



# Mississippi Valley Chapter Newsletter

January 2010

<http://www.mississippivalleyashrae.org>

Monthly Newsletter

## Important Dates

- January 14, 2010  
Energy Conservation in Buildings with High Internal Loads, including Industrial Facilities.
- February 18, 2010  
ASHRAE'S Building Energy Labeling Program
- March 18, 2010  
Seminar
- April 15, 2010  
Hybrid Geothermal Systems
- May 20, 2010  
The US Army Corps of Engineers Commissioning Lessons Learned.
- June 2010  
Golf Outing

## Energy Conservation in Buildings with High Internal Loads: Including Industrial Facilities

### **Dr. Alex Zhivov**

Dr. Alex Zhivov joined the Construction Engineering Research Laboratory (CERL) in 2003 as a Mechanical Engineer in the Energy Branch. His responsibilities include: new energy use optimization methods, strategic planning leading to implementation of new energy conservation concepts and systems, and optimization of energy consuming processes. In recent years, Dr. Zhivov developed and led a number of Army, DoD, and national initiatives which support the goals and requirements defined in the 2005 Energy Policy Act, Army Energy Strategy, Executive Order 13423, and the 2007 Energy Independence and Security Act. Since 2003 Dr. Zhivov lead installation-wide energy analyses; developing and implementing new technologies; and promoting underutilized energy conservation technologies in new construction and facilities retrofits, helping the Department of Defense meet its energy goals and enhance energy independence.

Dr. Zhivov has an MS in Mechanical Engineering from the Leningrad Construction Engineers Institute, a Ph.D from All Union Research Institute for Labor Protection, Leningrad, and an MBA from the University of Illinois, Urbana-Champaign. He is a recognized Army expert in the area of energy conservation. He has authored and contributed to more than 100 publications in the USA and other countries. His many awards include the Commander's Award for Civilian Service for leadership of the Greater Fairbanks Military Complex Joint Long Range Study team from December 2003 through March 2004; the CERL Program Development Achievement Award for his leadership role for the Improvement of Energy Efficiencies for Military Facilities Program in Support of HQ IMA, ACSIM, and the Corps of Engineers; the Commander's Award for Civilian Service; and in 2009 he received the prestigious Department of Energy Federal Energy Management Program 'Energy Champion' for the Army.

### January 14th Program

*Location:* The SteepleGate Inn  
Symposium Room  
100 W 76th St  
Davenport, IA

*Program:* Energy Conservation in Buildings with High Internal Loads: Including Industrial Facilities

*Agenda:* 4:30-5:30 Program  
5:30-5:45 Meeting at SteepleGate  
5:45-6:45 Dinner at SteepleGate

*Menu:* Napoleon Chicken  
Tossed Salad  
Fresh Seasonal Vegetables  
Baked Potato  
Freshly Baked Dinner Rolls  
German Chocolate Cake



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## **Annual Design Competition**

A project is still needed to participate in this year's design competition. Any type of building (hospitals, institutional buildings, commercial buildings, industrial facilities, public assembly, or residential) is able to be entered for the competition, new or existing. A copy of the short form application is included at the end of the newsletter. This form can be used for submission to the Chapter and Region competitions. If a member has a good potential project but without a full year of operating data it is recommended the project be written up on the short form and submitted to chapter for consideration. When a full year of operating data is available the write-up and project submittal can be completed. If anyone has questions, email Bruce Davis at [DavisBruceL@JohnDeere.com](mailto:DavisBruceL@JohnDeere.com).

## **ASHRAE News**

### **IAQ 2010 Examines Impact of HVAC on Airborne Infectious Disease**

ATLANTA – The role of HVA&R in airborne infectious disease transmission, design and control strategies and technology, pandemic preparedness and airborne infection control will be examined at the IAQ 2010 conference sponsored by ASHRAE.

Co-organized by CIBSE and ISIAQ, IAQ 2010: Airborne Infection Control – Ventilation, IAQ & Energy, takes place Nov. 10-12, 2010, in Kuala Lumpur, Malaysia. This is the first time the conference is being held outside of the United States.

<http://www.ashrae.org/pressroom/detail/17385>

### **Health Care Facility Ventilation Standard Incorporated into FGI Guidelines**

ATLANTA – As a move toward a single consensus-based standard of care, a ventilation standard from ASHRAE and ASHE has been incorporated into the Guidelines for Design and Construction of Health Care Facilities, copyrighted by the Facility Guidelines Institute and published by the American Society for Healthcare Engineering (ASHE).

ANSI/ASHRAE/ASHE Standard 170-2008, Ventilation of Health Care Facilities, defines ventilation system design requirements that provide environmental control for comfort, as well as infection and odor control.

<http://www.ashrae.org/pressroom/detail/17382>

### **ASHRAE Conference Goes Virtual**

ATLANTA – ASHRAE's Winter Conferences provide members and professionals in the HVAC&R industry with technical guidance, networking opportunities and access to the latest technology. For 2010, the Society will continue in this tradition with an additional new twist: The Conference is going virtual.

The Virtual Conference extends access to advances in the HVAC&R industry to professionals across the country and around the world. Participants in the Virtual Conference will be able to interact with speakers and attendees by posting questions and comments, viewing other comments and viewing the presenters' responses through an online discussion board, in addition to ASHRAE's traditional recordings (synced audio and PowerPoint presentations).

<http://www.ashrae.org/pressroom/detail/17363>

### **Pilot Building Energy Labeling Program Launched by ASHRAE with Leading Owners, Designers**

ATLANTA – A new program to inform building owners and operators, tenants and prospective buyers on the energy use of buildings, similar to a nutrition label on food or miles per gallon ratings on cars, was launched today to encourage the building industry to find ways to cut energy use and costs.

The Building Energy Quotient program, which will be known as Building EQ, will include both As Designed (asset) and In Operation (as operated) ratings for all building types, except residential. It also will provide a detailed certificate with data on actual energy use, energy demand profiles, indoor air quality and other information that will enable building owners to evaluate and reduce their building's energy use. The program is administered by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

<http://www.ashrae.org/pressroom/detail/17380>

## ***Digital Journal***

[http://www.nxtbook.com/nxtbooks/ashrae/ashraejournal\\_200904/#/0](http://www.nxtbook.com/nxtbooks/ashrae/ashraejournal_200904/#/0)

## ***Industry News***

### **Lawsuit Filed Over Nevada Smoking Laws**

LAS VEGAS—The American Cancer Society in Nevada has filed suit against the state, health officials and the Las Vegas Convention and Visitors Authority, seeking to invalidate a recently enacted state law allowing smoking at some trade shows. Anti-smoking advocates want a Nevada judge to void a measure to ease smoking restrictions that was attached to a new statute making stalking and text-messaging threats a crime. The lawsuit was filed the same day the smoking elements of the measure took effect.

<http://images.ashrae.biz/redirect/?url=1661>

## DOE to Invest #366 Million in Energy Research 'Hubs'

WASHINGTON—The U.S. Department of Energy (DOE) will invest up to \$366 million to establish and operate three new Energy Innovation Hubs intended to accelerate research and development in three energy areas. Each Hub will bring together a multidisciplinary team of researchers to speed research and shorten the time it takes new technologies to reach commercial deployment. The three DOE Energy Innovation Hubs will focus on solar technologies, improving energy-efficient building systems design, and computer modeling and simulation of advanced nuclear reactors.

<http://images.ashrae.biz/redirect/?url=1662>

## New Glass Tiles Change Color With Temperature

CHICAGO—Temperature-sensitive glass from Moving Color has been named the most popular new material in 2009 by engineering and design Web site inventables.com. The textured glass tiles change color with changes in ambient temperature, body temperature or water temperature. Color change begins at a selected activation temperature, and continues through phases over temperature ranges. At the Disneyland Hotel in Anaheim, Calif., the tiles are used to decorate showers. As the glass tiles change color, silhouettes of Mickey Mouse appear around the perimeter of the shower. Global architectural firm HOK is working on a roof tile concept with the manufacturer to use the temperature-sensitive glass tiles on rooftops.

<http://images.ashrae.biz/redirect/?url=1663>

Check-out the Updated Chapter  
Website at:

[www.mississippivalleyashrae.org](http://www.mississippivalleyashrae.org)

### 2009-2010 Officers/Board of Governors

President:	Patrick Igou
Vice President:	Simon Possin
Treasurer:	Jake Vorac
Secretary:	Nate Jacques
Past President	Andrew Price
Member at Large:	Erick Granzow
Member at Large:	Brian Hodgins

### 2009-2010 Committee Chairs

CRC Delegate:	Bruce Davis
CRC Alternate:	Simon Possin
Historian:	Sherm Sweeney
Membership:	Vacant
Programs:	Patrick Igou
Resource Promotion:	Andrew Price
Seminar:	Bruce Davis
Student Activities:	Vacant
CTTC:	Bruce Davis
Webmaster:	John Schaub



Mississippi Valley Chapter  
ASHRAE  
Attention: Pat Igou  
One John Deere Place  
Moline, Illinois 61265

# CHAPTER/REGIONAL TECHNOLOGY AWARD - SHORT FORM

**1. Category (Check one and indicate New or Existing, if applicable)**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Commercial Buildings         | <input type="checkbox"/> New or <input checked="" type="checkbox"/> Existing |
| <input type="checkbox"/> Institutional Buildings                 | <input type="checkbox"/> New or <input type="checkbox"/> Existing            |
| <input type="checkbox"/> Health Care Facilities                  | <input type="checkbox"/> New or <input type="checkbox"/> Existing            |
| <input type="checkbox"/> Industrial Facilities or Processes      | <input type="checkbox"/> New or <input type="checkbox"/> Existing            |
| <input type="checkbox"/> Public Assembly                         | <input type="checkbox"/> New or <input type="checkbox"/> Existing            |
| <input type="checkbox"/> Residential                             |  |
| <input type="checkbox"/> Alternative and/or Renewable Energy Use |  |

**2. Name of Building or Project:** \_\_\_\_\_

**City/State:** \_\_\_\_\_

**3. Project Description:** \_\_\_\_\_

**Project Study/Design Period:** \_\_\_\_\_

**Has the project been completed? Yes** \_\_\_\_\_ **No** \_\_\_\_\_

**If YES, date completed:** \_\_\_\_\_

**If NO, scheduled date of completion (or other explanation):** \_\_\_\_\_

**4. Entrant (ASHRAE member with significant role in project) If multiple entrants, all must be listed.**

a. **Name:** \_\_\_\_\_  
*Middle* \_\_\_\_\_ *Last* \_\_\_\_\_ *First* \_\_\_\_\_

Membership Number: \_\_\_\_\_

Chapter \_\_\_\_\_

Region: \_\_\_\_\_

b. **Address (including country):** \_\_\_\_\_  
\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_  
*City* *State/Province* *Zip/Country Code*

c. **Telephone:** \_\_\_\_\_ d. **E-mail address:** \_\_\_\_\_

e. **Company:** \_\_\_\_\_

f. **Member's Role in Project:** \_\_\_\_\_

g. **Member's Signature:** \_\_\_\_\_

**5. Engineer of Record:** \_\_\_\_\_

By affixing my signature above, I certify that the information contained in this application is accurate to the best of my knowledge. In addition, I certify that I have discussed this entry with the owner and have received permission from the owner to submit this project to the ASHRAE Technology Awards Competition.