



# THE THERMOS



The St. Louis Chapter, ASHRAE Newsletter  
[www.ASHRAE-STL.org](http://www.ASHRAE-STL.org)

VOLUME 26, NUMBER 5  
February 2010

MAKE YOUR RESERVATION TODAY FOR  
Monday, February 8th, 2010

**4:15- 5:05 pm First Session (1.0 PDH) / No "Sit Ins" Please**

### LEED Design: Student Chapter Project

Take a look at what the design engineers of tomorrow are working on! Join the ASHRAE students of Southern Illinois University-Carbondale as they take a look at the renovation of the interfaith center on campus. Topics incorporated include: heating and cooling with ground source heat pumps, LED lighting and light tubes, solar power panels, passive solar heating, radiant heating and the associated costs and benefits of these systems.

**5:15 pm Dinner and Chapter Announcements**

**6:10-7:00 pm Second Session (1.0 PDH) / No "Sit Ins" Please**

### Sustaining Our Future by Rebuilding Our Past

ASHRAE's current national president will present to us on ASHRAE's plan for reducing energy consumption in existing buildings via the *Sustainability Roadmap* and *Vision 2020 Plan* which is centered on six key elements:

- The *Advanced Energy Design Guide* series
- Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*
- Standard 189.1, *Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings*
- Standard 100, *Energy Conservation in Existing Buildings*
- Commissioning and Retro-Commissioning Guidance
- Operational and Maintenance Guidance

These six key vehicles will provide sequential guidance over the life cycle of buildings and disseminate the knowledge that we need to keep buildings operating efficiently.

### Speakers

ASHRAE student chapter members from **Southern Illinois University-Carbondale** will present to us on student projects at SIU-C. (First Session)

**Gordon Holness, P.E., Fellow ASHRAE, Life Member**, was inducted as the Society's president for 2009-10. Holness is a member of the Advanced Energy Design Guide Steering Committee and the Headquarters Building Renovation Committee. He has served as chair of numerous committees and councils most recently Members Council, the Advocacy Committee and the Steering Committee on Building Information Modeling and Interoperability. He formerly served on the Board of Directors as president-elect, vice president and director-at-large. He is a registered mechanical engineer, licensed to practice in 42 states and four provinces. He also is a chartered engineer in the United Kingdom. (Second Session)

**Next Month (March 8<sup>th</sup> 2010 Tour Night)**

Please come next month when we will tour the Local 36 Sheet Metal Contractors Apprentice Training Center <http://smw36jatc.org/> and

RUSSO'S SPAZIO AT WESTPORT  
12031 Lackland Rd  
St. Louis, MO 63146

**Chapter Members Cost \$0.00\***

\* when chapter dues paid

**Non-Members Cost \$25.00**

Cash or Check Only-No Credit Cards

### RESERVATIONS

*Everyone must register even if you have paid local dues.*

ONLINE: Click on hyperlink below or copy this into your browser:

[https://echapter.ashrae6.org/mtg\\_meetings.php?CHAPTERNBR=054](https://echapter.ashrae6.org/mtg_meetings.php?CHAPTERNBR=054)

Please make sure that you fill in all the information requested. Thanks.

**PHONE:** Must be called into Sporlan Division, Parker (800-325-3393) ext. 639, no later than noon, **Thursday, February 4th**, 2009. This is a voice mail extension. This number is in operation 24 hours a day.

**CANCELLATION:** You may cancel up to noon on **February 4th** before the meeting. If not cancelled by this point you will be responsible for the meeting cost listed above.

**PDH CERTIFICATES:** If you want a PDH for either session please check the appropriate boxes during online reservation or for phone reservations leave email address and PDH requests.



## January's Chapter Meeting "R" (refrigeration) in ASHRAE

**Jamie Horton** provided the technical session presenting on Natural Refrigerants: Here Yesterday and of Interest Today.

As the industry searches for sustainable design alternatives, the interest in natural refrigerants is growing. This presentation will review the viability of the "gentle five" refrigerants (ammonia, carbon dioxide, hydrocarbons, air and water) in refrigeration system applications.



**Dave Breitmayer** presented at the dinner session on the subject of Optimizing Facility Performance with Supermarket Commissioning

He discussed how facility commissioning can be applied to supermarkets, resulting in lower energy costs and enhanced profitability. Ideas were also presented on how commissioning can be applied to new facilities as well, reducing maintenance costs and helping the retail operator get the most value from a construction project.

## 2010 TEGA Award Competition

Everywhere you turn, energy efficiency is being discussed. Engineers have risen to the challenge of providing ever more energy efficient designs. The TEGA award is an opportunity for you to receive recognition for excellence in engineering and your client to receive recognition for their commitment to energy efficiency. Think of “2” when you think of the TEGA Award. 2 Pages is all it takes for a chance to win the Chapter TEGA award. The Chapter award winning engineer of record and the client receive their Chapter award plaques and complementary meals at the Spring awards program. Chapter award winners then have the opportunity to compete at the National and International level.

Every firm has a potential winner! Think “2” and enter this year! The categories are Commercial Buildings, Institutional Buildings, Health Care Facilities, Industrial & Process Facilities, Public Assembly, Residential, Alternative and /or Renewable Energy Uses.

Contact Sara Seagrist, TEGA Committee Chairman at 314.961.5252 or at [sseagrist@wmtao.com](mailto:sseagrist@wmtao.com) if you have any questions, please

**Download your form today off of our Chapter website**

[www.ashrae-stl.org](http://www.ashrae-stl.org)

[http://ashrae-stl.org/sites/default/files/090211\\_Technology%20Award%20Short%20Form.doc](http://ashrae-stl.org/sites/default/files/090211_Technology%20Award%20Short%20Form.doc)



## ASHRAE Technology Awards Highlight Outstanding Building Projects

First place recipients of the ASHRAE Technology Awards were recognized at the Society's 2010 Winter Conference, held last week in Orlando, Fla. The recipients have applied ASHRAE standards for effective energy management,

<http://www.ashrae.org/pressroom/detail/17413>

## St. Louis Chapter Research Donation Status

ASHRAE Research Investors 2009-10		
Individual Investors HR = Honor Roll participants \$100 min		Company Investors HR = Honor Roll participants \$150 min
Mr H. John Sauer, III (HR)		Midwest Machinery Company (HR)
Mr Mark L Bengard, PE (HR)	\$30,000	Echelmeier Company (HR)
Mr F William Rundquist (HR)		Engineered Thermal Systems (HR)
Mr R Keith Morehead (HR)	\$28,000	Dierbergs Market, Inc (HR)
Mr Vincent Francis Stanec, III, PE (HR)	\$26,000	C L R Mechanical Company (HR)
Mr Richard P Vestal (HR)		Roger L Echelmeier Company (HR)
Mr Donald W Behrmann, PE (HR)	\$24,000	St Louis ASHRAE Chapter
Mr Jordan L Heiman (HR)	\$22,000	
Mr Charles E Dale-Derks (HR)		
Mr John A Day (HR)	\$20,000	
Ms Mary Beth Burka, PE, CEM (HR)	\$18,000	
Mr Jeffrey J Gross (HR)	\$16,000	
Mr James T Barry (HR)	\$14,000	
Mr David Lester Zimmerman (HR)	\$12,000	
Mr William F Wischmeyer (HR)	\$10,000	
Mr Robert A Jones, PE (HR)	\$8,000	
Mr James L Jansen, PE (HR)	\$6,000	
Mr Eric P Rogers, PE (HR)	\$4,000	
Mr Rogelio Vocero (HR)	\$2,000	
Mr Edward D Fitts, PE (HR)	\$0	
Mr Robert G Glunt (HR)		
Mr William Richard Kalin		
Mr John D Hinton, PE		
Mr Mark W Tesar		
Mr James G Govaia		
Mr Roger O Zoellner		
Mrs Kathie Cronin		
Mr William C Nejejskij		
Mr John A Paulauskjs		
Mr Francis J Brown, PE		

Current Campaign Total - \$5,612.50	22.7% of Goal
Campaign Goal - \$24,762.00	Money Required for Goal - \$19,149.50

### Meeting registration reminder:

Please help us keep our meeting costs under control by observing the registration and cancellation deadlines. Having an accurate headcount is essential to running efficient meetings. Visit the [www.ashrae-stl.org](http://www.ashrae-stl.org) website for registration details.

Meals cost \$25 for non-members.

Meals are free to members who pay their \$75 local dues and register by the deadline of 12:00 noon the Thursday before the meeting. Members who do not register in time will be charged \$25 at the door.

Cancellations are due by 12:00 noon the Friday before the meeting. Members and non-members who cancel after this deadline will be charged \$25.

No free "sit-ins" are allowed for the tech sessions or luncheons. Regardless of whether you plan to join us for lunch or dinner, the cost to attend the meetings is \$25.

Meals are free to student members who follow registration procedures.

If you have any questions, please contact membership chairman Robert Glunt at [rglunt@b-g.com](mailto:rglunt@b-g.com).

**2009 – 2010 Calendar of Events**

Meeting Date	Day	Time	Location	Meeting Theme / Event
11/9/2009	Monday	Lunch	Spazios	<b>RESEARCH PROMOTION</b> <b>Tech Session:</b> How and Why Variable Speed Drives Deliver Real Energy Savings-Robert Helt <b>Main Program:</b> Air Duct Leakage-Larry Smith
12/4/09	Friday	ALL Day	Spazios	<b>HRATEC-Geothermal Systems</b>
1/11/2010	Monday	Evening	Spazios	<b>“R” IN ASHRAE NIGHT</b> <b>Tech Session:</b> Ammonia Refrigeration-Jamie Horton <b>Main Program:</b> Supermarket Commissioning-David Breitmeyer
1/23/10- 1/27/10-	Monday- Wednesday	ALL Day	Orlando, FL	<b>ASHRAE Winter Meeting –Orlando, FL</b>
2/8/2010	Monday	Evening	Spazios	<b>STUDENT SCHOLARSHIP AWARDS</b> <b>Tech Session:</b> Student Led Campus Energy Audit or Solar Village-Student ASHRAE Chapter <b>Main Program:</b> Society President-Gordon Holness
3/8/2010	Monday	Evening	SMACNA's Training Center	<b>TOUR NIGHT</b> <b>Tech Session:</b> Using BIM for 3D Design, Kevin Cook <b>Main Program:</b> Tour the Sheet Metal Contractors Apprenticeship Training Center
4/12/2010	Monday	Evening	Spazios	<b>TEGA AWARDS</b> <b>Tech Session:</b> Fundamentals of Ultraviolet Germicidal Irradiation for Air and Surface Disinfection -Bill Bahnfleth <b>Main Program:</b> Variable Primary Flow Chilled Water Systems -Bill Bahnfleth
5/7/10	Friday	Afternoon		<b>Spring Golf Outing</b>
5/13/10- 5/15/10	Thursday- Saturday		Milwaukee, WI	<b>Chapter Regional Conference (CRC)</b>
6/26/10- 6/30/10	Wednesday- Sunday		Albuquerque, NM	<b>ASHRAE Summer Meeting – Albuquerque, NM</b>



[www.ASHRAE-STL.ORG](http://www.ASHRAE-STL.ORG)



**ASHRAE**  
**CHAPTER/REGIONAL TECHNOLOGY AWARD APPLICATION**  
**SHORT FORM**  
(7/29/08)

**INTRODUCTION:**

*This Short Form has been developed to stimulate more participation in chapter and regional competition.*

**This form is not intended to replace the full Society Technology Award Application form.** *Regional winners using the short form will be required to complete the full Technology Award Application form before their applications can be forwarded for Society Competition. (This form does not require extensive narrative, plans or photographs.)*

**INSTRUCTIONS:**

- A. The individual submitting the Technology Award Application must be a current member of ASHRAE who had a significant role in the design or development of the project.
- B. Complete the "Short Form" and use it as the cover page.
- C. Provide a system schematic/diagram not larger than 11" x 17" in size. In addition, attach a brief narrative (maximum of 2 pages). The narrative should include the gross and net building areas applicable to the project, a description of the major building areas (i.e., operating rooms, laboratories, computer rooms, industrial processes, offices, warehouses) and a brief discussion regarding the following five criteria (if a criterion is not applicable, state accordingly):
  - Energy Efficiency
  - Indoor Air Quality
  - Innovation
  - Operation & Maintenance
  - Cost Effectiveness
  - Environmental Impact
- D. Submit your schematic, brief narrative, and completed form to your Chapter Technology Committee Chapter (CTTC) Chair for judging at the chapter level in accordance with their instructions.
- E. Winners in each category from the chapter competition will be submitted by the CTTC Chapter Chair to the Regional CTTC RVC Chair. Submit the appropriate number of copies as requested by your Regional RVC.
- F. It is highly recommended that each entrant confirm by letter (and retain a copy for record) to the owner that the owner has granted permission to submit this project to competition.

NOTE: ASHRAE Technology Awards are the HVAC&R industry's most prestigious honor for efficient energy use in buildings and environmental system performance. While the awards do not certify responsible charge or professional license status, they do recognize outstanding design innovation and successful implementation.

# CHAPTER/REGIONAL TECHNOLOGY AWARD - SHORT FORM

**1. Category (Check one and indicate New or Existing, if applicable)**

- |  |                                 |                                   |
|--|---------------------------------|-----------------------------------|
| <input type="checkbox"/> Commercial Buildings                    | <input type="checkbox"/> New or | <input type="checkbox"/> Existing |
| <input type="checkbox"/> Institutional Buildings                 | <input type="checkbox"/> New or | <input type="checkbox"/> Existing |
| <input type="checkbox"/> Health Care Facilities                  | <input type="checkbox"/> New or | <input type="checkbox"/> Existing |
| <input type="checkbox"/> Industrial Facilities or Processes      | <input type="checkbox"/> New or | <input type="checkbox"/> Existing |
| <input type="checkbox"/> Public Assembly                         | <input type="checkbox"/> New or | <input type="checkbox"/> Existing |
| <input type="checkbox"/> Residential                             |                                 |                                   |
| <input type="checkbox"/> Alternative and/or Renewable Energy Use |                                 |                                   |

**2. Name of Building or Project:**

City/State:

**3. Project Description:**

Project Study/Design Period:

Has the project been completed? Yes                      No

If YES, date completed:

If NO, scheduled date of completion (or other explanation):

**4. Entrant (ASHRAE member with significant role in project) If multiple entrants, all must be listed.**

a. **Name:**

*Last*

*First*

*Middle*

Membership Number:

Chapter

Region:

b. **Address (including country):**

*City*

*State/Province*

*Zip/Country Code*

c. **Telephone:** Office

d. **E-mail address:**

e. **Company:**

f. **Member's Role in Project:**

g. **Member's Signature:**

**5. Engineer of Record:**

By affixing my signature above, I certify that the information contained in this application is accurate to the best of my knowledge. In addition, I certify that I have discussed this entry with the owner and have received permission from the owner to submit this project to the ASHRAE Technology Awards Competition.

# Deadline for Registration: Wednesday, February 17, 2010

## How to Enroll – 5 Ways to Register:

1. **Online** – To register online, go to [www.stchas.edu/ConEd](http://www.stchas.edu/ConEd) beginning Jan. 6.
2. **By Mail** – Complete the registration form, attach your check or money order, and mail to:  
SCC, Division of C&CD  
4601 Mid Rivers Mall Dr., HUM103  
Cottleville, MO 63376-2865
3. **In Person** – Walk into 103 HUM with completed registration form and payment.  
Registration hours:
  - 8 a.m. – 5:30 p.m. Mon-Thurs.
  - 8:30 a.m. – 4:00 p.m. Fridays
  - After-hours drop box in HUM hallway
4. **By Fax** – Complete the registration form and fax to 636-922-8686. Fax registrations: VISA, Discover, and MasterCard only accepted.
5. **By Phone** – Call 636-922-8233 during the hours listed above. Telephone registration: VISA, Discover, and MasterCard only accepted as payment.

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

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

City, State, Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Date of birth: \_\_\_\_\_

Home Phone: \_\_\_\_\_

Work/Cell Phone: \_\_\_\_\_

### Registration Fee:

\$450 for MSPE & SAME members

\$500 for ASCE, ASME, ASHRAE, & IEEE members

\$550 for non-members

### Circle one (if applicable):

MSPE / SAME / ASCE / ASME / ASHRAE / IEEE Member

Member Number: \_\_\_\_\_

Payment Method:  Check Payable to SCC

VISA     Discover     MasterCard

Card No.: \_\_\_\_\_

Exp. Date: \_\_\_\_\_ 3-digit security code \_\_\_\_\_

Signature: \_\_\_\_\_

- Civil Engineering Refresher (SPI-014-11, 21, 31)
- Mechanical Engineering Refresher (SPI-014-12, 22, 32)
- Electrical Engineering Refresher (SPI-014-13, 23, 33)

ST. CHARLES COMMUNITY COLLEGE  
Division of Corporate & Community Development  
Humanities Building, Room 103  
4601 Mid Rivers Mall Drive  
Cottleville, MO 63376-2865



# Professional Engineer Refresher Course



Presented By



ST. CHARLES COMMUNITY COLLEGE



## Professional Engineer Refresher Course

These review courses are geared toward helping participants pass the Professional Engineer (P.E.) license exam. Spring classes will be held in the fields of Civil, Mechanical, and Electrical engineering.

Course fee includes a three-ring binder, lecture notes, certificate of completion, and CEU's.

Participants should purchase course reference materials **prior** to the first class. Discounted reference material can be obtained by going to the following website:

[http://ppi2pass.com/ppi/PPIShop\\_psp\\_SX330](http://ppi2pass.com/ppi/PPIShop_psp_SX330)



## 2010 Spring Schedule

Classes are scheduled to meet the following seven Saturday mornings from 8:00 a.m. – noon:

- Feb. 20
- Feb. 27
- Mar. 6
- Mar. 13
- Mar. 20
- Mar. 27
- Apr. 10

*(There will be no class on April 3<sup>rd</sup>)*

Report to Room 216 of the Humanities Building (HUM) on the campus of St. Charles Community College. Park in the Yellow Lot.

## Registration Fee

- MSPE & SAME Members .....\$450
- ASCE, ASME, ASHRAE, & IEEE .....\$500
- Non-Members .....\$550

Proceeds of the course go toward the MSPE Scholarship Fund.

**DEADLINE:  
February 17, 2010**

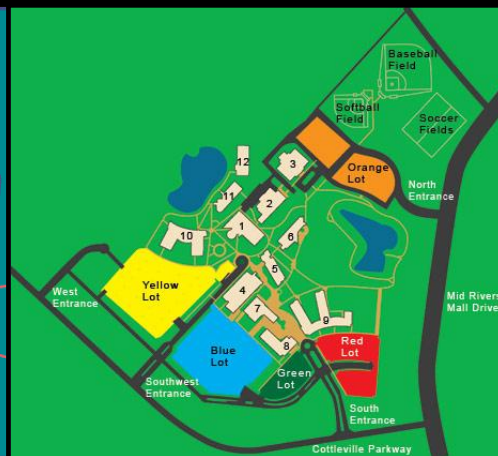
Register by mail, fax, or phone  
(See back of this panel for details.)

Course content inquiries should be directed to

**Louis Becker, P.E.**

(314) 554-2242 or  
[lbecker@ameren.com](mailto:lbecker@ameren.com)

### HOW TO LOCATE THE COLLEGE & CAMPUS BUILDINGS



1. College Center
2. Campus Services
3. Child Development Center
4. Fine Arts Building
5. Humanities Building
6. Technology Building
7. Learning Resource Center – Library
8. Student Center
9. Administration Building
10. Social Sciences Building
11. Cafe/Bookstore
12. Visual Arts Building



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[www.stchas.edu](http://www.stchas.edu)