

ASHRAE Rochester



VOLUME 4, ISSUE 1

AUGUST 13, 2009

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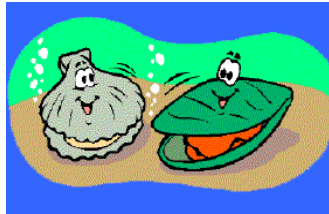
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ASHRAE Clambake Meeting info



Topic: "Energy Conservation at the Eastman Business Park"

Presenter: Raúl Santiago P.E., Kodak Rochester Energy Manager,
Eastman Kodak Company

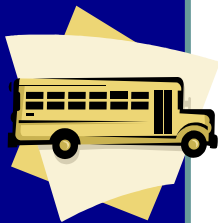
When: September 14, 2009 at 5:00 PM

Where: White House Lodge at Webster Park

Cost: \$25.00 plus \$5.00 per dozen clams (No limit, Pre-order as
many dozens as you want)

Tickets must be purchased by September 1st. No tickets
will be sold at the door. **See clambake announce-
ment on page 5** of this issue for specifics on how to
make your reservation.

Reservations are Required



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ASHRAE 2009/2010 MEETING SCHEDULE

DATE	EVENT	LOCATION	SCHEDULE
9/14/2009 Donor Recognition	Annual Clambake: Raul Santiago -Eastman Kodak Company "Energy Conservation at Eastman Business Park"	Webster Park White House Lodge	5:00 PM
10/12/2009 Membership Night	Danja McMillan—Camfil Farr "ASHRAE 52.2-2007"	Mario's	12:00-2:00 PM Lunch
11/9/2009	David Meyer—Pathfinder Engineers Possible tour of new downtown office with review of LEED Accomplishments	Pathfinder - Dinner downtown?	5:30 PM
12/14/2009 Research Promotion	TBD—Possible Distinguished Lecturer Speaker	Mario's	12:00-2:00 PM Lunch
1/11/2010 Student Night	Steve Beck—Envelope Commissioning Joint Meeting with USGBC	Mario's?	12:00-2:00 PM Lunch
2/8/2010 Student Night	RIT CIMS Building—Thermal Fluids Lab Al Rodgers & Carl Lundgren	RIT - Dinner through RIT Food Service	5:30 PM
2/13/2010	Valentine's Dinner Dance	Hyatt Downtown Rochester	7:00 PM
3/8/2010 Membership Night	TBD—Possible Distinguished Lecturer Speaker	Mario's	12:00-2:00 PM Lunch
4/12/2010	Refrigeration Tour—Tour of Perry's Ice Cream Possible Joint Meeting with Niagara Chapter	Perry's Ice Cream—Akron Dinner?	
5/18/2010	Annual ASHRAE Golf Outing and Picnic	Ravenwood Golf Club	8:00 AM Golf 2:00 PM Picnic 6:45 PM Dinner

Mission Statement

ASHRAE will advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related human factors to serve the evolving needs of the public and ASHRAE members.



"Advancing HVAC&R to serve humanity and promote a sustainable world"

Vision Statement

- will be the global leader in the arts and sciences of heating, ventilation, air conditioning and refrigeration.
- will be the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines.
- will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.

President's Message

ASHRAE Rochester is about to begin another season of technical programs, social events, and continuing education opportunities. Rochester Chapter officers Jim Browe and Jeff Ellis are in the process of planning the upcoming events. Jim and Jeff are part of a group who volunteer their time for the benefit of the local chapter, our northeast region and the ASHRAE international Society. It is this spirit of volunteerism that is one of the major driving forces moving ASHRAE constantly forward. Thank you to the following members of the Rochester ASHRAE community for their service:

- Jim Browe, President Elect
- Jeff Ellis, Vice President
- Michelle Sommerman, Secretary
- Rob Wind, Treasurer
- Joe VanCura, Immediate Past President
- Casey Bernhard, 2nd Past President, Nominating Committee Chair
- Ed Burns, Board of Governors, Attendance Committee Chair, Picnic Committee Chair
- Trisha Jackson, Board of Governors
- Phil Masters, Board of Governors, Membership Committee Chair
- Jeff Close, Board of Governors, Research Promotion Committee Chair
- Bill Murray, Board of Governors
- Tim Duprey, Board of Governors
- Lee Loomis, Historian
- Christina Walter, Newsletter Editor
- Al Rodgers, Student Activities Committee Chair, Awards Committee Chair
- Kevin Wind, Webmaster
- Mike Nohle, Refrigeration Committee Chair
- Jody Monaco McGarry, Valentines Dinner Dance Committee Chair
- Chuck White, Buyer's Guide Committee Chair
- Lynn Bellenger, Society President Elect
- Peter Oppelt, Regional Vice Chair Program

One of the founding principals of ASHRAE is that it is a grassroots organization. This means that the international Society functions for the betterment of ASHRAE Region, the Region serves the local chapters, and the Chapters work for their Members. With this in mind, the Board will be seeking input from the Membership on suggested meeting topics. We do this to ensure a successful and fulfilling season. Please take a few minutes to fill out the surveys when you see them in your inbox. This really helps us serve our Membership.

Our outgoing president, Joe VanCura has served the Rochester Chapter over the past 20 years. I believe I speak for the Membership when I extend a sincere thank you to Joe for his outstanding leadership and enthusiasm on behalf of the Chapter. In addition, I owe Joe a personal debt of gratitude for his steady leadership over the last five years. Thank you Joe!



Jeff Davis, PE, 2009-2010 President



ASHRAE CLAMBAKE



White House at Webster Park

When: September 14, 2009
 Where: Webster Park White House Lodge
 Time: 5:00 P.M.
 Cost: \$25.00 plus \$5.00 per dozen clams

(No Limit, Pre-Order as Many Dozen as You Want)

Tickets must be purchased by September 1st. No tickets sold at the door.

Energy Conservation at the Eastman Business Park

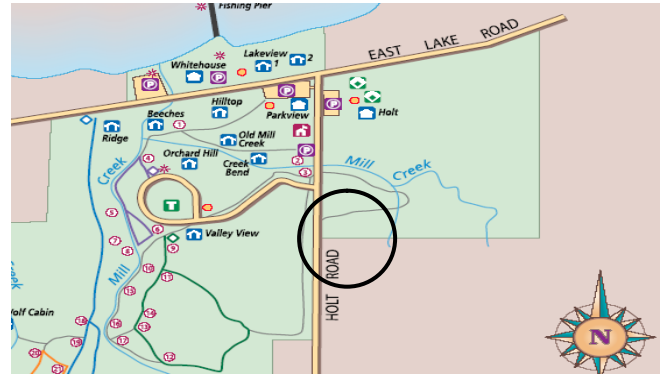
Presented by: Raúl Santiago P.E., Kodak Rochester Energy Manager, Eastman Kodak Company

Raúl Santiago (Kodak Rochester Energy Manager) has over 20 years of experience evaluating and optimizing a variety of mechanical systems supporting manufacturing operations and processes. In support of Kodak's transformation, he has been leading teams of technical experts in reducing overall energy consumption utilizing Lean Manufacturing tools and principles. Energy conservation efforts over the last 3-4 years have resulted in yearly savings of over \$25 million dollars, and the closure of one of Kodak's' cogeneration power plants. Raul holds a bachelors degree in Mechanical Engineering from the University of Puerto Rico and is a licensed professional engineer in the state of NY.

Buffet Menu: Marinated Split Roast Chicken; Pulled Pork, Baked Beans, Salt Potatoes, Corn on the Cob, Tossed Green Salad, Rolls/Butter, Pop, Beer, Coffee and Dessert.

Catered by: Flaherty's Three Flags Inn

If you have questions contact Kacie at R.F. Peck at (585)697-0836 x105 or E-mail to khoffman@rfpeck.com



Take 104E towards Webster. Take Holt Rd exit. Turn left on Holt Rd. and take to end. Turn left on Lake Rd & enter park. Whitehouse Lodge is on the right hand side of Lake Rd. on the shores of Lake Ontario.

Non- ASHRAE Members are Welcome!

Cut Here

Make check out to Rochester Chapter of ASHRAE and mail with completed form to:
 ASHRAE Clambake, Attn: Kacie, R.F. Peck Co. Inc, 889 Atlantic Ave., Rochester, NY 14609

Name: _____ ASHRAE Member Yes No
 (Circle one)

Company: _____

Address (where tickets are to be sent): _____

City: _____ State: _____ Zip Code: _____

Number of Buffet Tickets: _____ x \$25.00 = Total \$ _____

Number of Dozen Clams: _____ x \$5.00 = Total \$ _____

Total Check Amount: \$ _____

Reservations must be mailed in by September 1st.

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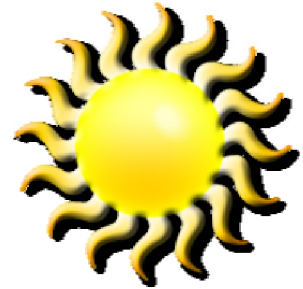
Welcome to ASHRAE's Government Affairs Update. Along with the Government Affairs webpage, these periodic e-mail updates feature information on government affairs related activities of interest to ASHRAE members and others interested in the built environment. Archives of previous updates are available from the government affairs webpage (<http://www.ashrae.org/advocacy>).

Please pass this information on to interested colleagues who also may subscribe from the ASHRAE Government Affairs webpage. Should you wish to unsubscribe, information appears at the end of this e-mail.

If you have any recommendations regarding content, or have questions about or would like to participate in Washington Office activities, please contact ASHRAE Government Affairs staff at (202) 833-1830 or washdc@ashrae.org.

ASHRAE Government Affairs Update, 08/07/09

- [DOE awards more than \\$54 million for State Energy Programs](#)
- [GSA Invests \\$1 Billion in Recovery Act Construction Projects](#)
- [DOE Awards \\$11.8 Million for New Solar Energy Grid Integration Systems](#)
- [DOE Awards \\$28 Million to National Laboratories for Bioenergy, Smart Grids](#)
- [EPA Names Top 20 Organizations Using On-site Renewable Energy](#)
- [McKinsey Releases New Report on Energy Efficiency Barriers, ASHRAE Responds](#)



[DOE awards more than \\$54 million for State Energy Programs](#)

U.S. Department of Energy (DOE) Secretary Steven Chu announced more than \$54 million in funding from the American Recovery and Reinvestment Act to support energy efficiency and renewable energy projects in Nevada, Rhode Island, Vermont, and Wisconsin. Under DOE's State Energy Program, states and territories have proposed statewide plans that prioritize energy savings, create or retain jobs, increase the use of renewable energy, and reduce greenhouse gas emissions.

These states and territories are receiving 40% of their total State Energy Program (SEP) funding authorized under the Recovery Act. They will now have received 50% of their total Recovery Act SEP funding. The initial 10% of total funding was previously available to states to support planning activities; the remaining 50% of funds will be released once they meet reporting, oversight, and accountability milestones required by the Recovery Act.

Activities eligible for State Energy Program funding include energy audits, building retrofits, education and training efforts, transportation programs to increase the use of alternative fuels and hybrid vehicles, and new financing mechanisms to promote energy efficiency and renewable energy investments.

The Recovery Act appropriated \$3.1 billion to the State Energy Program (SEP) to help promote energy efficiency and clean energy deployment, as well as to support local economic recovery. States use these grants at the state and local level to create green jobs and address state energy priorities.

For more details see:

http://apps1.eere.energy.gov/news/progress_alerts.cfm/pa_id=215.

GSA Invests \$1 Billion in Recovery Act Construction Projects

The U.S. General Services Administration marked a major milestone in its implementation of the American Recovery and Reinvestment Act, as it brought its total investments in construction projects to date to more than \$1 billion.

GSA was appropriated \$5.5 billion under the Recovery Act to convert federal buildings into high-performance green buildings and build new energy-efficient federal buildings, courthouses, and land ports of entry.

GSA's first \$1 billion in Recovery Act investments is funding projects at 120 buildings across the country. For example, in Austin, Texas, GSA is designing and building a new courthouse which will meet both the future needs of the courts as well as security requirements. In Otay Mesa, Cal., GSA is developing a Land Port of Entry that will accommodate better commercial traffic flow, and have new primary inspection booths as well as office and processing areas. And in Boston, Mass., GSA is improving energy performance while enhancing security at the John F. Kennedy Federal Building by installing energy efficient, blast resistant windows surrounded by improved insulation.

GSA will obligate its remaining \$4.5 billion in Recovery Act construction funds by September 30, 2011. Contract bids are coming in, on average, approximately 8 - 10 percent lower than expected, allowing GSA to fund additional high performance features in existing projects, and using existing criteria, consider funding additional projects with the goal of continuing to stimulate the real estate, construction, and manufacturing sectors of the economy.

Details on the projects currently awarded are available at http://www.gsa.gov/Portal/gsa/ep/contentView.do?pageTypeId=8199&channelId=-24825&P=&contentId=28346&contentType=GSA_BASIC

DOE Awards \$11.8 Million for New Solar Energy Grid Integration Systems

DOE awarded \$11.8 million to five projects designed to advance the next stage of development of solar energy grid integration systems (SEGIS).

Located in Connecticut, Florida, New Jersey, and Oregon, the five projects are part of DOE's continuing work to help assure the nation's electrical grid reliability is maintained and improved as solar energy technologies reach cost competitiveness and are increasingly integrated with the grid.

Of the total funds, some \$5 million came from the American Recovery and Reinvestment Act.

Initiated in 2008, the SEGIS activity is a partnership that includes DOE, Sandia National Laboratories, industry, utilities, and universities and emphasizes the development of complete systems for integrating solar power with the electrical grid. The selected projects focus on grid interconnections that will work optimally with the full range of emerging solar modules, achieve reliability and resiliency, reduce costs, integrate controls for energy storage systems (such as batteries), and allow two-way "smart" communications between the solar power systems and the electric utilities. Awardees include Apollo Solar, the Florida Solar Energy Center, Petra Solar, Princeton Power, and PVPowered. The projects ultimately seek to maintain or improve power quality and reliability, as well as return economic value, while increasing the integration of solar technologies into the U.S. electrical grid. See the DOE press release (<http://www.energy.gov/news2009/7720.htm>).

DOE Awards \$28 Million to National Laboratories for Bioenergy, Smart Grids

DOE announced that it will award more than \$28 million to four DOE national laboratories to support research and development of bioenergy technologies and to support analytical studies of Smart Grid technologies. The awards were part of \$327 million in funds from the American Recovery and Reinvestment Act for scientific research, instrumentation, and infrastructure improvements, including \$107.5 million that is slated to go to universities, nonprofit organizations, and private firms, and \$220 million that will go to 10 of DOE's national laboratories. Of that \$220 million, \$164.7 million has been allocated to specific projects, with most of the funds going toward research in high-energy physics and fusion energy.

Of the funds going toward bioenergy, Lawrence Berkeley National Laboratory (LBNL) will receive \$13.1 million to upgrade equipment at the DOE Joint Genome Institute and \$4 million for new instrumentation at the DOE Joint BioEnergy Institute, which is one of three DOE Bioenergy Research Centers.

Oak Ridge National Laboratory will receive \$5.4 million for equipment at the DOE BioEnergy Science Center—another of the DOE Bioenergy Research Centers—as well as \$3.2 million to start developing a computerized knowledge base that integrates the data from DOE-supported research in genomics and systems biology. In addition, LBNL, the Pacific Northwest National Laboratory, and Sandia National Laboratories will receive a total of \$2.43 million for mathematical analyses related to the development of the Smart Grid. See the DOE press release (<http://www.energy.gov/news2009/7737.htm>).

Governmental Affairs Update (continued)

[EPA Names Top 20 Organizations Using On-site Renewable Energy](#)

The U.S. Environmental Protection Agency (EPA) has named the top 20 partners in its Green Power Partnership that are generating their own renewable energy on-site. Combined, the top 20 partners are generating more than 736 million kilowatt-hours of renewable energy on-site each year, enough to power more than 61,000 average U.S. homes. Leading the list are Kimberly-Clark Corporation, the Los Angeles County Sanitation Districts, the City of San Diego, the San Jose/Santa Clara Water Pollution Control Plant, and CalPortland, a cement company. Like many paper companies, Kimberly-Clark produces electricity from biomass waste generated by the pulp manufacturing process. Cities and sanitation districts tend to generate methane at their wastewater treatment plants and can convert that methane to energy, accounting for much of the green power generated by the California cities of Los Angeles, San Diego, and San Jose, while CalPortland has its own wind power facility. The top 20 partners also draw on other biomass energy sources, solar power, and small hydropower to meet their energy needs. For more information on EPA's Green Power Partnership see: <http://www.epa.gov/greenpower>. For the top-20 list see: <http://www.epa.gov/greenpower/toplists/top20onsite.htm>.

[McKinsey Releases New Report on Energy Efficiency Barriers, ASHRAE Responds](#)

McKinsey and Company has released a new report "Unlocking Energy Efficiency in the U.S. Economy." In this report, McKinsey & Company offers a detailed analysis of the magnitude of the efficiency potential in non-transportation uses of energy, a thorough assessment of the barriers that impede the capture of greater efficiency, and an outline of the practical solutions available to unlock the potential.

The research shows that the U.S. economy has the potential to reduce annual non-transportation energy consumption by roughly 23 percent by 2020, eliminating more than \$1.2 trillion in waste – well beyond the \$520 billion upfront investment (not including program costs) that would be required.

The reduction in energy use would also result in the abatement of 1.1 gigatons of greenhouse gas emissions annually – the equivalent of taking the entire U.S. fleet of passenger vehicles and light trucks off the roads.

Such energy savings will be possible, however, only if the United States can overcome significant sets of barriers. These barriers are widespread and persistent, and will require an integrated set of solutions to overcome them – including information and education, incentives and financing, codes and standards, and deployment resources well beyond current levels.

For a copy of the report see

http://www.mckinsey.com/client-service/electric-power-natural-gas/US_energy_efficiency/

ASHRAE has prepared a response to the report focused on the activities ASHRAE is undertaking to overcome some of the barriers identified by McKinsey. For a copy of the report see http://www.ashrae.org/docLib/20090804_McKinseyResponse.pdf.



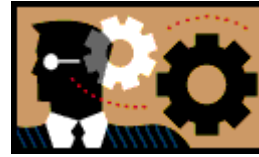
Job Postings & Help Wanted



This section of the newsletter is reserved for those firms wishing to advertise their desires to hire from the Chapters Membership.

If you are interested in utilizing this FREE service provided by the Rochester Chapter, please contact our Newsletter Editor, Christina Walter (585.486.2148) or by email cmwalter@trane.com

This service is available to any firm in our industry looking for knowledgeable persons in the HVAC&R industry.



Corporate Office:
2430 North Forest Road, Suite 106
Getzville, New York 14068

Energy Engineer

Company Description

PRES Services is a national provider of energy solutions to reduce the operational cost bottom line for customers coast to coast. PRES makes buildings comfortable, safe, productive, more efficient and less costly to operate with a full range of services and solutions. At PRES, you're skills will be challenged and encouraged to grow with the advancement of technologies.

Job Description

Applicants should possess the following skills, attributes and experience:

- Capability and leadership skills to work independently out of a home office.
- Building auditing and analysis of existing building systems performance.
- Ability to apply building energy simulation programs, other energy calculation software, and preparation of detailed spreadsheet calculations as it relates to building systems.
- Develop design or retrofit concepts, write accurate scope of work descriptions, calculate savings potential, and estimate budget implementation cost.
- Prepare detailed facility audit reports and other related technical writing documents.
- Participate in the identification and qualification of potential client project opportunities.
- Coordinate the procurement of equipment and project implementation.
- Assist in commissioning activities for retrofit solutions to ensure the design meets performance requirements and the customer's expectations.

Qualifications

Degree in Engineering or other related field. This role requires applicable experience in engineering, construction, or facility operations with direct involvement in energy systems and/or energy reduction initiatives. Strong written and verbal communication skills and is comfortable working in customer-facing situations. Annual average travel is estimated at 30%.

Please forward resumes to Jeff Close at jeff.close@pres-services.com

2009-2010 Presidential Award of Excellence Summary

Chapter #	Chapter Name	Chapter Members / Students	Member Promotion	Student Activities	Research Promotion	Chapter Technology Transfer	History	Chapter Operations	Chapter PAOE Totals
11	Rochester	218 /26	0	0	0	0	0	0	0



Society News: ASHRAE Research Targets Tying Together BIM, Energy Efficiency

ATLANTA – Ensuring that a common language of “energy efficiency” is spoken by both building information modeling software used by architects and energy analysis and simulation software used by engineers is the goal of new research funded by ASHRAE.

The project will develop open-source reference models by which developers may test their solutions to interoperability between BIM and energy simulation software. The project will focus on the most common thermal features in buildings assumed to have the greatest impact on energy use, and provide guidelines for describing thermal models extracted from BIM and the rules for extracting those models used in whole building energy analysis applications.

“This research will promote the inclusion of energy efficiency measures in the early design of building model development,” said Mark Clayton, Ph.D., principal investigator for the project. “It is expected to greatly increase the efficiency and accuracy of energy analysis and allow building designs to achieve higher levels of energy efficiency.”

The project is one of 13 approved for funding by ASHRAE at its 2009 Annual Conference, totaling some \$1.6 million.

ASHRAE Research Project 1468, *Development of a Reference Building Information Model (BIM) for Thermal Model Compliance Testing*, was awarded to Texas A&M University. The \$175,311 project is expected to take 15 months to complete. It is sponsored by ASHRAE’s technical committee (TC) 1.5, Computer Applications.

Studies have shown that problems related to exchanging information among various building design software systems causes more than \$16 billion per year of unnecessary expense. Given that new computer technologies for representing buildings are expected to transform the processes for architectural engineering design services, it is

imperative that standards for data exchange among disparate software systems be established, according to Clayton, the associate director of the Center for Housing and Urban Development at Texas A&M.

“Consequently, the research will enable ASHRAE to foster standard for interoperability between various BIM software systems and energy simulation systems and address some of the costs attributable to poor interoperability,” said Clayton. “More significantly, improved interoperability is expected to improve the quality of design and the energy efficiency of buildings.

Some of the other projects approved for funding are:

Development of Design Tools for Surface Water Heat Pump Systems, RP-1385, Oklahoma State University, two years, \$193,132, sponsored by TC 6.8, Geothermal Energy Utilization

Measuring, Modeling, Analysis and Reporting Protocols for Short-Term M&V of Whole Building Energy Performance, RP-1404, Milwaukee School of Engineering, two years, \$199,512, sponsored by TC 4.7, Energy Calculations

Stability of Candidate Lubricants for CO2 Refrigeration, RP-1409, Spauschus Associates, one year, \$46,200, sponsored by TC 3.2, Refrigerant System Chemistry

Ventilation Requirements for Refrigerating Machinery Rooms, RP-1448, CPP Inc., 18 months, \$93,368, sponsored by TC 4.3, Ventilation Requirements and Infiltration

Balancing Latent Heat Load Between Display Cases and Store Comfort Cooling, RP-1467, University of Colorado-Boulder, two years, \$167,425, sponsored by TC 10.7, Commercial Food and Beverage Cooling Display and Storage. The Air-Conditioning, Heating and Refrigeration Institute (AHRI) is contributing \$100,000 toward the project.
Thermal Comfort in Commercial Kitchens, RP-1469, KEMA Inc., two years, \$350,000, sponsored

by TC 5.10, Kitchen Ventilation

Measuring Air-Tightness of Mid- and High-Rise Non-Residential Buildings, RP-1478, Wiss, Janney, Elstner Associates Inc., two years, \$150,000, sponsored by TC 4.3, Ventilation Requirements and Infiltration

Binary Refrigerant Flame Boundary Concentrations, RP-1507, Safety Consulting Engineers Inc., one year, \$87,500, sponsored by TC 3.1, Refrigerants and Secondary Coolants

Establishment of Design Procedures to Predict Room Airflow Requirements in Partially Mixed Room Air Distribution Systems, RP-1522, Building Energy and Environmental Engineering, two years, \$104,500, sponsored by TC 5.3, Room Air Distribution

Establishing Benchmark Levels and Patterns of Commercial Building Hot Water use, RP-1544, Research Quality and Design Engineering, 18 months, \$190,000, sponsored by TC 6.6, Service Water Heating

Effects of Fin Design on Frost and Defrost Thermal Performance of Micro-Channel Heat Exchangers, RP-1589, Oklahoma State University, 18 months, \$137,065, sponsored by TC 8.4, Air-to-Refrigerant Heat Transfer Equipment

Implementation of Total Cost of Ownership Principles into Higher Education as an Integrated Decision Making Tool, RP-1590, APPA (Association of Physical Plant Administrators of Universities and Colleges), one year, \$125,000, sponsored by TC 7.8, Owning and Operating Costs

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

Disclaimer

“ASHRAE has compiled this publication with care, but ASHRAE has not investigated, and ASHRAE expressly disclaims any duty to investigate any product, service, procedure, design or the like which may be described herein.

The appearance of any technical data, editorial material, or advertisement in this publication does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, procedure, design or the like. ASHRAE does not necessarily agree with any statement or opinion in this publication. The entire risk of the use of any information in this publication is assumed by the user. Statements made in this publication are not expressions of the Society or of the Chapter and may not be reproduced without special permission”.

From the Editor’s Desk

The ASHRAE Chapter Bulletin should reflect the opinions, activities and needs of its members. We represent an active membership and the Bulletin can provide a valuable and enjoyable forum for news of our individual members.

Any announcements of interest, as well as letters, opinions, questions or comments, should be addressed to Christina Walter, Trane, 75 Town Centre Drive, Rochester, NY 14623 or email to cmwalter@trane.com

Reminder

Go to www.ashrae.org to update your personal information. Keeping your information current helps us to find you. Please add email, phone number, fax number, address correction, etc.

