

Iowa Stalks Monthly Newsletter - April 2019

This Month at ASHRAE Iowa

2019 April Bowling Tournament

When - What

Tuesday April 23, 2019

- 5:00 pm Announcements and Presentations
 - Luke Miller will present his history project
 - o Tim Conrad will speak on Membership Promotion
 - Michael Gustafson & Ted Gerber will speak on Research Promotion
- 5:30 Bowling Tournament
 - 2-game singles bowling tournament with prizes for 1st, 2nd and 3rd in both YEA and Regular member divisions.

- YEA Event in conjunction with the Chapter event
 - Pizza will be provided by the Chapter and 2 drink tickets will be provided by Trane Iowa

Location

Val Lanes

100 Ashworth Rd.

West Des Moines, IA 50265

MAP

Program

Bowling Tournament!

Cost

Free for ASHRAE Iowa Members and ISU Student Chapter members

Social Sponsor

Trane Iowa

Registration

Registration is open now – it will close on **April 22nd at Noon** so we can get lanes reserved. **Please register if you are coming so we know how many lanes to reserve.**

Please register online if you are attending.

2019 Spring Fling Golf Outing

It's not too early to register!

Thursday May 9th, 2019 – 1:00 pm Shotgun Start – NOTE START TIME!

4-Person Best Ball TournamentDinner to follow right after GolfDoor, Pin Event and Place Prizes after dinner

Echo Valley Country Club

3150 Echo Valley Road Norwalk, IA 50211

www.echovalleycc.com

Pricing:

\$85 - 18-holes - 1/2-cart

\$45 - dinner

\$5 – mulligans

NOTE: You may bring cash or use a credit card at the clubhouse and on the course. There will be ample opportunities before the event to stock your cart – cooler included – 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 also gets your name at the registration table and sponsors the main door prizes

GOLF REGISTRATION WILL OPEN April 4th (Sponsorship registration too!)

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 flyer for all of the information in a printable version (just don't mail it

in! Register online!)

Golf and dinner Registration Closes May 2nd (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!

If you have troubles with the registration site, contact Jason Kems or Jeff Hammer for help.

The 2019 Product Directory is complete!

Thank you to all sales representatives for advertising. The directory is available in PDF format on our website - http://www.ashraeiowa.org/wp-content/uploads/2019/02/2019-

Product-Directory.pdf

Printed copies should be delivered by mail in early March to all ASHRAE lowa members and non-members who ordered the directory. If there are any questions, or you did not receive your directory please contact Holly Elbert at helbert@bbsae.com

President's Corner

Greetings ASHRAE lowa - Who's enjoying the start of this warmer weather?!

It was a great showing at our March meeting with an afternoon of technical sessions from ASHRAE DL, Thomas Lawrence, PhD, PE. Thanks to everyone who made it out to the meeting. If you missed it, you'll have another chance to see Dr. Lawrence. He will be one of the speakers at CRC in Milwaukee this year. We also can't forget to thank Woodman Controls for sponsoring drinks after the afternoon of learning.

As our ASHRAE year is winding down, there's only a few more events for you to take part of, so sign up now!

There will be a couple differences in the annual

ASHRAE Iowa Chapter

www.ashraeiowa.org

- Board of Governors -

Tjaden Ahrens Matt Jesson Matt Peters

Sara Schmerbach

- Officers -

President

Brian Steffens

President Elect

David Poetting

Treasurer

Adam Puls

Secretary

Tyson Scheidecker

society webcast this year. The annual ASHRAE webcast is being offered at two different times. On **April 17** from 6:00 PM to 8:00 PM and on **April 18** from 10:00 AM to Noon. The topic will be "The Future of Refrigerants: Unitary and VRF Systems."

Join us for a night of bowling, food, and drinks on **April 23** at 5:00 PM. We'll meet at Val Lanes in West Des Moines. Hone up those skills as we'll have multiple prizes to give away. Luke Miller will present his history project, Tim Conrad will speak on Membership Promotion, and Michael Gustafson will speak on Research Promotion.

The Spring Fling golf outing registration is now live on our website. Get your teams together, sign up, and sponsor a hole! We will be at Echo Valley on **May 9** for a 1:00 PM start.

Finally, here is my last plug to get signed up for this year's ASHRAE Region VI Chapters Regional Conference (CRC) in Milwaukee, WI. Our chapter has always had great representation, so if you haven't signed up yet, what are you waiting for? It will be held **May 2-4**. Registration and more information can be found here:

https://crcmke.org/.

See you out there.

- Committee Chairs -

Attendance

Dan Zaug

<u>Auditing</u>

Joe Moench

<u>CTTC</u>

Matt O'Banion

Peter Ernzen

eCommittee

Jason Kems

Chris Clausen

Education

Kit Cartwright

Matt Gumm

GAC

Matt Swenka

Historian

Luke Miller

Honors & Awards

Andrew Pospisal

Membership

Tim Conrad

Product Directory

Holly Elbert

Refrigeration

Justin Barrett

Research Promotion

Michael Gustafson

Ted Gerber

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

lowa Chapter President 2018-2019

Student Activities

Mike Wolfe

Joe Nielsen

<u>TEGA</u>

Dan Ponxs

Emmett Konrad

YEA

Heidi Turner

AG Fleckenstein

Past Presidents

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

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

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 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

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 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

Month	Date	Location	Topic
September	12	The Legacy Golf Club	Fall Frolic Golf Outing
October	17	Ramada Tropics	Membership & RP Night
November	14	Ames	Student Night & Tour
December	12	Holiday Inn	SMCI / CSI Joint Meeting
January	23	Hotel Renevo	UFAD Systems
February	12	Hy-Vee Commissary Tour	Refrigeration Meeting
March	18	Operating Room	YEA Spring Outing
March	20	Des Moines Marriott Downtown	Super-tech MP, RP, & History Project
April	18	At Your Desk!	ASHRAE Webcast
April	23	Val Lanes	Chapter Meeting and Bowling
May	9	Echo Valley	Tournament 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

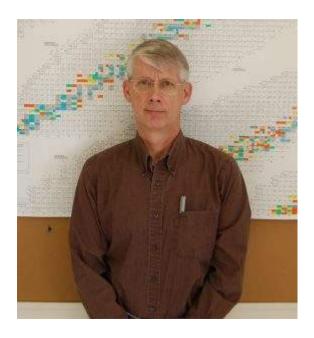
What's New in the Iowa Chapter?

ME's Maxwell wins Honors Parks Award as outstanding faculty member

Mechanical Engineering Associate Professor and ASHRAE Iowa Chapter member Greg Maxwell has been awarded the Honors Parks Award for being an outstanding faculty member who has continually contributed to Iowa State University's Honors Program.

Maxwell will be presented with a plaque and will also be recognized during the program for the Honors Senior Capstone Presentation on May 1 in the Memorial Union's Great Hall. Maxwell was nominated for this honor by John Mobley IV, a junior majoring in physics at Iowa State.

Maxwell, who joined the ME faculty at Iowa State in 1985, will retire at the end of the current semester.



Chapter History Report - Odean "Dean" Jukam

Last year's president and current history chair Luke MIller has put together a great look into Dean Jukam's life and career for this year's history project. One of the more interesting tidbits from Dean's life is that he built his own landing strip next to his house in Menlo, named Jukam's Landing.

View the full report on the ASHRAE Iowa website



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.

HR = Honor Roll participants \$100 min	40.8% OF GOAL \$20,000 \$19,000 \$19,000 \$19,000 \$18,500 \$17,000	\$11,840.55 -TO GOI	HR = Honor Roll participants \$250 SHRAE fowa Chapter SHRAE fowa Chapter CH Michighes Co Inc. CH Michighes Chapter Chapter Chapter Chapter Chapter Chapte	HS
Mr. Rojeer C. Hill Mr. Erick A. Steffens Mr. Erick A. Steffens HR. Hill Mr. David Peterting HR. Mr. Luke Miller HR. Mr. Luke Miller HR. Mr. Erick Amelier HR. Mr. Fred Miller HR. Mr. Fred Miller HR. Mr. Mart S. Lennight HR. Mr. Mart S. Lennight HR. Mr. David L. Pomos HR. Mr. Matter A. Mr. Mr. Mr. Martin A. Burette HR. Mr. Matter A. Burette HR. Mr. Mould Engelharde HR. Mr. Rould Engelharde	\$19.000 \$18.000 \$18.000 \$18.000 \$17.500 \$17.500 \$17.500 \$16.000 \$16.000 \$16.000 \$16.000 \$19.000 \$14.000 \$14.000 \$13.000 \$13.000 \$13.000 \$13.000		Shive-Hattery Group Inc. C1 MrGuiness Co Inc. C2 MrGuiness Co Inc. Central lowar Chapter of Sheet Metals Contractor Raymon-Gonco Air Distribution Equipment Dahl Air Conditioning & Heating, LLC	H
Mr. David Desting	\$19,000 \$18,000 \$18,000 \$17,900 \$17,900 \$16,500 \$16,500 \$15,500 \$15,500 \$14,500 \$14,000 \$14,000 \$13,500 \$13,500 \$13,500		C H McGuiness Co Inc Central Iowa Chapter of Sheet Metals Contractor Raymon-Donico Air Distribution Equipment Dahl Air Conditioning & Heating, LLC	H
Wr. David Poeteting HR Wr. Lule Millier HR Wr. Lule Millier HR Wr. Tree Millier HR Wr. Free Millier HR Wr. Free Millier HR Wr. Addin Puls HR Wr. Addin Puls HR Wr. Daniel L. Poniss HR Wr. Daniel L. Poniss HR Wr. Daniel L. Fonis HR Wr. Daniel L. Fonis HR Wr. July Scholicher HR Wr. Millies AE, Gustafron HR Wr. Millies AE, Gustafron HR Wr. Romald Engelhardt HR Wr. Chris Wr. Nelson HR Wr. Chris Wr. Nelson HR Wr. Chris Wr. Nelson HR	\$18,000 \$18,000 \$17,000 \$17,000 \$16,000 \$18,000 \$18,500 \$14,500 \$14,500 \$13,500 \$13,500 \$13,500		Central lowa Chapter of Sheet Metals Contractor Raymon-Donco Air Distribution Equipment Dahl Air Conditioning & Heating, LLC	н
Mr. Liuke Miller Mr. Liuke Miller Mr. Liuke Miller HR. Mr. Matt S. Jesson HR. Mr. Adam Puls HR. Mr. Adam Puls HR. Mr. Daviet I. Ponns HR. Mr. Tyjons Scheidecker HR. Mr. Tyjons Scheidecker HR. Mr. Tyjons Scheidecker HR. Mr. Tyjons Scheidecker HR. Mr. Tydon Scheidecker HR. Mr. Tydon Scheidecker HR. Mr. Tot Gerber HR. Mr. Tot Gerber HR. Mr. Tot Gerber HR. Mr. Tot Gerber HR. Mr. Chris W. Nelsoon HR. Mr. Typositis HR	\$18,000 \$17,500 \$17,500 \$16,500 \$16,500 \$16,000 \$15,000 \$15,000 \$14,500 \$14,500 \$13,500 \$13,500 \$12,500		Raymon-Donco Air Distribution Equipment Dahi Air Conditioning & Heating, LLC	
Mr. Bit C. Carberight HR Mr. Free Millier HR Mr. Free Millier HR HR Mr. Add Millier HR Mr. Add Mr. Davide L. Pomis HR Mr. Latvini. Navrett HR Mr. Latvini. Navrett HR Mr. Tod Gerber HR Mr. Tod Gerber HR Mr. Tod Gerber HR Mr. Tod Gerber HR Mr. Chris Mr. Nelson HR Mr. Chris Wr. Nelson HR	\$17,500 \$17,000 \$16,500 \$16,000 \$15,000 \$15,000 \$14,000 \$14,000 \$13,500 \$13,500 \$12,500		Dahl Air Conditioning & Heating, LLC	
W. Fred Miller W. Mill's J. Sisson HR W. Mill's J. Sisson HR W. Dasiel L. Poiss HR W. Mill's Alf Gutzfalon HR W. Mill's Alf Gutzfalon HR W. Rowald Engelbar B HR W. Chris W. Nelson HR W. Chris W. Nelson HR W. Chris W. Nelson HR	\$17,000 \$16,500 \$16,000 \$19,900 \$19,000 \$14,500 \$14,000 \$13,500 \$13,000 \$12,500			
Mr. Adam Puls Mr. Adam Puls HR. Adam Puls HR. Adam Puls HR. Adam Puls HR. Adam Puls Mr. Typon Scheddecker HR. Adam I. Barrett HR. Adam I. Barrett HR. Mr. Typon Scheddecker HR. Mr. Stene A. Lee HR. Mr. Chris Mr. Melson HR. Mr. Chris Mr. Melson HR. Mr. Canaled V. Zuag HR. Mr. Canaled V. Zuag HR.	\$16,000 \$15,500 \$15,000 \$14,500 \$14,500 \$13,500 \$13,500 \$13,500 \$13,500		Millennium Technology of Iswa	Н
Mr. Addam Puls HR. Mr. Daniel L. Pomes HR. Mr. Daniel L. Pomes HR. Mr. Saniel L. Pomes HR. Mr. Julin I. Barrett HR. Mr. Julin I. Barrett HR. Mr. Ted Gerber HR. Mr. Rouald Rogelburdt HR. Mr. Rouald Rogelburdt HR. Mr. Chrolis W. Welson HR. Mr. Kind A Roguesta HR. Mr. Roual W. Mr. Daniel V. Zuog HR. Mr. Chamel V. Zuog HR.	\$15,500 \$15,000 \$14,500 \$14,000 \$13,500 \$13,000 \$12,500			
Mr. Dasiel L. Ponss HR Mr. Tyten Schröderker HR Mr. Tyten Schröderker HR Mr. Milchael K. Gustafton HR Mr. Milchael K. Gustafton HR Mr. Ted Gerber HR Mr. Bonald Engelhardt HR Mr. Lamies A. Lee HR Mr. Chris W. Nelson HR Mr. Chris M. Nelson HR Mr. Mich A. Rapostha HR Mr. Carallel V. Zug HR	\$15,000 \$14,500 \$14,000 \$13,500 \$13,000 \$12,500			
Mr. Tyrun Schedecker HR Mr. Javin I. Barvett HR Mr. Javin I. Barvett HR Mr. Stark I. Barvett HR Mr. Total Greber HR Mr. Total Greber HR Mr. Total Greber HR Mr. Total Greber HR Mr. Chris Mr. Melson HR Mr. Chris Mr. Stayoutha HR Mr. Totaled V. Zoug HR	\$14,500 \$14,000 \$13,500 \$13,000 \$12,500			
Mr. Jastin J. Barrett HR Mr. Milchalds Goutafron HR HR Wr. Teld Gerber HR Mr. Bould Rogelbards HR Mr. Bould Rogelbards HR Mr. Brould Rogelbards HR Mr. Strike H. September HR Mr. Christ W. Nelson HR Mr. Kild A Rogelsta HR HR Mr. Kild A Rogelsta HR	\$13,500 \$13,500 \$13,000 \$12,500			_
Mr. Michael K. Gustahon HR Mr. Ted Gerber HR Mr. Ronald Engelhardt HR Mr. James A. Lee HR Mr. Chris W. Nelson HR Mr. Chris W. Nelson HR Mr. Mich A. Rapoushla HR Mr. Caralel V. Zaug HR	\$13,500 \$13,000 \$12,500			
Mr. Ted Gether HR Mr. Round Engelhardt HR Mr. Round Engelhardt HR Mr. Sames A. Lee HR Mr. Chris W. Melson HR Mr. Rich A Majoustia HR Mr. Rich A Majoustia HR Mr. Rich A Majoustia HR	\$12,500			
Mr. Rosald Engelhardt HR Mr. James A. Lee HR Mr. Chris W. Nelson HR Mr. Chris W. Nelson HR Mr. Chris W. Nelson HR Mr. Charlet V. Zaug HR Mr. Daniel V. Zaug HR				
Mr. James A. Lee				
Mr. Chris W. Nelson HR Mr. Rick A Kapustka HR Mr. Daniel V. Zaug HR				
Mr. Rick A Kapustka HR Mr. Daniel V. Zoug HR	\$11,500 \$11,000			
Mr. Daniel V. Zaug HR	\$10,500			
	\$10,000			
Mr. Mark W. Allen HR	\$9,500			- 1
	\$9,000	\$8,159.45		
	\$8,500	\$8,159.45		
	\$7,500			
	\$7,000			
	\$6,500			
	\$6,000			
	\$5,500			-+
	\$5,000			
	\$4,500			
	\$3,500			
	\$3,000			
	\$2,500			-
	\$2,000			
	\$1,500 \$1,000			

Updated: 29-03-19

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 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

Industry News

Active Learning Model Predicts Room Temperature Preferences

Researchers at Purdue University developed <u>a framework</u> for learning personalized thermal preferences. It uses a survey system that can infer room temperature preferences for an occupant in only five to 10 preference queries. The researchers anticipate that the framework could be used to develop intelligent HVAC systems that can respond to an individual's thermal comfort needs. The plan is to make the

framework available as an open-source package in the future. Three of the researchers are members of ASHRAE. Read More

New Polymer Mixture Creates Sensitive Heat Sensor

Scientists have developed an ultra-sensitive heat sensor that can be used in a range of applications including as an electronic skin and temperature exchange in smart buildings. Flexible, transparent and printable, the sensor is based on the fact that certain materials are thermoelectric. The scientists have used screen printing to manufacture a heat sensor, based on the different and complementary polymers. Read More

Energy-Guzzling Hospitals Find Ways to Cut Consumption and Costs

An innovative energy efficiency program run by New Jersey utility PSE&G enables hospitals to use interest-free, on-bill repayment to install energy-saving upgrades.

Life-Cycle Cost for DOAS With VAV

By Brandon Frink, Associate Member ASHRAE

Dedicated outdoor air systems are starting to be used with centralized variable air volume (VAV) systems. This article investigates how adding this system to a traditional VAV system impacts initial investment costs, utility costs and energy use. Read More

This article originally was published in April 2018. <u>Download here</u>. It will be available here through April 17.

ASHRAE Learning Opportunities

2019 Building Performance Analysis Conference
www.ashrae.org/BuildPerform2019
September 25-27 · Denver, Colorado

Unleash your innovative design and modeling skills, collaborate with project team members and showcase your building design to conference attendees!

Sign up NOW for the 5th Annual LowDown Showdown that will take place at the 2019 ASHRAE Building Performance Conference September 25 – 27th in Denver, Colorado.

Here's your chance to join an integrated team that will compete for fun and prizes in the annual LowDown Showdown modeling competition. This year's 2019 Building Analysis Conference (BPAC) will center on the integration of building science into the design process. Innovation in modeling and analysis will be a driving force in defining high performance buildings of the future!

In that spirit, the 2019 LowDown Showdown model building will not only challenge participants to achieve "near net zero" but also to include design and modeling elements to create a resilient building capable of withstanding natural disasters and providing prolonged emergency operations.

And the **2019 model building** is a:

90,000 sf town hall (new construction) located in San Diego, California

The facility will be a multi-functional building, housing many of the cities vital public services including being an Emergency Operations Center in times of disaster or crisis.

Bring your creative ideas and analytic thinking to the table as you design a new town hall for San Diego, California.

Overview

The goal of the 2019 LDSd competition is to engage participants in a collaborative and fun learning experience that explores new advances in building science, modeling and technology. Teams are comprised of building analysts, designers, architects, engineers and other participants. Teams will be responsible for creating the architectural design and a performance analysis model based on model building data. The teams may use any software or a combination of software to complete their projects.

Each team will create and submit a poster of their building design, complete the performance analysis model and results spreadsheet and write a one-page narrative on project workflow. Teams will present their projects at the BPAC conference and be judged by a panel of industry experts who will select the winners. Teams will be judged on seven categories: Creativity, Innovative Approaches, Resilience, Workflow, Energy Use, Teamwork and Presentation.

Sign up now and be assigned to a team OR sign up with your friends and colleagues and create your own team.

The deadline to sign up to participate in the 2019 LowDown Showdown is April 1, 2019.

Newsletter Sponsors







FLUID TECHNOLOGY CORPORATION

Strobic Air Corpo

AADN

HART - HAMMER, INC.

Nailor info@harthammer.com

Phone (515) 277-6305 Fax (515) 277-3069 529 Elm St • PO Box 65517 West Des Moines, IA 50265

www.harthammer.com

Carrier



INNOVATIVE HVAC SOLUTIONS

1454 30th Street, Suite #207 West Des Moines IA 50266 Ph 515-223-6048 Fax 515-223-7269 info@milltechhyac.com

www.milltechhvac.com



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

J. Craig Miller

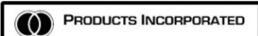
PRESIDENT

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





www.products-inc.com

PHONE (515)288-5838 1429 2nd Ave (800)466-5738 Des Moines, IA 50314 FAX (515)288-2574















- 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

IA 50263

www.hvactab.com

James E. Hall, P.E. jimh@hvactab.com Matt Jesson matti@hvactab.com







We are hiring!









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 lowa. The cost is \$125.

Send payment to: Adam Puls

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: tyson@shive-hattery.com.

