

# Iowa Stalks Monthly Newsletter - December 2018

### This Month at ASHRAE Iowa

### 2018 December Chapter Meeting

## Joint Meeting with CSI & SMCI

#### When

Wednesday December 12, 2018

11:30 a.m. - Registration Opens/Networking

11:45 a.m. - Lunch

12:00 p.m. - Announcements

12:15 p.m. – Program – Presentation by ASHRAE DL Tim Wentz (Past ASHRAE

President)

#### Location

Holiday Inn Downtown – Mercy Campus 1050 6th Ave Des Moines, IA 50314

#### **Program**

Presentation: The Interface Between Risk and Ethics

The topic of ethics has always been difficult to address because ethics is often seen as fluid and difficult to quantify. The fluid nature of ethics is generated by the wide spectrum of individual perspectives, coupled with highly variable cultures and situations, thus making ethical decisions difficult to predict. Risk has many of the same attributes in that it can also be very fluid and difficult to measure or predict. The presentation looks at the relationship between risk and ethics while exploring some ways to place both into a common context so that viable strategies can be developed for both the firm and the individual.

Earn 1 PDH for attending this program.

#### Presenter

Presenter: Tim Wentz (ASHRAE Distinguished Lecturer and past ASHRAE President)

Tim is an Associate Professor of Construction Management at the University of Nebraska – Lincoln, where he teaches a wide spectrum of courses, including environmental systems, mechanical estimating, mechanical project management, professional practice/ethics and the senior capstone course. Tim's professional focus is in teaching and undergraduate education, where he has participated in numerous committees and initiatives. He currently serves as an advanced team leader for the Peer Review of Teaching program, a College representative on the Student Success task force and is also currently chair of the College of Engineering Curriculum and Academic Standards Committee.

Tim has served the Society in many different capacities. He started his ASHRAE career in 1976 after graduating from the University of Nebraska and worked in a grassroots capacity for many years. He is a past president of the Nebraska Chapter, past RVC of Student Activities for Region IX, past DRC of Region IX and as Society president in 2016-2017. Tim also serves as Faculty Advisor of the Mechanical/Electrical Specialty Contractors (MESC) student chapter, which is an umbrella student chapter cosponsored by ASHRAE, the Mechanical Contractors Association of America (MCAA) and the National Electrical Contractors of America (NECA). He received an ASHRAE Technology Award in 1987, Region IX Chapter President of the Year, Region IX Hall of Honor in 2005, E. K. Campbell Award of Merit for Teaching in 2000, the Distinguished Service Award in 2013 and the Exceptional Service Award in 2015. Tim was named an ASHRAE Fellow in 2005.

Tim has also been very active in the Mechanical Contractors Association of America (MCAA), where he has served as a trustee for the Mechanical Contractors Education and Research Fund (MCERF) and is currently a member of the National Education Initiative (NEI) faculty and also on the Institute for Project Management (IPM) faculty. He was named the MCAA 'Educator of the Year' three times (2000, 2002 and 2004) and in 2009 was the recipient of MCAA's highest award, the Distinguished Service Award, the first academic to receive the award.

### **President's Corner**

Happy Holidays Everyone!

It's crazy that we are already in the middle of December and 2019 will be here in a blink of an

**ASHRAE Iowa Chapter** 

www.ashraeiowa.org

- Board of Governors -

eye. December also marks the half way point though our society year, so thanks to everyone who was able to make it out to an event this year. If not, you still have 6 months left in this society year!

I hope you were able to make it up to Ames for our November meeting where we were able to award five \$1,000 dollar scholarships to the following students: Ahmed Bilal, Michael Friest, Wesley Graham, Riley McLaren, and Elizabeth Sesker. If you know or see them around, congratulate them!

Coming up in just a few days is our annual joint chapter meeting with the Construction Specification Institute (CSI) and Sheet Metal Contractors of Iowa (SMCI). We will be meeting at the Downtown Des Moines Holiday Inn on Wednesday, December 12. We will have the honor of hosting past ASHRAE society president Tim Wentz. Tim will give his presentation titled, "The Interface Between Risk and Ethics."

Speaking of past presidents, we invite all past lowa Chapter presidents to join us for our annual past presents photo. It's awesome to catch up with everyone and honor all the volunteer effort that has put in over the years to help our chapter be a success. We can't do it without all of you.

Tjaden Ahrens
Matt Jesson
Matt Peters
Sara Schmerbach

#### - Officers -

President

**Brian Steffens** 

President Elect

David Poetting

Treasurer

Adam Puls

Secretary

Tyson Scheidecker

#### - Committee Chairs -

Attendance

Dan Zaug

Auditing

Joe Moench

**CTTC** 

Matt O'Banion

Peter Ernzen

*eCommittee* 

Jason Kems

Chris Clausen

Education

Kit Cartwright

Matt Gumm

GAC

Unfortunately our January topic fell through, but our BOG team is working hard to come with a great new idea, and I have no doubt they will prevail. Keep the night of January 16<sup>th</sup> open and keep an eye out for the topic and email invites coming soon.

Warm wishes to you and your family this holiday season!

Brian Steffens (<u>bsteffens@shive-hattery.com</u>)

lowa Chapter President 2018-2019

Matt Swenka

<u>Historian</u>

Luke Miller

**Honors & Awards** 

Andrew Pospisal

<u>Membership</u>

Tim Conrad

Product Directory

Holly Elbert

Refrigeration

**Justin Barrett** 

Research Promotion

Michael Gustafson

Ted Gerber

Student Activities

Mike Wolfe

Joe Nielsen

**TEGA** 

Dan Ponxs

**Emmett Konrad** 

YEA

Heidi Turner

AG Fleckenstein

### **Past Presidents**

| Luke Miller 2017-2018        | Verne Stewart 1976-1977   |
|------------------------------|---------------------------|
| Andrew Pospisal 2016-2017    | Curtis Hammer 1975-1976   |
| Matt Gumm 2015-2016          | Ralph Schilling 1974-1975 |
| Justin Barrett 2014-2015     | Donald Bonicamp 1973-1974 |
| Tim Conrad 2013-2014         | Kent Mosher 1972-1973     |
| Matt Jesson 2012-2013        | Thomas Van Hon 1971-1972  |
| Kelly Crow 2011-2012         | Robert McBride 1970-1971  |
| Holly Elbert 2010-2011       | William Whitman 1969-1970 |
| Roger Lesher 2009-2010       | Einar Dahl 1968-1969      |
| Kit Cartwright 2008-2009     | Eugene O'Neil 1967-1968   |
| Jerrod Sieverding 2007-2008  | James Green 1966-1967     |
| Jason Kems 2006-2007         | Neil Hanson 1965-1966     |
| Chuck Heldenbrand 2005-2006  | Bob Flanagan 1964-1965    |
| Jeff Gross 2004-2005         | Lyndon Kelley 1963-1964   |
| Ron Engelhardt 2003-2004     | Elwood Giberson 1962-1963 |
| Dan Zaug 2002-2003           | Vern Polly 1961-1962      |
| Susan Oltrogge 2001-2002     | John Bain 1960-1961       |
| Christopher Nelson 2000-2001 | Crom Campbell 1959-1960   |
| Donald Swanson 1999-2000     | R.T. Howard 1958-1959     |
| Edward Truslow 1998-1999     | W.A Schworm 1957-1958     |
| James Hall 1997-1998         | D.E. Schroeder 1956-1957  |
| Robbin Vannoy 1996-1997      | G.J. Kraai 1955-1956      |
| Mark Conway 1995-1996        | W.E. Nanes 1954-1955      |
| Paul Melton 1994-1995        | J.F. Sandfort 1953-1954   |
| Gregory Maxwell 1993-1994    | R.H. Schnell 1952-1953    |
| Jeffery Hammer 1992-1993     | C.H. McGuiness 1951-1952  |
| Jack Culp 1991-1992          | R.S. Stover 1950-1951     |
| James Lee 1990-1991          | D.E. Wells 1949-1950      |
| Clint Leonard 1989-1990      | D.C. Murphy 1948-1949     |
| Charles Pedersen 1988-1989   | C.A. Wheele 1947-1948     |
|                              |                           |

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

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**

Mark your calendars! The chapter is working hard to put on a great set of events this year and we hope to see you there.

### **Iowa Chapter Future Meetings**

| Date | Location                           | Topic   |
|------|------------------------------------|---|
| 12   | The Legacy Golf Club               | Fall Frolic Golf Outing   |
| 17   | Ramada Tropics                     | Membership & RP Night   |
| 14   | Ames                               | Student Night & Tour  |
| 12   | Holiday Inn                        | SMCI / CSI Joint Meeting  |
| 16*  | Hotel Renevo                       | TBD   |
| 15*  | Hy-Vee Commissary Tour             | Refrigeration Meeting   |
|      |                                    |   |
|      | 12<br>17<br>14<br><b>12</b><br>16* | 12 The Legacy Golf Club 17 Ramada Tropics 14 Ames 12 Holiday Inn 16* Hotel Renevo |

| April | 18* | Val Lanes     | Chapter Meeting and Bowling<br>Tournament |
|-------|-----|---------------|---|
| April | 19* | At Your Desk! | ASHRAE Webcast                            |
| May   | 14* | TBD           | Spring Fling Golf Outing                  |

### **Society & Region Events**

| Month   | Date  | Location        | Topic                  |
|---------|-------|-----------------|------------------------|
| January | 12-16 | Atlanta, GA     | 2019 Winter Conference |
| May     | 2-4   | Milkwaukee, WI  | Region VI CRC          |
| June    | 22-26 | Kansas City, MO | 2019 Annual Conference |

<sup>\*</sup>Tentative dates

### What's New in the Iowa Chapter?

### Student Scholarship Awards

Congrats to all the scholarship award winners!

Pictured left to right (Elizabeth Sesker, Wesley Graham, Michael Friest, Ahmed Bilal)

Not pictured (Riley McLaren)



Research Project Opportunity

\*STILL AVAILABLE\* Seventhwave (formerly Energy Center of Wisconsin) is conducting the **ASHRAE Research Project RP-1814** "Actual Energy Performance of Secondary Schools and Medium Offices Designed to Comply with ASHRAE Standard 90.1-2010."

They have reached out to the ASHRAE lowa chapter and their members for sample buildings for the research project. If you have a project that may be a potential candidate, contact <u>Joe Zhou</u>, senior researcher, with Seventhwave OR fill out a two-minute online survey <u>at this link</u>.

### **Research Promotion**

Please consider donating to RP if you haven't already. With the new year, we have a new goal. Any donation is helpful and appreciated. If you have any specific questions about how your donated money will be used, please contact Michael Gustafson.

| Individual Investors HR = Hanor Roll participants \$100 min |       | 8.9% OF GOAL \$18,225.00 -TO GO |            | Company Investors  HR = Honor Roll participants \$250 min |   |
|---|-------|---------------------------------|------------|---|---|
| Mr. Mark G. Conway  | HR    | \$20,000                        |            | ASHRAE Iowa Chapter                                       | H |
| dr. Roger O. Hill   |       | \$19,500                        |            | 3.35.9.004.00.003.5.5                                     |   |
| Wr. Brian A. Steffens                                       | HR    | \$19,000                        |            |   |   |
| Wr. David Poetting  | HR    | \$18,500                        |            |   |   |
| Wr. Luke Miller   | HR    | \$18,000                        |            |   |   |
| Wr. Kit C. Cartwright                                       | HR    | \$17,500                        |            |   |   |
| Wr. Fred Miller   | HR    | \$17,000                        |            |   |   |
| Wr. Matthew S. Jessen                                       | HR    | \$16,500<br>\$16,000            |            |   |   |
| Wr. Adam Puls   | HR    | \$15,500                        |            |   |   |
| Wr. Daniel L. Panas   | HR    | \$15,000                        |            |   |   |
| Wr. Tyson Scheidecker                                       | HR    | \$14,500                        |            |   |   |
| Wr. Justin J. Barrett                                       | HR    | \$14,000                        |            |   |   |
| Wr. Michael K. Gustafson                                    | HR    | \$13,500<br>\$13,000            |            |   | _ |
|   | HR    | \$12,500                        |            |   |   |
| Mr. Ted Gerber  | - Ink | \$12,000                        |            |   |   |
| \   |       | 411,600                         |            |   |   |
|   |       | \$11,000                        |            |   |   |
|   |       | \$10,500                        |            |   | _ |
|   | _     | \$9,500                         |            |   | _ |
|   | _     | \$9,000                         |            |   | _ |
|   |       | \$8,500                         |            |   | _ |
|   |       | \$8,000                         |            |   |   |
|   |       | \$7,500                         |            |   |   |
|   |       | \$7,000<br>\$6,500              |            |   |   |
|   |       | \$6,000                         |            |   |   |
|   | 8 8   | \$5,500                         |            |   |   |
|   |       | \$5,000                         |            |   |   |
|   |       | \$4,500                         |            |   |   |
|   |       | \$4,000                         |            |   |   |
|   |       | \$3,500<br>\$3,000              |            |   |   |
|   |       | \$2,500                         |            |   |   |
|   |       | \$2,000                         | \$1,775.00 |   |   |
|   |       | \$1,500                         |            |   |   |
|   | 6 0 1 | \$1,000                         |            |   |   |
|   | -     | \$900                           |            |   | _ |

Updated: 06-12-18

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, <u>please contact Michael Gustafson</u>.

#### Thank you for your donation!

### **ASHRAE Society News**

### What's new?

#### **Behind the New Indoor Swimming Pools Chapter**

In response to industry demand and the growing number of natatoriums, the 2019 ASHRAE Handbook—HVAC Applications will include a new chapter dedicated to the design of indoor swimming pools. A member of TC 8.10, Mechanical Dehumidification and Heat Pipes, explains the <u>significance of the new chapter</u>.

ASHRAE and Partners Release 2018 International Green Construction Code

ASHRAE Seeks Third Round of Comments on Legionella Guideline 12

Public Reviews Open for Standards 90.1, 62.1, More

Four Errata Released on Standard 90.1

Direct Evaporative Air Coolers Standard Committee Looking for Members

Call for Members Announced for SPC 40R

Submit Nominations for Standards Achievement Award by End-of-Year

### **Industry News**

#### **Design Considerations In Cold Climates**

By Scott Schuetter, Associate Member ASHRAE, and Scott Hackel, Member ASHRAE Air source variable refrigerant flow (VRF) systems are grabbing a greater share of the market in moderate climates. However, they are not widely implemented in cold climates because they typically lose capacity and efficiency at low ambient temperatures. To overcome this barrier, VRF systems may be supplemented by an additional heat source. Alternately, they can be upgraded to water or ground source systems that are not subject to ambient temperatures. While questions remain regarding how to select, design, and operate VRF systems in colder climates to achieve good energy performance and reduce capacity degradation, we have analyzed several strategies and share our conclusions and observations in this article.

#### Worker Shortage Causes Problems for HVAC Industry

SACRAMENTO, Calif.—The HVAC industry is challenged with meeting the increasing demands for HVAC services while facing a shrinking skills gap. One-fourth of the

workforce will be "retirement age" by 2020, and the industry is predicted to see a 15% growth in the number of jobs created to meet the expected demand for HVAC services and products, according to a new report. The EGIA Foundation, a California-based non-profit devoted to building the home service trades workforce, released a study titled "Bridging the HVAC Employment Gap" that details the level of interest in joining the HVAC industry.

Heat Pump Water Heating Part of All-Electric Housing A utility district and a development company are working to build all-electric homes in California. The homes are set to include heat pump space heating and cooling, heat pump water heating, induction stoves and no natural gas infrastructure. The utility views all-electric new construction and gas-to-electric retrofits as a means to achieve the utility's climate goals: reduce the greenhouse gas emissions required to serve its customers by 90% from 1990 levels by 2050. An ASHRAE Journal article from April 2018 explores a successful surface water heat pump system that was installed at a community college.

Net Zero Schools Hit Performance Goals Five individuals, school districts and school projects have been honored with ZNE School Leadership Awards for innovation and leadership in driving a new zero net energy (ZNE) standard for schools in California. For one school, building performance is a priority for acoustics, lighting and daylighting, indoor air quality and thermal comfort. A dedicated outside air system ensures indoor carbon dioxide levels do not spike, causing students to lose focus. An ASHRAE Journal article from January 2018 focuses on the Advanced Energy Design Guide on zero energy K–12 schools, which provides design and operation guidance.

### **ASHRAE Learning Institute**

CHECK OUL ACHINAL ELEGINING TO HIGHE WALL BY COULDED AVAILABLE OH YOUR COMPUTED.

These courses have been created by HVAC&R professionals using ASHRAE's extensive pool of knowledge and most courses are recognized PDHs by AIA and GBCI (confirm with licensing body for specifics). Course options include:

- Introduction to Refrigerants
- Refrigerant Selection
- Refrigerant Management
- Ethics for the Built Environment Professional Engineer
- Standard 62.1-2013: Natural Ventilation Procedure
- Using Standard 90.1-2010 to Meet LEED Requirements
- Building Information Modeling
- Humidity Control Design: Basic Principles, Loads and Equipment
- Standard 189.1 for High-Performance Green Buildings Energy Efficiency
- School of Hard Knocks: Controlling Moisture & Humidity in Buildings

**Click Here for More Details** 

### **Newsletter Sponsors**







3307 104th Street • Des Moines, Iowa 50322 www.hydronicenergy.com

#### RICK KAPUSTKA

515.250.7120 rick@hydronicenergy.com **BRET WAGONER** 

515.250.6090

bret@hydronicenergy.com





#### INNOVATIVE HVAC SOLUTIONS

1454 30th Street, Suite #207 West Des Moines IA 50266

Ph 515-223-6048 Fax 515-223-7269

info@milltechhvac.com

www.milltechhyac.com



Des Moines, Iowa P.O. Box 1613 \* 50305 510 Murphy St. \* 50309 www.MMSIncOnline.com

#### J. Craig Miller

PRESIDENT

EMAIL - cmiller@mmsinconline.com

office 515.243.4287 + cell 515.249.1859 + fax 515.243.7313

SPECIALISTS IN MEASUREMENT & CONTROL EQUIPMENT FOR INDUSTRY SINCE 1952









Phone: (515) 243-8720 FAX: (515) 243-8714 www.ristandassociates.com

4 Washington Ave. P.O. Box 1807 Des Moines, Iowa 50305





#### www.products-inc.com

1429 2<sup>rd</sup> Ave Des Moines, IA 50314 PHONE (515)288-5838 (800)466-5738 FAX (515)288-2574



SYSTEMS CMB≅ MANAGEMENT 8 BALANCING, INC.



- HVAC System Test and Balance - Air & Water Balancing -HVAC System Commissioning

925 S.E. Olson Drive Waukee, IA 50263

Phone 515-987-2825 Fax 515-987-5036

www.hvactab.com

James E. Hall, P.E. jimh@hvactab.com

Matt Jesson mattj@hvactab.com





















Sponsoring our monthly newsletter is a great way to advertise your business and support your Iowa ASHRAE Chapter. Please consider sponsoring for the 2018-2019 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:

Adam Puls
ASHRAE Newsletter Sponsorship
P.O. Box 3686
Urbandale, IA 50323

Tyson Scheidecker 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:tyson@shive-hattery.com">tyson@shive-hattery.com</a>.



Student night flash backs to sleeping through an important test