



Volume 43, No. 3
November 2007

Quaker City CLIMATE

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

PHILADELPHIA CHAPTER

Pre-dinner Presentation
**Intelligent Contract Design
for Architects and Engineers**

presented by
Shawn R. Farrell
and
Kevin B. Watson
Cohen Seglias Pallas Greenhall & Furman PC

Dinner Presentation

Standard 62.1

presented by
Andrew K. Persily
ASHRAE Vice President

Thursday, November 8

5:00 pm
Pre-dinner Presentation
and
Social Hour
Cash Bar

6:00 pm to 8:00 pm
Dinner
and **Presentation**

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

Parking is available on the street or through
valet service at the entrance
to the restaurant.

FOR RESERVATIONS

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

RESERVATION NOTICE

Reservations must be made
no later than 12:00 Noon
on **Tuesday, November 6, 2007**

COST

Local Chapter Members Reservation
\$30
Late Registration & Walk-ups
\$45
Non-local Dues Paying Attendees
\$35
Members 30 years & under
\$10 Discount
Student Members
\$10

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

From Our President

We have a great meeting planned this month.

Dr Andrew Parsily is joining us on Thursday, November 8th as our Dinner Speaker to discuss ASHRAE Standard 62.1 “Ventilation for Acceptable Air Quality”. Dr Parsily is Vice-President of ASHRAE, and is past chair of ASHRAE SSPC 62.1. We also have a presentation from Dr. Jin from Drexel University on ASHRAE Research and a Pre-Dinner topic on “Everything Engineers and Architects Should Know about contracts”.

We are in the process of setting up dates for Saturday TAB Training (NEBB Testing, Adjusting & Balancing Program). Look for dates and availability this month.

National Engineers Week is quickly approaching (February 17-23, 2008) and associated with this is the **Future City Competition**. This is a program of the Delaware Valley Engineers Council and will be held on January 26, 2008 at Villanova University at the Jake Nevin Field House. This is a great opportunity for local Engineers to volunteer as a mentor for local schools or as a judge on Competition Day. Please check their web site out at:

<http://www.futurecityphilly.org/fcvolops.htm>.

I look forward to seeing everybody at our November 8th meeting.

Andrew O’Pella

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.

November Meeting Dinner Presentation

ASHRAE Standard 62.1: Why, What and How

**Presenter:
Andrew Parsily
ASHRAE Vice President**

ASHRAE Standard 62 has been the preeminent ventilation and indoor air quality standard since it was first issued in 1973. As our understanding of indoor air quality issues has increased, as new HVAC technology has been developed and in the face of various trends in the building and HVAC industries, the standard as continued to evolve over the years, with the latest release designated as ANSI/ASHRAE Standard 62.1-2007. This Professional Development Seminar will consist of a thorough treatment of the standard, beginning with a history of the standard including the motivations for its development and revision over the years. The latest version of the standard will be reviewed, with a detailed discussion of the requirements and their implications for practice. This discussion will focus on the Ventilation Rate Procedure by which design outdoor air intake values are calculated. Finally, pending revisions and other issues impacting the standard into the future will be discussed. These issues will include the relationship of the standard to energy use, sustainability and code adoption.

(See synopsis and presenter bio on page 3.)

Future Meeting Preview

Please join us on Thursday, December 13, at the Union League for our annual Breakfast Meeting. The theme will be Refrigeration, and Hans Greene, Energy Manager at Drexel University, is going to speak about his experience with his ice plant, from a project funding operation and results standpoint.

For our January meeting, we have invited Terry Townsend, Past President of ASHRAE, to speak on Sustainability. Watch our newsletter for further details when they are available.

November Meeting Dinner Speaker

Andrew K. Persily



Education

Beloit College, B.A.,
Physics and Mathematics,
1976
Princeton University, M.A.,
Mechanical and Aerospace
Engineering, 1979
Princeton University,
Ph.D., Mechanical and
Aerospace Engineering,
1982

Position

Leader
Indoor Air Quality and Ventilation Group
Building Environment Division
Building and Fire Research Laboratory

Dr. Persily works on indoor air quality and ventilation in commercial and residential buildings. His work includes the development and application of measurement techniques to evaluate airflow and air quality characteristics in a variety of building types, including large, mechanically ventilated buildings and single-family dwellings. The evaluation procedures include tracer gas techniques for measuring air change rates and air distribution effectiveness, contaminant concentrations measurements, and envelope airtightness. He is also involved with the development and application of multi-zone airflow and contaminant dispersal models.

Dr. Persily is currently a vice-president of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), and is past chair of ASHRAE SSPC 62.1, responsible for the revision of the ASHRAE Ventilation Standard 62. He is a past chair of ASTM Subcommittee E6.41 on Air Leakage and Ventilation Performance and vice-chair of subcommittee D22.05 on Indoor Air Quality.

Dr. Persily's first two years at the National Bureau of Standards were as a National Research Council Postdoctoral Research Associate, working on air infiltration in homes and large buildings. He received the Department of Commerce Bronze Medal in December 1989, and was named Young Engineer of the Year by the D.C. Council of Engineering and Architectural Societies in 1990. He was named an ASTM Fellow in 2002 and an ASHRAE Fellow in 2004.

November Meeting Presentation Synopsis

1. **History of Standard 62**
Why do we need a Ventilation and Indoor Air Quality Standard
Revisions from 1973 to 2007
2. **Review of Standard 62.1-2007**
Title, Purpose and Scope
Definitions
System and Equipment Requirements
Design Procedures: Ventilation Rate and Indoor Air Quality
Construction and Start-Up
Operations and Maintenance
3. **Ventilation Rate Procedure**
Rationale for ventilation rates
Calculation Examples and Tools
4. **Potential Revisions and Other Issues**
Rationale for ventilation rates
Calculation Examples and Tools
Energy impacts
Sustainability
Code adoption
5. **Wrap-Up**
Q&A
How to participate in the process

Student Activities Update

During the course of the Fall the student activity committee will be presenting the benefits of ASHRAE to the following local schools – Drexel University, Temple University, Villanova University and Widner University. Our local chapter will be sponsoring students from these universities to attend the winter meeting in New York City for a day. Currently we are looking for additional members who can help coordinate activities with the specific universities. Currently Jim Piscopo and Drew McFadden have volunteered to assist Drexel. Please contact myself if you are interested in helping mwitkowski@mchugheng.com

Mike Witkowski

November Meeting Pre-Dinner Presentation

Intelligent Contract Design for Architects and Engineers: More than Divine Providence

In a fast paced industry where construction owners and contractors have become masters at leveraging profits while avoiding losses through carefully negotiated and drafted contract terms and conditions, design professionals are being left behind due to reliance on antiquated industry forms or boiler plate suggestions from professional liability carriers. This presentation focuses initially on the legal underpinnings of the contracting process as it pertains specifically to the design professional, and moves forward with particular emphasis on specific contract provisions and negotiating techniques that are invaluable in helping to restore the architect and engineers rightful position at the top of contractual food chain.

07-08 Directories Now Available

The 2007-2008 Directory of Manufacturers' Representatives in the Philadelphia Area have been mailed to all Philadelphia Chapter Members. If you have paid your local chapter dues and did not receive a copy, please email hope@mmco1.com.

If you would like to purchase a copy, they sell for \$23 each. Send you check, payable to "Philadelphia Chapter ASHRAE", to 994 Old Eagle School Road, Suite 1019, Wayne, PA 19087-1866.

Check

www.ashrae-philadelphia.org

for further information
on the
Philadelphia Chapter!

November Meeting Pre-Dinner Speakers

Shawn R. Farrell is a partner in the Construction and Labor & Employment Practice Groups of Cohen Seglias Pallas Greenhall & Furman PC (CSPG&F). Shawn has handled all phases of construction law, from negotiating and drafting construction contracts to litigating cases. Shawn has personally litigated numerous complex construction matters in federal court, state court, mediation and arbitration. He has also lectured for a host of clients and trade organizations on topics such as mechanics' liens, surety law, proving and pricing construction claims, OSHA violations and alternative dispute resolution in the construction industry. Shawn has also handled a variety of other civil litigation matters in federal court, state court, and arbitration and mediation forums regarding securities transactions, the Employee Retirement Income Security Act (ERISA), business torts and other general business matters.

Kevin B. Watson is a partner of the Construction group of CSPG&F. Kevin's practice focuses on the litigation and resolution of complex professional liability, commercial, construction, intellectual property, products liability and environmental matters. He has successfully represented domestic contractors, international contractors, design professionals and project owners before various federal, state and international courts and arbitration forums. Topics of the cases have included: trade secrets; copyright infringement of CAD drawings and other electronic work product; wrongful death and personal injury claims against architects, engineers and contractors; schedule delays and labor inefficiencies for a nationally ranked electrical contractor; and a multimillion-dollar claim for contract balances. Kevin is also keen on finding non-litigious solutions for his clients, bringing his considerable knowledge of architectural, engineering and construction disciplines to the bargaining table.

Cohen Seglias Pallas Greenhall & Furman, PC is a full service law firm with a specialty in construction law. Whether they are in the Construction, Labor & Employment or Business Practice Groups, the attorneys at Cohen Seglias are experienced in litigation, mediation and arbitration. They are also well-versed in the negotiation of contracts, how to handle corporate mergers and dissolutions and the drafting of commercial documents, trusts, wills and other estate-planning instruments. They appear regularly before state and federal courts, union boards and administrative agencies.

**PHILADELPHIA CHAPTER ASHRAE
2007 - 2008 PROGRAMS**

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

Date	Location	Pre-Dinner Topic	Dinner Topic	Theme
Thursday November 8	Colleen's	Intelligent Contract Design for Architects and Engineers	Standard 62.1	
Thursday December 13	Union League BREAKFAST		Discussion of Ice Storage Plant	Refrigeration & Donor Recognition
Thursday January 10	Colleen's		Sustainability	Joint Meeting with DVGBC
Jan 22-24	New York City Jacob Javits Ctr	AHR Expo * (ASHRAE Winter Meeting, January 19-23)		
Wednesday February 13	TBD	HVAC design for Critical Environments	Panel Discussion: Design, Construct, Commission, Balance	Student Night Joint Meeting with SMCA
Thursday March 13	Cescaphe	Table Top Vendor Show	LEED M&V	Membership
Thursday April 10	Colleen's	Renewable Energy	HVAC for High Density Data Storage	Scholarship Night
Thursday May 8	Urban Outfitters	Tour of Physical Plant	History of ASHRAE	Past Presidents Night
Thursday June 12	Temple University	2008-2009 Planning Meeting		
June	Golf Outing			

* The Philadelphia Chapter will arrange for a bus trip for the first two days of the Expo.
It will be free to chapter members. There will be a fee for those who are not chapter members.

PLEASE COPY AND POST ON YOUR BULLETIN BOARD AT WORK.

Please help the ASHRAE Research 2007-2008 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 Piccolo, Research Promotion Chairman, at spiccolo@airtectonics.com.

ASHRAE RESEARCH - Donor Form Philadelphia Chapter 21 - Region 3

1) Type of Contribution;

Individual

Corporate

Memorial To: _____

Please attach the details for the acknowledgment 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

Visa Master Card 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

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 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.

**ASPE
14th Biennial Expo and Seminars
Ramada Inn
Essington, PA**

**October 25, 2007
1:00 pm to 7:00 pm
(Seminars 1:00 pm to 4:00 pm)**

For more information: www.aspephila.org

Job Opportunities

Senior Energy/Mechanical Engineer PWI-Energy, Philadelphia, PA

PWI-Energy Inc., an energy consulting firm specializing in identifying, assessing and implementing energy conservation projects for pharmaceutical, industrial and institutional facilities domestically and internationally, seeks self-motivated individuals for the following position based in Philadelphia, PA.

Senior Energy/Mechanical Engineer. The candidate should have at least 5 years of HVAC systems design, laboratories, central steam and chilled water plants, compressed air etc. for large facilities. The ideal candidate will have a B.S in mechanical engineering, architectural engineering or a professional engineering license (PE) along with proven record of project management and leadership and strong communication skills. It is expected that the selected individual will have the ability to lead a team of engineers and analysts in energy surveys and prepare professional reports for sophisticated clients. A potential future partnership will be considered.

Please submit your resume to:

Itzhak Maor, Ph.D., P.E., CEM
Principal / Director of Engineering
PWI-Energy
100 North 17th Street, Suite 801
Philadelphia, PA 19103
Tel: (215) 241-9111 ext 14
Fax: (215) 241-0113

imaor@pwienergy.com

www.pwi-energy.com

Energy/Mechanical Engineer PWI-Energy, Philadelphia, PA

PWI-Energy Inc., an energy consulting firm specializing in identifying, assessing and implementing energy conservation projects for pharmaceutical, industrial and institutional facilities domestically and internationally, seeks self-motivated individuals for the following position based in Philadelphia, PA.

Energy/Mechanical Engineer. The candidate should have at least 2 years of HVAC systems design, laboratories, central steam and chilled water plants, compressed air etc. for large facilities. The ideal candidate will have a B.S in mechanical engineering or architectural engineering (with emphasize in buildings mechanical and electrical systems) and strong communication skills. The selected individual will participate in energy surveys, perform energy analyses and building energy simulations, develop reports and participate in energy projects implementation. A highly motivated, entry level engineer will be considered for this position.

Please submit your resume to:

Itzhak Maor, Ph.D., P.E., CEM
Principal / Director of Engineering
PWI-Energy
100 North 17th Street, Suite 801
Philadelphia, PA 19103
Tel: (215) 241-9111 ext 14
Fax: (215) 241-0113

imaor@pwienergy.com

www.pwi-energy.com

Future City 2008

Less than two weeks until registration closes for Future City 2008, and schools continue to sign up!

Out of 30 schools registered, 5 still need mentors. Here is the current list:

- CCA Baldi Middle School Philadelphia, PA (Far Northeast)
- Feltonville School of Arts and Science Philadelphia, PA (Feltonville)
- Grover Washington Jr. Middle School Philadelphia, PA (Olney)
- Shaw Middle School Philadelphia, PA (SW Phila)
- St. Matthew School Wilmington, DE
- General George A. McCall, Philadelphia, PA

Four new volunteers have agreed to be mentors for 4 of the 5 schools I mentioned last month - excellent job, now let's keep the momentum going! Please consider sharing your knowledge and expertise with the engineers of the future - just a few hours a week can make a huge difference to a team. Let me know if you are interested in working with any of the schools above, I will get you in touch with the team's teacher. If you'd like to be a mentor but don't see a school in your area, send me an e-mail and I'll keep you posted as schools register.

Please visit our website at www.futurecityphilly.org and click on Volunteer Opportunities, then On-line Volunteer Sign Up. There you can register to be a mentor, judge, or general volunteer. You can also see the complete list of registered schools. The more volunteers we get, the better the competition will be for the students, so sign up today!

If you're already signed up this year, thank you. You will continue to receive e-mails from me in hopes that you will spread the word about this great program.

Any questions, please let me know.
Thanks.
Jennifer
Philadelphia Regional Volunteer Coordinator

Jennifer Wetzel
Project Manager
University of Pennsylvania
Facilities and Real Estate Services - Design and Construction Management
tel. 215-573-3935
fax 215-746-6606
jwetzel@pobox.upenn.edu

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

The *Quaker City Climate*
is published eight times annually by

The Philadelphia Chapter of the
American Society of Heating, Refrigerating
and Air Conditioning Engineers, Inc.
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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:

James Piscopo
AEC Inc.
485 Devon Park Drive, Suite 113
Wayne, PA 19087
(P) 610-688-3980
(F) 610-688-4566
jpiscopo@aeceng.net

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