



# Bi-State Chapter Exchanger

Volume XXVII, Issue 10

Serving the Hudson Valley and Western Connecticut

June 2014

## 2014 Region I Chapter Regional Conference Hosted by Bi-State Chapter

August 14-16

DoubleTree Hotel in Tarrytown



### Inside this Issue

CRC 2014	3-4
Officers and Governors	9
Employment Ads and Sponsorship	10
Upcoming Meetings	11

### Conference Registration Fees:

	Before <u>July 30th</u>	After <u>July 30th</u>
Full Conference	\$370	\$450
Companion Full Conference	\$220	\$270
Friday/Saturday Conference	\$220	\$270
Friday/Saturday Companion	\$130	\$160
Saturday Only	\$120	\$150
Kids under 18	\$ 25	\$ 25

### To register:

Go to the web address:

[www.ashraebistate.org/crc-2014](http://www.ashraebistate.org/crc-2014)

Click on "Registration" tab and follow the directions.

## **China and UK Declare Global Warming is 'One of the Greatest Challenges Facing the World'**

The leaders of China and the UK have declared the threat of global warming to be “one of the greatest challenges facing the world,” and have called on all nations to reveal their action plans well ahead of a major climate summit set for Paris in late 2015.

In a joint statement released recently by UK Prime Minister David Cameron and his visiting Chinese counterpart, Premier Li Keqiang, the leaders said climate change was already happening, “much of it as a result of human activity.” “The odds of extreme weather events, which threaten lives and property, have increased,” the statement said, citing the recent reports by the UN’s Intergovernmental Panel on Climate Change. “Sea levels are rising, and ice is melting faster than we expected.”

In a nod to the severe pollution frequently enveloping many Chinese cities, the statement added: “In addition, the burning of fossil fuels creates serious air pollution, affecting quality of life for millions. Both sides recognize that climate change and air pollution share many of the same root causes, as well as many of the same solutions.”

The comments are likely to be seen as further proof China, the world’s largest emitter of the greenhouse gases blamed for warming the planet, will place a cap on emissions. The country is particularly exposed to shifting climate patterns with much of its agriculture reliant on the regularity of seasonal snowmelt. In recent days, Chinese newspapers have carried reports that the area of frozen earth on the Qinghai-Tibet Plateau has shrunk 16 per cent in the past 30 years because of global warming.

China and Britain’s “urgent call to action” also follows the recent release of the most ambitious climate action in United States history by President Barack Obama. Some 1600 fossil-fuel burning power plants will have to cut emissions 30 per cent on 2005 levels by 2030.

## **ASHRAE 2014 Annual Conference Announced for Seattle**

ASHRAE’s 2014 Annual Conference takes place June 28-July 2 in Seattle, Washington. The Technical Program kicks off June 29, with interactive programs and a networking coffee break, and concludes July 2. The program addresses broad topics in the application of technology to practice, specific applications in ground source heat pumps, operations and maintenance and indoor environmental quality, as well as new reports on research taking place worldwide.

Featured is a track on Ground Source Heat Pumps State of the Art: Design, Performance and Research, which addresses all aspects of design that lead to optimally performing systems in addition to avoiding common pitfalls that lead to poorly performing systems. The Conference also features the second annual ASHRAE Research Summit, which presents innovations in HVAC&R research with particular emphasis on high performance building design and its role in a clean energy economy, and brings together researchers to present and discuss the latest research. Researchers present papers, seminars and forums or participate in panel discussions. Also, highlights on ongoing ASHRAE funded research are presented.

Attendees also can take part in courses offered by the ASHRAE Learning Institute, including two full-day professional development seminars and seven half-day short courses. New is a course on building demand response and the coming smart grid. ASHRAE also offers its Building Energy Assessment Professional (BEAP) and Building Energy Modeling Professional (BEMP) exams on July 1.

The keynote speaker is Robert Bryce, one of America’s most prominent energy journalists and a senior fellow at the Manhattan Institute. He serves as the keynote speaker at the opening Plenary Session, held Saturday, June 28. Registration is not required to attend the session, which also features the Honors and Awards program. Denis Hayes, president and CEO, Bullitt Center, serves as keynote speaker at the Technical Plenary, Sunday, June 29. Conference registration is required to attend. In his remarks, Hayes discusses the problems and opportunities associated with “net positive” commercial construction, using the Bullitt Center as an illustration of what is currently possible.

Technical tours at the Conference include Federal Center South Building 1202; The Fred Hutchinson Cancer Research Center 1100 Eastlake Facility; The Bullitt Center; the Bill and Melinda Gates Foundation Headquarters; the University of Washington Molecular Engineering & Sciences Building; and the University of Washington Power Plant. General tours include Tillicum Village; Show Me Seattle; Aircrafts, Airpark and Aviation Artifacts; Leisurely Lakes Cruise; Going Boeing; Cascades, Cabernets and Chocolates; and Museum of History and Industry (MOHAI).

The Conference takes place at the Sheraton Seattle and the Washington State Convention Center. To register or more information, visit [www.ashrae.org/seattle](http://www.ashrae.org/seattle).



Welcome to the historic Hudson Valley. We are ready to book your registration for the Region I CRC, August 14-16, at the *DoubleTree hotel by Hilton* located in the beautiful and pleasant County of Westchester, New York. The Hotel has a newly built Conference Center overlooking the Tappan Zee Bridge and the famous Hudson River. Just to bring everyone up to date, the Bridge is in the process of being replaced with two new Bridges, North and South Bound. The construction has already started and is expected to be completed within five years.

Westchester County offers many charming, historical attractions and entertainment to please the spouses and their different interests. Following are just a few: Union Church of Pocantico Hills, famous for the stained glass window by Henri Matisse; Sunnyside, the home of Washington

Irving, author of the Legend of Sleepy Hollow; Lyndhurst, a historic site of the National Trust; one of the great domestic landmarks of America; Playland Amusement Park in Rye; The Hudson River Museum of Yonkers; the Race Track and Empire Casino in the city of Yonkers; and shopping throughout Westchester, including some of the biggest and great shopping centers.

We look forward to hosting you and making your stay as pleasurable and relaxing as possible. Our committee has been working hard to prepare and is eager to receive and warmly welcome you. Please, pass the word and help us distribute our flyer to everyone. **PLEASE REGISTER THROUGH OUR CRC WEBSITE.**

Michael Circosta, P.E. (CRC Chairman)

### Distinguished Guests

#### David Underwood

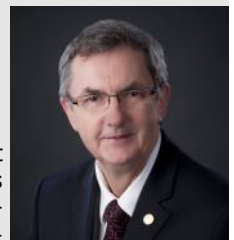
P.Eng., Fellow ASHRAE, Life Member, ASHRAE-Certified Commissioning Process Management Professional, 2014-15 President-Elect ASHRAE



David Underwood has many years of experience in the HVAC&R industry and founded Isotherm Engineering Ltd. In 1975. Among his many accomplishments he coauthored a trade refrigeration safety manual and served on a trade advisory committee for the refrigeration trade in Ontario. He is an ASHRAE Distinguished Lecturer and a member of technical committee 7.2, HVAC&R Construction & Design Technologies. He has received an Exceptional Service Award, a Distinguished Service Award and the William J. Collins Research Promotion Award.

#### Darryl Boyce

Fellow ASHRAE, 2014-15 Vice President ASHRAE



Darryl Boyce is assistant vice president (Facilities Management and Planning), Carleton University, Ottawa, Ontario, Canada. As vice president, ASHRAE, Boyce is a member of the Board of Directors and the Executive Committee and serves as chair of the Publishing and Education Council. He also serves on the Planning Committee. During his career, Boyce has served in many volunteer organizations including president of the Ontario Physical Plant Administrators and chair of the Canadian Association of University Business Officers National Facilities Management Committee. Boyce currently serves the Association of Higher Education Facilities Officers (APPA) as a member of the Information and Research committee. Boyce previously served three terms on the Board as a vice president and also served as a director-at-large and Region II director and regional chair. He is the recipient of an ASHRAE Distinguished Service Award and an Exceptional Service Award.

#### Conference Registration Fees:

	Before <u>July 30th</u>	After <u>July 30th</u>
Full Conference	\$370	\$450
Companion Full Conference	\$220	\$270
Friday/Saturday Conference	\$220	\$270
Friday/Saturday Companion	\$130	\$160
Saturday Only	\$120	\$150
Kids under 18	\$ 25	\$ 25

**To register:**  
Go to the web address:  
[www.ashraebistate.org/crc-2014](http://www.ashraebistate.org/crc-2014)  
Click on "Registration" tab and follow the directions.

#### Double Tree by Hilton Room Rates (until 7/22)

- 2 Queen beds \$159
- 1 King bed \$159

#### DoubleTree web link:

<http://doubletree3.hilton.com/en/hotels/new-york/doubletree-by-hilton-hotel-tarrytown-TERHIDT/index.html>

NOTE: Hotel reservation is separate from conference registration. Make hotel reservations by calling 914-631-5700 or by going to the above web link and using the Group code: ASO







**2014 Region I Chapter Regional Conference  
August 14-16 Tarrytown, NY**

EVENT SCHEDULE				
Start Time	End Time	Event	Location	Attendees
<b>Thursday, August 14</b>				
12:00 PM	7:00 PM	Registration	Pre South	All Attendees
12:00 PM	2:00 PM	Region 1 Audit	Lounge	Invited Region 1 Officers
1:00 PM	3:00 PM	Hospitality Suite	Suite	Registered Attendees
2:00 PM	4:00 PM	Technical Sessions	Hudson Room C	Registered Attendees
4:30 PM	6:30 PM	1st Business Meeting	Salon 4/5	Delegates, Alternates & Regional Officers and Chairs
7:00 PM	8:00 PM	Welcome Reception	Multi/Terrace	Registered Attendees
8:00 PM	9:30 PM	BBQ Dinner	Multi/Terrace	Registered Attendees
10:00 PM	12:00 AM	Hospitality Suite	Suite	Registered Attendees
<b>Friday, August 15</b>				
7:00 AM	7:00 PM	Registration	Pre South	Registered Attendees
9:00 AM	11:00 AM	Hospitality Suite	Suite	Registered Attendees
7:00 AM	9:00 AM	Continental Breakfast	Pre South	Registered Attendees
8:00 AM	9:00 AM	Local ASHRAE Recognition Breakfast	River Room	Invited Society and Local Guests
8:00 AM	10:00 AM	Caucus	Salon 4/5	Delegates & Alternates ONLY
10:00 AM	11:45 AM	Chapter Operations Workshop	Salon 4/5	Chapter Officers
12:00 PM	1:30 PM	Lunch w/Speaker	Salon 3	Sandwich Buffet
2:00 PM	3:30 PM	Executive Session	Salon 4/5	Delegates & Alternates ONLY
3:30 PM	5:45 PM	2nd Business Meeting	Salon 4/5	Delegates, Alternates & Regional Officers and Chairs
6:30 PM	7:30 PM	Reception	Multi	Registered Attendees
7:30 PM	10:00 PM	Presidential Dinner	Salon 3	Registered Attendees
10:00 PM	???	YEA Event	Meet in Lobby	YEA Members
10:00 PM	12:00 AM	Hospitality Suite Open	Suite	Registered Attendees
<b>Saturday, August 16</b>				
7:00 AM	10:00 AM	Registration	Pre South	All Attendees
9:00 AM	11:00 AM	Hospitality Suite	Suite	Registered Attendees
7:00 AM	9:00 AM	Continental Breakfast	Pre South	Registered Attendees
8:00 AM	9:45 AM	3rd Business Meeting	Salon 4/5	Delegates, Alternates & Regional Officers and Chairs
8:00 AM	11:00 AM	Government Activities Workshop	Sleepy Hollow Rm	GA Chairs
8:00 AM	9:00 AM	Research Workshop	Hudson Room A	Research Chairs
8:30 AM	11:30 AM	Membership Workshop	Hudson Room B	Membership Chairs
8:30 AM	11:30 AM	CTTC Workshop	Hudson Room C	CTTC Chairs
8:00 AM	9:30 AM	History Workshop	River Room	Historians
8:30 AM	10:30 AM	Student Activities Workshop	Tarrytown Room	Student Activities Chairs
10:00 AM	11:30 AM	RECC Workshop	River Room	RECC Chairs
10:00 AM	11:30 AM	YEA Workshop	Tarrytown Room	YEA Members
12:00 PM	2:00 PM	Awards Luncheon	Salon 3	Registered Attendees
2:30 PM	3:30 PM	CRC Debrief Meeting	Suite	CRC Host Committee & Guests

*Conference schedule is preliminary, subject to change prior to CRC*

**Presidential Dinner Entertainment**

**Master storyteller Jonathan Kruk offers a dramatic performance of Washington Irving's classic tale, *The Legend of Sleepy Hollow*.**



Just a few of the local attractions . . .



Kykuit — Rockefeller Estate



**SUNNYSIDE**  
The home of Washington Irving



**LYNDHURST**  
A historic site of the National Trust.



Playland Amusement Park — Rye



Hudson River Museum — Yonkers  
Exhibitions, planetarium, programs



Yonkers Raceway and Empire City Casino

# 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**.

Name\_\_\_\_\_Member #\_\_\_\_\_

Company\_\_\_\_\_Chapter Bi-State\_\_\_\_\_

Address\_\_\_\_\_

City\_\_\_\_\_State\_\_\_\_\_Zip\_\_\_\_\_

Please check one:           ( ) Personal contribution  
                                  ( ) Company contribution

Charge my gift to:   ( ) Visa   ( ) Master Card   ( ) American Express

Credit Card #\_\_\_\_\_Expiration Date\_\_\_\_\_

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.*

## MIT and Stanford Scientists Find New Way to Harness Waste Heat

Vast amounts of excess heat are generated by industrial processes and by electric power plants. Researchers around the world have spent decades seeking ways to harness some of this wasted energy. Most such efforts have focused on thermoelectric devices – solid-state materials that can produce electricity from a temperature gradient – but the efficiency of such devices is limited by the availability of materials.

Now researchers at Stanford University and the Massachusetts Institute of Technology have found a new alternative for low-temperature waste-heat conversion into electricity – that is, in cases where temperature differences are less than 100 degrees Celsius. The new approach is described in a study, published in the journal *Nature Communications*, by Seok Woo Lee and Yi Cui at Stanford and Yuan Yang and Gang Chen at MIT.

“Virtually all power plants and manufacturing processes, like steelmaking and refining, release tremendous amounts of low-grade heat to ambient temperatures,” said Cui, an associate professor of materials science and engineering. “Our new battery technology is designed to take advantage of this temperature gradient at the industrial scale.”

The new Stanford-MIT system is based on the principle known as the thermogalvanic effect, which states that the voltage of a rechargeable battery is dependent on temperature. “To harvest thermal energy, we subject a battery to a four-step process: heating up, charging, cooling down and discharging,” said Lee, a postdoctoral scholar at Stanford and co-lead author of the study.

First, an uncharged battery is heated by waste heat. Then, while the battery is still warm, a voltage is applied. Once fully charged, the battery is allowed to cool. Because of the thermogalvanic effect, the voltage increases as the temperature decreases. When the battery has cooled, it actually delivers more electricity than was used to charge it. That extra energy doesn't appear from nowhere, explained Cui. It comes from the heat that was added to the system.

The Stanford-MIT system aims at harvesting heat at temperatures below 100 C, which accounts for a major part of potentially harvestable waste heat. “One-third of all energy consumption in the United States ends up as low-grade heat,” said co-lead author Yang, a postdoc at MIT.



Join us at **ASHRAE's 2014 Annual Conference**  
June 28–July 2 | Seattle, Washington | [www.ashrae.org/seattle](http://www.ashrae.org/seattle)

Special first  
time attendee  
registration fee  
available!

Join ASHRAE in Seattle! Take advantage of the opportunity to discuss and examine the latest topics in the building industry, such as high performing buildings and integrated design, through the technical program; participate in technical tours; attend ASHRAE Learning Institute courses; and earn professional credits.

**Research Summit** – held in conjunction with the 2014 Annual Conference. The summit addresses the latest research results, innovative research techniques and forecasts future research directions.

**Technical Program** – presentations and papers focus on current research worldwide; core HVAC&R applications and systems; and Integrated Project Design, Energy Modeling and Building Efficiency Performance.

**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 technologies.





## ASHRAE Guideline on Specifying Building Automation Systems Published

Guidance on performance monitoring is featured in a newly published guideline from ASHRAE. ASHRAE Guideline 13-2014, *Specifying Building Automation Systems*, provide designers of building automation systems (BAS) with background information, recommendations for good practice, project considerations, and detailed discussion of options with respect to the design of a BAS system. The guideline includes online access to an example specification that illustrates the concepts described throughout the document. The new informative Annex D Performance Monitoring was included to assist in the specification of performance monitoring systems.

“The guideline defines three levels of performance monitoring and provides criteria for each level,” Dave Kahn, chair of the Guideline 13 committee, said. “This allows even the basic systems to realize some performance monitoring benefits. It allows monitoring and reporting of HVAC equipment function and operating efficiency, energy consumption and environmental conditions. Careful grouping of X-Y type plots can provide information required to monitor and, if necessary, troubleshoot each different part of the HVAC system. A Level 3 automated fault diagnosis can be used to predict faults. Performance monitoring can direct a building owner to additional energy savings potential at the plant or equipment level.”

The Cost of Guideline 13-2014, *Specifying Building Automation Systems*, is \$95 (\$81, 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](http://www.ashrae.org/bookstore).

### 2017 Addendum Currently Open for Public Review Until July 21

ASHRAE is already looking ahead to changes to the 2017 version of the guideline. Addendum *a* to the standard is open for an advisory public review from June 6 to July 21, 2014. For more information or to comment, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews).

“Under the proposed change, the guideline is being rewritten to update the use of the Internet as the primary method for networking BAS devices,” Kahn said. “The Guideline contains very little specification language on the Internet. Our Committee hosted a consultation seminar at the 2013 ASHRAE Conference, and attendees told us internet connectivity was the top issue we need to address.”

The significant changes under proposed addenda *a* are:

- Discussion of BAS Design Options using IP and non-IP devices
- Use of new software tools, such as energy dashboards
- Strategies that BAS designers can use when working with the Enterprise IT department to deal with securing BAS devices on the Enterprise Intranet.
- A new Clause 12, BAS Device Network Design, written as a standalone section so readers who are responsible for this work can refer to one section for all information on this topic.
- A new Clause 13 addressing options for migrating legacy control systems to the Enterprise Intranet.

More information about the guideline is available in a seminar at ASHRAE’s 2014 Annual Conference, June 28-July 2, Seattle, Wash. Kahn is scheduled to give a presentation on specifying performance monitoring with the guideline as part of a session on monitoring. The seminar takes place at 8 a.m. Wednesday, July 2. For more information, visit [www.ashrae.org/seattle](http://www.ashrae.org/seattle).

## Temperatures and Tempers Heat Up in India

Angry protests broke out in India's capital recently over power blackouts as summer temperatures soar, fueling concerns of a repeat of the electricity crisis of two years ago that blacked out half the country and left more than 600 million people without electricity. Residents took to the streets at around midnight June 10 in New Delhi's northeast, attacking vehicles as frustration mounts over the power cuts. Riots have also erupted in the northern state of Uttar Pradesh, with residents storming a power substation near the capital, Lucknow. Recent temperatures in New Delhi have reached 45°C (113°F). The New Delhi government announced emergency-power saving measures on June 8, including cutting electricity at the city's shopping malls, turning off street lights and ordering government offices to switch off air conditioners at certain times. Overloading in the system resulted in the power cuts beginning in early June, when peak demand in the city reached 5,600 MW. Damage to some transmission lines during a recent major thunderstorm in New Delhi, home to more than 16 million people, has added to the problems.

## Study — Controls Could Halve Packaged HVAC Energy Use

Commercial buildings could cut their heating and cooling electricity use by an average of 57 percent with advanced energy-efficiency controls, according to a year-long trial of the controls at malls, grocery stores and other buildings across the country. The study demonstrated higher energy savings than what was predicted in earlier computer simulations by the same researchers.

"We've long known that heating and cooling are among the biggest energy consumers in buildings, largely because most buildings don't use sophisticated controls," said the study's lead researcher, engineer Srinivas Katipamula of the Department of Energy's Pacific Northwest National Laboratory. "But our tests of controls installed at real, working commercial buildings clearly demonstrate how much more energy efficient air-conditioning systems can be."

This research was supported by DOE's Office of Energy Efficiency & Renewable Energy and the Bonneville Power Administration.

Sitting on the roofs of many commercial buildings are shiny metal boxes containing heating, cooling, ventilation and air conditioning (also known as HVAC) units. These are pre-made in a factory and have all their components inside a box, leading the industry to call them "packaged" HVAC units. Another kind of commercial HVAC, called air handling units, have long used sophisticated controls to ensure they work as efficiently as possible. But packaged units are often allowed to run for hours on end, even if they aren't needed, and receive little maintenance.

Packaged HVAC units consume the same amount of electricity each year as 8 million U.S. residents, or about 2,600 trillion British thermal units of energy. All those ignored and often-inefficient HVAC systems add up, creating higher power bills and contributing to the nation's greenhouse gas emissions.



### APPLY

Each year the ASHRAE Foundation awards scholarships of up to \$10,000 each to qualified students.

### DONATE

Help support ASHRAE's student scholarship programs.

[www.ashrae.org/scholarships](http://www.ashrae.org/scholarships)



## Bi-State Chapter Officers and Governors 2013—2014

Position	First Name	Last Name	Email	Phone	Fax
<b>Officers</b>					
President	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
President-Elect	James	Dolan	jdolan@olace.com	(914) 919-3106	(914) 747-0453
Vice President	Cliff	Konitz	c.konitz@verizon.net	(845) 297-5864	(845) 297-5864
Secretary	Brendan	Smith	bsmith@lynstaar.com	(914) 741-1290 ext 17	
Treasurer	Dennis	LaVopa	dlavopa@dIFlowTech.com	(845) 265-2828	(845) 265-2745
<b>Governors</b>					
BOG (term ends June 2016)	Michael	Circosta	mjcarmonk@optonline.net	(914) 273-9173	(914) 273-4097
BOG (term ends June 2016)	Dennis	LaVopa	dlavopa@dIFlowTech.com	(845) 265-2828	(845) 265-2745
BOG (term ends June 2016)	Robert	Roston	bob@rostonfamily.com	(914) 761-3364	(203) 504-7949
BOG (term ends June 2015)	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
BOG (term ends June 2015)	Brendan	Smith	bsmith@lynstaar.com	(914) 741-1290 ext 17	(845) 297-5864
BOG (term ends June 2015)	James	Dolan	jdolan@olace.com	(914) 919-3106	(914) 747-0453
BOG (term ends June 2014)	Steven	Abbattista	sabbattista@olace.com	(914) 919-3102	(914) 747-0453
BOG (term ends June 2014)	Cliff	Konitz	c.konitz@verizon.net	(845) 297-5864	(845) 297-5864
BOG (term ends June 2014)	Joseph	Trongone	jatrong@optonline.net	(914) 332-7658	
Chapter Delegate	Brendan	Smith	bsmith@lynstaar.com	(914) 741-1290 ext 17	
Chapter Alternate	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
<b>Committee Chairs</b>					
CTTC	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
Research Promotion	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
Student Activities	Stephanie	O'Dea	Stephanie.L.Odea@jci.com	(914) 593-5245	
Young Engineers in ASHRAE	TJ	Kieper	kiepertj@gmail.com	(917) 993-1023	
Membership Promotion	James	Dolan	jdolan@olace.com	(914) 919-3106	(914) 747-0453
Refrigeration	John	Fusco	jfusco@olace.com	(914) 919-3178	(914) 747-0453
Webmaster	Cliff	Konitz	c.konitz@verizon.net	(845) 297-5864	(845) 297-5864
Newsletter Editor	Michael	Gordon	gordonm@emfcontrols.com	(914) 747-1007	(914) 747-1054
Historian	Robert	Roston	bob@rostonfamily.com	(914) 761-3364	(203) 504-7949
Reception	Joseph	Trongone	jatrong@optonline.net	(914) 332-7658	
Administrator	Cliff	Konitz	c.konitz@verizon.net	(845) 297-5864	(845) 297-5864
Golf	Steven	Abbattista	sabbattista@olace.com	(914) 919-3102	(914) 747-0453

### 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.*

## 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:

**ASHRAE Bi-State Chapter**  
DL Flow Tech  
2421 Route 52  
Hopewell Junction, NY 12533



**Walter E. Greenwood (Chip)**  
PRESIDENT  
(914) 747-1007 Phone  
(914) 747-1054 Fax  
(914) 403-4702 Cell  
greenwoodw@emfcontrols.com

**Energy Management of Facilities, Inc.**  
5 West Cross St., Suite 5G  
P.O. Box 176  
Hawthorne, NY 10532  
http://www.emfcontrols.com

Partner of  
**Schneider Electric**

**Certified Energy Management System Contractor**  
Facility Automation • HVAC Controls • Security • Access Control • CCTV

Dennis LaVopa  
Tel 845-265-2828  
Fax 845-265-2745



2421 Rt. 52 Hopewell Jct., NY 12533  
www.dlflowtech.com  
dLaVopa@dlflowtech.com



**a.c.i.**  
Facility Automation  
Access Control  
Digital Video/CCTV  
Systems Integration  
24 Hour Monitoring

**Preston M. Bruenn**  
President  
578 Commerce Street, Thornwood, NY 10594  
PH: 914-769-8880 FAX: 914-769-2753  
pbruenn@automatedcontrollogic.com

OLA Consulting Engineers  
50 Broadway  
Hawthorne, NY 10532

www.olace.com  
(914) 747-2800



MEP Engineering • Energy Engineering • Commissioning

Engineering Consultant

**Bob Roston, P.E.**

6 Pilgrim Road  
White Plains, NY 10605-3703

Tel: 914 761-3364  
Fax: 203-504-7949  
Mobile: 914 646-8322  
e mail: bob@rostonfamily.com

**chimney DESIGN solutions**

800-685-7077 FAX: 212-685-4777  
chimney design solutions.com



**D.P. Wolff Inc.**  
Service & Mechanical Contractors

**Vikash Patel, LEED AP** • Vice President  
vpatel@dpwolff.com

143 Bedford Road • Katonah, New York 10536  
914/767.0515 • 212/689.7801 • 914/767.3596 FAX  
914/767.0515 24 HOUR EMERGENCY



**Atlantic Westchester, Inc.**

- HVAC Services
- Building Management Systems
- Energy Solutions

914-666-2268  
914-666-8344

AtlanticWestchester.com 264 Adams St. | Bedford Hills | NY 10507



**LAWRENCE STURGIS**  
EXECUTIVE VICE PRESIDENT

1 PAULDING STREET  
ELMSFORD, NY 10523

PHONE: 914-592-1776  
FAX: 914-592-1904  
e mail: lamysturgis@gmail.com

Westchester, Putnam, Rockland, Orange  
Ulster, Sullivan, Dutchess,  
Fairfield & Litchfield, Ct.

## Employment Opportunities

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.

### Decentralization of Electricity Grid Leading to 'Personal Power Plants'

A medium-sized city north of Denver is ground zero for one of the most ambitious energy agendas of any municipality in the United States. Fort Collins, Colorado, population 150,000, is trying to do something that no other community of its size has ever done: transform its downtown into a net zero energy district, meaning it will consume no more energy in a given year than it generates. And the city as a whole is aiming to reduce its carbon emissions by 80% by 2030. To make that happen, engineers are preparing to deploy an array of advanced energy technologies, including combined-cycle gas turbines to replace aging coal-fired plants, as well as rooftop solar photovoltaics, solar gardens, wind turbines, thermal and electricity storage, and microgrids. The local utility, like utilities all over the world, is dealing with the dissolution of the traditional regulated-monopoly model of electricity production. An article in engineering magazine IEEE Spectrum cites Fort Collins as one case study of a growing trend of decentralizing the electricity grid, enabling businesses, factories, campuses, and households to provide their own electricity for much of the day and most of the year.



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

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
August	8/14/2014 through 8/16/2014		ASHRAE Region 1 2014 CRC hosted by Bi-State Chapter	

### 2014 ASHRAE Handbook Focuses on Refrigeration

The 2014 *ASHRAE Handbook—Refrigeration*, which covers refrigeration equipment and systems for applications other than human comfort, is now available for purchase. The 51 chapters in this volume include information on cooling, freezing, and storing food; industrial applications of refrigeration; and low-temperature refrigeration.

“The 2014 ASHRAE Refrigeration Handbook continues to provide the practicing refrigeration engineer with the data and information necessary to safe and efficient processing and storage of food and pharmaceuticals but the Handbook is evolving,” Dan Dettmers, volume chair, said. “With the industry’s growing interest in the category of ‘natural’ refrigerants, the dedicated technical committees have updated the Handbook chapters on ammonia and carbon dioxide refrigeration systems. These chapters, traditionally focused on industrial systems, are finding new fans in the commercial realm as zero ozone depletion potential/global warming potential refrigerants are requested by our customers.”

Updates and changes to the 2014 volume include:

- Reworking of insulation tables in Chapter 10, Insulation Systems for Refrigerant Piping, to comply with ASTM Standard C680-10.
- Extensive reorganization of Chapter 2, Ammonia Refrigeration Systems, to reflect current practices.
- Addition of new sections on additives and process chemicals to Chapter 6, Refrigerant System Chemistry.
- Addition of moisture isotherm data for R-290 and R-600a and a new section on system sampling Chapter 7, Control of Moisture and Other Contaminants in Refrigerant Systems.
- Expansion of the focus on hydrofluorocarbons and addition of chemical information and guidance on retrofits to Chapter 12, Lubricants in Refrigerant Systems.

The ASHRAE Handbook is published in two editions: inch-pound (I-P) units of measurement and the International System of Units (SI). The new 2014 volume is also available as one of the four current volumes included in the ASHRAE Handbook Online. Members can subscribe for \$29 (list \$269) and get immediate, searchable access to all four volumes in both I-P and SI units.

The cost of the 2014 *ASHRAE Handbook—Refrigeration*, which includes the CD is \$199, in I-P or SI. The 2014 ASHRAE Handbook CD, which contains both the I-P and SI editions, costs \$179. 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](http://www.ashrae.org/bookstore).

*Statements made in this publication are not expressions of the Society or of the Chapter and may not be reproduced without special permission of the chapter.*