

Northeast Chapter

Thermal Briefs

MARCH 2016

MARCH MEETING Tuesday, March 15, 2016

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Solving Dirt, Air, and Hydraulic Separation Problems

By Joseph Samuell

1 PDH credit APPROVED

Free credit!* 12:00pm – Lunch and Presentation Italian American Community Center, Washington Ave Ext Members - \$30 Non-Members - \$35 Students - \$15

RSVP to Tim Houle no later than Thursday, March 9th Thoule@advancedcomfortsys.com or 518-884-8444 x3439

Seminar Description:

This session is designed to look at the potential problems dirt, air and pumping conflict present to the hydronic system designer. We will first examine the sources of dirt and other particles in a closed system and what methods are available to remove the particulate from the system. With dirt separation we will also explore the need for iron oxide removal and its removal through the addition of magnetic separation to the dirt separator. We will then look at the problems air presents to the designer, their sources and how to effectively control system air. We will finally look at primary secondary piping arrangements and methods of hydraulically decoupling the system to ensure proper pump performance for the hydronic system. Additionally we will explore how these functions are effectively combined into multi-functional components for providing simplified design and cost effectiveness.

*Sponsored by Northeast Sales Associates!

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Speaker Bio

Name: Joseph Samuell Company: Caleffi Hydronic Solutions

Jody graduated from the Maine Maritime Academy in 1983 with a Marine Engineering Degree and earned a U.S. Coast Guard license. After graduation he accepted a commission with the U.S. Navy and served as a nuclear trained officer on submarines. Jody's teaching career began at the Naval Education and Training Command in Groton, Conn.

Upon completing his service commitment, Jody turned his attention to the HVAC industry. He's invested over 20 years of experience in product management, technical support and training for boiler and tank manufacturers such as Heatmaker, AMTROL and most recently Viessmann. During this time Jody refined his industry knowledge, experience and his passion for teaching. His presentation style will keep you engaged and challenged as he discusses best methods to approach hydronic system design.



Message from the President

March...time to spring ahead...and also time to be tempted by Easter candy in every store (in my house, we have to stock up on Cadbury Mini Eggs while they're available). Unlike last year, it seems as if winter never even came for the Capital District. This winter included record high average temperatures and an unusually low amount of snow accumulation. I had my snow blower all ready to go for nothing! I'm definitely not complaining, but if you are a skier or snowboarder, you may have stronger feelings about this unusual winter.

Thank you to those of you who participated in this year's Superbowl Pool last month and congratulations to the winners! The Superbowl Pool is our second largest Research Promotion fundraiser each year and we thank you for making it a success.

We will be announcing details for a YEA event in the very near future. I remember fondly a few years ago a YEA event at the Albany Curling Club. I never thought that in my life I would be able to watch curling on the Olympics and say "yeah, I did that once". Unfortunately we kind of dropped the ball with YEA activities last year which is a disservice to the chapter members for which I am very sorry, and look forward to impoving.

Please also keep your eyes open for information about the ASHRAE webcast "*Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox*", hosted by the ASHRAE Northeast Chapter with the generous support of Trane Co. for inviting us to utilize their facility in Latham. Thursday April 21st, 2016, 1:00-4:00 pm *worth 3 PDHs*.

I just reviewed our recent chapter meeting attendance history, and we are looking good folks! From the 2013-14 to 2014-15 chapter years we improved our average chapter meeting attendance by 10 percent. From the 2014-15 to 2015-16 chapter years so far we have improved the average meeting attendance by another 23 percent! Thank you so much everyone for joining us at our chapter meetings. This is an indication to me that our President Elect/CTTC/Program Chair, David Houle, is doing an exceptional job of finding topics that interest you. We are always looking for your feedback; if you have a topic or presenter in mind, by all means contact us to make recommendations.

As always, please keep encouraging your colleagues to become ASHRAE members and join to us at our Chapter meetings; the more the merrier!

Sincerely, Dan Williams 2015-2016 Northeast Chapter President



Message from Membership Promotion

MARCH IS MEMBERSHIP PROMOTION MONTH! Buy one Get One Free is Back!

Bring a non-member friend to the ASHRAE Meeting on March 15 to introduce them to our Chapter and one of your meals is FREE! Can't make this meeting? Another month has a meeting more relevant to your colleague's area of interest? No worries! Buy One Get One Free coupons for future meetings will also be distributed to all members in attendance. Use them to market to your clients! ...And......Are ASHRAE Meetings Boring? Well, we're going to liven *this* meeting up! We're teaming up with YEA (Young Engineers in ASHRAE) this month to add a little fun. It's even rumored that there may be Prizes for some lucky winners, so come join us!



Roster 2016 is now being prepared! Did you OPT IN or OUT

yet? If not, please see the February Newsletter (page 4 under Membership Promotion) and send us the form with your contact info. We want all our members to be included!

LADIES LUNCHEON – Save the Date!

Ladies, You are cordially invited to attend a gathering of your fellow ASHRAE Women Members on : April 12, 2016 Time and Location TBD

Meet Our Members

Welcome back!

Returning or Transferring Into our Chapter

Mr. Daniel Alain Coutin Mr. Bradley B Juneau Mr. Jeffrey Thibodeau Dr. Dennis R Landsberg EME Group Trane AAF International L&S Energy Services Inc

New Members

Ms. Adrienne L Kleiber Mr. Jacob Andrews Pinnacle Innovations Trane

Congratulations to Kristin Gustafson for being included in Albany's Business Review's "40 under 40" list!

Click for link to the article.



Current PAOE Chapter Summary

Membership Promotion	Student Activities	Research Promotion	Historical	Chapter Operations	Chapter Technology Transfer	Chapter Grassroots Government Activities	Chapter PAOE Point Totals
1105	605	830	350	275	125	-	3290

PAOE stands for the Presidential Award of Excellence and is a point system used within ASHRAE to **evaluate the success of each chapter**. Officers and grassroots chairs have the opportunity to earn PAOE points based on achievements and accomplishments designated by the ASHRAE Society President. Example activities for earning PAOE points include starting a new student chapter, holding at least eight regular chapter meetings in a year, and educating non-members about ASHRAE



Northeast Chapter Officers and Board of Governors 2015-16

Chapter President: President Elect/CTTC/Program Chair: Vice President/ Newsletter Editor: Treasurer: Secretary: Board of Governors Board of Governors: Grassroots Gov. Advocacy Chair: Honors & Awards Chair: Membership Chair: Student Activities Chair: **Research Promotion Chair: Refrigeration Chair**

Dan Williams David Houle Adam Feather Kendra Potasiewicz Trevor Gensch **Russ Danforth Gregory Kirkpatrick** Todd Turcotte John Thomas Tim Houle Douglas Belokopitsky Douglas Belokopitsky Kristin Gustafson Liesl Hammer Dave Ricci Chris Schmidt Ray Hickey

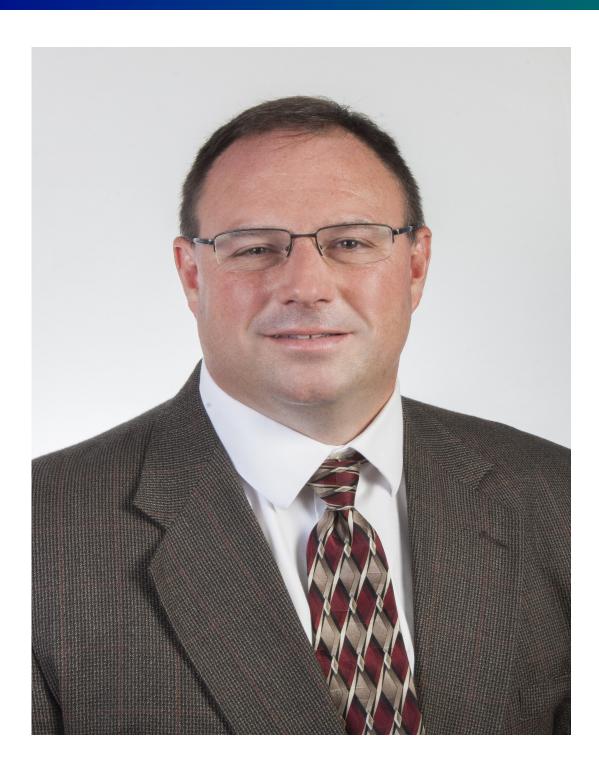
Please consider volunteering for a regional or society level position or let us know if you think of anybody who would be good for any of the positions listed at the following link:

https://www.ashrae.org/society-groups/committees/

If you have a professional relationship with any local government officials, please let us know!

The ASHRAE Northeast Chapter would like to reach out to them to promote sustainability topics. Government officials might include school board, state or provincial legislative committee, state or provincial agency, city council, county board, etc.





William D. Gerstler, PhD Northeast Chapter President – 2008 – 2009 ASHRAE FELLOW



Special History Report

Dr. Gerstler is the second ASHRAE Fellow of the Northeast Chapter having received this distinction at the 2016 Society Winter meeting in Orlando, Florida. He also has the distinction of being the Northeast Chapter President from 2008-2009. He was born and raised in Ann Arbor, MI. He attended Kenyon College in Gambier, OH where he received a BA in Physics and then on to Southern Illinois University in Carbondale, IL where he attained his MS in Mechanical Engineering. He went on to receive his PhD in Mechanical Engineering from the University of Minnesota.

Bill's first job, which occurred between his MS and PhD studies, was a Department of Energy Fossil Energy Fellowship at the Pittsburgh Energy Technology Center. The work related to coal preparation and lasted for three years. Bill moved to GE Global Research in Niskayuna, NY where he worked in the Thermal Systems Lab for 10 years and has spent the last 5 years with the Energy Systems Lab.

Graduate school at the University of Minnesota was an introduction to HVAC. An ASHRAE sponsored research project on Kitchen Ventilation led Bill to join the Student Branch of ASHRAE where he became the President for three years. He attended approximately eight Society meetings and joined the Task Group (TG) that became TC5.10 on Kitchen Ventilation. He very much liked the high impact on the everyday lives of people that ASHRAE brought to the forefront.

In 2001 Bill became a Member of ASHRAE when he converted his Student Membership. His work on the Characterization of Commercial Cooking Effluent particle sizes and gases, namely CO, CO2, NOx and hydrocarbons in general was one of two research projects. The Deposition of Grease in Exhaust Ducts was involved with the fate of the grease particles and grease vapor that penetrate the hood filtration system. The grease not removed at the filters ends up in the atmosphere and walls of the duct, both of which are problematic from a safety and environmental perspective. This ASHRAE Research work helped to revise NFPA 96 exhaust velocities from 1500 to 500 FPM.

In 2010-2011 Dr. Gerstler was the Principle Investigator for a CERDEC funded U.S Army project for a Combined Cooling & Power Module Communications Center. This project was part of the reduction of fuel for the military by better utilization of diesel power for propulsion, electrical power and cooling of the electronic equipment. The system was a unique membrane-based absorber/evaporator, which is a significant advancement in LiBr absorption refrigeration. The air cooled LiBr absorption technology greatly enhances the possibilities for waste heat powered cooling.

Also, in 2010 Dr. Gerstler became the Adjunct Professor for the HVAC class at RPI where he is also the faculty advisor for an active combined student chapter of ASHRAE and MCA. In his role as Adjunct Professor, he works with Assistant Instructor, Chet Vogel, former RPI graduate. Mr. Vogel was the owner of a consulting firm M-E/Vogel Taylor Engineers PC and was instrumental in establishing an endowment that supports the HVAC course.

Bill served the Northeast Chapter first as Membership Promotion Chair for two years and received the Thomas S. Brown Membership Award for Society year 2004-2005. He went on to serve the chapter through the Officer positions and became the Chapter President for Society year 2008-2009. Bill received the Region I Golden Gavel Award, the most prestigious Region I Award for a Chapter President, additionally receiving the President for Society and of Excellence for his management of the Northeast Chapter. He received the Region I Award for Outstanding Chapter Programs in 2007-2008. Bill also received the Society's Homer Addams Award for his work on 745RP the Characterization of Cooking Effluent research project.

Bill would like to stay involved with ASHRAE at the Chapter level and get involved with Society Technical Committees (TC's) having to do with Heat Transfer and Fluid Mechanics as these would be aligned with his work at General Electric Global Research. He would also like to be known as a Mentor for new ASHRAE members.

Bill is married and has two girls that are 10 and 14 years old which keep him very busy. In his spare time he enjoys Ice Hockey, Rugby and brewing some good beer. He is a member of the American Institute of Aeronautics and Astronautics (AIAA). This activity is aligned with work that he does involving cooling of GE products and devices. He volunteers time to GE Network Programs which involves various community related activities. We thank Bill for his fine work with ASHRAE and the Northeast Chapter.

Stan Westhoff Northeast Chapter Historian, February 2016





This webcast will feature industry experts who will define the importance of, and why we should strive for, net zero in the built environment. Viewers will be able to identify behaviors that create more effective ownership, design and construction teams, and will recognize the value of a collaborative process in building design and the impact on costs. With a strong emphasis on real-world applications, the program will also discuss the primary technical and financial challenges in achieving net zero buildings, and where this design approach can best be applied.

April 21, 2016 1:00 pm to 4:00 pm EDT

ASHRAE NORTHEAST is hosting this webinar at Trane's sales office! Please RSVP to <u>Adam Feather</u> if you're interested in attending! Lunch will be available at your own cost, which will be determined soon. More details to come, please reach out if you have questions.

Address: 301 Old Niskayuna Road, Latham, NY 12110





ASHRAE NORTHEAST CHAPTER SCHOLARSHIP APPLICATION

American Society of Heating, Refrigerating and Air-Conditioning Engi-

neers, Inc.,

The ASHRAE Northeast Chapter Scholarship Program is designed to encourage and assist in the education of men and women pursuing a career in the field of heating, ventilating, air conditioning and refrigeration (HVAC&R) through its granting of scholarships. The program also serves the public interest by aiding in the education of men and women to become qualified to practice within the HVAC&R field.

Personal Data

Last Name	First Name	Middle Initial
Student's Home Address		
City	State	Zip
E-mail address	Home Phone	
Date of Birth	Citizen- ship	

Education

High School	H.S. Location
H.S. Course of Study	Year Graduated H.S.
College or University	Location
Major	Cumulative Grade Point Average
Anticipated College or University Graduation Date	
Other School	Location
Course of Study	Year Graduated
Anticipated Gradua- tion Date	



Education (continued)

List of Engineering/ Technical Courses taken to date (applicant may refer to transcript):

Extra Curricular Activities and Hobbies:

Professional Data (provide a brief resume of your work experience)

Employer	From/To Dates	
Brief Job De- scription		
Employer	From/To Dates	
Brief Job De- scription		
Employer	From/To Dates	
Brief Job De- scription		

Professional Goals

What is your particular interest in a field(s) covered by ASHRAE, and describe one or more ways that the HVAC&R industry affects the lives of people in today's society. (300 words maximum, attach extra pages as required)



References

Please provide a total of two references along with a separate letter of recommendation from either: Professor, Faculty, Business Person or Former Employer.

Name & Relation

Name & Relation

Please list any associations with ASHRAE Northeast chapter members.

Name & Relation

Basic Criteria which all Scholarships are granted:

- 1. Full time enrollment in a college, university, or technical institute. Undergraduate students should be entering their sophomore, junior or senior year with at least one full year of studies remaining in the year for which the scholarship is granted. Graduate students can apply at any point during their studies as long as they have at least one full year of studies remaining in the year for which the scholarship is granted.
- 2. Study that is applicable to service in the HVAC&R profession.
- 3. A cumulative grade point average (GPA) of at least 3.0 on a scale where 4.0 is the highest (attach official transcript).
- 4. Association with the region covered by ASHRAE Northeast Chapter (Capital Region) by attendance to a school in the area or permanent address in the area.

I believe all of the above information to be true and complete and I hereby apply to the American Society of Heating Refrigeration and Air-Conditioning Engineers –Northeast Chapter for an ASHRAE Scholarship. I certify that I am not receiving full funding for my education from an employer, any branch of the Armed Services or any other organization.

Signature of Applicant

Date

APPLICATIONS MUST BE POSTMARKED BY Thursday, March 31th, 2016:



Mail or email completed application to: Johnson Controls Inc. 116 Railroad Ave. Albany, NY 12205 518-451-2700 David.e.ricci@jci.com Dave Ricci



Employment Opportunities

We are currently accepting employment opportunity advertisements for this year's newsletters. We have revised our cost for these postings. Rather than a set 'price' there is no cost, but we do highly encourage and appreciate any and all donations to RP, to aid in reaching our RP fundraising goal. Again, the newsletter is distributed to OVER 200 RECIPIENTS each month!

Interested in placing an ad? Please contact me at <u>adam.feather@trane.com</u>.



Business Card Ads

The ASHRAE Northeast Chapter would like to thank the following sponsors for choosing to help us by making a donation to ASHRAE Research Promotion:

We are currently accepting business card advertisements for this year's newsletters. The cost of a business card ad is \$10.00 per month (this money goes directly to Research Promotion; it is not income for our chapter operations).

If you list an ad for the remained of the year you will receive 1 month free and your ad will circulate to OVER 200 RECIPIENTS each month!

Interested in placing an ad? Please contact me at <u>adam.feather@trane.com</u>.



ASHRAE Learning Institute 2016 Spring Online Course Series

2 WAYS TO REGISTER

Take 3 or more courses and save 15% off registration!

Internet:	www.ashrae.org/onlinecourses
Phone:	Call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)
Price:	\$284 (\$219 ASHRAE Member); Two-part courses: \$484 (\$359 ASHRAE Member)
Note:	You may register up to 24 hours prior to an online course. Courses are in US Eastern Time.

Combined Heat & Power: Creating Efficiency through Design & Operations Mon, March 28, 2016 – 1:00 pm to 4:00 pm EDT

Commissioning Process & Standard 202 Wed, March 30, 2016 – 1:00 pm to 4:00 pm, EDT

IT Equipment Design Evolution & Data Center Operation Optimization Wed, April 6, 2016 – 1:00 pm to 4:00 pm, EDT

Complying with Standard 90.1-2013: HVAC/ Mechanical Wed, April 13, 2016 – 1:00 pm to 4:00 pm, EDT

Laboratory Design: The Basics and Beyond Mon, April 18, 2016 – 1:00 pm to 4:00 pm, EDT

Standard 188-2015 – Successfully Managing the Risk of Legionellosis

Air-to-Air Energy Recovery Applications: Best Practices Wed, April 27, 2016 – 1:00 pm to 4:00 pm, EDT

Fundamental Requirements of Standard 62.1-2013 Mon, May 2, 2016 – 1:00 pm to 4:00 pm, EDT

Variable Refrigerant Flow System Design & Applications Mon, May 16, 2016 – 1:00 pm to 4:00 pm, EST

The following courses are comprised of two parts. Registrants must attend both parts in order to receive CEU/PDH credits.

Exceeding Standard 90.1-2013 to Meet LEED® Requirements Part 1: Mon, April 11, 2016 – 1:00 pm to 4:00 pm, EDT Part 2: Wed, April 20, 2016 – 1:00 pm to 4:00 pm, EDT

Operations & Maintenance of High-Performance Buildings Part 1: Tue, May 17, 2016 – 1:00 pm to 4:00 pm, EDT Part 2: Wed, May 18, 2016 – 1:00 pm to 4:00 pm, EDT

ASHRAE HVAC Design Training

2 Courses, 5 Days of Intense Instruction

Atlanta • Cleveland • Halifax • Hong Kong • Kuala Lumpur

HVAC Design: Level I – Essentials - Registration is \$1,264 (\$1,009 ASHRAE Member)

Gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

HVAC Design: Level II – Applications - Registration is \$854 (\$699 ASHRAE Member)

HVAC Design: Level II — Applications provides instruction on HVAC system design for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. The training provides information that allows practicing engineers and designers an opportunity to expand their exposure to HVAC systems design procedures for a better understanding of system options to save energy.



ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.



