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

PHILADELPHIA CHAPTER

Pre-Dinner

IAQ and Productivity

presented by Katherine E. Wilde Edifice Rx

After-Dinner

Integrated Design

presented by Michael Gubbins The Albanese Organization

Thursday, January 12, 2006

LEED Night

Joint Meeting with DVGBC

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

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

> 6:15 to 7:00 PM Dinner

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

> 7:45 to 8:00 PM Conclusion

STRENGTHENOUR 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

Self-parking is available in the underground garage, 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 \$10

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.

Pre-Dinner Presentation

IAQ and Productivity

Post LEED certification research is showing that, in addition to energy efficiency gains, productivity gains realized are substantial. Because occupant salaries are the highest square footage cost in comparison to gross office rental rates, electricity, and repair/maintenance costs, improved HVAC characteristics hold significant economic and human factor incentives.

The pre-dinner presentation will provide a review of the literature defining and documenting productivity, performance and health effects related to HVAC comfort parameters, ventilation rates, development and distribution of pollution sources, noise, etc. Suggestions and recommendations for productivity and human factor gains will be presented.

Pre-Dinner Speaker

Katherine E. Wilde

Katherine Wilde is the founder and president of Edifice Rx, a company that provides IEQ, Green Building, and Applied Environmental Psychology services for the commercial building markets. She founded the company in 1994 and was recently ranked number 6 among the 100 Fastest Growing Businesses in the Philadelphia area.



Prior to starting Edifice, Katherine was employed by major chemical and oil companies on the West Coast. After graduating from California State University, Hayward, with an MS degree in Organizational Psychology, she provided executive assessment and management development services for a Philadelphia based human resources consulting firm. Kathy holds an undergraduate degree from the University of Delaware.

Her mission is the improvement of a building's ability to positively affect occupant productivity and health.

After-Dinner Presentation

Integrated Design

Michael Gubbins will discuss his experiences with developing and managing "green" buildings in New York City. The talk will focus specifically on The Solaire, the first high-rise residential building with a LEED Gold certification. The Solaire is a 27 story, 400,000 square foot tower completed in 2003 that has a strong focus on indoor air quality, water management and energy efficiency Michael has been involved with this project from its conception, throughout the design and construction and has ongoing responsibility for its management.

After-Dinner Speaker

Michael Gubbins

Michael Gubbins is Vice President and Director of Residential Management for the Albanese Organization in New York City. Michael functions as the property manager for the residential division of Albanese Organization, which includes America's first high rise "green" residential building. This building, The Solaire, is certified LEED Gold. Michael has 19 years of experience in the real estate field with operational and management responsibilities in commercial and residential buildings. In the last four years, Michael's work has focused on "green" projects. This has included both new projects like The Solaire as well as implementing environmental and energy efficient practices in existing structures. Michael has a degree in mechanical engineering and is a LEED accredited professional.

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 too our email distribution list, if you are not included already.

We will keep your email address confidential!

05-06 Directories Have Arrived!

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 – Upcoming Events

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 me at mwitkowski@mchugheng.com.

We are also getting ready for another year supporting the Future City Competition. ASHRAE has been supporting the competition over the past several years. (Please refer to the article on page 9.) On a personal note, I was a judge last year and was thoroughly impressed with the creativity of the students. Each school had a unique way to tackle the problems. I encourage you to support this competition.

Mike Witkowski, Student Activities Committee Chair

PHILADELPHIA CHAPTER ASHRAE 2005 - 2006 PROGRAMS

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

Date	Location	Pre-Dinner Topic	Dinner Topic	Theme
Thurs Jan 12	Colleen's	IAQ and Productivity	Integrated Design	LEED (Joint Meeting with DVGBC)
Thursday Feb 9	Colleen's	Career Demographics for the Engineering Industry	Ductless Air Distribution	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	or 2006-2007	

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

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

Corporate Sponsors

TJ Equipment Co.

TJ Equipment Co. was established in 1977 with owner, Pat Tajirian, bringing 20 years of prior experience with him. We are one of the nation's top suppliers of storage tanks, oil water separators, grease interceptors, and a full line of plumbing and HVAC pumps as well as fuel oil distribution packages, including tanks, pumps, gauging and specialties.

Our customers, "recognizing our exceptional value", have come to depend on us for all their tank needs, including ASME pressure vessels, steel and fiberglass storage tanks for fuel, water and other liquids. TJ Equipment takes pride in its leadership position as the source for tanks, pumps and related equipment in the commercial/construction market.

Let our technical knowledge, superior customer service, and our manufacturers' endless capabilities go to work for you. Our motto speaks for itself – THERE'S NEVER A TRAFFIC JAM ON THE EXTRA MILE!

Lawrence Industrial Park 510B Abbott Drive Broomall, PA 19008 610-328-3001 www.tjequipment.com

The Tri-M Group

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.

206 Gale Lane, PO box 69 Kennett Square, PA 19348 610-444-1002 www.tri-mgroup.com Merion Pump & Equipment Co.

Merion Pump & Equipment Co. is a manufacturer's representative and distributor of centrifugal pumps, hydronic accessories, heat exchangers, motor controls, filters, fiberglass cooling towers and automatic tube brushing systems for chillers. Founded in 1990 by Frank Colosey and Bill Gormley, Merion has established a strong presence in the HVAC and Industrial marketplaces.

Serving Eastern Pennsylvania, South Jersey & Delaware, MPE has participated in some high profile projects over the last decade. These include Liberty Office Towers, University of Pennsylvania Module #6 Chiller Plant, Philadelphia Airport Terminal E CUB, First Union Sports Arena, Conectiv Thermal System's Midtown Thermal Plant AC, NJ, Bristol Myers Squibb CUB, Pennington, NJ, Marina Energy Thermal Plant AC, NJ, and Borgata Hotel and Casino, AC, NJ.

Our current sales force consists of 4 outside sales engineers each with the capability of assisting the Consulting Engineer and End User with proper application of our fine products including PACO Pumps, POLARIS Heat Exchangers, TOWER TECH Cooling Towers, WHEATLEY HVAC Accessories and EATON/CUTLER-HAMMER VFD's and Motor Starters.

Merion's service department is staffed with 3 trained outside service men and 1 apprentice. A complete machine shop for pump assembly and repairs, plus on-site servicing of cooling towers are some of the many services we offer to our customers. Also, we are an authorized service and startup center for Cutler-Hammer HV9000 Variable Frequency Drives and Controls.

Merion Pump & Equipment Company is located in a 6000 square foot facility in Conshohocken, PA near Route 476 at Ridge Pike. Our warehouse is currently stocked with a wide variety of PACO Pumps, pump suction diffusers, triple duty valve and flexible pump connectors. We now offer custom pump and filter assemblies and recently have introduced the MPE Glycol Feed Pak.

960 Brook Road, Unit 3 Conshohocken, PA 19428 610-825-5040 www.merionpump.com

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 Belleghem, 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.

December Philadelphia Chapter Meeting



David Altenhofen is thanked by Steve Piccolo for his presentation at the Union League on *Controlling Heat, Air & Moisture with the Building Envelope.*

Tall Buildings Focus of ASHRAE Public Session

As skyscrapers have risen in height and sophistication since the first one was constructed in Chicago more than 100 years ago, so have concerns about their design and safety.

"Buildings taller than 300 feet pose unique design challenges for all involved," Peter Simmonds, Ph.D., IBE Consulting Engineers, Sherman Oaks, Calif., said. "To meet these challenges, a collaborative design approach that integrates architectural, mechanical and electrical design elements is needed to produce a fully functioning highly productive building."

That design approach will be highlighted in a free public session at ASHRAE's 2006 Winter Meeting, Jan. 21-25, Chicago. Integrated Design of Tall Buildings will be held from 3-5 p.m. Jan. 23, at McCormick Place.

One area to be addressed is fire safety challenges based on lessons learned since Sept. 11, 2001. The need for exit plans, smoke control, fire suppression and emergency communications will be discussed, along with how building security impacts exit plans, according to Simmonds, who will chair the session.

Speakers are:

- Dan Jenkins, principal, The John Buck Co., Chicago, will present challenges in developing energy efficient and sustainable buildings.
- Peter Ruggiero, AIA, design partner, Skidmore, Owings and Merrill, Chicago, will discuss problems and solutions associated with integrating all disciplines into design.
- Ron Klemencic, president, Magnusson Klemencic Associates, Seattle, will discuss supporting buildings in non-seismic and seismic zones.
- Reg Monteyne, senior vice president, Flack + Kurtz Inc., San Francisco, will discuss the building services systems, including system choice, energy requirements and distribution systems.
- William A. Webb, project director, Schirmer Engineering Corp., Chicago, will discuss designing fire and life safety systems for tall buildings.

Chicago Site of ASHRAE 2006 Winter Meeting

ASHRAE will hold its 2006 Winter Meeting in Chicago.

The meeting will take place Jan. 21-25, 2006, with the ASHRAE Headquarter Hotel at the Palmer House Hilton. The meeting will be held in conjunction with the International Air-Conditioning, Heating, Refrigerating Exposition (AHR Expo), Jan. 23-25, McCormick Place, Chicago.

Those interested in attending the ASHRAE meeting should contact the ASHRAE meetings section at 404-636-8400. Advance registration for the 2006 ASHRAE Winter Meeting will be \$635 (\$375, ASHRAE members).

For more information about the 2006 Winter Meeting, visit www.ashrae.org/chicago. For more information about the AHR Expo, visit www.ahrexpo.com.

Career Opportunities

Looking for work, see job 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.

Member Services

Members who would like stay on top of the <u>latest news</u> <u>from ASHRAE</u> 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 <u>have their resumé posted on</u> <u>our website</u>, 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 <u>Video Resume And Job Opportunities</u>, visit online portal: <u>www.LookFirst.net</u>

SALES ASSOCIATE or ENGINEER (HVAC)

McGill AirFlow LLC, a subsidiary of United McGill, engineers and manufactures commercial and industrial ductwork systems. We have seven manufacturing plants and about 40 sales engineering offices throughout the U.S. Products are sold mainly to mechanical and sheet metal contractors.

The person sought will sell ductwork and acoustical products in a specific territory around a large city. The duties include calling on contractors and consulting engineers, preparing priced proposals, managing projects and solving problems.

The job requires a bachelor's degree in business, marketing, engineering, technology, or the like, proficiency at using computers, and excellent communication & presentation skills. A few years of relevant experience in HVAC or construction industry sales is preferred, but entry-level candidates will be considered for a training program. Travel away from the office will average about 60% of the workweek.

The Company offers a competitive salary, incentive and benefits program including: medical, dental, & vision care, Flexible Spending Accounts (FSA), paid time off (PTO) and paid Holidays, 401(k) Plan with Company match, paid disability and life insurances, and educational assistance.

For further information about our Company and available positions, please refer to our web site at Interested candidates should forward a resume and cover letter with salary history to:

United McGill Corporation Fax: (614) 836-9843 E-mail: Personnel@unitedmcgill.com

EOE/m/f/d/v

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.

Page 9

ASHRAE RESEARCH - Donor Form Philadelphia Chapter 21 - Region 3

Type of Contril	oution;
O Individual	
O Corporate	
OMemorial To	o:
Please attac	ch the details for the acknowledgement to, relationship to, and addresses
Level of Contri	oution;
O Golden Circ	le (\$10,000 and greater)
	rtner (\$5,000-\$9,999)
	sociate (\$2,500-\$4,999)
	ajor Donor (\$250-\$2,499)
	onor Roll Donor - Individual (\$100-\$249)
	onor Roll Donor – Corporate (\$150-\$249)
O Research Ge	eneral Donor (Less then \$100 Individual/\$150 Corp.)
Method of Payr	nent;
A) Attach Che	ck (Payable to "ASHRAE Research")
	note on check "Phila- Chapter 21"
B) Credit Card	1
O-Visa	O-Master Card O-AMEX
Date:	Signature:
Card#:	Exp. Date:
	ions are fully deductible under section 170 of the IRS code.
Donor Informa	tion:
Donor Informa	non-
Name:	
Member#(If A	SHRAE member):
Corporation Na	nme (If Corp. Donation):
Address:	

!! 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.

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.

Future City Gears Up for 2005-2006

The Philadelphia Regional Future City Competition, an education outreach program of the Delaware Valley Engineers Week Council, is actively seeking volunteers for this year's program. Although the Regional Competition will not be held until January, the Future City Steering Committee has been registering schools since May.

In August, even before the school year began, there were 12 schools registered and since the beginning of the school year, more schools have been starting the program. The program offers 7th and 8th grade students the opportunity to work with their teacher and a practicing engineer mentor to:

- Design a city of the Future using SimCity 3000
- Write a researched engineering essay of 500 700 words and a 100 – 300 word abstract describing their city development
- Build a 30" x 60" model of a portion of their city
- Prepare a 7 minute presentation

The schools will come together at the regional competition at Villanova University on January 28, 2006 to present their cities to teams of judges. The winning team will represent the Philadelphia region at the national competition in February. In addition, there are over 40 other prizes awarded at the regional competition.

In order to run the program, Future City needs almost 200 volunteers to be:

- Mentors needed NOW!
- City Design Judges needed in December
- Essay Judges needed in late December early January.
- Preliminary Judges, Special Award Evaluators and competition workers – needed in late January

Why not volunteer for this exciting program? It will give you an opportunity to share your engineering expertise with middle school students and you will have a lot of fun. Sign up on-line at www.futurecityphilly.org, or call or e-mail Jennifer Wetzel, the Volunteer Coordinator, at 215-573-3935 or volunteer@futurecityphilly.org.

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

Inside This Issue

Page
Meeting Announcement1
Meeting Speakers2
Meeting Presentation Summary 2
Technology Awards Program 3
Volunteers Needed
Student Activities
Chapter Event Schedule 4
Corporate Sponsors 5
ASHRAE Sustainability Effort 6
ASHRAE Energy Design Guide 6
ASHRAE IAQ 2007 6
ASHRAE Winter Meeting 2006 7
Career Opportunities
Donor Form
Membership Grade Announcements 10
Future City Competition

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 fax 610.971.4859 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.