## **IOWA Stalks**



February 2013

A Newsletter for the Iowa Chapter of ASHRAE

## ASHRAE Iowa Chapter www.ashraeiowa.org

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> TEGA Emir Kadic

### THIS MONTH AT ASHRAE

Resource Promotion

#### Date:

Monday, February 17th

#### Schedule:

2:00-5:00PM: Tech Sessions 5:00-6:00PM: Social Hour 6:00-7:00PM: Chapter Meeting / Dinner

#### Location:

Johnny's Italian Steakhouse 6075 Mills Civic Parkway West Des Moines, IA <u>click for map</u>

#### **Tech Sessions:**

2:00-2:50PM: How to Implement Demand Control Ventilation & Comply with ASHRAE Standards

3:00-3:50PM: Using ASHRAE Standard 62.1-2010 Multiple Spaces Equations

4:00-4:50PM: Retrocommissioning for Energy Savings

#### **Tech Session Cost:**

\$30 for ASHRAE lowa Chapter members \$60 for non-members

#### Chapter Meeting/Dinner Cost:

Free to ASHRAE lowa Chapter members \$20 for Guests

#### RSVP:

Please register for either or both events via the ASHRAE lowa website.

Please Note: Registration for the chapter meeting/dinner may fill up. Members are still welcome to use the registration page link below to be put on the waiting list but we can't guarantee that a meal will be available.

Use the Event Registration page at ASHRAElowa.org



Come join us at Johnny's Italian Steakhouse on Monday, February 17<sup>th</sup> for afternoon tech sessions and a dinner meeting.

Our guest speaker will be ASHRAE Distinguished Lecturer Hoy Bohanon, PE, LEED AP, BEAP and Director of Energy Programs for WorkingBuildings, LLC. Mr. Bohanon has written technical papers and articles on indoor air quality, operations, and maintenance and is a frequent presenter at technical society meetings. He is a recipient of the ASHRAE Distinguished Service Award and is vice-chair of ASHRAE Standard 62.1 committee, Ventilation for Acceptable Indoor Air Quality.

See you there!

#### **PAST PRESIDENTS**

Matt Jesson	2012-2013
Kelly Crow	2011-2012
Holly Elbert	2010-2011
Roger Lesher	2009-2010
Kit Cartwright	2008-2009
lawa al Ciarravalia a	
Jerrod Sieverding	2007-2008
Jason Kems	2006-2007
	2005-2006
Chuck Heldenbrand	
Jeff Gross	2004-2005
Ron Engelhardt	2003-2004
Dan Zaug	2002-2003
Susan Oltrogge	2001-2002
Christopher Nelson	2000-2001
Donald Swanson	1999-2000
Edward Truslow	1998-1999
James Hall	1997-1998
Robbin Vannoy	1996-1997
Mark Conway	1995-1996
	1994-1995
Paul Melton	
Gregory Maxwell	1993-1994
Jeffery Hammer	1992-1993
Jenery Hammer	
Jack Culp	1991-1992
James Lee	1990-1991
Clint Leonard	1989-1990
Charles Pedersen	1988-1989
Gary Reynolds	1987-1988
Dennis Hogan	1986-1987
Eugana Zafran	
Eugene Zefron	1985-1986
Donald Hagge	1984-1985
	1983-1984
Robert Rist	
Joseph Proctor	1982-1983
Mark Allen	1981-1982
Curtis Klaassen	1980-1981
Gerald Anderson	1979-1980
C.W. Miller	1978-1979
Richard South	1977-1978
Verne Stewart	1976-1977
Curtis Hammer	1975-1976
Ralph Schilling	1974-1975
Donald Bonicamp	1973-1974
Kent Mosher	1972-1973
TI WOSHOT	
Thomas Van Hon	1971-1972
Robert McBride	1970-1971
William Whitman	1969-1970
Einar Dahl	1968-1969
	1967-1968
Eugene O'Neil	
James Green	1966-1967
Neil Hanson	1965-1966
Neiriumon	
Bob Flanagan	1964-1965
Lyndon Kelley	1963-1964
Elwood Giberson	1962-1963
Vern Polly	1961-1962
John Bain	1960-1961
Crom Campbell	1959-1960
R.T. Howard	1958-1959
14/ A C = l	
W.A Schworm	1957-1958
D.E. Schroeder	1956-1957
G.J. Kraai	1955-1956
W.E. Nanes	1954-1955
J.F. Sandfort	1953-1954
R.H. Schnell	1952-1953
C.H. McGuiness	1951-1952
R.S. Stover	1950-1951
D.E. Wells	1949-1950
D.C. Murphy	1948-1949
C.A. Wheeler	1947-1948
E.O. Olson	1946-1947
B.E. Landes	1945-1946
W.W. Stuart	1944-1945
C.W. Helstrom	1943-1944
P.E. Triggs	1942-1943
Perry LaRue	1941-1942
R.A. Norman	1940-1941
Tracy Johnson	1939-1940
W.R. White	1938-1939

## **President's Corner**



The January meeting at the Ramada Tropics was a great way for our membership to branch outside of the technical side of the HVAC industry and gain more knowledge on the topic of ethics. Special thanks to Nick Maletta from Holmes Murphy for better explaining how ethics can play a role in your daily lives and how your values are formed over time with influence from family, religion, society, etc. The case study on Citigroup Headquarters in New York, NY was a practical example of some of the challenges that someone may encounter and how important it is to step up when you make a mistake to come up with a solution. In the study, the engineer identified an issue with the construction of the building that could affect life safety. He could have easily walked away, but his values kicked in and involved all parties to come up with solution.

The YEA happy hour this month was a blast from the 80s and 90s at UpDown in East Village. I attended this event and it was great way to promote membership of younger members in the chapter. It was a very relaxed setting with WWF and American Gladiators playing on televisions in the background. A few nonmembers attended and have already requested to become

members. Thanks to the YEA Chair, Val Hageman, for coordinating this event. Feel free to contact Val is you know of any other 35 or under HVAC industry professionals looking to get more involved in an organization that give so much back to their membership.

Next week, Distinguished Lecturer Hoy Bohanon is coming to our local chapter providing our members an opportunity to earn 3 more professional development hours. He will be talking to us about Indoor Air Quality and **Energy Savings** techniques which are both topics that were identified through the survey we conducted at the beginning of my term. Dinner and drinks will follow the technical session which will be a great way to network with your peers and ask any questions you may have for Hoy. Johnny's Italian Steakhouse never fails to serve up a great dinner so get signed up for this event. Remember that dinners are included in your lowa Chapter Fees so be sure

Tim Conrad Iowa ASHRAE Chapter President 2013-2014

Monday.

to take advantage of it.

I look forward to seeing

you all at the meeting on

# UPCOMING CHAPTER MEETINGS

#### February 17th

Afternoon tech session on "How to Implement Demand Control Ventilation and Comply with ASHRAE Standards". Dinner meeting to follow.

Location: Johnny's Italian Steakhouse West Des Moines, IA

#### March 6th

Dinner meeting followed by presentation on "Refrigerants – Past, Present & Future"

Location: Ramada Tropics Resort 5000 Merle Hay Rd Des Moines, IA

## **ASHRAE Iowa January Meeting**





The January meeting was a Membership Promotion lunch meeting held at the Ramada Tropics Conference Center. In honor of promoting membership, BOG member Dan Ponxs offered a jar of candy as a prize to anyone who could guess the current ASHRAE lowa Chapter membership count. The correct answer was 325 members! No one guessed the correct number so Dan kept all of the candy for himself.....

Nick Maletta from Holmes Murphy & Associates gave an entertaining presentation on "Engineering Ethics" in our industry. This was a topic not often covered in our meetings but one that was still informative and educational.

## 2014 YEA Happy Hour

The annual YEA (Young Engineers in ASHRAE) Happy Hour was held on Wednesday, February 5<sup>th</sup> at the new Up-Down arcade bar in the East Village. The event was open to anyone in the industry age 21-35, ASHRAE members and non-members.







## **February Meeting**



# **Resource Promotion Meeting and Tech Session**

Date: Monday, February 17, 2014

#### Schedule:

2:00PM - 5:00PM Tech Session (with the following segments):

2:00PM – "How to Implement Demand Control Ventilation & Comply with ASHRAE Standards"

3:00PM - "Using ASHRAE Standard 62.1-2010 Multiple Spaces Equations"

4:00PM – "Retro-commissioning for Energy Savings

5:00-6:00PM: Social Hour

6:00-7:00PM: Dinner and business meeting

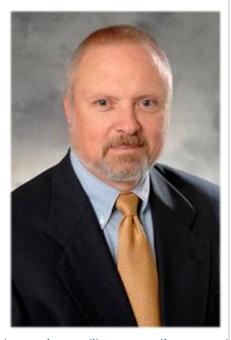
#### Location:

Johnny's Italian Steakhouse, West Des Moines

#### Speaker:

HOY R. BOHANON, JR., P.E. Director of Energy Programs, WorkingBuildings, LLC Winston-Salem, NC

Hoy Bohanon, PE, LEED AP, BEAP is director of the Energy Programs for WorkingBuildings. WorkingBuildings is a professional services firm whose offerings include building commissioning, sustainability consulting, and laboratory compliance services. Mr. Bohanon began his engineering career as a research and design engineer, and then gained experience as a project engineer, facilities engineer, facilities manager, indoor air quality research engineer, environmental engineer, and business owner. He has a master's degree in engineering from North Carolina State University, and a bachelor's degree in mechanical engineering from Georgia Institute of Technology.



Mr. Bohanon has written technical papers and articles on indoor air quality, operations, and maintenance and is a frequent presenter at technical society meetings. He is a recipient of the ASHRAE Distinguished Service Award and is vice-chair of ASHRAE Standard 62.1 committee, Ventilation for Acceptable Indoor Air Quality. He also serves on the bEQ committee, Building Performance Alliance ad-hoc committee, and TC5.5 Air-to-Air Energy Recovery. He is chair of the US Technical Advisory Group panel 1 (general principles) and panel 4 (indoor air quality) for ISO TC205 Building Environment Design. He is a co-author of The Indoor Air Quality Guide: Best Practices for Design, Construction and Commissioning and Performance Metric Protocols for Commercial Buildings: Best Practices Guide. He also teaches multiple courses for the ASHRAE Learning Institute addressing ASHRAE 62.1 and IAQ. Mr. Bohanon is also a member of the Professional Engineers of North Carolina, US Green Building Council, and ASHE.

## February Meeting (cont.)

#### LECTURE TOPICS

## ► How to Implement Demand Control Ventilation and Comply with ASHRAE Standards GBCI Approved | 1 CE Hour | 0090010478 AIA Approved | 1LU/HSW | BOHANON02

ASHRAE standards 90.1 and 189P require demand control ventilation in some instances. ASHRAE standard 62.1 allows demand control ventilation but places restrictions on its application. Many existing installations do not comply with the requirements of ASHRAE Standard 62.1. What is required and what strategies and technologies can be used to meet the requirements of the all the standards?

#### ► Retro-commissioning for Energy Savings

GBCI Approved | 1 CE Hour | 0090010481

AIA Approved | 1LU/HSW | BOHANON03

What is retro commissioning? Is it required by LEED? How can a process save energy? What are some of the aspects of an energy saving retro-commissioning application? What guidance is available from ASHRAE guidelines? What are the types of savings from the process and what are the critical components to assure that savings are realized?

#### ▶ Using ASHRAE Standard 62.1-2010 Multiple Space Equations

GBCI Approved | 1 CE Hour | 0090010484

AIA Approved | 1LU/HSW | BOHANON04

Use of the multiple spaces equation is now a code requirement in many areas and is a requirement of LEED for any new building that uses multiple space ventilation systems. Why is the equation there? How do you use the equations? What are the two options? Does the system approach make a difference in the quantity of outdoor air required? This presentation presents answers and discussion points for these important questions.

## ASHRAE Iowa Research Promotion – Corporate Donors Needed!

Thank you to all of the individuals and companies that have donated to the ASHRAE lowa Research Promotion fund so far this year, we are currently at 40% of our goal!

If your company has donated in the past but has yet to do so this year, please consider making a donation. It only takes a contribution of \$150 to make our honor roll and it goes to a really good cause, ASHRAE research!

## **ASHRAE Technology Awards Program**



The ASHRAE lowa Chapter is soliciting Technology Award Applicants. The purpose of the awards is three-fold:

- To recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven through actual operating data.
- To communicate innovative systems design to other ASHRAE members.
- To highlight ASHRAE technological achievement to others, including associated professionals and societies worldwide, as well as building and facility owners.

If interested in submitting a project, contact Emir Kadic at <u>kadice@kjww.com</u> or Xiaohui (Joe) Zhou at xhzhou@iastate.edu. Submissions for the chapter level will be due by March 15<sup>th</sup>, 2014.

For more information on the Technology Awards Program visit <a href="https://www.ashrae.org/membership-conferences/honors--awards/technology-awards-program">https://www.ashrae.org/membership-conferences/honors--awards/technology-awards-program</a>

## ASHRAE's Attic & Antiques





Have you ever encountered pieces of HVAC history while working on remodel projects? Are you fascinated by the origins of modern HVAC equipment? If so, help us to launch our new section, ASHRAE's Attic & Antiques. We're trying to populate our newsletter and website with fascinating old photos and historical anecdotes, preferably with a local bent. Send your photos and stories to Matt Jesson at matti@hvactab.com

## The HVAC&R Industry

#### When 'Continuous Improvement' of Codes, Standards Is Neither

HOUSTON—The ever-increasing size and complexity of building codes and standards presents a problem to engineers, who have less time to fully and properly digest the tomes that define how they should practice their professions, writes Bob Zabcik, director of Research and Development for NCI Group, on the Star Building Systems blog. He illustrates his points by citing specific specifications and standards that have grown in size by as much as 15 pages per year for several decades. "So, how do we address this trend of growing complexity and shrinking time?... today's environment is one where 'can't see the forest for the trees' problems flourish. Fortunately, those problems are fairly easily spotted when put in front of a person who is capable of seeing the forest because they don't have an in-depth knowledge of the trees growing in it," he writes. He suggests engineers ask for help on projects from others not bogged down by minutiae. He writes "...let's do what doctors do in this situation: swallow our pride and ask for a consult from a practitioner whose experiences are different from our own."

#### Read more

#### **Prototype Generator Harnesses Power From Humidity**

CAMBRIDGE, Mass.—A new type of electrical generator uses bacterial spores to harness the power of evaporating water. Researchers at Harvard University's Wyss Institute of Biologically Inspired Engineering foresee electrical generators driven by changes in humidity from sun-warmed ponds and harbors. The prototype generators work by harnessing the movement of a sheet of rubber coated on one side with spores. The sheet bends when it dries out, much as a pine cone opens as it dries or a freshly fallen leaf curls, and then straightens when humidity rises. Such bending back and forth means that spore-coated sheets or tiny planks can act as actuators that drive movement, and that movement can be harvested to generate electricity. "Water evaporation is the largest power source in nature," said Ozgur Sahin, Ph.D., who led the study. "Sunlight hits the ocean, heats it up, and energy has to leave the ocean through evaporation," he explained. The research is published in Nature Nanotechnology.

#### Read more

#### **Small Buildings Prompt Big News for Building Certification Organizations**

WHATELY, Mass.—Two of the world's foremost building certification programs have been active in the early part of the year. The Living Building Challenge added to its exclusive portfolio. Smith College's Bechtel Environmental Classroom, a new 2,300 ft² (214 m²) learning center set on 240 acres (97 ha), has become only the fifth building in the world to be certified as a Living Building. Meanwhile, the Green Building Initiative, developer of the Green Globes program, has named Jerry Yudelson as its new president. The Tucson, Ariz.-based consultant says he wants to update the six-year-old program to make it faster and more accessible for smaller projects.

<u>Click here</u> to learn more about the new Living Building on the Smith College campus.

<u>Click here</u> to learn more about Green Building Initiative naming Jerry Yudelson as its new president.

#### **Reasons to Breathe Easier About Bad Air**

WASHINGTON—The air above the U.S. is becoming cleaner, and voters want action to make it even more so. U.S. voters strongly want action by the Environmental Protection Agency (EPA) to limit carbon pollution from power plants. According to a new survey conducted for the Sierra Club, around 70% of respondents support strong carbon pollution limits on power plants. The survey of 1,000 voters also found strong support among voters for moving away from coal and other dirty fuels and a preference for investing in clean energy. Total releases of toxic chemicals decreased 12% from 2011-2012, according to the U.S. Environmental Protection Agency's (EPA) annual Toxics Release Inventory (TRI) report released this week. The decrease includes an 8% decline in total toxic air releases, primarily due to reductions in hazardous air pollutant (HAP) emissions. "People deserve to know what toxic chemicals are being used and released in their backyards, and what companies are doing to prevent pollution," said EPA administrator Gina McCarthy.

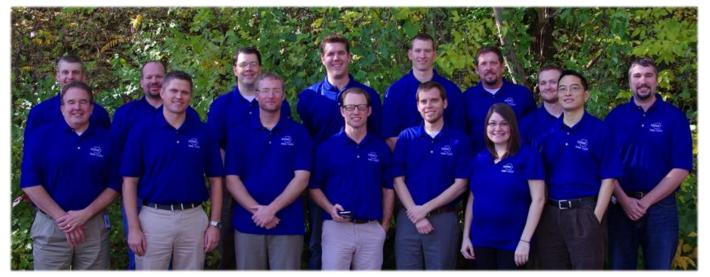
<u>Click here</u> to read more about the Sierra Club survey. <u>Click here</u> to read more about EPA's Toxics Release Inventory.

## 2013-2014 Meeting Dates

MONTH	GENERAL MEETING	GENERAL MEETING				
	Topic	Date				
July	-	-				
August	-					
September	Fall Frolic Golf Outing – Legacy Golf Club	5				
October	Student Night / Membership Promotion	16				
November	Research Promotion	12				
December	Past Presidents / History (joint w/ CSI and SMCI)	16 (Lunch)				
January	Membership Promotion	13 (Lunch)				
February	Resource Promotion	17				
March	Refrigeration	6				
April	ASHRAE Webcast	17				
May	Spring Fling Golf Outing	19				

Winter Meeting	2014 Winter Conference - New York, NY	Jan 18-22
CRC	Region VI CRC – Iowa City, IA	May 1-3
Summer Meeting	2014 Annual Conference – Seattle, WA	Jun/Jul 28-2

## **Meet Your BOG Officers**



Back Row (Left to Right)
Chris Deal, Refrigeration
Dan Ponxs, BOG
Jason Kems, e-Committee
Luke Miller, RP
David Poetting, GGAC
Vince Sanders, RP
Justin Barrett, President-Elect

Front Row (Left to Right)
Dan Zaug, BOG
Tim Conrad, President
Kelly Crow, Honors/Awards
Matt Gumm, Treasurer
Matt Jesson, Historian
Britt Vincent, CTTC
Xiaohui (Joe) Zhou
Patrick Peterson, BOG

## **ASHRAE 2013-2014 Research Promotion Fund**

	AS	SHRAE Iowa Resea	rch Investors 2013-20	014	
Individual Investors			40	Company Investors	
HR = Honor Roll participants \$100 min		40.0% OF GOAL	\$9,598.54 -TO GO!	HR = Honor Roll participants \$150 min	
Mr. Mark W Allen	(HR)	\$16,000		A. J. Allen Mechanical Contractors Inc.	(HR
Mr. Justin J Barrett, PE	(HR)	\$15,500		ASHRAE Iowa Chapter	(HR
Mr. Aaron Brace	(HR)	\$15,000		Capitol R&D Inc.	(HR
Mr. Kit C. Cartwright	(HR)			KJWW Engineering Consultants	(HF
Mr. Timothy J Conrad	(HR)	\$14,500		MMS Inc.	(HI
Mr. Mark G Conway	(HR)	\$14,000		System Management & Balancing Inc.	(HF
Mr. Kelly G Crow	(HR)	\$13,500		VHF Sales, Inc.	(HF
Mr Einar Dahl Jr	(HR)	\$13,000		Woodman Controls Company	(HI
Mr. Ronald Engelhardt	(HR)	\$12,500		Millennium Technology Of Iowa	(HI
Mr. Matt Gumm, PE	(HR)	\$12,000			
Mr. Jim E Hall	(HR)	\$11,500			
Mr. Charles S Heldenbrand	(HR)	\$11,000			
Mr. Rodney Heston	(HR)	\$10,500			
Mr. Odean Jukam	(HR)	\$10,000			
Mr. Emir Kadic	(HR)	\$9,500			
Mr. Jeff Lindell	(HR)	\$9,000 —			
Mr. Paul K Melton	(HR)	\$8,500 —			
Mr. Frederic L Miller	(HR)	\$8,000			
Mr. Fred Miller	(HR)	\$7,500			
Mr. Luke Miller	(HR)	\$7,000	• • • • • • • • • • • • • • • • • • • •		
Mr. Andrew L. Pospisal	(HR)	\$6,500	\$6,401.46		
Mr. Vince Sanders	(HR)	\$6,000 —	_		
Mr Don Stanek	(HR)	\$5,500 —	_		
Mr. Dale Vest	(HR)	\$5,000 —	_		
Mr. Daniel V Zaug	(HR)	\$4,500			
Dr. Xiaohui (Joe) Zhou, PhD, PE	(HR)	\$4,000 —			
Dr. Alaonar (30e) Zhou, Fhb, FL	(116)	\$3,500 —			
		\$3,000 —			
		\$2,500 —			
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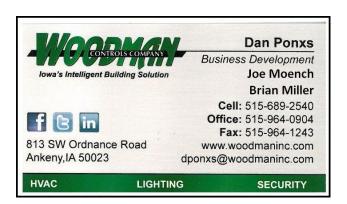
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Matt Gumm Setpoint Mechanical Solutions 1450 69<sup>th</sup> Place, Suite 56 Ankeny, IA 50021

Andrew Pospisal is collecting cards for all of the sponsors. If you've paid and don't see your card here or would like to revise the card shown, send a card-sized PNG or JPEG file to: <a href="mailto:apospisal@mail.ashrae.org">apospisal@mail.ashrae.org</a>