

Technology for a Better Environment

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### **Program:**

#### 11<sup>th</sup> Annual Electro-Technology Expo Thursday, January 20, 2011 Meeting

Ramkota Inn & Convention Center - Rapid City, SD 1:15 PM – 2:15 PM

Speaker: Rich Ivey, Office of State Engineer, State of South Dakota

**Overview:** Topics will include selected energy conservation projects on the Capitol Complex. Emphasis will be on the MacKay Building renovation and Capitol Lake Plaza renovation, including the on-site renewable energy systems. Several other projects will be discussed, such as chiller and boiler replacements, lighting retrofits and retro-commissioning will also be presented.

**About the Speaker:** Rich Ivey, P.E., LEED AP, received a B.S. degree from the University of South Dakota in Political Science in 1974 and a B.S. degree from South Dakota State University in Mechanical Engineering in 1984. He was elected to Board of Directors, United States Green Building Council (USGBC) South Dakota Provisional Chapter in 2010.

Ivey has worked for the State of South Dakota from 1986-1989 and 1990 to the present. Previous positions with the State of South Dakota included Energy management System Coordinator, Trades Supervisor, Manager of the Capitol Complex Buildings and Grounds. He began working at the Office of the State Engineer in 2001. Primary responsibilities include contract administration for state building construction and renovation projects and technical assistance to state agencies and campuses.

\* Please see the attached flyer for registration fees and other interesting topics along with their scheduled times.

# President's Message

Happy New Year to you and yours! As we enter a new year, I would like to challenge each of us to expand our network. With the wealth of information and resources that ASHRAE offers, you can get almost any answer you need. It may be a phone call to another member, download of a publication, pursuing a certification, using a new wireless application, or whatever you can think of. ASHRAE is a vast resource available to you. Over the years I have enjoyed attending the Chapter's Regional Conferences and look forward to attending my first Winter Meeting at the end of this month.

We are still seeking a Research Promotion Chairman since Dan Gabrielson stepped down with his career change. This is a great way to expand your network and there are many regular and reliable research donors out there. If you or someone you know may be interested, Allen Freeland has the training manual and can give you a rolling start into this vital position. The research dollars raised support ASHRAE research that is done. The following link summarizes the use of these tax deductible dollars: <a href="http://www.ashrae.org/publications/detail/14494">http://www.ashrae.org/publications/detail/14494</a>.

With today's energy challenges and opportunities, we need it more now than ever. We have already reached Full Circle, which means that all of your chapter officers have contributed at least \$100 each. We also have several members and companies that give annually. Reaching "Top Dog" status this past year speaks volumes for our members' investment. As of today we are at only 20% of our RP goal. We have \$650 out of our \$3900 goal. RP donors do make a difference, thank you.

Mike Mueller

#### CHAPTER MAY NOT ACT FOR THE SOCIETY



Technology for a Better Environment

# **Chapter Programs Schedule**

Below is a listing of this year's programs. If any has any suggestions for programs, please call or email me below:

\* September 16, 2010 Creating Tomorrow's Workforce in Engineering and Science Nancy Anderson-Smith

\* October 21, 2010 Tour RPM Facility Rob Mudge

\* November 18, 2010 Pumping Technology in 2010 Richard Miller

\* December 16, 2010 Variable Refrigerant Flow Technology Julian DeBullet, DL

January 2011 11th Annual Electro – Technology Expo Multiple

February 28, 2011 Region IX RVC of Membership Promotion Gaylen Atkinson

March 17, 2011 Energy Recovery Technology Ken Smith

April 11, 2011 ASHRAE President

May 19, 2011 Geothermal Heat Pump Technology Craig Fischback

July 2011 ASHRAE - API Annual Golf Outing & Fund Raising

\* Completed Program

Send program suggestions to: Sean O'Connor

(P) 605-348-2033 (F) 605-348-9215

programs@blackhillsashrae.org

# **Upcoming Events**

Lynn Bellenger, DL

Make plans now to attend the ASHRAE 2009 Winter Conference held in Las Vegas, Nevada January 29-February 2, 2011. Las Vegas, Nev. continues to build upon its reputation as a vibrant showcase for the extraordinary by offering the grandest hotels, the biggest stars in entertainment and, of course, the brightest lights. It's no wonder that the world's biggest HVAC Expo and the largest membership-based HVAC&R engineering society have chosen the city as the site of the ASHRAE 2011 Winter Conference and AHR Expo.

The extravagant setting of Las Vegas serves as a unique contrast to ASHRAE's Winter Conference theme of A Safe Bet: Zero-Energy Design. It is sure to highlight the importance of finding the balance in design. The technical program focuses on efficient use of energy, different design approaches and other topics related to refrigeration, standards and codes and HVAC systems, equipment, applications and fundamentals.

Obtain more information for the ASHRAE 2011 Winter Conference at www.ashrae.org.

# **Membership**

If anyone knows of someone who might be interested in becoming a member of ASHRAE, contact Dave Riemenschneider at 348-7455 or email him at <a href="membershippromotion@blackhillsashrae.org">membershippromotion@blackhillsashrae.org</a> or submit an application.

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#### Save The Date!

#### Thursday, Jan. 20, 2011

#### Ramkota Inn & Convention Center, Rapid City, South Dakota

Looking for a way to stay plugged in with the changing energy landscape? Then come to the 11th annual Electro Technology Expo on Thursday, Jan. 20, 2011. The 2011 Expo will have exhibits featuring cutting-edge technology. Plus, workshops are given in four concurrent sessions throughout the day by leading energy industry and technology experts covering a variety of topics, including:

- LED Street & Area Lighting
- Commercial Geothermal Systems
- Power Quality
- South Dakota & Wyoming Electrical Code Classes
- Geothermal System Testing
- Heat Pump Water Heaters

- Smart Meter/Smart Grid Technology
- New Lighting Technology
- ENERGY STAR Home Performance Audits
- Updates on LEED Building Standards
- Hydronic In-Floor Heating Systems
- Solar Energy Technology

#### Only \$25 to attend!

Preregister at www.blackhillspower.com by Friday, Jan. 14, and save \$5. Registration includes lunch.

#### Continuing education credits available!

Code hour and CEU credits are available for electricians, HVAC specialists, engineers and realtors.

#### Keynote speaker

Michele Farris, Statewide Energy Manager, State of South Dakota

#### **Expo Schedule**

#### Thursday, Jan. 20, 2011

- 7:30 a.m. Doors open for check-in
- 8:00 a.m. Vendor exhibits open
- 8:15 a.m. to 11:30 a.m. Presentation sessions
- 11:30 a.m. to 1:00 p.m. Lunch, Keynote Speaker and Exhibitor Showcase
- 1:00 p.m. to 5:00 p.m. Presentation sessions

#### For more information

For more information about the 2011 Electro-Technology Expo, contact Jeff Easton at <a href="mailto:jeff.easton@blackhillscorp.com">jeff.easton@blackhillscorp.com</a> or 605.721.1269.











# **2011 Electro-Technology Expo**

# **Presentation Schedule**

#### **CHECK-IN BEGINS AT 7:30 A.M.**

#### **EXHIBITOR SHOWCASE OPENS AT 8:00 A.M.**

TIME	SYLVAN 1	SYLVAN 2	LEGION 1	LEGION 2				
SESSION 1 8:15 a.m. To 9:15 a.m.	RESIDENTIAL GEOTHERMAL SYSTEMS Lyle Darnell, Energy Dynamics, Inc.	ELECTRICAL CODE TRAINING Darwin Jones, South Dakota Electrical Commission	INSULATION Steve Loftis, NCFI Polyurethanes	DEMAND CONTROLLER PROGRAM UPDATE FOR CONTRACTORS Mutch Usera, Black Hills Power Keith Gade, Black Hills Power				
9:15-9:30	WELCOME – MUTCH USERA, BHP, AND VERONICA KUSSER, WREA							
SESSION 2 9:30 a.m. to 10:30 a.m.	<b>HYDRONIC HEATING</b> Jeff Medley, Ferguson	ELECTRICAL CODE TRAINING (CONTINUED)	LED LIGHTING PANEL John Less, City of Rapid City George Martin, City of Spearfish Mark Meissner, Ellsworth AFB	<b>LEED CERTIFICATION</b> Garry Black, FourFront Design				
10:30-10:45	BREAK & EXHIBITOR SHOWCASE							
SESSION 3 10:45 a.m. to 11:45 a.m.	POWER QUALITY Don Martinez, Black Hills Power	<b>DEMAND SIDE MANAGEMENT</b> Bill Brayden, Brayden Automation	RADIANT HEAT Kirk Sharp, Radiant Systems, Inc.	FLIR TECHNOLOGY Michael McKibben or Marc Bocella, FLIR Systems, Inc.				
LUNCH 11:45 a.m. to 1:00 p.m.	KEYNOTE SPEAKER – MUTCH – confirmed Michele Farris, Statewide Energy Manager State of South Dakota "Presentation Title"							
1:00-1:15		BREAK & EXHIBI	TOR SHOWCASE					
SESSION 4 1:15 p.m. to 2:15 p.m.	<b>HEAT PUMP WATER HEATERS</b> Mick Mitzel, Northwest Pipe Fittings	SOLAR RENEWABLES Kevin Pratt, Black Hills Energy – Colorado Electric	<b>LIGHTING TECHNOLOGY</b> Speaker TBA	ASHRAE SPEAKER SERIES Michele Farris, Statewide Energy Manager, State of South Dakota				
2:15-2:30	BREAK & EXHIBITOR SHOWCASE							
SESSION 5 2:30 p.m. to 3:30 p.m.	<b>HEAT PUMP 101</b> Dan DeJong, Black Hills Power	ELECTRICAL CODE TRAINING Jeff Larus, City of Rapid City	ENERGY AUDITS Tiger Adolf, Building Performance Institute	COMMERCIAL GEOTHERMAL SYSTEMS Richard Hiles, ClimateMaster				
3:30-3:45	BREAK & EXHIBITOR SHOWCASE							
SESSION 6 3:45 p.m. to 4:45 p.m.	<b>HOME AUTOMATION</b> Barry Shaw, Soundpro	ELECTRICAL CODE TRAINING (CONTINUED)	ENERGY EFFICIENT HOME BUILDING Bob Malisch, Company	SMART METER/SMART GRID TECHNOLOGY Gary Kohama, Black Hills Power Ross Johnson, West River Electric				
4:45-5:00		EXHIBITOR	SHOWCASE					



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# **Program:**

#### Region IX RVC of Membership Promotion Monday, February 28, 2011 Meeting

SDSM&T Campus, Surbeck Center Hisega Room – Rapid City, SD 12:00 PM - 1:00 PM

Gaylen Atkinson, founder and President of Atkinson Electronics, has been in the controls industry for almost 40 years. His educational background is Electronic Engineering from the University of Utah, Salt Lake City, Utah and Business Management from Brigham Young University, Provo, Utah.

Gaylen has been a member of ASHRAE's TC1.4 Controls Committee for 20 years and has served as Chairman of that Committee. He has served in all of the local ASHRAE chapter chairs including president of the Utah Chapter. In June 2008, Gaylen received an ASHRAE Distinguished Service Award in recognition of his numerous technical papers and ASHRAE seminars and symposiums.

His business specialties include electronic manufacturing of AC control devices and control systems and building automation for commercial and industrial clients. He is presently an adjunct professor at the Salt Lake Community College, where he teaches a class on energy controls.

In addition, Gaylen has specialized in renewable energy systems including solar PV, solar thermal and the automation of these processes. He serves on ASHRAE's TC6.7 solar energy applications and is a member of the Utah Solar Energy Board.

# **President's Message**

We look forward to Gaylen Atkinson's visit to our Chapter. Gaylen is our Region IX Membership Vice-Chair and his schedule only permitted us to have our lunch meeting on Monday, February 28th. Gaylen has also offered to meet with an engineering class and meet with our Board of Governors before he leaves. This meeting will be following the previous week's Engineer's Week activities. Last year's national Rube Goldberg Champion was from UW-Stout and they have another team headed to SDSM&T for the Regional competition once again.

I had the pleasure of meeting our Society President, Lynn Bellenger, at the Winter Meeting in Las Vegas. She is looking forward to her visit to the Black Hills on April 11th. We have reserved the Ballroom at Surbeck Center and she will deliver her message of "Modeling a Sustainable World" at a lunch meeting. With the integrated design needs of complex buildings today, we would like to invite all building related professionals to this meeting. Our Board of Governors will be meeting to prepare a list of invitees. If you have connections to a group, please let us know. She has a great message that will make a difference to all who hear it.

Mike Mueller

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# **Chapter Programs Schedule**

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\* November 18, 2010 Pumping Technology in 2010 Richard Miller

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\* January 2011 11th Annual Electro – Technology Expo Multiple

February 28, 2011 Region IX RVC of Membership Promotion Gaylen Atkinson

March 17, 2011 TBD TBD

April 11, 2011 Modeling a Sustainable World Lynn Bellenger, DL

May 19, 2011 Geothermal Heat Pump Technology Craig Fischback

July 2011 ASHRAE - API Annual Golf Outing & Fund Raising

\* Completed Program

Send program suggestions to: Sean O'Connor

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programs@blackhillsashrae.org

# **Upcoming Events**

Make plans now to attend the ASHRAE 2011 Annual Conference held in Montreal, Quebec Canada June 25 - 29, 2011. Obtain more information for the ASHRAE 2011 Annual Conference at <a href="www.ashrae.org">www.ashrae.org</a>.

# **Membership**

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The South Dakota School of Mines and Technology, the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and Theta Tau are hosting the



Come to the School of Mines campus and join the **CHALLENGE** this year!

Last year's regional winner went on to win the National Challenge at Purdue! Will **YOUR** team be next?

# For more information and to register go to:

http://www.rubegoldberg.com/

http://academics.sdsmt.edu/e-week/rubegoldberg/ or call Beth Riley at (605)394-2257

# For previous year's videos go to:

http://news.uns.purdue.edu/rube/rube.index.html

# We hope to see you there!



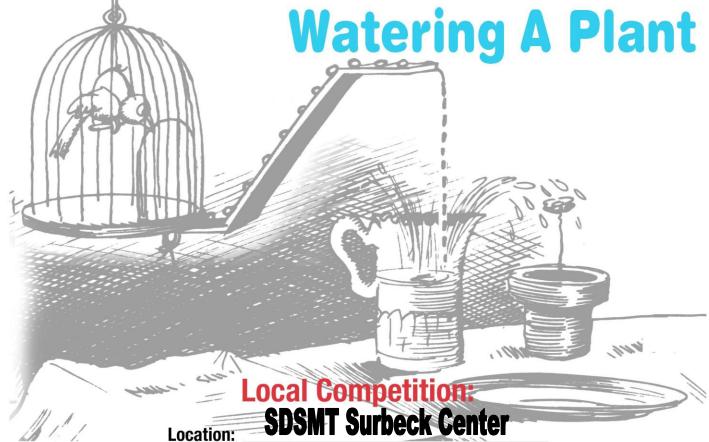






# **MACHINE CONTEST 2011**

THE NATIONAL CHALLENGE IS:



Date: Friday, February 25, 2011

Time: **3:00 pm** 

Registration Deadline: Monday, January 31, 2011

NATIONAL FINALS

COLLEGE: Purdue Armory, Purdue University, West Lafayette, IN on Saturday, March 26 HIGH SCHOOL: Ferris State, Big Rapids, MI on Saturday, March 19

See all contest information and schedules at www.rubegoldberg.com



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### **Program:**

# **Tour the CBEC Building Thursday, March 17, 2011 Meeting**

SDSM&T Campus, Surbeck Center Hisega Room – Rapid City, SD BOG 11:30 - 12:00 PM Lunch/Short Presentaion 12:00 PM - 12:30 PM Tour 12:30 PM - 1:30 PM

Steven Tebben – graduated from SDSU in 1976 with a Degree in Mechanical Engineering. He spent 1 year at Wood Manufacturing in Luverne MN, 6 years with Dunham Associates in Sioux Falls SD, 5 Years with Korstad-Tebben Consulting Engineers, 23 years with TSP in Sioux Falls SD, and 4 years with TSP in Rapid City SD. He was the Mechanical Department Head with TSP for 20 but decided to give it up to do more engineering.

He has primarily designed Mechanical Systems for Healthcare, Institutional, and Educational facilities. His latest accomplishment prior to CBEC SDSMT was the study and eventual de-centralization of the central heating plant at the Human Services Center in Yankton SD.

He has been married for 35 years and has 5 children; two of which reside in the Twin Cities, one resides in South Korea (Spanish Major teaching English?), one finishing college this year at SDSU, and a sophomore at Spearfish HS; his wife is a teacher at Wilson Elementary.

He always wanted to move to the Black Hills, but had to get rid of 4 of the 5 children who were voting against the move; the youngest loves it here. Steve and his family live near Whitewood SD, love the scenery, the people, and even the motorcycles.

# **President's Message**

This month I would like to spotlight our website improvements. Michael Heinrich has put a lot of effort in adding content and updating the site. As chapter webmaster he has a responsibility to maintain a current website. With today's world of technology we can be reached by many means, and the website is a critical part of that. Our companion Region IX chapters are all linked for your access. This alone gives us access to see what other chapters are doing and can help us generate ideas and develop relationships with those chapters. Since ASHRAE is basically a volunteer organization, the more connections we have will make a difference.

April meetings: Our spotlight next month will be ASHRAE Society President Lynn Bellenger's visit and presentation on Monday, April 11th. We are finalizing the details and a flyer will be sent out soon for you to help circulate to all building professionals to include designers, contractors, suppliers, and facility managers. Sustainability will be a part of our vernacular for a long time to come. Please help encourage people to come. With the April 21st webcast I am trying to reserve a room on campus to have that. It will be from 11 AM to 2 PM that day.

Mike Mueller

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Technology for a Better Environment

#### ASHRAE WEBCAST

April 21, 2011 – 1:00 p.m. – 4:00 p.m. EDT "Ground Source Heat Pump Systems: Putting the Earth to Work for You"

#### 8003

ASHRAE's Chapter Technology Transfer Committee with support from ClimateMaster, Mammoth, Taco, the International Ground Source Heat Pump Association, and the ASHRAE Foundation will present a *free* Webcast, "Ground Source Heat Pump Systems: Putting the Earth to Work for You" on Thursday, April 21, 2011. The program will be archived online until May 5, 2011 for those unable to participate in the live webcast. Registration will be required to view the archived program.

Please promote the Webcast to members and non-members by utilizing the **Media Kit** at www.ashrae.org/GHPwebcast.

The Media Kit contains:

- A Digital Brochure
- A Sample Flyer
- ASHRAE Insights Article
- The Tentative Webcast Program
- How to Earn PDHs
- Webcast Sponsorship Opportunities
- The ASHRAE Webcast Logo

To add a registration reminder to your Outlook and find additional information regarding the program and presenters, visit <a href="www.ashrae.org/GHPwebcast">www.ashrae.org/GHPwebcast</a>. Please share this email with your colleagues.

If you have any questions or need assistance, please call (678) 539-1200 or email <u>ashrae-webcast@ashrae.org</u>.

Thank you for supporting ASHRAE webcast programs.

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American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.



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Send program suggestions to: Sean O'Connor

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programs@blackhillsashrae.org

# **Upcoming Events**

Make plans now to attend the ASHRAE 2011 Annual Conference held in Montreal, Quebec Canada June 25 - 29, 2011.

Bienvenue à Montréal, known for bringing a bit of European charm to North America. This is a city that blends cultures, languages and people from all over the world, culminating in a unique and vibrant joie de vivre.

In the same way, the 2011 ASHRAE Annual Conference will bring together members from all over the world to share their knowledge of HVAC&R. Their desire to create a more sustainable and energy efficient building industry surpasses language barriers and knows no borders. Vive la difference!

Obtain more information for the ASHRAE 2011 Annual Conference at www.ashrae.org.

# **Membership**

If anyone knows of someone who might be interested in becoming a member of ASHRAE, contact Dave Riemenschneider at 348-7455 or email him at <a href="membershippromotion@blackhillsashrae.org">membershippromotion@blackhillsashrae.org</a> or submit an application.

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# **ASHRAE Learning Institute Spring 2011 Online Course Series**

#### **2 WAYS TO REGISTER**

Internet: www.ashrae.org/onlinecourses

Phone: Call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Note: You may register up to 24 hours prior to an online seminar. Courses are in US Eastern Standard Time.

Using Standard 90.1 to Meet LEED Requirements Monday, March 28, 2011 – 1:00 p.m. to 4:00 p.m.

Fundamental Requirements of ASHRAE Standard 62.1-2010 Wednesday, March 30, 2011 - 1:00 p.m. to 4:00 p.m.

Application of ASHRAE Standard 62.1-2010 Wednesday, April 6, 2011 – 1:00 p.m. to 4:00 p.m.

The Commissioning Process & Guideline 0 Monday, April 11, 2011 – 1:00 p.m. to 4:00 p.m.

Avoiding IAQ Problems Using ASHRAE's New IAQ Guide Wednesday, April 13, 2011 – 1:00 p.m. to 4:00 p.m.

**Understanding Standard 189.1 for High Performance Buildings** Monday, April 18, 2011 – 1:00 p.m. to 4:00 p.m.

District Cooling & Heating Systems: Central Plants Wednesday, April 20, 2011 – 1:00 p.m. to 4:00 p.m.

Understanding Air-to-Air Energy Recovery Technologies & Applications Monday, April 25, 2011 – 1:00 p.m. to 4:00 p.m.

Basics of High Performance Building Design Wednesday, April 27, 2011 – 1:00 p.m. to 4:00 p.m.

Complying with Standard 90.1-2010 HVAC/Mechanical Monday, May 2, 2011 - 1:00 p.m. to 4:00 p.m.

Advanced High Performance Building Design Wednesday, May 4, 2011 – 1:00 p.m. to 4:00 p.m.

Complying with Standard 90.1-2010 Envelope/Lighting Wednesday, May 11, 2011 - 1:00 p.m. to 4:00 p.m.



# **ASHRAE HVAC Design Essential Workshop**

May 18-20 • ASHRAE Foundation Learning Center • Atlanta, GA

#### In three days, you will

- Participate in in-depth, practice-focused training
- Improve overall building performance
- Effectively collaborate on an integrated design team
- Learn from industry leaders selected by ASHRAE
- Gain real-world experience to make immediate contribution to design projects

ASHRAE created the HVAC Design Essentials to provide intensive, practical education for HVAC designers and others involved in delivery of HVAC services. Developed by industry-leading professionals, this workshop provides attendees with the fundamental and technical aspects of HVAC design in commercial buildings.

In three days, you will gain practical skills and knowledge to design, install and maintain HVAC systems that can be put to immediate use. The workshop provides real-world examples of HVAC systems including calculation of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

#### **Who Should Attend**

#### Professionals at:

- Mechanical design firms
- Architectural firms
- Mechanical consulting firms
- Facility management departments
- Sales engineering firms
- Utility companies

**Programs** 

- Building Energy Assessment Professional (BEAP)
- Building Energy Modeling Professional (BEMP)
- Commissioning Process Management Professional (CPMP)
- Healthcare Facility Design Professional (HFDP)
- High-Performance **Building Design** Professional (HBDP)
- Operations & Performance Management Professional (OPMP)

For more info, visit www.ashrae.org/ certification





# Hands-on modelers, principals responsible for energy modeling projects — this conference is for you!



# ASHRAE Headquarters Seating is limited- register early!

For more information and to register, visit ashrae.org/energymodeling



# Lynn G. Bellenger, P.E., ASHRAE president - Keynote speaker William J. Worthen, AIA, LEED AP - Keynote speaker

#### **Sessions include:**

- ASHRAE standards
- Cost of energy modeling
- •Modeling for a variety of building types, such as hospitals, data centers and labs
- Building information modeling and integrating building performance
- Case studies

The conference covers energy modeling procedures, elements, and systems; case studies; and how different software applications address similar energy modeling challenges all while providing ample opportunities for networking.

ASHRAE is offering a special administration of the Building Energy Modeling Professional (BEMP) certification examination on April 6.. There is a separate application fee for the certification exam. **Certification applications must be received by ASHRAE 30 days prior to the exam. Applications will not be accepted onsite.** 

As part of the conference, The U.S. Department of Energy launches its development roadmap for EnergyPlus, OpenStudio, EPGUI, and other tools and introduces new, formal channels for public input. Attendees can provide feedback on the roadmap and on DOE's general activities in the simulation tools area.

Energy modeling software companies will offer 30-minute demonstrations. One-on-one comprehensive demonstrations also are available.

#### Registration is \$450/Member of ASHRAE, USGBC, or AIA / \$500 Non Member

This conference is ideal for hands-on modelers, principals responsible for energy modeling projects. For more information, and to register for the conference and apply for the BEMP exam, visit ashrae.org/energymodeling. Seating is limited – register early!

### April 4-6, 2011 ASHRAE Headquarters – Atlanta

#### **REGISTRATION**

This conference seeks to explain building energy modeling and computer-aided building simulation by providing a program that focuses on understanding, manipulating, and optimizing building design choices and dynamics. The program covers modeling fundamentals, building component contributions, day lighting, the impact of renewable sources and waste energy recovery, system right-sizing, and 3-D computer simulation advantages.

For more information, visit ashrae.org/energymodeling

State
Email

Your registration cost includes continental breakfast and lunch\$450/Member of ASHRAE, USGBC, or AIA\$500 Non Member	on each day and a reception on Monday and Tuesday evenings.
If paying by credit card	
VisaMastercardDiners ClubAmerican Express	Credit Card Number
Name on Credit Card	Expiration Date

Please mail your registration to ASHRAE Meetings Department - 1791 Tullie Circle, Atlanta, GA 30329. You may also register online at ashrae.org/energymodeling.



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### **Program:**

#### Modeling a Sustainable World Monday, April 11, 2011 Meeting

SDSM&T Campus, Surbeck Center Ball Room – Rapid City, SD YEA Meeting – 11:00 AM – 12:00 PM – McKeel Room Lunch Presentation – 12:00 PM – 1:00 PM – Ball Room (Cost is \$25 please RSVP by April 7, Refer to Flyer on page 5 for Details)

Lynn G. Bellenger, P.E., Fellow ASHRAE, is a partner with Pathfinder Engineers and Architects LLP, Rochester, N.Y. Bellenger is ASHRAE certified as a Building Energy Modeling Professional and a High Performance Building Design Professional. She is the first female president in the Society's 116 year history. As ASHRAE's president, Bellenger directs the Society's Board of Directors and oversees the Executive Committee. She formerly served as president-elect, treasurer and vice president.

Her presidential theme, Modeling a Sustainable World, notes that in energy simulation, daylight analysis, CFD and BIM software, we have powerful modeling tools that enable us to create and refine our vision of a building – its appearance, systems, operation and performance. Those resources, used effectively in an integrated design process for new buildings and in analyzing retrofit opportunities in existing buildings, will help us guide building owners, architects, developers, and contractors in building orientation, shading, and shape and in selecting materials, windows, equipment, and systems that optimize building performance.

"Our biggest challenge is implementing integrated design in daily practice. The traditional approach where the architect designs the building shape, orientation, and envelope and then transmits the drawings to the mechanical and electrical engineers for their design is a solo approach that misses the rich opportunities for optimizing building performance through a collaborative approach from the beginning. It is going to require a real cultural shift in our industry to transform the design process, and it's a shift that has to occur if we are going to reach our goal of net-zero-energy buildings."

Bellenger is a recipient of the Exceptional Service Award, the Distinguished Service Award, two first-place ASHRAE Technology Awards and the Lincoln Bouillon Membership Award. She received a Bachelor of Science in mathematics from Principia College and a Master of Science in environmental science from Rutgers University.

# President's Message

We have been spotlighting committees this year as each one has a chance to make a difference. This month I would like to pay special credit to our newsletter editor, David Dowling. He has put extra effort in keeping the newsletter on track for advanced notice to our membership. His reminders for articles start way in advance of the deadline to those of us who send him content. He has also gone above and beyond with the extra content with regard to Society items and upcoming events. Our chapter newsletter is very professional and all of us should be thankful to David's dedication to excellence.

In regards to the ASHRAE Webcast, we have Room 110 in the Classroom Building reserved for the webcast on 4/21 from 11 AM to 2PM.

Mike Mueller

CHAPTER MAY NOT ACT FOR THE SOCIETY



Technology for a Better Environment

#### ASHRAE WEBCAST

April 21, 2011 - 11:00 a.m. - 2:00 p.m. MDT "Ground Source Heat Pump Systems: Putting the Earth to Work for You"

#### 8003

ASHRAE's Chapter Technology Transfer Committee with support from ClimateMaster, Mammoth, Taco, the International Ground Source Heat Pump Association, and the ASHRAE Foundation will present a *free* Webcast, "Ground Source Heat Pump Systems: Putting the Earth to Work for You" on Thursday, April 21, 2011. The program will be archived online until May 5, 2011 for those unable to participate in the live webcast. Registration will be required to view the archived program.

Please promote the Webcast to members and non-members by utilizing the **Media Kit** at www.ashrae.org/GHPwebcast.

The Media Kit contains:

- A Digital Brochure
- A Sample Flyer
- ASHRAE Insights Article
- The Tentative Webcast Program
- How to Earn PDHs
- Webcast Sponsorship Opportunities
- The ASHRAE Webcast Logo

To add a registration reminder to your Outlook and find additional information regarding the program and presenters, visit <a href="www.ashrae.org/GHPwebcast">www.ashrae.org/GHPwebcast</a>. Please share this email with your colleagues.

If you have any questions or need assistance, please call (678) 539-1200 or email <u>ashrae-webcast@ashrae.org</u>.

Thank you for supporting ASHRAE webcast programs.

CHAPTER MAY NOT ACT FOR THE SOCIETY

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.



Technology for a Better Environment

# **Chapter Programs Schedule**

Below is a listing of this year's programs. If any has any suggestions for programs, please call or email me below:

\* September 16, 2010 Creating Tomorrow's Workforce in Engineering and Science Nancy Anderson-Smith

\* October 21, 2010 Tour RPM Facility Rob Mudge

\* November 18, 2010 Pumping Technology in 2010 Richard Miller

\* December 16, 2010 Variable Refrigerant Flow Technology Julian DeBullet, DL

\* January 2011 11th Annual Electro – Technology Expo Multiple

\* February 28, 2011 Region IX RVC of Membership Promotion Gaylen Atkinson

\* March 17, 2011 Tour the CBEC Building Steven Tebber

April 11, 2011 Modeling a Sustainable World Lynn Bellenger, DL

May 19, 2011 Geothermal Heat Pump Technology Craig Fischback

July 2011 ASHRAE - API Annual Golf Outing & Fund Raising

\* Completed Program

Send program suggestions to: Sean O'Connor

(P) 605-348-2033 (F) 605-348-9215

programs@blackhillsashrae.org

# **Upcoming Events**

Make plans now to attend the ASHRAE 2011 Annual Conference held in Montreal, Quebec Canada June 25 - 29, 2011.

Bienvenue à Montréal, known for bringing a bit of European charm to North America. This is a city that blends cultures, languages and people from all over the world, culminating in a unique and vibrant joie de vivre.

In the same way, the 2011 ASHRAE Annual Conference will bring together members from all over the world to share their knowledge of HVAC&R. Their desire to create a more sustainable and energy efficient building industry surpasses language barriers and knows no borders. Vive la difference!

Obtain more information for the ASHRAE 2011 Annual Conference at www.ashrae.org.

Make plans now to attend 2011 CRC Sponsored by the El Paso Chapter in August. For more information visit <a href="https://www.elpasoashrae.com">www.elpasoashrae.com</a>.

# **Membership**

If anyone knows of someone who might be interested in becoming a member of ASHRAE, contact Dave Riemenschneider at 348-7455 or email him at membershippromotion@blackhillsashrae.org or submit an application.

#### CHAPTER MAY NOT ACT FOR THE SOCIETY



March 24, 2011

Dear Building Professional,

Integrated building design has come of age. We would like to invite you to a very special presentation on sustainability from our ASHRAE Society President, Lynn Bellenger. Her presentation is titled "Modeling a Sustainable World". This comprehensive presentation will be held during a luncheon at the South Dakota School of Mines and Technology, Surbeck Center Ballroom starting at 11:30 AM on Monday, April 11<sup>th</sup>. Your attendance will greatly enhance the diversity of the number of building professionals at the luncheon.

President Bellenger's message will apply to anyone in the design field, construction industry, supply business, facility operations, or academia. Professional development hours will be available with proper registration for the luncheon. The attached flyer further explains what to plan for. Whether a new or existing building, this presentation will benefit all of us.

Lynn is the first female president of ASHRAE and may be the first Presidential visit to the Black Hills. We hope you can join us!

Mike Mueller

President, Black Hills ASHRAE Chapter #127

# Modeling a Sustainable World Lynn Bellenger, P.E.

Lynn G. Bellenger, P.E., Fellow ASHRAE, is a partner with Pathfinder Engineers and Architects LLP, Rochester, N.Y. Bellenger is ASHRAE certified as a Building Energy Modeling Professional and a High Performance Building Design Professional.

Her presidential theme, Modeling a Sustainable World, notes that in energy simulation, daylight analysis, CFD and BIM software, we have powerful modeling tools that enable us to create and refine our vision of a building – its appearance, systems, operation and performance. Those resources, used effectively in an integrated design process for new buildings and in analyzing retrofit opportunities in existing buildings, will help us guide building owners, architects, developers, and contractors in building orientation, shading, and shape and in selecting materials, windows, equipment, and systems that optimize building performance.

ASHRAE Society President

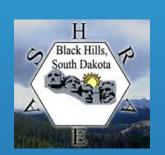


"Our biggest challenge is implementing integrated design in daily practice. The traditional approach where the architect designs the building shape, orientation, and envelope and then transmits the drawings to the mechanical and electrical engineers for their design is a solo approach that misses the rich opportunities for optimizing building performance through a collaborative approach from the beginning. It is going to require a real cultural shift in our industry to transform the design process, and it's a shift that has to occur if we are going to reach our goal of net-zero-energy buildings."

April 11, 2011 11:30am-1:30pm SDSM&T Ballroom

(Cost is \$25 please RSVP by April 7)
\* All proceeds to benefit Youth Summer Camps at SDSM&T

FOR MORE INFORMATION OR RSVP Contact: Judy Oakley Black Hills ASHRAE Treasurer joakley@oconnorcorc.com (605) 348.2033 www.blackhillsashrae.org www.ashrae.org



Professional Hours
Available!
0.5 CEU, 0.5 PDH

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilating, air conditioning and refrigeration (HVAC&R) to serve humanity and promote a sustainable world.

# ASHRAE – API

# SIGN UP FOR YOUR

# ANNUAL GOLF OUTING & FUND RAISING

July 21, 2011

**Elks Golf Course** Rapid City, South Dakota

"BEST BALL SCRAMBLE"

Tee-Off - 7:00 a.m. to 12:00 p.m.



#### GOING GOLFING "GREEN"

\$70 Entry Fee - Includes—Green Fees, Cart Rental, Refreshments on Course, Dinner for One **Location: Elks Supper Club – Lower Level** 

Social Hour: 5:00 p.m. Awards and Dinner: 6:00 p.m.

Dinner Choices: Steak or Chicken w/trimmings Additional Dinners: \$20 (wife, friends welcome)

GETTING SOME GREEN \$\$ CLOSEST TO THE PIN ON #9 CONTEST \$100.00 prize with proceeds of your \$5.00 Donation to Support SDSM&T Summer Youth Programs

#### NO LAST MINUTE CHANGES!

Send confirmation, checks, foursome and requested starting time(s) to:

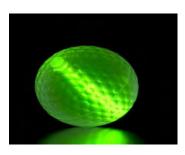
Tim Elliott **Balancing Professionals, Inc. 1221 Concourse Drive** Rapid City, SD 57703 (605) 348-8298 (605) 348-9215 (Fax) telliott@oconnorcorc.com

Mike Erhart API 5008 API Road Black Hawk, SD 57718 (605) 787-6781 (605) 787-4017 (Fax) mike.erhart@apidistribution.us

# **PRIZES & DONATIONS NEEDED**

Proud Hole Sponsors (\$50.00)

Thank you to all the previous sponsors – We again met our scholarship goal!





# Mining and Explosives Engineering Camp

**Grades 10-12 June 26-29** 

\$450

Students participating in this camp will:

- learn about the science behind explosives
- learn how engineers apply explosive forces to break rock to unearth precious minerals from the ground
- explore the world of math, physics, and chemistry through explosives
- be given a safe, up close and personal view of mining and explosives engineering by trained explosives experts

Field trips to watch blasts are included in this exciting camp experience!

#### **STEPS Engineering Camp**

Grades 6-8

Boys: June 12-17 or July 17-22 Girls: June 19-24 or July 10-15

Grades 9-12

Boys: June 19-24 or July 24-29 Girls: June 26-July 1 or July 17-22

\$500

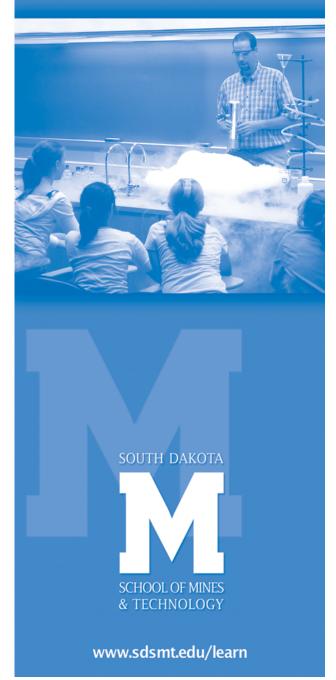
Science Technology Engineering Preview Summer Camp (STEPS) is a one-week introduction to the world of technology and engineering.

#### Campers participate in:

- hands-on activities that give them an understanding of what engineers do
- science and engineering topics such as robotics, clean manufacturing, materials/metallurgy, team building, making biofuels, and more!
- group presentations of their project
- exposure to many types of engineering to learn about careers

# South Dakota School of **Technology**

# 2011 Youth Summer Camps



#### **Space Adventures! Camp**

**Grades 6-8 July 17-22** Grades 9-12 July 24-29

\$500



Students in this camp will explore:

- the birth of the universe and life cycle of stars
- relativity, time travel, and black holes
- star mythology and basic astronomy
- space engineering

Students will make "alien slime" and build and launch their own model rocket. Field trips to the SD Air & Space Museum and Hidden Valley Observatory are included!

#### **Super Science Camp**

Grades 6-8 **July 10-15** 

\$500



Students will get excited about science in this camp! Students will explore:

- Physics impulse and momentum, phases of matter, and catapults
- Earth Science geology of the Black Hills, water quality, and meteorology
- Astronomy Mars, the Hubble telescope, NASA, comets, and meteors
- Chemistry safety and hands-on experiments

For more information, visit:

www.sdsmt.edu/learn/youth

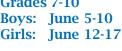
or call

(605) 394-2693

**Scholarships Available!** 

#### Socket to Me! **Computer Camp**

Grades 7-10



#### \$500



This camp provides a hands-on computer science and computer engineering experience.

Students will learn about:

- computer disassembly and reassembly
- PC maintenance
- basic programming and Web programming
- basic electronics, hardware, and software
- robotics
- cell phone applications

# Youth Geology Field Camp

Grades 6-8 **June 5-8** \$400

Grades 9-12 June 12-17 \$500



This camp provides an understanding of the earth. Through daily field trips, participants will learn about:

- minerals, rocks, and fossils
- basic geology
- understanding topographic and geologic maps
- water, landslides, and earthquakes
- volcanoes and magmas
- geology of the Black Hills
- the creation of mountains and landforms
- living the life of a field geologist

Field trips include the Museum of Geology, Black Hills Institute, Mt. Rushmore, and the Badlands.

This is truly a field camp experience!

#### **Chemical Engineering** Institute

**Grades 10-12 June 26-30** 

\$550



Students in this camp will learn:

- chemical process design
- how to convert biomass into products
- biofuels
- biopharmaceuticals
- other bio-based products
- chocolate processing for consumption
- biomedical engineering and biomaterials

This hands-on program will give students experiences to help them make decisions about pursuing chemical engineering in college. This is a great pre-college experience!

#### **Forensics and Materials Engineering Institute**

Grades 10-12 July 10-14

\$500



Explore the exciting world of forensics engineering and material analysis in this camp!

Hands-on laboratory experiments, including:

- Introduction to materials -metals, polymers, composites, nanomaterials
- Building a Samurai sword minerals and metals processing
- Metal working heat treating, blacksmithing, welding, casting
- Materials testing impact & tensile strength testing
- Materials characterization optical and scanning electron microscope
- Forensic engineering investigate how materials fail

Students will also go on field trips, including a visit to a local metals mine and to local industries to learn about material applications.



Technology for a Better Environment

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Historian/Webmaster

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Newsletter Editor

**David Dowling** 

### **Program:**

#### **Dual Core Energy Recovery** Thursday, May 19, 2011 Meeting

SDSM&T Campus, Surbeck Center Hisega Room – Rapid City, SD 12:00 PM - 1:00 PM

Ken Smith has been in the HVAC industry for 14 years, all of which have been in the ventilation segment of the market. He holds a diploma in Mechanical Engineering Technology, and an MBA from the University of Manitoba. Previous to Tempeff, Ken was the National Sales Manager for ICE Manufacturing, a gas fired make-up air manufacturer, and 2.5 years ago became the General Manager and partner with Tempeff North America.

# President's Message

As we close out another good year of programs, I would like to thank Sean O'Connor, our Chapter Technology Transfer Committee Chair (CTTC) for being way ahead of the game on getting our schedule filled early. He has already had a planning meeting for the upcoming year and I am sure he will find us great programs for those meetings. If any of you have ideas or contacts for Sean, please let him know.

From the regional level, our CTTC Regional Vice Chair is in charge of soliciting and selecting Technology Awards from chapters who submit them. I know many of you are connected to projects that could be submitted. A minimum requirement is to have at least a year of data with the project. In the year ahead, please look for these and be ready to submit them early next spring. Regional projects that receive awards can be sent on to Society.

Another thank you goes out to John Huntley as he has stepped up to chair our Research Promotion Committee. Now that our year is reaching the end, it would be awesome to get the "Top Dog" Award two years in a row. Our chapter does stand out in the Region for the exceptional achievements we accomplish as a small chapter. This would be our chance to finish the year like it started and **make a difference**.

Mike Mueller

CHAPTER MAY NOT ACT FOR THE SOCIETY



Technology for a Better Environment

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Send program suggestions to: Sean O'Connor

(P) 605-348-2033 (F) 605-348-9215

programs@blackhillsashrae.org

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# **ASHRAE - API**

# SIGN UP FOR YOUR

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Rapid City, South Dakota

"BEST BALL SCRAMBLE"

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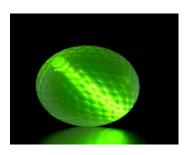
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Historian/Webmaster

**Michael Heinrich** 

Newsletter Editor

**David Dowling** 

### **Program:**

#### Why Humidify and Humidification Technologies Thursday, September 15, 2011 Meeting

SDSM&T Campus, Surbeck Center Bump Lounge – Rapid City, SD 12:00 PM - 1:00 PM BOG 11:30 AM

Brent Field is a member of Tri-County ASHRAE in Southern Califormia. He has been the Western Regional Manager of Nortec Humidifiers for 8 years. Brent has spent that time working with engineers, contractors and building owners throughout the western half of the United States on a variety of humidication applications. He has concentrated his efforts towards energy efficiency and reduced maintenance solutions for building owners.

# **President's Message**

As we embark on a new year with ASHRAE I particularly appreciate Society President Ron Jarnagin's theme this year: "Sustaining ASHRAE Through Leadership". I was grateful to get to spend quality time with Mr. Jarnagin (including golfing) at the Region IX CRC in El Paso. As we visited, it was apparent that the leadership role of ASHRAE has many opportunities. Leadership may show up through an outstanding design, or sharing time with a student, or extending your expertise as a volunteer to benefit a group, or solving a system problem, or inviting a colleague to a chapter meeting, and we could go on and on.

I would like to thank those companies within our chapter that support ASHRAE both financially and for the time commitments for those who serve the chapter and beyond. That is leadership from the top! I would also like to spotlight a couple of leaders within our chapter: Sean O'Connor received the Region IX award for best programs, and Michael Heinrich received the award for the best website in Region IX. Congratulations to each of them! Thanks to Michael also for attending the CRC as our alternate.

Please notice that our meeting locations will vary throughout the year at Surbeck Center due to room availability. Please be there early enough to grab lunch and find your way to each of the meetings. See you there!

P.S. We have a special visit by an ASHRAE Society Vice President (and recently became a DL) coming in March.

Mike Mueller

#### **CHAPTER MAY NOT ACT FOR THE SOCIETY**



Technology for a Better Environment

# **Chapter Programs Schedule**

Below is a listing of this year's programs. Please call or e-mail suggestions for programs as indicated below:

September 15, 2011 Why Humidify and Humidification technologies Brent Field

October 20, 2011 TBD TBD

November 17, 2011 TBD TBD

December 15, 2011 TBD TBD

January 19, 2012 12th Annual Electro – Technology Expo Multiple

February 16, 2012 TBD TBD

March 15, 2012 TBD Ross D. Montgomery, DL

April 19, 2012 TBD TBD

May 17, 2012 TBD TBD

July 2012 ASHRAE - API Annual Golf Outing & Fund Raising

Send program suggestions to: Sean O'Connor

(P) 605-348-2033 (F) 605-348-9215

programs@blackhillsashrae.org

# **Upcoming Events**

Make plans now to attend the ASHRAE 2012 Winter Conference held in Chicago, Illinois January 21 - 25, 2012.

ASHRAE is pleased to be returning to Chicago for the 2012 Winter Conference. Members have the chance to discuss and examine the latest topics in the building industry, such as high performing buildings and integrated design, as well as participate in technical tours; attend ASHRAE Learning Institute courses; earn professional credits; and obtain ASHRAE certifications.

Obtain more information for the ASHRAE 2012 Winter Conference at www.ashrae.org.

# **Membership**

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CHAPTER MAY NOT ACT FOR THE SOCIETY

<sup>\*</sup> Completed Program

Technology for a Better Environment

Name:	Spouse's Name:				
	Last	First	Initial		
Address:				Phone:	
City:			State:	Zip:	
Employer	·			Phone:	
Address:				Fax:	
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E-mail Ad	ldress:				
Please Ma	ail My ASHRAE Co	orrespondence to:	Home Address	Business Address	Mail Dues to:
Please Email My ASHRAE Correspondence Please Fax My ASHRAE Correspondence					O'Connor Company Attn: Judy Oakley
Enclosed	is \$30.00	\$35.00	Cash	Check	1221 Concourse Drive
	•	,	_	after this date, please	Rapid City, SD 57703
				ate response to this notice	Fax: 605-348-9215
		your local dues wit our files. Thank y		ase complete and return	

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American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

# ASHRAE Learning Institute 2011 Fall Online Course Series

#### **2 WAYS TO REGISTER**

Internet: www.ashrae.org/onlinecourses

**Phone:** Call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Note: You may register up to 24 hours prior to an online seminar. Courses are in US Eastern Standard Time.

Basics of High-Performance Building Design Mon, September 19, 2011 – 1:00 pm to 4:00 pm EST

Advanced High-Performance Building Design Wed, September 21, 2011 – 1:00 pm to 4:00 pm EST

Fundamental Requirements of ASHRAE Standard 62.1-2010 Mon, September 26, 2011 – 1:00 pm to 4:00 pm EST

Complying with Standard 90.1-2010: HVAC/Mechanical Thurs, September 29, 2011 – 1:00 pm to 4:00 pm EST

Complying with Standard 90.1-2010: Envelope/Lighting Mon, October 3, 2011 – 1:00 pm to 4:00 pm EST

Healthcare Facilities: Best Practice Design Mon, October 31, 2011 – 1:00 pm to 4:00 pm EST

Healthcare Facilities: Best Practice Application Wed, November 2, 2011 – 1:00 pm to 4:00 pm EST

**Evaluating the Performance of LEED-Certified Buildings** Mon, November 7, 2011 – 1:00 pm to 4:00 pm EST

Project Management for Improved IAQ Wed, November 9, 2011 – 1:00 pm to 4:00 pm EST

The following courses are comprised of two parts. Registrants must attend both parts in order to receive CEU/PDH credits. Archiving is available.

**Data Center Energy Efficiency – Part 1**Mon, October 10, 2011 – 1:00 pm to 4:00 pm EST

**Data Center Energy Efficiency – Part 2**Wed, October 12, 2011 – 1:00 pm to 4:00 pm EST

Using Standard 90.1 to Meet LEED Requirements – Part 1 Mon, October 17, 2011 – 1:00 pm to 4:00 pm EST

Using Standard 90.1 to Meet LEED Requirements – Part 2 Wed, October 19, 2011 – 1:00 pm to 4:00 pm EST

Implementing Standard 189.1 for High-Performance Green Buildings – Part 1 Mon, October 24, 2011 – 1:00 pm to 4:00 pm EST

Implementing Standard 189.1 for High-Performance Green Buildings – Part 2 Wed, October 26, 2011 – 1:00 pm to 4:00 pm EST

# **ASHRAE HVAC Design Essential Workshop**

January 11-13, 2012 • ASHRAE Foundation Learning Center • Atlanta, GA

#### Obtain the skills needed to:

- Improve overall building performance
- Design high-performance HVAC systems
- Effectively collaborate on an integrated design team

ASHRAE has created the HVAC Design Essentials to provide intensive, practical education for designers and others involved in delivery of HVAC services. Developed by industry-leading professionals, this workshop provides participants with training design to accelerate their evolution into effective member on a design, construction or facilities maintenance team.

In addition to gaining in-depth knowledge and understanding, attendees will receive real-world examples of HVAC systems based on the newly renovated ASHRAE Headquarters building. The workshop teaches a systematic approach to guide a design team to a solution that optimally meets the client's expectations.

#### **Who Should Attend**

- Engineers new to the HVAC industry
- Facilities managers involved in new construction or major renovation projects
- Technicians who would like to gain design knowledge
- Architects who want to understand HVAC design
- Construction project managers involved with mechanical systems

#### ASHRAE Certification Programs

- Building Energy Assessment Professional (BEAP)
- Building Energy Modeling Professional (BEMP)
- Commissioning Process Management Professional (CPMP)
- Healthcare Facility Design Professional (HFDP)
- High-Performance Building Design Professional (HBDP)
- Operations & Performance Management Professional (OPMP)

For more info, visit www.ashrae.org/certification

Visit www.ashrae.org/hvacdesign to register





Technology for a Better Environment

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Research Promotion

John Huntley

Technology Transfer

Sean O'Connor

Student Activities

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Historian/Webmaster

**Michael Heinrich** 

Newsletter Editor

**David Dowling** 

# **Program:**

#### Game Fish and Parks Outdoor Campus West Tour Thursday, October 20, 2011 Meeting

Game Fish and Parks Outdoor Campus West – Rapid City, SD 12:00 PM - 1:00 PM

Michael Heinrich graduated from SDSM&T in 1999. He has been with West Plains Engineering for 11 years and received his PE in 2004. He has designed numerous types of projects from healthcare to education facilities. He is a past President of the Black Hills ASHRAE Chapter and is currently the webmaster and historian for the chapter.

The 28,000 square foot main building is the focal point of the site, with three distinct areas. The old offices of Game Fish and Parks were cramped and had several people in them. The new facility has offices that include room for expansion. The remainder of the facility was designed as a learning and education center.

# President's Message

With our tour this month of the new Game, Fish, and Parks facility, we will not be conducting a business meeting. We will get together for a quick lunch and then proceed to the tour to allow enough time for everyone.

Since we will follow the theme of leadership in ASHRAE this year, below is a summary of the motions that your Region IX leadership discussed at the Chapters' Regional Conference (CRC) in El Paso in August. A delegate and alternate from each chapter attend two business sessions where these motions can be presented, debated, and then voted on. If the motion passes it is then forwarded to Member's Council for consideration. Our Director and Regional Chair (DRC) both presents and speaks to these motions.

- 1. Standard motions passed for DRC and CRC assessments passed at \$5 and \$6 per Area Assigned Member. This is done for funding of DRC business for the upcoming year and partial CRC funding for the next CRC to be held. Next year's CRC is in Billings, Montana.
- 2. Big Sky Chapter proposed: Annual and winter meetings should have free registration for ASHRAE members. Discussion: This would possibly require a \$35 annual dues increase to offset the financial impact per current member. Intent of the motion was to present a perk for members and this may increase membership. Motion passed.
- 3. Black Hills Chapter proposed: Setting the baseline year for evaluating energy efficiencies to 90.1-2004. Discussion: This gives a constant reference point for future gains in efficiencies instead of having a moving target. Motion passed.
- 4. Utah Chapter proposed: Have ASHRAE Society add Android apps to complement the existing IPod/IPhone apps. Motion passed.
- 5. Utah Chapter proposed: Have Society make more standards available for free for quick reference. Discussion: Major standards are currently available. Which of the other 135 standards would be chosen and what part of the 31% of Society's income generated from bookstore sales would be lost? Motion failed.

We will be hosting the 2015 CRC in late July. Please call to sign up to get on the committee. Thank you to each Dave Riemenschneider (Membership Promotion Chair) and John Huntley (Research Promotion Chair) for attending Society's Centralized Training this past month for their respective committees. This took personal time and expense to commit to this.

Mike Mueller

#### CHAPTER MAY NOT ACT FOR THE SOCIETY



Technology for a Better Environment

# **Chapter Programs Schedule**

Below is a listing of this year's programs. Please call or e-mail suggestions for programs as indicated below:

\* September 15, 2011 Why Humidify and Humidification technologies Brent Field

October 20, 2011 Game Fish and Parks Outdoor Campus West Tour Michael Heinrich

November 17, 2011 Better Building Control John Welch

December 15, 2011 Green Data Rooms Nick Gangemi

January 19, 2012 12th Annual Electro – Technology Expo Multiple

February 16, 2012 ECM Motor Technology Sam Hammoud

March 15, 2012 Building Commissioning Ross D. Montgomery, DL

April 19, 2012 Flow Control Technology Joe Schaffer

May 17, 2012 University Center Tour TBD

July 2012 ASHRAE - API Annual Golf Outing & Fund Raising

\* Completed Program

Send program suggestions to: Sean O'Connor

(P) 605-348-2033 (F) 605-348-9215

programs@blackhillsashrae.org

# **Upcoming Events**

Make plans now to attend the ASHRAE 2012 Winter Conference held in Chicago, Illinois January 21 - 25, 2012.

ASHRAE is pleased to be returning to Chicago for the 2012 Winter Conference. Members have the chance to discuss and examine the latest topics in the building industry, such as high performing buildings and integrated design, as well as participate in technical tours; attend ASHRAE Learning Institute courses; earn professional credits; and obtain ASHRAE certifications.

Obtain more information for the ASHRAE 2012 Winter Conference at www.ashrae.org.

# **Membership**

If anyone knows of someone who might be interested in becoming a member of ASHRAE, contact Dave Riemenschneider at 348-7455 or email him at <a href="membershippromotion@blackhillsashrae.org">membershippromotion@blackhillsashrae.org</a> or submit an application.

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Mike Mueller

Vice President and Secretary

**Allen Freeland** 

**Treasurer** 

**Judy Oakley** 

**Membership** 

Dave Riemenschneider

Research Promotion

John Huntley

Technology Transfer

Sean O'Connor

Student Activities

**Mike Malone** 

Historian/Webmaster

**Michael Heinrich** 

Newsletter Editor

**David Dowling** 

# **Program:**

# **Better Building Control**

Thursday, November 17, 2011 Meeting

SDSM&T Surbeck Center, Bump Lounge – Rapid City, SD 12:00 PM - 1:00 PM BOG Meeting 11:30 AM

John Welch, Regional Sales Manager, Ebtron Airflow Measurement Products

John has 20 years of HVAC experience in roles ranging from product design engineer for Carrier Corporation to program manager for Texas Instruments' electronic controls group to sales engineer for GE/Telaire's complete line of CO2 Sensors.

For the past 2 years, John has been a regional sales manager for Ebtron airflow measurement products where his main role is to educate the HVAC market on how airflow monitors improve building control, ensure a comfortable and healthy environment, and show compliance to building codes and ASHRAE standards.

# **President's Message**

This month we want to recognize the leadership shown by those whom have served. First we thank those veterans who have provided us the freedoms we enjoy. Secondly we would like to thank all of our ASHRAE past presidents and officers, to include those at the Society level. Please take a second to thank those individuals as you encounter them. As a reminder, we are doing a fund raiser to honor Lynn Bellenger, our most recent past Society President, who passed away unexpectedly last month.

Mike Mueller

# History

The program held on Thursday, April 15, 1993 was in regards to ASHRAE 62-89, Ventilation for Acceptable Indoor Air Quality by Victor C. Colwell of the FARR Company. This program had a special guest, the National President.

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# **Program:**

# **Green Data Rooms Thursday, December 15, 2011 Meeting**

Pizza Ranch – Rapid City, SD 12:00 PM - 1:00 PM

Joseph "Nick" Gangemi is a graduate of the University of Colorado with a Bachelor of Science degree in Aerospace Engineering. Upon graduation Nick joined Trane Company where he was a sales engineer for over 20 years. His vast work experience includes sales engineering for both large and small HVAC firms and he has worked as an independent manufacturer's representative before joining Data Aire as a Regional Sales Manager in 2003.

Nick has filled numerous civil and professional posts including President of the local district school board, ASHRAE Chapter President, and ASHRAE RVC for Membership and Assistant Regional Chair for Region I. He is a voting member of ASHRAE's TC 9.9 Technical Committee and program chair.

Nick's almost 40 years of HVAC industry experience makes him a much sought after technical and dinner speaker having presented for Uptime Institute, Data Center Journal, AFCOM, NYSERDA, DOE Save Energy Now, and numerous ASHRAE chapters.

# **President's Message**

Opportunity for leadership: Society recently published the Technology Award winners for this year. This process starts in the spring with submitting the project applications to our CTTC Chair (Sean O'Connor) at our chapter level. The next step is for Sean to send applications to our Region IX CTTC Vice Chair for consideration at the regional level. Historically Region IX may only have one submitted per category – see link (http://www.ashrae.org/publications/detail/14704) for more information. Any project that is awarded top billing at the regional level is then submitted to Society. I know we have projects that could be submitted and awarded from work many of you have done. Here is why you need to strongly consider this challenge to be a leader in ASHRAE:

The purpose of the ASHRAE Technology Awards is threefold:

- 1. To recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven through actual operating data.
- 2. To communicate innovative systems design to other ASHRAE members.
- 3. To highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners.

All current members of ASHRAE and its Associate Societies may submit entries. Entrants must have had a significant role in the design or development of the project.

Mike Mueller

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Also, this year's Regional IX Dinner will be held at Giordano's Pizza, 223 W. Jackson Blvd on Monday January 23, 2012 at 6:30 pm. If you would like to attend this event, please contact Rich Rose at <u>richr@mticontrols.com</u>.

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