

**INSIDE
THIS ISSUE:**

Officer / Committee List	2
Events Calendar	3
President's Message	4
Meeting Info	5
Job Postings	6
Membership Pro- motion	7
Young Engineers	7
Student Member- ship Application	8
Board of Gov. Meeting Minutes	10
Engineering Symposium	13
ASHRAE Scholarship	15
ASHRAE Picnic Info	16
2015 Conference	18
Society News	24



VOLUME 9, ISSUE 8

APRIL 2015

Join us at

ASHRAE's 2015 Annual Conference

June 27—July 1
Atlanta, Georgia



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!

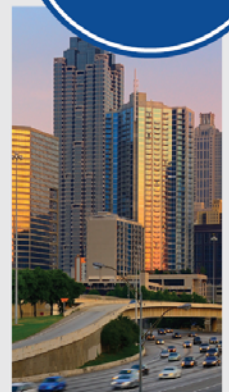
Join ASHRAE in its hometown of Atlanta! Take advantage of the opportunity to discuss and examine the latest topics in the building industry, such as high performing buildings and modeling, through the technical program; participate in technical tours; attend ASHRAE Learning Institute courses; sit for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

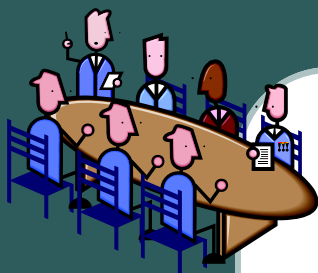
Networking—share ideas and learn from fellow members from your hometown and around the world.

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.



(refer to page 18)



Chapter Officers

President

Edward J. Burns
585-739-7548 / 872-9172(fax)
ejb@mechtechhvac.com

President Elect

Christina Walter
585-486-2148
cmwalter@trane.com

Secretary

Jeff Close, PE
585-289-6816 / 218-0737(fax)
jeff.close@pres-services.com

Treasurer

William J. Clark
585-303-0729
william.clark@DayAutomation.com

Committee Chairs

CTTC / Programs

Jeff Wiedrick 585-232-5137 x354
jwiedrick@bergmannpc.com

CTTC / TEGA

Tom Burke
amtburke@yahoo.com

CTTC / Refrigeration

Michael Nohle 585-216-9016
mikenohle@aol.com

Historian

Lee Loomis 585-738-3079/262-4156(fax)
leeloomis46@gmail.com

Membership

Jake Hall 585-869-5125
jhall@proairplus.com

YEA

Matt Kremers 585-398-8018
mkremers@mcsmms.com

Student Activities

Chris Lukasiewicz 585-381-3360 x135

Board of Governors

Eric Smith (3)
585-381-3360
esmith@turnerengineering.com

Paul Kenna, PE (3)
585-295-3114
Paul.Kenna@carrierenterprise.com

Scott Edwards (2)
585-486-2156
sgedwards@rochester.rr.com

Mike Benedict (2)
585-490-2661
mjbenedict5@gmail.com

Branden Farnsworth-Weinblatt
585-364-1628
bfweinblatt@popligroup.com

Tom Streber
585-272-9450
tstreber@jswanson.com

Newsletter Editor

Scott Edwards
ashraerocnews@gmail.com

Attendance & Reception

Timothy Duprey 585-330-6430
tduprey@rochester.rr.com

Publicity

Mark Kukla 585-232-3440
mark@airsystemsbalancing.com

Research Promotion

Paul Kenna 585-295-3114
Paul.Kenna@carrierenterprise.com

Webmaster

Kevin Wind 585-263-1280
kwind@rochester.rr.com

Nominating

Michelle Sommerman, PE 585-232-5135
msommerman@bergmannpc.com

Buyer's Guide

Stephanie Dempsey 585-232-2462
sdempsey@bergmannpc.com

ASHRAE 2014-2015 Meeting Schedule				
Date	Event	pdh / Theme	Location	Schedule
04/06/15	Ethical Decision Making Barry Benator, PE, CEM - Benatech, Inc. ASHRAE Distinguished Lecturer	Available	Mario's	11:00 AM
05/11/15	Annual ASHRAE Golf Outing and Picnic	---	Ravenwood Golf Club	9:30 AM Golf 4:30 - 8:00 Picnic

2014-2015 Presidential Award of Excellence Summary

Chapter #	Chapter Name	Chapter Members	Member Promotion	Student Activities	Research Promotion	Chapter Technology Transfer	History	Chapter Operations	Chapter PAOE Totals
11	Rochester	238	275	0	165	0	0	0	440

Mission Statement

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



Shaping Tomorrow's
Built Environment Today

Vision Statement

- will be the global leader in the arts and sciences of heating, ventilation, air conditioning and refrigeration.
- will be the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines.
- will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.

President's Message

Greetings,

What a February we had here in Rochester! For those of us in the heating industry some of the challenges we faced as professionals were not pleasant, but at least we were part of history! Rochester's historical record as the coldest month we've had! Soon enough our minds will be away from the frozen pipes or the lost sleep over why we did not design heating loads to -10 F. We are closing in on the end of the ASHRAE program year it is getting warmer outside and my mind is on hitting a white Ball at our annual golf picnic!

Our March meeting consisted of How to use Classroom Air-handlers with S12.60 to meet RC25 - Classroom Design for Intelligently Quiet Schools. I want to say thank you to Mr. Kevin McGachy, System air Change'Air & YEA Committee chairperson Mr. Matt Kremers for putting this program together for the chapter.

Coming up at our future meetings will be the following:

- April will consist of Ethical Decision Making, Presented by Barry Benator, PE, CEM of Benator, Inc. Mr. Benator is an ASHRAE Distinguished Lecturer and we look forward to his program.

- Monday May 11th, 2015 - SAVE THE DATE! May is our Annual ASHRAE Golf outing and Picnic at the Ravenwood Golf Club. Golf Picnic Sponsorship opportunities and Ticket info can be found on the following pages and also on the chapter website.

Please consider joining us at these meetings as we expect great attendance and as always there are PDH opportunities there.

Our nomination committed has met. New board of Governors and Officer nominations are complete and election will be taking place in April.

Bill Murray our education chairperson and I had the opportunity to meet on February 18th with the Rotary Sunshine Camp. The Sunshine camp is building a new Sensory Stimulation building at Sunshine Campus. The Rochester ASHRAE chapter has committed to turnkey HVAC design and installation for this project. Project design, construction and commissioning. This is going to be a Grass Roots ASHRAE Community Sustainable project. The Camp is looking at a construction completion date of 6/1/2015. We need your help, if you are interested in participating in this project please contact Ed Burns.

Please check out our chapter website at www.rochester.ashraechapters.org or if facebook is your preferred method of communication take a moment to "like" us www.facebook.com/#!/ashraerochester



Edward J. Burns
Rochester ASHRAE President

Ed Burns, 2014-2015 President

Rochester Chapter Meetings

Highlights from March ASHRAE Meeting



Kevin McGachy (left) of Systemair Change'Air, presents to the chapter.

ASHRAE March Meeting Info

April ASHRAE Meeting

- Date:** Monday, April 6, 2015
Location: Mario's Italian Restaurant
Time: **11:00 AM** *****note that this is an earlier start time**
Cost: \$25
Speaker: ASHRAE Distinguished Lecturer - Mr. Barry Benator, PE, CEM - Benator, Inc.
Topic: Ethical Decision Making



Like us on Facebook!



Visit our new Facebook page by searching for "ASHRAE Rochester" on Facebook. Any ideas for additions or improvements email to Mark Kukla at mark@airsystemsbalancing.com. Keep up to date with current events and photos from recent meetings.



This section of the newsletter is reserved for those firms wishing to advertise their desires to hire from the Chapters Membership.

If you are interested in utilizing this FREE service provided by the Rochester Chapter, please contact our Chapter President, Ed Burns 585-739-7548 or by email ejb@mechtechvac.com.

This service is available to ASHRAE members for any local firm in our industry looking for knowledgeable persons in the HVAC&R industry.

Outside Sales Engineer Wanted

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.

Rochester Chapter Committee Chairs Updates

Membership

ASHRAE Rochester Chapter- Membership Promotion

Please remember to take a few minutes to make sure that your profile is up to date at www.ASHRAE.org. Maybe you've changed jobs? email address? or would like to advance your membership (i.e. Associate Member to Member). Keeping this information current ensures that you get the most value out of ASHRAE.

There is also a lot of emphasis this year to attempt to do as much of our Membership Renewals and New Member Applications online to decrease the amount of paperwork for the Society and make the process "Greener." If you have any questions or need assistance with any Membership Issues, please let me know.

Thank you, and as always, thank you for your support for ASHRAE.

Sincerely,
Jake Hall

Membership Promotion Chair

Young Engineers of ASHRAE (YEA)

YEA Tech Session

There will be a YEA Tech Session on Natatorium Design, set for either April 28th or 29th (tentative).

Explorer's post with YEA

Our Rochester ASHRAE chapter and YEA are looking for volunteers to help with an Explorers Post. We are assembling a group of us to donate some time with local high school students. This program is an excellent opportunity for kids with interest in science and technology to spend time in different career fields. The intent is to allow these students to try out several potential career paths to investigate their interests. Our Explorer's program will expose the students to different disciplines within the HVAC industry to help gain exposure to our industry for future generations. Please contact Ed Burns or Matt Kremers mkremers@mcsmms.com if you are interested.

YEA Award of Individual Excellence

For more information on the award and how to submit, please contact Matt Kremers at mkremers@mcsmms.com.



Shaping Tomorrow's
Built Environment Today

Student Membership Application

What You'll Get With Your ASHRAE Student Membership!

What's "Cool" In ASHRAE

- ASHRAE maintains standards for indoor air quality
- ASHRAE promotes energy efficiency, savings and recovery
- ASHRAE reports on building controls, automation and integration
- ASHRAE focuses on green building issues and green technology
- ASHRAE promotes solar and other alternative energy sources
- ASHRAE offers certification programs, online learning opportunities and courses and seminars at ASHRAE Conferences

How Can ASHRAE Help You?

- Provide access to new technology
- Offer professional development opportunities
- Create opportunities for networking
- Offer online continuing education programs and eLearning programs

Student Member Benefits

- Access to members-only web pages
- Discounts on ASHRAE Handbooks
- Monthly ASHRAE Journal - print and digital
- HVAC&R Industry and Society Connections eNewsletters
- Discounted ASHRAE Annual and Winter Conference registration (AHR Expo, Student Program, Technical Sessions)
- Virtual online HVAC&R resume posting, job and internship searching program

ASHRAE Student Member Opportunities

- Society and chapter-level scholarships for both undergraduate and graduate engineering students
- Discounts for student members on select publications, go to www.ashrae.org/studentbookstore for more information
- Student Design Competition
- Networking with local ASHRAE Chapters
- Senior Undergraduate Project Grant Program
- At the student branch level, you'll enjoy meeting other students with similar interests - if your school hasn't yet started a student branch, take charge and contact a faculty member and ask for help on getting started!

You can continue your student membership after college with the SmartStart Program. The SmartStart program locks in the price of student dues for the first year of membership after graduation.

Visit www.ashrae.org/students
to join online!



FIRST NAME: [grid]

LAST NAME: [grid]

DATE OF BIRTH (mm/dd/yyyy) [grid]

Current Mailing Address: (this will be where all correspondence will be sent unless otherwise specified)

Street Address: _____ Apt. # _____ City: _____
State/Province: _____ Postal Code: _____ Country: _____
Email: _____ Alternate email: _____ Phone: _____

Permanent Mailing Address: (during the Summer Months and after graduation)

Check if Current Address is the same as Permanent Address

Street Address: _____ Apt. # _____ City: _____
State/Province: _____ Postal Code: _____ Country: _____
Email: _____ Alternate email: _____ Phone: _____

ASHRAE protects contact information provided by its members and customers. To view ASHRAE's privacy policy visit www.ashrae.org/privacypolicy.

All student applicants must have the name and member number of an ASHRAE member serving as their student sponsor. If your Student Branch Advisor is an active Associate or Full member, he/she can serve as your sponsor. If you need assistance locating a sponsor, please email students@ashrae.org or call 678-539-1212. Also, you must list the name, phone and email address of your faculty advisor or course instructor.
Sponsor Name: _____ ASHRAE Member #: _____
Advisor/instructor: _____ Phone: _____
Email: _____

To receive your subscription to the ASHRAE Journal, please answer the following questions by entering the appropriate codes in the spaces provided.
Which best describes your firm?
11. Consulting Engineering
12. Architect/Architectural & Eng Services
13. Design/Build
21. Contractor
26. Property Mgmt & Dev
31. Industrial Facility
41. Commercial Facility
42. Government, Healthcare, Education
43. Utility
51. Manufacturer/HVAC&R Equipment
61. Manufacturer's Representative
62. Sales Engineering
71. Wholesaler or Distributor
83. Library
84. Technical, Professional or Trade Association
86. Student
91. Other (Please Specify)
Which best describes your title?
B. President
C. Partner
D. Associate
E. Owner
F. Vice President
G. Vice President Eng, Chief Engineer
K. Design Engineer
L. Project/Application Engineer
O. Facility Engineer/Manager
R. Research/Development Engineer
S. Sales Engineer, Sales
S. Purchasing Agent
T. Drafter/Designer
U. Estimator
W. Technician
X. Instructor, Professor
Y. Student
Z. Librarian
ZZ. Other (Please Specify)
ASHRAE Society Dues include \$6.00 for ASHRAE Journal. This amount is not deductible from Membership dues.

I would like to participate in the activities of the _____ ASHRAE Chapter.
School Name: _____
Street Address: _____ City: _____ State: _____
Country: _____ Postal Code: _____
Expected Graduation Date: _____
Full time: [] Part time: [] Degree: _____
Classification: Freshman [] Sophomore [] Junior [] Senior [] Masters/PhD. []
ASHRAE Student Membership \$20.00 USD
ASHRAE Handbook - Fundamentals [] I-P [] SI
(you will receive the most current edition of Fundamentals)
More than 900 pages of HVAC&R technical information and it includes the CD! (List Price \$199)
Student Member Price: \$49.00 USD \$ _____ USD
CD Only: \$39.00 USD Total \$ _____ USD
*Additional books are available at ashrae.org/studentbookstore
*Please allow up to 30 days to receive new member packets. For U.S. book orders, allow 3-5 business days from processing. For international locations and Canada, allow 7-10 business days from processing.

Please complete the ENTIRE application to ensure accuracy. Incomplete applications will NOT be processed.
Method of payment: [] VISA / Master Card [] American Express [] Diner's Club [] Check or money order enclosed*
Card Number: _____ Expiration Date: _____ CVV No. _____ Amount: _____
Signature: _____ Date: _____
Print Name (as it appears on card): _____

*Checks will be accepted in U.S. and Canadian funds. Credit Card payments will be accepted in U.S. funds only.

Board of Governors Meeting Minutes



BOARD OF GOVERNORS MEETING MINUTES

Meeting Date:

Friday, March 6, 2015

Location:

Carrier Office, Rochester, NY

President / CRC Alternate	Ed Burns	x
President Elect / Program	Christina Walter	x
Secretary	Jeff Close	x
Treasurer	Bill Clark	
Immediate Past President / CRC Delegate	Rob Wind	
Board of Gov. (1)	Branden Farnsworth-Weinblatt	
Board of Gov. (1)	Tom Streber	
Board of Gov. (2)	Mike Benedict	x
Board of Gov. (2)	Scott Edwards	
Board of Gov. (3)	Eric Smith	
Board of Gov. (3)	Paul Kenna	x
Attendance	Tim Duprey	x
Historian	Lee Loomis	
Membership Promotion	Jake Hall	x
Newsletter Editor	Scott Edwards	
Research Promotion	Paul Kenna	x
Awards	Al Rodgers	
CTTC	Jeff Wiedrick	x
Education	Bill Murray	x
Publicity	Mark Kukla	x
Website	Kevin Wind	
YEA Chair	Matt Kremers	x
Student Activities	Chris Lukasiewicz	
Nominating (2 nd Past President)	Michelle Sommerman	
Picnic/Golf Chair	Jim Browe	
Buyers Guide	Stephanie Dempsey	
Valentine's Dinner Dance	Jody M. McGarry	
Refrigeration	Mike Nohle	

Board of Governors Meeting Minutes

Roll Call: The above noted individuals were present.

Call to Order: 7:30am

Meeting Minutes:

- **Program** – Chris Walter
 - Reviewed program for the rest of the year.
 - Discussed future program topics (Victaulic, Balancing)
- **Treasurer** – Bill Clark
 - See attached Treasurer's report dated 11/01/2014.
 - Taxes complete – need to be signed (Jeff Close to get them to Bill)
- **CTTC** – Jeff Wiedrick
 - Contacted ~7 firms for project applications.
 - Deadline = April 1st
 - Review applications at April BOG meeting.
- **Membership** – Jake Hall
 - 2 new members
 - 240 members currently
 - Down 2 members for the year
- **Student Activities** – Chris Lukasiewicz
 - Ed to discuss with Chris the status of MCC relationship.
 - Bill to focus on re-establishing a relationship with RIT.
 - Chapter willing to pay for student memberships.
- **Education** – Bill Murray
 - All remaining meetings with PDHs the PDHs have been approved or are in the approval process now.
- **YEA** – Matt Kremers
 - Explorers post meeting will be rescheduled. A post for next year is more likely than this year.
- **Awards** – Al Rodgers
 - Award presented to Jim Browe at Dinner Dance.
- **Resource Promotion** – Paul Kenna
 - No update on promotions, promotions are on track for this year.
 - Paul to look into ASHRAE Scholarship fund management.

Board of Governors Meeting Minutes

- **Refrigeration** – Mike Nohle
 - No report.
- **Chapter Tech Energy & Govt Activities** – Tom Burke
 - No report.
- **Newsletter** – Scott Edwards
 - Please be aware of RES deadlines
 - Electronic Newsletter deadline = 18th of each month
- **Buyers Guide** – Stephanie Dempsey
 - No report.
- **Attendance** – Tim Duprey
 - 44 individuals at Feb Meeting.
- **Historian** – Lee Loomis
 - No report.
- **Publicity** – Mark Kukla
 - No report
- **Nominating** – Michelle Sommerman (Not present)
 - Nominations will be presented at the March Meeting.
- **CRC 2016** – Jim Browe
 - Dates for event are August 18-20, 2016 at the Hyatt in Rochester.
 - Jim Browe has a budget for the CRC.
 - Deposit made for the Hyatt Downtown.
- **Old Business**
 - RES Symposium – speakers for all 3 sessions have been found.
 - Scholarship updates – Bill Murray has been in contact with RIT and most of the contacts have changed and Bill has been contacting the new people so we can award scholarships to RIT students.
- **Next BOG Meeting**
 - Monday, April 6, 2015 @ 9:30 am – Mario's

Meeting adjourned at 8:45 am.

2015 Annual Engineering Symposium in Rochester

Earn up to 7 pdh's

Sponsored by

Rochester's Technical and Engineering Societies and RIT

Wednesday, April 29th 2015

Courses available in:

Civil, Electrical, Lighting, Mechanical, HVAC, Plumbing

Radisson Hotel Rochester Riverside

120 East Main Street, Rochester NY

Time: 7:30 am to 6:30 pm

\$130 Advance Registration

\$20 Student Registration

\$160 AFTER March 31, 2015 and at the door

For more information and to register please visit

www.engineeringsymposiumrochester.com

The Monroe Chapter of NYSSPE, in accordance with ADA compliance, will make every attempt to provide reasonable accommodation for those requiring additional services to participate in our educational programs. If you should require such service, please contact Lynne Irwin at the Rochester Engineering Society (res@frontiernet.net or 585-254-2350) to request support by April 1, 2015.

15-Jan-15

2015 ENGINEERING SYMPOSIUM IN ROCHESTER

Sponsored by
Rochester's Technical and Engineering Societies
April 29, 2015

PDH hours will be acceptable in New York State. Schedule subject to change.

Registration and Continental Breakfast						
Welcoming Remarks: Chris Devries, Chair of the 2015 ESR Committee						
	Civil Engineering Sponsored by ASCE	Civil Engineering Sponsored by ASCE	Mechanical Engineering Sponsored by ASME	Electrical Sponsored by IEEE	Mechanical, Plumbing, & Fire Protection Sponsored by ASHRAE and ASPE	Lighting and Power Sponsored by Elect. Assoc. of W N Y
Room	Riverview	Douglas	Fitzhugh	Eastman	Silver	Gleason
Host	Jim Baker	Kip Finley	Ron Salzman	Dave Krispinsky	Jennifer Wengender	Joe Dombrowski
8:15 to 8:30	Lago Casino Site Analysis and Design <i>Peter Vars</i>	Geotechnical - Piles <i>Wendel Armstrong</i>	Engineering Disasters: A Hazardous Materials Management Perspective <i>Richard Cartwright</i>	Audio Engineering 4. Dr. Sung Young Kim	NYS Building Codes and the use of Referenced Standards <i>Andy Taylor</i>	RESTRAINING AND ISOLATING ROOF TOP EQUIPMENT-PER NEW YORK STATE BUILDING CODE AND ASCE 7-05 <i>DICK SHERREN</i>
Break						
9:30 to 9:45	Planning Around Critical Water System Component Downtime <i>Clem Chung</i>	THM Removal – Small System Applications <i>Tom Clark</i>	Science and Technology at the Laboratory for Laser Energetics <i>Steven Ivanic</i>	RIT's Micro Grid system in the Golisano Sustainability Building 2. Mr. Christopher Piggot	Coordination of Building Storm water discharge with on-site Disposal Regulations <i>David Johnson</i>	ZONE SELECTIVE INTERLOCKING <i>BRENT VILD</i>
Break						
10:45 to 11:00	Civico Center Green Roof <i>Jim Krapf</i>	Air Transport Engineering foundations of operational Safety <i>Fred White</i>	Particulate Control with Holographic Optical Tweezers <i>L. Lindley</i>	Software Defined Radio <i>Dr. Miguel Bazzresch</i>	Case Study: East Irondequoit CSD Cogeneration system <i>Dave Hart, PE</i>	READING TIME CURRENT CURVES <i>JOHN KOWAL</i>
Lunch and Keynote Program Ethics for Engineers <i>Peter DeMarco -Priority Thinking</i>						
	Civil Engineering Sponsored by ASCE	Civil Engineering Sponsored by NYSATE	Mechanical Engineering Sponsored by ASME	Electrical Sponsored by IEEE	Mechanical, Plumbing, & Fire Protection Sponsored by ASHRAE and ASPE	Lighting and Power Sponsored by IES Rochester
Room	Riverview	Douglas	Fitzhugh	Eastman	Silver	Gleason
Host	Erin McCormick	Paul Presutti	Bill Bishop	Dave Krispinsky	Michelle Sommerman	Joe Dombrowski
12:00 to 1:30	TBA	Access 360 Structural Lifting <i>Howard Ressel, Chris Bayer</i>	Additive Manufacturing <i>Denis Cormier</i>	Vehicular Collision Avoidance System 3. Dr. Clark Hochgraf	Natorium Design <i>Jordan Daniow</i>	SCADA SYSTEMS <i>MIKE MCGRATH</i>
Break						
1:30 to 2:30	Geotechnical Analysis and Construction of New Maid of the Mist Drydocks in the Niagara River Gorge <i>Mike Mann</i>	Aerial Project – Transforming the Middle Gorge of the Genesee River <i>Michael Phillipson</i>	Human Contributions to Global Warming Part 1 <i>Bill Bishop</i>	GE diesel locomotives 1. Dr. Shola Olabisi	Energy Modeling and Analysis (for existing buildings) <i>Erik Durka</i>	LED Lighting <i>Mike Trippe</i>
Break						
2:30 to 2:45	Design Build Roundtable Lessons Learned <i>Various Presenters</i>	Cost Effective Engineering Techniques for Environmental Benefits <i>Sarah Piecuch</i>	Human Contributions to Global Warming Part 2 <i>Bill Bishop</i>	Electrical/Mechanical Product Safety Compliance (Speaker TBA)	VRF Applications <i>Marty Brinton</i>	Lighting Controls And Energy Codes <i>Brian Horner</i>
Break						
4:00 to 5:00	Cocktails and Conversation in the Lounge					
5:00 to 7:00	Cocktails and Conversation in the Lounge					



Tips for ASHRAE Scholarship Applicants

Make sure ...




- You meet all applicable criteria
- You read the application carefully and answer all questions completely and honestly.
- The application and all required documents are submitted or postmarked on or before the applicable deadline.
- Your application is NEAT, legible (typed or handwritten clearly), and proper English (correct grammar and spelling) is used when responding to essay questions.
- To take time to submit a brief, non-required introductory cover letter
- You are clear and thorough when stating goals and financial need.
- You contact the nearest ASHRAE chapter for an interview with the Student Activities Chair or other officer to learn more about the Society.
- You find out if your school hosts an ASHRAE student branch.
- You contact ASHRAE headquarters if you have any questions and to ensure your application has been completed and submitted properly.

More information on the scholarship and details on how to apply can be found at www.ashrae.org/scholarships.



2015 ASHRAE PICNIC SPONSORSHIP FORM

Monday, May 11, 2015

 RAVENWOOD GOLF CLUB	
<p>Ravenwood Golf Course 929 Lynaugh Road Victor, NY 14564 11:00 AM – 4:30 PM - Golf 4:30 PM - 8:00 PM - Picnic</p>	<p>Picnic: 4:30 PM-8:00 PM 4:30 PM - 6:00 PM Cocktails and Hors d'oeuvres 6:00 PM - 8:00 PM Dinner Catered By: Dinosaur Barbeque at Ravenwood Golf Club</p> <p>Thank you in advanced for supporting this long standing Rochester ASHRAE Chapter tradition.</p> 

Please include check (on notes put what sponsorship you made) and make payable to:
ASHRAE Rochester Chapter
 and mail to:

Attention: Kacie Hoffman
 RF Peck Company, Inc.
 889 Atlantic Ave.
 Rochester, NY 14609

*Any questions, call Kacie at (585) 697-0836 ext. 105
 Email: khoffman@rfpeck.com*

Please fill out so we can correctly recognize you or your company:

Company Name: _____

OR

Individual Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (Work) _____ (Home) _____

Sponsorship Form

Sponsorship Name	X here for Sponsorship	Sponsorship Amt.
Major Door Prize Sponsor – Gift/Item or Cash Donation- \$200 or more.		
Gold - \$250.00 - Hole Sponsorship and Recognition at Picnic		\$250.00
Silver - \$150.00 - Hole Sponsorship		\$150.00
Bronze - \$100.00 - Recognition at Picnic		\$100.00
Prize Sponsor - \$175.00 - Longest Drive		\$175.00
Prize Sponsor - \$175.00 - Closest to Pin		\$175.00
Total Check Amount:		



MONDAY, MAY 11, 2015
ASHRAE Picnic / Golf Tournament
To be held at
Ravenwood Golf Course

Reservation Deadline is... May 1st, 2015
 (There is a limited amount of tickets this year on a first come basis)

 RAVENWOOD GOLF CLUB		
<p align="center">Ravenwood Golf Course 929 Lynaugh Road Victor, NY 14564 Golf Registration 9:30 – 10:45 Juice, Scones and Coffee Served 11:00 am - Shotgun Start</p>	<p align="center"><u>Picnic: 4:30 PM-8:00 PM</u> 4:30 PM - 6:00 PM Cocktails and Hors d'oeuvres 6:00 PM - 8:00 PM Dinner Catered By: Dinosaur Barbeque at Ravenwood Golf Club</p>	<p align="center"><i>Four Man Scramble and Optional Skins Game.</i></p> <p><u>Golf includes:</u></p> <ul style="list-style-type: none"> ➤ Golf ➤ Cart ➤ Driving Range ➤ Prizes ➤ On course beverages and food at the turn



**NO TICKETS WILL BE SOLD OR DISTRIBUTED AT THE DOOR!
 TICKETS WILL BE MAILED TO YOU OR CAN BE PICKED UP AT
 THE R.F. PECK CO., INC.**

*Please include check and make payable to:
 "ASHRAE – Rochester Chapter"*

Return this form....
 Mail prior to **May 1, 2015** to:
 Attention: Kacie Hoffman
 R.F. Peck Co., Inc.
 889 Atlantic Avenue
 Rochester, New York 14609
 Any questions, call (585) 697-0839 ext. 105
 Email: khoffman@rfpeck.com

Address where you would like your picnic tickets sent to:
 Company: _____
 Contact Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone: (Work) _____ (Home) _____

Entry Form			
Ticket Request Form			
Event	Fee Amount	No. Attending	Total
Golf	\$90.00		\$
Picnic	\$50.00		\$
OR:			
Golf and Picnic (SAVE \$10.00)	\$130.00		\$

ASHRAE 2015 Annual Conference
 June 27-July 1, 2015
 Atlanta, Georgia



ASHRAE has a warm southern welcome as the 2015 Annual Conference comes to the Society's hometown of Atlanta, Ga. It's been nearly 15 years since the last time ASHRAE hosted a conference here. And while the city and the Society have grown and changed, the hospitality remains the same. We look forward to seeing y'all!

Airline Transportation - Discounted Airfares for ASHRAE



Delta Air Lines is pleased to offer special discounted airfares for ASHRAE

To take advantage of these discounts, follow these steps:

Click on www.delta.com/booking and enter Meeting Event code NMKBW then continue with online booking process.

Or you can call Delta Meeting Network@ reservations at 1-800-328-1111**, Monday - Friday, 7:30 a.m. - 7:30 p.m. (CT) and refer to File Meeting Code (new code will be posted soon).

**\$25 service fee for booking via 1-800 phone number

[https://www.ashrae.org/membership--conferences/
 conferences/2014-ashrae-annual-conference](https://www.ashrae.org/membership--conferences/conferences/2014-ashrae-annual-conference)

Registration

Registration Opens March 1

✓ Early bird fees from March 1 through April 26

- \$425, member/\$635, non-member
- \$400, first-time member attendee/\$610, first time non-member attendee
- \$115, Life Members

Advanced fees from April 27 through June 7

- \$450, member/\$660, non-member
- \$425, first-time member attendee/\$635, first-time non-member attendee
- \$125, Life Member

Full registration fees from June 8 through June 27

- \$580, member/\$780, non-member
- \$555, first-time member attendee/\$755, first-time non-member attendee
- \$135, Life Member

Registration fees for speakers, student branch advisors and students

- \$115, speaker
- \$25, student branch advisor
- \$25, student member/\$55, full-time student non-member

Keynote Speaker

✓ Legendary NASA Flight Control Director Who Led the Effort to Save *Apollo 13*

Gene Kranz is the keynote speaker at the opening Plenary Session, held Saturday, June 27. Registration is not required to attend the Session, which also features the Honors and Awards program.

As the leader of the "Tiger Team" of flight directors who brought the Apollo 13 spaceship safely back to Earth on April 17, 1970, Kranz demonstrated extraordinary courage and heroism.

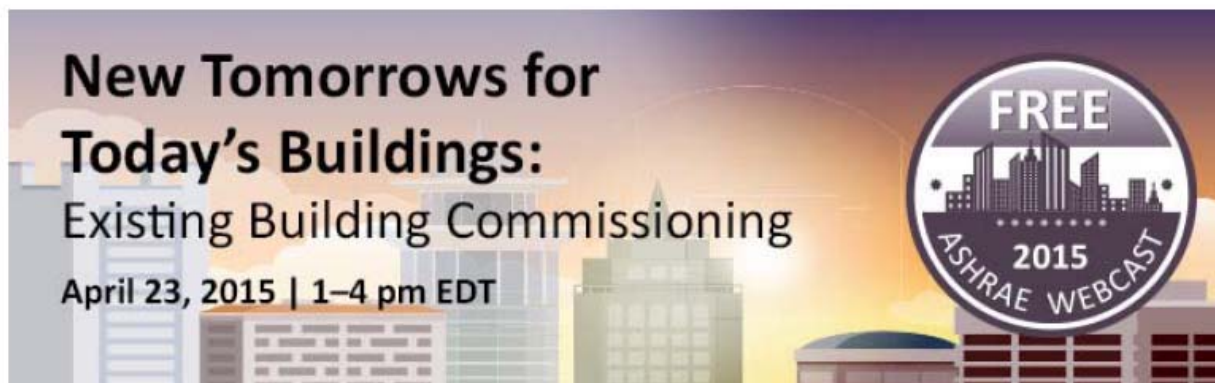
Commissioned into the US Air Force in 1954, Kranz flew high-performance jet fighter aircraft and was a flight test engineer on early jet bomber development. In 1960, Kranz joined the NASA Space Task Group at Langley, Virginia, as a flight controller on Project Mercury. He served as flight director for the 33 missions of Projects *Gemini*, *Apollo*, and *Skylab*, and led the flight control team during the first lunar landing.

Kranz retired from NASA in 1994 after 37 years of federal service, and is currently a consultant and speaker. The hit film *Apollo 13* chronicles Kranz's struggle to devise the plan that would safely bring the ship and its crew of three astronauts home after its oxygen system failed. Actor Ed Harris portrays Kranz in the film, which was directed by Ron Howard.

Kranz was a co-recipient of the Presidential Medal of Freedom awarded by President Nixon for the Apollo 13 mission, and was designated a Distinguished Member of the Senior Executive Service by President Reagan.

Since his retirement from NASA, Kranz has served as a flight engineer on a B-17 "Flying Fortress," constructed an aerobatic biplane, and published a *New York Times* best-selling memoir about his experiences in the space program. His book, *Failure is Not an Option: Mission Control from Mercury to Apollo 13 and Beyond*, was selected by The History Channel as the basis for a documentary on Mission Control.

Stay Tuned for more details!



Planning your Chapter's Event Calendar?

Well, We've got April Covered!

Register your Chapter to view the 2015 ASHRAE Webcast at www.ashrae.org/webcast. Registration begins on March 23, 2015. Add lunch, a speaker, or even a product show and make it a full-day event.

- **Attend a live, interactive, educational program.**
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
- Chapter members and other attendees at your event may earn **3 Professional Development Hours (PDHs)** by completing the online Participant Reaction Form by May 8, 2015
- The webcast has been approved for **3 GBCI Continuing Education (CE) Hours** and **3 AIA Learning Units (LU)**
- Chapters who register to view the webcast will earn **100 PAOE points**



Promote the Webcast

Use the flyer and article in the online [Media Kit](#) to promote the webcast viewing at your Chapter event in your newsletter and on your webpage. We will also be sending the Chapter Presidents and Chapter CTTC Chairs hard copies of the Webcast Guide to promote the program at work, with other organizations, and of course, at your Chapter meetings. Please email ashrae-webcast@ashrae.org to request additional copies.

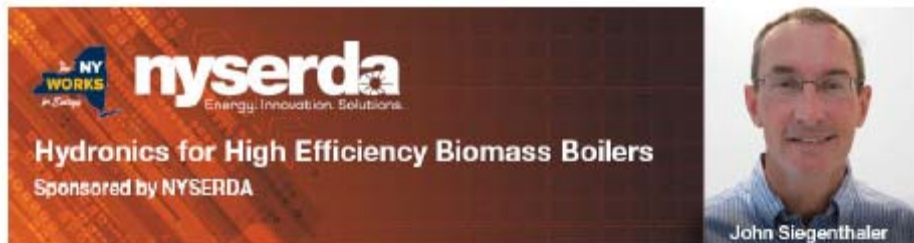
Need more information?

If you have questions about the webcast, call 678-539-1200 or email ashrae-webcast@ashrae.org.

For more information about the program, continuing education credits, speakers, registration, and Existing Building Commissioning resources visit us online at www.ashrae.org/webcast.

NOT ABLE TO WATCH THE LIVE WEBCAST ON APRIL 23?

Not a problem! Register your Chapter and view the Webcast online between April 23rd and May 8th. PAOE points and continuing education credits are also available for the Webcast On Demand. Visit www.ashrae.org/webcast for details.



Hydronics for High Efficiency Biomass Boilers

Sponsored by NYSERDA

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 NYSERDA'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 NYS 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, April 8, 2015

8:00 AM - 5:00 PM

Holiday Inn Downtown Binghamton

2-8 Hawley Street

Binghamton, New York 13902

Wednesday, May 20, 2015

8:00 AM - 5:00 PM

Clinton Community College

136 Clinton Point Drive

Plattsburgh, NY 12901

Tuesday, June 16, 2015

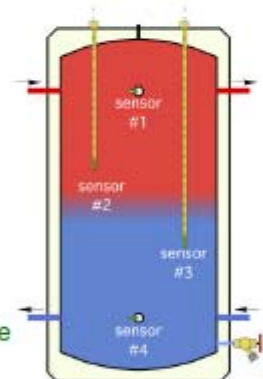
8:00 AM - 5:00 PM

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.

To avoid having ASHRAE messages blocked by spam-blocking software, add learninginstitute@ashrae.org to your address book.

ASHRAE's HVAC Design Training

HVAC Design: Level I—Essentials

ASHRAE's *HVAC Design: Level I — Essentials* provides intensive, practical training for HVAC designers and others involved in the delivery of HVAC services. In three days, gain practical skills and knowledge in designing, installing and maintaining HVAC systems that can be put to immediate use.

- Fundamentals
- Heating/Cooling Load Calculation
- System Selections
- HVAC System and Components
- Cooling System
- Basic Design of Hydronic Systems
- Basic Design of Air Systems
- Control/BAS

HVAC Design: Level 1—Essentials

When: March 16–18, 2015 | Atlanta, GA
 May 18–20, 2015 | Chicago, IL
 June 15–17, 2015 | Atlanta, GA

Cost: \$1,239 (ASHRAE Member: \$989)

Company Discount: Enroll 3 or more participants from the same company at the same time and SAVE!

REGISTER



BONUS!

Get a FREE copy
 of *Standard
 189.1-2014* and
User's Manual.

A \$200 Value!



Register for **BOTH training sessions** to save money and fast track your experience level!

HVAC Design: Level II—Applications

ASHRAE's *HVAC Design: Level II — Applications* provides advanced instruction on HVAC system designs for experienced HVAC designers and those who complete the HVAC Design: Level I — Essentials training. In two days, gain an in-depth look into *Standards 55, 62.1, 90.1, 189.1* and the *Advanced Energy Design Guides*. Training will focus on a range of topics including: HVAC equipment and systems, energy modeling, designing a chiller plant, and BAS controls.

- Sustainability / Green/LEED / HPB / NZEB
- Standard 55
- Standard 62.1
- Building Systems: Education Facility
- System Applications: Chiller/Boiler, Air Handlers, VAV Terminals
- Life Cycle Cost
- Building Systems: Multi-story Office Building
- Water-to-Water GSHP Option 1 Chilled Beam with DOAS
- Water-to-Water GSHP Option 2 UFAD

HVAC Design: Level II—Applications

When: March 19–20, 2015 | Atlanta, GA
 May 21–22, 2015 | Chicago, IL
 June 18–19, 2015 | Atlanta, GA

Cost: \$829 (ASHRAE Member: \$679)

Company Discount: Enroll 3 or more participants from the same company at the same time and SAVE!

REGISTER



BONUS!
 Get a **FREE** copy of **ASHRAE GreenGuide: Design, Construction, and Operation of Sustainable Buildings, 4th. ed.**
A \$100 Value!

Your Instructors



Julia Keen, Ph.D., P.E.,
 Member ASHRAE, HBDP
[view bio](#) →



Joel Primeau, P.Eng., Member
 ASHRAE, HBDP, LEED® AP
[view bio](#) →



Donald Brandt, Member ASHRAE
[view bio](#) →



Julian de Bullet, Life Member
 ASHRAE
[view bio](#) →

Like us on Facebook | Follow us on Twitter | Join the conversation on ASHRAExCHANGE



News

1791 Tullie Cir. NE | Atlanta, Ga. 30329-2305 | 404-636-8400 | www.ashrae.org

For Release:
March 13, 2014

Contact: Jodi Scott
Public Relations
878-539-1140
jscott@ashrae.org

New: Recognition for "Best Graduate Student Paper"
Paper Deadline Approaching for ASHRAE's 2016 Winter Conference

ATLANTA – ASHRAE has announced a call for papers for its 2016 Winter Conference in Orlando, Fla., Jan. 23-27.

The call for papers includes a recognition for the best paper written by a graduate student.

Papers are being accepted on the following topics:

Design Build project delivery, which explores the challenges and benefits, highlights successful projects and addresses several topics, including contracts and alternative design and construction processes.

Modern Residential Systems for energy efficient solutions and the latest advances ranging from glazing to water heating to lighting for the residential market.

Cutting Edge Technologies, which explores efforts to achieve net zero energy buildings.

In addition, the 2016 ASHRAE Winter Conference also seeks papers addressing advances and practices across HVAC&R systems, equipment, fundamentals and applications, especially for the **International Design Track**.

ASHRAE offers two types of paper submissions:

- Conference Paper Abstracts due March 23, 2015. Upon acceptance, papers will be due July 6, 2015. These "final" papers undergo a single-blind review, are submitted as a PDF and have an eight single-spaced page maximum length.
- Full Technical Papers due April 20, 2015. Papers submitted for review must be both technically accurate and clearly written. These papers undergo a rigorous double-blind review and can be a maximum of 30 double-spaced pages.

Graduate Student Paper Recognition

Graduate students who submit a Conference Paper are eligible to participate in a recognition program titled "Best Graduate Student Paper."

The recognition program is an ASHRAE effort to expose a deserving graduate student to the international community of researchers in the field by helping to fund their travel to the 12th CLIMA World Congress to be held May 22-25, 2016, in Aalborg, Denmark.

ASHRAE will conduct a review of graduate student papers accepted for the January 2016 ASHRAE Winter Conference to make the selection. The graduate student author chosen will receive funding up to \$2500 to offset expenses of attending the CLIMA 2016 Congress. Conditions of the award are that the paper must be based on the student's thesis, that the paper be a Conference Paper (not a Technical Paper), that the student be the first author listed and that the submitter be a graduate student at the time of the abstract submission.

To submit a Conference paper abstract or a technical paper and for more information about the tracks, go to www.ashrae.org/orlando.

The 2016 Winter ASHRAE Conference takes place at the Hilton Orlando.

Held in conjunction with the 2016 Winter Conference is the ASHRAE co-sponsored International Air-Conditioning, Heating, Refrigerating Exposition, Jan. 25-27, 2016 Orlando Convention Center. The AHR Expo will attract some 60,000 professionals and the ASHRAE Conference will attract some 4,000 attendees and meeting participants.

Like us on Facebook | Follow us on Twitter | Join the conversation on ASHRAExCHANGE



News

1791 Tullie Cir. NE | Atlanta, Ga. 30329-2305 | 404-636-8400 | www.ashrae.org

For Release:

March 18, 2015

Contact: Jodi Scott

Public Relations

678-539-1216

jscott@ashrae.org

Papers Sought for International Conference on Energy Research and Development

ATLANTA – Papers are being sought for a conference focused on emerging energy conversion technologies, conservation and management strategies.

Organized by Kuwait University and ASHRAE, the 6th International Conference on Energy Research and Development (ICERD-6) takes place March 14-16, 2016, in Kuwait.

Abstracts (400 words in length) are due June 1, 2015. If accepted, papers are due September 15, 2015. Authors of accepted papers are responsible for travel and registration. Hotel accommodations are free for authors presenting papers. Submittal information can be found at www.ashrae.org/Kuwait2016.

The conference objective is to optimize the utilization of basic energy resources in the major energy consuming sectors in the arid region of the Arabian Peninsula. The conference builds upon the five previous conferences that attracted the international energy research and development community. The conference will be attended by more than 300 registrants and will involve decision makers to help in setting energy policies not only for Kuwait but also for the region. Many challenges arise when designing systems in high ambient condition and new innovations and advances are always needed, according to Walid Chakroun, chair of the scientific committee for the conference.

"The conference theme is 'Advances in Energy Research and Development' and aims to bring together leading academic scientists, researchers and practicing experts to exchange and share their experiences and research results about all advancements in energy applied systems," Chakroun said.

Topics include but are not limited to:

- Energy Conversion and Management
- Energy Conservation
- Fuels and Alternatives
- Energy Policy and Planning
- Combined and Cogeneration Energy Systems
- Air-conditioning and Refrigerating Systems
- Energy and Environmental Issues
- Energy and Sustainable Development
- Renewable Energy Technologies
- Energy Storage
- Thermodynamics, Heat Transfer and Fluid Dynamics
- Thermodynamic Optimization and Exergy Analysis
- Plant and Facilities Mechanical Integrity
- Emerging Energy Technology
- Material Design and Analysis

The papers will undergo a peer-review conducted by ASHRAE and overseen by the scientific committee. The conference also includes lectures of invited speakers and training courses to help in building local capacities. In addition, a forum discussion will be organized to present a future plan for energy in the Gulf Cooperation Council (GCC) countries. A representative from each GCC country will make a presentation followed by a discussion on energy production, management and conservation.

Like us on Facebook | Follow us on Twitter | Join the conversation on ASHRAExCHANGE



News

1791 Tullie Cir. NE | Atlanta, Ga. 30329-2305 | 404-636-8400 | www.ashrae.org

March 23, 2015

Contact: Jodi Scott
Public Relations
678-539-1140
jscott@ashrae.org

Registration Open for Free ASHRAE Webcast on Existing Building Commissioning

ATLANTA – Registration for the 2015 ASHRAE Webcast, “New Tomorrows for Today’s Buildings: Existing Building Commissioning,” is now open at www.ashrae.org/webcast. There is no fee for registration.

The webcast, offered by ASHRAE’s Chapter Technology Transfer Committee (CTTC), is broadcast live on April 23, 2015, from 1-4 p.m. EDT. The webcast features industry experts who will define the benefits of existing building commissioning for the environment, occupants, operations staff and overall ownership costs.

“The presenters will distinguish between new building commissioning, existing building commissioning and retro-commissioning,” Nathan Hart, chair of the CTTC Webcast Ad Hoc Committee, said. “Viewers will learn how to manage the commissioning process to minimize the impact on building functions and occupants, and how to integrate elements of existing building commissioning into the operation and maintenance staff’s daily activities. The focus will be on maximizing energy efficiency and return on investment.”

The webcast presenters are:

- Bob Baker, Fellow ASHRAE, OPMP, managing director, BBJ Consulting, Riverview, Fla.
- Jim Vallort, Fellow ASHRAE, practice leader, Environmental Systems Design Inc., Chicago, Ill.
- Ron Wilkinson, P.E., CPMP, commissioning authority, Wilkinson Commissioning Management, Seattle, Wash.

The webcast has been approved for three Learning Units (LUs) by the American Institute of Architects (AIA) and three Continuing Education (CEUs) by GBCI. The state of New York also recognizes AIA course approval.

For more information on the webcast program continuing education credits and ASHRAE resources related to existing building commissioning, visit www.ashrae.org/webcast.

Not able to view the live webcast? Be sure to register and take advantage of the free Webcast On Demand. The Webcast On Demand allows you to view all or part of the webcast online, as many times as you like, until May 8, 2015. Registration is required to view the Webcast On Demand.

Like us on Facebook | Follow us on Twitter | Join the conversation on ASHRAEExchange



News

1791 Tullie Cir. NE | Atlanta, Ga. 30329-2305 | 404-636-8400 | www.ashrae.org

For Release:
March 25, 2015

Contact: Jodi Scott
Public Relations
678-539-1140
jscott@ashrae.org

ASHRAE International Conference on Ships Takes Place May 22-24 in Athens

ATLANTA – The technical program for the International Conference on Energy and Environment in Ships, May 22-24, 2015, Athens, Greece, is being finalized. Registration is slated to open in April.

Organized by ASHRAE, the Hellenic Navy, the Technical Chamber of Greece and the ASHRAE Hellenic Chapter, the Conference is focused on the state of the art and challenges related to HVAC&R, indoor environmental quality, and energy safety and security on ships as well as onshore facilities.

The Conference presents a comprehensive overview of the areas relevant to military and commercial ships. Conference paper topics cover energy conservation and efficiency, ship HVAC systems, economic and financial considerations, IAQ in compact cabins and much more.

Among the 30-plus papers to be presented are:

- Evaluation of Thermoelectric Generators for Waste Heat Recovery in Ships
- Minimizing Shipboard HVAC Energy Costs through Optimal Design
- Deep Water Wind Energy Production and Storage Coupled with Desalination Process
- Power Plant-Related Measures for Improving Energy Efficiency in Ships
- Energy Performance of a Liquid Desiccant and Evaporative Cooling-Assisted 100% Outdoor Air System in Commercial Ships
- Application of Photovoltaics on Ship Electrical Power Systems: Utopia or Reality?
- Life Cycle Assessment as a Prerequisite Tool in Maritime Industry
- Optimal Economic Operation of a Complex Electric Power System with Shaft Generators
- Capital Budgeting Techniques in Energy Systems Applied in Marine Science
- Production and Characterization of Zero Waste Biodiesel from Green Algae (*Cladophora glomerata*)
- Current and Future Trends on Marine Antifouling Coatings and the Study of Energy Efficiency Benefits for a Naval Fleet
- Royal Naval HVAC Systems

In addition, the United Nations Environment Program presents a special session with a range of topics and presenters that addresses the management of ozone-depleting substances in the fishing and shipping sectors.

The Conference seeks to bring together the various professions in the shipping industry, according to Dimitris Charalambopoulos, conference chair.

"This conference will be the first of its kind to draw up the strong links to the Hellenic Navy, the shipping community and the engineering community," he said. "Attendees can expect to see current practices, new approaches, methodologies and technologies, and identify areas of improvement."

More information can be found at www.ashrae.org/ships2015. Registration will open April 2015. Registration fee for the technical program is 35 euros. Technical program and all social events registration fee is 155 euros. Reduced registration is available for students. All sessions take place at the Yacht Club of Greece and at the Hellenic Naval Academy.

 Like us on Facebook |  Follow us on Twitter |  Join the conversation on ASHRAEExchange



News

1791 Tullie Cir. NE | Atlanta, Ga. 30329-2305 | 404-636-8400 | www.ashrae.org

For Release:
March 26, 2015

Contact: Jodi Scott
Public Relations
678-539-1140
jscott@ashrae.org

Advanced Energy Design Guide for Grocery Stores Available; Free Download

ATLANTA – Today's grocery stores often include a wide range of prepared food services and expanded fresh food products, which creates unique challenges in the design process due to the needed balance between refrigeration, food service and HVAC systems. When coupled with the need to create an inviting environment and positive shopping experience for customers, energy efficiency may get overlooked. However, an energy efficient grocery store design adds value, reduces expenses and enhances the customer shopping experience. A new publication from leading industry associations provides an integrated approach to achieve such energy efficiency design.

The new published *Advanced Energy Design Guide for Grocery Stores* focuses on grocery stores ranging in size from 25,000 to 65,000 square feet with medium- and low-temperature refrigerated cases and walk-ins. The information in this Guide can be combined with that in *Advanced Energy Design Guide for Medium to Big-Box Retail Buildings* and used for larger stores that consist of both grocery and general merchandise.

To download a free copy, please visit www.ashrae.org/freeaedg.

Refrigeration systems consume approximately half of the total energy consumed by a typical grocery store, and they interact with other building systems in a number of ways. One example is the heating load created by refrigerated cases without doors. Humidity control is another major issue. These interactions impact equipment performance and fresh food perishability.

"Traditionally, the refrigeration and food service are considered independently from the rest of the building systems and the HVAC&R is expected to meet the loads," Paul Torcellini, chair of the committee that wrote the Guide, said. "An integrated approach looks at the building holistically and addresses issues such as: HVAC humidity levels that are critical to the performance of the refrigeration system, refrigeration system waste heat that can be used for hot water or conditioning the outside air, and food service operation that generates lots of heat that must be removed. Adding doors to refrigerated cases reduces uncontrolled cooling, simplifies temperature control and reduces system load. Better management of exhaust hoods and better selection of equipment reduces the food service loads. Proper introduction of outside air that is semi-conditioned helps minimize cooking smoke and odors with minimal conditioning. These are just examples of how the pieces need to work together."

The Guide is the fifth in a series to provide recommendations for achieving 50% energy savings over the minimum code requirements of ANSI/ASHRAE/IESNA Standard 90.1-2004, *Energy Standard for Buildings Except Low-Rise Residential Buildings*. In the case of this Guide, all recommendations also meet or exceed Standard 90.1-2013.

Continued on next page

The series was developed by a committee representing a diverse group of energy professionals drawn from ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society (IES), the U.S. Green Building Council (USGBC) and the Department of Energy (DOE). Support and funding was provided by DOE through the National Renewable Energy Laboratory (NREL).

The specific energy-saving recommendations are summarized in a single table for each climate zone and allow contractors, consulting engineers, architects, and designers to easily achieve advanced levels of energy savings without detailed energy modeling or analyses. In addition, this Guide discusses principles of integrated design and how they can be used to implement energy-efficient strategies. A chapter addressing design philosophies for grocery stores is also included. This chapter is devoted to interaction between refrigeration and other building systems.

An expanded section of tips and approaches is included in the "How to Implement Recommendations" chapter. These tips are cross-referenced with the recommendation tables. This chapter also includes additional "bonus" recommendations that identify opportunities to incorporate greater energy savings into the design of the building.

Case studies and technical examples throughout the Guide illustrate the recommendations and demonstrate the technologies in real-world applications.

This guide's electronic copy has navigational hyperlinks to allow easy movement throughout the guide. Links in the recommendation tables direct readers to the applicable "how to" tips, and links within the text direct to referenced tables and figures.

The 50% series includes books for large hospitals; medium to big box retail buildings; small to medium office buildings; and K-12 school buildings. The energy savings target of 50% is the next step toward achieving a net zero energy building, which is defined as a building that, on an annual basis, draws from outside resources equal or less energy than it provides using on-site renewable energy sources.

ANSI/ASHRAE/IESNA Standard 90.1-2004 provides the fixed reference point and serves as a consistent baseline and scale for all of the 50% guides.

There also is a series providing 30% savings, which target small office buildings; small retail buildings; K-12 school buildings; small warehouses and self-storage buildings; highway lodging; and small hospitals and healthcare facilities.

For more information on the entire Advanced Energy Design Guide series, or to download a free copy, please visit www.ashrae.org/freeaedg. A print version of the Guide may be purchased for \$89 (\$62, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit www.ashrae.org/bookstore.