

Rocky Mountain ASHRAE



VOLUME 53, NUMBER 4

DECEMBER 2011

EDITOR: MEGAN VAN WIENEN

DECEMBER MEETING

Denver Meeting Information

DATE: Wednesday, December 7, 2011

TIME: 11:30 PM Registration
12:30 PM Program & Lunch

LOCATION: Blake Street Tavern
2301 Blake St
Denver, CO 80205

RSVP: Jessie Jones jjones@rmhgroup.com

COST: \$25 Rocky Mtn Chapter Members
*Reservation made by 12:00 PM 12/5
\$35 Non-members and late reservations
\$20 Students

Denver Rescue Mission - Food Drive

Each year as part of the Annual Summer ASHRAE Society Meeting, ASHRAE selects a local Sustainability Project for members to volunteer their time and services. The Rocky Mountain chapter has selected the Denver Rescue Mission for our 2013 Sustainability Project. In an effort to raise awareness about the project, and to help with a need of the DRM, we are asking members to donate non-perishable food items. The following items are particularly needed: canned fruits, canned vegetables, stuffing mix, canned pumpkin, canned cranberries, instant potato mix, canned soup, peanut butter, canned tuna and macaroni and cheese mix.

For every item brought to the December 7th chapter meeting, one ticket will be given for a chance to win the monthly Research Promotion raffle.

“The History of Magnetic Bearings and Their Current Application to HVAC Equipment”

This month's ASHRAE meeting will cover the history of magnetic bearing technology going back to the Manhattan project to present day. Utilization of magnetic bearing chillers allows the system to be oil free so discussion will cover how this maintains the efficiency of the chiller system. ASHRAE 90.1 minimum efficiencies will be discussed along with how IPLV is calculated. Finally he will discuss ARI 550/590 on chiller testing standards.

Joe Buffalin is the Western Regional Sales Manager for McQuay International. He has over 30 years of experience in the HVAC industry and specializes in the application of HVAC equipment to total project designs with an emphasis on optimized building performance.

Table of Contents

PRESIDENT'S MESSAGE	2
ROCKY MOUNTAIN ROSTER	3
ASHRAE RESEARCH	4
SUSTAINABLE ENGINEERING COMMITTEE	7
YEA	9
MEMBERSHIP PROMOTION	10
ASHRAE SOCIETY NEWS AND PRESS RELEASES	12

PRESIDENT'S MESSAGE

Dear Rocky Mountain ASHRAE:

First off, I would like to thank Bill England from Flow Design Inc for presenting at our meetings in November. The chapter will be planting a tree via the Mile Hi Million initiative in the name of each of the speakers this year. The turnout for the meetings continued to provide strong numbers for the chapter.

For those of you who were not able to attend November's dinner meeting I wanted to let you know that we gave out four \$1,000 scholarships to some very deserving students.

It is my honor to invite everyone to our annual ASHRAE Past President's Appreciation event. This is a lunch meeting, in Denver only, where we strive to show our appreciation every year to those who have held our highest offices. As I look at the list of past presidents, I am humbled by the leadership level each has contributed to our industry.

Past President's Month is an opportunity for the chapter to buy our past leadership lunch and to recognize them for their services and contributions to the Rocky Mountain Chapter. It's also a great opportunity to meet the members that have shaped the chapter for where we are today. I hope to see you there!

Please note that we will also be hosting a food drive benefiting the Denver Rescue Mission. Be on the lookout for some announcements regarding the food drive. Please plan on bringing any item that you can for the December meeting.

It's our intent to continue providing relevant topics for educational purposes to our members and guests. If there is a particular topic that you think would be beneficial, please let me know and we'll do our best to include it in this year's presentations. At the very least, we can plan ahead and have it scheduled for next year.

Be on the lookout for YEA (Young Engineers in ASHRAE) Social Hours. Whether you're recognized as a YEA individual we encourage you to participate in this event.

If you have any questions or concerns, please do not hesitate to contact me. Thanks a lot and have a great day!

Happy Holidays,

Adam Bishop

Chapter President
Rocky Mountain Chapter of ASHRAE

ROCKY MOUNTAIN ROSTER

Rocky Mountain ASHRAE 2011 - 2012 Board of Governors

Title/Committee Chair	Name	Email	Phone
President	Adam Bishop	adamb@cfmcompany.com	303.607.4438
President-elect/Tech Conf.	Michelle Swanson	mwsanson@rmhgroup.com	303.239.0909
Vice President/CTTC Chair	Jon Rundquist	jonathan.e.rundquist@jci.com	303.904.7923
Secretary	Jessie Jones	jjones@rmhgroup.com	303.239.0909
Treasurer	Mike Harrington	mharrington@setpointsystems.com	303.733.2300
Newsletter Editor	Megan Van Wieren	MeganLVanWieren@eaton.com	303.974.1230
Past President	Ken Urbanek	kurbanek@mkkeng.com	303.796.6000
Director	Aaron Zimmerman	azimmerman@mkkeng.com	303.796.6088
Director	John Stumpf	jstumpf@CarrierWest.com	720.472.0422
Northern Section Chair	Mike Fulton	mfulton@westernmechanicalsolutions.com	720.934.8273
Membership	Chris Garofoli	CGarofoli@victaulic.com	303.396.9006
Historian	Dale Eismueller	dale@werc.com	303.406.4080
Website	Tony Anderson	tanderson@airpurificationcompany.com	
Student Activities	Craig Wanklyn	craig.wanklyn@me-engineers.com	303.421.6655
Sustainable Engineering	Celeste Cizik	CelesteLCizik@eaton.com	303.974.1212
Government Activities	Celeste Cizik	CelesteLCizik@eaton.com	303.974.1212

ASHRAE RESEARCH – 2011-2012 UPDATE



2012 Golf Tournament – Save the Date!

The 2012 Golf Tournament to support ASHRAE Research and the Rocky Mountain research promotion 2011-2012 goals will take place at the Hiwan Golf Club.

DATE - Monday June 18, 2012,

REGISTRATION - 11:30 AM

SHOTGUN START - 1:15 PM

THANK YOU to all of our Research Promotion donors from 2010 - 2011 we raised \$62,616 for research last year, we will be having donor recognition night at the December meeting. Please consider giving to the 2011 - 2012 campaign as we are hoping to get the Rocky Mountain chapter to be the highest fundraiser in all of society. We were less than \$6,000 away last year, let's blow by everyone and hit the goal of \$75,000 this year.

Don't Wait, Please Donate for the 2011-2012 ASHRAE Year

Mail Check To:

ASHRAE RESEARCH
c/o The RMH Group
12600 W Colfax Ave, A-400
Lakewood, CO 80215

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

* Individual contributions of \$100 or more and Corporate contributions of \$150 or more receive this year's Commemorative Coin And Honor Roll Contribution status.

Name: _____

Company: _____

Address: _____

Telephone: _____

INDIVIDUAL	\$25.00	\$50.00	\$75.00	\$100.00
CORPORATE	\$75.00	\$100.00	\$175.00	\$250.00

Other: _____

Other: _____

























Or Contact Michelle Swanson at: 303-239-2724



ROCKY MOUNTAIN CHAPTER

ASHRAE RESEARCH – DONOR LEVELS

ASHRAE RESEARCH DONOR LEVELS AND RECOGNITION

Presented Golden Circle Commemorative Sculpture							
Individually recognized at President's Luncheon*							
Invited to President's Luncheon*							
Invited to Board of Directors Luncheon*							
Listed on special Display at President's Luncheon*							
Group photo published in spring issue of ASHRAE Insights							
Receives personalized shadowbox plaque							-----
Listed on RP Display in Registration							
Receives Gold ASHRAE Commemorative Coin and Plaque							
Receives Silver ASHRAE Commemorative Coin and Plaque					-----	-----	-----
Receives Bronze ASHRAE Commemorative Coin and Plaque				-----	-----	-----	-----
Receives Antique ASHRAE Commemorative Coin and Plaque			-----	-----	-----	-----	-----
Receives blue desktop coin holder		-----	-----	-----	-----	-----	-----
Listed in annual Investor Honor Roll							
	Honor Roll Donor \$150- \$249	Major Donor – Antique \$250- \$499	Major Donor – Bronze \$500- \$999	Major Donor – Silver \$1000- \$4,999	ASHRAE Associate \$2,500- \$4,999	ASHRAE Partner \$5,000- \$9,999	Golden Circle Donor \$10,000+

SUSTAINABLE ENGINEERING COMMITTEE

December SEC Meeting

DATE: Wednesday, December 21, 2011

TIME: 12PM – 1PM

LOCATION: TBD

RSVP: Celeste Cizik
CelesteLcizik@eaton.com

The Sustainable Engineering Committee is committed to advocate sustainable design, construction and operation to our members, the industry and our community through advocacy group meetings and educational seminars. We strive to promote sustainable practices at all ASHRAE events and sponsored activities.

This committee meets once a month for planning and coordination. If you have questions about the committee, please contact Celeste Cizik at sustainable@rockymtnashrae.com.

2013 ANNUAL MEETING SUSTAINABILITY PROJECT & DECEMBER FOOD DRIVE

December Food Drive | Denver Rescue Mission

Each year, ASHRAE selects a Sustainability Project for members to volunteer their time and services. This project traditionally is done for a non-profit organization that would significantly benefit from energy efficiency upgrades and improved systems. Please help the Rocky Mountain Chapter of ASHRAE support the Denver Rescue Mission Lawrence Street facility. As part of the 2013 Annual ASHRAE Society Meeting, the Rocky Mountain chapter has selected the Denver Rescue Mission for our Sustainability Project.

If you or your organization would like to assist in the 2013 Annual Meeting Sustainability Project, please contact Brian Lynch at 720.472.1037 or BL@westernmechanicalsolutions.com.

Acceptable Food Drive Items

In an effort to raise awareness about the project, and to help with a need of the DRM, we are asking members to donate non-perishable food items. The following items are particularly needed:

- Canned fruits
- Canned vegetables
- Stuffing mix
- Canned pumpkin
- Canned cranberries
- Instant potato mix
- Canned soup
- Peanut butter
- Canned tuna
- Macaroni and cheese mix

For every item brought to the December 7th chapter meeting, one ticket will be given for a chance to win the monthly Research Promotion raffle.

GREENING OUR MEETINGS

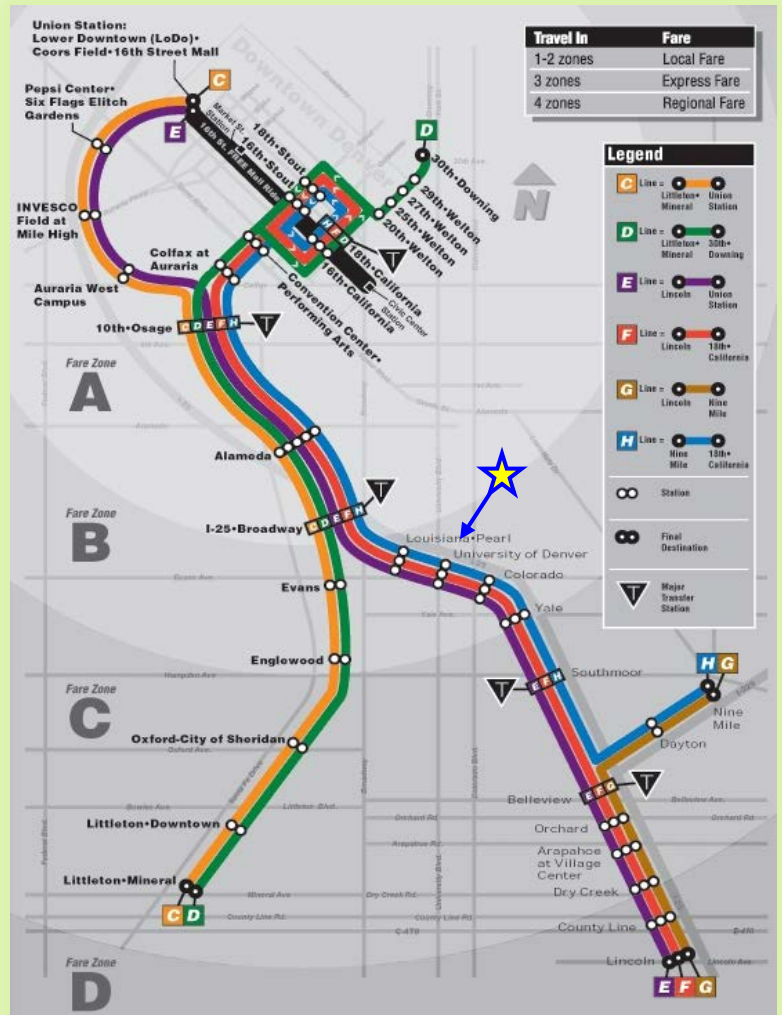
The Rocky Mountain Chapter of ASHRAE will present a free raffle ticket to anyone taking public transportation to the monthly ASHRAE meeting.

One raffle ticket will be given to each participant for each meeting. Visit www.rtd-denver.com for system maps and times or contact ridegreen@rockymtnashrae.com for further assistance.

Acceptable modes of alternative transportation:

- ✓ Walking
- ✓ Bicycling
- ✓ Bus
- ✓ Light Rail
- ✓ Alternative Fuel Vehicle
- ✓ High Efficiency Vehicle (35+ mpg)
- ✓ Carpooling (2 or more persons)

The ASHRAE meeting (Denver) at Dave & Buster's is located at the **Colorado Light Rail Station** for lines E, F and H. Any bus lines that pass through the **Evans and Colorado intersection** will also get you to Dave & Buster's.



YEA (YOUNG ENGINEERS IN ASHRAE)

YEA Events – Happy Hour

DATE: 3rd Thursday of each Month

TIME & LOCATION: TBD

RSVP: Tim Hughes
tim.j.hughes@siemens.com

The Young Engineers in ASHRAE Committee is committed to enhancing the young professional member benefits, 35 years old and younger, by identifying activities and services focused on their needs.

If you have questions about the committee, please contact Tim Hughes at tim.j.hughes@siemens.com.

HATS OFF TO YEA!

Congratulations to the Rocky Mountain Chapter YEA committee and beer tour attendees! The Rocky Mountain Chapter beer tour hosted by YEA in October was recognized on the ASHRAE Society Research Promotion page “*Research Ramblings*”, see below for details.

Hats of to...

Posted on November 14, 2011 | Leave a comment
The Rocky Mountain Chapter!

The Rocky Mountain Chapter hosted a beer tour at their local brewery. The \$50 fee covered transportation to the brewery, the tour, beer (OF COURSE!), breakfast and lunch. For an additional \$15, attendees could buy a brewery tour t-shirt, and for just \$5 a can coozie (for all that beer)!

The fundraiser was hosted by the Chapter’s YEA branch, with all proceeds going to RP.

Great job Rocky Mountain, for reminding us once again that thinking outside the box can be fun and profitable for RP. Keep up the good work!

WINTER ASHRAE MEETING - SCHOLARSHIP WINNER

The Rocky Mountain Chapter of ASHRAE sponsored a \$1,000 scholarship for one Y.E.A. member to attend the ASHRAE Winter Conference in Chicago January 23-25, 2012. In order to qualify for this scholarship the applicants had to meet the following: age 35 or younger, never attended the ASHRAE Winter Meeting/ AHR Expo, and a member of the Rocky Mountain Chapter of ASHRAE.

The Chapter would like to congratulate Rachel Romero of NREL for winning the Winter Mtg Scholarship!

MEMBERSHIP PROMOTION

Welcome to the "The Membership Promotion Page." We would like time to welcome the following new ASHRAE members for the month of December:

- Oliver Davis
- Heidi J Dugan
- David Kandel
- Russell L Pascua
- Luke Ramirez
- Paul Schlough
- Brook K Zion

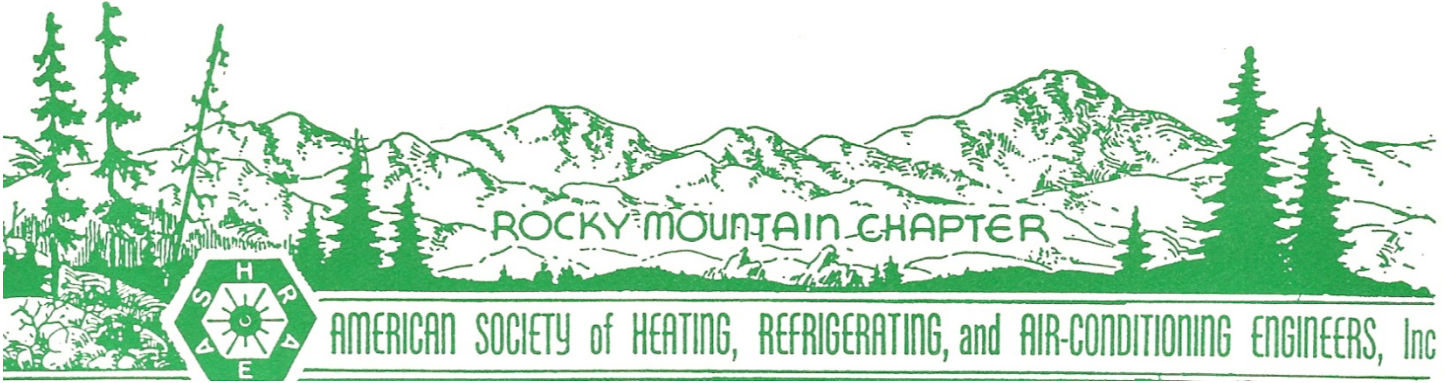
We would also like time to welcome the following new ASHRAE Student members for the month of December:

- Mr Andreas Rudolf Haun

If you have questions or need membership assistance please send an email to cgarofoli@victaulic.com or call Chris Garofoli at 303-396-9006.

Also, please look around your company and through your contacts to let people know about the benefits of joining ASHRAE. We continue to bring in new young members of the industry to keep them involved with technology and standard advancements.

ROCKY MOUNTAIN MEMBERSHIP APPLICATION



Name: _____ (Last) _____ (First) _____ (MI)
Status: Renewal ____ New Member ____ Address Change ____

Please circle preferred mailing address: HOME BUSINESS
Home Address and Phone Business Name, Address and Phone

p: _____
p: _____

Preferred email address: _____

Society Membership Number / Grade: _____

Name Tag (\$10.00) Paid? Y N

Name to appear on name tag as: _____

- I would like to be contacted about serving on one of the following committees or functions (Please circle):
- | | | |
|-----------------------|-----------------------------|--------------------------------------------------|
| A. Newsletter | F. Chapter Historian | K. Spouse's Night / Social Committee |
| B. Membership | G. Technical Seminars | L. Colorado Engineering Council (Committee Help) |
| C. Meeting Attendance | H. Research Fund Promotions | M. General |
| D. Education | I. Monthly Meeting Programs | N. Energy Committee |
| E. Golf | J. Publicity | O. Sustainable Engineering Committee |

Please mail this invoice and your check for \$50.00 (2010 / 2011 year) + \$10.00 (Name Tag if requested) payable to **Rocky Mountain Chapter ASHRAE** to the address listed below. ASHRAE will invoice you for both society and local dues every year following the first year.

Chris Garofoli
Rocky Mountain Chapter ASHRAE Membership Promotion Chair
c/o Victaulic
3416 Alcott Street Denver, CO 80211
cgarofoli@victaulic.com

ASHRAE SOCIETY NEWS AND PRESS RELEASES

For Release:
November 14, 2011

ASHRAE Provides Guidance on the “How-To’s” of Energy Audits

ATLANTA—Seeking to promote best practices and offer a “how-to” approach, ASHRAE has released updated guidance on building energy audits.

While energy audits are a commonly used component of the industry, there is great diversity in the services delivered to customers, and little industry standardization. The second edition of “Procedures for Commercial Building Energy Audits” promotes best practices, provides “how-to’s” and fills a void in available information for engineers, building owners, managers and government entities. The new publication includes time-saving tips for energy auditors, how to hire an auditor, what to ask for in a comprehensive audit report and how to build a successful energy efficiency retrofit team.

“As we work to reduce energy consumption in our commercial buildings, we want to ensure that recommendations are cost effective, technically feasible, maintain safety and comfort and result in significant energy savings” Jim Kelsey, a member of Technical Committee 7.6, Building Energy Performance, and who oversaw the writing of the updated publication, said. “This volume focuses on how to improve energy audit best practices. Providing the best audits that we can will help move the industry forward to net zero buildings.”

Additionally, the publication addresses how to build a successful team, analytical methods, successful approaches to site visits, incorporating on-site measurements, economic evaluation of measures and how to organize an energy audit report that promotes action on the part of building owners and managers. It includes many tips for conducting energy audits and reviewing results prepared by others. For example, the top things to check for in when reviewing an audit report include verifying that:

- proposed measures are feasible and appropriate for the building;
- proposed measures meet applicable building codes;
- data are internally consistent;
- savings estimate methods follow established principles and methods;
- estimates of potential energy savings are reasonable compared to quick estimates and historical energy use;
- proposed cost estimates are reasonable relative to field experience;
- interactions between EEMs are identified and addressed;
- recommendations and report meet the project scope, goals and client’s needs;
- any financial discussion includes current and viable mechanisms available per the tax structure, location, and motivations of the client.

Another benefit of the new publication is a greatly expanded section of forms and template analyses, including “live” Excel spreadsheets, checklists and equipment-specific forms suitable for field collection of detailed commercial building data, to name just a few.

“Procedures for Commercial Building Energy Audits, Second Edition” is available in the ASHRAE bookstore, www.ashrae.org/bookstore, for \$99 (\$84, ASHRAE members). Or, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, to order.

ASHRAE SOCIETY NEWS – CONTINUED

For Release:
Nov. 17, 2011

ASHRAE Announces Energy Modeling Conference, Call for Presenters

ATLANTA – An upcoming ASHRAE specialty conference seeks to advance the industry’s ability to more accurately model and simulate a building’s energy use.

ASHRAE’s Energy Modeling Conference – Tools for Designing High Performance Buildings is slated for Oct. 1-3, 2012 in Atlanta. The conference will guide building design professionals about what does and does not work when using currently available modeling tools to design and analyze buildings and their energy using systems.

“The conference will provide the design professional with ‘workarounds’ that may be applied to improve the results of their modeling results when their modeling tool of choice may not be capable of modeling some of the more unique or hybrid buildings or energy using systems being used in high performance buildings today,” Dennis Knight, conference chair, said.

With a focus on case studies and real world examples, the conference will allow an exchange of ideas among design professionals and software developers to facilitate understanding of current modeling tools and their capabilities and limitations and identify the need for new tools and improvements to existing modeling and simulation tools. The conference will guide design professionals toward developing in-house modeling checklists and quality control procedures to improve their competence and confidence in making decisions and recommendations based on modeling in their day-to-day practices.

Building on the successful Energy Modeling Conference format in April 2011, this conference will begin with an interactive session with modeling software developers presenting common modeling scenarios on how their specific software can model a scenario, whether there are any limitations and what might be the best work around and exceptional modeling practices to obtain acceptable results when the tool cannot model the scenario out-of-the-box.

Call for Presenters:

ASHRAE seeks presentations on case studies and actual projects and how they were analyzed and designed using modeling tools as well as integrated and interoperable modeling tools to best optimize buildings and energy-using systems. Presentation abstracts are requested on the following topics:

- HVAC load analysis
- Energy modeling
- Side-by-side software provider presentations on their ability to address specific modeling system types and applications and energy simulation programs
- Code and standards compliance issues
- ENERGY STAR, LEED® and other high performance building guidelines’ impacts on models
- Innovative system modeling: chilled beams, water source heat pumps, renewables, variable refrigerant flow, cogeneration, labyrinths, electronically commutated motors
- Integration of analytic modeling tools with building information modeling
- Exceptional modeling techniques for when tools just do not work
- Simplified and rapid modeling techniques that may be applied for early analysis.
- Integration of daylighting, computational fluid dynamics and other exceptional modeling techniques and results into HVAC simulations
- Life cycle cost analysis

To submit a presentation application, visit www.ashrae.org/EMC2012. Information required for the submission are a 300-500 word abstract, 100 word “promotion” abstract and other information.

Presenters will give an oral presentation, have their presentations posted online for conference attendees and receive a substantially-reduced conference registration rate.

Presentation Schedule:

Full Page Abstracts due: Feb. 15, 2012

Notification of abstract decisions: March 15, 2012 Accepted speaker forms due: April 15, 2012 Presentations due: Sept. 1, 2012

Conference: October 2012

For more information, go to www.ashrae.org/EMC2012.

ODDS AND ENDS

ASHRAE Jobs Website Tool:

We thought you and your fellow members would like to know about this valuable tool for ASHRAE Members and HVAC&R hiring authorities. We have prepared a page detailing the story of [ASHRAEjobs.com and its success here](#).

The Career Center offers several benefits for hiring authorities and job seekers:

- ASHRAE Jobs is user friendly. Its products and services equal the offerings from traditional big box boards such as Monster.com, yet its information and postings are specific to the ASHRAE Community.
- Due to its focus on HVAC&R engineering, Job seekers have a more effective search experience. Employers also have immediate access to a pre-filtered pool of talent for skills and experience.
- A unique feature is ASHRAE members are highlighted in search results. The online job application and resume forms require applicants to identify themselves by membership status. Employers can sort applications and resumes by membership status.

I would invite your Chapter to participate in this program by creating a link on your website to the ASHRAE Jobs Career Center. You will find attached a copy of the logo to use on your homepage. We would also appreciate your help to spread the news about ASHRAE Jobs' success through an announcement through your eNewsletter, blogs, etc.

If you have questions, I or John von Harz (Services Manager at jvonharz@ashraejobs.com) will be pleased to answer them.