March Chapter Meeting

Student Night & YEA Night

March 17, 2015

Presentation:

**Topic:**
Center of Excellence Tour at Binghamton University

**Speaker:**
Jason Gilbert, P.E.
Dept. of Physical Facilities at Binghamton University
(See Page #12 for full details)

To register, visit the Chapter website:
http://twintiers.ashraechapters.org
and select the “Programs” page.

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

The American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE), has provided the information, text, graphics and links herein as a convenience for informational purposes only. Persons accessing this information assumes full responsibility for its use.
Dear Twin Tiers Chapter Members,

Thank you to all our members who have been making a great effort to attend meetings this year. It’s truly great to see such a dedicated and cheerful group of individuals come together to make our great chapter succeed.

Thank you to all who made February’s meeting possible. And a special thanks to Danny Miller for making the long challenging trip to Owego New York. And what a great presentation it turned out to be! Who would have thought that with a couple sensors and a control board you can make a plain rooftop unit into a top of the line, energy efficient, piece of equipment. Great information that I’m sure we’ll all keep handy.

This month we’ll be back in Binghamton for a tour of Binghamton Universities brand new Center of Excellence. This is a brand new high tech/energy efficient building employing many new and exciting green technologies. Our very own Jason Gilbert has done a great job making this meeting happen. Any of you who know Jason know, his chapter meetings are always most entertaining!

Don’t forget to mark your calendars for our Annual Spring Symposium on April 21st at the Owego Treadway Inn and for our Annual Golf Tournament on June 16th.

I hope to see you all there!

Best regards,
Andrew Nice
Twin Tiers Chapter President
Twin Tiers Chapter– Employment Opportunities

If your company has any Employment Opportunities that you would like to advertise in the Newsletter please send to ASHRAE

Outside Sales Engineer

Outside Sales Engineer Wanted – H&V Equipment Sales, Inc.

H&V Equipment Sales, Inc. a manufactures representative for applied HVAC equipment is seeking a motivated salesperson to help expand its market presence in Western and Central NY.

Responsibilities will be working with local mechanical contractors in the plan/spec and design/build markets, providing quotations for equipment, generating submittals and sales orders.

Candidates should poses a thorough knowledge of Mechanical HVAC systems, have good communication, sales and computer skills, and be willing to travel within the sales territory.

Other skills considered favorable to the applicant are actual HVAC field installation, service, HVAC design experience and/or HVAC sales experience.

Please email resume to Thomas Snyder at tsnyder@hvgroup.us

H&V Equipment Sales, Inc. is a division of H&V Group.
MECHANICAL ENGINEER

Delta Engineers, Architects, & Land Surveyors, P.C., a growing upstate NY design firm, is currently seeking a Mechanical Engineer in our Endwell, NY office. Experience in HVAC, Plumbing and Fire Protection is highly preferred.

Primary Duties Include:
- Using methods recommended by senior project team members, perform work which involves conventional and/or complex types of plans, investigations, surveys, structures, or equipment
- Is expected to solve engineering problems using thermodynamics, fluid mechanics, and heat transfer to design water, waste water, hydronic, and gaseous piping and ductwork. Design and selection of HVAC equipment associated with the building environment.
- Prepare, or assist in the preparation of, engineering documents, details, schedules or reports as assigned
- Attend and/or lead client meetings/presentations – daytime or evenings
- Communicate with client representatives, contractors, suppliers, etc.
- Serve and/or lead field inspection teams to obtain and document existing conditions using field notes, sketches, and photography
- Develop quantity take offs and construction cost estimates
- Develop project specifications and bidding documents
- Participate and/or lead site visits/inspections/documentation during construction

The preferred candidate should have a minimum 2 year degree with at least 5 years relevant experience, or 4 year degree with at least 2 years of relevant experience. Compensation for this position depends on experience. This position provides a competitive benefits package.

Delta Engineers, Architects, & Land Surveyors, PC is an Equal Opportunity Employer of Protected Veterans and Individuals with Disabilities.

To apply, visit our website career page at: http://deltaengineers.com/current_careers.php
ASSISTANT ELECTRICAL ENGINEER

Delta Engineers, Architects, & Land Surveyors, P.C., a growing upstate NY design firm is currently seeking an Assistant Electrical Engineer in our Endwell, NY office.

Primary Duties Include:

- Using methods recommended by senior project team members, perform work which involves conventional types of electrical plans, field investigations, and design.
- Is expected to try to solve engineering problems using experience, judgment and education, but is expected to ask for assistance when required.
- Be proficient in the use of computer applications including word processing, spreadsheets, Revit, and CADD. Become proficient in Group design software(s).
- Prepare, or assist in the preparation of, engineering documents, details, schedules or reports as assigned.
- Attend client meetings/presentations – daytime or evenings.
- Communicate with client representatives, contractors, suppliers, etc.
- Serve on field inspection teams to obtain and document existing conditions using field notes, sketches, and photography.
- Develop quantity take offs and construction cost estimates.
- Participate in site visits/inspections/documentation during construction.

The preferred candidate should have at least an Associate’s degree in Electrical Engineering. Compensation for this position depends on experience. This position provides a competitive benefits package.

Delta Engineers, Architects, & Land Surveyors, PC is an Equal Opportunity Employer of Protected Veterans and Individuals with Disabilities.

To apply, visit our website career page at: http://deltaengineers.com/current_careers.php
PROJECT ENGINEER – ELECTRICAL

Delta Engineers, Architects, & Land Surveyors, P.C., a growing upstate NY design firm, is currently seeking an Electrical Project Engineer in our Endwell, NY office. Project Engineers work with the Project Manager to develop design solutions of a specific discipline which are incorporated into contract documents by the design team. While these positions are primarily technical, assistance with some project management duties is likely.

Primary Duties Include:

- Assist the Project Manager in developing design parameters, scopes of service and person-hour estimates during the proposal stage
- Assign individual work tasks and provide guidance to subordinate team members of that design discipline. Discuss the desired expectations of the delegated work including the amount of time estimated to complete the work
- Responsible for the quality control of work products (e.g., reports, studies, drawings, letters, calculations, memos, etc.)
- Responsible for adherence to applicable codes
- Responsible for the preparation of technical specifications
- Responsible for the processing of shop drawings and submittals
- Monitor performance of project team members and provide feedback to the Project Manager.
- Attend and/or lead client meetings/presentations – daytime or evenings
- Communicate with client representatives, contractors, suppliers, etc.
- Participate and or lead site visits/inspections/documentation during construction

The preferred candidate should have an Associate’s degree with a minimum of 7 years experience or a Bachelor’s degree with a minimum of 4 years relevant experience; a PE License is preferred. Compensation for this position depends on experience. This position provides a competitive benefits package.

Delta Engineers, Architects, & Land Surveyors, PC is an Equal Opportunity Employer of Protected Veterans and Individuals with Disabilities.

To apply, visit our website career page at: [http://deltaengineers.com/current_careers.php](http://deltaengineers.com/current_careers.php)
PROJECT ENGINEER - STRUCTURAL

Delta Engineers, Architects, & Land Surveyors, P.C., a growing upstate NY design firm is currently seeking a Structural Project Engineer in our Endwell, NY office. Project Engineers work with the Project Manager to develop design solutions of a specific discipline which are incorporated into contract documents by the design team. While these positions are primarily technical, assistance with some project management duties is likely.

Primary Duties Include:

- Assist the Project Manager in developing design parameters, scopes of service and person-hour estimates during the proposal stage
- Assign individual work tasks and provide guidance to subordinate team members of that design discipline. Discuss the desired expectations of the delegated work including the amount of time estimated to complete the work
- Responsible for the quality control of work products (e.g., reports, studies, drawings, letters, calculations, memos, etc.)
- Responsible for adherence to applicable codes
- Responsible for the preparation of technical specifications
- Responsible for the processing of shop drawings and submittals
- Monitor performance of project team members and provide feedback to the Project Manager.
- Attend and/or lead client meetings/presentations – daytime or evenings
- Communicate with client representatives, contractors, suppliers, etc.
- Participate and or lead site visits/inspections/documentation during construction

The preferred candidate should have a BS degree with a minimum of 8-10 years relevant experience; a PE License is required. Compensation for this position depends on experience. This position provides a competitive benefits package.

Delta Engineers, Architects, & Land Surveyors, PC is an Equal Opportunity Employer of Protected Veterans and Individuals with Disabilities.

To apply, visit our website career page at: http://deltaengineers.com/current_careers.php
Delta Engineers, Architects, & Land Surveyors, P.C., a growing upstate NY design firm, is currently seeking a Project Architect in our Endwell, NY office. This person must be a leader who gets things done. The Project Architect works with the Project Manager to develop design solutions which are incorporated into contract documents by the design team. While these positions are primarily technical, assistance with some project management duties is likely.

Primary Duties Include:

- Assist the Project Manager in developing design parameters, scopes of service and person-hour estimates during the proposal stage
- Assign individual work tasks and provide guidance to subordinate team members of that design discipline. Discuss the desired expectations of the delegated work including the amount of time estimated to complete the work
- Responsible for the quality control of work products (e.g., reports, studies, drawings, letters, calculations, memos, etc.) for the specific discipline
- Responsible for adherence to applicable codes
- Responsible for the preparation of technical specifications
- Responsible for the processing of shop drawings and submittals
- Considers alternate designs and value engineering
- Responsible for meeting scheduled deadlines
- Monitor performance of project team members and provide feedback to the Project Manager. Discuss potential corrective action with the Project Manager as required
- Attend and/or lead client meetings/presentations – daytime or evenings
- Communicate with client representatives, contractors, suppliers, etc.
- Participate and or lead site visits/inspections/documentation during construction

The preferred candidate should have a BS degree with a minimum of 8-10 years relevant experience. An RA is required and candidate must have experience as a Lead Project Architect. Compensation for this position depends on experience. This position provides a competitive benefits package.

Delta Engineers, Architects, & Land Surveyors, PC is an Equal Opportunity Employer of Protected Veterans and Individuals with Disabilities.

To apply, visit our website career page at: http://deltaengineers.com/current_careers.php
YEA Message

YEA: Young Engineers in ASHRAE

Travis Fisher & Mike McGinnis

The first YEA event of the New Year will be a tour of the J&K Pipe Shop followed by Bowling at Laural Bowl. The exact date is TBD but the plan is for late January or early February. We will have additional information at the meeting in January. If anyone has additional events or activities that they would like to see, please contact Travis or Mike. Thanks.

Travis Fisher & Mike McGinnis
Twin Tiers Membership Committee
tf222@cornell.edu, mmcginnis@rlkistler.com

CURRENT LOCAL MEMBERS:

<table>
<thead>
<tr>
<th>Evan Hallas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandre P. Lovallo</td>
</tr>
<tr>
<td>Bryan D. Simpson</td>
</tr>
<tr>
<td>Saurabh K. Shrivastava, PhD</td>
</tr>
<tr>
<td>Timothy J. Envid</td>
</tr>
<tr>
<td>Christopher M. Shumeyko</td>
</tr>
<tr>
<td>Andrew D. Nice</td>
</tr>
<tr>
<td>Michael T. McGinnis</td>
</tr>
<tr>
<td>Joseph Parisella</td>
</tr>
<tr>
<td>Travis Fisher</td>
</tr>
<tr>
<td>Jacob A. Schatz</td>
</tr>
<tr>
<td>Stephen L J Wage</td>
</tr>
<tr>
<td>Devin Shapley</td>
</tr>
<tr>
<td>Timothy Fabian</td>
</tr>
<tr>
<td>George J. Slavik III</td>
</tr>
<tr>
<td>Richard Lance</td>
</tr>
</tbody>
</table>

The primary objective for the YEA Committee of Members Council is to enhance our member benefits for young professional ASHRAE members by identifying activities and services focused on their needs.

Young Engineers Event:

We had an awesome time at the driving range, mini-golf, then drinks and wings at a local pub. We learned 2 things; the older YEA members had no chance at out eating the new YEA members, and we should all stick to engineering!

Thanks for the great time! Keep an eye out for future events.
**Presidential Award of Excellence (PAOE)**

<table>
<thead>
<tr>
<th>Membership Promotion</th>
<th>Student Activities</th>
<th>Research Promotion</th>
<th>Historical</th>
<th>Chapter Operations</th>
<th>Chapter Technology Transfer</th>
<th>Grassroots Government Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN/PAR</td>
<td>500/800</td>
<td>300/500</td>
<td>800/1050</td>
<td>100/300</td>
<td>400/1000</td>
<td>450/1050</td>
</tr>
<tr>
<td>Current</td>
<td>510</td>
<td>665</td>
<td>370</td>
<td>375</td>
<td>1020</td>
<td>650</td>
</tr>
</tbody>
</table>

POINTS CURRENT AS OF 3/06/2015

**Chapter Committee Chairs**

**Technology Transfer**
Doug Breese
dbreese@labellapc.com
(585) 402-7090

**Government Activities**
Petros Papathomopoulos
(607) 723-9421
ppapathomopoulos@mjinc.com

**Refrigeration**
Tim Fabian
tfabian@meiersupply.com
(607) 427-0436

**Golf & Clambake Outing**
Jason Gilbert
gilbert@binghamton.edu
(607) 777-2240

**Membership Promotion**
Michael McGinnis
mmcginnis@rlkistler.com
(607) 727-3168

**Nominating**
James F. Chesko
jchesko@airtemphvac.com
607-772-8362

**Meeting Reception**
Petros Papathomopoulos
(607) 723-9421
ppapathomopoulos@mjinc.com

**H.O. Ward Scholarship**
Jason Gilbert
gilbert@binghamton.edu
(607) 777-2240

**Research Promotion**
Matt Hawley
mhawley@airtemphvac.com
(607) 772-8362

**Student Activities**
Jason Gilbert
gilbert@binghamton.edu
(607) 777-2240

**Membership Directory**
Michael McGinnis
mmcginnis@rlkistler.com
(607) 727-3168

**Albern Education Fund**
Richard Sanguinito
rsanguinito@deltaengineers.com
(607) 231-6605

**Honors & Awards**
Andrew Nice
anice@meiersupply.com
607-760-5960

**Historian**
Richard Sanguinito
rsanguinito@deltaengineers.com
(607) 231-6605

**Symposium– Fall/Spring**
Travis Fisher
tff222@cornell.edu
(607) 255-5608

**Auditing**
Rick Lopez
rslopez@proairplus.com
(315) 487-8791

**Webmaster**
Mike Colwell
mcolwell@mail.ashrae.org
(607) 724-8282

**Newsletter Editor**
Andrew Nice
anice@meiersupply.com
607-760-5960

**YEA: Young Engineers**
Travis R. Fisher/Mike McGinnis
607.231.6644
tffisher@deltaengineers.com

**Publicity**
Michael McGinnis
mmcginnis@rlkistler.com
(607) 727-3168
### Twin Tiers Chapter—Monthly Meeting Information

#### 2014-2015 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>
<tbody>
<tr>
<td>16-Sep</td>
<td>Rick Allabaugh/Andy Nice</td>
<td>UMH Hilltop VRF Tour &amp; Presentation</td>
<td>28</td>
</tr>
<tr>
<td>21-Oct</td>
<td>Various / TBD</td>
<td>Fall Engineering Symposium - Daytime</td>
<td>-</td>
</tr>
<tr>
<td>21-Oct</td>
<td>Seth Weisel</td>
<td>Galaxy Brewing Tour</td>
<td>25</td>
</tr>
<tr>
<td>20-Jan</td>
<td>Art Studer / Chuck Gaylord</td>
<td>Ice Rink Tour &amp; Presentation Theme: Membership/Refrigeration/Student/YEA Night</td>
<td>23</td>
</tr>
<tr>
<td>17-Feb</td>
<td>Richard Miller / Danny Miller</td>
<td>Case study of transforming “dumb” roof top units to energy efficient machines. It is brain surgery. Theme: Research Promotion</td>
<td>36</td>
</tr>
</tbody>
</table>
| 17-Mar     | Jason Gilbert                        | Binghamton University Tour & Presentation  
Theme: Student/YEA Night                                                                                   |            |
| 21-Apr     | Multiple/TBD                         | Spring Engineering Symposium—Daytime                                                                   |            |
| 19-May     | Lanny Joyce                          | Cornell University LEED Gold Weill Hall Biomedical Lab Tour & Presentation  
**Theme:** Membership Promotion                                                                         |            |
| 16-Jun     | None                                 | Golf Tournament                                                                                         |            |

**NOTE:** Speakers and topics are subject to change based on availability.
**Twin Tiers Chapter March Meeting Details**

**March Chapter Meeting**

**March 17, 2015**

**Student/YEA Night**

**EVENT:** Center of Excellence Tour at Binghamton University

Bring your lucky charms to Binghamton University’s COE where future engineering and scientist come together in this new $30M, 114ksf glass, metal, and stone building that adjoins their Biotechnology building. Key research in electronics packaging, energy-smart electronic systems, and energy harvesting & storage brings together students with government, industry partners, and community leaders. The building was built to LEED standards and features the latest technology for heat recovery and humidity control. Other features include a naturally ventilated atrium with adaptive cooling, and radiant floor heating.

**DATE:** Tuesday, March 17th, 2015

**TIME OF THE TOUR:** 5:00 PM

**TOUR LOCATION:** Binghamton University – Center of Excellence

**DINNER TIME:** 6:00 PM

**DINNER LOCATION:** California Grille Banquet Room 912 Vestal Parkway, NY 13850

**PRESENTER:** Jason Gilbert, Mechanical Engineer, Dept. of Physical Facilities at Binghamton Univ.

**AGENDA:**

5:15 – 6:15 - Tour the Center of Excellence

6:30 – 7:30 - Dinner and Brief Chapter Meeting at California Grille

7:30 – 8:30 - Presentation

**MENU:** Corned Beef, Chipotle Chicken and Baked Ziti with Spicy Black Beans, Parsley Red Potatoes, and Coleslaw. Coffee/Tea/Water.

**REGISTRATION:** $25.00 Early Registration (By 3/13/2015)

$30.00 (After 3/13/2015)
Twin Tiers Chapter March Meeting Details

MAPS:

Tour Directions: Follow Vestal Parkway East (Rt434) and turn RIGHT onto Murray Hill Rd. Take first LEFT towards the Center Of Excellence and Biotech buildings.

Dinner Directions: Turn RIGHT onto Murray Hill Rd, then turn LEFT and follow Vestal Parkway West (Rt434). Stay on Vestal Parkway West for 4-1/2 miles and turn LEFT onto Airborne Ave. Additional Parking at Joanne Fabrics across the side-street.

CONTACT: Doug Breese
dbreese@labellapc.com
(585) 402-7090
Twin Tiers Chapter– February BOG Meeting Minutes

Board of Governors Meeting Minutes

Date: Tuesday 2/17/2015 @ 4:00
Location: Owego Treadway Inn

The meeting was called to order at: 4:09 p.m. by Andy Nice

1. Call to Order and Attendance: Andy Nice, Doug Breese, Travis Fisher, Devin Shapley, Matt Hawley, Jason Gilbert, Rick Sanguinito, Jacob Schatz

2. General Announcements – Andy Nice
   a) October Meeting Minute Approval: Motion By: Travis Fisher
      Second By: Jason Gilbert

3. Treasurer’s Report - Petros Papathamopoulos
   • All Accounts are in good standing.
   • Audit Update: Sent out today

4. PAOE Responsibility – Andy Nice
   Membership Promotion (510/500/800) Mike McGinnis (Not Present)
      No new updates.

   Student Activities (665/300/500) Jason Gilbert
      No new updates.

   Research Promotion (345/800/1050) Matt Hawley
      To start Donor Call Sheet

   History (375/100/300) Rick Sanguinito (Not Present)
      No new updates.

   Chapter Operations (915/400/1000) Andy Nice
      Need to find new members for audit committee.
      Rick Sanguinito volunteered
      Looking for one more member to volunteer - Jason Gilbert possibly

   Chapter Technology Transfer (550/450/1050) Doug Breese
      No new updates.

   Grassroots Government Activities (400/500/650) Petros Papathamopoulos (Not Present)
      No new updates.
5. Committee Reports - Andy Nice

   **Meeting Reception:** Petros Papathomopoulos *(Not Present)*

   **Golf & Clambake:** Jason Gilbert / Mike McGinnis
   Would like to grow the clam bake portion
   Matt still looking to Mountain Top Pricing

   **Refrigeration:** Tim Fabian *(Not Present)*
   No New Updates

   **Webmaster:** Mike Colwell *(Not Present)*
   No New Updates

   **Newsletter:** Andy Nice
   If you would like information published in the newsletter please send Andy your information
   3 Mondays before the chapter meetings

   **YEA:** Mike McGinnis / Travis Fisher
   Going to look into having a bowling night

   **Publicity:** Mike McGinnis *(Not Present)*
   No New Updates

   **Symposium:** Travis Fisher
   No New Updates

6. OLD BUSINESS

1. **PayPal:** Look into changing account out of Shirley Jean’s Name & into a Non-Profit Account.
   Correcting the account manager issue first. - Petros

2. **Tompkins Charity Gift Fund:** Travis to send out Contact Information
   Utilize their forms for funds distribution, Travis to ask Tompkins for the original opening documents.

3. **Member Shirts:** Agreed on Charcoal Color Golf Shirts
   Shirts will be given to members who are attending the CRC & Members with attend ½ of the Meetings.

4. **Scholarship:** *(Revisit by the end of the year)*
   The HO Ward account is above $25k- looking into giving out scholarships
   Ask Jason the procedure needed to broadcast scholarship
   Can the scholarship apply to BOCES students
   Look into adding a scholarship tab on the website

7. NEW BUSINESS

   No new business.

**Meeting adjourned motion by:** Jake Schatz

**Second by:** Devin Shapley

The meeting was adjourned at: 5:16 p.m.
What Were They Thinking???

“The duct tape makes it all possible”

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.***
SAVE THE DATE
April 23, 2015
1:00pm - 4:00 pm EDT

FREE ASHRAE WEBCAST
New Tomorrows for Today’s Buildings:
Existing Building Commissioning

This FREE webcast will feature industry experts who will define the benefits of existing building commissioning for the environment, occupants, operations staff, and overall ownership costs. Viewers will be able to recognize the varied scopes of commissioning, when to apply comprehensive versus focused commissioning, and best practices in existing building commissioning specifications & contracting.

Visit www.ashrae.org/Webcast for additional information about the program, sponsorships, continuing education credits, speakers, and registration.
American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

TRAINING

New Publications from ASHRAE

ASHRAE, a leader in building information technology, develops publications that impact every facet of the environment, both indoors and out.

Data Center Design and Operation – ASHRAE Datacom Series CD 4th Ed.

This CD-ROM presents the full text of all eleven ASHRAE Datacom Series publications and Standard 127-2012 in fully searchable and printable PDF format. Authored by ASHRAE Technical Committee 9.9, the Datacom Series provides comprehensive treatment of data center cooling, energy efficiency, and related subjects.

$289 ($246 ASHRAE Member) / CD / 2014

ASHRAE Reference Offers Design Guidance on Healthcare HVAC Systems

The second edition of HVAC Design Manual for Hospitals and Clinics provides in-depth design recommendations based on best practices from consulting and hospital engineers, with a focus on presenting what’s different about healthcare HVAC systems.

$129 ($109 ASHRAE Member) / 312 pages / 2013

Visit www.ashrae.org/bookstore to learn more about these and other outstanding ASHRAE publications!
TRAINING

2015 NY-GEO Annual Conference

Geothermal Heating and Cooling:
"Meeting the Sustainability Challenges of the 21st Century"

When: March 17 & 18, 2015
Where: Skidmore College
Saratoga Springs, NY

Winner of the 2012 Sustainability Leadership Award from the Association for the Advancement of Sustainability in Higher Education (AASHE) for its use of geothermal heating and cooling in campus buildings, Skidmore aims to have 50% of its campus building space heated and cooled using GSHP by 2020.

The First Energy Node at Skidmore College—one of many geothermal installations on campus

Come learn and share best practices as an installer or designer of Geothermal Heat Pump Systems
or
As an architect, designer, owner, or developer of buildings who wants the most efficient and cost effective way to heat and cool your building(s).

Topics:
Continuing education credits available
• Efficient Design
• Product Showcase
• Funding Opportunities
• NYS Policies
• Skidmore Facility Tours
• Delivering Quality
• PACE Financing
• Growing the Market
• Geo+Solar/Wind = Net-Zero
• ...and more

To get involved, sponsor, become an exhibitor, suggest workshops or lead us to folks who should be invited, call 518-3136-GEO or email nygeoinfo@gmail.com Visit us at www.ny-geo.org

Do you have the Right Stuff?
Are you a geothermal rock star?
Do you want a free pass to attend geopaloosa?
Is your job worthy of being crowned the NY-GEO 2015 Top Job & the $500 Award?
If so, you need to apply at Top Job Application
This full day design-focused workshop examines best practices for combining modern, high efficiency wood-fueled boilers with hydronic distribution systems. It covers the operating characteristics of wood-gasification boilers, pellet-fired boilers, and the latest hydronic heating technology that complements these high efficiency heat sources. The hydronic topics discussed include low temperature heat emitters, high efficiency circulators, modern control techniques, and optimal use of thermal storage. The workshop culminates with several examples of how to combine these heat sources and distribution techniques into stable, efficient, and reliable systems.

If you plan to be involved in designing or installing high efficiency wood-based biomass heating systems, this workshop will present a wide range of design details that will help optimize the performance your systems deliver.

This workshop is required for installers who want to participate in NYERDA’s Renewable Heat NY program. This program currently has $20 million allocated for promoting the use of high efficiency / low emission biomass boilers within New York State, in both residential and commercial applications. Additional information on the Renewable Heat NY program is available at http://www.nyserda.ny.gov/renewableheatny.

This workshop is approved for 7 AIA and 3.5 BPI hour credits. AIA learning hours can be used to meet Professional Development Hour (PDH) requirements for NY’s licensed engineers.

**Here is the current 2015 Training Schedule:**

**Thursday, February 19, 2015**
8:00 AM - 5:00 PM  
Burgundy Basin  
1361 Marsh Road  
Pittsford, New York 14534

**Wednesday, May 20, 2015**
8:00 AM - 5:00 PM  
Clinton Community College  
136 Clinton Point Drive  
Plattsburgh, NY 12901

**Wednesday, April 8, 2015**
8:00 AM - 5:00 PM  
Holiday Inn Downtown Binghamton  
2-8 Hawley Street  
Binghamton, New York 13902

**Tuesday, June 16, 2015**
8:00 AM - 5:00 PM  
SUNY College of Environmental Science  
1 Forestry Drive  
Gateway Center  
Syracuse, NY 13210-2785

Course enrollment fee: $149* (which includes lunch, breaks, and PDF file of full presentation) *Groups of 3 or more attendees from same company: $126.65/each

For more information contact Meeting Planner,  
Heather Courtney at heather@meetingie.com or (518) 852-0740

Instructor Bio:  
**John Siegenthaler, P.E.,** is a mechanical engineering graduate of Rensselaer Polytechnic Institute, a licensed professional engineer, and Professor Emeritus of Engineering Technology at Mohawk Valley Community College. “Siggy” has over 35 years of experience in designing modern hydronic heating systems, including systems using high efficiency biomass boilers. John is principal of Appropriate Designs - a consulting engineering firm in Holland Patent, NY, and author of the textbook - Modern Hydronic Heating.
Climate Resilience in New York

http://www.dec.ny.gov/

Handling extreme events and everyday climate risks

New York's climate is becoming wetter and warmer. Scientists project greater weather variability, with intense storms becoming more frequent and floods more damaging. Precipitation is likely to increase somewhat, but between wet periods we may endure several weeks when no rain falls. How much our climate actually changes will depend in part on how successfully, and how soon, nations are able to reduce greenhouse gas emissions. But some climate change is already unavoidable. New York is working to estimate likely risks and increase resilience throughout the state.

Extreme events threaten resources and people

Extreme weather and floods make headlines -- they kill and injure, disrupt entire regions, contaminate water and promote insect borne diseases. Cleanup and restoration consume scarce public- and private-sector resources, often for months or years.

For New York's coastal and estuarine areas, the greatest climate risk is flooding from the combination of more frequent severe storms and rising seas. With more than half of the state's population, and infrastructure worth many billions of dollars, our coastal areas are vulnerable to widespread suffering and loss from floods.

For upland areas of the state, projections show more frequent heavy precipitation events. Torrential rains and heavy snow or ice create risks to life, health and infrastructure. Such storms can disrupt not only travel, electric power and communication, but also agriculture, tourism and other vital economic sectors.

Everyday climate risks also raise vulnerability

Not only extreme events, but also any change from the predictable and moderate conditions of the past can interfere with accustomed activities and create new risks. The changes discussed below have been observed in New York and are projected to continue.

Rising sea levels: Mid-range projections (25 to 75 percent likelihood) of sea-level rise along New York's coast are 18 to 50 inches in this century. Such high levels would greatly intensify the danger and damage from storm-related flooding.

Warmer temperatures: Long, intense heat waves raise health risks for human and animal populations. Warm winters and hot summers will likely lower the productivity of temperature-sensitive agricultural products like maple syrup, apples and dairy. Warmer weather also favors disease carriers and pests.
Climate Resilience in New York (Cont.)

**New precipitation patterns:** Heavy precipitation is expected to fall more frequently, and there may be a trend toward longer-lasting events that compound the damage. Similarly, persistent shortages of precipitation can be expected more often. Such shortages can lower field crop yields and reduce the amount of water available for drinking, irrigation and hydropower.

**Weather variability:** Unusual weather not only inconveniences people, but also disrupts natural cycles. For instance, warm spells in late winter can make plants bud and bloom early. Young leaves and flowers are vulnerable to severe damage if temperatures later swing back below freezing; early blooms may be gone before the arrival of birds or insects that pollinate and feed on them.

**Setting up for resilience**

Climate change impacts already are testing New Yorkers’ ability to survive problems and come back better. These impacts are likely to intensify, increasing the value of resilience measures adopted now.

As climate change progresses, more New Yorkers are likely to confront physical disasters like Hurricane Irene and Superstorm Sandy. What is more, most of us will encounter impacts that are less dramatic but still costly or disturbing - more dying trees, lower crop or garden yields, our favorite catch missing from the creel.

Recent experiences, accumulating data and current projections are revealing how climate risks threaten different areas of New York. Knowledge of these risks enables businesses, governments and individuals to plan for resilience.

**Community Risk and Resiliency Act (CRRA)**

To strengthen New York’s preparedness for climate change and help protect communities against severe weather and rising seas, Governor Andrew M. Cuomo recently signed into law the Community Risk and Resiliency Act.

CRRA requires applicants to certain State programs to demonstrate that they have taken into account future physical climate risks caused by storm surges, sea-level rise or flooding. It also mandates State-adopted sea level rise projections, which will be used as the basis for State resiliency decisions and will be available for use by all decision makers. CRRA applies to specific State permitting, funding and regulatory decisions, including smart growth assessments; funding for wastewater treatment plants; siting of hazardous waste facilities; design and construction of petroleum and chemical bulk storage facilities; oil and gas drilling, and State acquisition of open space.

**Sea-level rise projections**

New York State has sponsored a statewide study of the impacts of climate change on our population and resources. Titled ClimAID, the study was completed in 2011; a 2014 supplement updated its sea-level rise projections and incorporated data from recent severe storms and updated climate modeling.

An additional sea-level rise study, limited to Nassau and Suffolk counties, has been released by the New York State Resiliency Institute for Storms and Emergencies (RISE).
Climate Resilience in New York (Cont.)

Protecting families and communities
People sometimes raise concerns about the cost to mitigate greenhouse gas emissions and increase climate resilience. The preliminary analysis of ClimAID 2011 shows that failure to reduce emissions and adapt to climate change in a timely fashion may prove more costly than the supposed "savings" from delaying a response.

The high cost of doing nothing
It is important to compare outlays for adaptation measures with the costs of doing nothing, and to take into account the importance of climate change losses to society.

ClimAID 2011 initiated these comparisons with a statewide analysis of limited data on eight economic sectors. This study concluded that unless resilience measures are put in place, by mid-century the total costs of climate change for key economic sectors in New York State each year may approach $10 billion (in 2010 dollars).

The study projected the largest likely direct impacts and costs of climate change in coastal areas, chiefly impacting transportation, energy and other infrastructure, and natural resources. However, it concluded, all economic sectors and all parts of the state will feel impacts like lower agricultural crop yields and dairy production, or declining winter recreation tourism.

For one or more elements in each sector analyzed, the projections show the following mid-century (2050s) annual costs of climate change impacts: water resources, $116-203 million; ocean coastal zones, $44-77 million; ecosystems, $375-525 million; agriculture, $140-289 million; energy, $36-73 million; transportation, $100-170 million; communications, $15-30 million; and public health, $2,998-6,098 million. These figures probably understate the aggregate expected costs, especially for heavily developed coastal areas.

Improving resilience: cost-effective common sense
As the global average temperature rises, New Yorkers already are seeing more extreme precipitation, heat and storms. Making our properties and communities more resilient in the face of these changes is common sense and good business.

The Regional Greenhouse Gas Initiative
http://www.dec.ny.gov/

(RGGI) Carbon Dioxide Budget Trading Program
In New York and eight other Northeastern and Middle Atlantic states, the Regional Greenhouse Gas Initiative (RGGI) is promoting a clean-energy future with lower greenhouse gas emissions from electric power generation and savings for electricity customers. RGGI is the first mandatory market-based emissions trading program in the U.S. to reduce carbon dioxide (CO2) emissions and the first anywhere to use the cap-and-invest model for reducing pollution.

RGGI Support of Federal Clean Power Plan
In November 2014, the nine RGGI states sent a letter to EPA in support of its proposed Clean Power Plan:

Support Letter and Comments to EPA (PDF) - 11/7/14
http://www.dec.ny.gov/docs/administration_pdf/rggicppcomments1114.pdf
Press Release from RGGI States (PDF) - 11/7/14
http://www.dec.ny.gov/docs/administration_pdf/rggicommentpr1114.pdf

How RGGI Works
CO2 emissions cap
Together the nine RGGI states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island and Vermont) set a cap for total emissions of CO2 from electric generation facilities in the region. By agreement, the RGGI cap declines over time, gradually tightening emission limits: initiated at 165 million tons per year in 2005, the regional cap in 2014 is 91 million tons. Emissions caps (or CO2 Budgets) in individual RGGI participating states are equal to agreed-upon shares of the regionwide cap.

Emission allowances
Large electric power plants in the RGGI states are required to hold one tradable emissions allowance for each ton of CO2 they emit. The 168 facilities covered by this requirement together produce approximately 95 percent of electric generation CO2 emissions in the region. (Because power plants using renewable and nuclear technologies do not emit CO2, they are not subject to RGGI’s emissions allowance requirement.) Power plants acquire emission allowances through quarterly auctions that are jointly sponsored by the participating states, or by purchase from other allowance holders.
The Regional Greenhouse Gas Initiative (Cont.)

Benefits from RGGI
Consumer benefits
RGGI states invest most of the proceeds from the quarterly CO2 emission allowance auctions in consumer benefit programs with emphasis on end-use energy efficiency, renewable energy deployment and greenhouse gas abatement technology development region-wide. Of the more than $1.5 billion in proceeds since the first auction was held in 2009, approximately 80 percent has been allocated to consumer benefits. New York is investing most of its RGGI proceeds (totaling more than $583 million as of the end of 2013) in energy audits, energy efficiency measures and cleaner energy sources for residential, commercial and industrial buildings.

Lower CO2 emissions
Today in the RGGI region, power sector GHG emissions are more than 40 percent lower than they were when RGGI was initiated in 2005. RGGI’s cap is proving an effective accounting method for emission reductions attributable to multiple factors - in this case, efficiency improvements, fuel-switching, a carbon price signal and regulatory predictability. This year, in response to the findings of a scheduled program review, the RGGI participating states reduced the regionwide emissions cap by 45 percent. At 91 million tons, the new cap approximates the amount of actual power plant CO2 emissions, locking in emission reductions already achieved and is positioned to drive further reductions in future years. The reduced cap took effect on January 1, 2014.

Economic strength
It is notable that the RGGI participating states have achieved significant GHG emission reductions while their economies continue to grow. An independent study (Analysis Group link at right) projected positive economic outcomes through the end of the present decade from investment of the first three years’ (2009-2011) of RGGI proceeds:

- $1.6 billion in net economic benefit;
- $1.1 billion in electricity bill savings for consumers;
- 16,000 additional job-years; and
- $765 million retained in local economies due to reduced fossil fuel demand.

Transformative investments of RGGI proceeds also are enhancing New York's green economy, stimulating local economies and creating jobs by removing barriers and promoting carbon reduction practices (e.g. smart grids, clean industries and advanced technologies for power and transportation).
RGGI as a model for action

RGGI requires emission reduction from the electricity system as a whole using a regional framework consistent with the regional basis on which the electric system operates. Under this regional, market-based approach, electric generators can achieve the most cost-effective emission reductions possible. At the same time, RGGI is straightforward to administer. States determine compliance unit-by-unit simply by ascertaining that each regulated source holds allowances sufficient to cover its own emissions. The RGGI states have shown that a system-based cap-and-invest program can achieve cost-effective reductions in regional electricity emissions, facilitate the transition to a lower-emitting and more efficient power sector and also create economic benefits and jobs. RGGI offers a successful model for consideration as the nation establishes guidelines for regulation of power plant CO2 emissions.

More about The Regional Greenhouse Gas Initiative:

**Policy DAR-12: "Sustainably Harvested" Determination for Purposes of "Eligible Biomass," Part 242** - Establishes guidelines for determinations by the Department regarding whether particular sources of forest-based woody biomass, and unadulterated wood and wood residues, are considered to be sustainably harvested, for purposes of being considered eligible biomass under the CO2 Budget Trading Program, Part 242

**Lodging of Consent Decree Pertaining to New York’s Regional Greenhouse Gas Initiative Regulations** - Lodging of Consent Decree pertaining to New York's RGGI regulations. Notice is hereby given that, on December 23, 2009, a proposed Consent Decree in Indeck Corinth, L.P. v. Paterson et al., Index No. 5280-09 (Judge McNamara), was lodged with the Supreme Court of the State of New York, County of Albany. The Consent Decree has been approved by all parties to the litigation and has been furnished to the Court pending the public comment period that is being announced today. The Consent Decree has not yet been entered by the Court as an Order.

**Economic Effects of RGGI** - The RGGI program is expected to have a small effect on electric power rates for consumers.

**How the Carbon Dioxide Budget Trading Program Works** - Mechanisms used by the RGGI cap-and-trade system, and how New York State will implement them

**CO2 Emissions Offset Projects** - Regional Greenhouse Gas Initiative (RGGI) CO2 Offset Allowances

ADVERTISE your business card:

• Current business card adds will expire at the end of this year, December 31, 2015.

• New subscription will run the calendar year 2015.

• Cost to advertise for the 2015 year is $50.

• Sign up now for the 2015 year On Pay Pal 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 anice@meiersupply.com.

From Web site please visit: http://twintiers.ashraechapters.org
Go to the News Letter tab, and place your order to advertise your business card.

Business Card Advertising 2015

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 2015. This is a great opportunity to get your name and business in front of the over 200 subscribers to our chapter newsletter. The price for the newsletter only is $50 for the entire 2015 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
anice@meiersupply.com
Thank you,
Sponsors!

2015 Business Cards

ASHRAE Twin Tiers Chapter

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

Thank you Sponsors!

MEIER SUPPLY CO., INC.
Refrigeration, Air Conditioning & Heating

Andrew Nice
Commercial HVAC Sales Engineer
Applied Products Division
607.760.5960 Cell

275 Broome Corporate Pkwy
Conklin, NY 13748
www.MeierSupply.com
ANice@MeierSupply.com

KISTLER
R. L. KISTLER, INCORPORATED

Mike McGinnis, P.E.
360 MILE CROSSING BLVD. ROCHESTER, NY 14624

Direct: (607) 727-3168
Office: (585) 436-1940
Fax: (585) 436-6006
Email: mmcginnis@rklkister.com
www.rklkister.com

Evan Hallas
Aerosol Operations Manager
ehallas@taitem.com
Taitem Engineering, PC 110
South Albany Street Ithaca,
New York 14850
p 607.277.1118 x104
c 607.592.0001
www.taitem.com

H & V GROUP
“Providing Integrated Efficient Solutions”

Manufacturers’ Representatives
Air Distribution
Mechanical Equipment
HVAC Warehouse

Richard R. Sanguinito, PE, LEED AP
Vice President

Tel: 607.231.6605
Fax: 607.231.6650
Email: rsanguinito@deltaengineers.com
860 Hooper Road
Endwell, NY 13760
www.deltaengineers.com

Thank you Sponsors!
Thank you Sponsors!

2015 Business Cards

Chris Devins
Account Manager

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

Ryan Byrd
Sales Engineer

Trane Commercial Systems
15 Technology Place
East Syracuse, NY 13057
Office (315) 234-1503
Fax (315) 433-9120
rjbyrd@trane.com
www.trane.com

Shey Doane
Sales Engineer

Trane Commercial Systems
15 Technology Place
East Syracuse, NY 13057
Office (315) 234-1509 Mobile (315) 382-2350
Fax (315) 433-9120
sdoane@trane.com
www.trane.com

Glenn Roberts
HVAC Sales Engineer - Equipment and Controls

Trane
15 Technology Place
East Syracuse, NY 13057 US
Office (315) 234-1527 Cell (315) 374-3050
Fax (315) 433-9120
groberts@trane.com
www.trane.com

John Anderson
Account Manager - Owner Markets

Trane
15 Technology Place
East Syracuse, NY 13057
Office (315) 234-1506 Cell (315) 415-0614
Fax (315) 433-9120
john.anderson@trane.com
www.trane.com

Daniel Brosnan
Modular Comfort Systems

5860 Belle Isle Rd. • Syracuse, NY 13209
Phone: 315-494-9048 Fax: 315-494-9528
7491 Willowbrook Rd. Victor, NY 14564 Phone: 585-398-8058 Fax: 585-924-0632
Cell: 315-951-5050 Email: dbrosnan@modcomsys.com Web: www.modcomsys.com
Thank you Sponsors!

2015 Business Cards

Victaulic

CHRISTOPHER WOLAK
Engineer

4901 Kesslersville Road
Easton, PA 18040
Email: chris.wolak@victaulic.com

Tel: 610/923-3888
Cell: 484/350-1954
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”

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.