April Chapter Meeting Webinar

Online Tech Session

Getting from AEDGs to Zero-Energy Buildings: AIA (Crawley06) GBCI (0920020231)

Drury Crawley, Ph.D.

Buildings account for more than 40% of worldwide primary energy use. ASHRAE, IESNA, USGBC, AIA, and DOE have collaborated on a series of Advanced Energy Design Guides (AEDGs) for significant energy savings beyond Standard 90.1. The guides provide prescriptive packages for each climate zone to reach the energy savings goals of 30% and 50%. AEDGs for 50% savings in five building types were completed in 2014. This presentation provides an overview of the AEDG process as well as examples of packages and case studies from the 50% guides. Also presented are examples of today's zero-energy buildings and the key systems and technologies they employ.

When

Wednesday, April 29th, 2020
3:00 – 4:00 PM CDT

Location/Registration

Please register for Iowa Chapter Meeting on Apr 29, 2020 3:00 PM CDT at:

https://attendee.gotowebinar.com/register/7119799990843033611

After registering, you will receive a confirmation email containing information about joining the webinar.

President's Corner

I hope this newsletter finds you healthy and safe as we all adjust to these difficult circumstances forced upon us by the COVID-19 pandemic. Of course, the health and safety of our members is our highest priority. Our Board of Governors has been working diligently to provide safe, meaningful, and worthwhile Chapter meetings to

ASHRAE Iowa Chapter

www.ashraeiowa.org

- Board of Governors -

Matt Jesson
Sara Schmerbach
Elli Abel
upcoming Iowa Chapter, Region VI, and Society events. This is of course a very fluid situation as the severity of the pandemic changes daily. We will continue to communicate and keep you updated as new information becomes available.

We have canceled the bowling event originally scheduled for April 20th. We hope to bring this fun event back in 2021, so you have plenty of time to work on your bowling game. With the success of our March webinar, we have decided to host another webinar in April in place of the bowling outing. We are very fortunate that ASHRAE Distinguished Lecturer Dru Crawley has once again agreed to give one of his presentations virtually via GoToWebinar. The webinar will start at 3:00 on April 29th with some announcements, followed Dr. Crawley’s presentation on Getting from AEDGs to Zero-Energy Buildings. We are hoping you will register and join us from the comfort of your home or office. This meeting will be free to all ASHRAE members, and there will be 1 PDH available to those who attend. Visit our website to register for the webinar and to read more about Dr. Crawley and his presentation.

We are still optimistically hoping to have our Spring Fling at Des Moines Golf and Country Club once it is safe to do so. Not only is it our main RP fundraiser for the year, but also a chance to connect with colleagues and momentarily get away from the stresses we have all been under the last month. We are working with the golf course to determine if and when the outing should be postponed. Watch for an official announcement on the golf outing in the coming weeks.

The 2020 Region VI Chapters’ Regional Conference (CRC) has been postponed. The CRC Planning Team is working with their Peoria venues to find a date this Fall to reschedule the conference. More information will be shared with the region once details are finalized.

The 2020 ASHRAE Annual Conference and concurrent committee meetings will no longer take place in Austin June 27–July 1. Instead, they will host the 2020 ASHRAE Virtual Conference, presenting the business meetings, technical program, and Society updates in a new and convenient virtual format. Additional information will be available soon.

ASHRAE has been working hard to support its
The ASHRAE Iowa April 2020 Iowa Stalks Newsletter

6/5/2020

Members during these challenging times including allowing free online access to ASHRAE handbooks, offering free online courses, establishing a new Epidemic Task Force, and creating the COVID-19 Resource Page. They have made it a priority to ensure members and industry professionals have easy access to critical ASHRAE technical resources.

Thank you for your patience and understanding during this unprecedented time. We will do our best to keep you informed on Iowa Chapter events as we adjust to the rapidly changing circumstances. As always, we hope that you and your families stay healthy and safe.

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

Past Presidents

- Brian Steffens 2018-2019
- Luke Miller 2017-2018
- 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
- 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
- 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
- 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. 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

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

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Location</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>27</td>
<td>Tournament Club of Iowa (TCI)</td>
<td>Fall Frolic Golf Outing</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>December</td>
<td>16</td>
<td>Holiday Inn (Downtown)</td>
<td>SMCI / CSI Joint Meeting</td>
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<tr>
<td>January</td>
<td>22</td>
<td>Hotel Renovo (Urbandale)</td>
<td>Building Operators Panel</td>
</tr>
<tr>
<td>February</td>
<td>18</td>
<td>Exile Brewing</td>
<td>&quot;Future of Refrigerants,&quot; by Steve Kujak</td>
</tr>
<tr>
<td>March</td>
<td>25</td>
<td>Marriott Downtown</td>
<td>Super-tech</td>
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<tr>
<td>April</td>
<td>29</td>
<td>At Your Computer</td>
<td>MP, RP, &amp; History Project</td>
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Society & Region Events

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Location</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>1-5</td>
<td>Orlando, FL</td>
<td>2020 Winter Conference</td>
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<tr>
<td>October</td>
<td>25-27</td>
<td>Peoria, IL</td>
<td>Region VI CRC</td>
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<tr>
<td>June-July</td>
<td>27-1</td>
<td>Virtual Conference</td>
<td>2020 Annual Conference</td>
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What's New in the Iowa Chapter?

Spring Golf Outing Event May Be Postponed
Sponsorship Registration Now Open

Monday May 18th, 2020 (DATE MAY CHANGE) – 11:00 am Shotgun Start – NOTE THE START TIME!

4-Person Best Ball Tournament
Dinner to follow right after Golf
Door, Pin Event and Place Prizes after dinner

Des Moines Golf and Country Club
1600 Jordan Creek Parkway
West Des Moines, IA 50266
www.dmgcc.com

Pricing:
$130 – 18-holes – 1/2-cart
$70 – dinner
$5 – mulligans

NOTE: You must bring cash – NO CREDIT CARDS WILL BE ACCEPTED AT THIS EVENT. There will be ample opportunities before the event to stock your cart as well as on the course.

Be a Sponsor for the event!
You can sponsor during your golf team registration or right now. The earlier you sponsor, the more publicity you will get. See below for sponsorship levels and our sponsors.

- Silver – $100 – gets you a color sign at a tee box of one of the holes
- Gold – $250 – also gets your name on a sponsorship list at the prize table and sponsors a pin event
- Platinum – $500 – (Maximum of 3) also gets your name at the registration table, sponsors the main door prizes AND ALLOWS FOR SETTING UP AT A TEE BOX TO GREET GOLFERS ALL DAY (This is a new item added for the Platinum level!)

A BIG Thank You to our Spring Fling 2020 Sponsors:
Platinum – $500 (limit 3 – ONLY ONE LEFT!)
Mechanical Sales, Inc.
Victaulic
Gold – $250
Your name could be here!
Silver – $100
Mack McClain Associates

Register a team online and pay through our secure payment system or mail a check to:
ASHRAE Golf c/o Hart-Hammer, Inc.
ATTN: Jeff Hammer
529 Elm St. – PO Box 65517
West Des Moines, IA 50265

See the 2020-05-18-Golf-DMGCC-Flyer for all of the information in a printable version (just don’t mail it in! Register online!)

Golf and dinner Registration Closes May 13th (TENTATIVE) (or when we reach maximum capacity).

- Payment MUST be made prior to registration closing or your spot may be given to next team on the waitlist.
- You must register online – you can mail/deliver a check, just make sure it’s in by the deadline!

Who to contact for help:
If you have questions with the website or registration site, contact Jason Kems or Chris Clausen.
If you have questions about Golf, Dinner or Payments, contact Jeff Hammer.
If you have questions about signs, contact Nathan Edwards.
ASHRAE COVID-19 Resource Page

To view ASHRAE's COVID-19 resource page, click here: https://www.ashrae.org/technical-resources/resources

2020 Product Directory is Complete

Thank you to all sales representatives for advertising. The directory is available in PDF format on our website (Click Here). Printed copies should have already been delivered by mail to all ASHRAE Iowa members and non-members who ordered the directory. If you would like to order additional directories they are $10. Please contact Holly Elbert to order. If there are any questions, or you did not receive your directory please contact Holly at helbert@bbsae.com

Consider ASHRAE eLearing

In light of coronavirus concerns and the impact the pandemic is having on travel, ASHRAE eLearning, a 100% web-based training allowing you to learn at your own pace and when convenient, can be a valuable resource. Courses can be accessed anywhere, anytime, and from any computer with an internet connection. Courses contain interactive exercises that enable you to engage and retain what you have learned. Learn more.

Offerings include these popular course packages:

- Fundamentals: HVAC Systems
- HVAC Control Systems
- System Essentials
- DDC Controls
- Electrical System Design
- Sustainability
- Standard 62.1: Ventilation for Acceptable Indoor Air Quality
- Standard 90.1: Energy Standard for Buildings
- Standard 189.1-2011 - High Performing Green Buildings
- Loads and Modeling

Recently Updated:

- Introduction to HVAC Design (1.5 PDHs)
- Refrigeration System Parameters and Key Performance Indicators (KPIs) (1.0 PDH)

Once enrolled, you have 12 months to complete your training.

Why ASHRAE eLearning?

- Convenient way to learn about new applications and standards
- Easy way to keep up with license and certification requirements
- Approved by AIA and GBCI
- Earn PDHs/CEUs
- Courses created by industry leaders in HVAC&R

For the complete eLearning catalog, please visit https://elearning.ashrae.org/.
Individuals can register online at https://elearning.ashrae.org and immediately gain access. Companies can register employees by contacting elearning@ashrae.org or calling 678-500-3917.

ASHRAE eLearning is an approved Continuing Education provider for the American Institute of Architects (AIA), and a U.S. Green Building Council (USGBC) Education Partner. Continuing Education (CE) hours earned from ASHRAE eLearning may be applied toward maintenance of state-licensed professionals (architects and professional engineers) and LEED credentials.

Thank you,
ASHRAE eLearning

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**ASHRAE Photos Wanted**

Brian Steffens is compiling and organizing all of our pictures for his history project. If anyone has photos from any Iowa Chapter event from any year, please send them to Brian: bsteffens@shive-hattery.com

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**Apply for Regional Historian Position**
ASHRAE Technology Awards

ASHRAE IOWA Members. We are at that time of year again where we ask our Members to submit projects for the ASHRAE Technology Awards. The Technology Awards recognize ASHRAE members who are involved in the design of innovative and energy efficient buildings. Fill out the attached application and submit following the procedure below.

This year’s chapter deadline is **April 3rd**

Projects may be new buildings, existing buildings, or commissioning of existing buildings and are divided into six categories:

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

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**Term:** 3 years, DRC-appointed

**Travel:** CRC, Regional Planning, chapter visits as needed

**Position Description (from the Regional and Chapter Historians Guide, June 2018):**

In June 1978, the position of Regional Historian was created by the ASHRAE Board of Directors and is appointed by the Director and Regional Chair (DRC). Guidelines were established by the Society Historical Committee for the Regional Historians as follows:

1. Aid and encourage the chapter historian and communicate often.
2. Receive and retain chapter publications and minutes of the annual CRC, under the guidance and direction of the DRC. Also, receive copies of communications from headquarters' staff that are sent by the Society to chapter historians.
3. Seek regional sources of artifacts, photographs and documentary articles relating to the HVAC industry through chapter historians.
4. Collect historical pictures and data that could be used for publication from major manufacturers who are willing to furnish them.
5. Make inquiries through chapters as to which libraries have materials, publications and references of interest to our members as well as which libraries would be willing to receive such items.
6. Oversee PAOE points for the current year on the ASHRAE website for Historical that are entered by the chapter historians and enter points that are assigned to the Regional historian.
7. Coordinate time and facilities for the annual CRC with the DRC & General Chair to hold a workshop for chapter historians and encourage historians’ attendance.

   **Note:** The regional historian shall assemble electronic materials for distribution to chapter historians prior to or immediately after the CRC workshop. This is to be used for reference and guidance.
8. Review and seek comments on the individual chapter Gold Ribbon entries, send in entries to Society and present Gold Ribbon Awards at CRC.
9. Maintain and record lists of all members receiving Regional and Society Awards.
10. Maintain a list of all regional officers.
11. Prepare and annually update the history for the region on the Historical Committee’s website.

**Interested? Contact Eric Sturm | esturm@trane.com | (608) 787-3736**
All projects must be complete and a minimum of one year of energy data 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 where winners are then published in the ASHRAE Journal. 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.

More information about the Technology Awards program and submission forms can be found on the Technology Awards page at the ASHRAE Iowa Website. Projects should be submitted electronically to Dan Ponxs. Contact information can also be found on the ASHRAE Iowa Technology Awards page.

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. I encourage all members take a look at their past projects and consider submitting any of them that are innovative or energy efficient.

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. 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!
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

Thermal Comfort Model Measures Body Shape With Sensors
A team at Carnegie Mellon University has created the first model that combines environmental information with data on an individual’s body shape to determine thermal comfort. Information is aggregated to find the temperature that the most occupants possible will find comfortable. The system estimates body shape information from depth-imaging sensors, which are less privacy-invasive than approaches such as cameras. 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 Certifications

ASHRAE offers 7 certification programs that demonstrates a design professional’s knowledge and skills in a practice area. The certifications allow you to standout to potential 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-certification

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
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.