

A Newsletter for the Iowa Chapter of ASHRAE

**ASHRAE Iowa Chapter**  
[www.ashraeiowa.org](http://www.ashraeiowa.org)

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## THIS MONTH AT ASHRAE

### Student Night / Membership Promotion

**Date:**

Wednesday,  
 October 16<sup>th</sup>

**Schedule:**

4:00-5:00PM: Panel Discussion  
 – sponsored by Johnson Controls  
 5:30PM: General Meeting  
 5:45-6:45PM: Dinner  
 7:00PM: Tour of ISU Agricultural and Biosystems Engineering Phase 2 Building

**Panel Discussion/Dinner:**

Olde Main Brewing Company  
 316 Main Street  
 Ames, IA 50010  
[click for map](#)

**Tour:**

Agricultural and Biosystems Engineering Phase 2 Building  
 ISU campus between Howe Hall and College of Design  
**Bring a hard hat and safety glasses if you have them**  
[click for map](#)

**Cost:**

Free to ASHRAE Iowa Chapter members  
 \$20 for Guests

**RSVP:**

Please RSVP by Friday, October 11<sup>th</sup> if you are attending and you will receive two complimentary drink tickets.

Click the following link to RSVP with our CTTC/Programs co-chair, Brit Vincent: [ASHRAE Iowa October Meeting – I'll be there!](#)



Please join us in Ames on Wednesday, October 16<sup>th</sup> at Olde Main Brewing Co. for this month's chapter meeting.

It will begin with a Panel Discussion comprised of several industry professionals from the Des Moines metro area.

This is a great opportunity for current engineering students to ask questions and gain insight into the HVAC/R industry. We will have experts in design, sales, project management and other disciplines on the panel.

## PAST PRESIDENTS

Matt Jesson .....	2012-2013
Kelly Crow .....	2011-2012
Holly Elbert .....	2010-2011
Roger Leshner .....	2009-2010
Kit Cartwright .....	2008-2009
Jerrold Sieverding .....	2007-2008
Jason Kems .....	2006-2007
Chuck Heldenbrand .....	2005-2006
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
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 Rist .....	1983-1984
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
Thomas Van Hon .....	1971-1972
Robert McBride .....	1970-1971
William Whitman .....	1969-1970
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 Giberson .....	1962-1963
Vern Polly .....	1961-1962
John Bain .....	1960-1961
Crom Campbell .....	1959-1960
R.T. Howard .....	1958-1959
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. McGuinness .....	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



Fall is approaching quickly and the days are getting shorter. That can only mean one thing, the 2013-2014 Iowa Chapter year is in full swing! The Board of Governors has already met several times over the past few months to plan the programs for the coming year. We have put special emphasis on creating a diverse list of topics that appeal to the local chapter members.

The ASHRAE Fall Frolic on September 5 at Legacy Golf Club in Norwalk, IA was a success. The recent heat wave caused some distress to golfers but I think everyone would agree that it was a great time. Once again the golf committee did an excellent job coordinating the event. Special thanks to The

Weidt Group for being the sole Platinum Sponsor which allowed us to award better prizes to participants (3 LED TVs).

The next event will take place on Wednesday, October 16. This will be student night so we plan on holding the event in Ames, IA to make it easier for student members to attend. As in recent past, we will be holding a student panel of industry experts to answer any questions participating students may have. Come join the rest of the group for some good food and tour to follow.

Stay tuned for the remaining programs in future newsletters. Hope to see you all at the upcoming Iowa Chapter events!

Tim Conrad  
Iowa Chapter President  
2013-2014



## UPCOMING CHAPTER MEETINGS

**October 16<sup>th</sup>**

Topic: Student Night / Membership Promotion

Location:

Olde Main Brewing Co.  
316 Main Street  
Ames, IA 50010

**November 12<sup>th</sup>**

Morning and afternoon technical sessions on DDC controls

Location:

Iowa Events Center  
Des Moines, IA

Visit us online at: [www.ashraeiowa.org](http://www.ashraeiowa.org)

## ASHRAE Iowa Fall Frolic at Legacy Golf Club



Congratulations to the team of Ted Gerber, Austin Henneset, Doug Kumm, and George Scheppmann for winning the annual ASHRAE Iowa Fall Frolic Golf Outing held on September 5<sup>th</sup> at Legacy Golf Club in Norwalk. The foursome shot a score of 14 under par in the scramble format.

We had 22 teams tackle the course this year and help raise money for ASHRAE Research Promotion, thanks for your support everyone!

Visit the following link to see pictures from this year's outing: [ASHRAE Iowa Fall Frolic Pics](#)

## November Meeting



### Advanced VAV Control Sequences &

### Optimizing Chilled Water Plant Controls

with Steven Taylor, P.E. F ASHRAE  
November 12, 2013  
Des Moines, IA

**Advanced VAV Control Sequences** *sponsored by the Iowa Energy Center*

**Time:** 8 am- 1 pm CDT (includes lunch)

**Location:** Iowa Events Center, Hy-Vee Hall, Room 101, 730 Third St., Des Moines, IA

**Cost:** \$90 (ASHRAE Central Iowa Chapter members receive a 50% discount)

**Continuing Education Credits:** 4 PDH (Professional Development Hours)

**[REGISTER NOW!](#)**

**Optimizing Chilled Water Plant Controls** *sponsored by the Central Iowa Chapter of ASHRAE*

**Time:** 1 -5 pm CDT, with Dinner to follow

**Location:** Iowa Events Center, Hy-Vee Hall, Room 101, 730 Third St., Des Moines, IA

**Cost:** \$90 (ASHRAE Central Iowa Chapter members receive a 50% discount)

**Dinner:** \$20 for guests (Free for ASHRAE Central Iowa Chapter members)

**Continuing Education Credits:** 4 PDH (Professional Development Hours)

**REGISTRATION info:** Contact Britt Vincent at [bvincent@mechsales.com](mailto:bvincent@mechsales.com) or (515) 276-9005.

**PLEASE NOTE: YOU MUST REGISTER FOR BOTH EVENTS SEPARATELY.**



#### **About the Speaker**

Steven Taylor of Taylor Engineering, Alameda, CA is a professional engineer and ASHRAE Fellow with over 30 years of commercial and institutional HVAC system design experience. He is a member of the committee responsible for ASHRAE Standard 90.1 "Energy Conservation in New Non-residential Buildings", a standard that is the basis of energy conservation codes in every state in the country. Mr. Taylor is an experienced control system designer. He is the author of an ASHRAE sponsored textbook on the [Fundamentals of HVAC Control Systems](#) and served as chair of ASHRAE's Control Theory & Application Technical Committee 1.4 and ASHRAE's Guideline Committee 13 [Specifying Direct Digital Control Systems](#).



## November Meeting (cont.)

### Advanced VAV Control Sequences

The Iowa Energy Center will sponsor a half day seminar focusing on advanced VAV control sequences. Steven Taylor of Taylor Engineering, Alameda, CA is the featured speaker. Mr. Taylor is a professional engineer and ASHRAE Fellow with over 30 years of commercial and institutional HVAC system design experience.

This seminar will summarize recent ASHRAE Research Projects such as:

- RP 1455, "Advanced Control Sequences for HVAC Systems - Phase I Air Distribution and Terminal Systems."
- RP 1515, "Thermal and Air Quality Acceptability in Buildings that Reduce Energy by Reducing Minimum Airflow from Overhead Diffusers."
- RP 1547, "CO2-based Demand Controlled Ventilation for Multiple Zone HVAC Systems."

Topics will include:

- VAV Box Control Sequences
- Zone Groups & Modes
- AHU Control Sequences
- Demand Controlled Ventilation for VAV Systems
- Automatic Fault Detection and Diagnostics

**Questions:** Contact Denise at [djunod@iastate.edu](mailto:djunod@iastate.edu) or (515) 965-7055

### Optimizing Chilled Water Plant Controls

The Central Iowa Chapter of ASHRAE will sponsor Mr. Taylor's afternoon seminar, Optimizing Chilled Water Plant Controls, which is based primarily on the background research performed in the creation of the ASHRAE Journal Series, "Optimizing the Design and Control of Chilled Water Plants", published in 2011 and 2012, particularly Part 5: Optimized Control Sequences published June 2012.

Topics will include:

- Quick Summary of Chilled Water System Design
- Determining Optimized Sequences
- Chilled Water Pump Control
- Chilled Water Temperature and DP Setpoint Reset
- Tower Fan Speed Control
- Condenser Water Pump Control
- Chiller Staging

**Questions:** Contact Britt Vincent at [bvincent@mechsales.com](mailto:bvincent@mechsales.com) or (515) 276-9005.

**PLEASE NOTE: YOU MUST REGISTER FOR BOTH EVENTS SEPARATELY.**

# ACE Mentor Program



## **The ACE Mentor Program is searching for mentors!**

If you are a dedicated professional, are passionate about what you do, and want to share your enthusiasm with the workforce of the future, please become a mentor.

The ACE Mentor program is an after-school program that gives high school students a hands-on introduction to architecture, construction, and engineering. At weekly meetings, student teams work directly with design and construction professionals to design a mock project, tour local construction sites, and visit architectural, engineering and construction offices. This is a great opportunity for the students to become engaged, excited, and enlightened about a career in the design and construction industry.

ACE, a national program established in New York in 1995, now has a presence in over 200 cities across America, including Mason City and Des Moines. Thanks to the dedication of ACE's mentors and to the support of local schools, more than 60,000 students nationwide—many who are economically challenged—have had an opportunity to explore the building design and construction industry. Locally, schools participating in ACE include Des Moines Public High Schools, West Des Moines Valley HS, Ankeny/Ankeny Centennial High Schools, Dowling Catholic HS, Southeast Polk HS, Waukee HS, and Johnston HS.

Our programs rely on committed, energetic mentor participation. By acting as professional role models, trusted friends, and career advisors, mentors make a significant contribution to their communities as they help to develop tomorrow's building industry leaders. Please become an ACE mentor today.

Meetings with students will start the first week of November. Engineering professionals from the design and building industry practicing in structural, civil, mechanical, electrical, and geotechnical disciplines are needed. For more information about the ACE Mentor Program in the Des Moines area, please contact Jeff Magner, PE, of Terracon (515.244.3184, [jmagner@terracon.com](mailto:jmagner@terracon.com)).

## 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 [mattj@hvactab.com](mailto:mattj@hvactab.com)

## The HVAC&R Industry

### **Facebook Data Centers: Outside Air Provides Cooling**

LONDON—Data centers operators can be operated without mechanical air conditioning to dramatically reduce energy costs and the facilities' impact on the environment, according to Facebook. Facebook said that it uses 100% outside air to cool all of its data centers, and that other data center operators typically over-cool their facilities. Frank Frankovsky, Facebook's vice president of hardware design and supply chain operations, said modern server hardware is much more robust than is typically thought, and that Facebook has found it can operate successfully without cooling even at temperatures as high as 35°C (95°F). The company is sharing its trade practices as part of its Open Compute Project initiative.

[Read more](#)

### **More Turning to Ductless Cooling Systems**

BOULDER, Colo.—Annual revenue from ductless cooling systems will grow from \$3.9 billion in 2013 to more than \$9 billion by 2020, according to Navigant Research. This will represent nearly 30% of total energy-efficient HVAC systems revenue in that year. In North America, where they have typically been much less popular than unitary systems, ductless systems are forecast to grow at a compound annual growth rate of 14% until 2020. "Ductless systems have several advantages over ducted systems," says Bob Gohn, senior research director with Navigant Research.

[Read more](#)

### **Misuse of 'Engineer' Debated**

LONDON—The use of made-up terms such as "hair engineer" for hairdressers is offending some genuine engineers, says an article in the *Guardian* newspaper. One indignant engineer has started an "e-petition" that calls for the title to be "legally protected [here] as it is in many other countries around the world, including Germany, France, USA and Canada" with legal repercussions for those using it without authorization. The Institution of Mechanical Engineers (IMechE) disagrees. In a recent address, IMechE president Patrick Kniveton argued that informal use of "engineer" was far too ingrained to change, and enforcing its non-use could even be demoralizing to many of those tradespeople who currently use it.

[Read more](#)

## 2013-2014 Meeting Dates

MONTH	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	TBD
February	Resource Promotion	TBD
March	Refrigeration	TBD
April	ASHRAE Webcast	17
May	Spring Fling Golf Outing	TBD

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



# ASHRAE 2013-2014 Research Promotion Fund

ASHRAE Iowa Research Investors 2013-2014		
Individual Investors <small>HR = Honor Roll participants \$100 min</small>	6.9% OF GOAL    \$14,900.00 -TO GO!	Company Investors <small>HR = Honor Roll participants \$150 min</small>
Mr. Mark W Allen (HR)	\$14,000	A. J. Allen Mechanical Contractors Inc. (HR)
Mr. Timothy J Conrad (HR)	\$13,500	
Mr. Mark G Conway (HR)	\$13,000	
Mr. Jeff Lindell (HR)	\$12,500	
Mr. Fred Miller (HR)	\$12,000	
Mr. Luke Miller (HR)	\$11,500	
Mr. Andrew L. Pospisal (HR)	\$11,000	
Mr. Daniel V Zaug (HR)	\$10,500	
	\$10,000	
	\$9,500	
	\$9,000	
	\$8,500	
	\$8,000	
	\$7,500	
	\$7,000	
	\$6,500	
	\$6,000	
	\$5,500	
	\$5,000	
	\$4,500	
	\$4,000	
	\$3,500	
	\$3,000	
	\$2,500	
	\$2,000	
	\$1,500	
	\$1,000	
	\$500	
	\$0	

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[rp@ashraeiowa.org](mailto:rp@ashraeiowa.org)

**Thank you for your donation!**

Patrick Peterson, LEED AP  
Sales Engineer

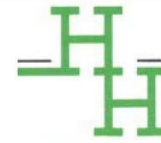
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