

Volume 40, No. 3
November 2004

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

“Heat Pipes for Dehumidification and Air-to-air Energy Recovery”

Presented by
Jim McCoy
Air Tectonics, Inc.

After-Dinner Presentation

“Application Considerations for Variable Frequency Drive Chiller Systems and Hybrid (Elec/Steam) Chiller Plant Alternatives”

Presented by
Larry Kouma
York International

REFRIGERATION NIGHT

Thursday, November 11, 2004

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

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!

FOR RESERVATIONS

Call (610) 971-2169
Or Email
hope@multiservicemgmt.com

DINNER COSTS

Local Chapter Members Reservation
\$30
Late Registrations & Walk-ups
\$45
Non-local Dues Paying Members
\$35
Members 30 years & Under discount
\$10
Student Members
\$10

LOCATION

Cesaphe Restaurant
923 North 2nd Street
Philadelphia, PA 19123

Located a few blocks north of
Spring Garden Street.
Free valet parking is available.

RESERVATION NOTICE

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

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.

President's Message

Our next monthly meeting will be held on Thursday, November 11, at a new venue in Philadelphia. We are pleased to present the Cesaphe Restaurant for your enjoyment. See the announcement in this issue of the Climate for location and parking instructions.

The theme for the evening is Refrigeration Night and our after dinner speaker will specifically address chillers. The national President of ASHRAE, Ronald Vallort, has made Refrigeration his mission. During his term, Vallort is emphasizing the widespread benefits of refrigeration as the technology for survival and ASHRAE as the strongest link in the cold chain. He said, "We need to advance the technology of refrigeration to enable all the people of the world to enjoy its benefits. And this refrigeration should be more economical and foolproof to construct and operate, while still being friendly to the earth."

I hope to see many of you at the November meeting.

Steve Ridenour, PE

College of Engineering
Temple University
215.204.8825
steven.ridenour@temple.edu

Volunteers Wanted!

Your Philadelphia Chapter officers are asking for your help in leading the chapter's efforts as a resource to the HVAC&R community here in the Delaware Valley. The chapter has needs for both one-time and ongoing commitments. The following list highlights some specific areas in which we need help:

Membership Promotion Committee:

We are looking for committee members to help promote ASHRAE membership amongst HVAC&R professionals.

Chapter Technology Transfer Committee:

Members of this committee help provide technical resources to our membership, and facilitate the sharing of useful information with other chapters. We desperately need someone to chair the sub-committee that will solicit entries from our local members for Technology Awards. ASHRAE Technology Awards are used to recognize innovative designs at the regional and national level.

Student Activities Committee:

Members in this committee help increase ASHRAE involvement in local schools and universities. The following are some specific objectives this year:

1. Establish new student chapters at local universities and technical schools
2. Participate in the Future Cities Competition (volunteers needed as mentors, judges, and coordinators)
3. Arrange speakers for local K-12 schools during National Engineering Week

If you have an interest in one of these areas, contact Volunteer Chairman Jay Halsey at jayhalsey001@aol.com.

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

**Pre-Dinner Presentation
Thursday, November 11, 2004**

**“Heat Pipes
For Dehumidification and Air-to-air Energy
Recovery”**

A technology developed with NASA by Heat Pipe Technology for use in outer space is now the mainstream in HVAC applications here on earth.

Exhaust and supply airstreams can be up to 100 feet apart utilizing the refrigerant-run-around alternative to low-efficiency glycol/water coil-run-around systems widely used in contaminated exhaust applications. Refrigerant heat pipe applications range from light commercial offices and schools to process pharmaceutical laboratories and chemical treatment plants. The discussion reviews how the technology works and where it is beneficial to apply.

Our presenter, Jim McCoy has been a familiar face on the board and as speaker with the Philadelphia Chapter of ASHRAE since 1985. Jim is a principal and co-founder of Air Tectonics, a respected manufacturer's representative in Bucks County, PA specializing in laboratory exhaust, custom air handling, air-to-air energy recovery, humidification, and dehumidification equipment. Air Tectonics has applied equipment from numerous manufacturers on hundreds of projects in the Philadelphia Area since 1987.

**After-Dinner Presentation
Thursday, November 11, 2004**

**“Application Considerations for Variable
Frequency Drive Chiller Systems and Hybrid
(Elec/Steam) Chiller Plant Alternatives”**

Our after-dinner speaker, Larry Kouma, is a Senior Product Manager at York International and has been working in the HVAC industry for more than 13 years. He has experience with hydronic system design including product and application support for steam and chilled water systems. He currently leads a team responsible for R&D direction, product planning and engineering, application support, and system integration for large chilled water equipment. He is a current voting member of the ASHRAE SSPC 90.1 Committee, including active membership on the Mechanical Subcommittee. He has a BS in Mechanical Engineering and an MBA in Finance.

Drexel University's College of Engineering Welcomes ASHRAE
Dr. Selcuk Guceri, Dean of Engineering at Drexel University, along with
Dr. Alexander Fridman, Nyheim Chair and Director of the Drexel Plasma Institute
cordially invite you to attend an informational seminar and reception.

When: November 16, 2004

Time: 6:00 p.m.

Place: Drexel Plasma Institute

Drexel University Hess Laboratories

34th Street and Lancaster Avenues

Philadelphia, PA 19104

(No Charge)

Please RSVP to: Maria Papa at 215/895-6654 or Maria.A.Papa@drexel.edu



The Drexel Plasma Institute is home to extensive research related to plasma, and other modern high energy engineering techniques are conducted. Specifically, DPI leads multi-institutional efforts to clean exhaust gases of industries from dangerous volatile organic compounds. New special electric discharges were created to provide the effective air cleaning, including the most powerful in the world pulsed corona discharge, especially mounted on a trailer to perform pilot tests at industrial sites.

!! 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 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.

A membership application form is also included with this newsletter.

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.



Clarity



Intention

PHILADELPHIA CHAPTER ASHRAE 2004 - 2005 PROGRAMS

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

Date	Location	Pre-Dinner Topic	Dinner Topic	Theme
Nov. 11 Thursday	Cesaphe	Heat Pipes	Chillers	Refrigeration Night
Dec. 9 Thursday	Holiday Inn	Dedicated Outside Air Systems	<u>Breakfast</u>	Air Systems & Membership Promotion
Jan. 13 Thursday	Colleen's	Commissioning	LEED Requirements	LEED / Joint Meeting with DVGBC
Feb. 10 Thursday	Colleen's	SMCA TBD	ASHRAE Distinguished Speaker	Joint Meeting with SMCA / Student Night
March 10 Thursday	TBD	Table Top Show	Panel Discussion	Research / Joint Meeting with GPBPA
April 14 Thursday	Colleen's	90.1 Controls	Control Logic	Past Presidents Night / Controls
May	Citizen's Bank Ballpark	Tour	Phillies Outing	Joint Meeting with GPBPA
June	Temple University		Planning Meeting	2005-2006

PROFESSIONAL ENERGY CODE SEMINAR
ANSI/ASHRAE/IESNA STANDARD 90.1-2001
ENERGY STANDARD FOR BUILDINGS
EXCEPT LOW-RISE RESIDENTIAL BUILDINGS

ONE DAY SEMINAR SPONSORED BY
THE PHILADELPHIA CHAPTER OF ASHRAE

NOVEMBER 22, 2004

TEMPLE UNIVERSITY
Engineering and Architecture Building, Room 126
12th and Norris Streets
Philadelphia, PA

OBJECTIVE

As states and local governments adopt ANSI/ASHRAE/IESNA Standard 90.1, and Owners require compliance, ASHRAE is responding to requests to provide training on the Standard. New Jersey requires compliance with the Standard. Pennsylvania has just adopted the International Energy Conservation Code (IECC) as part of the new mandatory statewide Uniform Construction Code (Act 45) to become effective this year, which includes a requirement for compliance with the Standard.

The Standard sets the minimum requirements for energy use in buildings except low-rise residential buildings and the methodology to attain these goals. The Standard differs from past Standards as it addresses not only new construction but also renovations to existing facilities. This Standard is also the mandatory minimum energy benchmark for the US Green Building Council Leadership in Energy and Environmental Design (LEED) program.

WHO SHOULD ATTEND

Architects, Engineers, Building Owners, Code Officials, Building Managers, Contractors, Students, and other parties involved with construction, renovation, and operation of facilities.

REGISTRATION

Attention: Hope Silverman Phone: 610-971-2169
Email: hope@multiservicemgmt.com Fax: 610 971-4859

Phone, Fax or Email Hope Silverman with the following information:

NAME, COMPANY, ADDRESS, PHONE#, FAX #, EMAIL, and if the books are not wanted.

Checks/cash will be collected at registration *on the day of the seminar*. Any person/company registering for the seminar but not attending will be invoiced for the seminar and will receive a copy of Standard 90.1 and the User's manual upon receipt of full payment and handling charges. *Sorry, we do not accept credit cards.*

Checks to be made out to: PHILADELPHIA CHAPTER ASHRAE

Confirmation, directions, and parking information will be sent out a week before the seminar.

REGISTRATION FEES

The fee for the seminar is \$150 (with Standard and User's Manual) or \$70 (without Standard and User's Manual). Full Time Students and Full Time Code Officials are invited at a 50% discount of \$75 (with Standard and User's Manual) or \$35 (without Standard and User's Manual). This Fee includes:

- Instruction regarding the application of the Standard to be presented by eminent industry professionals.
- Copies of both Standard 90.1-2001 and the associated User's Manual. If purchased independently the cost for these would be \$195.00 (non-ASHRAE members) and \$157.00 (ASHRAE members).
- Lunch.
- Eligibility for 6 Professional Development Credit Hours and AIA Learning Units.

SEMINAR SCHEDULE

REGISTRATION - 9:15 AM

MORNING SESSION - 9:45 AM

Introduction of presenters
Overview/Organization of ASHRAE 90.1-2001
Building Envelope compliance

LUNCH - 12:45PM

1ST AFTERNOON SESSION - 1:45 PM

HVAC compliance
Service Water Heating compliance

BREAK

2ND AFTERNOON SESSION - 3:45 PM

Power compliance Lighting compliance
Users Manual and ASHRAE Services
Concluding remarks

FINISH - 5:30 PM

SPEAKERS

Lawrence G. Spielvogel, PE

He is currently an ASHRAE Director at Large, a Fellow, and serves on Members Council. Mr. Spielvogel now chairs the ASHRAE Homeland Security Committee, and previously chaired the ANSI/ASHRAE/IESNA Standard 90.1 Project Committee, ASHRAE Standard 105 on Building Energy Performance, the Standard 90 Panel on HVAC Systems, and ASHRAE technical committees on energy utilization, computer applications, and service water heating. He is also a Fellow of CIBSE (Chartered Institution of Building Services Engineers) (England), a Fellow of SLL (Society of Light and Lighting) (England), a member of the ACEC (American Council of Engineering Companies), and a member of many other technical societies.

Valerie Block

With over twenty year's experience in the architectural glass industry, Ms. Block serves on ASHRAE's Standard 90.1 Building Envelope Committee, as well as on numerous industry codes and standards organizations, including the Glazing Industry Code Committee, the National Fenestration Rating Council, and the American Society for Testing Materials. Ms. Block is currently a Senior Marketing Representative with DuPont's Glass Laminating Solutions.

Larry Kouma

Mr. Kouma is a Senior Product Manager at York International and has been working in the HVAC industry for more than 13 years. He has experience with hydronic system design including product and application support for steam and chilled water systems. He currently leads a team responsible for R&D direction, product planning and engineering, application support, and system integration for large chilled water equipment. He is a current voting member of the SSPC 90.1 Committee, including active membership on the Mechanical Subcommittee. He has a BS in Mechanical Engineering and an MBA in Finance.

Carl M. Watson, PE, LC

A member of IESNA for over 25 years and a registered engineer, he is an award winning lighting designer, author, and electrical engineer. He has BS in EE and an MBA from Drexel University. He is also a member of IEEE and NSPE and is Lighting Certified by the National Council on Qualifications for the Lighting Professions. He specializes in developing and implementing very effective energy management solutions that optimize aesthetics, efficiency, and maintainability. Past projects have included lighting design, power quality and energy studies for office buildings, health care facilities, banks, schools, churches, multi-family residential, parking, and municipal facilities.

James A. Clark, CEM

Mr. Clark has over 20 years experience in the energy industry. He has conducted energy conservation audits and developed Performance Contracting projects and proposals. He has designed and project managed the installation of Cogeneration plants. He has a BS in Mechanical Engineering and is a Certified Energy Manager. He has received local and national awards for accomplishments in the energy field. He is a member of ASHRAE and AEE. He is on the Philadelphia Chapter of AEE Board and was the 2003/2004 Chapter President.

ATTENDANCE IS LIMITED -
PLEASE RESPOND BEFORE NOVEMBER 12, 2004

Your Research Donation is Matched \$ 1 for \$ 1

Your donation to ASHRAE Research is matched \$1 for \$1 by the ASHRAE association. Please be as generous as you can by filling out the enclosed Donor Form on the next page and sending it to Atlanta per the instructions.

Thank you for your help.

Sincerely yours,

Jay Halsey
Research Promotion Chairman

Tech Reader's Corner / Tech Watch

by Reynold Pratt

If you have not heard of it, find out where it is playing. "What The *Bleep* Do We Know" is the title. Be prepared to respond; We don't know *Bleep*. It's a great film that explores Quantum Mechanical effects as perhaps an underlying cause of Spirituality, don't take my word for it, because in this movie the more confused you are the more deservingly smart you become. It is a mind blower, go see it you will not regret it.

The movie explores how as individual we have much more influence on the Time environment and how our choosing have deeper consequences. It is presented with lots of humor (a Polish wedding) and in documentary parlance with top physicists from reputable universities, psychologist, biophysicist, geneticist, and experts on religion and consciousness studies.

The main thrusting idea is that we live in a universe open with possibilities; and, not just the duality mind set of

good and evil that we have been conditioned to adapt as our life box, when we look we see only the collapsing quantum wave field of our choice, when we turn away many choices or many possible universes continue in existence. May be this where my quantum wave field collapsed, as many other interpretations are available to watchers.

God exists in conclusion but too big for human comprehension, although, we are Him placed here to impregnate the universe with ideas. Eventually, each and each one of us will take his place as Timeless Avatars, such as Christ, Buddha, and others. This is where we are headed as The One, hopefully Mystic HVAC Engineers. Who knows in this metaphysical universe, building owners and their architects in ACTION might just entertain this idea of Mystic Engineers since absorbing their liabilities would not take on legal challenges but miraculous fixes at no additional fees.

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 then \$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:

**ASHRAERESEARCH
1791 Tullie Circle, NE
Atlanta, GA 30329**



The Greater Philadelphia Chapter of The Association of Energy Engineers

APPLICATION FOR FEBRUARY 24, 2005 TRADE SHOW/STUDENT JOB OPPORTUNITY NIGHT BEING HELD AT THOMAS JEFFERSON UNIVERSITY

Name: _____ Title: _____

Company: _____

Address: _____

Phone: _____ Fax: _____

Email: _____ Case Sensitive? Y / N _____

Would you be willing to speak with students about potential future employment? Y / N _____

Would your company have an HR person at the show to discuss job opportunities? Y / N _____

Trade Show Details:

- Vendor Table Fee: \$100 per table
- Trade show table location is on a first-come, first-select basis
- Anticipated number of attendees: 175 -225
- Anticipated number of vendors: 20 - 25
- Venue: Thomas Jefferson University – Alumni Hall (1020 Locust Street), Philadelphia PA
- Date: Thursday, February 24, 2005
- Time: 3:30 pm to 8:00 pm
- Beverages: Keg of Beer, Boxes of Wine, Soda, Coffee
- Food: Cold platters

Make Checks Payable to “Greater Philadelphia AEE” and remit to:

Mr. John Zuk
c/o Philadelphia Gas Works
800 W. Montgomery Avenue
Philadelphia, PA 19122

Not for Vender Application's use:

AEE Board Member Forwarding the Application: Jim Clark (610) 325-9229 ja11clark@aol.com

Corporate Sponsor Bios

Siemens Building Technologies, Inc.

Siemens Building Technologies is the U.S. affiliate of Siemens Building Technologies AG of Zurich. Serving customers in more than 100 countries around the world, SBT is a leading supplier of facility performance solutions for comfort, fire safety, security, energy efficiency and building operation. SBT employees total more than 7,000 in the Americas and 33,000 worldwide.

Divisions:

- Building Automation (BAU): Systems and services for building control and energy management, including integrated solutions
- HVAC Products (HVP) : Development, manufacturing and distribution of components for heating, ventilating and air conditioning systems
- Security Systems (SES): Systems and services for access control, intrusion, video surveillance (CCTV), danger management systems
- Fire Safety (FIS): Systems and services for fire detection, gas detection, extinguishing and evacuation

1450 Union Meeting Road
Blue Bell, PA 19422
215-654-8040

It's not too late!

Your company may still take part in our Corporate Sponsor program. Have your company featured in our newsletter, on our web site, in our directory, and receive dinner tickets for our monthly meetings.

Call Hope Silverman at 610-971-2169 or email hope@multiservicemgmt.com for further details.

E.F. Siegfried Co., Inc.

E. F. Siegfried Co., Inc. was founded in January 1975 by Ed Siegfried, Sr. and has been serving the HVAC needs of our region (from Atlantic City to State College and Wilkes-Barre to Delaware) ever since. We represent the highest quality manufacturers of air diffusion products, electric heating products, fans, louvers, dampers, sound attenuators, and more. Throughout the years, our goal has remained the same: to provide the best level of service possible to all of our customers by supplying quality products at competitive prices with the best lead-time available. We believe that honesty, integrity, and service have always been and always will be the driving forces in our industry. Our motivation is driven by a simple belief: If we do not service the customer, someone else will. For more information, please visit our website: www.efsiegfried.com

1811 Walnut Street
Oreland, PA 19075
215-887-7244

Sass, Moore & Associates, Inc.

Founded in 1976, Sass, Moore & Associates, Inc., is celebrating over 25 years of servicing engineers and contractors in the Delaware Valley. Our long-term success is based on teamwork and the talents of each employee to exceed customer expectations by providing the highest quality of products and services. Sass, Moore & Associates proudly represents the premium manufacturers of water source heat pumps, cooling towers, fan coil units, dehumidification equipment, boilers, plate frame heat exchangers and water filtration systems. We have expanded to over 30 employees and offer full parts and service support as well as design assistance and installation of building automation systems using TAC/CSI and LonMark technologies. We are a company dedicated to customer satisfaction. We listen and understand the needs of our customers and provide products of uncompromising quality and value. For more information on the products we represent, please visit our web site at www.sassmoore.com

906 North Evergreen Avenue
Woodbury, NJ 08096
856-853-0110

THE GEOTHERMAL PROJECT AT RICHARD STOCKTON COLLEGE

GEOTHERMAL TRAINING

Presented by Richard Stockton College Geothermal Project

GEOTHERMAL TECHNOLOGY II: FOR DESIGN PROFESSIONALS

Edison, NJ

9:00 AM - 1:00 PM

November 10, 2004

Registration begins at 8:30 with a Continental Breakfast

COURSE DESCRIPTION: This course will review Geo-exchange Technology giving overviews of two case studies. Life cycle cost analysis will be discussed in detail. Project design details will be taught: Heat/Gain Loss Data; Test Bore & Thermal Conductivity Test; Borehole Layout; Software Applications and Ventilation Issues. NEW Includes computer design software updates.
(Suggested Prerequisite: Some knowledge of Geothermal Technology is assumed. Quick overview will be given.)

INSTRUCTORS:

Lynn Stiles, Ph.D. Richard Stockton College of New Jersey
Howard Alderson, P.E. Alderson Engineering, Inc.

Architects earn 3 AIA Learning Units
Early Registration Fee
Special Group Discounts

FOOD and FACILITY COMPLIMENTS OF PUBLIC SERVICE ELECTRIC & GAS CO. (PSE&G)

REGISTRATION INSTRUCTIONS

Cost: \$125.00 LATE Registration \$150.00 after November 3

Special Group Discounts: Organizations with 3 or more employees attending the training will get a special group discount if they register by early registration deadline. The price for each employee will be reduced to \$99.00

Your payment must be received in advance to hold your registration!

1. Mail: fill out registration form on following page and mail check payable to

Richard Stockton College of NJ, Geothermal Project.
PO Box 195
Pomona, NJ 08240-0195
ATTN: Diane Hulse-Hiller

2. FAX: registration form and payment information to 609 652-4972(Secure)

3. PHONE: call 609-652-4677 to register by credit card

Directions: To PSE&G Edison Training & Development Center:

PH 732 417-2801 http://www.pseg.com/customer/business/small/facility/edison_directions.html

QUESTIONS 609-652-4677

Email diane.hulse-hiller@stockton.edu
or lynn.stiles@stockton.edu 609-652-4299

**REGISTRATION FORM
GEOTHERMAL TECHNOLOGY II**

RICHARD STOCKTON COLLEGE
NOVEMBER 10, 2004

Name:_____

Title:_____

Organization:_____

Address:_____

Phone:_____ **Fax:**_____

Email:_____

Payment Information:

_____ check in mail or Please charge my credit card in the amount of \$ _____

_____Master Card _____Visa _____ American Express

Authorized Name_____

Account Number:_____ **Expires**____/____

Signature_____ **Today's Date**____/____/____

Mail: fill out registration form and mail check payable to

Richard Stockton College of NJ, Geothermal Project.
PO Box 195
Pomona, NJ 08240-0195
ATTN: Diane Hulse-Hiller

2. FAX: registration form and payment information to 609 652-4972(Secure)

3. PHONE: call 609-652-4677 to register by credit card

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

Business Opportunity

Prominent Philadelphia area process industry manufacturer's rep and distributor organization looking to enter HVAC market-place through relationship with a company or individuals currently addressing this sector. Relationship can be a partnership, merger, or direct employment.

Our products include complete lines of manual and automatic valves, instrumentation and controls, including, but not limited to:

- solenoid valves
- pressure gauges and accessories
- thermometers and wells
- water meters
- gas meters and regulators
- heat trace
- ph and conductivity meters
- Btu meters
- toxic and combustible gas detectors
- liquid and solid level detectors
- wireless products

Interested parties call Bill Smith at (610)768-4327 or e-mail w2smith@aol.com.

Construction Management Association of America (CMAA)
Mid Atlantic Chapter
Welcomes
All ASHRAE Philadelphia Chapter Members
To The CMAA Meeting
Every Second Tuesday of Every Month.
Meeting Schedule Posted at:
www.cmaanet.org/mac/

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

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.
994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866
610.971.2169
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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:



Reynold Pratt
23 A Riverhill
New Hope, PA 18938
or email: rpratt@comcast.net
or call: 215-862-5304
or fax: 215-862-5304

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

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

An Invitation to Join!



ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

1791 Tullie Circle, NE., Atlanta, Georgia 30329 • 404-636-8400 • fax: 404-321-5478 • web:<http://www.ashrae.org> • email: ashrae@ashrae.org

The World Leader in HVAC&R Information!

Your ASHRAE Membership Benefits

Learn Technology

- At ASHRAE chapter, region, and Society Meetings
- Via technical periodicals:
 - ASHRAE Journal (monthly; free to all member grades)
 - International Research Journal (quarterly);
 - IAQ Applications (quarterly magazine)
- ASHRAE Handbooks (yearly):
 - Included at no additional charge to Members and Associate Members.
 - One-time discount (20% off) for Affiliate Members.
 - \$39 for Student Members.
 - ASHRAE Publications — some 300 current titles, with 20% member discount.
- ASHRAE Continuing Education – with members discounts.
- ASHRAE Standards & Guidelines – more than 100, with 20% member discount.

Develop Leadership Skills

Work with and lead ASHRAE committee members.

Network with Industry Professionals

At ASHRAE Chapter, Region, and Society meetings. Network in the online forums in ASHRAE's Society Connections eNewsletter (twice monthly). You also keep updated with the industry via: ASHRAE's Insights newsletter (monthly), and the HVAC Industry eNewsletter (weekly).

Career Advancement

Look for employees & employment, and network with other HVAC&R professionals at ASHRAE meetings. Take educational courses. Participate in job postings on ASHRAE web.

Professional Development / Continuing Education

Maintain your professional education and designation with 40+ courses, earning CEUs / PDHs / AIA LUs. Also: Technical topics at ASHRAE Chapter, Region and Society meetings.

Industry Insight

You're on the "team" with thousands of members who volunteer on industry-driven committees. Also: HVAC&R Industry eNewsletter (weekly).

Group Insurance Program

ASHRAE members can choose from a number of high-quality, competitively priced insurance plans. Plans include Term Life, Comprehensive Healthcare, Disability Income, Member Assistance, High-Limit Accident, Medicare Supplement, Catastrophe Major Medical, Cancer Expense and Dental Insurance.

Join the 50,000 ASHRAE members advancing their careers through an ASHRAE membership.

Members include such industry professionals as consulting & design engineers, architects, contractors, code officials, government representatives, facility engineers/managers, project/application engineers, technicians, industrial/manufacturing engineers and management, public utility engineers, professors/instructors, researchers, sales engineers, manufacturers reps and distributors/wholesalers.

Membership Grades

AFFILIATE MEMBER (Annual Dues - \$40.00): An Affiliate Member shall have the same qualifications as an Associate Member shown below. **The Affiliate Member grade is an introductory membership level for applicants who are under 30 years of age. Membership tenure in this grade is limited to three years.** Affiliate Members receive monthly issues of the ASHRAE Journal and Insights Newsletter. The annual handbook is not a benefit of this grade.

ASSOCIATE MEMBER (Annual Dues - \$150.00): An Associate Member shall have had experience in technical matters or in design, operation, or maintenance in heating, refrigerating, air-conditioning, or ventilating fields; shall have an interest in the advancement of the Society's aims; and shall 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.

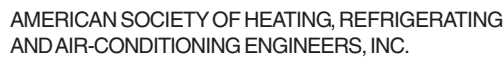
MEMBER (Annual Dues - \$150.00): A Member shall have the equivalent of twelve Society-approved years of experience composed of an approved combination of (a) completed education beyond high school, (b) work experience, and (c) professional engineering or related professional registration or license issued 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 that accredited by the Accreditation Board for 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 which has been accredited by an organization charged with monitoring standards of performance.
- 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 at 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 accreditation. Those holding associate degrees from technical institutions shall also be credited for one year for each year of education.
- One year for each year of the qualifying work experience in the performance of duties in work related to ASHRAE fields of interest, as verified by the applicant's reference, and shall have included research, teaching, design, contracting, engineering sales or engineering management.
- Three years of credit for professional registration or 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.

Qualifying Work Experience:

The following defines as qualifying work experience in ASHRAE-related fields:

- A. Research** Must have demonstrated competence in independent and original research of an engineering or scientific nature which has been published.
- B. Teaching** Assistant Professor or higher in an engineering or scientific discipline.
- C. Design** Responsible for engineering or scientific design including calculations, system and equipment selection and layout, and performance.
- D. Contracting** Responsible for the installation, start-up and operation of significant systems. Must demonstrate capability of initiating or evaluating the effect of engineering or scientific design changes of any type on the performance of the system.
- E. Engineering Sales ..** Must be responsible for assistance to system designers in the engineering, equipment selection and application of components of heating, refrigeration, air-conditioning, ventilation and allied systems.
- F. Engineering Management** Must be directly responsible for and involved in the management of technical, scientific and engineering phases of the organization, which phases may include building, engineering, operation and maintenance.



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1. Application Type:

- ☐ Admission as a Member (Complete items 1-18)
- ☐ Admission as an Associate Member (Complete items 1-13)
- ☐ Admission as an Affiliate Member-Open to new member applicants who are under 30 years of age (Complete items 1-13)
- ☐ Reinstatement-ASHRAE Member#: _____ Previous Grade: _____ Election Date: _____
- ☐ Student Advancement-Member#: _____

☐ MISS ☐ MS ☐ MR. ☐ MRS.

3. Annual Dues: _____ Member and Associate Member (\$150.00) _____ Affiliate Member (\$40.00) (Fee includes U.S. \$6 for ASHRAE Journal. This amount is not deductible from dues.)

Payment Options - CHECK: (Must be in U.S. or Canadian Funds and drawn on a U.S. or Canadian bank.)
Credit Card: ☐ American Express ☐ Mastercard ☐ Visa ☐ Diners Club

Credit Card No. |_| |_| |_| |_| |_| |_| |_| |_| |_| |_| |_| |_| |_| |_| |_| **Exp. Date** _____

Signature (required for credit card payment) _____

5. Business Address																																					
		Business Name																Street Address																			
		Street Address																																			
		City																State/Prov		Zip/Postal																	
		Country																Facsimile (Including Area Code)										Phone (including Area Code)									

/ /

- ☐ ASME
- ☐ IESNA
- ☐ IEEE
- ☐ IIR
- ☐ RSES
- ☐ OTHER

Applicants for the grade of Member should complete items 1-18

14. EDUCATIONAL RECORD (Do not use initials for name of institution or for location.)

TECHNICAL INSTITUTE (Less than 4-year course after high school)

Name of Institution _____ Location _____

Specific Course _____ Date: From-To _____ Date of Graduation _____ Degree Granted or Hours Earned _____

COLLEGE OR UNIVERSITY

Name of Institution _____ Location _____

Specific Course _____ Date: From-To _____ Date of Graduation _____ Degree Granted or Hours Earned _____

GRADUATE STUDY

Name of Institution _____ Location _____

Specific Course _____ Date: From-To _____ Date of Graduation _____ Degree Granted or Hours Earned _____

15. PROFESSIONAL REGISTRATION

Issuing Authority _____ Field of Registration _____ Year Issued _____

Principal Location of Registration _____

16. QUALIFYING WORK EXPERIENCE RECORD

List present affiliation first. List each major responsibility separately, using copies of this form if necessary. Describe your work experience that qualifies you for the grade of Member as indicated. Employer and work activity codes are listed below. Feel free to attach a resume if you wish.

EMPLOYER NAME _____ EMPLOYER ADDRESS _____

DATES: FROM-TO _____ WORK ACTIVITY CODE _____ EMPLOYER ACTIVITY CODE _____

QUALIFYING WORK EXPERIENCE _____

EMPLOYER NAME _____ EMPLOYER ADDRESS _____

DATES: FROM-TO _____ WORK ACTIVITY CODE _____ EMPLOYER ACTIVITY CODE _____

QUALIFYING WORK EXPERIENCE _____

EMPLOYER NAME _____ EMPLOYER ADDRESS _____

DATES: FROM-TO _____ WORK ACTIVITY CODE _____ EMPLOYER ACTIVITY CODE _____

QUALIFYING WORK EXPERIENCE _____

EMPLOYER/WORK ACTIVITY CODES

Use the appropriate codes to identify your employer and work activity code for the Qualifying Work Experience Record on the application form.

EMPLOYER ACTIVITY CODE

11-Consulting Engineering
13-Architectural/Engineering, Architectural
15-Design Build
21-Contractor
26-Property Management & Development
31-Industrial Facility
41-Commercial Facility
42-Government, Healthcare, Education
43-Utility
51-Manufacturer of HVAC&R Equipment
61-Manufacturers Representative
71-Distributor/Wholesaler
91-Other/Miscellaneous

WORK ACTIVITY CODE

A-President, Corporate Officer, Partner, Associate, Owner
B-Management of technology, scientific or engineering activity
C-Design Engineer
E-Application Engineer
F-Project Engineer
G-Codes/Standards Engineer
H-Research Engineer
I-Engineering Sales
J-Draftsperson
K-Estimator
L-Designer
M-Technician Laboratory
N-Installation Technician
O-Service Technician
P-Professor

17. Occasionally ASHRAE makes mailing lists available, under proper safeguard, to make members aware of new educational and technological opportunities. If you do not want to receive these mailings, check here ☐

18. Applicant Signature _____ **Date** _____

**FOR OFFICE
USE ONLY**
