This Month at ASHRAE Iowa

December Meeting Information

On Monday, December 16th, we will have our annual joint chapter meeting with the Construction Specification Institute (CSI) and Sheet Metal Contractors of Iowa (SMCI). The lunch meeting will hosted by SMCI and will be held at the Holiday Inn downtown Des Moines. The meeting will feature SMACNA's Executive Director, Eli Howard, and Director of Engineering & Technical Resources, Mark Terzigni, speaking on “HVAC System Effects – Efficient Duct System Selection”.

HVAC System Effect – Efficient Duct System Selection
With the continued focus on high efficiency, today’s presentation on fan system effect and impacts of duct fitting selection will provide key components for a high performance air distribution system. This highly interactive “live” demonstration comparing the performance of various inlet/outlet conditions and how they greatly
impact the overall performance of the fan and system will be covered.

Please register for the meeting ASAP as it is now less than one week away.

Monday December 16, 2019
11:30 a.m. – Registration Opens/Networking
11:45 a.m. – Lunch Buffet
12:15 p.m. – Welcome – Kim Best, Executive Vice President of Sheet Metal Contractors of Iowa
12:20 p.m. – ASHRAE Presentation
12:25 p.m. – Main Program – HVAC Systems Effects – Efficient Duct System Selection with SMACNA’s Executive Director Eli Howard and SMACNA’s Director of Engineering & Technical Resources Mark Terzigni.

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

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President's Corner

Happy Holidays Iowa Chapter! I hope this newsletter finds you well and getting ready for the holiday season.

Thank you to everyone who made it up to Ames for our November meeting. It was great to see such a strong turnout for our presentation and

ASHRAE Iowa Chapter
www.ashraeiowa.org

- Board of Governors -
Matt Jesson
Sara Schmerbach
tour of the Student Innovation Center. We were also honored to award three deserving students with $1,000 scholarships.

Next week we will have our annual joint chapter meeting with the Construction Specification Institute (CSI) and Sheet Metal Contractors of Iowa (SMCI). SMCI will be hosting the lunch meeting on December 16th at the Downtown Holiday Inn. The meeting will feature SMACNA’s Executive Director, Eli Howard, and Director of Engineering & Technical Resources, Mark Terzigni, speaking on “HVAC System Effects – Efficient Duct System Selection”. Please register for the meeting ASAP as it is now less than one week away.

We invite all past Iowa Chapter presidents to join us at the December meeting for our annual past presidents photo. We will also be honoring Brian Steffens for his dedication and services as the Iowa Chapter President last year.

Keep the night of January 22nd open and watch your inbox for information on our January meeting. We are confirming details for this meeting and will have more information out to you soon.

The 2020 ASHRAE Winter Conference is just

Elli Abel
Terence Schafer

- Officers -

President
David Poetting
President Elect
Adam Puls
Treasurer
Tyson Scheidecker
Secretary
Michael Gustafson

- Committee Chairs –

Attendance
Dan Zaug
Auditing
Joe Moench
CTTC
Peter Ernzen
Ted Gerber
eCommittee
Jason Kems
Chris Clausen
Education
Kit Cartwright
Matt Gumm
GAC
Matt Swenka
Historian


around the corner on February 1-5 in Orlando. Visit the conference website for more information. If you plan to be in Orlando, consider attending the Region V & VI Super Bowl viewing party and dinner on February 2\textsuperscript{nd}. You can sign up for the event here.

The members of the ASHRAE Board of Governors would like to extend well wishes to you and your families this holiday season.

David Poetting (david.m.poetting@jci.com) Iowa Chapter President 2019-2020

Brian Steffens Honors & Awards
Luke Miller Membership
Tim Conrad Product Directory
Holly Elbert Refrigeration
Justin Barrett Research Promotion
Tjaden Ahrens Gary Thompson
Student Activities Mike Wolfe
Joe Nielsen TEGA
Dan Ponxs YEA
Heidi Meyer
AG Oviatt Golf Outing Committee
Jeff Hammer
Nathan Edwards

Past Presidents
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

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<td>Tournament Club of Iowa (TCI)</td>
<td>Fall Frolic Golf Outing</td>
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<td>October</td>
<td>23</td>
<td>Hyperion Field Club - Johnston</td>
<td>Ethics / Membership &amp; RP Night</td>
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<tr>
<td>November</td>
<td>19</td>
<td>Ames</td>
<td>Student Night &amp; Tour</td>
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<td>December</td>
<td>16</td>
<td>Holiday Inn (Downtown)</td>
<td>SMCI / CSI Joint Meeting</td>
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<td>January</td>
<td>22</td>
<td>TBD</td>
<td>Building Operators Panel?</td>
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<tr>
<td>February</td>
<td>19?</td>
<td>TBD</td>
<td>Refrigeration Meeting?</td>
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Society & Region Events

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<tr>
<td>February</td>
<td>1-5</td>
<td>Orlando, FL</td>
<td>2020 Winter Conference</td>
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<td>May</td>
<td>7-9</td>
<td>Peoria, IL</td>
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<td>June-July</td>
<td>27-1</td>
<td>Austin, TX</td>
<td>2020 Annual Conference</td>
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What's New in the Iowa Chapter?

Winter Conference Super Bowl Party
If you're going to be attending the 2020 ASHRAE Winter Conference in Orlando, please consider attending the Super Bowl viewing party.
ASHRAE REGIONS V & VI
SUPER BOWL VIEWING PARTY

Join members of ASHRAE Region V and VI as we gather to socialize and watch the Super Bowl. Like the attendees in Miami, all will be dining on Caribbean food. There will also be a cash bar.

Where: Café Tu Tu Tango 8625 International Drive, Orlando, FL 32819
When: Sunday, February 2, 2020 at 6:00 p.m.
Advance Cost: $50/person | www.ashrae6.org/registration
Same-day registration: $60/person at the door

Eric Sturm: esturm@trane.com | Jim Arnold: jarnold@live.com
We presented our custom-built AHU demo rig at the DMACC STEM event on Monday, October 28th. Having a presence at this event was a good way to reach out to students to encourage their engagement in the HVAC industry.
YEA Played Bingo at The Hall
The Young Engineers in ASHRAE (YEA) played Bingo on December 9th at The Hall in Valley Junction. Keep an eye on your email for future events.

Research Promotion

Please consider donating to Research Promotion (RP). With the new year, we have a new goal. Any donation is helpful and appreciated. This year the Honor Roll levels are set at $150 minimum for individuals and $500 minimum for company investors. If you have any specific questions about how your donated money will be used, please contact Tjaden Ahrens.
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 [here](http://ashraerp.com). ASHRAE provides options for you to determine where to place your donation. The Iowa 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 “Iowa 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 Tjaden Ahrens.

Thank you for your donation!

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ASHRAE Society News

Industry News

ASHRAE Standard Updated to Align with Industry’s Evolving Technologies
ASHRAE’s newly updated data centers energy standard includes a reduction of the maximum mechanical load component (MLC) and electrical loss component (ELC) for compliance in order to evolve with the IT industry’s constantly changing technologies. ANSI/ASHRAE Standard 90.4-2019, Energy Standard for Data Centers, establishes the minimum energy efficiency requirements for the design and operation of data centers and includes two key updates. Read more

Astronauts Replace Coolant Pumps on International Space Station
Two astronauts spent more than six hours installing replacement coolant pumps during a spacewalk on Monday. The astronauts attached the 350-lb (159 kg) pump
module to the 6.8 metric ton Alpha Magnetic Spectrometer (AMS), plugged in power and data cables and spliced together eight existing coolant lines. The AMS was not designed to be serviced in orbit, so connecting the coolant lines while working in pressurized spacesuits was especially challenging. Read more

**MIT Creates System that Cools Without Using Electricity**

A new system provides cooling with no electricity by using the process of radiative cooling. The device, which has no moving parts, uses an aerogel insulation that blocks and reflects visible rays of sunlight. The system can keep fruits and vegetables from spoiling and can help double the time the produce remains fresh in remote places where reliable power for refrigeration is not available. Read more

**Retrofitting HVAC Systems Could Create Renewable Energy Opportunities**

Researchers are proposing retrofitting air-conditioning units as integrated, scalable and renewable-powered devices capable of decentralized CO₂ conversion and energy democratization. Adapting air conditioning systems to be able to capture and convert carbon dioxide and water into renewable hydrocarbon fuels can create oil wells. The oil wells can be tapped, shared and stored, with the option for the property owner to receive payment for any excess fed into a renewable oil grid. Read more

**Water Battery Powers Air-Conditioning Systems**

A three-story "water battery" is producing enough energy to power a university's air-conditioning systems, which is reducing its reliance on the grid by more than 40%. The water battery is a thermal energy storage system that uses energy generated by a 2.1-megawatt photovoltaic system to cool 4.5 megaliters of water resting inside a three-story tank. The campus' air-conditioning systems use the cooled water. Read more
ASHRAE Learning Opportunities

Advance your Career with ASHRAE Certified

ASHRAE offers 7 certification programs design professional’s knowledge and skill area. The certifications allow you to stand out to clients and enhance your reputation.

Certifications offered:
- Certified HVAC Designer (CHD)
- High-Performance Building Design Professional (HBDP)
- Building Energy Modeling Professional (BEMP)
- Building Commissioning Professional (BCxP)
- Healthcare Facility Design Professional (HFDP)
- Building Energy Assessment Professional (BEAP)
- Operations & Performance Management Professional (OPMP)

Learn more at: https://www.ashrae.org/professional-development/ashrae-certified

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 2019-2020 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:
Tyson Scheidecker
ASHRAE Newsletter Sponsorship
P.O. Box 3686
Urbandale, IA  50323

Michael Gustafson 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: gustafsonm@thebakergroup.com.

Pictured: ASHRAE golfers demonstrating how not to golf.