ASHRAE Philadelphia Chapter

May 2015
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COSTS

Fees are based on online reservations and prepayment.

Philadelphia Chapter Members:
$30

ASHRAE Members - Non-Chapter Members:
$40

Non- ASHRAE Member:
$40

Life Member:
NO CHARGE

Young Engineers (35 & under):
$25

Students:
$10



QUAKER CITY CLIMATE

Thursday, May 14, 2015

Connecting Green Building Outcomes to Enterprise Sustainability Programs

presented by

E. Mitchell Swann, PE
MDC Systems, LLC

(see page 6 for more information)

5:00 PM to 6:00 PM	Social Hour with Cash Bar
6:00 PM to 7:00 PM	Dinner
7:00 PM to 8:00 PM	Presentation

This is Past Presidents Night.

Please note that this event is free for Past Philadelphia Chapter Presidents.

Past Presidents should contact Hope at hope@mmco1.com to register.

Click here to Register

LOCATION

The Wyndham
400 Arch Street
Philadelphia, PA 19106

www.phillydowntownhotel.com

For directions, click here.

Young Engineers in ASHRAE Phillies Night

Sponsored by CM3 Building Solutions

Wednesday, June 3, 2015

See page 11 for more information.

2014- 2015

President
Mike Witkowski, PE

President-Elect
Ashley Lester, PE, LEED AP

Vice President
Casey Younkins, PE

Treasurer
Jeff Crozier, PE, CEM, LEED AP

Secretary
Mike Radio, PE

Senior Governor
Jared Johnson, PE

Governors
Michael Calabrese, PE, CEM, LEED AP
Brian Dail
Justin Mazur, PE
Mike Radio, PE

Newsletter & Website Editor
James Piscopo, PE, LEED AP

Chapter Technology Transfer Committee Chair
Chris Gale

Research Promotion Chair
Gary Debes

Basic School Coordinator
James Lill, PE

Refrigeration
Brian Dail

Membership Promotion Chair
Michael Calabrese, PE, CEM, LEED AP

Student Activities Chair
Erik App

Program Committee Chair
Ashley Lester, PE, LEED AP

Chapter Historian
Brian Dail

Young Engineers in ASHRAE
Jeffrey Pisarek, PE

Public Relations
Jared Johnson, PE

Grassroot Government Activities
Casey Younkins, PE

Golf Outing Director
Tim Reinking

PRESIDENT'S MESSAGE

Hello Everybody -

What an exciting past month! At our last meeting, we implemented some new variations to our trade show based on our members' feedback. The new format was well received and will be evolved for next year to make it even better. I highly recommend our engineering community continue to take advantage of the learning opportunity next year.

Shortly after the trade show, Ashley Lester, Chris Gale and myself represented ASHRAE at the CANstruction competition and had a great team building experience. All of this was followed up with our most successful golf outing in the past 10 years. We had over 35 foursomes and over a hundred and fifty golfers take to the links at DuPont Country Club. Tim Reinking did an awesome job putting this together and a special thanks to all of our sales representatives who help make this happen. The event was a great time for our members to socialize without the barriers work sometimes creates and to remember we are all part of the same community. Not to mention, you could not top the weather – blue skies and 85°F…

Remember our last meeting before the summer break is on May 14th featuring our very own Mitchell Swann. Mitchell is always an entertaining speaker and just happens to be a distinguished lecturer. I look forward to seeing you all there.

Position Highlight – Golf Outing Chair and our **Sustainability Chair** –

This month we are highlighting two lesser known chair positions and a dedicated board member. **Tim Reinking** has been supporting our chapter for the past several years. About three years ago, Tim took on the golf outing from Jared Johnson and helped evolve it to the fantastic event we just had. This past year was especially challenging due to the fact that we upgraded the location. It is never easy to change what was a successful event, but Tim took on the challenge and put in the hard work that is required to make it happen. Initially Tim looked at several different golf courses offering different levels of packages and financial exposure to our chapter, ultimately selecting DuPont. The date changed several times and the quantity of golfers increased beyond expectations in the last few weeks leading up to the event. Tim handled it all in stride and still had time to gather the door prizes. (Note his kids were not excited to find out the Xbox was a door prize and not for their use.) Additionally Tim took on the Sustainability Chair for our chapter. This is probably the 1st year I can recall where we had good discussions as to what we can do to improve this positon and evolve it for next year. Tim has put a lot of time and hard work into this chapter. The next time you see him, please thank him for his volunteerism.

-Mike

Mike Witkowski
Philadelphia Chapter President
c021@ashrae.net



CANSTRUCTION

This past April, Chris Gale, Ashley Lester and myself represented the ASHRAE team at the annual CANSTRUCTION competition. The competition had approximately 14 teams from all areas of our industry – architects, engineers, construction managers and owners. Each creation was on display on the 1st floor of Liberty Place for a week. In total, our display donated approximately 2,600 lbs of can goods to Philabundance and the total competition donated approximately 32,000 lbs. This was a great experience and we learned a lot during the process. A key lesson learned is that we need more team members. We are hoping to participate again next year, incorporating our lessons learned. If you are interested in participating next year, let us know.

To learn more about CANSTRUCTION, go to www.canstruction.org.

Mike Witkowski
c021@ashrae.net



Proposed ASHRAE Board of Governors Slate for 2015/2016

President – Ashley Lester, PE, LEED AP
President Elect – Casey Younkins, PE
Vice President – Jeff Crozier, PE, CEM, LEED AP
Treasurer – Mike Radio PE
Secretary/Governor – Tim Reinking
Governor— Michael Calabrese PE
Governor— Eric Feinshil
Governor— Sean Hughes
Senior Governor— Mike Witkowski PE

The above are the nominees made by our Nominating Committee for Chapter officers and governors for the Philadelphia Chapter of ASHRAE for 2015-2016. Any Chapter member is welcome to bring an additional nomination(s) for consideration at the May 14th Chapter meeting. At this meeting, the Chapter officers and governors will be voted on by the Chapter membership in attendance.

Grassroots Government Affairs Update

Lower Merion Township Considers Revising Noise Ordinance

Lower Merion Township is considering revising the Township's noise ordinance codes. At present, there is a single standard for the entire township, no matter what the property type is, and also allows for different interpretations of noise depending on the type of measuring device used. The updated code would define a specific method for measuring sound levels using A-weighted noise and refer to ANSI standards for ensuring noise measurement is done properly. The code would abandon the old "inside" and "outside" noise standards and rely on property line measurements. With the updated code, residents and business owners could be subject to fines from the township if they violate the property line sound levels defined for daytime or nighttime. A primary source of ambient noise is air conditioning equipment – cooling towers, chillers, condensing units, etc. How this code update, if approved, is implemented has concerned at least one Chapter member. What are your thoughts? Please feel free to e-mail us at c021vp@ashrae.net or if you are a resident or business owner in the Township and are concerned, consider contacting the township officials. A complete copy of the proposed code update can be found at the website below.

http://www.lowermerion.org/Modules/ShowDocument.aspx?documentid=10960

Are you interested in advertising your company in the
2015-2016 Philadelphia Area Directory of Associations, Consulting Firms, and Manufacturers' Representatives?

Email hope@mmco1.com
before May 15, 2015



Philadelphia's premier Facilities Engineering Association
Presents their First Annual

AFE Energy Symposium

Save the Date!

Wednesday, June 10, 2015

4:00-8:30 pm

Steamfitters Local Union 420 Hall
Townsend Road, Philadelphia

Multi-Speaker Presentations
Network w/Industry Peers
Vendor Tabletop Exhibits
Training Facility Tours

Meal & Snacks Included!

Don't Miss This Exciting Event … Mark your Calendar NOW!

For more information, contact Denny Hydrick or Dean Wallace
dhydrick@outlook.com or dean@appliedfacilitysolutions.com

AFE Association for FACILITIES ENGINEERING®

The Greater Philadelphia Chapter #6
Association for Facilities Engineering

CHAPTER 6 IS ONLINE!

Thursday, May 14, 2015

Connecting Green Building Outcomes to Enterprise Sustainability Programs

presented by

E. Mitchell Swann, PE
MDC Systems, LLC

Presentation Summary

Green, or high performance have become a target norm for almost any sizeable capital for most “world class” business enterprises. The reasons for this focus can vary from broad based concerns about the ‘public persona’, or PR to a more laser like focus on bottom line ($$ & ¢) savings direct to the balance sheet. However, it is sometimes difficult to translate what a new “bricks and mortar” office building or plant really means to overall corporate value and sustainability. Energy and resource savings can be reported cleanly on the bottom line, but there are other impacts which may not be readily captured and recorded. Properly assessing and capturing the impacts of green buildings in procurement, execution and operations on enterprise-wide sustainability metrics is essential to successfully measuring and monitoring a program’s real performance and value. This program will identify multiple impacts of green buildings on overall sustainability and how those impacts relate to key performance indicators as part of an overall enterprise sustainability program.

Speaker Bio

E. Mitchell Swann P.E., C. Eng, LEED AP has over 20 years of experience in the areas of management, engineering and construction for a wide array of clients in diverse industries in the USA and abroad. Mr. Swann’s career has included dispute resolution, consultation, forensic analysis, engineering design, construction, commissioning, validation and troubleshooting for complex mechanical, instrumentation, electrical and control systems for high-tech industrial, institutional and commercial clients. Mr. Swann's experience has included system design from concept development through construction, operations troubleshooting, master planning and expert witness consulting. He has served as liaison between the design and construction team during multiple projects and has been responsible for the successful field execution of the design intent, the start-up of critical building systems. He is well versed in the various types of project execution approaches from traditional bidspec to designbuild and has prepared proposals and scope documents for all types of projects.

Mr. Swann has authored several articles on issues in professional practice including the “Standard of Care and Consequential Damages” and is a co-author of the “ASHRAE Survival Guide to DesignBuild.” Mr. Swann is active in several Technical Committees within ASHARE, including TC 1.7-General Business, Management and Legal Education, TC 2.8-Sustainable Design, TC 9.10-Laboratory Systems and TC 9.11-Clean Spaces where he served as Chair for two terms. He is also a member of ISPE and the ABA where he is vice-chair of the Alternative Dispute Resolution Section Committee on Construction.

Membership Advancement

If you are currently an ASHRAE Associate Member, becoming a full Member is easier than you think!
See page 13 for details.

Please submit articles highlighting novel HVAC technologies to Chapter Technology Transfer Committee Chair Chris Gale (c021cttc@ashrae.net) for consideration in future newsletters.

Did you know there are free design guides available on the ASHRAE web site? The regular technical article is not the only place to get great free information each month. Take a few minutes to log on and see the variety of design guides available to download at no cost. The design guides can be located by using the link below.

https://www.ashrae.org/standards-research--technology/advanced-energy-design-guides

Using Wastewater for Cooling Tower Makeup

By Alexander S. Butkus, Member ASHRAE, and Shirish C. Maniar, Member ASHRAE

A resort hotel on the Caribbean island of Aruba used the proximity of its laundry and central chilled water plant to recover laundry wastewater as cooling tower makeup water. Because the cooling tower consumed millions of gallons of water annually (at more than $13 per thousand gallons [$3.43/1000 L]), this plan has saved about $50,200 in annual water costs.

Our design firm's initial reaction to the hotel's plan was negative. We had observed laundry water recovery systems that ranged from systems that were turned off to those that required significant operating and maintenance staff attention. In no case was 90%+ of the water recovered because washing laundry requires a significant percentage of fresh water. However, we agreed to perform an initial feasibility study for the project.

Initial Feasibility

The cooling tower's water consumption was first estimated by reviewing cooling tower makeup water meter readings. Annual consumption was estimated to be more than 10 million gallons (38 million L) of water.

Laundry water consumption was calculated at 3 gallons (11.4 L) of water per pound (0.45 kg) of laundry processed. At occupancies noted in the feasibility study phase, laundry water consumption was about 6 million gallons (23 million L) per year. It was determined that most of this water could be recovered using commercial technologies already available to hotel operators. A storage tank of about 4,000 gallons (15 200 L) was needed to match the nearly constant water use of the towers, with the laundry's discharges of hundreds of gallons in short bursts during one eight-hour shift per day. In addition, cooling coil condensate could be recovered from nearby systems for use in the recovery system. A concern was expressed about the thermal load added to the cooling tower from the warm laundry water. This load was estimated to be less than 2.5% of the cooling tower capacity (peak) and much less than 1% of the tower capacity on an annual basis. Therefore, this did not appear to be significant. Heat recovery also was considered for the project. However, average water temperatures leaving the laundry (about 95°F to 100°F [35°C to 38°C]) were close to the incoming utility water temperature at about 90°F (32°C). The opportunity for recovered heat was limited. The design did include piping taps for future heat recovery. Annual water savings, net of auxiliary power and chemical costs were estimated at about $70,000 at hotel occupancies at that time. Construction costs were estimated to be $100,000 to $150,000, resulting in a payback of two years or less. Estimating costs was problematic because we had no experience with this unique combination of systems, and it appeared unlikely that a local contractor could be found to be responsible for the work. Also, the construction material of the storage tank (stainless steel, fiberglass or concrete) was not finalized at this time.

Design Phase

The engineer's preliminary design included a flow diagram, specification and questions and issues for other parties, including:

- Who would serve as the general contractor? It was determined that the hotel would serve as general contractor, since multidiscipline contractors are in short supply on the island. Fortunately, the property's staff was well qualified for the task.

(click here to read the entire article)

Philadelphia Chapter ASHRAE Annual Golf Outing Photos

Monday, May 4, 2015
DuPont Country Club
Wilmington, DE







Philadelphia Chapter ASHRAE Annual Golf Outing Photos

Monday, May 4, 2015
DuPont Country Club
Wilmington, DE





ACE MENTOR PROGRAM
ARCHITECTURE • CONSTRUCTION • ENGINEERING

CALL FOR VOLUNTEERS & SAVE THE DATE

ACE NEEDS YOU!

Did you resolve to get more involved in 2015?

What's ACE?

The **ACE Mentor Program of Eastern Pennsylvania** is the local affiliate of a national non-profit organization. ACE (Architecture – Construction – Engineering) engages, excites, and enlightens high school students to consider or pursue careers in the integrated construction industry through mentoring, scholarships, and grants. Students are recruited from public and private high schools in Philadelphia and the suburbs, with special effort made to reach traditionally underrepresented women and minorities. ACE is the design and construction industry's fastest-growing high school mentoring program, reaching over 8,000 students annually.

How Do I Become a Mentor?

ACE follows a group-mentoring model: 8-10 mentors per team of 20-30 students meet biweekly during the school year (approx. 10 meetings). Teams meet at volunteers' offices and on jobsites, then present their final designs at a year-end event.

Mentors can sign up as individuals or with a group of colleagues. The process is simple:

- Complete an online application: www.acementor.org
- Pass a background check
- Complete a training program
- Attend biweekly meetings through the school year (mentors are encouraged but not required to attend every meeting)

ACE Job Shadowing Opportunities

ACE is seeking local firms to offer job shadowing opportunities for students in the ACE program. Just a single day can provide excellent exposure to your field. If you would like to have a student shadow one of your architects, contractors, or engineers, please contact: **Timothy Reinking** | TReinking@hvac.mea.com

Want to Learn More?

Tiffany Millner, AIA, NOMA
Affiliate Director
ACE Mentor Program
36 South 18th Street
Philadelphia, PA 19103
T: 215-820-8929
easternpa@acementor.org
www.acementor.org

Learn the latest on twitter:
Follow **@ACEmentorEPA**

Don't Forget Breakfast!

Attend our annual scholarship breakfast and awards ceremony with 400 of your industry peers. It's our biggest – and only – fundraiser of the year and a great networking opportunity.

ANNUAL SCHOLARSHIP BREAKFAST
Crystal Tea Room
Philadelphia
SAVE THE DATE:
Thursday, 14 May 2015

Ticket and sponsorship details available soon.







Young Engineers in ASHRAE
YEA Phillies Night
Sponsored by CM3 Building Solutions
Wednesday, June 3, 2015

Philadelphia Phillies vs. Cincinnati Reds
6:00 PM—10:00 PM
YEA & Student Registration Fee $15.00

Philadelphia Chapter ASHRAE invites all members under 35 to a night of fun at the Phillies game!

Tickets are limited. Sign up today to get your seat!

Click here for more details and to register!

Join us at ASHRAE's 2015 Annual Conference

June 27–July 1 | Atlanta, Georgia | **www.ashrae.org/atlanta**

Special first time attendee registration fee available!

Join ASHRAE in its hometown of Atlanta! Take advantage of the opportunity to discuss and examine the latest topics in the building industry, such as high performing buildings and modeling, through the technical program; participate in technical tours; attend ASHRAE Learning Institute courses; sit for an ASHRAE certification exam; and earn professional development credits.

Conference Technical Program—includes the third annual Research Summit, which brings together researchers to present and discuss the latest research. Tracks focus on the design, construction and operation of high performance buildings, specifically advanced design guidance, modeling, operation and optimization, and indoor air quality. Laboratories, refrigeration, fundamentals, applications, systems and equipment round out the program.

Networking—share ideas and learn from fellow members from your hometown and around the world.

ASHRAE Learning Institute—choose from two full-day professional development seminars and seven half-day short courses to stay current on new HVAC&R technologies.

ASHRAE Certification—to gain a competitive edge, apply by June 9 to sit for an ASHRAE Certification exam.



PHILADELPHIA CHAPTER PROGRAMS CALENDAR 2014-2015

Date	Location	Topic	Theme
5/14/2015	Wyndham Hotel	Connecting Green Building Outcomes to Enterprise Sustainability Programs by E. Mitchell Swann PE of MDC Systems, LLC	Past President's Night

Program calendar is tentative and subject to change. Please refer to ASHRAE Philadelphia Website for up to date information. Advance registration and pre-payment are required before the meetings.

We need your attendance!

If we are below our guaranteed level for attendees at our meetings, our treasury could be negatively effected. Our programs are designed around the membership's input and we all need to support these meetings to maintain a strong/informed association. We hope to see you at our next meeting. Please come out and support our Chapter!

YEA Scholarship

We are asking that working professionals nominate young engineers at your firms for a YEA scholarship. These individuals should have shown outstanding performance in the HVAC&R industry and show an active involvement and interest in ASHRAE.

The nomination form may be downloaded here. The winner will be announced at a future ASHRAE meeting. Nominations should be sent to Jeffrey Pisarek at c021yea@ashrae.net.

Philadelphia Chapter ASHRAE Basic HVAC Class

The last session of the 2014-2015 ASHRAE Philadelphia Chapter Basic HVAC System Design Course was held on March 19. Twenty-four students successfully completed the course.

This is a demanding one-year course that introduces students to the fundamentals of HVAC design. Various topics are taught by industry professionals. The class is a great way to further, or even begin, a career in HVAC.

The 2015-2016 course is now in the planning phase. **The course is currently looking for a location to host next year's classes.** The facility would need to provide seating for 30 students along with a computer connection and a projector. If you are able to host this class at your facility, please contact Jim Lill (Course Coordinator) at LILLJK@mail.ashrae.org.

Classes meet Tuesdays and Thursdays from 6:15 PM to 8:30 PM beginning in October and running through the end of March. Enrollment applications will be available in August.

The Philadelphia Chapter
of the
American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.

994 Old Eagle School Road
Suite 1019
Wayne, PA 19087-1866
P 610-971-2169
F 610-971-4859

Visit
our web site at:

www.ashraephilly.org

Republication of material contained herein is expressly forbidden without official Chapter authorization. The Chapter does not speak or act for the Society. Any member with material to submit for inclusion in the *Climate* can send the information to:

Hope Silverman
P 610-971-2169
hope@mmco1.com

Material can include letters to the editor, member news, upcoming events, comments on chapter programs or issues, etc.

New Philadelphia Chapter Members

New Associates/Members:

Christopher Bratz
Ronald Fulton
Annina Hogan
Harry Schmidt
Michael Schwarz
Judy Vicario
Mark Walush
David Werner

Membership Advancement

If you are currently an ASHRAE Associate Member, becoming a full Member is easier than you think! The following count toward the required **12 points** to advance to full membership status. You must update your ASHRAE online biography and send an email to membership@ashrae.org to advance.

Non-accredited degree = 4 points
Accredited degree = 6 points
PE = 4 points
Industry experience = 1 point/year

