



Quaker City CLIMATE

JOURNAL OF THE PHILADELPHIA CHAPTER OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS, INC.

PHILADELPHIA CHAPTER

Pre-Dinner

Career Demographics for the Engineering Industry

presented by
William F. Reardon, CAE
Executive Director,
SMCA Philadelphia & Vicinity

After-Dinner

Alternatives to Traditional Air Distribution Concepts

presented by
Mark M. Maguire, PE
Engineering Principal, Kling

Thursday, February 9, 2006

Student Night

*Student members of ASHRAE are invited
to attend free of charge.*

Joint Meeting with SMCA

5:00 to 5:45 PM
Pre-Dinner Presentation

5:45 to 6:15 PM
Cocktails and Hors D'oeuvres

6:15 to 7:00 PM
Dinner
Presentation of SMCA Philadelphia book grants
to ASHRAE student scholars

7:00 to 7:45 PM
After-Dinner Presentation

7:45 to 8:00 PM
Conclusion

STRENGTHEN OUR MEMBERSHIP!

Ask for a Membership Application at our
Events' Reception Table -
Pass it along to a Friend
or Colleague!

LOCATION

Colleen's on the Parkway
Parktowne Place Apartments
South Building
22nd & Ben Franklin Parkway
Philadelphia, PA

Valet parking is available at the
restaurant entrance, courtesy of
the Philadelphia Chapter.

FOR RESERVATIONS

Call (610) 971-2169
or Email
philachapter@mail.ashrae.org

RESERVATION NOTICE

Reservations must be made by
no later than 12:00 Noon
2 days prior to the meeting date.

COSTS

Local Chapter Members Reservation
\$30
Late Registrations & Walk-ups
\$45
Non-local Dues Paying Members
\$35
Members 30 years & under
\$10 Discount
Student Members
No Charge for This Meeting

Reservations not cancelled by 12:00 noon
2 days prior to the meeting date will be
billed the full amount.
The Chapter will no longer
bear the cost of "no-show" meals.

Student Branches in the Philadelphia Chapter

Student Night, February 9, 2006

By Dr. Steven Ridenour PE, Senior Governor

The Sheet Metal Contactors of America, SMCA, and ASHRAE have had a close association for decades. Each year at our February meeting, we invite all local student members and honor the best students from our student branches at Drexel, Temple and Widener Universities and from Delaware County Community College. The SMCA generously provides a Book Scholarship to the best student from each student branch. The Philadelphia Chapter of ASHRAE appreciates the support that SMCA has given for the student branches of ASHRAE. It is interesting to note that the combined student membership in the Philadelphia Chapter is over 100 students.

New membership is the lifeblood of ASHRAE. Student branch membership is a vital part of our overall promotion for new members in the society. Mike Witkowski has done a super job as Student Activities Chair over the past several months. The students have the benefits of joining the society at a low cost; they can move seamlessly to associate membership at graduation; they get the ASHRAE Journal; they have access to the Society website and receive electronic versions of "Society Connections" and "The HVAC&R Industry." At the Philadelphia Chapter level, they can attend meetings at a reduced rate and network for future careers. They can also post their resume on the Chapter website.

Success for the student branches depends on several people. The Faculty Advisor is important in introducing prospective students to ASHRAE and encouraging their application. The Drexel advisor is Dr. Agami Reddy, for Widener we have a new advisor Dr. Zhongping Huang, and I am the advisor for Temple. For Delaware County Community College, the advising is shared by Professors Paul Bentzley and Barry Webster. The presidents of the student branches are to be commended for their contribution of precious time to run the branch. They are David Callan at Drexel, Marwan El Mougharbel at Temple, Anthony Gonzalez at Widener and Prentice Funderburk at DCCC. Another vital part of student participation is the Chairperson of Student Activities for the host chapter and that would be Mike Witkowski as mentioned above. But the last one involved in this equation for success is **YOU**. Come out to the meeting on February 9. Meet the students and tell them about your **"Adventures in HVAC & R"**. I hope to see you there.

Pre-Dinner Presentation

Career Demographics for the Engineering Industry

Student members will not want to miss the early presentation. The engineering industry offers a wide range of professional opportunities. Anyone embarking on a related career has plenty of questions about employment outlook, compensation, and work environment. This program is intended to provide answers, in a forum suitable for interaction between up-and-coming members and seasoned professionals.

Pre-Dinner Speaker

William F. Reardon, CAE
Executive Director, SMCA Philadelphia & Vicinity

After-Dinner Presentation

Alternatives to Traditional Air Distribution Concepts

The after dinner presentation will focus on air distribution systems that defy the conventional use of sheet metal ductwork. Various technologies, including displacement ventilation, plenum distribution and fabric air dispersion products, have become emerging trends in the HVAC industry. The merits and shortcomings of non-conventional air distribution will be discussed.

After-Dinner Speaker

Mark M. Maguire, PE

Mark is an Engineering Principal with Kling in Philadelphia and has been responsible for the design of research and manufacturing facilities for over 25 years. Mark has presented on related topics at Tradeline, ISPE and EPA "Labs for the 21st Century" conferences and has published four articles on related subjects. Mark is Past President of the ISPE Delaware Valley chapter, an Adjunct Associate Professor of Engineering at Drexel University and holds a BSME from Drexel University and an MS in Energy Management and Policy from the University of Pennsylvania.

ASHRAE Volunteers are Needed

Can you spare a few minutes a month to help on one of the following committees for the Philadelphia Chapter?

Membership Promotion Committee
Program Committee
Research Promotion Committee
Refrigeration Committee
Technical, Energy & Government Activities Committee
Student Activities Committee

Please send an email to our Volunteer Chairman, Bob Carpenter, at bob@cowardenvironmental.com to identify your interests to participate.

We Need Your Email Address!

The Quaker City Climate, the monthly newsletter of the Philadelphia Chapter of ASHRAE which is published September through May, is now distributed only by email, unless a Chapter member contacts our office and specifically asks that they continue to receive a hard copy by mail.

This is a cost savings for the Chapter and eliminates lost time due to mail delays. This is also useful to distribute meeting reminders and urgent information in a timely manner.

Don't miss the latest information on meeting dates, locations, and speakers, as well as other news of interest to engineers in the Philadelphia area!

Please email us at hope@multiservicemgmt.com to be added to our email distribution list, if you are not included already.

We will keep your email address confidential!

05-06 Directories Available

The 2005-2006 Directory of Consulting Firms and Manufacturers' Representatives in the Philadelphia Area is now available for \$20 each. To order your copy, send your check, payable to "Philadelphia Chapter ASHRAE", to:

994 Old Eagle School Road, Suite 1019,
Wayne, PA 19087-1866.

Technology Awards Program – Have Your Work Recognized!

ASHRAE has an annual technology awards program that recognizes advances in the application of HVAC+R technology. Philadelphia has not had many entries in recent years, and I would like your support in changing that. These awards are a great way to gain recognition for your innovative designs.

Submission at the Chapter and Region level requires completion of a short application along with brief supporting documentation. One entry in each category will be selected as a chapter winner. Those entries will then be sent on for judging in the regional competition.

Applications and background information on the program can be found on the ASHRAE website (<http://www.ashrae.org/template/AssetDetail/assetid/25424>). The information is under the "Technology Awards Program" heading near the bottom of that web page.

All entries should be mailed to John Pardekooper no later than March 1, 2006 at Siemens Building Technologies, 1450 Union Meeting Road, Blue Bell PA 19422. Please contact John at john.pardekooper@siemens.com or by phone at 215-654-8040 if you have questions about this program.

Student Activities

Over the next couple months, the Student Activities Committee will be attending local colleges to promote ASHRAE. Some of the colleges include Drexel, Temple, Widener, and Delaware Valley Community College. We are also looking to set up visits to local grade schools and or high schools. If you have any interest in presenting or getting involved, please contact Mike Witkowski, Student Activities Committee Chair, at mwitkowski@mchugheng.com.

Check
www.ashrae-phila.org
for further information
on the
Philadelphia Chapter!

PHILADELPHIA CHAPTER ASHRAE 2005 - 2006 PROGRAMS

For reservations and updates, check www.ashrae-phila.org.

Date	Location	Pre-Dinner Topic	Dinner Topic	Theme
Thursday Feb 9	Colleen's	Career Demographics for the Engineering Industry	Alternatives to Traditional Air Distribution Concepts	Student Night (Joint Meeting with SMCA)
Thursday Mar 9	Cescaphe	Table Top Vendor Show	Owner Presentation - Energy Conservation in the Pharmaceutical Industry	GPBPA
Thursday April 6	Colleen's	Standard 62 Compliance IAQ Method	ASHRAE Standards	Past President's Night
Thursday May 11	Colleen's	Humidity Control	IBC Seismic Requirements	ASHRAE Scholarship Night
(date TBD) May 2006	Princeton University Campus	Centralized Thermal Energy Storage	Tour of New TES Plant	Field Trip
(date TBD) June 2006	Temple University Campus	Program Planning Meeting for 2006-2007		

SPECIAL MEETING ANNOUNCEMENT Vendors Needed for Tabletop Displays at March Meeting

Our meeting on March 9 will be held at a special venue, Cescaphe Ballroom at 923 North 2nd Street, Philadelphia. Wyeth Healthcare graciously helped arrange the after-dinner presentation, "Energy Conservation in the Pharmaceutical Industry". Our featured speaker is Joseph E. Turk, President of PWI Energy.

There will be an extended cocktail reception (5:00pm-6:30pm) prior to dinner, open to a limited number of vendor tabletop displays. This is a great opportunity for engineers and facilities managers to learn about product innovations in a comfortable atmosphere. We are hoping to make this annual event our largest meeting of the year.

Interested vendors may contact Hope Silverman (610-971-2169 or philachapter@mail.ashrae.org) to reserve a table. ASHRAE will collect a nominal fee of \$100 to cover the cost of each table. Vendors manning the displays are expected to register as regular attendees for the meeting. (NOTE- Cescaphe Ballroom cannot provide power connections for tabletop displays.)

Sustainability Topic of ASHRAE Satellite Broadcast

A satellite broadcast is being offered by ASHRAE to fulfill its goal of promoting building sustainability as a means to provide a safe, healthy, comfortable environment while simultaneously limiting the impact on the Earth's natural resources.

Information about building sustainability principles, practices and emerging concepts will be presented in the free April 19, 2006, satellite broadcast and Webcast, Sustainability and the Building Environment. The program is sponsored by ASHRAE's Chapter Technology Transfer Committee (CTTC).

"This broadcast will benefit all of the team members involved in the design, construction, start-up, and operation phases of a facility," said Jon Christopher Larry, chair of CTTC. "Viewers will be given information and sources to assist them when they are faced with the situation where a green design must be done. The green building industry will also benefit from the engineering input from ASHRAE."

The speakers for the broadcast will provide guidance on how to practice green building design. They are: Joe Van Bellegem, president, BuildGreen Developments, Victoria, Canada; Hal Levin, Fellow ASHRAE, research architect, Building Ecology Research Group, Santa Cruz, Calif.; Jean Lupinacci, director, ENERGY STAR commercial and industrial branch, ClimateProtection Partnerships Division, U.S.Environmental Protection Agency; Kevin Hydes, P.E., P.Eng., president and CEO, Keen Engineering, Montreal, Canada; and Malcolm Lewis, Ph.D., P.E., president, CTG Energetics, Irvine, Calif.

The broadcast will be similar to the April 2005 Mold in the Building Environment Broadcast/Webcast viewed by some 16,000 viewers at 1,700 locations.

Visit www.ashrae.org/greenbuildingsbroadcast for the latest information regarding the broadcast/Webcast and ASHRAE's work on sustainability.

ASHRAE IAQ 2007 Examines Healthy, Sustainable Buildings

Healthy, sustainable buildings are those that create high quality indoor environments while minimizing their impacts on the outdoor environment. But achieving both can be a challenging goal.

Guidance on how to do so will be presented at the American Society of Heating, Refrigerating and Air-Conditioning Engineers' (ASHRAE) conference, IAQ 2007 Healthy and Sustainable Buildings, which will be held Oct. 15-17, 2007, at Baltimore's Inner Harbor, Baltimore, Maryland.

"The issues of healthy and sustainable buildings are cyclical and interdependent," Lawrence J. Schoen, P.E., chair of the conference said. "Buildings not only impact the indoor environment but they have an impact on the outside environment. Our goal in creating healthy buildings should be to create indoor environments where people are healthy and productive but that minimize impact on the environment."

The conference will emphasize the measured performance of healthy and sustainable buildings and practical methods for their design, construction, operation and maintenance, according to Schoen.

For more information, contact ASHRAE Technical Services at IAQ2007@ashrae.org or www.iaq2007.org.

Corporate Sponsor Bio



Established in 1964, **The Tri-M Group** has grown over the years to become a leading facility services company in the Tri-State Region. The **Building Automation Systems Division**, an authorized representative of Tour Andover Controls, Integral, and Gamewell, is a preeminent systems integrator to the industrial, commercial, healthcare, institutional, K-12, and college/university markets. Our turnkey engineered solutions include HVAC monitoring and control, lighting control, energy management, SCADA systems, intrusion detection, access control, CCTV, fire alarm, and integrated fire/smoke control systems and services. Additionally, The Tri-M Group, LLC provides electrical construction and structured cabling systems and services. Visit our website at www.tri-mgroup.com for additional information.

Please help the ASHRAE Research 2005-2006 Fund Drive by filling out this Donor Form and sending it to national headquarters in Atlanta this week. Have you asked your company if they have a matching gift program? Remember every dollar you donate to this worthy cause is doubled by ASHRAE Society! If you have any questions, please contact Steve Ridenour, Research Program Chairman, at steven.ridenour@temple.edu.

ASHRAE RESEARCH - Donor Form Philadelphia Chapter 21 - Region 3

1) Type of Contribution;

☐ Individual

☐ Corporate

☐ Memorial To: _____

Please attach the details for the acknowledgement to, relationship to, and addresses.

2) Level of Contribution;

☐ Golden Circle (\$10,000 and greater)

☐ Research Partner (\$5,000-\$9,999)

☐ Research Associate (\$2,500-\$4,999)

☐ Research Major Donor (\$250-\$2,499)

☐ Research Honor Roll Donor - Individual (\$100-\$249)

☐ Research Honor Roll Donor – Corporate (\$150-\$249)

☐ Research General Donor (Less than \$100 Individual/\$150 Corp.)

3) Method of Payment;

A) Attach Check (Payable to “ASHRAE Research”)

Please note on check “Phila- Chapter 21”

B) Credit Card

☐ O-Visa ☐ O-Master Card ☐ O-AMEX

Date: _____ Signature: _____

Card #: _____ Exp. Date: _____

Note: All contributions are fully deductible under section 170 of the IRS code.

4) Donor Information:

Name: _____

Member # (If ASHRAE member): _____

Corporation Name (If Corp. Donation): _____

Address: _____

Phone : Home: _____ Business: _____

E-Mail: _____

5) Send this completed form to: ASHRAE RESEARCH, 1791 Tullie Circle, NE, Atlanta, GA 30329

!! NEW !! AFFILIATE MEMBERSHIP GRADE

For an Annual Dues of \$40, Applicants under Age 30 can Join ASHRAE at this introductory membership level. Membership tenure in this grade is limited to three (3) years.

Affiliate Members Benefits Affiliate Members receive monthly issues of the ASHRAE Journal and Insights Newsletter. The annual handbook is not a benefit of this grade.

Qualifications

An Affiliate Member shall have the same qualifications as an Associate Member. They are:

1. Experience in technical matters or in design, operation, or maintenance in heating, refrigerating, air conditioning, or ventilating fields.
2. An interest in the advancement of the Society's aims.
3. Possess sufficient qualifications to cooperate with heating, refrigerating, air conditioning, or ventilating engineers in the advancement of relating to heating, refrigerating, air conditioning, or ventilating engineering and its application.

Limitations

- You do not receive ASHRAE Handbook with membership. You do not receive *ASHRAE Insights*. You get a one-time discount (20% off) on all Handbook items.
- You can serve on Chapter committees, but cannot hold office or vote at Chapter, Regional or Society level.

Contact For Receiving Application

Go to www.ashrae.org and click on "Join" in the upper right corner. This will take you to a page describing each membership grade, its benefits and qualifications, and a link to membership application forms.

MEMBERSHIP ADVANCEMENT!

Any Associate Member meeting the following requirement can apply for Advancement to the more entitling Member grade. By ASHRAE society definition:

A member shall have the equivalent of twelve society-approved years of experience composed of an approved combination of: (a) completed education beyond high school, (b) work experience, and (c) professional engineering or related registration or license issued by a legally authorized body.

All technical and scientific education shall be based on curricula approved by the Board of Directors.

Approved engineering curricula shall be equivalent to the accredited by the Accreditation Board of Engineering and Technology in the United States of America or the Canadian Engineering Accreditation Board. Scientific education in fields other than engineering shall be from a college or university course of study that has been accredited by an organization charged with monitoring standards of performance. *Society approved years of experience shall be credited as follows:*

One and one-half years of credit for each year of completed education for graduates of approved technical curricula. One year of credit for each year of education for non-graduates who have completed a least two years of approved technical curricula. One year of credit for each year of completed education for graduates of colleges or universities which do not have accreditations. Those holding associated degrees from technical institutions shall also be credited for one year for each year of education.

One year for each year of qualifying work experiences in the performance of duties in work related to ASHRAE fields of interest and shall have included research, teaching, design, contracting, engineering sales or engineering management.

Three years of credit for professional registration of license issued by a legally authorized body in engineering or related fields, the requirements of which as to education, examination, and active practice are satisfactory to the Board of Directors.

More information is available on the ASHRAE website (www.ASHRAE.org) under menu items Membership Resources...Manage Your Membership, the above definition is extracted from such application information in PDF file format. The application can also be filled interactively online. ASHRAE sends members who upgrade a \$20 gift certificate usable at the ASHRAE bookstore or towards ASHRAE membership renewal.



Post Vendor Attendees

Trade Show & Job Fair

**Sponsored by the Greater Philadelphia Chapter
Association of Energy Engineers**

February 23, 2006

Snow Date - March 2, 2006

3:30 p.m. to 8:00 p.m.

**Thomas Jefferson University
Jefferson Alumni Hall
1020 Locust Street
Philadelphia, Pennsylvania**

*Door Prizes
Hot and Cold Buffet
Hot Hors d'Oeuvres
Beer, Wine, and Soda*

*Relaxed
Networking Event*

*Pursue New Career
Opportunities*

*Energy and Technology
Updates*

*Equipment and Vendor
Displays*

Special Sessions from

4:30 p.m. to 7:30 p.m.

Resume Development

Job Market Update

Employment Specialists Available

Energy Utilities Updates



Trade Show & Job Fair

Reserve Your Ticket

Send in Registration Today ! Reserve Your Ticket ! Send in Registration Today ! Reserve Your Ticket !

Please register me for the Trade Show and Job Fair.

☐ Admission \$10.00 ☐ Students \$5.00

Name: _____

Address: _____

Phone #: _____ E-Mail: _____

Make Check Payable to " Greater Philadelphia AEE" and send with registration form to:
Philadelphia Gas Works - Major Accounts Department- 800 Montgomery Avenue - Philadelphia, PA 19122
All attendees & contactors contact: Thersa Kowalik-Meyer - Ph: 215-684 - 6728 - Fax: 215-684-6721

**The Delaware Valley Green Building Council and
AIA Philadelphia's Committee on the Environment**

invite you to an evening seminar

High Performance Building Façades

Thursday, March 9, 2006

5:30 - 7:30 pm

As the primary interface between a building and its immediate environment, the façade has long been a focal point of sustainable design research. Recent technological developments are changing the way we conceptualize, detail and construct building envelopes. High performance façades can reduce energy consumption, provide well-tempered daylight, ventilate occupied spaces, and even generate electricity.

Drawing on KieranTimberlake's current practice, as well as examples from Europe and Asia, Kevin Pratt will examine a number of different façade systems, from simple high R-value enclosures to complex ventilated double skin curtain walls. He will assess the effect of these technologies on electrical and mechanical systems and discuss how a high performance facade can become a key element of an integrated sustainable design.

Location: Carpenter's Hall, 320 Chestnut St., Philadelphia, PA

Schedule: 5:30 - 6:00 Refreshments (hors d'oeuvres and beverages)
6:00 - 7:30 Kevin Pratt on "High Performance Building Facades"

Cost: \$20 members, \$25 Non-members, \$10 students by 3/6/06
\$25 members, \$30 Non-members, \$15 students at the door.

Continuing Ed. Credits: This program is worth 1.5 AIA/CES (HSW) LUs.

Please RSVP by noon on Monday, March 6, 2006 at <http://www.acteva.com/go/dvgbc/>.

Contact Aaron Dahlstrom, 215.282.2169, adahlstrom@dvgbc.org with questions.

Kevin Pratt, RA, LEED v2 Accredited Professional, received his BA in Architecture (Magna Cum Laude) from Columbia University and an MA from the Environment and Energy Programme at the Architectural Association in London. Mr. Pratt has twelve years of experience as a researcher and architect; he recently returned to the United States to spearhead research efforts at KieranTimberlake Associates LLP. He previously spent five years at the design and façade consulting firm Evans Heintges Architects in New York City. His current research activities include daylighting, shading, and thermal simulation analysis for the Sidwell Friends Middle School (a LEED Platinum building), and the development of a passively ventilated curtain wall for the new sculpture building at Yale University. In addition to his work at KTA, Mr. Pratt is a contributing writer to Artforum and has written articles for various design and general interest publications.

See www.dvgbc.org for more details.

Check the Calendar at
www.gpbpa.org
for further information
on events for DVGBC, ASPE, SMCA,
and other organizations!

Member Services

Members who would like stay on top of the **latest news from ASHRAE** may join the News Release List Serve at <http://www.ashrae.org/template/AboutLinkLanding/category/1584>.

If you or your company are hiring, please take a moment to **review the resumés of chapter members** and students which have been posted on the chapter website at www.ashrae-phila.org/resumes.html.

Any member who wishes to **have their resumé posted on our website**, or who would like to update it, can email our webmaster, Seth Weiss, at sweiss@comcast.net. The file must be in pdf format and will be posted for 3 months.

For **Video Resume And Job Opportunities**, visit online portal: www.LookFirst.net

Looking for work? See jobs posted at STEP, Inc.

S.T.E.P., Inc.
100 Highpoint Drive
Suite 104
Chalfont, PA 18914
P: 1.215.996.1255
F: 1.215.996.1266
www.step-inc.com

Send an updated resume to admin@step-inc.com in Microsoft Word format to be considered for any of these opportunities or to be kept posted as you are. Feel free to contact us with any questions.

Keep in mind that this is a totally FREE SERVICE to any of our applicant clients. There is nothing to sign, nothing to agree to.

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1.888.AEROTEK

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**This is your newsletter.
We welcome your input and comments.**

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ashrae-phila.org

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

Jeff Gilbeaux, PE
Gilbeaux Associates
3000 Atrium Way, #117
Mount Laurel, NJ 08054
or email: ga1engineering@comcast.net
or call: 856-231-5340
or fax: 856-273-6913

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