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
(click for map)

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: Retr-commissioning for Energy Savings

Tech Session Cost:
$30 for ASHRAE Iowa Chapter members
$60 for non-members

Chapter Meeting/Dinner Cost:
Free to ASHRAE Iowa Chapter members
$20 for Guests

RSVP:
Please register for either or both events via the ASHRAE Iowa 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 ASHRAEiowa.org

Come join us at Johnny’s Italian Steakhouse on Monday, February 17th 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!
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 perspective 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 a 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 non-members attended and have already requested to become members. Thanks to the YEA Chair, Val Hageman, for coordinating this event. Feel free to contact Val if 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 this 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 Iowa Chapter Fees so be sure to take advantage of it. I look forward to seeing you all at the meeting on Monday.

Tim Conrad
Iowa ASHRAE Chapter President 2013-2014

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

Past Presidents
Matt Jesson 2012-2013
Kelly Crow 2011-2012
Holly Elbert 2010-2011
Roger Leisher 2009-2010
Kit Cartwright 2008-2009
Jerrod Sieverding 2007-2008
Jason Kens 2006-2007
Chuck Heldenbrand 2005-2006
Jeff Gross 2004-2005
Ron Engelhardt 2003-2004
Dan Zoog 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
Paul Melton 1994-1995
Gregory Maxwell 1993-1994
Jeffery Hammer 1992-1993
Jack Culp 1991-1992
James Lee 1990-1991
Clint Leonard 1989-1990
Charles Pedersen 1988-1989
Gary Reynolds 1987-1988
Dennis Hogan 1986-1987
Eugene Zefron 1985-1986
Donald Hagge 1984-1985
Robert Ritl 1983-1984
Joseph Proctor 1982-1983
Mark Allen 1981-1982
Curts Klenssen 1980-1981
Gerald Anderson 1979-1980
C.W. Miller 1978-1979
Richard South 1977-1978
Verne Steward 1976-1977
Curts Hammer 1975-1976
Ralph Schilling 1974-1975
Donald Bonicamp 1973-1974
Kent Mosher 1972-1973
Thomas Van Hor 1971-1972
Robert McBride 1970-1971
Einar Dahl 1968-1969
Eugene O’Neil 1967-1968
James Green 1966-1967
Neil Hanson 1965-1966
Bob Flanagan 1964-1965
Lyndon Kelley 1963-1964
Elwood Gibson 1962-1963
Vern Polly 1961-1962
John Bain 1960-1961
Crom Campbell 1959-1960
R.T. Howard 1958-1959
W.A. Schwarm 1957-1958
D.E. Schroeder 1956-1957
G.J. Knaul 1955-1956
W.E. Nanes 1954-1955
J.F. Sandfort 1953-1954
R.H. Schnell 1952-1953
C.H. McGrinness 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. Stategor 1944-1945
C.W. Helstrom 1943-1944
P.E. Triggs 1942-1943
Perry LaRue 1941-1942
R.A. Norman 1940-1941
Tracy Johnston 1939-1940
W.R. White 1938-1939
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 Iowa 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 5th 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 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 Iowa 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 Iowa 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 kadice@kjww.com or Xiaohui (Joe) Zhou at xzhou@iastate.edu. Submissions for the chapter level will be due by March 15th, 2014.

For more information on the Technology Awards Program visit https://www.ashrae.org/membership-conferences/honors--awards/technology-awards-program

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
**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.

Click here to learn more about the new Living Building on the Smith College campus.
Click here 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.

Click here to read more about the Sierra Club survey.
Click here to read more about EPA's Toxics Release Inventory.
# 2013-2014 Meeting Dates

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

**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
Your contribution puts us closer to achieving our goal. Please send what you can today!

COMPLETE THE INFORMATION BELOW AND RETURN IT WITH YOUR INVESTMENT

Please accept my research investment in the amount of $__________ CK#__________

NAME_________________________ PHONE_____________

COMPANY________________________ FAX_________________

ADDRESS___________________________________________________________

CITY________________________ STATE  __________  ZIP  ____________

PLEASE CHECK ONLY ONE:  (  ) Personal Contribution  (  ) Company Contribution

Charge my gift to:  (  ) VISA   (  ) MC (  ) AE

Credit Card #:____________________________  Exp. Date:____________

Signature:_____________________________________________

ASHRAE is a 501(c)(3) organization. Contributions are deductible as allowed by law.
A receipt will be sent to the address listed above.

Send to:
ASHRAE RESEARCH PROMOTION
C/O Vince Sanders
P.O. Box 3686
Urbandale, IA 50323
PHONE: 515-554-2589
rp@ashraeiowa.org
Sponsoring our monthly newsletter is a great way to advertise your business and support your Iowa ASHRAE Chapter. Renewing and new sponsors need to send in payment immediately for inclusion in next month’s (and all subsequent) newsletter. Make check payable to: ASHRAE Iowa. Cost is $125. Send to:

**Matt Gumm**
Setpoint Mechanical Solutions
1450 69th 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: apospisal@mail.ashrae.org