



## SEASON'S GREETINGS

### Inside this issue:

President's Message	1
In Memory	2
LI Chapter Officers	3
Meeting Schedule	4
LI Past Presidents	5
PAOE	5
BOG Minutes	6-9
Programs	10
YEA	11
Research Promotion	12
Membership	13
History	14-15
GGAC	16
Student Activities	16
CTTC	17
Refrigeration	18
May 2017 Meeting	19
Nov. Meeting Pictures	20-21
HVAC Design Training	22
ASHRAE Courses	23-27
Chapter Service Awards	28
ASHRAE Conference	29
ASHRAE Social Media	30
ASHRAE Ticket Books	31
ASHRAE Certifications	32
ASHRAE Scholarships	33
ASHRAE Winter Conference	34-37
Advertisements	38-41

### President's Message

As the snow which greeted me this morning reminded me, the end of the year is almost here. We look forward to seeing everyone at our annual Holiday party this month (no charge for members), and usher in the Winter Season with Holiday wishes, food and socializing. There will be no formal program allowing time for members to catch up on the latest happenings.

It was great to see so many ASHRAE and SMACNA people at our joint meeting last month. SMACNA's Eli Howard always puts on an informative presentation and this was no exception, detailing the proper design of duct and duct connections as well as differentiating between duct leakage and system leakage, and noting the ongoing standards and guideline work being conducted in this area of interest.

Frank Paradiso, our Research Promotion Chair, presented certificates of recognition to members who have supported ASHRAE Research. If you haven't already contributed this year to RP, there is still time before the end of the year to do so....contact Frank for more information on RP giving.

Our YEA (Young Engineers in ASHRAE) Chair, Elizabeth Jedrlinic is putting together a multi-chapter (LI-NYC-CT-Westchester) YEA event that should be fun as well as providing a great networking opportunity for our younger members.

For those planning on attending the ASHRAE Winter Conference/AHR Expo in Las Vegas in January, there is still time to get the advance registration price (Prior to December 22<sup>nd</sup>), details are elsewhere in this Sounder.



### CHAPTER MONTHLY MEETING

<b>DATE:</b>	<b>Tuesday, December 13, 2016</b> <b>ASHRAE Holiday Party</b>
<b>TIME:</b>	6:00 PM - 8:00 PM
<b>LOCATION:</b>	Westbury Manor South Side of Jericho Tpke. 25 Westbury, NY 11590
<b>FEES:</b>	
Members -	No Fee
Student -	No Fee
Guest -	\$50.00

*Reservations requested, but not required.*

*Call (516) 333-7117*

On a sad note, Richard Rosner, PE, a Past-President of the Chapter as well as a personal friend and colleague of mine, passed away November 13<sup>th</sup>. As many of you know, Rich had been diagnosed last year with an inoperable brain tumor and, although the prognosis was bleak, he never gave up, hoping somehow to succeed in battling the cancer. He made it a point to come to our September meeting so he could express to all how much ASHRAE, the LI Chapter and its members meant to him. He will truly be missed by many.

**Don Kane, P.E.**  
**President - Long Island Chapter**

## In Memory of Past Chapter President Richard L. Rosner, P.E.

### IN MEMORY



**Richard L. Rosner, PE**

ASHRAE-LI Past President

July 13, 1950 – November 13, 2016

It is with sadness that we report the passing of our fellow chapter member and Past-President. A Professional Engineer, Master Electrician, Teacher, Sailor, Amateur Radio Operator, Musician, Father, Grand Father and a good friend, Rich was a modern day Renaissance Man. He was not a bystander in life's parade...as witnessed by his dedication to the ASHRAE-LI Chapter as BOG officer and President, as well as Chairing Programs, Membership, Student Activities, Research Promotion and Chapter Historian. He was a teacher and mentor, encouraging students to apply for the ASHRAE scholarships to further their studies; he was always ready to lend a helping hand to those in need, truly an example for others to follow. Although he has passed, he will not be forgotten by the many whose lives he has touched.

## Long Island Chapter Officers & Committees

### ASHRAE 2016/2017 OFFICERS




POSITION	NAME	PHONE	FAX	EMAIL
President	Donald W. Kane, PE	631.737.9170	631.737.9171	<a href="mailto:president@ashraeli.org">president@ashraeli.org</a>
President-Elect	Andrew B. DuBel, PE	212.967.7651	212.967.7654	<a href="mailto:president_elect@ashraeli.org">president_elect@ashraeli.org</a>
Vice President	Richard Halley	718.269.3809	718.269.3725	<a href="mailto:vice_president@ashraeli.org">vice_president@ashraeli.org</a>
Financial Secretary	Frank Paradiso	631.632.2791	631.632.1473	<a href="mailto:finsec@ashraeli.org">finsec@ashraeli.org</a>
Treasurer	James Hanna	718.269.3768	718.269.3794	<a href="mailto:treasurer@ashraeli.org">treasurer@ashraeli.org</a>
Secretary	Bill Artis	201.395.3750		<a href="mailto:secretary@ashraeli.org">secretary@ashraeli.org</a>
Board of Governors	Matthew Vitrano	212.643.9055	212.643.0503	<a href="mailto:bog1@ashraeli.org">bog1@ashraeli.org</a>
Board of Governors	Murat Bayramoglu	631.312.8818		<a href="mailto:bog2@ashraeli.org">bog2@ashraeli.org</a>
Board of Governors	Michael Nigro	212.643.9055	212.643.0503	<a href="mailto:bog3@ashraeli.org">bog3@ashraeli.org</a>
Board of Governors	Thomas Fields, PE, LEED AP	212.643.9055	212.643.0503	<a href="mailto:bog4@ashraeli.org">bog4@ashraeli.org</a>

### ASHRAE 2016/2017 COMMITTEES

COMMITTEE	NAME	PHONE	FAX	EMAIL
Programs & Special Events	Andrew B. DuBel, PE	212.967.7651	212.967.7654	<a href="mailto:programs@ashraeli.org">programs@ashraeli.org</a>
Membership (MP)	Bill Artis	201.395.3750		<a href="mailto:membership@ashraeli.org">membership@ashraeli.org</a>
Refrigeration	Bill Artis	201.395.3750		
Chapter Technology Transfer (CTTC)	Murat Bayramoglu	631.312.8818		<a href="mailto:cttc@ashraeli.org">cttc@ashraeli.org</a>
Grassroots Government Activities (GGAC)	Matthew Vitrano	212.643.9055	212.643.0503	<a href="mailto:ggac@ashraeli.org">ggac@ashraeli.org</a>
Newsletter Editor	Liset Cordero	212.643.9055	212.643.0503	<a href="mailto:editor@ashraeli.org">editor@ashraeli.org</a>
Research Promotion (RP)	Frank Paradiso	631.632.2791	631.632.1473	<a href="mailto:rp@ashraeli.org">rp@ashraeli.org</a>
Historian	Michael Nigro	212.643.9055	212.643.0503	<a href="mailto:historian@ashraeli.org">historian@ashraeli.org</a>
Student Activities (SA)	James Hanna	718.269.3768	718.269.3794	<a href="mailto:sa@ashraeli.org">sa@ashraeli.org</a>
Young Engineers in ASHRAE (YEA)	Elizabeth Jedrlinic	718.269.3554	718.269.4698	<a href="mailto:yea@ashraeli.org">yea@ashraeli.org</a>
Webmaster				<a href="mailto:web@ashraeli.org">web@ashraeli.org</a>
Nominating	Michael Gerazounis, PE, LEED AP	212.643.9055	212.643.0503	<a href="mailto:nominating@ashraeli.org">nominating@ashraeli.org</a>
Reception & Attendance	Michael Nigro	212.643.9055	212.643.0503	<a href="mailto:reception@ashraeli.org">reception@ashraeli.org</a>
PR & Engineering Joint Council of LI (EJCLI) Liaison	Andrew Manos, LEED AP	631.632.2791	631.632.1473	<a href="mailto:pr@ashraeli.org">pr@ashraeli.org</a>
Chapter Regional Conference – 2017 (CRC)	Richard Halley	718.269.3809	718.269.3725	<a href="mailto:crc@ashraeli.org">crc@ashraeli.org</a>
Golf Outing	Peter Gerazounis, PE LEED AP	212.643.9055	212.643.0503	<a href="mailto:golf@ashraeli.org">golf@ashraeli.org</a>
Awards	Brian Simkins	203.261.8100	203.261.1981	<a href="mailto:bsimkins@accuspecinc.com">bsimkins@accuspecinc.com</a>
ASHRAE LI, P.O. Box 79, Commack, NY 11725				

**Editor's Note:** The appearance of any technical data, editorial material, or advertisement in this set of publications does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, procedure, design, or the like. ASHRAE does not warrant that information is free from errors, and ASHRAE does not necessarily agree with any statement or opinion in this set of publications. The entire risk of the use of any information in this set of publications is assumed by the user. Statements made in this publication are not expressions of the Society or of the Chapter and may not be reproduced without special permission.

## Chapter Monthly Meeting - Program for 2016/2017

<b>September 13, 2016</b> * At Westbury Manor  Dinner Presentation – Code Compliance Considerations for VRF Applications Presenter: Bill Artis <b>**1 PDH**</b> <b>Refrigeration Night</b>	<b>March 14, 2017</b> * At Westbury Manor Dinner Presentation— TBD Presenter: TBD <b>**1 PDH**</b> <b>YEA Night</b>
<b>October 11, 2016</b> * At Westbury Manor  Dinner Presentation— High-Performance Run-around Energy Recovery Systems Presenter: Rudolf Zaengerle <b>**1 PDH**</b>	<b>April 11, 2017</b> <b>ANNUAL FIELD TRIP - TBD</b>
<b>November 8, 2016</b> * At Westbury Manor  Dinner Presentation-- Fitting Loss in Duct Construction Presenter: Eli P. Howard, III <b>**1 PDH**</b> <b>Joint meeting with SMACNA Membership Promotion</b> <b>Student Activities Night and YEA Night</b> <b>Resource Promotion Night</b>	<b>April 20, 2017</b> <b>ASHRAE Webcast - “Using Analytics to Drive Building Performance”</b>
<b>December 13, 2016</b> * At Westbury Manor <b>HOLIDAY PARTY</b> Free Buffet Dinner for Members	<b>May 8, 2017</b> * Cherry Valley Club, Garden City, NY <b>ANNUAL GOLF OUTING</b>
<b>January 10, 2017</b> * At Westbury Manor Dinner Presentation— TBD Presenter: TBD <b>**1 PDH**</b>	<b>May 9, 2017</b> * At Westbury Manor Dinner Presentation— TBD Presenter: TBD <b>**1 PDH**</b> <b>Refrigeration Night</b> <b>Student Activities Night</b>
<b>January 28 to February 1, 2017</b> ASHRAE Winter Meeting Las Vegas, NV	<b>June 13, 2017</b> * At Westbury Manor <b>Free Buffet Dinner for Members</b> <b>PAST PRESIDENTS NIGHT &amp; OFFICER INSTALLATION</b> <b>STUDENT SCHOLARSHIPS TO BE AWARDED</b> <b>ASHRAE History Quiz and prize Give-A-Ways</b>
<b>February 21, 2017</b> * At Westbury Manor – <u>Note: 3<sup>rd</sup> Tuesday</u> Dinner Presentation—Chiller Plant System Design for Demand Reduction with Ice Storage Presenter: Justin Wieman <b>**1 PDH**</b> <b>Membership Promotion Night</b> <b>Resource Promotion Night</b>	<b>June 2017</b> <b>ANNUAL FISHING TRIP - TBD</b>
<b>February 19-25, 2017</b> <b>NATIONAL ENGINEERS WEEK</b> <b>EJCLI Seminars</b>	<b>August 17-19, 2017</b> <b>CHAPTERS’ REGIONAL CONFERENCE (CRC) REGION I HAUPPAUGE, LONG ISLAND, NY</b>

## Long Island Chapter - Past Presidents

1958	H. Campbell, Jr. PE	1987	Abe Rubenstein, PE
1959	Clyde Alston, PE	1988	Michael O'Rourke
1960	Sidney Walzer, PE	1989	Mel Deimel
1961	Sidney Gayle	1990	Robert Rabell
1962	William Kane	1991	Gerald Berman
1963	Louis Bloom	1992	Donald Stahl
1964	Milton Maxwell	1993	Ronald Kilcarr
1965	Will Reichenback	1994	Jerald Griliches
1966	Joseph Minton, PE	1995	Walter Stark
1967	Irwin Miller	1996	Joe Marino
1968	Walter Gilroy	1997	Norm Maxwell, PE
1969	Charles Henry	1998	Alan Goerke, PE
1970	William Wright	1999	Frank Morgigno
1971	Louis Lenz	2000	Michael Gerazounis, PE, LEED AP
1972	Ronald Levine	2001	Ray Schmitt
1973	Henry Schulman	2002	Steven M. Stein, PE
1974	Myron Goldberg	2003	Andrew Braum, PE
1975	John N. Haarhaus	2004	Claudio Darras, P.E.
1976	Richard K. Ennis	2005	Craig D. Marshall, P.E.
1977	Kenneth A. Graff	2006	John Nally
1978	Evans Lizardos, PE, LEED AP	2007	Peter Gerazounis, PE, LEED AP
1979	Albert Edelstein	2008	Steven Friedman, PE, HFDP, LEED AP
1980	Ralph Butler	2009	Steven Giammona, P.E., LEED AP
1981	Robert Rose, PE	2010	Nancy Román
1982	Timothy Murphy, PE	2011	Carolyn Arote
1983	Leon Taub, PE	2012	Brian Simkins, LEED AP
1984	Raymond Combs	2013	Andrew Manos, LEED AP BD+C
1985	Edward W. Hoffmann	2014	Richard L. Rosner, P.E.
1986	Jerome T. Norris, PE	2015	Thomas J. Fields, P.E., LEED AP



## PAOE POINTS FOR 2016/2017

Chapter Members	Membership Promotion	Student Activities	Research Promotion	History	Chapter Operations	CTTC	GGAC	Chapter PAOE Totals
282	370	100	345	185	1,225	525	150	2,900



## BOG Meeting Minutes

BOG Meeting, Long Island Chapter

### Meeting Minutes for Approval

Tuesday October 11, 2016

5PM

Westbury Manor

### Call to Order

Officers and BOG Attendance Roster		
Position	Name	Attendance
President	Don Kane	Yes
President-Elect	Andrew Dubel	Yes
Vice President	Richard Halley	Yes
Financial Secretary	Frank Paradiso	Yes
Treasurer	James Hanna	Yes
Secretary	Bill Artis	Yes
BOG1	Matthew Vitrano	Yes
BOG2	Murat Bayramoglu	Yes
BOG3	Michael Nigro	Yes
BOG4	Tom Fields	Yes
Quorum		Yes

Committee Chair Attendance Roster		
Position	Name	Attendance
Programs and Events	Andrew Dubel	Yes
Membership	Bill Artis	Yes
Refrigeration	Bill Artis	Yes
CTTC	Murat Bayramoglu	Yes
GGAC	Matthew Vitrano	Yes
Newsletter	Liset Cordero	No
RP	Frank Paradiso	Yes
Historian	Michael Nigro	Yes
Student Activities	James Hanna	Yes
YEA	Elizabeth Jedrlin	Yes
Webmast	Vacant	No
Nominating	Michael Gerazounis	No
Reception	Michael Nigro	Yes
Public Relations	Andy Manos	Yes
CRC 2017	Richard Halley	Yes
Golf Outing	Peter Gerazounis	No
Awards	Brian Simkins	Yes

## BOG Meeting Minutes (Cont'd. from Page 6)

### DRC Address – Bill Walter

#### Secretary (Bill Artis)

- Meetings minutes - Comments/Additions– approval

Minutes Approved

#### President (Don Kane) Chapter Operations [min-600/Par-1200/925]

- PAOE- **Please** keep up with this on a monthly basis, so nothing gets overlooked.
- Sounder - Please have all submissions to Liset by November 21<sup>st</sup> (Before Thanksgiving) .
- Web Site - Ongoing
- CRC (Chapter) Reimbursement - Has this been submitted to Region 1?
- Banner/Patches Status
- MBOs – SA and YEA ?

#### Programs (Andrew DuBel)

- Cocktail Hour Sponsors
  - Sponsorship – December though June?
- Field Trip – Newsday?

Trane will sponsor December instead of November

January program still open

#### Chapter Technology Transfer (Murat Bayramoglu) [min-450/par-1050/125]

- Continue to publicize Society Certifications and Training opportunities in *Sounder*
- Distinguished Lecturer
  - Status?
  - Publicize in Sounder

#### Treasurer (James Hanna)

- Newsletter invoicing-Possibly to be handled by RP if this is where the \$ goes?
- Limits on “Ad” size in newsletter? (Tom Fields)
- Current Balance
- Outstanding expenses
- 2015 Region Assessment
  - Status
- 2016 Region Assessment
  - Have we received....we should pay and send certified mail this year.

\$10k Balance in account

#### CRC Treasurer (Don Kane)

- Current Balance - \$5,464.90
- Expenses – None this month
- Income – None this month

#### Grassroots Government Advocacy (Matthew Vitrano) [min-500/par-650/0]

- Mailing List of Local Officials
  - Status

Dubel and Vitrano to work on

- Meetings with local officials
- PAOE is up to date

#### Historian (Michael Nigro)[min-100/par-300/185]

- Articles/interviews of past presidents – Status
- Digitizing records -Status
- Follow up with Neil Rosen on Habitat for Humanity – Update? **Project is done**

## BOG Meeting Minutes (Cont'd. from Page 7)

### Honors and Awards Chair (Brian Simkins)

- Service awards/Technical Awards
  - Has identified potential projects for submission
- Candidate Projects
  - Have any candidate projects been identified?

### Research Promotion (Frank Paradiso) [min-800/par-1050/345]

- Vendor Book - Status
- 50/50
- Full circle donations complete

### Refrigeration (Bill Artis)

- Non-Meeting Field Trips:
  - OBB- MP Event counts- Refrigeration based
  - Winthrop agreed to host tour, probably pre-meeting event in spring
- EJCLI presentation will be refrigeration focused
- Looking to set up k-12 refrigeration promotion event
- Working on joint meeting with MAACNY
  - MAACNY is willing to host

### Membership Promotion (Bill Artis) [min-500/par-800/370]

- Membership Upgrades
- RVC MP Goal is 6 new members
  - Total to date ?
- Career Development Panel Discussion planned for February
  - Evans Lizardos (LEAPC) and Jeff Daniels (Cameron) and Tom Fields (MGE) committed for panel; Additional panelist?
- YEA/MP Brewery Tour planned for mid-November/ early December
  - Oyster Bay Brewing - Status
- Reception has updated schedule to identify delinquent/lapsed members attending
  - Can pay at reception
  - Identifies non-members and guests for PAOE
- New Members this month?

Motion passed to create MP budget of \$1,000

### Student Activities (James Hanna) [min-300/par-500/100]

- Scholarships
  - Start Early this year to publicize
  - Both Chapter and Society
- Student membership update.
- Stony Brook Chapter Update – Announced scholarship
- Suffolk, Hofstra, NYIT - James working on getting SCC reinstated as a chapter

### YEA (Elizabeth Jedrlnic)

- Smart Start promotion – Hanna to co-promote
- Joint CT/NY/LI YEA event? Status- Date TBD, Location in NYC
- YEA Leadership Weekend

### Reception & Attendance (Mike Nigro)

- Need to deputize additional people for Reception
- Provide tally of attendees (Cash/check/charge/IOU), Member/Non-Member/Student and receipts for the night to Treasurer (James Hanna)
- Attendance sheet to be emailed the day following the meeting. (CTTC, Pres, Treasurer). Note Westbury Manor headcount.



## BOG Meeting Minutes (Cont'd. from Page 8)

### Web Master

- Continue forwarding emails to correct person until aliases are corrected.

### CRC 2017 (Richard Halley)

- Update on the event planning/Next Planning meeting
- Agenda finalized

### Golf (Peter Gerazounis/Tom Fields)

### Old Business

- Label Printer – Need to get membership data to expedite printing of labels

### New Business

Andy seeking funding for SBU students to attend Winter conference- budget being developed for future vote.

Time/Place of next BOG Meeting – December 13, 2016 – Westbury Manor – 5PM

Motion to Adjourn



**ASHRAE Holiday Party - December 13, 2016**



**ASHRAE  
Long Island Chapter's  
2016 Holiday Party**



***"Member Appreciation Night"***

**Come and join us to celebrate a successful year.  
We cordially invite you to a holiday cocktail party, featuring  
dinner, drinks, and holiday cheer...**

**DATE:** Tuesday, December 13, 2016

**TIME:** 6:00 pm to 8:00 pm

**LOC.:** WESTBURY MANOR, Jericho Tpke. 25, Westbury (516) 333-7117

**MENU:** Hot and Cold Buffet, Coffee, Dessert and "Open Bar"

**FEE:** Complimentary Admission for ASHRAE Members & Students (FREE)!  
Fee for Non-Members is \$50.00 per person

**RSVP:** By Friday, December 9, 2016 (*REQUESTED*).  
Send your Name & Phone# to [programs@ashraeli.org](mailto:programs@ashraeli.org)



**Hope to see you there.  
RSVP today!**



*Season's Greetings and Best Wishes for the New Year  
from the ASHRAE Long Island Chapter*

## Young Engineers in ASHRAE (YEA)

In early November I participated in the YEA Leadership Weekend in Charlotte, NC. The main focus of this leadership weekend was identifying your core personality traits and comparing your core traits to what you do professionally. We discussed how you can use your traits to advance your career. The personality test was in depth, and constructive. I highly recommend this program to anyone interested in potential future leadership roles. Another major focus of this weekend was how ASHRAE can help its YEA members advance their careers. There will be another leadership weekend in the spring.



### Registration for YEA Leadership Weekend Spring 2017

The Spring 2017 YEA Leadership Weekend will be held in Denver, CO from March 3-5, 2017. Registration is \$450 and includes hotel accommodations for Friday and Saturday, meals during the event (dinner on Friday, all meals on Saturday, and breakfast and lunch on Sunday), and all necessary materials and resources. Airfare and any ground transportation costs are not included. This event is open to the first 30 registrants and the deadline for registration is Friday, January 20, 2017. By registering for this event, you agree to the [YLW Policies](#). You can register at the YEA page. Link below.

<https://www.ashrae.org/membership--conferences/young-engineers-in-ashrae/yea-leadership-weekend>

### ASHRAE Region LeaDRS Program

(Leadership Development through Regional Support)

LeaDRS is an ASHRAE regional program that encourages the development of future regional and Society leaders. Similar to YEA's Leadership U program, the LeaDRS program allows a Region to select an ASHRAE member to shadow their Director and Regional Chair (DRC) at an ASHRAE conference. The LeaDRS program is open to all ASHRAE members (it is not restricted to YEA members). The LeaDRS program is run, funded, and administered by each Region.

If you are interested in applying for your Region's LeaDRS program, please contact your Region's DRC directly:

Region	DRC	Email
Region I	Mr. William Walter	<a href="mailto:r01drc@ashrae.net">r01drc@ashrae.net</a>

### 2016 YEA Award Recipients

Congratulations to the following YEA members who have been selected as the 2016 YEA Award of Individual Excellence recipients!

#### **Hao Luo, New York Chapter**

Rachel Romero, Rocky Mountain Chapter

Kris Tan, Singapore Chapter

### Smart Start Program:

A 3-year program that allows Student members to transfer to Associate grade membership at a rate that is recent-graduate friendly. The application can be found on the ASHRAE website.

### Scholarship for HVAC Design Essentials Training:

The YEA Institute offers one full scholarship for attendance to the HVAC Design: Level I – Essentials training. Details are available on the ASHRAE website for those interested in applying.

**Elizabeth Jedrlinic**  
**YEA Chair**

## Research Promotion

My name is Frank Paradiso and I am your RP chair for the 2016-2017 year for the Long Island ASHRAE chapter.

ASHRAE has a \$2.36 million dollar funding raising goal. This supports 140 research projects with a combined value of more than 15 million. The bar has been set pretty high by our former RP Chairs for our chapter's goals. This year we have a goal of \$18,000. Every year we try to exceed our goal and reach towards challenge goal. This year will be no different as the challenge is \$20,400. With your help I believe we can achieve it.



Our current RP year to date amount is \$3,421 which is about 19% of our goal.

I would like to acknowledge and thank all those who were generous enough to have donated early in ASHRAE's 2016-2017 RP campaign:

### INDIVIDUALS

Peter Gerazounis, PE	James Hanna
Robert J Fuchs	Richard I Halley
John D Nally	Thomas Fields, PE
Donald W Kane, PE	Elizabeth Jedrlnic
Andrew B Dubel	Michael Nigro
Murat Bayramoglu, MS	Matthew Vitrano
Andrew E Manos	Richard L Rosner, PE, BOB
Frank Paradiso	Liset Cordero
William Artis, Jr	Ronald J Kilcarr, PE
John Katimaris	

### COMPANIES

Anron Heating & Air Conditioning  
Inc  
A.D.E. Systems Inc.

### CONTRIBUTIONS CAN BE MADE IN THE FOLLOWING WAYS:

1) You can mail your checks, made out to ASHRAE Research Promotion, to:

Frank Paradiso  
ASHRAE Research Promotion Chair  
c/o Stony Brook University Research and Support Services,  
Suite 160 Development Drive  
Stony Brook, NY 11794-6010

2) You can bring your check to any of the meetings and give it to me. I will mail it into headquarters.

3) You can contribute via PayPal from the ASHRAE LONG ISLAND web site, just click on the donate button.

4) You can contribute directly on-line. [www.ashrae.org](http://www.ashrae.org)

**\* Please make sure you accredit your contribution to the LONG ISLAND CHAPTER 006 \***

Thank you again for all of your support!

**Frank Paradiso**  
**Research Promotion Chair**



## Membership Promotion

Our first Membership Promotion/YEA event for this year will be:



### OYSTER BAY BREWING

36 Audrey Ave, Oyster Bay, NY 11771

SATURDAY DECEMBER 10<sup>th</sup>

12PM-3PM

\$10/person, covers buffet and open bar

This event is an opportunity to get to know your chapter members, network, and learn about the brewing process used.

**Bill Artis**  
**Membership Promotion Chair**

**Andrew Blom**  
**Membership Promotion Co-Chair**



## History

**Hello Ashrae Members! This month's history article is on the history of Thermostats! We have also decided to include interviews of past presidents/ current members giving a more personal touch to the sounder. This month the interviewee is on past Chapter President and Managing Principal of MG Engineering, Michael Gerazounis, P.E., LEED AP.**



### History of Thermostats

Widespread use of comfort heating systems of various types in the latter 19th century provided the impetus to develop effective means to control the systems according to demand. There were sporadic attempts prior to this, but most centered on a direct control of the fire draft. These schemes were often complicated to adjust, if they could be adjusted at all. They were inconvenient, since one had to go to where the heating unit was located. Most heating systems simply relied upon the building engineer or homeowner to manually adjust firing rates, draft, valves, or dampers.

Modern thermostat control suddenly appeared from several inventors, all about the same time. Andrew Ure in England invented the bimetal thermostat. He received a British patent in 1830, but his device saw little use. In the U.S., the rapid development and use of central heating spurred several individuals to invent thermostatic control methods in the late 1800s.

Professor Warren Johnson taught at a school in Wisconsin, where the only means of room temperature control was to tell the janitor to go to the basement and adjust steam valves. Johnson developed an electric annunciator system in 1873 that was used to signal the janitor when heat needed adjusting. He continued experimenting and in 1885, patented a thermostat that relied on compressed air to operate steam valves. He then established the Johnson Electric Service Co. (Now Johnson Controls) to manufacture and install his system. Johnson went on to invent the humidostat for control of the humidity in buildings in 1905.

Albert Butz, partner in the Mendenhall Hand Grenade Fire Extinguisher Co. (hand grenade fire extinguishers were thin glass containers of carbon tetrachloride, designed to burst when thrown into a fire — the carbon tetrachloride acted like today's halons in smothering the fire) patented a thermostat-controlled draft damper in 1886. Butz's thermostat was electric, using battery voltage to activate a spring-loaded motor that operated the draft damper in the boiler or furnace. The Butz Thermoelectric Regulator Company of Minneapolis, MN, began manufacturing and selling the invention; however, the product did not sell well to homeowners. The company went through several name changes, ultimately ending up as the Minneapolis Heat Regulator Co. After WW I, the company emphasized oil burner controls and in 1927 merged with the Honeywell Heating Specialties Co. to form the Minneapolis-Honeywell Regulator Co., known today as Honeywell Inc.

About 1887, William Powers was daydreaming during a dull Sunday sermon when the idea occurred to him that vapor pressure could be used to manipulate a draft damper in a furnace. He formed the Powers Regulator Co. in 1890 in Chicago, IL, to experiment and develop thermostatic controls. (Ironically, the first installation was in a church, where a thermostat was used to control mixing dampers in a plenum heating system.)

The first Powers thermostats were about 15-in. dia and made of solid brass with ornate detail. Powers concentrated his efforts on large heating systems, and his system was used in many notable buildings, including the Chrysler and Empire State buildings. The Powers line of automatic control is now part of Siemens Building Technologies.

Thank you,

**Michael Nigro**  
**History Chair**

## History (Cont'd. from Page 14)

### ASHRAE 2016-2017 Past President's Interview



**Michael Gerazounis, P.E., LEED AP**  
**2000-01 Past Chapter President**

What do you like to do in your free time? *Golf, golf and more golf, and at night trying to catch up to the latest episodes of "The Walking Dead."*

Where have you worked in the past? *Since I graduated from college in 1985 I only worked at one other engineering firm before starting my own, and that was Lizardos Engineering PC. I was lucky because I felt it was almost like a continuation of school because I had many great mentors that who taught me so much. While in school I worked several jobs including; in restaurants, for a moving company and messenger services.*

When and why did you decide to pursue a career in HVAC&R? *Thankfully almost right from the beginning when I started doing "real" engineering I think I had found my "calling."*

When did you join ASHRAE? **1988**

What was the year you held the president position in ASHRAE LI? *I jokingly call myself The Millennial President taking office in the year 2000.*

When/Why did you decide to join the board? *In 1989 one of the Associates at Lizardos, Don Stahl, thought it would be a good idea for my career to be active so suggested I get into the queue for the Board of Governors which ultimately led to the presidency.*

What do you feel was the greatest contribution you made in ASHRAE? *During my time on the board I was able to; raise money for development, increase student awareness of the HVAC industry, maintain and increase Chapter membership and as I proceeded up the chain had the Committee chairs develop means and methods and procedures to be handed down to their successors to jump start the following years agenda.*

How has ASHRAE played a significant role in your career? *Being part of ASHRAE not only increased my knowledge of my trade but it also introduced me to many individuals who I still hold dear in my life and also helped hone my leadership skills which aid in the operation of my business and relationship with my clients.*

What recommendation would you make towards students showing interest in HVAC&R? *Get out of your comfort zone. Be active, learn and volunteer to help. It's a great industry filled with some great people.*

## Grassroots Government Activities Committee (GGAC)

Thank you to everyone who showed up to our November meeting, which was joint with SMAC-NA. It was great to see everyone.

This month I want to remind everyone about the New York State Reforming the Energy Vision (REV) strategy. This is Governor Cuomo's extended strategy to build "A clean, resilient, and more affordable energy system for all New Yorkers."

Some of the REV goals to be met by 2030 include:

- 40% reduction in greenhouse gas emissions from 1990 levels.
- A mandate for 50% of New York's electricity to be generated from renewable sources.
- 23% reduction in energy consumption of buildings from 2012 levels.

Some of the longer term goals are:

- Cut greenhouse gas emissions 80% by 2050.
- Improve New York's existing energy infrastructure.
- Create a more resilient energy system.

If you would like to read more about the REV program, please see <http://rev.ny.gov/>.

I look forward to seeing everyone at the December Holiday meeting!

**Matthew J. Vitrano**  
**Grassroots Government Activities Chair**



## Student Activities

Student Activities added another student member this month, bringing out total up to 8 for the year.

As a reminder As always we are looking for ASHRAE handbooks in good condition that are no longer in use and could be given to our student members. If you have are in position of a hand book or two please bring them into the chapter meeting and we will find them a new home.

We also encourage you to check out the ASHRAE student's zone at <http://www.ashrae.org/students/>. Information on society level design completions, scholarship and grant programs can all be found here.

**James Hanna**  
**Student Activities Chair**



## CTTC - RIPPLES

Before the Industrial Revolution, 1750s, the world was equally poor. Human population was below 1 billion. Gross domestic production GDP per capita was around \$2000 today's equivalent almost all around the world, and most common trades commodities were related to agriculture. Today, within less than 300 years, some economies' GDP have reached up to \$130,000 per capita. US GDP is hovering around \$56,000 per capita. Today, there are still some countries with \$2000 GDP per capita per person per year in the so called 3<sup>rd</sup> and 4<sup>th</sup> world countries. Why is there this huge difference today while entire world levels were almost same 250 years ago between 1<sup>st</sup> world and others? What triggered economic development in Western Europe and US in 1700s and not others as much?

Dr. Jeffrey D Sachs from Columbia University relates the economic development to the invention of steam engine by Thomas Newcomen in his book "The Age of Sustainable Development". Simply, steam engine means in engineering terms is the work done with speed. Increasing the speed of work increased the scale of industrial activity, and capacity soared the economic development starting in England and spread out to the Western Europe and US first, and then all around the world. England was the point where the rock hit to the surface of the water in the pond, and ripples reached out to the shores of the world, and some countries managed to pick up the advantages, but some couldn't.



When I was listening to Eli P Howard's presentation about "fitting loss in duct construction", it reminded me the ripples hitting to the shores, some of them pick up what they needed but some did not make the same effect as much as others. Howard's one slide was showing that the air loss numbers in ducts can reach as high as 60-70% in almost 40% of the entire ducts which were subject to his study. (I may not be correct with the percentages). These numbers didn't surprise me much because, just recently we had a study of 47 AC rooms in a relatively new Manhattan office building, and observed pretty much similar outcomes to Howard's numbers. There were some systems supplying about 100% more air to the space than their design conditions. Building engineer didn't believe us, we re-measured the entire system. CFM calculations didn't change. We suspect, because of the air leakages in the space, in the meantime either motors or pulleys replaced to be able to provide adequate air to the spaces, and building engineer doesn't know about it. Even some installed VFDs on the AC equipment running close to 100% operation. Contemporary technology has the ability to avoid air leakage and better air management practices, but it's the ripple's effect how that field is fulfilled. Obviously, in HVAC&R industry, there are some shores, really didn't catch up with technology as much. We have systems in our buildings supposed to be working in the most possible efficient way, but they are not. People living, working in these buildings are paying more for their energy usage, just waste energy and don't they care? 10% energy usage reduction for a building paying 1 million \$ annually may save \$100,000 with today's energy prices doesn't really have any attraction? I guess they do. Isn't it convincing, or are we not picking up the advantages?



To be able to reduce energy waste, we don't need to be at the tipping point, where we can't bear with it any more. Low energy prices may distract the building owners' attention over energy efficiency and saving money, but energy prices as we've been experiencing can change easily. Engineers, contractors, managers should design, build and manage systems as the most possible efficient way. We have the capacity to do so, just use it.

**Murat Bayramoglu**  
CTTC Chair

## Refrigeration

### Article I. Revised Section 608 Refrigerant Management Regulations

EPA is updating the safe handling requirements under Section 608 that currently apply to ozone depleting refrigerants and extending them to substitutes like hydrofluorocarbons (HFCs). These changes strengthen the existing program, in particular by requiring a number of industry best practices. This action reduces climate-damaging emissions from air conditioning and refrigeration equipment. EPA estimates that the annual emissions reductions from this rule will be approximately 7.3 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>eq) and 114 ozone-depletion weighted metric tons (ODP tons).



#### Key Documents

- [Update to the Refrigerant Management Requirements Under the Clean Air Act](#)
- [The docket for the rule can be found here.](#)
- [A webinar providing an overview of the rule can be found here.](#)

#### Rule Summary

This rule makes the following changes to the existing requirements under Section 608.

- 1) Extends the requirements of the Refrigerant Management Program to cover substitute refrigerants, such as HFCs. Note that EPA has previously exempted some substitutes from the Section 608 venting prohibition through previous rules. Such substitutes are also exempt from the requirements of this rule.
  - [This fact sheet describes the requirements of the existing Section 608 Refrigerant Management Program.](#) Fact sheets on how the rule affects the Program are found at the bottom of this page.
- 2) Lowers the leak rate thresholds that trigger the duty to repair refrigeration and air-conditioning equipment containing 50 or more pounds of refrigerant.
  - Lowers from 35% to 30% for industrial process refrigeration (IPR)
  - Lowers from 35% to 20% for commercial refrigeration equipment
  - Lowers from 15% to 10% for comfort cooling equipment
- 3) Requires quarterly/annual leak inspections or continuous monitoring devices for refrigeration and air-conditioning equipment that have exceeded the threshold leak rate
- 4) Requires owners/operators to submit reports to EPA if systems containing 50 or more pounds of refrigerant leak 125% or more of their full charge in one calendar year.
- 5) Extends the sales restriction to HFCs and other non-exempt substitutes, with the exception of small cans (containing 2 pounds or less) of non-exempt substitutes (e.g., primarily HFC-134a) for motor vehicle air conditioner servicing. These small cans can continue to be sold without technician certification so long as the small cans have a self-sealing valve to reduce refrigerant releases.
- 6) Requires technicians to keep a record of refrigerant recovered during system disposal from systems with a charge size from 5–50 lbs.

#### Fact Sheets

- [Fact Sheet: How the Revised 608 Rule Affects Supermarkets and Property and Facility Managers](#)
- [Fact Sheet: How the Revised 608 Rule Affects Refrigerant Distributors](#)
- [Fact Sheet: How the Revised 608 Rule Affects Small Appliance Recyclers](#)
- [Fact Sheet: How the Revised 608 Rule Affects Reclaimers](#)
- [Fact Sheet: How the Revised 608 Rule Affects Technicians](#)

<https://www.epa.gov/section608/revised-section-608-refrigerant-management-regulations>

**Bill Artis**  
**Refrigeration Chair**

**Andrew Blom**  
**Refrigeration Co-Chair**



## SAVE-THE-DATE: ASHRAE DISTINGUISHED LECTURER - MAY 9, 2017

### **SAVE-THE-DATE: MAY 9, 2017** **ASHRAE DISTINGUISHED LECTURER** **ECKHARD A. GROLL, DR. ENG.**



Dr. Eckhard A. Groll is the Reilly Professor of Mechanical Engineering and also serves as the Director of the Office of Professional Practice at Purdue University. He joined Purdue University as an Assistant Professor in 1994 and was promoted to Associate Professor in 2000, to Full Professor in 2005, and to the Reilly Professorship in 2013. He received his Diploma in Mechanical Engineering from the University of the Ruhr in Bochum, Germany, in 1989 and a Doctorate in Mechanical Engineering from the University of Hannover, Germany, in 1994.

Professor Groll teaches Thermodynamics and his research focuses on the fundamental thermal sciences as applied to advanced thermal systems, components, and their working fluids. Since joining Purdue, he has been the principal investigator (PI) or Co-PI on 100 research grants and 46 educational grants with a total budget of approximately \$10.3 million. He has advised 22 doctoral students, 48 master students, 52 undergraduate project students, 67 visiting scholars/visiting research associates, and 9 post-doctoral researchers. Currently, he advises 8

Ph.D. students, 10 master students, 1 Post-Doc, 3 undergraduate project students and 2 visiting scholars/visiting research associates. Dr. Groll has authored or co-authored 103 archival journal articles and 176 conference papers. He has been the co-author of 3 book chapters and the editor or co-editor of 7 conference proceedings. He holds 4 patents. He has given 73 invited lectures/invited seminars and 11 keynote lectures. He serves as the Regional Editor for the Americas for the International Journal of Refrigeration and is a Fellow of the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE).

Professor Groll has been recognized for his academic leadership in higher education. He is a 2010-2011 Fellow of the American Council on Education (ACE) and 2009-2010 Fellow of the Academic Leadership Program of the Committee on Institutional Collaboration (CIC-ALP). He has received numerous awards for his research and teaching excellence including the 2010 E. K. Campbell Award from ASHRAE, his induction into the Book of Great Teachers at Purdue University in 2008, and the 2007 Purdue University Faculty Scholar Award.

#### **Topic:**

### **Recent Research of Novel Compression Concepts for Heat Pumping, A/C, and Refrigeration Applications**

The phase-out of CFC and HCFC refrigerants, combined with advances in compressor technology such as reduced noise and vibration and mechanical capacity control, has motivated the development of novel compression concepts for the refrigeration industry. This paper provides an overview of several new developments for refrigeration, air-conditioning and heat pumping applications, including two novel compressors called the bowtie compressor and z-compressor. The bowtie compressor offers an integrated method of capacity modulation for use in domestic refrigerators/freezers. It modulates the cooling capacity by changing the piston stroke without changes of the clearance volume for better thermodynamic efficiency. The compressor is called bowtie compressor due to its two sector-shaped, opposing compression chambers forming a bowtie. The z-compressor is a dual-chamber hermetic rotary compressor with opposing upper and lower compression chambers separated by z-shaped blade. The compressor offers significantly lower noise and vibration levels than a conventional rolling piston compressor. In addition to presenting these new compressor types, research on flooded compression, miniature-scale compression, and compression processes with multi-port refrigerant injection will also be presented.



## November Chapter Meeting Photos





## November Chapter Meeting Photos



**ASHRAE HVAC Design Training**

City	Level I	Level II	
<a href="#"><u>Phoenix</u></a>	<a href="#"><u>October 17-19, 2016</u></a>	<a href="#"><u>October 20-21, 2016</u></a>	<a href="#">Register</a>
<a href="#"><u>Dubai</u></a>	<a href="#"><u>November 6-8, 2016</u></a>	<a href="#"><u>November 9-10, 2016</u></a>	<a href="#">Register</a>
<a href="#"><u>Atlanta</u></a>	<a href="#"><u>December 5-7, 2016</u></a>	<a href="#"><u>December 8-9, 2016</u></a>	<a href="#">Register</a>
<a href="#"><u>Orlando</u></a>	<a href="#"><u>January 9-11, 2017</u></a>	<a href="#"><u>January 12-13, 2017</u></a>	<a href="#">Register</a>
<a href="#"><u>Doha, Qatar</u></a>	<a href="#"><u>February 28-March 2, 2017</u></a>		<a href="#">Register</a>
<a href="#"><u>Hartford, CT</u></a>	<a href="#"><u>May 22-24, 2017</u></a>	<a href="#"><u>May 25-26, 2017</u></a>	<a href="#">Register</a>

## List of ASHRAE Individual Courses

Here are list of some individual courses listed in ASHRAE website <http://elearning.ashrae.org/individual-courses.html?p=3>

---

### Air-and-Water Systems (I-P), 2 PDHs (AIA, GBCI)

---

This course covers the applications, advantages, and disadvantages of air-and-water systems, as well as main component arrangement for maximum efficiency. 2.0 PDHs. AIA, GBCI approved. (I-P)

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

### Air-Conditioning System Components-Pumps, Valves, Piping and Ductwork (I-P), 1.5 PDHs (GBCI)

---

This course covers the air-conditioning system distribution components and includes a case study. 1.5 PDHs. AIA, GBCI approved. (I-P)

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

### All-Water Systems (I-P), 3 PDHs (AIA, GBCI)

---

This course presents the three major categories all-water systems, based upon piping arrangements. 3.0 PDHs. AIA, GBCI approved. (I-P)

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

### Basics of Electricity (I-P), 4.5 PDHs (AIA, GBCI)

---

This course provides the electrical knowledge needed to understand controls and the use of electrical circuit drawings. 4.5 PDHs. AIA, GBCI approved. (I-P)

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

### Building Electrical Power Components, 1.75 PDHs (AIA, GBCI)

---

This course identifies equipment, components, devices, controls, and materials in typical building electrical power systems. 1.75 PDHs. AIA and GBCI approved. (I-P).

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---



## List of ASHRAE Individual Courses (Cont'd. from Page 23)

---

### Building Information Modeling (Dual), 2.0 PDHs (AIA, GBCI)

---

Shows BIM's potential to improve the flow of data during planning, construction and operations, as well as improve a building's lifetime sustainability. 2.0 PDHs. (Dual)

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

### Central Plants (I-P), 2.0 PDHs (AIA, GBCI)

---

This course teaches the general operation and layout of steam systems and hot water, chilled water and condenser water systems. 2.0 PDHs

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

### Control Diagrams and Sequences (I-P), 3.5 PDHs (AIA, GBCI)

---

This course explains the use of written specifications, schedules, and drawings to clearly identify what is to be installed, how it is to be installed, and how it is expected to operate. 3.5 PDHs. AIA, GBCI approved. (I-P)

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

### Control Valves and Dampers (I-P), 6.5 PDHs (AIA, GBCI)

---

This course teaches the various types of valves and dampers, and their selection, installation and operation. 6.5 PDHs. AIA, GBCI approved. (I-P)

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

### Controls (I-P), 2.5 PDHs (AIA, GBCI)

This course covers the types of controls and control loops, DDC point types and protocol to ensure communication between DDC systems. AIA and GBCI. 2.5 PDHs. (I-P).

**Non-Member Price: \$50.00**

**Member Price: \$42.00**

---

## List of ASHRAE Individual Courses (Cont'd. from Page 24)

### BEAP - Building Energy Assessment Professional Certification



*ASHRAE has certified more than 2,400 professionals who have demonstrated their knowledge and expertise in the HVAC&R industry. Gain a competitive edge by earning an ASHRAE certification in building energy assessment. The BEAP certification, an ANSI accredited certification program, validates competency to do the following:*

1. *Audit, assess and analyze residential, commercial and industrial building energy use and*
2. *Develop recommendations thereof.*



### BCxP – Building Commissioning Professional Certification



*ASHRAE has certified more than 2,400 professionals who have demonstrated their knowledge and expertise in the HVAC&R industry. Gain a competitive edge by earning an ASHRAE certification in building commissioning. The BCxP certification validates competency to do the following:*

*Lead, plan, coordinate and manage a commissioning team to implement commissioning processes in new and existing buildings.*

## List of ASHRAE Individual Courses (Cont'd. from Page 25)

### HBDP - High-Performance Building Design Professional Certification



*ASHRAE has certified more than 2,400 professionals who have demonstrated their knowledge and expertise in the HVAC&R industry. Gain a competitive edge by earning an ASHRAE certification in high-performance building design. The HBDP certification, an ANSI accredited certification program, validates competency to do the following:*

*Design and integrate sustainable HVAC&R systems into high performing buildings.*



### OPMP - Operations & Performance Management Professional Certification



*ASHRAE has certified more than 2,400 professionals who have demonstrated their knowledge and expertise in the HVAC&R industry. Gain a competitive edge by earning an ASHRAE certification in operations and performance management. The OPMP certification validates competency to do the following:*

*Manage facility operations and maintenance to achieve building performance goals, including those related to indoor environmental quality, health and safety.*

## List of ASHRAE Individual Courses (Cont'd. from Page 26)

### BEMP - Building Energy Modeling Professional Certification



*ASHRAE has certified more than 2,400 professionals who have demonstrated their knowledge and expertise in the HVAC&R industry. Gain a competitive edge by earning an ASHRAE certification in building energy modeling. The BEMP certification, an ANSI accredited certification program, validates competency to do the following:*

- 1. Model new and existing building and systems with the full range of physics,*
- 2. Evaluate, select, use, calibrate and interpret the results of energy modeling software where applied to building and systems energy performance and economics.*



### HFDP - Healthcare Facility Design Professional Certification



*ASHRAE has certified more than 2,400 professionals who have demonstrated their knowledge and expertise in the HVAC&R industry. Gain a competitive edge by earning an ASHRAE certification in healthcare facility design. The HFDP certification validates competency to do the following:*

*Incorporate standards, guidelines and regulatory codes as well as unique healthcare facility requirements and design principles in HVAC system design.*

## Chapter Service Awards

**Congratulations to the following Chapter Service Award recipients:**

**Carolyn Arote**

**Brian Simkins**

**Nancy Román**

**Richard Rosner, PE**

**Frank Morgigno**

**Craig Marshall, PE**

**Joseph Marino**

**Evans Lizardos, PE**

**Ronald Kilcarr, PE**

**Peter Gerazounis, PE**

**Michael Gerazounis, PE**

**Steven Friedman, PE**

**Andrew Braum**





## ASHRAE: Lowest Rates Available for Annual Conference



Register today for the ASHRAE Conference in St. Louis. Take advantage of the opportunity to discuss and examine the latest topics in the building industry and earn professional development credits. Hotels are filling up quickly!

**[Register before rates increase on April 27. You can register at \[www.ashrae.org/stlouis\]\(http://www.ashrae.org/stlouis\).](http://www.ashrae.org/stlouis)**

The technical sessions offer an excellent opportunity to learn the results of cutting-edge research and the latest standards that affect the built environment. Topics include nearly every technology used in HVAC&R including alternative refrigerants, fire and smoke control, smart control systems and sources and efficient utilization of renewable energy. In addition, learn the personal and business skills necessary to become and remain a leader in our industry.

The Technical Program features eight tracks, 108 sessions and more than 400 speakers. The program offers over 130 Professional Development Hours, as well as Continuing Education Units, which can be applied toward a Professional Engineering license, including the state of Florida, AIA LUs and LEED AP credits. Check out the new interactive Technical Program to find the topics, sessions and speakers of most interest to you! Featuring options to search by track, program type, date and keyword, the interactive Technical Program provides a detailed look at each session from color-coded tracks to sponsoring committees. Access, browse and bookmark the feature on your computer, tablet or smartphone.

**[The interactive Technical Program is available at \[www.ashrae.org/stlouisinteractivetechprogram\]\(http://www.ashrae.org/stlouisinteractivetechprogram\).](http://www.ashrae.org/stlouisinteractivetechprogram)**

Technical Program	
Browse/Search	2016 ASHRAE Annual Conference: Tracks
Browse by Day	ADVANCES IN REFRIGERATION SYSTEMS AND ALTERNATIVE REFRIGERANTS
Browse by Program	FUNDAMENTALS AND APPLICATIONS
Track Index	HVAC SYSTEMS AND EQUIPMENT
Presenter Index	INDOOR ENVIRONMENT: HEALTH, COMFORT, PRODUCTIVITY
	PROFESSIONAL SKILLS BEYOND ENGINEERING
	RENEWABLE ENERGY SYSTEMS AND NET ZERO BUILDINGS
	RESEARCH SUMMIT
	SMART BUILDING SYSTEMS/REMOTE MONITORING AND DIAGNOSTICS

Can't attend the Conference but want to tap into the technology? [Check out the Virtual Conference option for the 2016 Annual Conference as well as previous ones.](#)

## Join ASHRAE on Social Media!



Follow **ASHRAE on Twitter** @ashraenews for up-to-date news, events, and articles about HVAC&R. Search #MyASHRAE on Twitter to see member photos from around the world.

Follow us on [Twitter](#)



### Most Popular Tweets

**Does It Cost More To Build Green? Benefits include reduced operating costs & construction waste.**

**Online Thermal Comfort Compliance Tool Included In New ASHRAE User's Manual.**

**87% of households in the US have #AC, 5% do in India. India's tough choice on air-conditioning and climate.**



**The November issue of the Journal is tested for binding strength to see how many times a page can be turned before the binding would fail.**

**Harvard & SUNY Upstate Medical University find that workers are healthier and happier in certified green buildings.**

**ASHRAE Standard 90.1 has been redefining energy savings since 1975. A new version is available now.**

**Adapting historical buildings for sustainable reuse.**

Get To Know ASHRAE



## \$\$\$ SAVE MONEY \$\$\$

ASHRAE-LI is now offering Ticket Books for our Monthly Meeting/Dinner presentations. \$450 for a book of Eleven (that's right....eleven, one better than ten) tickets for the price of ten member admissions. Tickets are valid until December of 2017 and may be used by members and non-members. For those of you who attend all or most of our meetings and for organizations who normally send large groups to the meetings, this is a great way to save a few dollars and speed up the entry process. For more information and/or to purchase ticket books, please contact Don Kane at [cttc@ashraeli.org](mailto:cttc@ashraeli.org) or call 631-574-4870.





## ASHRAE CERTIFICATIONS

### Certification



**Certified**

*ASHRAE, accredited by ANSI under ISO/IEC 17024 for the High-Performance Building Design Professional (HBDP) program, has certified more than 2,000 Built Environmental Professionals.*

Energy Assessment

Energy Modeling

Commissioning

Healthcare  
Facility Design

High-Performance  
Building Design

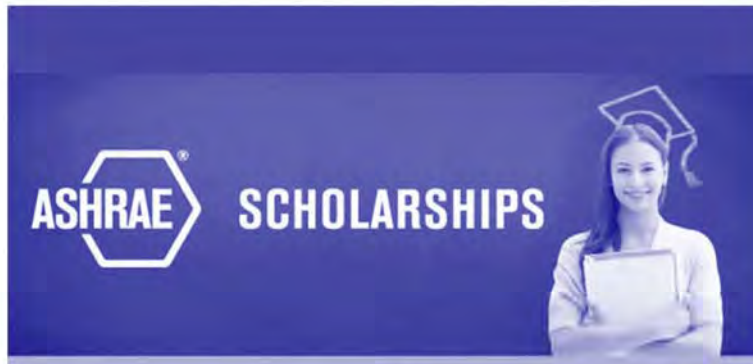
Building Operations

#### ASHRAE certification programs:

- Are developed by industry practitioners who understand the knowledge and experience that are expected for superior building design and system operation
- Assure employers and clients of subject mastery
- Serve as a springboard for continued professional development
- Offer an easy-to-apply process

FOR MORE INFORMATION GO TO - <https://www.ashrae.org/education--certification/certification>

## ASHRAE SCHOLARSHIPS



Help make students aware of this financial assistance!

Through its scholarships, ASHRAE seeks to motivate students worldwide to pursue an engineering or technology career in the HVAC&R field. The Society's Scholarship Program also serves the public interest by aiding in the education of men and women to become qualified to practice as engineers in HVAC&R.

ASHRAE has 33 scholarships available for the 2017–18 school year, for high school seniors entering college through senior undergraduate engineering students and engineering technology students. **ASHRAE is seeking your assistance in making students aware of this financial assistance.**

- 11 regional/chapter and university-specific scholarships - \$3,000 to \$5,000 each. **Now accepting applications!**
- 13 undergraduate engineering scholarships - \$3,000 to \$10,000 each. **Now accepting applications!**
- 1 freshman engineering scholarship - \$5,000
- 4 high school senior scholarships - \$3,000 each
- 4 engineering technology scholarships - \$5,000 each

Qualified students are encouraged to apply at [www.ashrae.org/scholarships](http://www.ashrae.org/scholarships).



"The financial support that you provided to me will be a great help to pay my educational expenses. Your generosity has taken me to be one step closer in achieving my educational and career goals. When I graduate, I hope that I can use what I have learned, along with all of the experiences that I've had at MNSU, to give back to others and help them in pursuing their goals just as you have helped me." *Aldo Kusnardi, Minnesota State University, Mechanical Engineering, Reuben Trane Scholarship, 2016-2017*

Don't Miss Out!

### Annual Application Deadlines:

**December 1** for undergraduate engineering, regional/chapter and university-specific scholarships

**May 1** for engineering technology, freshman and high school senior scholarships

Scholarships are awarded for the academic year following the application deadline beginning with the fall semester. For complete eligibility requirements and an application, visit [www.ashrae.org/scholarships](http://www.ashrae.org/scholarships)



## ASHRAE Winter Conference 2017 - January 28 thru February 1, 2017



### ASHRAE Conference

**The world's largest gathering of HVAC&R professionals is taking place this January in Las Vegas.** The ASHRAE Winter Conference - Caesar's Palace, January 28 – February 1. The AHR Expo - Las Vegas Convention Center, January 30 – February 1. ASHRAE's Winter Conference line-up includes 8 Conference Tracks and Keynote Speaker Adam Steltzner, Chief Engineer EDL, NASA Mars Rover Curiosity & Author. Easily request employer support with templates from the new [Conference Justification Toolkit](#). **Register early for the best rates.**

### [Registration Information](#)

#### [Registration Form \(PDF\) \(updated 10/11/2016\)](#)

##### **Early Bird registration fees from Sept. 1-Oct. 28**

- \$530, member/\$740, non-member
- \$505, first-time member attendee/\$715, first-time non-member attendee
- \$135, Life Member

##### **Advance registration fees from Oct. 29-Dec. 22**

- \$555, member/\$765, non-member
- \$530, first-time member attendee/\$740, first-time non-member attendee
- \$145, Life Member

##### **Full registration fees from Dec. 23-Feb. 1**

- \$690, member/\$900, non-member
- \$655, first-time member attendee/\$875 first-time non-member attendee
- \$155, Life Member
- \$270 member one-day fee/\$320 non-member one-day fee

##### **Registration fees for speakers, student branch advisors and students**

- \$135, speaker
- \$25, student branch advisor
- \$25, student member/\$55, full-time student non-member

## ASHRAE Winter Conference 2017 - January 28 thru February 1, 2017

Not a member of ASHRAE? Did you know that if you register to attend the Winter Conference as a "non-member" or "first time attendee non-member" you will receive complimentary ASHRAE membership for a year?

To obtain membership, an application form must be submitted when you register for the Winter Conference or within 60 days following the Conference. For assistance please contact customer service at 404-636-8400. A staff member will be present in Las Vegas at the Membership Desk during registration hours to assist you as well.

[Technical Program](#)

[Sunday, Jan. 29 – Wednesday, Feb. 1](#)

[Download Program Book \(10.10.16\)](#)

or use the [Interactive Tech Program](#) to compile sessions by technical interest area. Browse the program by day, session type, track or presenter

[NEW Personal Scheduler](#)

The Personal Scheduler allows users to create their own itinerary for the conference by selecting programs to attend, skip, or read about later. Search or browse events, create your schedule, check it for conflicts, record notes, and sync to your mobile device just before the conference.

"Today's HVAC&R profession is facing challenges unlike those from the past," Leon Shapiro, Conference chair, said. "The rapidity with which technology advances the modeling, design, equipment, systems, construction and operation of the buildings we deal with, along with the speed with which climate change is significantly altering the conditions around which we design, are creating problems for today's ASHRAE members. The Conference Technical Program addresses those problems."

The program features new tracks that address the changes in technology:

- Building Operation and Performance
- Commercial and Industrial IAQ
- Effects of Climate Change on HVAC&R **NEW**
- Energy Efficient Industrial Buildings **NEW**
- Fundamentals and Applications
- HVAC&R Systems and Equipment
- Mission Critical Design and Operation **NEW**
- Water-Energy Nexus **NEW**

[Training](#)

[ALI Training](#)

**Various Dates**

Learn about new technologies and earn continuing education credit when you participate in ASHRAE Learning Institute (ALI) courses offered at the 2017 ASHRAE Winter Conference and AHR Expo. The schedule of courses includes five Seminar and 15 Short Courses. New Seminars include Cogeneration from the Basics through Construction & Operation; Complying with Standard 90.1-2016; and Complying with the Requirements of Standard 62.1-2016. New Short Courses include New ASHRAE-Classified Refrigerants to Meet Society's Changing Needs; Variable Refrigerant Flow Design and Application; Complying with Standard 90.1-2016 Appendix G; and Design of Affordable and Efficient Ground Source Heat Pump Systems.

[Learn More >>](#)



## ASHRAE Winter Conference 2017 - January 28 thru February 1, 2017

### Certification

#### **Saturday, Jan. 28 - Wednesday, Feb. 1**

Elevate your reputation among peers, in the workplace and among clients with an ASHRAE certification. Recognized by over 30 national, state and local government bodies – and with over 2,400 certifications earned – ASHRAE certifications increasingly have become the must-have credential for built-environment professionals.

**Apply by Jan. 11** to sit for an ASHRAE Certification exam in one of these key fields: Energy Assessment | Energy Modeling | Commissioning | Healthcare Facility Design | High Performance Building Design | Building Operations.

**Note:** the NEW ASHRAE Building Commissioning Professional (BCxP) certification and recertification exams will be offered. Be among the first to earn this valuable credential.

[Learn More and Register >>](#)

### Travel and Housing

### Transportation

#### **Discounted Airfares for ASHRAE**



Delta Air Lines offer specials discounted airfares for ASHRAE. To take advantage of these discounts, click on [www.delta.com/meeting](http://www.delta.com/meeting), enter Meeting Event code NMNYF and then continue with online booking process.

Reservations may also be made by calling Delta Meeting reservations at 800-328- 1111 7 a.m.-7 p.m. CDT, Monday through Friday, and refer to Meeting Event code NMNYF. \*\*\$25 service fee for booking via 1-800 phone number

#### **Regional Transportation Commission of Southern Nevada**

RTC Transit provides service from McCarran International Airport (LAS) station for a \$2 one-way fare to and from the airport. **For more information regarding airport routes and transit, visit** <http://www.rtcnv.com/transit/getting-to-mccarran-airport/>

#### **Ground Transportation**

SuperShuttle is offering 10% discounted rides to and from McCarran International Airport. To take advantage of the discount, click on [www.supershuttle.com](http://www.supershuttle.com), select McCarran Airport and then enter the discount code **HGWTB**.

## ASHRAE Winter Conference 2017 - January 28 thru February 1, 2017

### Housing

The Headquarters Hotel is Caesars Palace, located at 3570 S Las Vegas Blvd, Las Vegas, Nevada, 89109. The ASHRAE room block has not opened yet. More information will be made available this fall. Rates are \$190 for Jan. 28 and 29, and \$180 for remaining nights. There is a \$25 resort fee not included in the room rate.

Please beware of unauthorized hotel deals. Emails from companies not affiliated with ASHRAE about housing may be a scam. If you have questions, contact [meetings@ashrae.org](mailto:meetings@ashrae.org).

### Visa Letter

#### ASHRAE 2017 Winter Conference Invitation Request Form

To create a personalized letter of invitation, please submit the requested information in the form: [Create a Letter of Invitation](#)

### Conference Attendance Justification Toolkit

Asking your Supervisor for support to attend an event takes some preparation. It's important to show that your attendance benefits not only you, but your company and co-workers as well. Click on the links below for items you can customize to fit your own needs, and will hopefully assist in your efforts to attend the 2017 Winter Conference & AHR Expo.

 [Email template to Supervisor](#)

 [Expense worksheet](#)

 [Post-Conference Review](#)

### Committees (TC and Standing Committee Content)

#### Meeting Room Request Forms

New for the Winter Conference in Las Vegas is an electronic meeting request form for technical committees (TCs) and Standard Project Committees (SPCs). Please click the links below to request a meeting room. Requests must be submitted by **October 7**. You will receive a confirmation email once you have submitted the form. If you do not receive a confirmation email, your request may not have been received. Contact [meetings@ashrae.org](mailto:meetings@ashrae.org) with any questions.

#### Technical Committee (TC)/Task Group (TG)/Technical Resource Group (TGR)/Multidisciplinary

#### Task Group (MTG) Subcommittee Request Form\*:

[http://web.ashrae.org/meeting\\_request/TC\\_meeting\\_request/](http://web.ashrae.org/meeting_request/TC_meeting_request/)

#### Standards Project Committee (SPC)/Guideline Project Committee (GPC) Request Form:

[http://web.ashrae.org/meeting\\_request/SPC\\_meeting\\_request/](http://web.ashrae.org/meeting_request/SPC_meeting_request/)

*\*All full committees of ASHRAE TCs, TGs, MTGs and TRGs listed on the final 2016 Annual Conference listing will be assigned the same time slot on the same day for the 2017 Winter Conference. Subcommittee meetings will NOT be scheduled unless requested through this link by October 7.*

## ADVERTISEMENTS



**PLACE YOUR AD HERE**

**OR  
HERE**

**OR  
HERE**

**OR  
HERE**

**OR  
HERE**

**AN AD OR BUSINESS CARD LISTING IS A GREAT WAY TO GET YOUR COMPANY'S NAME IN FRONT OF THE HUNDREDS OF LI CHAPTER MEMEBERS, AND TO HELP SUPPORT THE CHAPTER'S ACTIVITIES.**

If you would like to place an advertisement in the Long Island Sounder, please contact our Chapter Financial Secretary, Frank Paradiso @ 631-632-2791 or by email at [finsec@ashraeli.org](mailto:finsec@ashraeli.org) for further details. Thank you.

**Rates (includes all issues September-June):**

Business Card    \$200  
Triple Size        \$350

Half Page    \$500  
Full Page    \$800



## ADVERTISEMENTS

**PLACE YOUR  
AD HERE**

**GBI** **GIL-BAR INDUSTRIES**

MATT ROMANELLI  
E-MAIL: MROMANELLI@GIL-BAR.COM

**NEW YORK OFFICE**  
5 WEST 19TH STREET  
NEW YORK, NY 10011  
TEL: (212) 331-8272  
FAX: (212) 331-8273

**LONG ISLAND OFFICE**  
25 NEWBRIDGE ROAD  
HICKSVILLE, NY 11801  
TEL: (516) 216-4310  
FAX: (516) 869-4042



631-491-1300 x16  
FAX 631-491-8551

**Ultimate Power Inc.**

INDUSTRIAL BURNERS • BOILERS  
GAS • OIL • BURNER SERVICE • A/C & INSTALLATION  
NATIONAL BOARD CERTIFIED "R" STAMP REPAIR CO.  
DDC CONTROL SYSTEMS  
MECHANICAL CONTRACTORS FOR OVER 36 YEARS

RONALD MILANO

45 NANCY STREET  
WEST BABYLON, NY 11704-1498  
EMAIL: RMILANO@ULTIMATE-POWER.COM

Leonard Van Sicklin  
President



**Mechanical Services Inc.**  
• HEATING & AIR CONDITIONING •  
• SHEET METAL • SERVICE •

440 Wyandanch Avenue  
North Babylon, NY 11704  
lv@anronac.com  
www.anronac.com

Phone: 631-643-3433  
Fax: 631-491-6983  
Cell: 631-860-4349

**JAR**

J. A. Robertson, PE  
Mechanical Engineer  
HVAC/Plumbing System Design

P.O. Box 4982  
Richmond, Virginia 23220  
jar4d@alumni.virginia.edu  
Licensed: DC/MD/VA

Frank D. Morgigno - President/CEO fm@atiofny.com



90 Plant Ave. • Ste. 110 • Hauppauge, NY 11708  
Tel: 631-331-0215 • Fax: 631-928-4625  
www.atiofny.com



Kevin Cirincione  
President

**COUNTY ENERGY CONTROLS, INC.**  
County Pneumatic Controls, LLC  
Energy Management Systems

429 Montauk Hwy - POB 780  
East Quogue NY 11942  
www.countyenergycontrol.com

p: (631) 653-9124  
f: (631) 653-9177  
e: kevin@countyenergycontrol.com

## BERNE & BOB LEVENTHAL, INC.

Manufacturer's Rep. for Governair Corp.

NEW YORK CITY, LONG ISLAND, & WESTCHESTER

**GOVERNAIR CORP.**

**Roof Top Penthouses to 400,000 CFM**

**Custom DX Systems to 500 Tons**

**(Air - Water - Evap Cooled)**

Complete engineered systems designed and built for specific  
job requirements and complying with the latest NYC Sound code.

Replacements for existing Governair units.

**BOB LEVENTHAL**

**TEL (516) 826-5270**

**FAX (516) 826-5221**

**BLEVENTHALHVAC@OPTIMUM.NET**

**TWO TERRY LANE, WANTAGH, NEW YORK 11793**

**Right People. Right Results.™**

**Michael J. Mazzarello**  
Senior Manager

**Data Center Assessment and Design**

Direct: (631) 630-1203  
Cell: (631) 291-5490  
mazzarello@customonline.com  
www.customonline.com

70 Suffolk Court, Hauppauge, NY 11788

**SIEMENS**

**Industry**

Siemens Industry, Inc.  
Building Technologies Division

50 Orville Drive  
Bohemia, NY 11716  
USA

Tel: +1 631 218-1000 Ext. 214  
Fax: +1 631 218-1009  
Mobile: +1 516 924-2913  
vincent.catalano@siemens.com  
us.siemens.com/buildingtechnologies

**Vincent Catalano, C.E.M.**  
Account Manager

TEL (631) 218-8022  
FAX (631) 218-8023

**BCC**

**BEST  
CLIMATE CONTROL CORP.**

75 ORVILLE DRIVE  
BOHEMIA, NY 11716

AIR CONDITIONING  
SYSTEMS

MICHAEL O'ROURKE

Established 1959

**County Fair Air Conditioning Corporation**

253 GRAND BLVD - WESTBURY, NY 11590-3598  
(516) 997-6606 • (718) 347-7808 • FAX (516) 997-5741  
choigerson@countyfair.com • mnathan@countyfair.com

**CARL HOLGERSON** **RONALD J. NATHAN**  
Owner Owner

MECHANICAL CONTRACTORS • SALES • SERVICE • ENGINEERING

## ADVERTISEMENTS

### Retrofit energy savings into your next building upgrade.



#### Start with retrofit offers from National Grid.

If retrofitting existing commercial, institutional, and industrial facilities is an important part of your services, you know that incorporating energy efficiency measures into planned upgrades can add value to your clients' buildings and your business. We're here to help with money-saving financial incentives for lighting, HVAC/R, electric motors, retro-commissioning, and energy management system projects.

Learn more about how our retrofit offers can add value to your next upgrade project.

Call 844-280-4325 or visit [myngrid.com/retrofit](https://myngrid.com/retrofit) today.

**nationalgrid**

HERE WITH YOU. HERE FOR YOU.



## ADVERTISEMENTS

EFFICIENCY IS EVERYTHING.



**VRV III**  
THE INTELLIGENT AIR CONDITIONING SYSTEM



Daikin AC is pleased to announce the **VRV III PB** series.

This new iteration of VRV III is available in sizes ranging from 6 to 30 tons and is rated in accordance with AHRI standard 1230-2010. VRV III PB has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.E.R. Part 431 as determined by the U.S. Department of Energy (DOE) and efficiencies as defined by ASHRAE 90.1-2010. With this new efficiency data, Daikin positions its VRV system as one of the most efficient heating and air conditioning systems available in the North American market as well as the efficiency leader in the VRF market.

Contact our local Daikin AC sales engineers in New York City:

- Ray Schmitt: 631-335-7116 - ray.schmitt@daikinac.com
- Steve Handelman: 917-968-9332 - steve.handelman@daikinac.com



Try a Better Perspective, try Daikin AC.

866-4DAIKIN  
www.daikinac.com

**DAIKIN AC**  
absolute comfort



**PLACE YOUR  
AD HERE**

**chimney  
DESIGN  
solutions®**

134 W. 29TH ST., 11TH FL., NY, NY 10001  
800-685-7077 FAX: 212-685-4777  
chimney design solutions.com

### Advertising Rates:

<b>Business Card</b>	<b>\$200</b>
<b>Triple Size</b>	<b>\$350</b>
<b>Half Page</b>	<b>\$500</b>
<b>Full Page</b>	<b>\$800</b>



Visit the **Wales-Darby Energy Learning Center** at  
2910 Express Drive South  
Islandia, New York 11749  
631.585.6800 Comm'l FAX: 631.471.4950  
e-mail us at [info@walesdarby.com](mailto:info@walesdarby.com)  
visit our website at [www.walesdarby.com](http://www.walesdarby.com)