

**Denver Meeting Information**

**Honoring Past Presidents**

**DATE:** Wednesday, December 4, 2013  
**TIME:** 11:30 am – Registration and Lunch Buffet  
 11:45 am – Announcements  
 12:00 pm – Program Begins  
**LOCATION:** Dave & Busters  
 2000 South Colorado Blvd  
 Denver, CO 80222  
**RSVP:** [www.RockyMTNASHRAE.COM](http://www.RockyMTNASHRAE.COM)  
**COST:** \$25 Rocky Mtn Chapter Members  
 \*Reservation made by 5:00 PM on Monday  
**\$35 Non-members and late reservations**  
 \$20 Students

**Risk Transfer As It Pertains To Construction**

This presentation will cover risk in the construction industry, how, what and who is responsible when... Michael Moschetti, CIC, Senior Vice President, For over 27 years he has been helping clients with all of their insurance protection including Property, Liability, Accident, Employee Benefits, 401k, Life and even Personal insurance for home or auto. Michael is a generalist of hard to write insurance business. His clients range from manufacturers of iron and pharmaceuticals, to greenhouses and garden centers, to private schools and contractors and suppliers. Over 95 percent of his business has been referred to him by other clients. After graduating from the University of Colorado with a degree in Economics, Michael spent three years working with Security Title and two other independent insurance agencies before joining ISU Insurance in 1999. His experience and broad range of product knowledge, along with the fine companies represented by ISU Insurance, enable Michael to handle all of your insurance needs.

**This presentation has been registered for 1.0 GBCI Credits**

**Upcoming Events:**

- January 8<sup>th</sup> Technical Meeting-Denver Dinner and Fort Collins Lunch
- January 24<sup>th</sup>-DU Hockey Night. DU vs. North Dakota
- February 5<sup>th</sup>-Denver Lunch Meeting
- May 2<sup>nd</sup>, 2014 Technical Conference.

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**ROCKY MOUNTAIN CHAPTER LOGO POLO ORDER FORM**

**DU HOCKEY NIGHT SIGN UP FORM**

# PRESIDENT'S MESSAGE

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## PRESIDENT'S MESSAGE

Dear Rocky Mountain ASHRAE:

First I would like to thank David Kandel with Belimo for the interesting presentation on Hydronic Loops. It was very insightful in showing what potential mistakes can be made in design and selection.

Our November meeting was Student Night. As part of that, Craig Wanklyn & Rachel Romero set up a tour for the students at NREL. It was a fascinating tour and I want to thank them both. Many interesting and unique designs are being utilized. Congratulations to the following students who received our annual Scholarships:

Benjamin Shiflett – Metro State University of Denver  
Brent Johnson – University of Colorado  
Michael Gartman – University of Colorado  
Neal Kruis – University of Colorado

Our December meeting will be our annual Past President's meeting. It's always great to honor them for the hard work they put into getting our Chapter where it is today. Our December presentation will be on Risk Assessment/Management by Michael Moschetti with ISU Insurance Services. It should be very informative.

I'm excited to announce that we are now offering you the chance to pick up a Rocky Mtn ASHRAE shirt. We have 2 shirt options and more information in the newsletter as well as on our website. You will be the talk of your office if you are sporting one of our polo shirts!

If you have any questions or concerns, please do not hesitate to contact me.

Best Regards,

Jon Rundquist

Chapter President  
Rocky Mountain Chapter of ASHRAE

### **RM ASHRAE is a USGBC/GBCI education provider!**

The Rocky Mountain Chapter of ASHRAE is now a USGBC/GBCI education provider. If you would like to have a presentation submitted to the USGBC for LEED AP credentialing credits, please contact Jessie Jones [jjones@rmhgroup.com](mailto:jjones@rmhgroup.com) or Michelle Swanson [mswanson@rmhgroup.com](mailto:mswanson@rmhgroup.com) for more information.

# ROCKY MOUNTAIN ROSTER

## Rocky Mountain ASHRAE 2013 - 2014 Board of Governors

Title/Committee Chair	Name	Email	Phone
President	Jon Rundquist	<a href="mailto:President@RockyMtnASHRAE.com">President@RockyMtnASHRAE.com</a>	303.428.2800
President-elect/Tech Conf.	Jessie Jones	<a href="mailto:TechConference@RockyMtnASHRAE.com">TechConference@RockyMtnASHRAE.com</a>	303.239.0909
Vice President/CTTC Chair	Mike Harrington	<a href="mailto:CTTC@RockyMtnASHRAE.com">CTTC@RockyMtnASHRAE.com</a>	720.221.1078
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Treasurer	Tony Anderson	<a href="mailto:Treasurer@RockyMtnASHRAE.com">Treasurer@RockyMtnASHRAE.com</a>	303.280.1401
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Past President	Michelle Swanson	<a href="mailto:PastPresident@RockyMtnASHRAE.com">PastPresident@RockyMtnASHRAE.com</a>	303.239.0909
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Director	Jody Templeton	<a href="mailto:Director2@RockyMtnASHRAE.com">Director2@RockyMtnASHRAE.com</a>	303.295.6111
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Historian	Ainsley Thrailkill	<a href="mailto:Historian@RockyMtnASHRAE.com">Historian@RockyMtnASHRAE.com</a>	303.796.6074
Honors & Awards	Eugene Mitchell	<a href="mailto:Awards@RockyMtnASHRAE.com">Awards@RockyMtnASHRAE.com</a>	303.322.0165
Social Media	Andrew Van Essen	<a href="mailto:SocialMedia@RockyMtnASHRAE.com">SocialMedia@RockyMtnASHRAE.com</a>	303.257.2642
YEA Chair	James Newman	<a href="mailto:YEA@RockyMtnASHRAE.com">YEA@RockyMtnASHRAE.com</a>	303.421.6655

# ASHRAE RESEARCH



*Don't Wait, Please Donate for the 2013-2014 ASHRAE Year*

Mail Check To:  
**ASHRAE RESEARCH**  
c/o Jessie Jones, The RMH Group  
12600 W Colfax Ave, Suite 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	Other: _____
CORPORATE	\$75.00	\$100.00	\$175.00	\$250.00	Other: _____

*Or Contact Jessie Jones at: 303-312-4641*


































## THANK YOU Donors!

- Roger Abrahamson
- Kevin Ainsworth
- Tony Anderson
- Trevor Bromberg
- John Freeman
- Mike Harrington
- Michael Haughey
- Jessie Jones
- Mark Labac
- Brian Lynch
- Scott Martin
- Jon Rundquist
- Karl Selby
- Megan Sterl
- Michelle Swanson
- David Willets
- Engineered Products Company – Denver
- Haynes Mechanical Systems
- McNevin Company
- SBSA Inc.



**Our goal for this year is to raise \$83,100**

# ASHRAE RESEARCH DONOR LEVELS AND RECOGNITION

Receives 1 day Meeting Registration*							-----		
Receives 2 tickets to Members Night Out and Welcome Party*									
Presented 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 & Plaque							-----		
Receives Silver ASHRAE Commemorative Coin & Plaque					-----	-----	-----	-----	
Receives Bronze ASHRAE Commemorative Coin & Plaque				-----	-----	-----	-----	-----	
Receives Antique ASHRAE Commemorative Coin & Plaque			-----	-----	-----	-----	-----	-----	
Receives blue desktop coin holder		-----	-----	-----	-----	-----	-----	-----	
Listed in annual <i>Investor Honor Roll</i>									
	Honor Roll Donor** \$150-\$249	Major Donor – Antique \$250-\$499	Major Donor – Bronze \$500-\$999	Major Donor – Silver \$1000-\$2499	ASHRAE Associate \$2500-\$4999	ASHRAE Partner \$5000-\$9999	Golden Circle Donor \$10,000 - \$19,999	Platinum Circle Donor \$20,000+	

\* ASHRAE Winter Meeting

\*\* Individual Honor Roll Donor begins at \$100

# SUSTAINABLE ENGINEERING COMMITTEE

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## Upcoming Meeting

**DATE:** Wednesday September 25<sup>th</sup>

**TIME:** 12PM – 1PM

**LOCATION:** Eaton Energy Solutions  
143 Union Blvd. Suite 350  
Lakewood, CO 80228

**RSVP:** Sara Frame  
[sustainable@rockymtnashrae.com](mailto:sustainable@rockymtnashrae.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 Sara Frame at [sustainable@rockymtnashrae.com](mailto:sustainable@rockymtnashrae.com).

Are you aware of the Building Energy Quotient (bEQ) program and how it's helping building owners achieve levels of improved building performance. Setting high standards for improving energy performance is a major focus of ASHRAE's mission and we believe bEQ is an effective tool in this effort. bEQ is specifically designed to identify factors causing the gap between a building's design potential and its actual performance in operation. Only those who hold an ASHRAE Building Energy Modeling Professional or Building Energy Assessment Professional certification may submit workbooks and benefit fully from the bEQ program. At <https://www.ashrae.org/education--certification/certification/beq-brochures-for-your-use> you'll find revised brochures that reflect ASHRAE adding the As Designed rating to bEQ and how certification supports the program. Please let us know if you have any questions.



# GREENING OUR MEETINGS

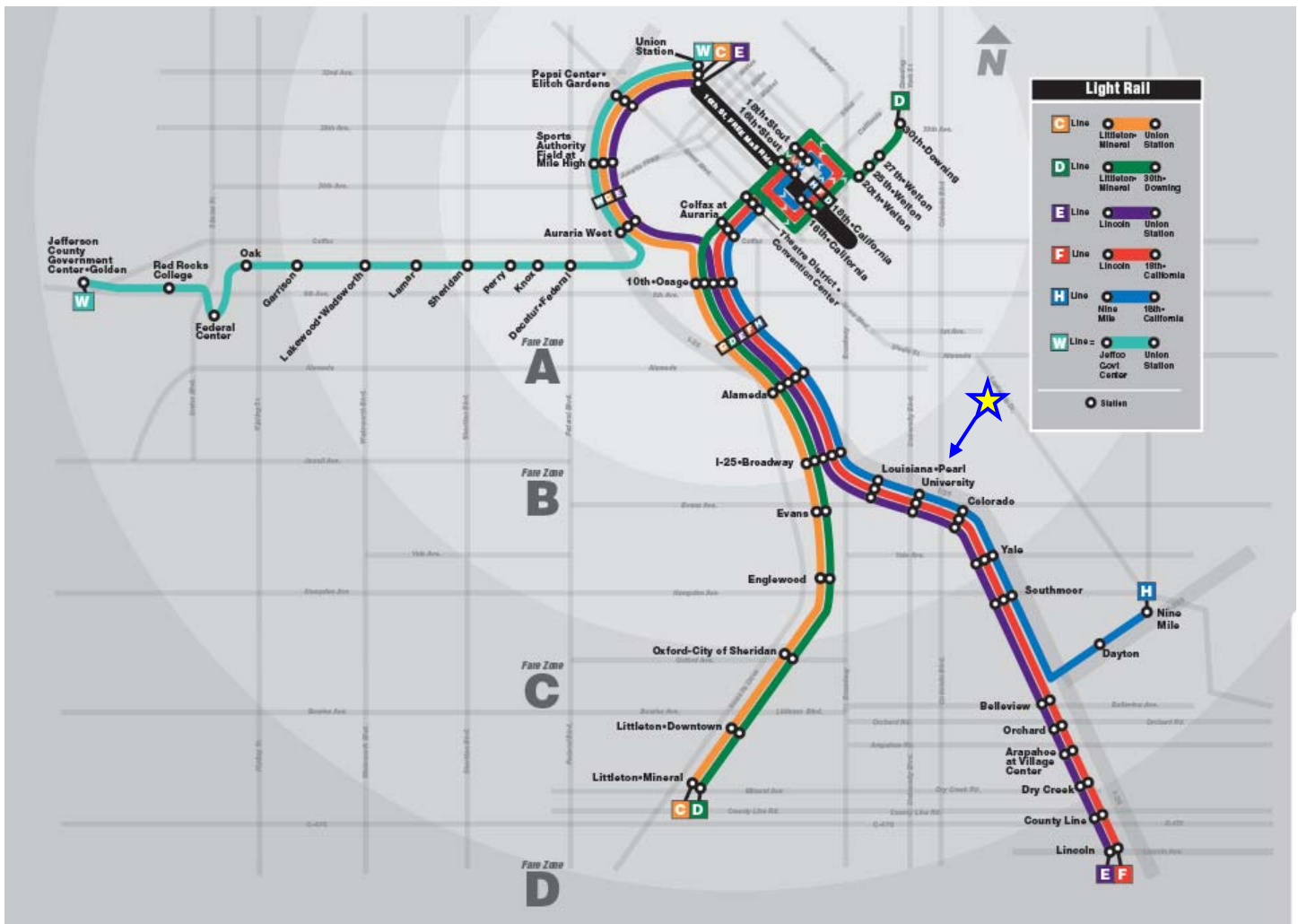
The Rocky Mountain Chapter of ASHRAE will present a free raffle ticket to anyone taking public transportation to the monthly ASHRAE meeting.

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.



# YOUNG ENGINEERS IN ASHRAE (YEA) & STUDENTS

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**Young Engineers in ASHRAE (YEA) events are open to all ASHRAE Members, you do not have to be younger than 35 to attend.**

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## Applications Now Being Accepted for the *HVAC Design: Level I - Essentials* Training Scholarship

ASHRAE's *HVAC Design: Level I - Essentials* training targets those new to the field, either as new hires or engineers and others in career transition. The next three opportunities to attend are:

**Atlanta, March 17-19** (apply by January 10)

**Toronto, March 17-19** (apply by January 10)

**Atlanta, June 9-11** (apply by April 11)

The YEA Institute scholarship is offered for each training listed above and covers the full cost of Level I registration.

<https://www.ashrae.org/membership--conferences/yea-scholarship-for-hvac-design-essentials-workshop>

## Registration Now Open for YEA Leadership Weekend Spring 2014

**March 28-30, 2014 | Portland, Oregon.**

Are you interested in expanding your knowledge, meeting fellow engineers and having some fun along the way? Look no further than YEA Leadership Weekend!

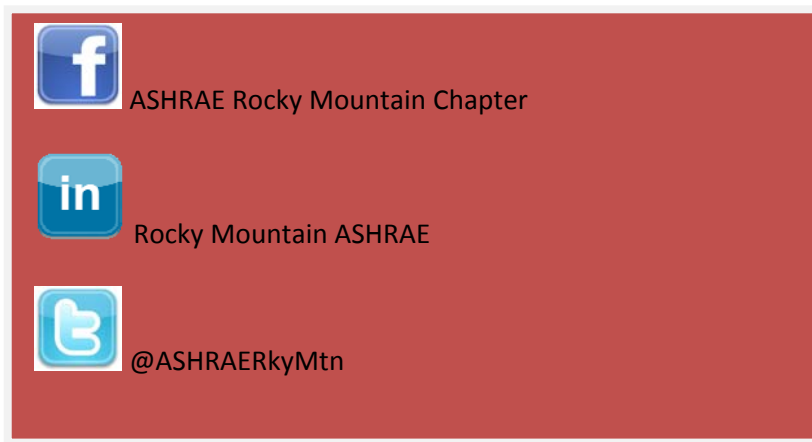
YEA Leadership Weekend is an opportunity for you—the future leaders of ASHRAE—to learn more about Society, develop soft skills and network with other young professionals. Over 300 YEA members have already taken advantage of this great opportunity...will you be next?

<https://www.ashrae.org/membership--conferences/young-engineers-in-ashrae/yea-leadership-weekend-spring-2014>

Stay tuned local events are in their planning stages. Have any ideas? Thoughts on a PE/FE study group?

Contact YEA Committee Chairman James Newman at [YEA@RockyMtnASHRAE.com](mailto:YEA@RockyMtnASHRAE.com) for more information.

Or at:





# GOVERNMENT AFFAIRS

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Government Affairs is now its own standing committee. This committee's responsibilities are to keep the Chapter members informed of Government activities such as new laws and regulations, legislative and building department activities as well as making ourselves available to the local government entities as an information source. The committee is chaired by Steve Ferguson who can be reached at [Government@RockyMtnASHRAE.com](mailto:Government@RockyMtnASHRAE.com) if you are looking for more information or are interested in being involved.

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## Federal Government's Role in STEM Education, Research Examined at Congressional Hearing

Research, competitiveness, and workforce development in the fields of science, technology, engineering, and mathematics (STEM) were the focus of a House Science, Space, and Technology Committee hearing last week. The specific focus of the hearing was to receive expert witness feedback on the Committee's draft Frontiers in Innovation, Research, Science, and Technology (FIRST) Act. This bill would reauthorize the National Science Foundation (NSF), National Institute of Standards and Technology (NIST), and improve coordination among federal STEM education programs.

Notably, among the witnesses was James Brown, Executive Director of the [STEM Education Coalition](#), of which ASHRAE is a member. The Coalition is an alliance of over 500 professional, education, and business organizations that seeks to promote STEM education policies at every level.

ASHRAE Government Affairs Office staff are preparing a detailed summary of the draft legislation, and will include a link to the summary in an upcoming version of the *Update*.

## Data Center Energy Efficiency Addressed by Congress at Capitol Hill Briefing

Members of Congress and industry leaders gathered together on Capitol Hill earlier this week to discuss the prescient need to improve data center energy efficiency. The focus was the Energy Efficient Government Technology Act ([H.R.540](#)), a bipartisan bill introduced by Representatives Anna Eshoo (D-CA) and Mike Rogers (R-MI) that would help make federal data centers for energy efficient by:

- Establishing performance goals for federal data centers that include overall targets, benchmarks, and specifications for energy efficiency and energy savings.
  - Recommendations and best practices for how the benchmarks may be attained.
- Requiring federal agencies to develop and implement a strategy for the maintenance, purchase, and use of energy efficient and energy savings information and communications technologies and practices.
- Establishing a Government-wide Data Centers Task Force that would be charged with identifying and exchanging best practices, and working with the private sector to improve federal data center energy efficiency.

ASHRAE has informed Representative Eshoo and other leading Members of Congress of the Society's development of Standard [90.4P](#), Energy Standard for Data Centers and Telecommunications Buildings, and is exploring opportunities for either referencing the forthcoming standard in the Energy Efficient Government Technology Act or otherwise being of technical assistance as the important issue of data center energy efficiency is further considered by Congress

# MEMBERSHIP PROMOTION

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

- Ms Sydney Hanson
- Mr Matt Alexander
- Mr Timothy Lillehoff
- Mr Keith Flint
- Mrs Lisa Buckley

We would also like to welcome the following new student members:

- Mr Eric Boxer
- Mr Jared Johnson

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



ASHRAE Rocky Mountain Chapter



Rocky Mountain ASHRAE



@ASHRAERkyMtn

## Industry History:

In 1977, the isolation of the bacterium *Legionella pneumophila* that was the cause of Legionnaire's Disease, was described in a scientific paper published in *The New England Journal of Medicine* by scientists at the Centers for Disease Control (CDC) in Atlanta, Georgia, USA\*. They had first announced that they had sufficient laboratory evidence to implicate a bacterium on 18 Jan 1977 as responsible for an outbreak of this disease in Philadelphia in 1976, largely among people attending a state convention of the American Legion, which led to the name "Legionnaires' Disease." After the bacterium causing the illness was named, the name of the illness was changed to legionellosis.





# MEMBERSHIP APPLICATION

Name: \_\_\_\_\_

New Member       Renewal       National Member ID \_\_\_\_\_  
\*National membership is required to join chapter.

Address: \_\_\_\_\_  
 \_\_\_\_\_

Email: \_\_\_\_\_

Name Tag: \_\_\_\_\_ (\$10)      Yes   
\*\*Name as it is to appear on the tag.

I would like to be contacted about participating in the following events.

Mentor	Trade Show	Meeting Volunteer	Sustainability Project
Meeting Presenter	Raffle item for meeting	Committee Participation	

Please make check payable to **Rocky Mountain Chapter ASHRAE**.

Annual Membership	\$50
Name Tag	\$10
Total	_____

Please mail to:  
  
Chris Garofoli  
  
3416 Alcott St Denver, CO 80211  
  
[membership@rockymtnashrae.com](mailto:membership@rockymtnashrae.com)

# ROCKY MOUNTAIN ASHRAE HISTORY

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In November of 1995, the dinner meeting topic covered snowmaking.

“It's that time of year again to wax up the boards, begin deep knee bends and plot your "Fall" line down the scopes! In an effort to satisfy the public's early season thirst for skiing, many areas around the world are expanding their snowmaking capabilities. We are pleased to present our topic of the evening, Snowmaking: Art & Science.

Mr. Steve Dikeman will provide an overview of snowmaking installations worldwide as well as discuss the technical application and the science of making snow. Steve is Marketing manager of York Automatic Snow Inc. with North American headquarters in Denver, Colorado. He has attained a bachelor of science in mechanical engineering and worked for York International in Denver and Dallas for eighteen years.

Sparky Reichwein will discuss snowmaking at the operational level. Sparky is manager of snowmaking operations at the Loveland ski area -usually the first area in the country to open for skiing.”

## Industry History:

In 1478, the anonymous *Arte dell'Abaco* (“The Art of the Abacus”), printed in Treviso, Italy had this publication date. It is the first dated printed book on arithmetic. The unknown author was likely a priest, and it was dedicated to some of his young friends who kept asking for it. The printer was probably Geradus de Lisa, *dé Flandria*. The 124-page text dealt with commercial applications of arithmetic, so the language was the local vernacular Venetian dialect, not the scholarly Latin used for the abstract studies of universities. The book teaches the four main operations, with numerous examples, and the concept of fractions (but not the as yet unknown decimals). He shows how to calculate the date of the new Moon. Although some pamphlets on Algorithms are possibly older than this book, they are undated.



## ASHRAE Seeks Presenters, Posters for HPB 2014 Conference

ATLANTA – Presenters and posters are being sought for ASHRAE’s High Performance Buildings Conference will take place April 7-8, 2014, Hyatt Fisherman’s Wharf, San Francisco, Calif.

Abstracts for presentations are due Oct. 25, 2013, while poster PDFs are due Feb. 21, 2014. Additional information can be found at [www.hpbmagazine.org/hpb2014](http://www.hpbmagazine.org/hpb2014).

The Conference program will have a mix of invited speakers and a call for presenters. In addition, there will be a poster session on “Measured Building Performance” and “Modeled Building Performance.”

“We would like to see a balance of presentations showing innovation, proven methods for improving building operation resulting in deep energy efficiency and indoor environmental quality, measured performance and HPB case studies demonstrating new technologies,” Kent Peterson, conference chair, said. “We are seeking posters of designed or built buildings that balance high performance building attributes of energy efficiency, water savings and indoor environmental quality.”

Building upon the 2012 High Performance Buildings Conference and 2009 Net-Zero Energy Conference, the conference seeks to advance the industry’s efforts to accomplish a true high-performance built environment.

The conference topics provide a comprehensive overview of high performance building design with a focus on strategies in several areas, Peterson said. New subject areas include water efficiency, building occupant behavior, new building technologies and indoor environmental quality. In addition, there is increased emphasis on lighting/daylighting and the building envelope.

Presentations and Posters are being sought for the following tracks:

- Building Envelope
- Building Occupant Behavior
- Building Performance Modeling
- Building Performance Measurement
- Case Studies and Lesson Learned
- Daylighting
- Indoor Environmental Quality Strategies
- Low Energy Techniques
- Market Value (Return on Investment)
- New Building Technologies
- Operating for High Performance
- Plug Load Reduction Strategies
- Policy/Benchmarking
- Water Efficiency Strategies

The conference is being presented by ASHRAE’s High Performing Buildings magazine, the industry’s premier source for measured performance of practices and technologies to promote better buildings.

ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow’s built environment today. More information can be found at [www.ashrae.org/news](http://www.ashrae.org/news).

# ASHRAE SOCIETY NEWS AND PRESS RELEASES (CONT.)

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## Learn More about Requirements of 2013 ASHRAE Standards at Learning Institute Courses

ATLANTA – With new versions of ASHRAE’s energy, indoor air quality and thermal comfort standards being published this year, users face new requirements.

Courses addressing the updates in those standards are featured at ASHRAE’s 2014 Winter Conference, Jan. 18-22, at the New York Hilton, New York, N.Y. The International Air-Conditioning, Heating, Refrigerating Expo®, held in conjunction with the Winter Conference, runs Jan. 21-23, [www.ahrexpo.com](http://www.ahrexpo.com). The Expo, held at the Javits Convention Center, takes place Tuesday, Wednesday and Thursday as opposed to the traditional Monday, Tuesday and Wednesday.

For complete Conference information and to register, visit [www.ashrae.org/newyork](http://www.ashrae.org/newyork).

Twenty-three Professional Development Seminars and Short Courses are being offered by the ASHRAE Learning Institute.

Of special interest are courses related to ANSI/ASHRAE Standard 62.1-2013, *Ventilation for Acceptable Indoor Air Quality*, and ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, both of which were recently published, along with the soon-to-be-published Standard 55-2013, *Thermal Environmental Conditions for Human Occupancy*.

“Throughout the HVAC&R and building construction industries, ASHRAE is the source of knowledge for energy efficiency, indoor air quality and thermal comfort in the built environment,” Hugh McMillan, chair of the ASHRAE’s Professional Development Committee, said. “ASHRAE publishes standards that establish baselines used to measure performance of buildings in those areas. As our knowledge base evolves, our standards must also evolve to reset the baseline. So that our members and others can stay abreast of the latest developments in this knowledge base, we offer courses in the application of these standards that allow those who attend to apply the latest developments to the design and construction of their projects.”

More information about the courses can be found at [www.ashrae.org/newyorkcourses](http://www.ashrae.org/newyorkcourses).

Also in New York, ASHRAE launches its new Career Enhancement Curriculum. These curricula offer tracks of courses in Energy Savings (ES) Practices and IAQ Practices. More can be learned about this new program by visiting our website at [www.ashrae.org/careerpath](http://www.ashrae.org/careerpath).

### Saturday, Jan, 18, 2014

- NEW! Commercial Building Energy Audits, 8 a.m.-3 p.m.
- Healthcare Facilities: Best Practice Design and Applications, 8 a.m.-3 p.m.
- NEW! Electric Rates, Rules and Regulations, 12 p.m.-3 p.m.

### Sunday, Jan. 19, 2014

- Air-to-Air Energy Recovery Applications: Best Practices, 2 p.m.-5 p.m.
- Laboratory Design: The Basics and Beyond, 2 p.m.-5 p.m.
- Mathematical Optimization Techniques and their Applications to HVAC&R Systems and Components, 2 p.m.-5 p.m.

# ASHRAE SOCIETY NEWS AND PRESS RELEASES (CONT.)

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## Monday, Jan. 20, 2014

- Combined Heat and Power: Design through Operations, 8:30 a.m.-11:30 a.m.
- High-Performance Building Design: Applications and Future Trends, 8:30 a.m.-11:30 a.m.
- NEW! IAQ Best Practices for Design, Construction and Commissioning, 8:30 a.m.-11:30 a.m.
- Commissioning for High-Performance Buildings, 2:45 p.m.-5:45 p.m.
- NEW! Designing High-Performance Healthcare Facilities, 2:45 p.m.-5:45 p.m.
- NEW! Exceeding Standard 90.1-2013 to Meet LEED Requirements, 2:45 p.m.-5:45 p.m.

## Tuesday, Jan. 21, 2014

- Energy Modeling Best Practices and Applications (Co-sponsored by IBPSA-USA and Rocky Mountain Institute), 9 a.m.-4 p.m.
- NEW! Significant Changes to Standard 90.1-2010 and IECC 2012, 9 a.m.-4 p.m.
- NEW! Fundamentals and Applications of Standard 55, 1 p.m.-4 p.m.
- NEW! Design of Commercial Ground Source Heat Pumps, 1 p.m.-4 p.m.
- Data Center Energy Efficiency, 1 p.m.-4 p.m.

## Wednesday, Jan. 22, 2014

- Effective Energy Management in New and Existing Buildings, 9 a.m.-4 p.m.
- NEW! Application of Standard 62.1-2013: Multiple Spaces Equations and Spreadsheets, 9 a.m.-12 p.m.
- Troubleshooting Humidity Control Problems, 1 p.m.-4 p.m.

## Thursday, Jan. 23, 2014

- NEW! Complying with Standard 90.1-2013, 8 a.m.-3 p.m.
- Operations and Maintenance of High-Performance Buildings, 8 a.m.-3 p.m.
- NEW! Introduction to Building Enclosure Commissioning, (Co-sponsored by Building Enclosure Commissioning Collaborative), 8 a.m.-3 p.m.

**SAVE THE DATE**

**April 17, 2014**

**1:00pm - 4:00 pm EDT**

**FREE ASHRAE WEBCAST**

***Buildings in Balance: IEQ and Energy Efficiency***

This **FREE** webcast will feature industry experts who will identify the link between energy efficiency and Indoor Environmental Quality (IEQ) through the integrated design process. Viewers will be able to recognize the importance of the four cornerstones of IEQ and how system selection can benefit both energy efficiency and IEQ.

Visit [www.ashrae.org/IEQWebcast](http://www.ashrae.org/IEQWebcast) for additional information about the program, sponsorships, continuing education credits, speakers, and registration.

# ASHRAE SOCIETY NEWS AND PRESS RELEASES (CONT.)

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## ASHRAE Technical Program Reaches for the Sky with Focus on Tall Buildings

ATLANTA – Lessons learned in the design, construction and operation of tall buildings can be applied to buildings of all sizes and stories.

A mini-conference on tall buildings is featured in the Technical Program at ASHRAE's 2014 Winter Conference, Jan. 18-22, at the New York Hilton, New York, N.Y. The International Air-Conditioning, Heating, Refrigerating Expo®, held in conjunction with the Winter Conference, runs Jan. 21-23, [www.ahrexpo.com](http://www.ahrexpo.com). The Expo, held at the Javits Convention Center, takes place Tuesday, Wednesday and Thursday as opposed to the traditional Monday, Tuesday and Wednesday.

For complete Conference information and to register, visit [www.ashrae.org/newyork](http://www.ashrae.org/newyork).

"What better place to showcase tall building design than in New York," Jon Cohen, New York Conference program chair, said. "Designing buildings with contingencies for natural disasters will benefit engineers worldwide. We should learn from how buildings respond to the disasters, and use this information to our advantage to save lives and infrastructure in the future. Environmental quality in buildings isn't just a health concern, it's a concern of the conscience. We need to do everything to ensure healthy work environments and living situations while considering the broader environmental impact."

Sessions specific to tall buildings include:

- Is ASHRAE Tall Enough for Tall Buildings?, Sunday, Jan. 19
- Linking Tall Buildings' Energy Use to Tenant Contribution to Economy, Sunday, Jan. 19
- Life Safety Issues with Tall Buildings, Tuesday, Jan. 21
- Natural Ventilation for Tall Buildings, Tuesday, Jan. 21
- Current Trends in Tall Building Designs, Tuesday, Jan. 21
- Specific Engineering Solutions for Tall Buildings, Tuesday, Jan. 21
- ASHRAE and Tall Buildings, Tuesday, Jan. 21
- Trends in Building Energy Disclosure: Increasing Energy Efficiency without Retrofits, Tuesday, Jan. 21 (AHR Expo session)
- Fire Safety Concern for Supertall Buildings, Wednesday, Jan. 22
- Data Center Control and Fire Safety in Tall Buildings, Wednesday, Jan. 22



# ASHRAE SOCIETY NEWS AND PRESS RELEASES (CONT.)

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## ASHRAE Seeking Comments on Purposed Data Center Energy Standard

ATLANTA—High plug loads and rapidly advancing IT technology make data center applications significantly different from their commercial building counterparts. A purposed standard from ASHRAE that specifically addresses the unique energy requirements of data centers is open for advisory public review.

Standard 90.4P, *Energy Standard for Data Centers and Telecommunications Buildings*, is being developed in response to requests to recognize the energy performance profiles unique to data centers; previously, data centers were included in in ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*. Standard 90.4P will feature a performance based approach that is more flexible and accommodating of innovative changes which rapidly occur in the data center design, construction and operations, according to chair Ron Jarnagin.

Standard 90.4P is open for advisory public review from Nov. 15-Dec. 30, 2013. For more information, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews).

“The explicit needs of data centers drive a fundamentally different approach to regulating minimum efficiency requirements for the electrical and mechanical systems that support the plug loads,” Jarnagin said. “By using an approach that requires compliance to a “system” level of performance, designers and end-users can utilize various trade-offs in their optimization strategies depending on their company specific business models.”

Also, current industry modeling tools do not possess all the necessary mathematical models to accurately and appropriately model data center HVAC and power design. As a result, demonstrating compliance to the 90.1 Chapter 11 or energy cost budget approaches is not always a practical option. Instead, Standard 90.4P proposes to utilize a performance compliance path known as the Power Utilization Efficiency (PUE) developed by The Green Grid®.

Although there is proposed research for the development of mathematical methods and associated software tools to assist data center designers down the road; compliance with 90.4P is intended to be possible without the use of modeling tools at this time.

# ASHRAE SOCIETY NEWS AND PRESS RELEASES (CONT.)

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## Papers Sought for International Conference on Efficient Building Design

ATLANTA – Papers are being sought for a conference focused on research in building design and system technologies for energy efficiency.

Organized by ASHRAE, the American University of Beirut and the ASHRAE Lebanon Chapter, the International Conference on Efficient Building Design: Materials and HVAC Equipment Technologies, takes place Oct. 2-3, 2014, in Beirut, Lebanon.

Abstracts (400 words in length) are due Jan. 6, 2014. If accepted, papers are due April 14, 2014. Authors of accepted papers are responsible for travel and registration. Hotel accommodations are free for authors presenting papers. Submittal information can be found at [www.ashrae.org/Beirut2014](http://www.ashrae.org/Beirut2014).

The Conference presents the latest research and development to improve building designs and state-of-the-art technologies in building materials and systems.

Reducing energy consumption and carbon dioxide emissions, implementing energy efficiency standards and introducing new equipment and technologies are areas seeking improvement in the Arab region, according to Nesreen Ghaddar, conference chair.

“This conference will serve as a platform for presenting advanced research in these topics with the intent to make recommendations for decision makers to implement,” she said. “Specifically, direction is sought on what technology is optimal and can be adopted when phasing out HCFC refrigerants in equipment and systems in developing countries.”

Topics include but are not limited to:

- Sustainable Building Designs
- Energy Efficiency Standards
- Building Materials
- Indoor Air Quality Systems
- HVAC and Different Technologies
- Solar Heating and Cooling for Built Environment
- Systems for Cooling and Water Production for Hot Humid Climates

# EMPLOYMENT OPPORTUNITIES

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Go to our website to open these links <http://rockymtnashrae.com/classifieds.php>

Job Title	Company	Date Posted
<a href="#">Mechanical Engineer II</a>	Beaudin Ganze Consulting Engineers, Inc.	April 29, 2013
<a href="#">Application Engineer</a>	Setpoint Systems Corporation	August 30, 2013
<a href="#">Mechanical HVAC/Plumbing Designer</a>	JCAA Consulting Engineers, LLC	September 16, 2013
<a href="#">Junior Mechanical Engineer</a>	MKK Consulting Engineers	October 09, 2013
<a href="#">Mechanical Engineer II</a>	Beaudin Ganze Consulting Engineers, Inc.	April 29, 2013
<a href="#">Application Engineer</a>	Setpoint Systems Corporation	August 30, 2013

## 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.

