



Notes from thin air....

February 2006

Volume 8 Issue 6

PIKES PEAK CHAPTER ASHRAE NEWSLETTER

<http://www.pikespeakashrae.net/>

PRESIDENT'S MESSAGE

By Ken Merola

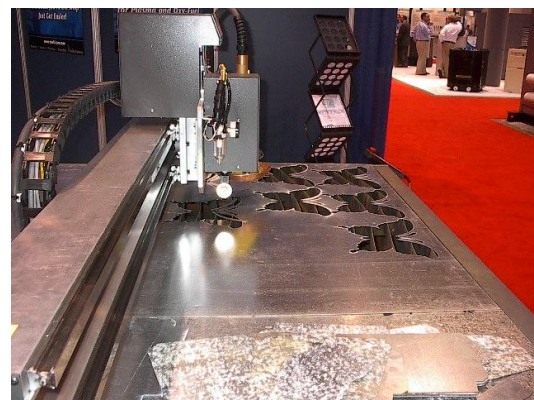
My feet and back still ache after trying to visit about 5% of the nearly 2000 exhibitor booths that covered 9.4 acres at the AHR Expo in Chicago. Both North American and international manufacturers from Egypt, Slovenia, Korea, Pakistan, including a large Chinese contingency, were showing off their products at the 56th annual international exposition. There were quite a few fascinating innovations like the new Armstrong

Irving Middle School. Contact Bob Cleaver if you would like to help. Students@pikespeakashrae.net



redundant vertical in-line pump, and a wall-hung picture frame mini-split system from LG (yes that's right – the maker of cell phones, washers/dryers & TVs). There were also ground-breaking machine tools, engineering software, refrigerants, hydronic radiant components, plasma cutters, gas phase filters, microwave water heaters, and a toilet seat with a \$997 MSRP.

At last month's meeting, Aaron Nahale, President of Setpoint Systems, spoke about the integration of building automation systems with other facility systems such as data, security and fire protection. The case study discussed was the development of Lakewood's new downtown (never had one) at the former Villa Italia Shopping mall. Read more at <http://www.belmarcolorado.com/sub/about/>



February 19th through the 25th is National Engineers Week (<http://www.eweek.org/>) and one of the ways our chapter will participate is by providing engineering career presentations at

This month's luncheon program topic is Boiler Safety, presented by Rick Boers of Honeywell.

Don't forget to sign-up for the upcoming Technical Seminar featuring ASHRAE Distinguished Lecturer Dan Int-Hout on February 24th – see page 4. His topics will include acoustic considerations in air distributions design and LEED™ ver 2.2 IEQ issues. All net proceeds will support our new scholarship fund. Save \$10 by signing up by February 14th (most of us will have at least two things to take care of by Valentines Day).

I look forward to seeing you there!

LUNCH MEETINGS

**Next Meeting is:
Thursday – February 16, 2006**

Giuseppe's Old Depot Restaurant

11:30 a.m. – 1:00 p.m.

10 S. Sierra Madre Downtown

Cost: \$18 advance/on-line, \$20 at door

<http://www.pikespeakashrae.net/store/index2.htm>

Program: Boiler Safety

Guest Speaker: Rick Boers, Honeywell

Please RSVP to: Dan Yaeger

Programs@pikespeakashrae.net

STORY OF THE MONTH

New cooling method could save 30% of small buildings' energy cost

Engineers have developed a method for "precooling" small office buildings and reducing energy consumption during times of peak demand. The method has been shown to trim the cooling-related demand for electricity in small office buildings by 30% during hours of peak power consumption in California's sweltering summer climate, said the California Energy Commission.

[Story link](#)

ASHRAE NEWS

ASHRAE Research Program Hits \$50 Million Milestone

ATLANTA – With approval of projects at the Society's 2006 Winter Meeting, ASHRAE has funded \$50 million in research since the merger of its two predecessor societies in 1959.

"ASHRAE research furthers technology to help keep indoor environments comfortable and productive, deliver healthy food to consumers and preserve the natural environment," Lee Burgett, P.E., ASHRAE president, said. "Only an organization such as ASHRAE has the continuity, the ability to generate research funding, and the expertise to attract researchers from disparate backgrounds and institutions. Only ASHRAE provides a forum to integrate their knowledge and transfer that knowledge to the industry to advance the science of engineering and the art of human comfort."

The first project contracted by ASHRAE was a study of condensing refrigerants in horizontal and inclined tubes at Kansas State University for \$7,600. Since that time, ASHRAE has funded some 700 projects. A complete listing of the projects funded since 1960 can be viewed at www.ashrae.org/research.

ASHRAE recently approved funding totaling \$1.4 million for 12 research projects. These are:

- Revised Heat Gain and Capture and Containment Exhaust Rates from Typical Commercial Cooking Appliances, 1362-RP, researcher Donald Fisher, Fisher-Nickel Inc., San Ramon, Calif., 2 years, \$261,000, sponsored by ASHRAE technical committee (TC) 5.10, Kitchen Ventilation.
- Develop a Standard for Testing and Stating the Efficiency of Industrial Pulse Cleaned Dust Collectors, 1284-RP, Robert Burkhead and Charles Rose, Blue Heaven Technologies Inc., Louisville, Ky., 18 months, \$114,617, TC 5.4, Industrial Process Air Cleaning.
- Incident-Response Monitoring Technologies for Aircraft Cabin Air Quality, 1306-RP, J.B.G.A. Havermans, TNO, Delft, the Netherlands, 10 months, \$98,000, TC 9.3, Transportation Air Conditioning.
- Identification and Evaluation of Working Fluids for High Temperature Heating Applications (including Replacements for R-114), 1308-RP, J. Steven Brown, Catholic University of America, Washington, D.C., 1 year, \$68,497, TC 3.1, Refrigerants and Secondary Coolants.
- Algorithm for Smoke Modeling in Large, Multi-Compartmented Buildings, 1328-RP, A. Kashef, National Research Council Canada, Ottawa, 18 months, \$80,000, TC 5.6, Fire and Smoke Control.
- Intelligent Control of Combined Heat and Power Systems, 1340-RP, Itzhak Maor, PWI Energy, Philadelphia, Pa., 18 months, \$100,563, TC 7.4, Building Operation Dynamics.
- Common Data Definitions for HVAC&R Industry Applications, Jason Glazer, GARD Analytics Inc., Park Ridge, Ill., 18 months, \$127,500, TC 1.5, Computer Applications.
- Generation of Hourly Design-Day Weather Data, 1363-RP, Roger Hedrick, GARD Analytics Inc., Park Ridge, Ill., 18 months, \$78,400, TC 4.2, Climatic Information.
- Characterization of Effluents from Additional Cooking Appliances, 1375-RP, Thomas Kuehn, University of Minnesota, Minneapolis, Minn., 18 months, \$124,779, TC 5.10, Kitchen Ventilation.
- Development of Design Guidelines for Hybrid Ground Source Heat Pump Systems, 1384-RP, Greg Nellis, Sandy Klein and Jeff Thornton, University of Wisconsin, Madison, Wis., 18 months, \$98,135, TC 6.8, Geothermal Energy Utilization.

- Heat Gains from Electrical and Control Equipment in Industrial Plants, Part 2, 1395-RP, Warren White, Kansas State University, Manhattan, Kans., 2 years, \$192,101, TC 9.2, Industrial Air Conditioning.
- Scientific Review of Existing Information Related to the Impact of Ventilation Related to Health, 1443-RP, Hal Levin and Jan Sundell, Indoor Air Institute, Santa Cruz, Calif., 18 months, \$50,000, Environmental Health Committee.

ASHRAE, founded in 1894, is an international organization of 55,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.

Board of Governors and Chapter Operations Roster

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Gary Leffingwell, Vice-President	VicePresident@pikespeakashrae.net
Bethany Trumble, Treasurer	Treasurer@pikespeakashrae.net
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Mike Mendenhall, Membership Chair	Membership@pikespeakashrae.net
Bob Cleaver, Student Activities Chair	Students@pikespeakashrae.net
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Roger Lemmon, CTTC Code Subcommittee Chair	
Jeremy O'Brien, Newsletter Editor	editor@pikespeakashrae.net

**2006
Technical
Seminar**

Friday, February 24, 2006

9:00 AM ~ 2:45 PM

Colorado Springs School District No. 11
Facilities, Operations, and Transportation Building
Training Room
5240 Geiger Boulevard
Colorado Springs, Colorado 80915

**Pikes Peak ASHRAE
Chapter #148**

presents its

Annual Tech Seminar

on

Visit our website for information
about our chapter or the seminar

www.pikespeakashrae.net

Pikes Peak ASHRAE
P.O. Box 7322
Colorado Springs, CO 80907

**Acoustic Environment
and IEQ for LEED v2.2**

**HURRY! Register by February 14, 2006 and
receive \$10 off the cost of registration!**

feature speaker

Dan Int-Hout III



An ASHRAE Distinguished Lecturer

Sponsored by

LONG

Technology for Better Buildings

VISIT WWW.PIKESPEAKASHRAE.NET FOR MORE INFO!

Membership Grades

ASHRAE membership is open to any person associated with heating, ventilation, air conditioning or refrigeration. ASHRAE is unique because its membership is drawn from a wide range of disciplines relating to the HVAC&R field. Approximately 50,000 individuals from more than 100 nations belong to the Society. Among them are students, consulting engineers, mechanical contractors, building owners, and employees of manufacturing companies, educational institutions, research organizations, government or any organization concerned with environmental control. Members range from students to longtime engineers and professionals in other related disciplines such as architecture and medical research. The Society has four grades of membership that are awarded to applicants based on their experience and participation in the industry. A brief description of the grades is shown below. For more detailed information on each grade, click on the grade link below.

Member — The grade of Member is awarded to individuals who have twelve or more years of qualified industry-related experience. Credit for industry related experience can be earned from any combination of approved education, work experience and professional registration.

Associate Member — The Associate Member grade is awarded to individuals who have less than twelve years of ASHRAE-approved industry experience in the heating, refrigerating, air-conditioning, or ventilating fields.

Affiliate Member — ASHRAE's newest grade is an introductory grade for applicants with a general interest in the Society's programs and services. Assignment to this grade is limited to those who are under 30 years of age who are first-time new members.

Student Member — To qualify as a student member you must be studying or have an interest in an HVAC&R industry-related field. Eligible students must be participating in an approved course of study in a university, college, junior college, or technical institute.

START GEARING UP FOR THE SPRING GOLF TOURNAMENT!

REGISTRATION HAS BEGUN ON THE WEBSITE.

FRIDAY MAY 19, 2006 @ WALKING STICK GOLF COURSE IN PUEBLO, CO

MORE TO COME IN THE UPCOMING MONTHS!!!!!!

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