

A Newsletter for the Iowa Chapter of ASHRAE

ASHRAE Iowa Chapter
www.ashraeiowa.org

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 Mike Wolfe

TEGA
 lyhab Hasan

THIS MONTH AT ASHRAE

Student Night in Ames

STUDENT NIGHT

ASHRAE IOWA CHAPTER

www.ashraeiowa.org

Chapter Meeting Schedule:

- 4pm- Student Panel Discussion
- 5pm- Social Hour
 - Drinks Sponsored by Johnson Controls
- 6pm- Dinner Meeting & Scholarship Presentation
- 7pm- Tour
 - ISU Agricultural & Biosystems Engineering Building

SCHOLARSHIP INFORMATION:

Scan QR labels for links to apply!



IOWA CHAPTER
 DUE OCTOBER 15TH



NATIONAL
 DUE DEC 1ST

WEDNESDAY OCTOBER 22ND

Olde Main Brewery, Ames, Iowa

**FREE DINNER!
 FREE DRINKS!
 FREE MEMBERSHIP!***

**GREAT NETWORKING
 WITH INDUSTRY
 PROFESSIONALS!**

**SCHOLARSHIP
 OPPORTUNITIES!**

APPLICATIONS DUE OCTOBER 15TH
 (3) \$1000 SCHOLARSHIPS AVAILABLE
 WINNERS RECOGNIZED AT DINNER

*STUDENT MEMBERSHIP FEE REIMBURSED WITH
 ATTENDANCE TO ONE IOWA CHAPTER MEETING



Join us for an informal panel discussion with industry professionals and learn about ASHRAE related job opportunities and what the real world is all about.

Following that is a social hour, with FREE drinks!
 This is a great networking opportunity!

Then a FREE dinner with brief chapter meeting and presentation of scholarship winners followed by a tour of ISU Agricultural & Biosystems Engineering Building.

For more information about ASHRAE contact our Student Activities Chairs, Holly Elbert, helbert@bbsae.com or Mike Wolfe, wolfem@TheBakerGroup.com

See Page 3 for more details

PAST PRESIDENTS

Tim Conrad	2013-2014
Matt Jesson	2012-2013
Kelly Crow	2011-2012
Holly Elbert	2010-2011
Roger Leshner	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 Zaig	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. McGuiness	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



Hello and happy fall. This time of year brings ASHRAE to mind as we transition from the "A" to the "H". We can experience a very wide swing of outdoor conditions, as the past week proved.

Our new ASHRAE Iowa Chapter year got off to a great start with the Fall Frolic golf outing. Although we were originally scheduled for earlier in the month, Mother Nature had other plans. Thank you to all the participants for being flexible and patient for what turned out to be a wonderful day; weather and otherwise. We need to thank the golf committee for planning and executing another great outing. We look forward to what they have planned for the spring of 2015. Last, but not least, thank you to all of our great local sponsors for

making the event possible.

Coming up this month is our annual student meeting in Ames at Olde Main Brewing. We will start off at 4pm with an industry discussion panel for the students; continue with social hour followed by dinner and the presentation of our chapter scholarships. The final event will be a tour of the recently-completed ABE complex at Iowa State. Make sure you RSVP when you see the meeting announcement.

Keep an eye out for information for our November meeting, which will include an afternoon tech session for 3 PDH's. ASHRAE Distinguished Lecturer Andrew Sharp will be presenting on laboratories. As always, the info will be posted to www.ashraeiowa.org. Hope to see you at a meeting soon!

Justin Barrett
ASHRAE Iowa Chapter
President
2014-15

UPCOMING CHAPTER MEETINGS

October 22nd
Membership Night
and Student Night

Location:
Olde Main
Ames, IA

November 19th
Resource
Promotion & Tech
Session

Location:
Ramada Tropics
Resort
Merle Hay Rd
Urbandale, IA

December 15th
Joint Meeting with
SMCI & CSI. Past
Presidents Meeting.

Location:
Holiday Inn Mercy
Campus

October Meeting (Wednesday the 22nd)



Membership Promotion and Student Night

Schedule (times still to be finalized):

4:00 PM: Industry Panel Discussion with Students

5:00 PM: Social Hour

6:00 PM: Dinner and Meeting

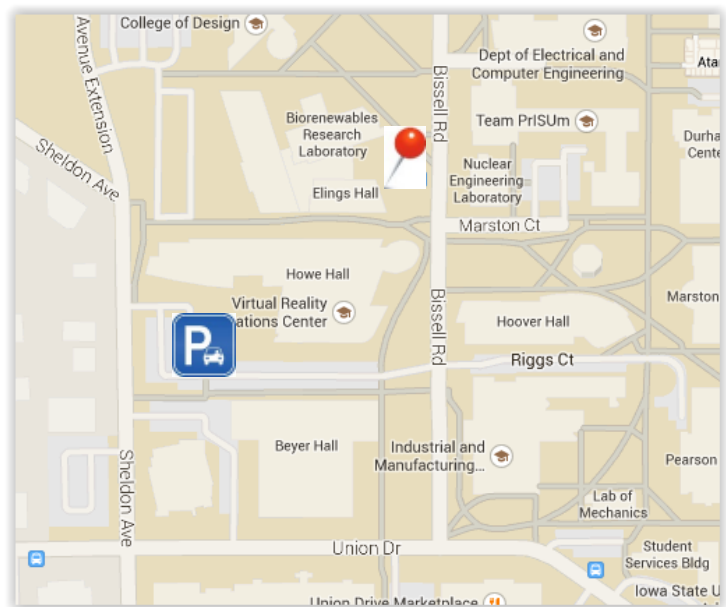
7:00 PM: Jobsite Tour – ISU ABE Building

Location:

Panel Discussion, Social Hour, Dinner and Meeting to be held at Olde Main Brewing Co.



Dinner Location – Olde Main



Campus Tour – Parking & Tour Locations

[“Click Here” for Iowa State University’s Student ASHRAE Chapter](#)

November Meeting (Wednesday the 19th)



Resource Promotion and Tech Session

Schedule (times still to be finalized):

1:00 – 4:30 PM: Tech Session

5:00 – 6:00 PM: Social Hour

6:00 – 7:00 PM: Business Meeting

Location:

Ramada Tropics Resort Conference Center
5000 Merle Hay Road
Des Moines, IA 50322



Abstract for Gordon Sharp's Iowa ASHRAE Tech Session:

A Holistic Overview of Technologies and Strategies to Achieve Deep Energy Reductions in Laboratories

As we strive to build more energy efficient laboratories and vivariums, the most impactful approach is often to reduce the outside airflow. In the last few years new design approaches such as demand based control of lab air change rates, chilled beams (hydronic cooling), and VAV exhaust fan control have been successfully employed to safely reduce these lab airflows to as low as 2 ACH to cut energy consumption significantly. Although these concepts may have been discussed individually in the past, this talk provides a detailed holistic discussion of how these and other energy saving technologies such as heat recovery can be combined to create a whole that is greater than the sum of the parts. A sophisticated lab energy analysis tool that can determine potential energy and capital cost savings will be used to both examine, quantify, and then compare the relative contributions of different energy savings approaches for a typical lab building in some representative climates. Several case studies will be provided including a large near net zero lab project in Abu Dhabi, UAE.



Finally, building HVAC systems naturally can degrade and building energy use can rise over time with maintenance staffs often lacking the time to analyze building performance. One solution that will also be discussed is the use of intelligent agent systems and monitoring based commissioning. These systems can be used to automatically analyze lab building energy and IEQ data, often using approaches like dashboards to help ensure long term energy savings and a healthier indoor environment.

Engineers Club

of Des Moines

Est. 1918

OCTOBER 2014 MEETING NOTICE

DATE: Thursday, October 9, 2014

TOUR: **CSI: IOWA**

The October meeting will feature a presentation and tour of the Iowa Division of Criminal Investigation Criminalistics Laboratory. The DCI Criminalistics Laboratory provides professional forensic scientific services and support to the criminal justice community throughout Iowa. The DCI Lab is Iowa's only full service criminalistics laboratory. It is located in a state of the art facility on the campus of Des Moines Area Community College.

The DCI Criminalistics Lab provides forensic science capabilities to Iowa criminal justice community in the following disciplines: *Arson and Explosives, Crime Scene Response processing, Breath Alcohol, Drug Identification, DNA (casework and offender profiling), Impression Evidence (latent prints, tire tracks, footwear), Firearms and Tool Marks, Photography & Video Enhancement, Questioned Documents, Toxicology and Trace Evidence.* You will see crime scene investigation behind the scenes – such as how DNA crime scene evidence is processed and compared to DNA profiles across the country; and the Firearms Section which conducts ballistics testing and retains over 4,000 firearms – many used in Iowa crimes.

The presentation and tour will be led by Bruce Reeve, DCI Crime Laboratory Administrator

PLACE: Iowa DCI Criminalistics Laboratory
2240 S. Ankeny Blvd (for GPS mapping, use 2240 DMACC Blvd)
Ankeny, IA 50023-9093 (See map)

LUNCH: We will be enjoying a gourmet noon lunch at the Bistro on the DMACC Campus. The Bistro offers this gourmet lunch experience with meals prepared by Culinary Arts students under the Iowa Culinary Institute programs at DMACC. You may order from a menu of selected entrees OR indulge in the Bistro Buffet. Either way, the cost of the lunch will be \$13 and collected by the treasurer. The Bistro is located in DMACC Building 7 – Conference Center. See map – and NOTE that the DMACC South Entrance allows the best access to the Bldg. 7 parking lot since the North access road to Bldg. 7 is under construction.

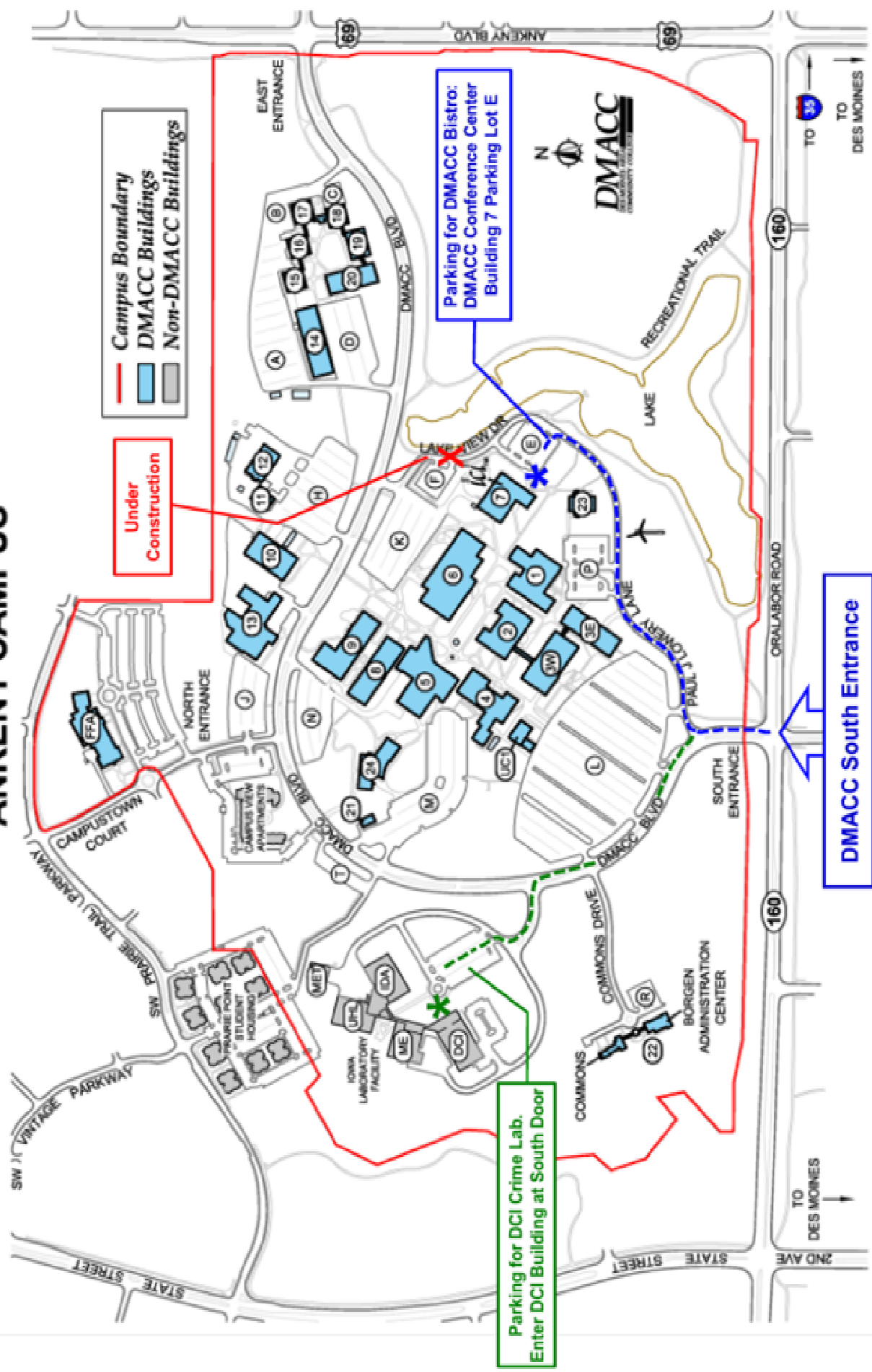
TIME: **12:30 PM** – Gathering Time at DMACC Bldg. 7 / Conference Center lobby
12:40 PM – Lunch served at DMACC Bistro
1:45 PM – Depart for DCI Crime Lab
2:00 PM – DCI Crime Lab Tour Begins

GUESTS: Guests are always welcome and encouraged to attend. You will be called for reservations.

DUES: If you haven't paid your dues for the new Club Year, you may bring your payment to the meeting or mail to our Treasurer: Norm Trentmann, 4121 82nd Street, Urbandale, IA 50322. Annual dues are \$30 for members. Life Members are not required to pay dues but a donation of \$15 is suggested to offset publication and other expenses.

DES MOINES AREA COMMUNITY COLLEGE

ANKENY CAMPUS



Fall Frolic Winners!



A big congratulations goes out to Ted Gerber, Chris Deal, Tyler Luttenegger, and Joel Becklund. They were the winners of the 2014 Fall Frolic held at Echo Valley Country Club. They finished with a score of 14 strokes under par to win the tournament.

Congratulations to the Pin Event Winners as well:

- Closest to the Pin Ridge #6 – Justin Friednoff
- Closest to the Pin Vale # 7 – Eric Biederman
- Longest Putt Ridge #9 – Vince Sanders
- Longest Putt Vale #9 – Jake Newman
- Longest Drive Ridge #4 – Eric Biederman
- Longest Drive Vale #6 – Luke Miller

The golf committee is hard at work trying to find an exciting course for the 2015 Spring Fling. Thank you to all of the participants this fall, we look forward to seeing you at the next chapter meeting.

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 Tim Conrad at tconrad@mechsales.com

The HVAC&R Industry

Amazon Heats Building With Data Center Waste Heat

SEATTLE—In what is believed to be a first-of-its-kind system, Amazon will use the waste heat from a large data center to provide much of the heat in its high-rise campus under construction in downtown Seattle. Once it's implemented, Amazon will save three-quarters of the electricity it would have bought for heat otherwise, according to McKinstry, a Seattle construction and energy services company working on the project. Amazon will begin by heating its offices in the 34-story former Westin Building. The company is planning the eventual creation of a "heating district"—several buildings that will be heated using the waste heat of the data center. The "heating district" will consist of several buildings on the three-block Amazon campus.

Mexico City's New Airport to be 'Most Sustainable Airport Ever Built'

LONDON—When Mexico City's new international airport is completed in 2018, it will be one of the largest in the world, spanning more than half a million square meters (5.4 million ft²). It will also be the most sustainable airport ever built. Instead of a group of warehouse-like terminals, the airport will use a single giant structure wrapped in a unique skin that lets in natural light and air, collects rainwater, and provides views of planes circling the sky. "The vast roof enclosure will be bright and airy, incorporating large areas of translucent and opaque panels, daylight reflectors and building-integrated photovoltaic panels," explains Piers Heath from architectural firm Foster and Partners, one of the designers. "These are all aimed at providing shade and thermal insulation, while also... diffusing natural daylight throughout the terminal, thus reducing the need for supplementary lighting." Support buildings and fields on the site will hold more solar panels, ultimately providing 50 MW of peak power. The airport will also have its own on-site central energy plant.

2014-2015 Meeting Dates

MONTH	GENERAL MEETING	
	Topic	Date
July	-	-
August	-	-
September	Fall Frolic Golf Outing – Echo Valley Golf Club	11
October	Student Night / Membership Promotion	22
November	Research Promotion	19
December	Past Presidents / History (joint w/ CSI and SMCI)	15 (Lunch)
January	Membership Promotion	13
February	Resource Promotion	16 (Lunch)
March	Refrigeration	16
April	ASHRAE Webcast	16
May	Spring Fling Golf Outing	21

Winter Meeting	2015 Winter Conference – Chicago, IL	Jan 24-28
CRC	Region VI CRC – Bettendorf, IA	April 30-2
Summer Meeting	2015 Annual Conference – Atlanta, GA	Jun 27-1

ASHRAE 2014-2015 Research Promotion Fund

ASHRAE Iowa Research Investors 2014-2015		
Individual Investors HR = Honor Roll participants \$100 min	6.7% OF GOAL \$16,792.00 -TO GO!	Company Investors HR = Honor Roll participants \$150 min
Mr. Jeff Lindell (HR)	\$14,000	Systems Management & Balancing Inc (HR)
Mr. Jason Kems (HR)	\$13,500	
Mr. Mark G Conway (HR)	\$13,000	
Mr. Charles S Heldenbrand (HR)	\$12,500	
Mr Rodney Heston (HR)	\$12,000	
Mr Kelly G Crow (HR)	\$11,500	
Mr James Edward Hall (HR)	\$11,000	
Mr. Daniel L Ponxs (HR)	\$10,500	
	\$10,000	
	\$9,500	
	\$9,000	
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	\$3,000	
	\$2,500	
	\$2,000	
	\$1,500	
	\$1,000	
	\$500	
	\$0	

Your contribution puts us closer to achieving our goal. Please send what you can today!

COMPLETE THE INFORMATION BELOW AND RETURN IT WITH YOUR INVESTMENT

Please accept my research investment in the amount of \$_____ CK#_____

NAME_____ PHONE_____

COMPANY_____ FAX_____

ADDRESS_____

CITY_____ STATE _____ ZIP _____

PLEASE CHECK ONLY ONE: () Personal Contribution () Company Contribution

Charge my gift to: () VISA () MC () AE

Credit Card #:_____ Exp. Date:_____

Signature:_____

ASHRAE is a 501(c)(3) organization. Contributions are deductible as allowed by law.
A receipt will be sent to the address listed above.

Send to:
ASHRAE RESEARCH PROMOTION
C/O Dan Ponxs
P.O. Box 3686
Urbandale, IA 50323
PHONE: 515-964-0904
dponxs@woodmaninc.com

Thank you for your donation!



**CONTROL INSTALLATIONS
OF IOWA, INC.**

DAN PHILLIPS
PROJECT MANAGER

6200 Thornton Ave., Suite 190
Des Moines, Iowa 50321
515.558.9300

did: 515.558.9314
fax: 515.558.9301
cell: 515.249.1846
email: dphillips@ci3.com



HART - HAMMER, INC.

Phone (515) 277-6305
Fax (515) 277-3069
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www.harthammer.com
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Andrew Pospisal
ASHRAE Newsletter Sponsorship
P.O. Box 3686
Urbandale, IA 50323

Luke Miller is collecting cards for all of 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: lukem@ajallen.com