



The PENNANT

Newsletter of the
ASHRAE® Central Pennsylvania Chapter

<http://www.cenpenn.ashraechapters.org/>

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President's Message...



November '08

Member Advancement

If you were asked, "What is your ASHRAE membership grade?" would you know how to answer?

ASHRAE has setup several grades of membership to recognize levels of experience and significant contributions to the HVAC&R industry. To attract young people new to the industry, ASHRAE offers the Affiliate grade. Affiliates are offered dues at a reduced rate of \$40 until they turn 30 years of age. Unfortunately, Affiliates do not receive the annual handbook as part of membership. Associate is another entry level grade that is available to all new members and is by far the most popular grade in our chapter, and I would assume society. For those members with 12 years of "society approved experience", they can apply for Member grade.

When considering the years of experience, ASHRAE considers a combination of the following categories: Post High School Education, Work Experience and professional engineering or related registration. I won't elaborate on all of the details, but as an example, a graduate of a four year college program will need six years of work experience to qualify for Member grade – each year of completed education is equivalent to a year and a half of experience.

Advancing your membership has several advantages. For Affiliate advancing to Associate, you will receive the yearly handbook – a survey of the membership revealed that these books are the #1 benefit of ASHRAE membership. Associate advancing to Member does not include more publications, but Members do receive an updated membership certificate and are recognized in ASHRAE Insights. If you wish to serve at the region or society level, it is advantageous to advance to Member sooner rather than later. To serve as a Regional Vice Chair, one must hold the grade of member for a minimum of three years. Additionally, to hold a society elected position, which includes Regional Chair, one must hold the grade of member for a minimum of 5 years.

So how do you take advantage of these opportunities to advance your grade? To advance from affiliate to associate, simply make the change next time you renew your membership. For Associate to member, I have included the link below to the advancement form. Complete the form and return it to ASHRAE headquarters.

[Application for Member Advancement](#)

I urge everyone to take the step to the next grade. During these times of economic uncertainty and increasing attention to energy consumption, it is beneficial to you and all levels of ASHRAE to account for your experience and commitment to the HVAC&R industry.

See you soon,
Mark Tome, PE

Inside this Issue

November Meeting Information
2008/2009 Schedule

Bulletin Board

Research Promotion Night
Virtual Keg Sponsored by H & H Associates
Wednesday November 12th 2008
Appalachian Brewing Company, Harrisburg PA
50 N. Cameron St., Harrisburg, PA

5:00 – 6:00 Tech Session - Engineering and Insurance (Andrew P. Brecker, CIC)

6:15 – 7:00 Dinner

7:00 – 8:00 Program - Engineering Liability (David Flores)

Tech Session - (Andrew P. Brecker, CIC)

Andrew Brecker started in the insurance industry in 1990 and in 1997 he joined Roehrs & Company. Since then he has specialized in providing to Architects and Engineers in Pennsylvania, New Jersey, and Delaware insurance, risk management and consulting services. Andrew and Roehrs & Company is an active member of the AIA. Andrew has given many risk management seminars for the Philadelphia Chamber of Commerce, as well as the Philadelphia chapter of the AIA.

In 2000 Andrew achieved the designation of Certified Insurance Counselor (CIC) and is currently working his way to achieve the designation of Certified Risk Manager (CRM).

Since 1923 Roehrs & Company, Inc has been an independent full service insurance and risk management firm. It has over 30 employees and offices in Exton and South Carolina. In addition to their work with Design Professionals, Roehrs & Company has helped develop many insurance programs for various industries including Building Material Dealers, Construction Industry, Roofers, and Medical Malpractice Liability.

Program - (David A. Flores)

David A. Flores joined Harmon & Davies, P.C. in 1993, and serves as partner in the firm's Lancaster, Pennsylvania office. He concentrates his practice in the areas of commercial and construction litigation and dispute resolution. Mr. Flores is experienced in representing clients before federal and state courts, and before administrative and arbitration tribunals. He has handled numerous trials in court and in arbitration hearings. These cases involve all aspects of construction contract disputes. He is also experienced at drafting construction contracts and in labor and employment matters. Mr. Flores earned his J.D. degree from Georgetown Law School, where he served as executive editor of Georgetown's *International Law Review*. He received his Bachelor's degree, with honors, from Dartmouth College. Mr. Flores is admitted to the Pennsylvania and New York Bars, and also the U.S. Court of Appeals for the 3rd, 5th, 7th, and 9th Circuits.

Reservations: toddp@trianglerrefrigeration.com or (717) 656-5720 ask for Todd Postlethwait

Deadline: Thursday , November 6th at 5:00 p.m. PLEASE!

Cost:

Members: \$ 30.00 Non Members: \$40.00 Retired: \$ 5.00 Students: Free

Note to all Chapter Officers and Committee Chairs: [Chapter Officers, Board Members and Committee Chairs have standing reservations.](#) If you do not RSVP by the deadline, you will be billed for the fun time you missed.

Between the Sessions

Bruno Lee will be speaking to our ASHRAE group between the tech. session and the regular program. He is a ASHRAE Grant-In-Aid recipient (funded by ASHRAE RP) and will be briefing us on his research. Below is a short on what we can expect.

Title:

Life-cycle cost analysis of the installation and operation of in-duct ultraviolet germicidal irradiation system under various environmental conditions

Short Description:

In-duct ultraviolet germicidal irradiation (UVGI) system are receiving attention as a method of controlling indoor biological air contaminants. Past and current research on UVGI has focused on its scientific and technical feasibility. Little published research considers the cost effectiveness of UVGI compared to alternative air treatment methods such as dilution ventilation. This project will investigate the performance and cost effectiveness of in-duct UVGI in a representative application using a combination of air quality modeling and economic analysis.

ASHRAE of Central Pennsylvania

Schedule of Events 2008/2009

EVENT	TOPIC/DESCRIPTION	DATE
Past Presidents Night		
Location: Wyndham Garden 765 Eisenhower Blvd Harrisburg		September 10, 2008 717-558-9500
Program	Chilled Beams for Retrofits	Mike Kaler Applied Air
Tech Session	Active Chilled Beams	William Rafferty Dadanco
Society President Visit		
Location: PSU, University Park Details to Follow		September 16, 2008
Program	Energy, Food & Environment – ASHRAE's Global Challenges	Bill Harrison
Membership Promotion Night - bring a friend!		
Location: Appalachian Brewery Company, Harrisburg		October 8, 2008
Program	Solar Thermal Technology	Steve Elkin Apricus
Research Promotion Night		
Location: Appalachian Brewery Company Harrisburg		November 12, 2008
Program	Engineering Liability	David Flores, Harmon and Davies
Tech Session	Engineering and Insurance	Andrew Brecker, CIC
Professional Development Seminar More information to follow November 2008		
History Night		
Location: TBD		December 10, 2008
Program	Integrative Design	TBD
Tech Session	USGBC Appendix G	TBD
Regular Meeting		
Location: TBD		January 14, 2009
Program	ASHRAE Standard 90.1 - 2007	TBD
Tech Session	ASHRAE Standard 189.1 For High Performance Buildings	TBD
Professional Development Seminar More information to follow January 2009		
YEA Night		
Location: TBD		February 11, 2009
Program	Renewable Energy	TBD
Tech Session	Geothermal/Wind/Solar Technology	TBD
Regular Meeting		
Location: TBD		March 11, 2009
Program	TBD	Gettysburg National Battle Field Museum
Tech Session	Gettysburg National Battle Field Museum Tour	Gettysburg National Battle Field Museum
Student Activities Night & Awards Night		
Location: Appalachian Brewery Company Harrisburg		April 8, 2009
Program	Student Presentations Awards	Rachel Voigtland Carrier
Family, Donor Recognition, & Volunteer Night		
TBD Location: TBD		May 2009

Bulletin Board

**LOOKING FOR NEWS
ON MEMBERS...YOUR
NEWS....THEIR
NEWS...ANY NEWS!**

The Central PA Chapter would like to recognize the following 2007-2008 Research Promotion donors:

Dr. William Bahnfleth, Penn State University Dr. Kenneth Hickman Mr. Kenneth Hutchison, H&H Sales Associates Mr. Thomas Long, Gannett Fleming Mr. Franklin Ruth, DGS York International Corp Mr. George Settle, Gannett Fleming Mr. Kirby Slear, SAIC Mr. David Rosenbaum, Johnson Controls Mr. Daniel Wyrick, Keller Equipment Silvertip Incorporated Mr. Daniel Kerr, McClure Co.
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H&H Sales Associates
Mr. Glenn DiEsposti, Pierce Phelps
Mr. Mark Tome, Barton Associates
Mr. Jason Richwine, Johnson Controls
Mr. Todd Postlethwait, Triangle HVAC
Mr. Nicholas Romeo, JDB

We would also like to make special recognition of those that gave over \$500

Mr. Gary Debes, Kling Stubbins
Dr. Kenneth Cooper, PoolPak
Mr. George Keller, Keller Equipment
McClure Company
Carel USA LLC

*Awards, Promotions, New Employees, New Members,
Weddings/Births/Deaths/Anniversaries, etc. (posted free of charge)*

Put it in the Pennant – Send your announcements to
Brent Adams – badams@fswelsford.com

*We also publish employment opportunities.
The cost is \$25/half page per issue.*

The Power of the “Mine”

In an age of rapidly rising fuel bills the discovery of vast supplies of free hot water sounds too good to be true. But that is exactly what one Dutch city has found to run the radiators of hundreds of homes, shops and offices.

Heerlen, in the southern province of Limburg, has created the first geothermal power station in the world using water heated naturally in the deep shafts of old coal mines — which once provided the southern Netherlands with thousands of jobs but have been dormant since the 1970s.

Tapping “free energy” marks a breakthrough in green technology by exploiting the legacy of the coalmines that emitted so much pollution and helped to create the climate change emergency faced by the planet.

“With the threat of global warming and soaring energy prices, nobody can afford to sit back,” said Riet de Wit, a councilor in Heerlen. “We have proven that a local initiative can provide a local solution for sustainable energy. Moreover, our concept can be adapted by former mining regions all over the world.”

The concept sounds simple. The abandoned mineshafts were seen as a blight on an area that has struggled to recover economically from the mass redundancies of miners in the 1970s. After the mineworks were demolished new homes were built and linked to a geothermal power station pumping water up from the mines at a depth of 800 metres, where it reaches temperatures of 35C (95F). The water is used to provide heating for 350 homes and then pumped back into the pit after use, where it will again heat up for the cycle to continue. The water will circulate two or three times a year.

The only drawback is that the homes need to be close enough to the old mines to make use of the heat, which will be topped up by domestic boilers when greater temperatures are needed.

Scientists estimate that the project will produce 55 per cent fewer CO2 emissions than a traditional coal-fired power station — and are now working on a carbon capture system to liquefy the CO2 and pump it back into other disused shafts rather than release it into the atmosphere.

The goal is “emission-free” heating and it could revitalize other former mining areas as sources of cheap, renewable energy.

“For wind power, you need wind. If there is no wind, there is no power. But with geothermal energy, you have a constant level of simple heat without any need for conversion,” said Karl-Heinz Wolf, Professor of Coal and Geothermal Energy at the Technical University of Delft. “You have it all year round and if you don’t need it, you close the tap until you need it again. You have heat at a certain level and you only have to top it up if you want it at a higher level.”

During the summer the water can be taken from near the top of the shaft where it is cold enough to cool the city’s buildings.

So, is this the answer to Europe’s energy crisis? Professor Wolf, who is working on a project to drill down to an aquifer 2.5km below Delft where the temperature of the water is 80-85C, said: “It is not difficult to do, the only thing you need is a mine which is in the vicinity of the industry or houses you want to heat.”

Yet another “renewable” energy for Pennsylvania!



Application Engineering Manager – York, PA Job #33647

BASIC FUNCTION

Plays a key role as a member of a small team of senior product managers (2-3), typically supervising 1-10 staff and is responsible for leading cross functional product teams which manage all aspects of a wide, diverse and complex product portfolio of large tonnage chillers including product development, product pro forma P & L, and is responsible for supporting global product performance. Focuses and takes direct responsibility for the product applications functions that require exceptional technical skills in the science and practice of refrigeration and air conditioning for the complete product portfolio which includes multiple product platforms (different refrigerants, compressor technologies, package control logic and capacity ranges) and is applied and supported globally.

ESSENTIAL DUTIES & RESPONSIBILITIES

1. Develop, train, mentor and lead a team of technically astute product and application experts to deliver product and application support to the field for product and system solutions meeting customer needs.
2. Take full responsibility for managing all essential marketing tools of selection, configuration, and rating simulation programs supporting product and system performance and interaction.
3. Responsible for field training of the sales force including product launches and sustaining training for existing products. Training programs would be targeted for range of skills from new hire to seasoned veteran.
4. Training programs, customer training and presentation programs, and technical seminars for industry associations and organizations supporting both US and global markets.
5. Demonstrate expert technical knowledge of components, products, and system designs to drive new product application opportunities based on innovative customization options. (e.g. intimate knowledge of compressor design, operation, and limitations and its response to component design changes).
6. Use expertise in competitive product position to guide and support the field sales, marketing, and applications engineers in selling and specifying the product portfolio including conducting regular field visits to offices and joint visits to customers and engineers.

TRAVEL REQUIREMENTS

25-50%

EDUCATION/EXPERIENCE

- BS/BA required; MS/MBA highly preferred or equivalent experience
- 15 years BAS or HVAC related experience in product or program management, marketing, or sales is required
- 10 years BAS or HVAC related experience in technical and/or application experience required.
- 5 years BAS or HVAC related experience in management is desired

Please apply online at www.johnsoncontrols.com and keyword search desired job #.



Sr. Program Marketing Manager – York, PA
Job #33648

BASIC FUNCTION

Plays a key role as a member of a small team of senior product managers (2-3), by assuming responsibility for leading cross functional product teams which manage all aspects of a wide, diverse and complex product portfolio of large tonnage chillers. Focuses on providing support and training to the field, participating in trade shows and organizations to promote our products and developing applications. Develops new business opportunities by combining unique applications with our product offerings, especially focusing on sustainable energy. Provides exceptional marketing skills for the complete product portfolio, which includes multiple product platforms (refrigerants, compressor technologies, package control logic and capacity ranges) applied and supported globally. Must be effective in delivering YORK perspectives and product messages to customers, sales teams, industry organizations, and governmental organizations. Travel required will be 30% to 60% of time.

ESSENTIAL DUTIES & RESPONSIBILITIES

- Analysis of market trends and evaluation of evolving opportunities
- Review of industry organizations, US and global, to determine shifts in the market
- Work with the York Product and Sales teams to identify targeted marketing plans that promote the product portfolio
- Maximize profit margins through optimization of product portfolio strategy
- Conduct effective competitive product evaluations specifically focused on operational and customization capabilities
- Advise on the correct competitive price positioning of products to account for the technical merits and weaknesses of competitor products.
- Develop strategic plans to stimulate the market
- Develop personal working relationships with targeted Customers to ensure York's products are considered more by personal preference
- Work with industry organizations to develop the market for the product portfolio including funded development and demonstration projects
- Organize promotional activities with Customers and industry groups
- Direct and coordinate Marketing, Sales and Application Guide literature requirements
- Organize and conduct regular training sessions for the York Sales channels

EDUCATION/EXPERIENCE

Should possess a high level of knowledge of product (YORK & competitors), marketing conditions and direction, environment (external influences of industry organizations and governmental regulations) and their effect on the business; thorough understanding of YORK financial systems; Prior leadership of product or process teams.

- BS/BA required; MS/MBA highly preferred or equivalent experience
- 15 years BAS or HVAC related experience in product or program management, marketing, or sales is required
- 5 years BAS or HVAC related experience in management is desired

Please apply online at www.johnsoncontrols.com and keyword search desired job #.



**Staff Applications Engineer – York, PA
Job #32172 & #33639**

RESPONSIBILITIES AND DUTIES: This position is responsible for the system application, design and quotation process for Custom Chiller products as a support for Sales Quotes and Orders. Supported products include Absorption chillers and single stage and multistage centrifugal chillers that may include motor, steam turbine and gas engine drives. Specific areas of responsibility include:

- Provide customers with effective solutions applying the relevant JCI products.
- Assist field offices in promotion of the solutions proposed.
- Play a key role in field office training and product promotion, energizing and focusing field sales.
- Providing field offices with effective sales tools and play a key role in developing these tools.
- Actively participate in designated Product Marketing and Product Development teams.
- Provide technical support and training for the department.

SKILLS AND ABILITIES:

- Candidate must be able to technically review and discuss customer specifications.
- Proficiency with Microsoft Office Suite Applications (Word, Excel, Access & PowerPoint), Internet and E-Mail is required.
- Good oral and written communications skills and strong organizational skills, preferably associated with equipment sales.
- Candidate must be able to pass Customer specification requirements to suppliers and validate quotations for compliance.
- Previous experience with YORKworks is desirable.

EDUCATION AND EXPERIENCE: Bachelors Degree in Mechanical Engineering or related Engineering field and ten (10) to fifteen (15) years of previous experience in mechanical design, applications engineering or product management. Preferably this experience includes refrigeration system design and/or complex chiller systems pricing experience. A PE, an advanced degree or progress toward an advanced degree, or appropriate additional related experience is also preferred.

Ability to travel 25%.

Please apply online at www.johnsoncontrols.com and keyword search desired job #.



**Staff Compressor Engineer – York, PA
Job #27488**

Primary Responsibilities:

1. Support continuous improvement of DXS and MTS screw refrigerant compressors for Small Tonnage chillers,
2. Provide comparative evaluation of potential future compressor designs including centrifugal compressors
3. Provide occasional support of manufacturing operations
4. Maintain understanding of theories, concepts, technical principles and processes related to mechanical and electrical aspects of compressors
5. Model compressor performance under various operating conditions
6. Has proficiency in mechanical design and be able to conceptualize and implement design ideas into the product
7. Provide clear technical direction to designers and review complex 3D models
8. Defines, plans and promotes a complex project into several routine smaller ones
9. Reports on the status of the projects
10. Contributes to the on-time completion of programs
11. Generates technical documentation and writes technical documents for use within the company
12. Prepare and help execute test programs to verify performance and reliability of mechanical and electrical sub-components of compressors
13. Analyzes, designs, modifies and/or troubleshoots mechanical sub-components and sub-systems based on test data
14. Possesses knowledge of manufacturing processes and applies the philosophy of designing to standard manufacturing processes
15. Strives for continuous improvement and teamwork in a global product development

EDUCATION AND EXPERIENCE: Qualifications:

1. BS in Engineering or related science or equivalent
2. Minimum 10 years experience in screw and centrifugal compressor design and/or manufacturing, or related experience with other fixed displacement/centrifugal compressors.
3. Proficiency in MS Project and Excel are needed.
4. Experience in a design and product development environment
5. Basic understanding of fundamental business knowledge

Please apply online at www.johnsoncontrols.com and keyword search desired job #.



CONTRACTORS AND ENGINEERS

a PPL company 

Mechanical Engineer

McClure Company, a PPL Energy Services Company and the region's largest mechanical contractor, is seeking a mechanical engineer to support growth in the energy & engineered services business.

Position Description:

The daily activities of the position will include any combination of the following:

- Conduct field surveys to assess existing conditions, customer needs and begin problem analysis.
- Perform design calculations using sound engineering practices and experience.
- Prepare equipment or material specifications for purchasing.
- Interpret submittals, architectural, structural, piping/plumbing and mechanical drawings.
- Design and layout of HVAC, Plumbing/Piping systems on commercial, institutional, pharmaceutical and healthcare projects using AutoCAD Software.
- Work with internal resources to estimate project cost.
- Communicate directly with field construction personnel, customers and equipment vendors.
- Coordinate project execution with construction management, field personnel and subcontractors.

Applicant Requirements and Skills:

- Experience in commercial HVAC and plumbing design using AutoCAD version 2005 (Building Systems or MEP experience a plus).
- Excellent communication skills, both written and verbal.
- Excellent organizational skills.
- Familiarity with the A-E design process as well as a general knowledge of the construction process.
- Ability to manage multiple priorities.
- Excellent computer skills including Microsoft Word, Excel and MS Project.
- Bachelor's degree in engineering or related technical degree.
- Minimum of 2 - 4 years experience required (PE License a plus).

McClure Company provides a full benefit package, including medical, prescription, vision and dental for all employees and their dependents at no cost, as well as a 401k/profit sharing plan.

Please forward resume and cover letter to:

Human Resources Coordinator, McClure Company

PO Box 1579

Harrisburg, PA 17105-1579

Or e-mail to: MichelleSullivan@McClureCo.com

Company website: www.McClureCo.com, **No phone calls please.**