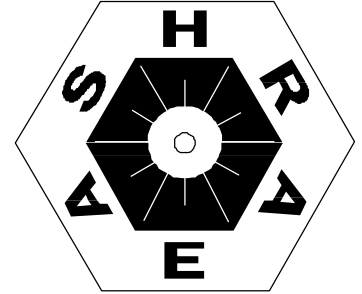
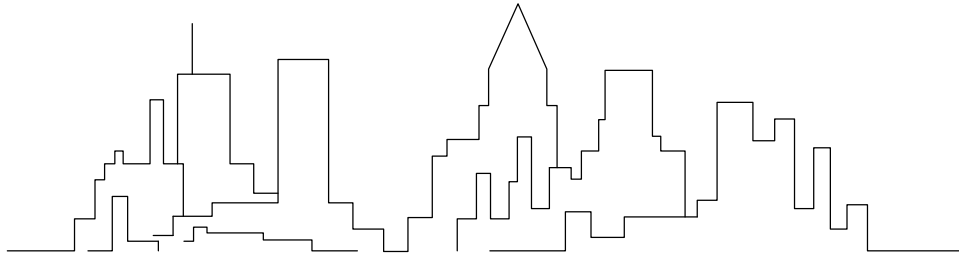


The EXCHANGER



Minnesota Chapter

www.mnashrae.org

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

c/o Karges-Falconbridge Inc., 670 County Road B, Saint Paul, MN 55113

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Minnesota State Faculty Advisor	Patrick Tebbe	507-389-6383		

Presidents Corner

Submitted by Brian Shablow

Dear Constituents,

Throughout the year I have been incorporating general information about ASHRAE – when founded, the mission, vision, and information about our Chapter. The following is OUR ASHRAE Core Values:

ASHRAE CORE VALUES:

ADVANCEMENT – We are committed to advancement of the arts and sciences of HVAC7R for the benefit of society through research, technology development and transfer, and education and training.

LEADERSHIP – We are committed to providing leadership within our industry, and developing leadership qualities in our members.

INTEGRITY – We are committed to honesty in the practice of our profession as embodied in the ASHRAE Code of Ethics.

SERVICE – We are committed to service to our members and to the public.

EXCELLENCE – We are committed to the achievement of technical quality and excellence in our programs, publications, courses and other activities.

Please contact your officers or myself to learn about how to get INVOLVED!

NOMINATIONS:

You should be receiving a ballot in the mail or please visit www.mnashrea.org and vote for your officer in the upcoming year!

EDUCATION SEMINAR:

The last-but-not-least seminar of the 07/08 year!!!! The subject matter is Renewable Energy – BIOMASS, TRENDS WITH EMPHASIS ON WIND POWER, AND COGENERATION SYSTEM TECHNOLOGY. And if you can not attend the morning seminar try to make the Lunch and Chapter Business Meeting to learn about ETHANOL – PROS/CONS.

ADVANCED ENERGY DESIGN GUIDES FREE DOWNLOAD:

Get these guides at, (<http://www.ashrae.org/publications/page/1604>). “The energy savings target of 30% is the first step in the process toward achieving a net-zero energy building, which is defined as a building that, on an annual basis, draws from outside resources equal or less energy than it provides using on-site renewable energy sources.”

YOUNG ENGINEERS IN ASHRAE (YEA):

A special thanks to Ross Nelson and Dan Cebelinski of Harris Companies for organizing the FIRST Minnesota Chapter of ASHRAE Young Engineers of ASHRAE (YEA) event in Minnesota.

“A group of over 20 ASHRAE members under the age of 35 met at the Intermediate District 287 South Education Center in Richfield, MN. “The meeting was a strong success for our initial meeting and we are excited for the next steps. Please watch the Exchanger, the MNASHRAE website, and your email for upcoming event notices. Thanks to all who made this event a success!”

YEA’s don’t forget to subscribe to the “YEA Connection” (http://cms.ashrae.biz/yea_connection/index.php).

Hope to see you in April! Wish all are well, doing good work, and keeping in touch via www.mnashrae.org !

Chapter Information

Year of the Engineer

Submitted by Ross Nelson

The Minnesota Chapter of ASHRAE held the first Young Engineer of ASHRAE event in Minnesota on March 5, 2008. The group of over 20 ASHRAE members under the age of 35 met at the Intermediate District 287 South Education Center in Richfield, MN. Project engineer Paul Dvorak led a tour of the facility and discussed the unique mechanical design and systems used to pursue LEED certification for the facility. Following the tour, Ross Nelson led a presentation on where the Minnesota Chapter is headed with YEA and the group shared some pizza and had an opportunity to mingle with other event attendees. The meeting was a strong success for our initial meeting and we are excited for the next steps. Please watch the Exchanger, the MNASHRAE website, and your email for upcoming event notices. Thanks to all who made this event a success!

MASDeC Green Product Directory Update

Submitted by Leighton Deer

The first generation of the MASDeC's Green Product Directory has been a success, as over 200 individuals have visited the directory since it's release in the Fall. Almost 100 products and links are included in the directory to assist the engineering community in energy efficient and sustainable engineering design.

Since it's inception, the Green Product Directory has received requests to include additional products in the directory. For those who would like to submit a product for inclusion in the spring MASDeC Green Product Directory and who have not yet

done so, **the deadline for submissions is April 14th**. The MASDeC committee will then review all submitted product information to confirm its applicability for sustainable engineering and posting to the website in May.

To view the current directory or to learn more about how the product directory is organized, go directly to www.mnashrae.org/green_product_directory.html or through the MN ASHRAE Chapter website at www.mnashrae.org. If a product would like to be included in the directory, please send all brochures, case studies, or technical data to GreenProductDirectory@mnashrae.org."

Local Technical and Engineering Talent

Submitted by Steve Schreurs

Your Minnesota Chapter sponsors three ASHRAE student branches at Dunwoody College, Minnesota State University Mankato and the University of Minnesota, Institute of Technology. A number of ASHRAE student members at these schools are looking for internship opportunities this summer. Others are nearing graduation and seeking entry level positions in the HVAC industry.

Each of these schools maintains a student career service and placement office that can be accessed at the college websites. The career services allow you to view student resumes and post job openings. Use a search engine like Google to locate the college websites and the associated career services. You may also wish to contact our student branch advisors as well at:

Chuck Taft at Dunwoody College - cghtaft@peoplepc.com

Patrick Tebbe at Minnesota State University Mankato – Patrick.tebbe@mnsu.edu

Tom Kuehn at the University of Minnesota - kuehn001@maroon.tcmn.edu

By working together we can create opportunities for the new generation of HVAC specialists that will carry the torch when it comes time for us to move on.

Society Information

ASHRAE Can Help Students with Internship Possibilities

ASHRAE offers an internship program for ASHRAE student members and employers (seeking student interns from engineering, architectural, or construction management programs).

The purpose of the program is to place ASHRAE student members in industry internships. Employers can post their available internships,

and student members can research and apply to the companies directly for positions meeting their search criteria.

Why wait? Post your available internships now and be a part of developing the future leaders of the HVAC&R industry!
You can make a difference in the future of an ASHRAE student member.

Go to: <http://www.ashrae.org/students/page/955> for more information.

Region VI Chapter Regional Conference hosted by the Illinois Chapter of ASHRAE

The 2008 CRC will be held May 15, 16 & 17th at the Eaglewood Resort and Spa in Itasca, Illinois. The resort is conveniently located 35 minutes West of Chicago directly off of I-355 and I-290 and only 20 minutes from Chicago O'Hare International Airport.

The Friday technical focus for the conference will be the Design of Geothermal Heat Pump Systems for Commercial and Institutional Buildings presented by industry expert Dr. Steve Kavanaugh. Dr. Kavanaugh is a Professor of Mechanical Engineering at the University of Alabama. He has been involved in ground source heat pump research and development for 20 years. The technical session emphasis will be focused on providing practical design knowledge. Professional development hours are available for this presentation. An optional nine-hole golf event will follow and we'll cap off the day with dinner. Regional business meetings will kickoff Thursday afternoon and conclude Saturday afternoon. Chapter training seminars will be held Saturday morning followed by the Awards Luncheon.

Registration is now open on our website <http://crc.ashrae6.org>. Hotel rooms may be booked at a rate of \$140/night through Eaglewood Resort, please contact them at (877) 285-6150 and mention you will be attending the ASHRAE Regional Conference. If you have questions please email crc@ashrae6.org or contact conference Chair Mark Hegberg, mark.hegberg@itt.com or (847) 983-5708.

Upcoming Events

Minnesota Chapter Meeting & Event Calendar

October 9th, 2007 Dinner

Meeting Topic: Tour — Energy High Bridge
Plant — Tour at 5 pm — Dinner at 6:30

-Sub Topic Student Night

October 31st, 2007 Seminar

Joint Venture w/ AEE — 7 Seminars and
Product Show

November 13th, 2007 Lunch

Technical Committee Review

—Sub Topic Research Promotion

December 11th, 2007 Seminar

Meeting Topic: MASDeG

—Sub Topic Membership

January 8th, 2008 Lunch

Meeting Topic: To Be Determined

-Sub Topic History

February 12th, 2008 Seminar

Refrigeration Seminar

March 11th, 2008 Lunch

Meeting Topic: To be determined

April 8th, 2008 Seminar

Meeting Topic: Education Seminar

May 13th, 2008 Lunch

General Business Meeting

-Sub-topic: Installation of Officers/Past
Presidents Day/History

June 9th, 2006

Golf Outing

Northern Lights Chapter

To Be Announced

Rochester Section Schedule

To Be Announced

ASPE Meeting Schedule

The Chapters meet's on the 3rd Wednesday
of every month @ 11:30 am - 1:30 pm
Cedars Hall
602 University Ave. NE
Mpls. MN 5 5413

Always consult

<http://www.aspe.org/Minnesota/>

For the latest information

March 19th — Design and Application of
Roof Drains

April 16 - To Be Determined

May 21 - Cast Iron Piping Joining
Methods

Professional Directory



Energy Efficient Resources
PO Box 49813
3140 104th Lane
Blaine, MN 55449

Providing
High Efficiency
HVAC Systems
MN, ND, SD & WI

Phone: 763-786-3700
Fax: 763-398-3915
Web-Site: www.eerhvac.com

ClimateMaster, ClimateCraft, Chandler, DesChamps Technologies, Hays Fluid Control
E-Tech, VTAC, HestCraft, USA Coil and Air, M&I, RenewAire and Williams Comfort

**2007-08 Student Dinners
Graciously Sponsored by:**

TO BE DETERMINED!

Space for Rent

Space for Rent

**Publication Deadline for the
Next Exchanger: April 18, 2008**
All submissions must be in electronic format and should be emailed to the
Editor: Daniel Chudecke – dchudecke@mulcahyco.com

ñ ñ Society and/or Chapter dues Paid?

First **Yes/No** on Mailing Label = Society Dues

Second **Yes/No** on Mailing Label = Chapter Dues

**ATTACHED: April Education Seminar
Golf Outing Information**

2008 EDUCATION SEMINAR: *Renewable Energy Sources and Strategies*



**Tuesday,
April 8, 2008**

8:15 AM - 1:30 PM

**Doubletree Park Place Hotel
1500 Park Place Blvd.
Minneapolis, MN 55416
(952) 542-8600**

SEMINAR AGENDA

TIME	TOPIC
7:30 to 8:15	Registration
8:15 to 9:15	Biomass as a Source of Renewable Energy <ul style="list-style-type: none"> • What is it and how does it work as fuel? • How is it produced and implemented? • Potential challenges of using biomass Speaker: Doug Maust, HGA, Minneapolis, MN
9:15 to 9:30	Break
9:30 to 10:30	Trends of Renewable Energy with an Emphasis on Wind Power <ul style="list-style-type: none"> • Wind power plant and its impact on utility costs • Case study of wind power plant in southern Minnesota • Regulatory requirements and the future of wind power Speaker: Steve Mudd, Xcel Energy, Denver, CO
10:30 to 10:45	Break
10:45 to 11:45	Cogeneration System Technology <ul style="list-style-type: none"> • Equipment design, sizing and applications • Power plants and use of all available energy • Regulatory requirements and business challenges Speaker: Jerry Peterson, Johnson Controls, Minneapolis, MN
11:45 to 12:30	Lunch and Chapter Business Meeting
12:30 to 1:30	Ethanol as a Source of Energy: Pros and Cons <ul style="list-style-type: none"> • Ethanol production process • Regulatory requirements and the future of ethanol processing • Ethanol's impact on the U.S. economy Speaker: Bob Sather, Ace Ethanol, Stanley, WI

REGISTRATION INFORMATION

ASHRAE CHAPTER MEMBER:
NON MEMBER:
ASHRAE STUDENT MEMBER: .

ENCLOSED IS MY CHECK FOR \$100
ENCLOSED IS MY CHECK FOR \$130
FREE

A LATE FEE OF \$30 WILL BE ADDED TO THE ABOVE FOR REGISTRATION AFTER APR. 4, 2008.

THE COST OF LUNCH, CHAPTER BUSINESS MEETING AND LUNCHEON SPEAKER IS **ONLY \$35.**

VENDOR/EXHIBITOR TABLE TOP DISPLAY

FOR \$250 (INCLUDES ONE LUNCH AND \$175 FOR ASHRAE RESEARCH)
ONLY 6 TABLES ARE AVAILABLE: FIRST COME, FIRST SERVED!
(EMAIL MARK MUHLSTEIN AT mark@mmstwincities.com FOR A TABLE RESERVATION)

REGISTRATION FEE INCLUDES

LUNCH, CHAPTER BUSINESS MEETING, 4 PRESENTATIONS AND MORNING BREAKS

CONTINUING EDUCATION

A TOTAL OF 5 (FIVE) PROFESSIONAL DEVELOPMENT HOURS (PDHs) ARE AVAILABLE

REGISTRATION FORM

MAKE CHECKS PAYABLE TO: **MINNESOTA ASHRAE**
2008 EDUCATION SEMINAR
TUESDAY, APRIL 8, 2008

ENCLOSED IS MY CHECK FOR \$ _____

I AM AN ASHRAE CHAPTER MEMBER _____ I AM A STUDENT MEMBER _____

**REGISTRATION MUST BE RECEIVED BY FRIDAY, APRIL 4, 2008
TO AVOID A LATE FEE OF \$30 AND TO ENSURE YOUR SPOT!**

NAME: _____ COMPANY: _____

PHONE : _____ EMAIL: _____

SEND REGISTRATION TO:

Mark Muhlstein, Midwest Mechanical Solutions
5831 Cedar Lake Rd
Minneapolis, MN 55416
FAX: 952-738-5228

YOU CAN ALSO REGISTER ELECTRONICALLY (THE SUSTAINABLE WAY):

Email: mark@mmstwincities.com OR

Register online at www.mnashrae.org (and pay with a credit card!)

NO SHOWS WILL BE BILLED FOR THE SEMINAR, SO PLEASE PLAN ACCORDINGLY!



MINNESOTA CHAPTER
AMERICAN SOCIETY OF HEATING, REFRIGERATING AND
AIR-CONDITIONING ENGINEERS, INC.

**41st ANNUAL GOLF OUTING
MAJESTIC OAKS GOLF COURSE**

WEDNESDAY, JUNE 4TH, 2008

SPONSORSHIP INVITATION

Once again it's your chance to show your support for ASHRAE research and our scholarship fund and simultaneously promote your company at our 41st Annual Golf Outing. As in the past several years, companies will be allowed to sponsor individual holes at this year's tournament. For a donation of \$175.00, we will provide a sign that will be placed at a tee box for the purpose of promoting your company's products or services. Or take advantage of our "Second hole special": for an additional \$100.00, we'll provide two signs promoting your company, one on each course.

If you wish to sponsor a hole, please fill out the form below and return with a check made out to MN ASHRAE to Don Smith at Automated Logic - Twin Cities.

PLEASE NOTE: NO MECHANICAL EQUIPMENT DISPLAYS WILL BE ALLOWED!!

Yes! I would like to sponsor a hole (or two) at the ASHRAE Golf Outing. Enclosed is my check for:

\$175.00 single hole sponsorship; or \$ 275 to sponsor a hole on each course.

Make checks payable to: Minnesota Chapter ASHRAE.

NOTE: ALL CHECKS MUST BE "IN HAND" BY May 30, 2008!!

CONTACT:

NAME _____

EMAIL _____

PHONE _____

COMPANY:

NAME _____

ADDRESS _____

(All money will go to the ASHRAE Scholarship and Research funds)

Mail to: Don Smith, Automated Logic - Twin Cities

2611 Hamline Ave. N, Suite 150 Roseville, MN 55113

(Phone: 651-697-7226; Fax: 651-697-7201; email: dons@alctwincities.com)



MINNESOTA CHAPTER
AMERICAN SOCIETY OF HEATING, REFRIGERATING AND
AIR-CONDITIONING ENGINEERS, INC.

41st ANNUAL GOLF OUTING
MAJESTIC OAKS GOLF COURSE

Wednesday, June 4th, 2008

GOLF / DINNER RESERVATION FORM

SHOTGUN START AT 1:00 PM
COCKTAIL HOUR: 5:00 - 6:00 PM

LUNCH - OPENS AT 11:00 AM
DINNER AT 6:00 PM

Fill in your foursome below and mail with check payable to:
Minnesota Chapter ASHRAE

Send to:
2008 ASHRAE Golf Outing
c/o Mulcahy Company
2700 Blue Water Road, Suite #100,
Eagan, MN 55121
Attn: Laura Citrowske;
e-mail: lcitrowske@mulcahyco.com
Call 651-686-8580 or Fax: 651-686-8588

All reservations must be in to Mulcahy Company WITH CHECK by JUNE 2, 2008!!
Please send your reservations in early!! (No golf packages without dinner.)

	FOURSOME (PAIRINGS BY COMMITTEE IF LESS THAN FOUR)	GOLF/CART LUNCH/DINNER \$105 / PERSON	DINNER ONLY \$35 / PERSON
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
TOTALS	(GOLF/CART/DINNER & DINNER ONLY)	_____	_____

CHECK ENCLOSED FOR \$ _____ Note: Make checks payable to **Minnesota Chapter ASHRAE**. Checks will be deposited as received. NOTE: YOUR CHECK MUST BE "IN HAND" BY JUNE 2nd !!

Name/Phone Number to contact if necessary: _____

If you wish to make a donation or have any questions, contact any committee member:
Jim Burns at: 651-686-8580 Don Smith at: 651-697-7226
Brent Kellum at: 763-553-5235

Cash / Prize Donation by _____ Amount \$ _____

