available to attendees!

EARLY PRE-PAID REGISTRATION DEADLINE: FRIDAY, APRIL 6, 2018
Send Pre-Paid Registration by Mail or Pay on-line at http://twintiers.ashraechapters.org

Symposium Registration Includes: Morning Refreshments, Buffet Lunch and Afternoon Refreshments

PLEASE REGISTER EARLY!! – SPACE MAY BE LIMITED!

Presentations are free to all students, $10 for student lunch.

<table>
<thead>
<tr>
<th>Name</th>
<th>ASHRAE, ACEC, or NYSSPE Member</th>
<th>$150 ($125 by 4/6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company/Affiliation</td>
<td>Non-ASHRAE Member</td>
<td>$175 ($150 by 4/6)</td>
</tr>
<tr>
<td>Address</td>
<td>Student Attendance</td>
<td>$0</td>
</tr>
<tr>
<td>City/State/Zip</td>
<td>Student Attendance with Lunch</td>
<td>$10</td>
</tr>
<tr>
<td>Preferred Email</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pay by credit card using PayPal (no account required) at our chapter website http://twintiers.ashraechapters.org/ or mail payment and registration to the following address. Make checks payable to “ASHRAE Twin Tiers Chapter”, 2018 Spring Symposium, PO Box 6706, Ithaca, New York 14851-6706.
Inquiries: Kyle Nedlik - kyle.nedlik@stantec.com

Hotel Reservations: Please call the DoubleTree by Hilton Binghamton at 607-722-7575 and identify yourself as part of the ASHRAE Twin Tiers 2018 Spring Symposium when making reservations.
Twin Tiers Chapter - March BOG Meeting Minutes

Meeting was called to order at 4:02pm

- Call to Order and Attendance: Petros P., Andy N., Adam K., Jason G.
- General Announcements: 3 Scholarships applications received to-date / Announce in April?
  - Push for April, Symposium
- Treasurer’s Report (Devin Shapley):
  - All accounts are in good standing.
- CTTC (Mike McGinnis / Kyle Nedlik)
  - Spring Symposium(Kyle):
    - Speaker solicitations
    - Table sponsorships
    - Marketing opportunities
    - Change of Venue? –
      - Double Tree, Binghamton
      - Andy, Jason, Adam for back up presenters
  - Monthly Meetings (Mike): May Meeting? Tompkins Trust in doubt? May Need Back up
- YEA (Devin Shapley/Victoria Kramer): Update on YEA event for March?
- Membership Promotion (Chris Wolak):
- GGAC (Adam Keller): June 5th: Day on the Hill Event, need volunteers, will provide more info on accommodations
- Student Activities (Jason Gilbert):
  - Training coming up end of June/undecided on attendance
  - Scholarship contributes to PAOE
- Research Promotion (Glenn Roberts):
  - Super Bowl $$ to Devin
  - 570 PAOE, End of Jan
  - Current YTD Donations $1,675
  - Is society PAOE points part of 570 points?
PAOE (Petros Papathomopoulou): Reminder to chairs that they can update PAOE points.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>PAR</th>
<th>MIN</th>
<th>PTS</th>
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<tbody>
<tr>
<td>Chapter Operations*</td>
<td>1200</td>
<td>600</td>
<td>885</td>
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<tr>
<td>Chapter Technology Transfer*</td>
<td>1050</td>
<td>450</td>
<td>1150</td>
</tr>
<tr>
<td>Electronic Communications</td>
<td>500</td>
<td>250</td>
<td>352</td>
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<tr>
<td>Grassroots Government Advocacy*</td>
<td>650</td>
<td>500</td>
<td>700</td>
</tr>
<tr>
<td>Historical Criteria</td>
<td>300</td>
<td>100</td>
<td>685</td>
</tr>
<tr>
<td><strong>Membership Promotion</strong>*</td>
<td>800</td>
<td>500</td>
<td><strong>760 (885 in Jan)</strong></td>
</tr>
<tr>
<td>RP*</td>
<td>1050</td>
<td>800</td>
<td>570</td>
</tr>
<tr>
<td>Student Activities*</td>
<td>500</td>
<td>300</td>
<td>225</td>
</tr>
</tbody>
</table>

PAOE requires achieving minimum in 5 of the 6 categories marked with *.
- New Business
- Old Business
  - Construction submission
    - Jason TO confirm Aspect Ratio
    - Tuna Can to Short
    - Soup Can to Tall

Meeting was adjourned at 4:48pm
Motioned: Petros
Second: Adam
Thank you Sponsors!

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www.taitem.com

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Team Leader

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Shey Doane
Sales Engineer

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Office (315) 234-1509 Mobile (315) 382-2350
Fax (315) 433-9120
sdoane@trane.com
www.trane.com
What Were They Thinking???

If only the wire was flexible enough to go around the pipe!

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. ***
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) 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
New York State Professional Engineers

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Email: joe.o'hara@camfil.com
www.camfil.com

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ANice@MeierSupply.com

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Scott Lance, BCP, LEED AP O+M
Engineering Manager
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Fax: 315.474.0751
Email: slance@horizon-engineering.com
620 Erie Blvd. West, Suite 107
Syracuse, NY 13204

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

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American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.
Since 1977

ASHRAE Twin Tiers Chapter

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Email: brian@techplusllc.com
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CELL 518-320-2733

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121 Drakes Drive
Altamont, NY 12009
www.techplusllc.com

Modular Comfort Systems

Daniel Brosnan
5860 Belle Isle Rd • Syracuse, NY 13209
Phone: 315-484-9048 Fax: 315-484-9528
7401 Willowbrook Rd • Victor, NY 14564 Phone: 585-398-8018 Fax: 585-924-8633
Cell: 315-952-5596 Email: dbrosnan@rmcmms.com Web: www.rmcmms.com

Camfil
Clean Air Solutions

Joe O’Hara, NCT
Branch Sales Manager
Governor Andrew M. Cuomo today announced that up to $15 million is available for projects that will help New York improve the resiliency, efficiency, and overall performance of its electric grid to save on energy and costs to combat climate change. Modernizing the grid supports Governor Cuomo’s initiative to deploy 1,500 megawatts of energy storage by 2025 and his requirement for half of the state’s electricity to come from renewable energy sources by 2030.

“One of the most critical components in our fight against climate change is the modernization of our electric grid,” Governor Cuomo said. “I encourage entrepreneurs and clean energy companies to join in New York’s mission to lead the nation in protecting the planet by investing in renewable energy and help make our system more resilient against whatever Mother Nature throws our way.”

The grid modernization initiative, which is administered by the New York State Energy Research and Development Authority, promotes the development of a high performing smart grid that will accommodate a diverse supply of clean energy generation resources, enhance overall electric grid performance, and enable customers to reduce their energy costs, energy consumption, and environmental impacts.

NYSERDA will award projects through a two-step competitive process. Applicants will initially submit concept papers of their proposals for a rigorous evaluation process. Based on those evaluations, a select group of applicants will be invited to submit full proposals for further evaluation. The final proposals selected will receive funding to move forward.

Concept papers will be accepted through July 18, 2018 in one of four categories: research studies, engineering studies, product development, and demonstration projects. Papers should focus on projects that will aid in developing innovative cybersecurity and data analytics or advanced planning, operations, and forecasting tools. Concept papers should also demonstrate how their proposals will advance the state’s goal to have 50 percent of its electricity come from renewable resources by 2030.

The funding builds on previous solicitations issued in October 2016 which resulted in $9.6 million being awarded through 22 contracts that focus on smart grid technologies aiding in the analysis of solar interconnections and the integration of energy storage, digital solutions, and advanced sensor applications. Funding is available through the state’s 10-year, $5.3 billion Clean Energy Fund. In total, $110 million is dedicated to modernizing New York’s electric grid through 2022. More information about this funding is available on NYSERDA’s website.

Richard Kauffman, Chairman of Energy and Finance for New York State, said, "Under Governor Cuomo, New York is rebuilding its outdated electric grid enabling it to provide clean, affordable, and reliable energy for New Yorkers from upstate to downstate and we need the private sector to bring some of their best ideas to the table. This initiative builds on the progress we've already made and helps us reach the Governor’s ambitious clean energy goals."

Alicia Barton, President and CEO, NYSERDA said, "Integrating clean, renewable energy into a more efficient, high performing grid is critical to New York meeting its ambitious energy goals, but we can’t do it alone. Governor Cuomo’s vision for modernizing our electric grid, reducing costs for customers, and providing clean and efficient energy for New Yorkers can only become a reality with the help of innovative and forward-thinking ideas from industry participants.”
Reforming the Energy Vision
Reforming the Energy Vision is Governor Andrew M. Cuomo's strategy to lead on climate change and grow New York's economy. REV is building a cleaner, more resilient and affordable energy system for all New Yorkers by stimulating investment in clean technologies like solar, wind, and energy efficiency and requiring 50 percent of the state's electricity needs from renewable energy by 2030. Already, REV has driven growth of more than 1,000 percent in the statewide solar market, improved energy affordability for 1.65 million low-income customers, and created thousands of jobs in manufacturing, engineering, and other clean tech sectors. REV is ensuring New York reduces statewide greenhouse gas emissions 40 percent by 2030 and achieves the internationally recognized target of reducing emissions 80 percent by 2050. To learn more about REV, including the Governor's $5 billion investment in clean energy technology and innovation.

About the Clean Energy Fund
The 10-year, $5.3 billion Clean Energy Fund is a core component of New York State's Reforming the Energy Vision strategy to achieve a clean, resilient and affordable energy system for all New Yorkers. The CEF includes a focused effort to bring more clean energy opportunities and benefits to low- to moderate-income communities and is designed to deliver on New York State’s commitment to accelerate the use of clean energy and energy innovation and drive economic development, while reducing ratepayer collections. NY Green Bank, a core component of the CEF, has generated $27.6 million in positive net income as a result of $457.5 million in investments in clean energy transactions across New York. Its $1 billion NY-Sun initiative has already helped facilitate a more than 1,000 percent increase in solar deployment since 2011. The CEF supports New York’s ambitious Clean Energy Standard requiring 50 percent of the state’s electricity to come from renewable energy sources by 2030.

MECHANICAL ENGINEER, HVAC DESIGN

Job Number: 25002
Location: Corning, NY

Corning is one of the world’s leading innovators in materials science. For more than 160 years, Corning has applied its unparalleled expertise in specialty glass, ceramics, and optical physics to develop products that have created new industries and transformed people’s lives.

Corning succeeds through sustained investment in R&D, a unique combination of material and process innovation, and close collaboration with customers to solve tough technology challenges.

Corning’s Glass Technologies segment manufactures chemically strengthened cover glass, such as Gorilla® Glass® for the consumer electronics market and glass substrates for active matrix liquid crystal displays (“LCDs”) that are used primarily in LCD televisions, notebook computers and flat panel displays.

Scope of Position:
Responsible for Precision HVAC Equipment Design within the Glass Melting and Forming Process, ranging from initial concept stage to final design approval and implementation, including fabrication and check-out at vendors, and follow-up to ensure that all quality, cost and safety requirements are met. Work includes support for plant expansions, along with continuous improvement projects and technology changes at equipment rebuilds/repairs.

Day to Day Responsibilities:
- Participates on project teams as an individual contributor or as a project task leader understanding the customer’s requirements, developing project plans and schedule, developing scopes of work and cost estimates and supporting implementation for advanced manufacturing environments with precision HVAC equipment.
- Receive direction or guidance from a senior department member(s) to develop/strengthen process environmental engineering competencies.
- Responsible for interfacing with project managers, supervisor, process personnel, along with dept SME to insure correct technology is being scoped and installed.
- Enclosure design work using accepted good airflow management design principles and HVAC principles
- Review as needed troubleshooting and problem solving exercises for enclosure systems
- Migrate standard enclosure design specifications, qualification documents, and installation practices
- Manage external suppliers of enclosure related equipment in Asia, for detailed technical design or installation work as required.
- Support and provide ownership of enclosures as a process tool
- Lead/Participate in existing facility modification as well as new facility design to ensure design meets the goals of the process requirements.
- Maintain documentation integrity for all systems of responsibility
- Provide the project or task with sound innovative thinking, problem solving skills and customer focus.
MECHANICAL ENGINEER, HVAC DESIGN (Cont.)

- Conceptual design, detailed design, CAD drawing updates, presentation at design reviews, working with other designers and process engineers, interactions with plant sites, technical guidance on equipment, working with vendors on fabrication of equipment, and compliance with department standards and policies.

Travel Requirements: Approximately 50% travel, mainly in Asia.

Work Schedule: 40 hrs per week - periodic evening or morning conference calls, Work duration Project by Project Basis

Required Skills:
- Mechanical, Engineering skills/experience
- HVAC Design and Best Practices
- Clean room Design and Operations Understanding
- Controls Experience
- Understanding Thermal dynamics Design (Heat Transfer, Heat Balance)
- Data Analysis
- Project management skills

Desired Skills:
- Experience with CAD software
- AutoCAD – 2D/3D – capable of standalone design and drawing experience
- Sold Works – capable of reviewing drawings and models
- AHU Design experience
- Capable of designing HVAC systems from concept to bidding
- Project leadership
- Capable of interacting with plant operators, contract vendors and leading the installation of proposed mechanical systems
- Construction Management experience
- Plant manufacturing Experience
- Experience working equipment vendors

For a full position description and requirements please visit the ASHRAE Twin Tiers Website. [http://twintiers.ashraechapters.org/](http://twintiers.ashraechapters.org/)

EOE/AA including Veterans and Disabled.

IF YOU ARE INTERESTED IN THIS OPPORTUNITY, PLEASE FEEL FREE TO CONTACT JESSICA HACKER AT HACKERJL@CORNING.COM
Tetra Tech is a leading provider of consulting, engineering, and technical services worldwide. Our reputation rests on the technical expertise and dedication of our employees—16,000 people working together across disciplines and time zones to provide smart, sustainable solutions for challenging projects. We are proud to be home to leading technical experts in water, environment, infrastructure, resource management, energy, and international development. Tetra Tech combines the resources of a global, multibillion dollar company with local, client-focused delivery in 400 locations around the world. We offer competitive compensation and benefits and are searching for innovative people to join our teams.

Tetra Tech A&E provides planning, design and construction phase services for a wide range of building types and clients, from K-12 and higher education facilities in New York to facilities supporting governments worldwide. We currently seek a Mechanical Engineer to work out of our Ithaca NY or Albany NY office.

**Responsibilities include:**
- Mechanical Engineering on a wide range of building projects: complexity and responsibility level to vary with experience and ability;
- Perform site visits for existing mechanical systems evaluation and to inspect contract work in progress or completed, prepare associated engineering reports;
- Design building mechanical systems (primarily HVAC) including appropriate system concepts, calculations, energy modeling, layout, sizing, selections, specifications and coordination;
- Review and respond to team members on project design work, RFIs, submittals, and other construction related documents and issues in a professional and timely manner;
- Monitor and controls project progress against scope, schedule, and budget;
- Attend client meetings and assist in marketing efforts.

**Requirements:**
- Bachelor’s degree in Mechanical Engineering, Mechanical Engineering Technology, or similar field;
- Experience with design of mechanical systems for educational facilities is desired;
- Licensed Professional Engineer (PE) or preparing to obtain professional licensure preferred;
- Proficient in AutoCAD and Revit/BIM with working knowledge of MS Office;
- Proficiency with building energy modeling concepts and software preferred;
- Knowledge of applicable codes and standards;
- Possesses and applies a broad knowledge of principles, practices and procedures to the completion of difficult assignments;
- Knowledge of and demonstrated interest in energy efficient solutions and designs;
- Possesses strong communication and interpersonal skills.

If you are interested in this exciting opportunity apply on-line at: [http://www.tetratech.com/en/careers](http://www.tetratech.com/en/careers)

Tetra Tech is committed to creating a diverse environment and is proud to be an Equal Opportunity Employer. We invite resumes from all interested parties including women, minorities, veterans and persons with disabilities. Tetra Tech is a VEVRAA federal contractor and we request priority referral of veterans for available positions.

EOE AA M/F/Vet/Disability
Senior Mechanical Engineer

Engineers thrive on solving problems by putting their logic and creativity together. They are able to invent, explore, and question to enhance the areas around us. IBI Group engineers work in multiple disciplines and collaborate on larger initiatives.

IBI Group’s Binghamton, New York office is searching for a Senior Mechanical Engineer to join its growing team. Are you looking for a challenging opportunity that can move your career to the next level? Then come discover what IBI has to offer.

IBI Group offers you a career you can Define…Discover It!

Responsibilities:
• Responsible for the technical and design development for assigned projects.
• Functions in the role of project leader and handles project management tasks and supervises the mechanical design and technical aspects.
• Produces design work according to established standards, methods, and procedures of the office.
• Coordinates and develops the layout, design, drafting, and specifications produced by architectural and engineering staff members who are part of the project team.
• Develops project cost estimates.
• Supervises technical staff and provides design guidance.
• Supervises the preparation and checks the accuracy of contract documents.
• Incorporates applicable codes, construction techniques, and sequences in various projects including all aspects of cross disciplines.
• Conducts site observations as required to perform the design.
• Conducts site observations of mechanical systems during construction operations. Performs other associated construction phase tasks.

Qualifications:
• Experience in designing HVAC systems for educational, commercial, institutional, and industrial facilities
• In addition to HVAC system design experience; experience with Plumbing design and Fire Protection design strongly desired.
• At least 5 years design experience
• Bachelor’s degree in Mechanical Engineering
• EIT required; Registration as a Professional Engineer in New York State strongly desired
• Working knowledge of AutoCAD, BIM/Revit
• Effective communication (verbal and written) in English
• Strong team player
• Highly proactive and detail oriented
• LEED certification is a strong asset

We are a global team of dedicated and experienced architects, engineers, planners, designers and technology professionals who share a common desire – to help our clients create livable, sustainable, and advanced urban environments. From high-rises to industrial buildings, schools to state-of-the-art hospitals, transit stations to highways, airports to toll systems, bike lanes to parks, we design every aspect of a truly integrated city for people to live, work, and play. Our collaborative and combined approach focuses not only on creating the best solutions today, but also determining the right solutions for tomorrow. We believe cities in the future must be designed with intelligent systems, sustainable buildings, efficient infrastructure, and a human touch.

At IBI, we’re defining the cities of tomorrow.

Applicants for U.S. based positions with IBI Group must be legally authorized to work in the United States. Verification of employment eligibility will be required at the time of hire. Visa sponsorship is not available for this position.

IBI Group is an Equal Employment Opportunity/Affirmative Action Employer and maintains a Drug-Free Workplace.

EOE-M/F/Vet/Disability

Contact: Linda Gauld linda.gauld@ibigroup.com (+1 519 472 7328 ext 261)
Senior Mechanical Engineer – Buildings

Your Opportunity:
Our Buildings Engineering group specializes in the design and development processes unique to buildings. Working closely with our clients, our dedicated professionals help to establish and understand the needs of a range of building projects. This is where great ideas and rewarding careers are built. For both public and private sector clients, we provide unique plan checking capabilities as well as energy engineering and performance engineering services, covering each of the major engineering disciplines - structural, mechanical, and electrical. In addition, we bring together innovative and functional design solutions for companies involved in the discovery, research and development, and commercial scale manufacturing of pharmaceuticals, biotechnology, and medical device products. Focused on providing cost-effective solutions to engineering challenges, we are involved in a diverse range of projects from the initial planning stages to design, construction, and commissioning. Our structure cultivates career growth and provides opportunities as unique as you are.

Your Duties:
• Duties will include but are not limited to preparation of project proposals and resulting contracts, project implementation plans, resource planning, quality control and design review, project team review and coordination, client, and financial management.
• May assist as mechanical engineering lead overseeing the engineering & design of plumbing / fire protection / HVAC and other mechanical systems for new and renovated buildings.
• Mechanical engineering - actual designs including the completion of code reviews, preparation of the basis of design, system calculations, mark-up of drawings, specification preparation, field investigations, construction estimating and site inspections and other such design as required to execute the mechanical construction for new or renovated buildings.
• May perform project manager duties as needed.
• Some travel to site locations or other Stantec offices may be required.

Your Capabilities and Credentials:
The successful candidate will possess:
• Requires a B.Sc. Mechanical Engineer
• NYS PE desired, registration in other states a plus
• 7+ years’ experience required
• Must have strong Mechanical Engineering skills in Plumbing, Fire Protection, HVAC, and related mechanical systems
• Prior management experience is a plus
• Prior consulting engineering experience is required
• Experience using Autocad, Revit, Trane Trace or Equest is a plus
• Excellent verbal and written communication skills
• Excellent interpersonal skills with team members and clients

We put people first, and it shows. We’re proud to be one of New York’s Best Places to Work, as named by The Business Council of New York and NYS-SHRM.

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• (Endicott) https://jobs-stantec.icims.com/jobs/25927/senior-mechanical-engineer---buildings/job
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, 2018.
  - New subscription will run the calendar year 2018.
  - Cost to advertise for the 2018 year is $50.
- Sign up now for the 2018 year On Pay Pal [http://twintiers.ashraechapters.org](http://twintiers.ashraechapters.org)
  
  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.
  
  From Web site please visit: [http://twintiers.ashraechapters.org](http://twintiers.ashraechapters.org)

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

Business Card Advertising 2018

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 2018. 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 2018 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:Twin Tier Newsletter Editor Email)
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, refrigeration 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 promote a sustainable world”

Twin Tiers Chapter Mailing Address:
Twin Tiers ASHRAE Chapter
P.O. Box 6706
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