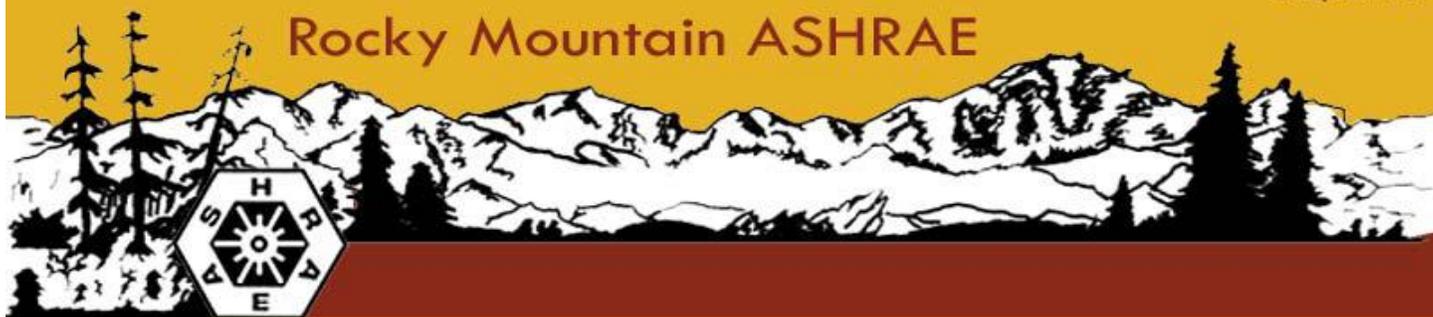


# Rocky Mountain ASHRAE



VOLUME 53, NUMBER 1

SEPTEMBER 2011

EDITOR: MEGAN VAN WIENEN

## SEPTEMBER MEETING

### Denver Meeting Information

DATE: Wednesday, September 7, 2011  
 TIME: 5:30 PM Registration  
 6:30 PM Dinner  
 7:00 PM Program Begins  
 LOCATION: Dave & Buster's  
 2000 S. Colorado Blvd  
 Denver, CO 80222  
 RSVP: Jessie Jones [jjones@rmhgroup.com](mailto:jjones@rmhgroup.com)  
 COST: \$25 Rocky Mtn Chapter Members  
 \*Reservation made by 12:00 PM 9/5  
 \$30 Non-members and late reservations  
 \$20 Students

### Fort Collins Meeting Information

DATE: Wednesday, September 7, 2011  
 TIME: 12:00 Registration  
 Announcements  
 Program (Ends at 1:00)  
 LOCATION: Cache Bank  
 100 S. College Avenue  
 Fort Collins, CO 80524  
 RSVP: Mike Fulton  
[MFulton@westernmechanicalsolutions.com](mailto:MFulton@westernmechanicalsolutions.com)  
 COST: \$10 Rocky Mtn Chapter Members

### 'Using Embedded Tube Radiant Cooling Systems to Maximize LEED Points'

This month's ASHRAE meeting will cover maximizing LEED points by using an embedded tube radiant cooling systems. The program will cover the following:

*Radiant Cooling Heat Transfer Fundamentals*  
*Radiant Cooling Performance/Capacity*  
*Typical Construction Methods*

As more and more jurisdictions and building owners are requiring higher levels of LEED certification for their projects, design teams are looking beyond traditional HVAC solutions to provide the energy efficiency needed to maximize LEED points while maintaining occupant comfort and safety. In-slab radiant heating systems have enjoyed popularity both here in the United States and abroad for years. Now, with the availability of improved control systems and better understanding within the design and construction community, the same concept can be applied to radiant cooling as an energy-efficient and cost-effective solution. Attendees will gain an understanding of how these systems can be used as part of an energy-efficient design solution to maximize credits for LEED certification, and see examples of how this has been accomplished on projects here in the United States and abroad.

### Table of Contents

PRESIDENT'S MESSAGE	2
ROCKY MOUNTAIN ROSTER	4
ASHRAE RESEARCH	5
SUSTAINABLE ENGINEERING COMMITTEE	7
GREENING OUR MEETINGS	9
MEMBERSHIP PROMOTION	10
HISTORY	14
ASHRAE SOCIETY NEWS AND PRESS RELEASES	15
ODDS AND ENDS	17

This month's topic will be presented by Devin A. Abellon, P.E. Mr. Abellon is a registered professional engineer with over 15 years of experience. Mr. Abellon acted as Vice President and managing principal of LSW Engineers California, Incorporated in San Diego until late last year, when he accepted a position as Business Development Manager for Uponor North America. He is currently the Programs Chair for ASHRAE TC6.5 – Radiant and Convective Space Heating and Cooling.

# PRESIDENT'S MESSAGE

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Dear Rocky Mountain ASHRAE:

Welcome back! It's that time of year again where the Rocky Mountain Chapter of ASHRAE will be pushing forth full steam ahead. Let me first both congratulate and thank our 2010-2011 Past President Ken Urbanek. Ken performed his duties to highest levels and continued to set the bar extremely high for those that follow him.

I'm incredibly excited to have an amazing team of people to help run the chapter this year. Our roster is included in this newsletter. If you have not had a chance to meet these individuals, I encourage you to do so.

The Board of Governors recently attended the Region IX Conference of Regional Chairs in El Paso, TX. This annual conference is attended by the 13 chapters in our region to discuss issues relating to ASHRAE and general business of the region. Once again, the Rocky Mountain Chapter received countless awards and praise for everyone's efforts. The chapter received awards for having the best chapter president (Ken Urbanek), best technical seminar, outstanding CTTC chair (Michelle Swanson), membership blue ribbon award (Chris Garofoli), and Top Presidential Award of Excellence (PAOE) just to name a few. Also, Steve Maxon and Jessie Jones each received technology awards for their project submissions. Next year's CRC will be held in Billings, MT.

There are a number of opportunities for you to get intimately involved with the chapter. Our committees are always looking for additional volunteers. The Rocky Mountain Chapter will host the ASHRAE Summer Meeting in 2013. We will need volunteers for that event as well so if get your name in there we'll be able to find something for you to do.

We have a fantastic list of programs scheduled for this under Jon Rundquist's direction. All meetings will be held on the first Wednesday of every month with the January being the only exception. Program director is easily one of the most difficult tasks for us. If you have an idea for a program, please contact either myself or Jon. We will continue with the same meeting model as years past where we have a variety of both lunch and dinner meetings.

I would like to welcome both Megan Van Wieren and Aaron Zimmerman as our newest Board of Governor members. Megan's primary responsibility is the editor of the newsletter that you are now reading from front to back. Aaron has joined us as one of our two Directors.

I'm really excited for this coming year for the Rocky Mountain Chapter and serving you as the President. If you have any questions or concerns, please do not hesitate to contact me. Thanks a lot and have a great day!

Best Regards,

Adam Bishop

Chapter President  
Rocky Mountain Chapter of ASHRAE

# ASHRAE SPECIAL MENTION

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## Outstanding Achievements Recognized at ASHRAE's Annual Meeting

The Rocky Mountain ASHRAE Chapter would like to congratulate our very own Sheila Hayter for being awarded the Exceptional Service Award at the 2011 ASHRAE Conference held in Montreal this June. The ASHRAE Society press release is below. Congratulations Sheila!

MONTREAL – Fifty-nine people were recognized by ASHRAE for their contributions to the Society and the building industry at the Society's 2011 Annual Conference held here June 25-29.

The Louise and Bill Holladay Distinguished Fellow Award, given to an ASHRAE fellow for continuous preeminence in engineering or research work, is awarded to Byron W. Jones, Ph.D., P.E., Fellow ASHRAE, associate dean for research, College of Engineering, Kansas State University, Manhattan, Kan.

The Andrew T. Boggs Service Award recognizes past recipients of the Distinguished Service Award for continuing unselfish, dedicated and distinguished service to the Society. It is awarded to Presidential Member Richard B. Hayter, Ph.D., P.E., Fellow ASHRAE, Life Member, associate dean of engineering for external affairs emeritus, College of Engineering, Kansas State University, Manhattan, Kan.

The Exceptional Service Award recognizes Distinguished Award recipients who have continued to serve the Society faithfully and with exemplary effort. Ten recipients were recognized:

- Constantinos Balaras, Ph.D., P.E., is research director, Institute for Environmental Research & Sustainable Development, National Observatory, Athens, Greece
- Van Baxter, P.E., is senior research and development engineer, Oak Ridge National Laboratory, Oak Ridge, Tenn.
- Tim Dwyer, C.Eng., Fellow ASHRAE, is teaching fellow, University College London, England
- William Fleming, Fellow ASHRAE, Life Member, is owner, Jacwill Services, St. Petersburg, Fla.
- Sheila Hayter, P.E., Fellow ASHRAE, is manager, U.S. Department of Energy's National Renewable Energy Laboratory, Golden, Colo.
- Richard Hermans, P.E., ASHRAE Certified Healthcare Facility Design Professional, is director of training and advanced applications, McQuay International, Minneapolis, Minn.
- Tom Lawrence, Ph.D., P.E., is senior public service associate, University of Georgia, Athens, Ga.
- Michael Ohadi, Ph.D., Fellow ASHRAE, is professor and co-director, Center for Environmental Energy Engineering, Department of Mechanical Engineering, University of Maryland, College Park, Md.
- Stanley Westhoff, Life Member, is technical sales associate, Unilux Advanced Manufacturing, Schenectady, N.Y.
- Alexander Zhivov, Ph.D., is senior researcher, U.S. Army Engineer Research and Development Center Construction Engineering Research Laboratory, Champaign, Ill.

# ROCKY MOUNTAIN ROSTER

## Rocky Mountain ASHRAE 2011 - 2012 Board of Governors

Title/Committee Chair	Name	Email	Phone
President	Adam Bishop	<a href="mailto:adamb@cfmcompany.com">adamb@cfmcompany.com</a>	303.607.4438
President-elect/Tech Conf.	Michelle Swanson	<a href="mailto:mswanson@rmhgroup.com">mswanson@rmhgroup.com</a>	303.239.0909
Vice President/CTTC Chair	Jon Rundquist	<a href="mailto:jonathan.e.rundquist@jci.com">jonathan.e.rundquist@jci.com</a>	303.904.7923
Secretary	Jessie Jones	<a href="mailto:jjones@rmhgroup.com">jjones@rmhgroup.com</a>	303.239.0909
Treasurer	Mike Harrington	<a href="mailto:mharrington@setpointsystems.com">mharrington@setpointsystems.com</a>	303.733.2300
Newsletter Editor	Megan Van Wieren	<a href="mailto:MeganLVanWieren@eaton.com">MeganLVanWieren@eaton.com</a>	303.974.1230
Past President	Ken Urbanek	<a href="mailto:kurbanek@mkkeng.com">kurbanek@mkkeng.com</a>	303.796.6000
Director	Aaron Zimmerman	<a href="mailto:azimmerman@mkkeng.com">azimmerman@mkkeng.com</a>	303.796.6088
Director	John Stumpf	<a href="mailto:jstumpf@CarrierWest.com">jstumpf@CarrierWest.com</a>	720.472.0422
Northern Section Chair	Mike Fulton	<a href="mailto:mfulton@westernmechanicalsolutions.com">mfulton@westernmechanicalsolutions.com</a>	720.934.8273
Membership	Chris Garofoli	<a href="mailto:CGarofoli@victaulic.com">CGarofoli@victaulic.com</a>	303.396.9006
Historian	Dale Eismueller	<a href="mailto:dale@werc.com">dale@werc.com</a>	303.406.4080
Website	Tony Anderson	<a href="mailto:tanderson@airpurificationcompany.com">tanderson@airpurificationcompany.com</a>	303.428.2800
Student Activities	Craig Wanklyn	<a href="mailto:craig.wanklyn@me-engineers.com">craig.wanklyn@me-engineers.com</a>	303.421.6655
Sustainable Engineering	Celeste Cizik	<a href="mailto:CelestelCizik@eaton.com">CelestelCizik@eaton.com</a>	303.974.1212
Government Activities	Celeste Cizik	<a href="mailto:CelestelCizik@eaton.com">CelestelCizik@eaton.com</a>	303.974.1212

# ASHRAE RESEARCH



*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: \_\_\_\_\_

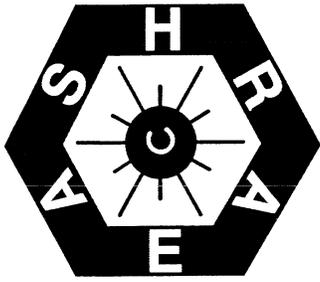
Telephone: \_\_\_\_\_

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

## 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

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## 2011-2012 Kick-off Meeting

DATE: Wednesday, September 21, 2011

TIME: 12PM – 1PM

LOCATION: Eaton Corporation  
143 Union Blvd, Suite 350  
Denver, CO 80228

RSVP: Megan Van Wieren  
[MeganLVanWieren@eaton.com](mailto:MeganLVanWieren@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](mailto:sustainable@rockymtnashrae.com).

## 2011-2012 Upcoming SEC Events!

Keep an eye out for information on our upcoming events planned for the 2011-2012 year. Information will be included in future newsletters and in emails to the chapter membership.

- High Performance Building Design Seminar – this one day seminar covers high performance building design and associated standards. Tentatively planned for December 2011.
- Brewery Tour – Tentatively scheduled for October 21. Tickets are \$50.00 (Joint SEC/YEA event)
- ASHRAE Tech Conference Sustainability Track – Again this year we will be including a Sustainability Track for the Annual RM ASHRAE Technical Conference full of presentations to keep you up to date and informed on the latest sustainable technologies.

# 2013 ANNUAL MEETING SUSTAINABILITY PROJECT

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## **Denver Rescue Mission | Lawrence Street**

In preparation for the 2013 Annual ASHRAE Society Meeting, the Rocky Mountain chapter has selected the Denver Rescue Mission Lawrence Street facility as the Annual Meeting Sustainability Project in an effort to reduce the environmental impact of the meeting. 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. A recent project organized by the Utah chapter involved adding a solar hot water heating system for an existing YWCA.

The Lawrence Street Shelter is the Mission's central outreach location. Tens of thousands of poor and needy people come to this facility each year for shelter, food, clothing, medical care, client services, and chapel services. At the Lawrence Street Shelter, all who are hungry: families, seniors, men, women, and children are welcome for a nutritious meal. The Lawrence Street Shelter serves three meals a day, seven days a week, three hundred sixty-five days a year. With 200 shelter beds and 100 emergency overflow cots, up to 300 men can find a warm bed and a safe place to sleep each night. Families and individuals come to their "closet" for everything from warm gloves to business attire for job interviews. Case managers help up to 2,000 individuals each month with needs such as food boxes, baby diapers, furniture, clothing, household goods, and referrals to other agencies. Program participants can receive free medical, dental, optical, and chiropractic treatment at the Mission's clinic.

The SEC will be working with Energy Outreach Colorado, a nonprofit organization that offers energy assistance to limited income households and for energy efficiency upgrades for affordable housing and nonprofit facilities. Since 1989, Energy Outreach Colorado has raised more than \$136 million to help Colorado's neediest families and seniors afford home energy. Energy Outreach is a leading nonprofit in the nation for "demonstrating ongoing fiscal excellence," according to Charity Navigator, an independent charity evaluator that annually ranks the financial health of U.S. charities.

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](mailto:BL@westernmechanicalsolutions.com).

# GREENING OUR MEETINGS

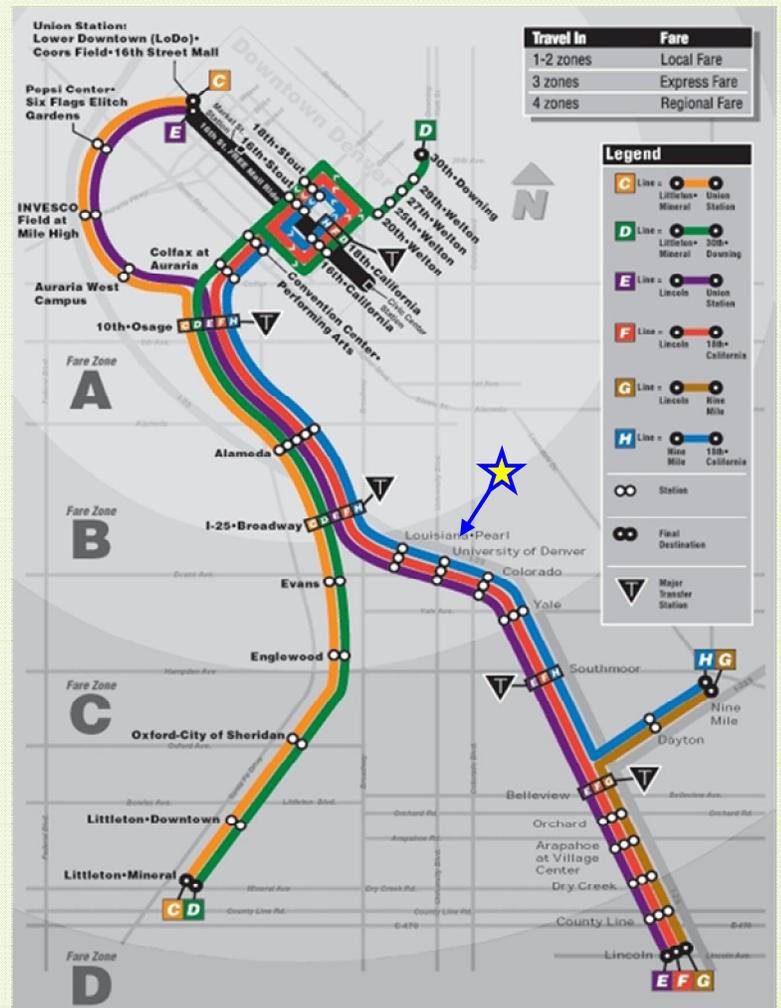
The Rocky Mountain Chapter of ASHRAE will present a free raffle ticket to anyone taking public transportation to the monthly ASHRAE meeting.

One raffle ticket will be given to each participant for each meeting. Visit [www.rtd-denver.com](http://www.rtd-denver.com) for system maps and times or contact [ridegreen@rockymtnashrae.com](mailto: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.



# ANNUAL DINNER PASS

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As a convenience to our members the Rocky Mountain Chapter of ASHRAE is now selling Annual Dinner Passes for the monthly chapter meetings! Late registration, received after September 5<sup>th</sup>, will be allowed up to the October 3<sup>rd</sup> meeting but it will not include the free dinner.

If you have any questions regarding the Annual Dinner Pass please contact the Rocky Mountain Chapter Treasurer Mike Harrington via e-mail at [mharrington@setpointsystems.com](mailto:mharrington@setpointsystems.com).

What does it cost?

- An Annual Dinner Pass costs \$200.

What do you get?

- With the purchase of the Annual Dinner pass, you get 1 free dinner. That's right buy 8 dinners at normal price and the last one is on us.
- Smoother check-in and recognition at September and October's meeting.

How do you get one?

- Fill out the form below and bring it with your check or credit card information to the September meeting.

Corporate Passes?

- Annual passes also work great as Corporate Passes. Buy one or more and make them available to whoever is available to attend the monthly meeting.

# ANNUAL DINNER PASS APPLICATION



## ANNUAL DINNER PASS – REGISTRATION FORM

### ROCKY MOUNTAIN ASHRAE CHAPTER

Please photocopy this form for additional attendees and for your records.

#### Individual Registration:

Your Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Mailing Address \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

#### Company Registration:

Company \_\_\_\_\_

Mailing Address \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

- Please sign me up for an Annual Dinner Pass at a cost of \$200
- Please register my company for \_\_\_\_\_ Annual Dinner Passes at a cost of \$200 per pass.

Enclosed please find a check for: \$ \_\_\_\_\_      Paypal total: \$ \_\_\_\_\_

Please make checks payable to Rocky Mountain Chapter ASHRAE

Payment can also be made via Paypal at the Chapter website [here](#)

Please fill out the above below and bring it with your check to the September meeting. No refunds allowed.

For questions please contact: Mike Harrington via e-mail at [mharrington@setpointsystems.com](mailto:mharrington@setpointsystems.com).

# MEMBERSHIP PROMOTION

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Welcome to the "The Membership Promotion Page." The chapter's roster has been updated. Please take a close look at the roster located at [www.rockymtnashrae.com](http://www.rockymtnashrae.com) for the following.

1. If you are a member of ASHRAE (student, associate, member, etc.), your name should be included in the roster.
2. Only the city and state of your primary contact address are included.
3. If no email address appears where your email address should be, ASHRAE does not have an email address for you.
4. Your name appears in the same format as recorded by ASHRAE. If ASHRAE doesn't have your titles or post-nominal letters (e.g., Dr., P.E., Ph.D., etc.), they are not included.
5. Your current member grade is also shown. If you are listed as an Affiliate Member or Associate Member grade and are interested in advancing to Associate Member or Member grade, please update your bio on the [www.ashrae.org](http://www.ashrae.org) website. Then send an email to [membership@ashrae.org](mailto:membership@ashrae.org) requesting the member grade advancement. I have recently completed this for myself, so I can talk you through it.
6. If any of your information is incorrect or if you want changes made to your information, please login at [www.ashrae.org](http://www.ashrae.org) and update your bio by following the link to Manage Membership under the Membership tab. Once you reach the membership page, click on Address Change to take you to your bio.
7. If you have been omitted from this list and want to know why, please let me know and I can investigate. Common reasons for omission include human errors and unpaid ASHRAE membership dues; most typically are easily corrected.

If you have questions or need membership assistance please send an email to [cgarofoli@victaulic.com](mailto: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](mailto:cgarofoli@victaulic.com)

# HISTORY

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## “Cooling by Evaporation”

In the year 1758, Benjamin Franklin and the professor of chemistry at Cambridge University John Hadley, conducted an experiment that looked into the evaporation principle as a means to rapidly cool an object. Franklin and Hadley tested and confirmed that the highly volatile liquids, such as alcohol and ether could be used to lower the temperature of an object past the freezing point of water.

They conducted their experiment with a mercury bulb thermometer as their object and a bellows that was used to blow on the object to increase evaporation. They lowered the temperature of the thermometer bulb down to 7 °F, while the ambient temperature was 65 °F. Franklin noted that soon after they passed the water's freezing point 32 °F, a film of ice formed on the thermometer's bulb's surface and the ice film grew to about a 1/4" they stopped the experiment upon reaching 7 °F. Franklin concluded, "From this experiment, one may see the possibility of freezing a man to death on a warm summer's day". The below letter was from Benjamin Franklin regarding the above experiment.

*“Dear Sir, London, June 17, 1758.*

In a former letter I mentioned the experiment for cooling bodies by evaporation, and that I had, by repeatedly wetting the thermometer with common spirits, brought the mercury down five or six degrees. Being lately at *Cambridge*, and mentioning this in conversation with Dr. *Hadley*, professor of chemistry there, he proposed repeating the experiments with ether, instead of common spirits, as the ether is much quicker in evaporation. We accordingly went to his chamber, where he had both ether and a thermometer. By dipping first the ball of the thermometer into the ether, it appeared that the ether was precisely of the same temperment with the thermometer, which stood then at 65; for it made no alteration in the height of the little column of mercury. But when the thermometer was taken out of the ether, and the ether with which the ball was wet, began to evaporate, the mercury sunk several degrees. The wetting was then repeated by a feather that had been dipped into the ether, when the mercury sunk still lower. We continued this operation, one of us wetting the ball, and another of the company blowing on it with the bellows, to quicken the evaporation, the mercury sinking all the time, till it came down to 7, which is 25 degrees below the freezing point, when we left off. -- Soon after it passed the freezing point, a thin coat of ice began to cover the ball. Whether this was water collected and condensed by the coldness of the ball, from the moisture in the air, or from our breath; or whether the feather, when dipped into the ether, might not sometimes go through it, and bring up some of the water that was under it, I am not certain; perhaps all might contribute. The ice continued increasing till we ended the experiment, when it appeared near a quarter of an inch thick all over the ball, with a number of small spicula, pointing outwards. From this experiment one may see the possibility of freezing a man to death on a warm summer's day, if he were to stand in a passage thro' which the wind blew briskly, and to be wet frequently with ether, a spirit that is more inflammable than brandy, or common spirits of wine.

It is but within these few years that the *European* philosophers seem to have known this power in nature, of cooling bodies by evaporation. But in the east they have long been acquainted with it. A friend tells me, there is a passage in *Bernier's* travels through *Indostan*, written near one hundred years ago, that mentions it as a practice (in travelling over dry deserts in that hot climate) to carry water in flasks wrapt in wet woollen cloths, and hung on the shady side of the camel, or carriage, but in the free air; whereby, as the cloths gradually grow drier, the water contained in the flasks is made cool. They have likewise a kind of earthen pots, unglaz'd, which let the water gradually and slowly ooze through their pores, so as to keep the outside a little wet, notwithstanding the continual evaporation, which gives great coldness to the vessel, and the water contained in it. Even our common sailors seem to have had some notion of this property; for I remember, that being at sea, when I was a youth, I observed one of the sailors, during a calm in the night, often wetting his finger in his mouth, and then holding it up in the air, to discover, as he said, if the air had any motion, and from which side it came; and this he expected to do, by finding one side of his finger grow suddenly cold, and from that side he should look for the next wind; which I then laughed at as a fancy.”

# ASHRAE SOCIETY NEWS AND PRESS RELEASES

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For Release:  
August 9, 2011

Contact: Amanda Dean  
Public Relations  
678-539-1216  
[adean@ashrae.org](mailto:adean@ashrae.org)

## ASHRAE Announces the Seventh International Conference on Cold Climate and Call for Papers

ATLANTA—ASHRAE, along with HVAC&R, architecture, interior design and building construction industry colleagues from around the world, will host the seventh International HVAC Cold Climate Conference, Nov. 12-14, 2012, in Calgary, Alberta, Canada.

Cold Climate HVAC 2012 will provide key elements of a strategy by which scientists, designers, engineers, manufacturers and other decision makers in cold climate regions can achieve good indoor environmental quality (IEQ), with a minimum use of resources and energy.

The range of topics includes energy and sustainability in arctic environments; building technology for people in the arctic; indoor environment and health; challenges for remote areas; cold climate building envelopes and moisture management; HVAC system operation and maintenance; and cold climate standards, codes, regulations and requirements.

The planning committee seeks papers featuring innovations in cold climate HVAC design. This includes new technologies and applications; improved methodologies, improvements to computational models or other design tools; novel methods of management, organization or quality assurance; and novel avenues of research or revised conceptual frameworks for designers.

Submit abstracts no longer than 350 words, which summarize the objectives, approach, results and conclusions of the proposed paper, and five to seven keywords by Dec. 1, 2011. Upon acceptance, papers will be due April 1, 2012. For specific topics, to submit a conference paper abstract or for more information go to [www.ashrae.org/ColdClimate](http://www.ashrae.org/ColdClimate). For additional information, contact [meetings@ashrae.org](mailto:meetings@ashrae.org).

The Scandinavian Federation of Heating, Ventilation and Sanitary Engineering Associations (SCANVAC) initiated the series of Cold Climate HVAC Conferences. The six previous conferences have been successfully organized in Rovaniemi, Finland in 1994; Reykjavik, Iceland in 1997; Sapporo, Japan in 2000; Trondheim, Norway in 2003; Moscow, Russia in 2006; and Sisimiut, Greenland in 2009.

The series of congresses have earlier been supported by national HVAC societies, the Federation of European Heating, Ventilation and Air Condition Associations (RHEVA) and ASHRAE.

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

# ASHRAE SOCIETY NEWS – CONTINUED

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For Release:  
Aug. 3, 2011

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Pre-proposals due Sept. 1 -New ASHRAE Research Program Grant Fosters Development of Innovative Technology

ATLANTA – A new research grant from ASHRAE will provide seed funding for novel research deemed to have the potential to significantly advance the state-of-the-art in HVAC&R.

The ASHRAE Innovative Research Grant is designed to encourage out-of-the box research to complement the research proposed and guided by the Society's technical committees. The award carries a base grant of \$50,000 per year for two years, with an additional \$25,000 available in the third year if matched by an industrial contributor. Pre-proposals are due Sept. 1.

"ASHRAE wants to foster the development of new and innovative technology and/or analysis tools," James Braun, Ph.D., P.E., recent chair of ASHRAE's Research Administration Committee that oversees the grant, said. "Most current research related to HVAC&R is prescriptive and geared toward addressing specific issues or problems that are common within the field. Typically, the focus is on existing technologies or tools. However, new technologies and tools don't always build directly on existing approaches. Our hope with this grant is to encourage out-of-the box research that will result in successful projects, which lead to additional research and development down the road and ultimately to adoption of new technologies and tools that can make an impact within the field."

The program criteria are based on novelty of the research; importance of the problem; potential for success; student involvement; and cost sharing. Pre-proposals are due Sept. 1 and should be submitted to Michael Vaughn, ASHRAE's manager of research and technical services, at [mvaughn@ashrae.org](mailto:mvaughn@ashrae.org), and should include "ASHRAE Innovative Research Grant Submission" as the subject line in the message. For more information on the program, visit [www.ashrae.org/research](http://www.ashrae.org/research) and click on the link for "ASHRAE Innovative Research Grant Program."

# ODDS AND ENDS

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## 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](https://www.ashraejobs.com).

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](mailto:jvonharz@ashraejobs.com)) will be pleased to answer them.



*Protecting Our Workforce*

# 17<sup>th</sup> Annual AIHA- RMS and ASSE Fall Technical Conference

September 20<sup>th</sup> and 21<sup>st</sup>

**Arvada Performing Arts Center**  
6901 Wadsworth Boulevard  
Arvada, CO 80003-3499

Registration is now open for the AIHA-RMS and ASSE Fall Technical Conference. Go to <http://www.AIHA-RMS.org> today and receive the early bird discount.



Don't miss the premier local safety and industrial hygiene event of the year. The 2011 Fall Tech Conference is hosted by AIHA-RMS and the Colorado Chapter of ASSE.



Upgrade your professional skills by attending these presentations:

- Business Management Skills
- Effective Safety and Health Communication
- Medical Waste Regulations and Guidelines
- Hiring and Termination in a Tough Economy
- Managing Questionable Workers' Comp Claims

Hone your technical skills by attending these sessions:

- Machine Guarding
- Effective EHS Training - Using a Response System as a Learning Solution
- Respiratory Protection
- CO Prevention – Fuel-fired Equipment Assessment

And there are many more safety, industrial hygiene and environmental topics to choose from.

Vendors will also be present on September 21<sup>st</sup> to display the newest in industrial hygiene and safety technology.

2.0 CM ABIH points, BCSP 3.375 COC points, 16 Recertification ACAC