

# Iowa Stalks Monthly Newsletter - November 2017

This is the first month we are trying a new newsletter service. If you have any thoughts, suggestions, or concerns please contact lowa Chapter Secretary Adam Puls at <a href="mailto:apuls@shive-hattery.com">apuls@shive-hattery.com</a>. Additional changes will likely appear in the coming newsletters while we adapt to this new service and format a template for future use. Thank you!

### This Month at ASHRAE Iowa

# Student Night with the Iowa State University Student Chapter

**Date:** Wednesday, November 15<sup>th</sup>

Where: Olde Main and ISU Boiler Plant

316 Main St, Ames, IA 50010 & 616 Beach Rd, Ames, IA 50011

#### **Presentations:**

- Industry roundtable discussion for students to learn about ASHRAE related professions
- Boiler Plant Tour
  - Must register separately for tour as ISU has limited it to only 30 people

### Presenters:

- Dan Zaug Johnson Controls
- Luke Miller A J Allen
- Brian Steffens Shive-Hattery
- Matt Gumm Setpoint Mechanical
- Matt Jesson Systems Management & Balance
- Jeff Witt Iowa State University Director of Utility Services (Tour)

#### Schedule:

- 4:00 Industry Panel
- 5:00 Social Hour
- 5:30 Scholarship Presentation
- 5:45 Dinner
- 6:45 Travel to Boiler Plant
- 7:00 Boiler Plant Tour

**Cost:** Free for ASHRAE lowa members; \$20 for non-members; Always free for students

Students who attend this meeting can get their membership dues reimbursed by the lowa Chapter!

Remember to register by Wednesday, Nov. 8th so we can get an accurate head count for dinner and the tour.

**Register for the November Meeting Here** 

# President's Corner

Happy Holiday Season!

**ASHRAE Iowa Chapter** 

www.ashraeiowa.org

I would like to extend the warmest of wishes to

you and your families. With the holidays it usually means lots of travel and family events. Hopefully you will be able to find an ASHRAE event or two that you can still attend during this busy time of year.

Wednesday the 15<sup>th</sup> of November, we will be making our annual voyage up to Ames to support the ISU Student ASHRAE Chapter. We are also touring the newly installed boilers at the ISU Central Plant. The tour has a capacity cap for safety reasons, so make sure to sign up on our website today. It's not too late to sign up for the dinner meeting as well. Signups are due by this Wednesday to get food counts submitted. Reminder, if you would like to attend the dinner and tour, you will need to register for both separately online.

YEA members, we have an exciting event scheduled for the end of the month. Our YEA committee worked hard at arranging Skybox Seats to an Iowa Wild Game! This won't be your typical YEA meeting, so make sure to cancel your other plans and come out for an evening of fun! Food will be provided. See the details later on in the newsletter. Make sure to register today, we are limited to 30 tickets.

Our joint meeting will be coming up quickly in December. Be watching your email from ASHRAE lowa for event registration. December 11<sup>th</sup> we will have our annual joint meeting with SMCI and CSI.

Reminder, the ASHRAE Winter Meeting is back in Chicago this year! January 20-24<sup>th</sup>, Chicago will come alive with the brightest minds, equipment, and technology in the HVACR industry. We hope the lowa Chapter will have a strong showing at

### - Board of Governors -

**Brandon Bratz** Chris Clausen Ted Gerber Joe Nielsen

#### - Officers -

<u>President</u> Luke Miller President Elect **Brian Steffens** <u>Treasurer</u> **David Poetting** <u>Secretary</u> Adam Puls

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<u>Attendance</u> Dan Zaug **Auditing** Joe Moench **CTTC** Matt O'Banion Tyson Scheidecker <u>eCommittee</u> Jason Kems **Education** Kit Cartwright Roger Lesher **GGAC** Matt Jesson Historian

**Andrew Pospisal** 

Honors & Awards

Matt Gumm

Membership

Tim Conrad

Mitch McColloch

Product Directory

Holly Elbert

the winter meeting. Please consider joining us in Chicago to help spread a little lowa Charm. The lowa Chapter always puts a smile on the faces of others.

I hope to see you in Ames. If you're unable to attend please have a safe, warm, and fun Thanksgiving with your loved ones.

Luke Miller

Refrigeration

**Justin Barrett** 

Research Promotion

Michael Gustafson

Dan Ponxs

Student Activities

**Emmett Konrad** 

Mike Wolfe

**TEGA** 

Peter Ernzen

Matt Swenka

YEA

Heidi Turner

### **Past Presidents**

Andrew Pospisal 2016-2017

Matt Gumm 2015-2016

Justin Barrett 2014-2015

Tim Conrad 2013-2014

Matt Jesson 2012-2013

Kelly Crow 2011-2012

Holly Elbert 2010-2011

Roger Lesher 2009-2010

Kit Cartwright 2008-2009

Jerrod 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

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

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

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. Wheele 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

# **Upcoming Meetings**

### **Fall YEA Meeting**



**YEA Members Register Here** 

### **December Meeting**

**Date:** Monday, December 11th

Location: Holiday Inn 1050 6th Ave, Des Moines, IA 50314

**Topic:** Joint meeting with local chapters of SMCI and CSI: Presentation about energy code and buliding science by Dave Ruffcorn of the State Fire Marshal's Office

More details to come!

### **Iowa Chapter Future Meetings**

| Month     | Date | Location             | Topic  |
|-----------|------|----------------------|--|
| September | 29   | The Legacy Golf Club | Fall Frolic Golf Outing                      |
| October   | 18   | Ramada Tropics       | Membership & RP Night                        |
| November  | 15   | Ames                 | Student Night                                |
| December  | 11   | Holiday Inn          | SMCI / CSI Joint Meeting                     |
| January   | 17   | Baker Group Offices  | Advanced Prefabrication<br>Techniques & Tour |
| February  | 15   | Hotel Renovo         | Refrigeration DL Presentation                |

| March | 28  | TBD | MP, RP, & History Project<br>ASHRAE Webcast – Myths |
|-------|-----|-----|---|
| April | 19  | TBD | ASHRAE Webcast – Myths About Energy Efficiency      |
| May   | TBD | TBD | Spring Fling Golf Outing                            |

### **Society & Region Events**

| Month   | Date  | Location       | Topic                  |
|---------|-------|----------------|------------------------|
| January | 20-24 | Chicago, IL    | 2018 Winter Conference |
| May     | 3-5   | Des Moines, IA | Region VI CRC          |
| June    | 23-27 | Houston, TX    | 2018 Annual Conference |

# **Last Month's Meeting in Review**

### **October RP & MP Meeting**

Peter Ernzen presented the Technology Award First Place for the Iowa Chapter and Region VI to Mark Hersch for his submission of the Market 1 project. Please see the Technology Awards section below for more information on Mark's accomplishment.

Presentations were made by Lee Buddrus, President and Owner of Acme Engineering & Manufacturing Corporation, and Dr. Kristen Cetin, Assistant Professor at Iowa State University.

Updates were provided for the Research Promotion (Michael Gustafson) and Membership Promotion (Ted Gerber) committees. Please consider donating to RP!









# **Research Promotion**

| ASHRAE Iowa Research Investors 2017-2018  Go to http://ashraerp.com to donate online. Please contribute all donations to the Endowed Research via ASHRAE Foundation. |    |                                  |             |   |        |  |  |
|--|----|----------------------------------|-------------|---|--------|--|--|
| Individual Investors  HR = Honor Roll participants \$100 min   |    | 8.8% OF GOAL \$18,250.00 -TO GO! |             | Company Investors  HR = Honor Roll participants \$150 min |        |  |  |
| Ar Eric R Peterson   | HR |                                  | 4.50/555555 |   | T      |  |  |
| r Mark G Conway  | HR | \$18,000                         |             |   | т      |  |  |
| Jason E Kems   | HR | \$17,500 —<br>\$17,000 —         |             |   | $\top$ |  |  |
| Corey B Metzger  | HR | \$16,500                         |             |   | Т      |  |  |
| Michael K Gustafson  | HR | \$16,000                         |             |   | $\top$ |  |  |
| Luke Miller  | HR | \$15,500                         |             |   | $\top$ |  |  |
| Rodney Heston  | HR | \$15,000                         |             |   |        |  |  |
| Brian A Steffens   | HR | \$14,500 —                       |             |   | T      |  |  |
| Daniel L Ponxs   | HR | \$14,000                         |             |   | T      |  |  |
| r Justin J Barrett, PE   | HR | \$13,500                         |             |   | $\top$ |  |  |
| David Poetting   | HR | \$13,000                         |             |   | $\top$ |  |  |
| r James Edward Hall  | HR | \$12,500                         | 871 74      |   | $\top$ |  |  |
| Adam Puls  | HR | \$12,000                         |             |   | T      |  |  |
| r Daniel V Zaug  | HR | \$11,500 —<br>\$11,000 —         |             |   |        |  |  |
|  |    | \$10,500                         |             |   | T      |  |  |
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|  | -  | \$9,000                          |             |   | -      |  |  |
|  | -  | \$8,500                          |             |   | +      |  |  |
|  | -  | \$8,000                          |             |   | +      |  |  |
|  | -  | \$7,500 —                        |             |   | +      |  |  |
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|  | -  | \$6,500 —                        |             |   | +      |  |  |
|  | -  | \$6,000                          | _           |   | +      |  |  |
|  | -  | \$5,500 —                        |             |   | +      |  |  |
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|  | -  | \$3,000                          |             |   | +      |  |  |
|  |    | \$2,500                          |             |   | +      |  |  |
|  | -  | \$2,000 —                        | \$1,750.00  |   | +      |  |  |
|  | -  | \$1,500                          |             |   | +      |  |  |
|  | -  | \$1,000                          |             |   | +      |  |  |
|  | -  | \$500 —                          |             |   | +      |  |  |
|  |    | \$0 —                            |             |   | +      |  |  |
|  |    |                                  |             |   | _      |  |  |

This year, the BOG is encouraging you to donate online in an effort to save paper and increase the efficiency of the RP donation process. Please visit the ASHRAE RP Donation page <a href="here">here</a>. ASHRAE provides options for you to determine where to place your donation. The lowa Chapter is looking to increase its endowment and would appreciate it if you would place your donation in the box available next to "Endowed Research via ASHRAE Foundation", check the box indicated that you understand that those funds are restricted for the support of ASHRAE Research, and put "lowa Chapter" in the "Existing Fund Name (If known):" box. From there it's as simple as any other online purchase with a credit card.

Don't forget that ASHRAE is a 501(c)(3) organization. Contributions are deductible as allowed by law.

A receipt will be sent to the address listed above.

If you would still prefer to donate by check or have any further questions about the donation process, please contact <a href="mailto:dponxs@woodmaninc.com">dponxs@woodmaninc.com</a>.

# **Technology Awards**



Peter Ernzen, Technology Awards Committee Chair, presenting Mark Hersch with the plaque to commemorate his project's first place selections at the chapter and regional levels.

2018 Society Level – First Place 2017 Region VI – First Place 2017 ASHRAE Iowa Chapter – First Place

Mark Hersch was our 2017 AHSRAE Iowa Technology Awards first place winner in the Commercial Buildings – Existing Category for his submission of the Market 1 Project.

His submission then moved on to the Region VI level and the Society level where it also was a first-place winner in both competitions.

The Market 1 project is one of only seven Society Level first place winners for 2018 and competed with submissions from across the world. As a first place Society Level winner, design team members Holly Stevens and Mark Hersch and Building Owner, Justin Doyle, have been invited to the 2018 ASHRAE Winter Conference in Chicago to receive their award. The Market 1 project will also be featured in the March 2018 issue of the ASHRAE Journal.

Below are some highlights of the Market 1 project:

- Renovation of an existing historical factory and warehouse building into a commercial office building.
- Exterior envelope upgraded where allowed while maintaining the historical appearance of the building.
- Addition of a hybrid geothermal and air to air heat pump HVAC system.
- Addition of a photovoltaic system that has a total capacity of more than 200 KW.
- 95% of the interior lighting is LED. All interior and exterior lighting is on a lighting control system.
- Energy star score of 94.
- Site EUI that is over 60% lower than the baseline building (34.6 KBtu/SF/Year).
- Photovoltaic system produced over 200,000 KWH of electricity over a one year period which was enough to offset 36% of the building's energy use.

You can read Marks submission on the <u>Technology Awards</u> page on the ASHRAE Iowa website.

Congratulations to Mark and the entire Market 1 team!

### 2018 ASHRAE Iowa Chapter Awards

We are currently accepting submissions for the 2018 AHSRAE lowa Chapter Technology Awards. This year's Chapter submission deadline is **March 1**<sup>st</sup>, **2018**. More information about the Technology Awards program and submission forms can be found on the <u>Technology Awards</u> page at the ASHRAE lowa Website. Projects should be submitted electronically to Peter Ernzen or Matt Swenka. Contact information can also be found on the ASHRAE lowa Technology Awards page.

#### **NEW FOR THIS YEAR**

For this year we will be giving out **\$100 prizes** for the first-place winner in each of the submission categories. There are six categories and six possible prize winners. The categories are:

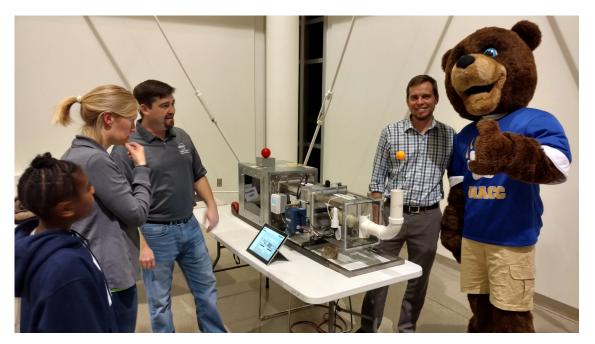
- Commercial Buildings
- Institutional Buildings
- Health Care Facilities
- Industrial Facilities or Processes
- Public Assembly
- Residential

All projects must be complete and a minimum of <u>one year of energy data</u> must be submitted. Submissions are first reviewed at the Chapter level. Winners from this level are then submitted to the Regional Level. Regional winners may then be submitted to the Society level. Society level winners, like the Market 1 project, are published in the ASHRAE Journal and honored at the annual Winter Conference. There are two submission forms, a short form and a long form. The short form is acceptable for chapter and regional level submissions. In order for a project to be able to compete at the Society level, a long form submission must be completed.

The Technology Awards program is a great way for Members to gain recognition for their projects. The program also builds recognition for the member's employers and the owners of the buildings. The Board of Govenors encourages all members to consider submitting any innovative or energy efficient projects.

# What's new in the Iowa Chapter?

ASHRAE Iowa has again taken "The Rig" out into the community for a Science, technology, engineering, and mathematics (STEM) event hosted by DMACC. The Iowa Chapter has received many compliments from other STEM presenters and event organizers for providing an interactive and educational presentation for event attendees.



Kit Cartwright explaining ASHRAE lowa's "Rig" and Matt Jesson posing with the DMACC Bear at DMACC's Annual Stem Event

## **ASHRAE Society News**

### Registration Opens for 2018 ASHRAE Winter Conference, AHR Expo

Registration is open for the 2018 ASHRAE Winter Conference, to be held in Chicago on Jan. 20–24, at the Palmer House Hilton. Registration is also open for the ASHRAE-cosponsored AHR Expo, to be held Jan. 22–24 at Chicago's McCormick Place. The ASHRAE Winter Conference features a technical program with more than 200 presentations and 300 speakers in eight conference tracks. The Conference also will include tours, social events, and keynote speaker Debbie Sterling, founder and CEO of GoldieBlox. In addition, ASHRAE Learning Institute (ALI) will offer two full-day, and five half-day seminars during the conference.





### **Industry News**

Co-Op Sees 83% Reduction in Refrigerant Emissions Over Six Years

An average grocery store leaks up to 1,000 pounds of refrigerant gas into the atmosphere every year, but one co-op has <u>reduced its refrigerant emissions</u> by nearly 83% since 2011. The co-op made improvements including installing new rooftop units that use safer refrigerants. Similarly, Collin Weber and Harrison Horning, P.E., Member ASHRAE, <u>discussed</u> how a supermarket in Maine reduced its emissions by 12% in an *ASHRAE Journal* article from October 2015.

### 'Self-Powered' Data Center Opens in Italy

MILAN, Italy—A new 49 acre (19.8 ha) facility, claimed to be "the world's first self-powered data center," has opened in Italy. The Global Cloud Data Center has its own dedicated hydroelectric plant. Electricity is generated from the running water from the Brembo River through turbines. That power is stored and then injected into the national grid infrastructure. The hydroelectric system, along with the power from solar panels, can produce up to 90 MW of power. The "river of energy" flows "more or less" constantly, says operator Aruba S.p.A.

### With EPA Rule Still in Courts, California Moves to Prohibit HFCs

SACRAMENTO, Calif.—The California Air Resources Board (CARB) will hold a public workshop on Oct. 24 to discuss beginning a rulemaking process to adopt into state regulations the U.S. Environmental Protection Agency's (EPA) Significant New Alternatives Policy (SNAP) Rule prohibitions of HFCs in stationary refrigeration and airconditioning end uses. The rulemaking to adopt the SNAP Program's bans on HFCs is in response to a recent U.S. Court of Appeals 2-1 panel ruling that the EPA cannot require companies to replace HFCs designated for HVAC&R equipment with low-GWP substances under the SNAP Program. "Although CARB is actively defending these [SNAP rules] in court, and believes that the federal program is the preferred path to achieve these reductions, it must consider state law alternatives as well in order to reach state [HFC] reduction targets," said CARB in its notice of the public workshop. CARB is required under California statute SB 1383 to reduce HFCs by 40% below 2013 baseline levels by 2030.

### **ASHRAE** Learning Institute

Variable Refrigerant Flow System: Design & Application Nov 29, 2017

Wednesday, 1:00 - 4:00 pm

Instructor(s): <u>Jocelyn Leger, P.Eng, CEM</u>, Member ASHRAE, LEED® AP

Paul Doppel, Member ASHRAE

Non-Member Price: \$284 ASHRAE Member Price: \$219

Variable-refrigerant flow (VRF) systems are now becoming increasingly utilized across North America. This course provides nonmanufacturer-specific concepts of the unique operational characteristics of VRF systems and how to apply VRF systems to a wide range of building types. The course supplements the fundamental VRF technology information in 2016 ASHRAE Handbook—HVAC Systems and Equipment by offering comprehensive VRF system design and application guidance using building-specific scenarios. This course is geared to mechanical engineers, design-build contractors, consulting engineers, HVAC system designers, and facility engineers.

**Click Here for More Details** 

ASHRAE Learning Institute offers four intensive HVAC Design and Operation training sessions that fill the need to improve overall building performance. From HVAC Design Essentials to Improving Existing Building Operations there is a course that could benefit you. These trainings are held in person across the country and the world.

**Click Here for More Details** 

# **Chapter Regional Conference**

The CRC committee continues to plan the event to ensure that have a great time and have the opportunity to gain valuable knowledge and professional development hours in central lowa. The technical tracks are forming and the special events are being locked in for your enjoyment. Be on the look out for the registration opening for what is going to be a great event!



If you would like to get involved please contact <u>Jason Kems</u>.

**CRC Sponsors** 

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Contact <u>Luke Miller</u> if you are interested in sponsoring the 2018 ASHRAE Region VI CRC.

## **Newsletter Sponsors**

Sponsoring our monthly newsletter is a great way to advertise your business and support your Iowa ASHRAE Chapter. Please consider sponsoring for the 2017-2018 society year. Renewing and new sponsors need to send in payment immediately for inclusion in next month's newsletter. Please make checks payable to: ASHRAE Iowa. The cost is \$125.

### Send payment to:

David Poetting
ASHRAE Newsletter Sponsorship
P.O. Box 3686
Urbandale, IA 50323

Adam Puls is collecting cards for 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:apuls@shive-hattery.com">apuls@shive-hattery.com</a>.





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