

Upcoming Events

- **May 11th** - HVAC Noise and Vibration Control
- **June 8th** - Golf Outing

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Meeting Wednesday April 13, 2011

2 PDH Credits Approved

Presentation: Basics of Room Air Distribution and Air Distribution Performance Index (ADPI)

In the main presentation, Distinguished Lecturer Dan Int-Hout will present the basic physics of air distribution. The following points will be addressed: Diffuser performance terminology, Air Diffusion Performance Index (ADPI) definition and purpose, Diffuser selection methods for cooling and heating applications, Common air distribution devices, Selecting and positioning air distribution components, System parameters for effective air mixing, Well mixed (Inductive) air distribution, Overview of non inductive air distribution, LEED requirements for air distribution, ASHRAE Thermal Comfort Standard 55-2010 and determining optimum comfort strategies, Requirements of ASHRAE Ventilation Standard 61.1-2010 and air distribution component selection, and Diffuser selection effect on project cost.

Tech Session: Introduction to Hydronic Heating and Cooling (Chilled Beams)

In the tech session, Rob Brown of Price Industries will present the following topics on chilled beams: Background Information on types of overhead hydronic heating and cooling systems, Overview of types of devices, theory and design parameters, Radiant Panels, Radiant Sails, Passive Beams, Active Beam, Architectural aspects of Hydronic Systems, Humidity Control, and Acoustics.

Place: Casa Rina, 886 Commerce Street, Thornwood, NY 10592
Program: 5:30 - 6:00 PM Attitude Adjustment Time
 6:00 Dinner
 6:30 - 7:00 PM Tech Session
 7:00 - 7:15 PM Coffee
 7:15 - 9:00 PM Presentation

Directions to Casa Rina

From Saw Mill Parkway - North or South
 Exit at Marble Avenue - Exit # 27
 Make right - continue to second traffic light
 Make right onto Commerce Street
 Casa Rina is the second house on your left.

Please make reservations by contacting either:

Nicholas Salomone — nsalomone@olace.com 914-919-3140
 Enzo Carlesimo — ecarlesimo@collado-eng.com 914-332-7658

President's Message

By Enzo A. Carlesimo

On behalf of the entire Chapter, I would like to extend our gratitude to the facilities management group of the New York Power Authority (NYPA) for hosting such an insightful tour of their headquarters in downtown White Plains. I am certain that all the attendees learned how the right combination of green building strategies can lead to LEED accreditation. Our upcoming meeting on April 13th will take place at our usual venue, Casa Rina Restaurant, and it promises to be yet another interesting and informative evening. We will be having our Tech Session on chilled beams which I am really looking forward to. While relatively new in North America, chilled beam air conditioning systems are a proven "green" solution and very popular in Europe, Australia and other parts of the world. Hopefully, our presenter will be able to show us what we have been missing out by sharing some insight on this cutting edge technology. Dan Int-Hout, Chief Engineer for Krueger Air Distribution and ASHRAE Distinguished Lecturer, will be giving the Main Presentation on "Effective Room Air Distribution." I am also looking forward to Dan's presentation as well because anyone knows even if you can size a forced air HVAC system properly and the air distribution system is designed incorrectly, you have only done half the job, and the client will be very dissatisfied. Designing a good air distribution system involves much more than just looking at the NC levels and throws for respective air outlets. I am certain that Dan will give all of us a crash course on how to do it the *right* way. I hope to see you all on the 13th!



Enzo A. Carlesimo
Bi-State Chapter President

Membership Promotion — Erica L. Ross, Chairman

ASHRAE is the world's leading organization for HVAC&R professionals. As the builders and engineers for the next generation, we look to ASHRAE to set the standard for our design work. As a member of ASHRAE you are exposed to many additional benefits. With membership have access to over 15,000 publications and articles in the ASHRAE bookstore, you gain access to a world of knowledge. Also, many of the licensing boards require professional credits toward credential renewal. With on site lectures, dinner meetings, and webcasts, your local Bi-State Chapter can bring these credits to you. So, come to our next meeting, bring a co-worker and find out who else shares your commitment to the future. Remember to find us on facebook at <http://www.facebook.com/BISTATE>.

UN Climate Chief Warns on Kyoto Protocol Deadline

Commitments by most developed countries to cut carbon emissions are likely to expire at the end of next year without a new round of legally binding pledges, the UN's climate chief warned recently. Christiana Figueres said governments needed to start preparing for a gap on the expiry of pledges under the Kyoto Protocol, which forms the foundation of the world's efforts to cut the emissions that are blamed for global warming.

"Governments have to face the fact that a gap in this effort looks increasingly impossible to avoid," Figueres told reporters in Bangkok during the UN's first round of climate talks for the year. "In 2011 they need to figure out how to address this issue and how to take it forward in a collective and inclusive way. Resolving this will create a firmer foundation for an even greater collective ambition to cut emissions."

Signed in 1997, the Kyoto Protocol saw most developed nations agree to legally binding agreements in curbing their greenhouse gas emissions. Those commitments are due to expire at the end of 2012. But Japan and Russia have firmly opposed extending the protocol because it excludes the world's two biggest polluters -- China and the United States -- and therefore only covers about 30 percent of global emissions. China did not have to commit to cutting emissions because of its status as a developing country, while the United States refused to ratify the protocol.

Residential Programmable Thermostats' Usability Impacts Effectiveness

Homes with programmable thermostats are not saving as much energy as expected and might even be using more compared to homes without them, according to research by the Lawrence Berkeley National Laboratory. Tests and surveys conducted for the study found that users frequently had difficulty performing various tasks on programmable thermostats. One survey found that half of residential programmable thermostats are set to long-term hold, and 20% had the wrong time of day set on the units' internal clocks. Also, 89% of the respondents rarely or never used their thermostat to set a weekday or weekend program. One intention of the study is to develop a usability "score" for programmable thermostats. The report is available at <http://eec.ucdavis.edu/ACEEE/2010/data/papers/1963.pdf>

Research Promotion Contribution Form

PLEASE COMPLETE THE INFORMATION BELOW AND RETURN WITH YOUR CONTRIBUTION TO:

Terry Connor
Johnson Controls
8 Skyline Drive
Hawthorne, NY 10532

Phone: 914-593-5223 Fax: 914-593-5201

Please accept my research investment in the amount of \$ _____

Make checks out to **ASHRAE Research**.

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Charge my gift to: Visa Master Card American Express

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Signature _____

Donors are recognized for their contributions as follows:

Honor Roll contributors are listed in the October ASRHAE Journal and receive the commemorative coin recognizing Giants in HVAC&R invention or innovation.

Individual Honor Roll beginning at \$100

Corporate Honor Roll beginning at \$150

Investors with contributions of \$250 or more receive a wall plaque that can display six commemorative coins.

Contributions in any amount are gratefully received and 100% of the contribution goes directly to research. All contributions are tax deductible.

ASHRAE Learning Institute Spring 2011 Online Course Series

2 WAYS TO REGISTER

Internet: www.ashrae.org/onlinecourses

Phone: Call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Note: You may register up to 24 hours prior to an online seminar. Courses are in US Eastern Standard Time.



Using Standard 90.1 to Meet LEED Requirements
Monday, March 28, 2011 – 1:00 p.m. to 4:00 p.m.

District Cooling & Heating Systems: Central Plants
Wednesday, April 20, 2011 – 1:00 p.m. to 4:00 p.m.

Fundamental Requirements of ASHRAE Standard 62.1-2010
Wednesday, March 30, 2011 – 1:00 p.m. to 4:00 p.m.

Understanding Air-to-Air Energy Recovery Technologies & Applications
Monday, April 25, 2011 – 1:00 p.m. to 4:00 p.m.

Application of ASHRAE Standard 62.1-2010
Wednesday, April 6, 2011 – 1:00 p.m. to 4:00 p.m.

Basics of High Performance Building Design 
Wednesday, April 27, 2011 – 1:00 p.m. to 4:00 p.m.

The Commissioning Process & Guideline 0
Monday, April 11, 2011 – 1:00 p.m. to 4:00 p.m.

Complying with Standard 90.1-2010 HVAC/Mechanical
Monday, May 2, 2011 – 1:00 p.m. to 4:00 p.m.

Avoiding IAQ Problems Using ASHRAE's New IAQ Guide
Wednesday, April 13, 2011 – 1:00 p.m. to 4:00 p.m.

Advanced High Performance Building Design 
Wednesday, May 4, 2011 – 1:00 p.m. to 4:00 p.m.

Understanding Standard 189.1 for High Performance Buildings
Monday, April 18, 2011 – 1:00 p.m. to 4:00 p.m.

Complying with Standard 90.1-2010 Envelope/Lighting
Wednesday, May 11, 2011 – 1:00 p.m. to 4:00 p.m.



ASHRAE HVAC Design Essential Workshop

May 18-20 • ASHRAE Foundation Learning Center • Atlanta, GA

ASHRAE Certification Programs

In three days, you will

- Participate in in-depth, practice-focused training
- Improve overall building performance
- Effectively collaborate on an integrated design team
- Learn from industry leaders selected by ASHRAE
- Gain real-world experience to make immediate contribution to design projects

ASHRAE created the HVAC Design Essentials to provide intensive, practical education for HVAC designers and others involved in delivery of HVAC services. Developed by industry-leading professionals, this workshop provides attendees with the fundamental and technical aspects of HVAC design in commercial buildings.

In three days, you will gain practical skills and knowledge to design, install and maintain HVAC systems that can be put to immediate use. The workshop provides real-world examples of HVAC systems including calculation of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.


Who Should Attend

Professionals at:

- Mechanical design firms
- Architectural firms
- Mechanical consulting firms
- Facility management departments
- Sales engineering firms
- Utility companies



Visit www.ashrae.org/hvacdesign to register

- Building Energy Assessment Professional (BEAP) 
- Building Energy Modeling Professional (BEMP)
- Commissioning Process Management Professional (CPMP)
- Healthcare Facility Design Professional (HFDP)
- High-Performance Building Design Professional (HBDP)
- Operations & Performance Management Professional (OPMP)

For more info, visit
www.ashrae.org/certification

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Why Be Involved in a Local Chapter?

- Learn about the latest technologies presented in the program sessions
- Attain continuing education credits
- Meet industry associates and discuss local concerns
- Network amongst designers, installers, vendors, educators, in your local area to help improve business for all
- Share experiences with others
- Enjoy a social hour
- Carry out ASHRAE's mission on a local level

"To advance the arts and sciences of heating, ventilating, air conditioning and refrigerating to serve humanity and promote a sustainable world."

ASHRAE Region I Roster 2010-11 Executive Committee

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Help Wanted

Mechanical Engineers

AltieriSeborWieberLLC is a consulting engineering firm in Norwalk, CT which provides mechanical, electrical, plumbing and fire protection design services to a premier list of national and international clients. We specialize in large institutional projects with specific and often challenging requirements for building types including: museums, performing arts centers, aquariums and education. Sustainability is an element in all of our designs. Each of our projects is different and unique. Motivated candidates are able to take on new responsibilities.

We are seeking experienced Mechanical Engineers with 3-5+ years of experience. Responsibilities include: heating and cooling load calculations, field survey, equipment selection and scheduling, central plant design, confirming energy code compliance, duct and pipe distribution, document development and production.

We are also seeking experienced Mechanical Engineers with 7-10+ years of experience. These candidates will have the above responsibilities as well as concept design, development of flow/controls diagrams and control sequences, comparing multiple design concepts based on energy-use benefits, project management, coordination with all trades and outside consultants, construction administration and client interface.

Experience using AutoCAD is a prerequisite. Experience with eQuest and Revit and candidates with EIT, PE, LEED, BEMP and/or HBDP certifications will be rewarded.

AltieriSeborWieberLLC offers excellent benefits including 401k, health & dental insurance, flexible workday schedule, summer hours and a casual, but motivated working environment.

Find out more at: www.altieriseborwieber.com. Please contact Ken Wieber, Jr. in confidence at info@altierisw.com

Employment ads may be submitted for inclusion in **The Exchanger** as follows:

1. \$100.000 from companies placing ad for one (1) month.
2. \$150.00 from companies placing ad for two (2) months.
3. No charge for members looking for employment.

62.1 User's Manual Provides Guidance on Ventilation Standard

The newest guidance for using Standard 62.1-2010 includes a revised, user-friendly spreadsheet and examples, as well as the latest updates pertaining to the new version of the standard.

The 62.1 User's Manual provides explanatory material, detailed information, figures and examples to guide users in designing, installing and operating buildings in accordance with ANSI/ASHRAE Standard 62.1-2010, Ventilation for Acceptable Indoor Air Quality, which sets minimum ventilation rates and other requirements for commercial and institutional buildings.

Also highlighted is the application of useful tools used for compliance with Standard 62.1-2010, including a newly revised spreadsheet that assists in Ventilation Rate Procedure calculations. The spreadsheet provides calculations for the multiple spaces procedure and has been significantly improved, made more user friendly and now includes two example spreadsheets focusing on cooling and heating.

"The spreadsheet and new examples have been revised in response to user feedback and have much improved usability," Roger Hedrick, chair of the Standard 62.1 committee, said. "The spreadsheet should significantly reduce the effort needed to perform the calculations needed for multizone recirculating systems. The spreadsheets are a must have for designers."

The Manual encourages users of the standard to apply the principles of good indoor air quality and effective ventilation when designing buildings and building systems, and provides useful reference material to assist designers in efficiently completing a successful and compliant design.

The cost of the 62.1 User's Manual is \$75 (\$64 ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.

Notice to business card advertisers:

We are currently accepting business card advertisements for this year's newsletters. The cost of a business card ad is \$125.00. The newsletter is published monthly, September through June (ten issues). That means for \$125.00 (\$12.50 an issue), your business card ad will circulate to approximately 300 recipients a month or an advertising cost of approximately 4 cents/recipient.

If you are interested in placing an ad, please forward a business card and check (payable to ASHRAE Bi-State) to:

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 DL Flow Tech
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Proctor & Gamble Commits to 100 Percent Green Building

“Procter & Gamble has announced that all new company facilities will be designed to meet green building standards as certified by the U.S. Green Building Council's (USGBC) LEED program.

P&G's Taicang plant in China, which broke ground recently, is the first P&G manufacturing site to pursue LEED certification, with several additional new P&G sites currently working toward the same distinction globally. The Taicang plant features notable environmental aspects such as maximizing beneficial water re-use while minimizing water consumption through efforts such as recovering steam condensate for domestic water needs and harvesting rainwater to replenish on-site landscaping water. Outdoor lighting will be powered by a combination of solar energy and use of high efficiency mechanical equipment, and the operational design aims to maximize waste recycling and ultimately achieve zero waste to landfill.

The American Society of Heating, Refrigerating and Air-Conditioning Engineers advances the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world. Membership is open to any person associated with the field including indoor air quality, building design and operation, and environmental control for food processing and industry.



ASHRAE will be the global leader, the foremost source of technical and educational information, and the primary provider of opportunity for professional growth in the arts and sciences of heating, ventilating, air conditioning and refrigerating.

Upcoming Meetings

Month	Date	Promotion	Main Presentation	Tech Session
April	4/13/2011	Sustainability	Effective Room Air Distribution	Introduction to Hydronic Heating and Cooling
May	5/11/2011	Student Activities	HVAC Noise and Vibration Control	Variable Refrigerant Flow Fundamentals
June	6/8/2011	Membership Promotion	Golf Outing	

Free ASHRAE Webcast Highlights Ground Source Heat Pumps

While temperatures above ground vary with the seasons one constant is the temperature underground, which stays relatively the same all year. Designers in the built environment using ground source heat pump systems are harnessing the energy underground to help with heating and air conditioning in the buildings they design.

ASHRAE's upcoming webcast, "Ground Source Heat Pump Systems – Putting the Earth to Work for You," focuses on this method of using underground temperature to create a system using natural resources to save energy and money at the same time. The webcast takes place April 21, 2011, from 1– 4 p.m. EDT.

"The overwhelming choice from our several webcast surveys has been ground source heat pump systems," Dave Shugars, chair of ASHRAE's Chapter Technology Transfer Committee Webcast Ad Hoc Committee, said. "This webcast will highlight several critical factors in the evaluation and design process that are essential to deliver system efficiency. From understanding ground characteristics, to avoiding pitfalls of design and installation, the webcast is a must see for discerning owners and designers alike."

The webcast presenters are Jeffrey D. Spitler, Ph.D., P.E., professor in the School of Mechanical and Aerospace Engineering, Oklahoma State University, Stillwater, Okla.; Kirk T. Mescher, P.E., principal, CM Engineering, Inc., Columbia, Mo.; and Mick Schwedler, P.E., manager, Applications Engineering, Trane, LaCrosse, Wis.

Three Professional Development Hours (PDHs) or three AIA Learning Units (LUs) may be awarded to viewers who complete the participant reaction from online by May 5, 2011.

The live program will be archived online until May 5, 2011, for viewers who are unable to participate on April 21. Registration is required to view the archived program.

Online registration is open. For more information on the webcast program, continuing education credits and ASHRAE ground source heat pump resources, visit www.ashrae.org/ghpwebcast. If you have questions about the webcast, call 678-539-1200 or email ashrae-webcast@ashrae.org.

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