

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XLVI - NUMBER 7

April 2008

April Meeting Details

This dinner meeting is our annual Vendor Product Show and Awards Night on the *first* Thursday of the month.

Date: Thursday, April 3, 2008

Place: Pacific Energy Center, San Francisco 851 Howard Street between 4th and 5th Streets ([directions](#))

Schedule:

- 4:30 - 6:30 pm: Product Show
- 5:00 pm: Registration begins and bar opens
- 6:30 pm: Dinner, announcements & introductions
- 7:30 pm: Break
- 7:45 pm: Main program
- 9:00 pm: Adjourn

Cost:

| | <u>Before noon</u> <u>Wed., 4/2</u> | <u>After noon</u> <u>Wed., 4/2</u> |
|---------------------------------|--|---------------------------------------|
| <u>ASHRAE</u> <u>members</u> | \$40 | \$47 |
| <u>Non-members</u> | \$47 | \$50 |
| <u>Students</u> | Free with registration | |
| <u>Voucher holder</u> | Free with registration | |

Please make your reservation at <http://www.ggashrae.org/meetings/2007-2008/apr.htm>

NOTE: If you make a reservation and cannot attend, you need to cancel in advance, or you will be billed. Kristin DeMartini will be taking reservations. If you need to CANCEL, please send a message to Kristin at cancellation@ggashrae.org.

Vendor Product Show and Awards Night



Lively participation at the 2006 Product show

This month's meeting features Golden Gate ASHRAE's annual Vendor Product Show as well as Awards Night.

The Product Show begins at 4:30 pm and features products relating to the HVAC industry from all over the Bay Area. Enjoy happy hour while you meet and greet vendors and colleagues, and see what's new in the industry!

After dinner, presentations will be made on each of the innovative projects listed below and the CTTC winners will be announced live at the meeting. The awards to be recognized include both ASHRAE Technology (CTTC) Awards and Scholarship Awards for University students studying fields related to our industry. Both Eric Thor Andresen Memorial Scholarship Fund (ETAMSF) and Golden Gate Chapter Scholarship (GGCSF) awards will be made following brief remarks from each of the students.

2008 Technology Award Entrants

1. Stopwaste.org Office Building - Rumsey Engineers
2. Stanford University Stauffer Building I Laboratory - Taylor Engineering
3. Tahoe Center for Environmental Sciences - Rumsey Engineers
4. CSU Stanislaus Science Building 2 - Guttman & Blaevoet Consulting Engineers
5. Austin Data Center Expansion - Ted Jacob Engineering Group

President's Message: A Season for Recognition

Robert Marcial, GG Chapter President

A few weeks ago, I partook in a roundtable discussion for the Junior Science and Humanities Symposium at the California State University Monterey Bay. Pacific Gas and Electric Company is a corporate sponsor and I am one of the new board members. In that capacity, one of my responsibilities is to take part in the annual regional symposium where winners of several local science fairs get to present their projects with an ultimate goal of going from the regional competition to the national round. Unfortunately, I wasn't able to make it to listen to their presentations, however, I did have the opportunity to participate in the roundtable discussions where several other professionals of different backgrounds talk with 8 to 10 high school students about their interests in the field of energy and the environment.

Wow...what a treat to be able to engage with students that are about to enter their college years! With recent news about the State of California going through budget cuts and our public education system being among the hardest hit, I was becoming pretty disillusioned about the future of our students. However, that night restored part of my hope in the people who will enter the workforce five years from now. Clearly, there's a lot that can be improved with our public education system, but there is hope.

One of the more interesting students was someone that was telling our group about the auto shop class that he was currently taking. Yes...auto shop. My high school had a auto shop class that was mostly about routine auto mechanics...fixing carburetors, doing brake jobs, etc. I'm sure that class had a positive impact upon several people who took it, but it didn't really catch my interest mostly due to the content of the class. The class that this student was discussing, however, intrigued me. It wasn't just about auto maintenance, but rather about different fuel and auto types from plug-in hybrids to fuel cells to hydrogen to natural gas. The instructor went beyond routine maintenance and engaged his students in learning about the various existing and potential ways of maximizing efficiency and using various fuel sources all the while explaining the financial and environmental benefits and disadvantages of everything they learned. But it wasn't even the content of the class that gave me hope. It was the genuine enthusiasm and interest that this teenager had for the various technologies, fuels and potential for solving transportation issues! I can't help to wonder if the next Amory Lovins or Paul Hawken might have been in the room that night. I look forward to next year's symposium.

This is the time of year when your Golden Gate Chapter reviews various people's entries in several competitions. On April 2, a few of your Board members and Committee Chairs will be reviewing Bay Area Science Fair entries at Golden Gate Park. We just reviewed three scholarship awards and are happy to announce that Kyle Konis, Karen Wetherow, and Dong Eun Kim have been awarded the Eric Thor Andresen Memorial Scholarship, the Don Bryant Memorial Scholarship, and the Golden Gate Chapter Scholarship, respectively. Their schedules providing, they will be joining us at the April meeting at the Pacific Energy Center to tell us a little bit about themselves and their academic and professional interests. Congrats to Kyle, Karen, and Dong.

And lastly, we are in the process of reviewing a few projects for the 2007 Golden Gate Chapter technology awards. At the April meeting, the winning project engineers will present their projects.

The April meeting is one of my favorites because we get to recognize and award the hard work of students about to enter college, students about to graduate from a college or university, and several of our peers who are trying to make a difference through innovative design and engineering. I hope you'll join us on Thursday.

Best regards,

Robert Marcial
2007 – 2008 GG ASHRAE President

Chapter Technology Transfer Committee (CTTC)

Tyler Bradshaw, ASHRAE Golden Gate CTT Committee Chair

2008 Golden Gate Technology Awards

Please join the chapter at the upcoming April meeting where we will be announcing the results to the 2008 Golden Gate Technology Award competition.

It's not too early to start thinking about the 2009 competition. Below are a few links to national and regional websites to help you get started. Contact Tyler Bradshaw if there are any questions.

<http://www.ashrae.org/publications/detail/14703>

<http://www.ashrae.org/publications/detail/14704>

<http://www.ashrae.org/publications/detail/14692>

<http://xp20.ashrae.org/STANDCOM/ShortForm.pdf>

ASHRAE News

**INTEGRATED BUILDING DESIGN SATELITE BROADCAST/WEBCAST:
Bringing the Pieces Together to Unleash the Power or Teamwork**

April 16, 2008 at 10:00-1:00 P.M. PST

Current ASHRAE president Kent Peterson will introduce the broadcast program. Online registration for this free webinar will begin March 1, 2008 at www.ashrae.org/ibdbroadcast.

2008 Spring Seminar

Tyler Bradshaw, Golden Gate ASHRAE Seminar Committee

Our 2007 seminar was a huge success; many thanks to this year's seminar committee for all their hard work. The CTTC is already planning to build upon this success with next year's seminar currently scheduled for May 1, 2008 at the PG&E Energy Center. Check back for announcement of specific topics, speakers and schedule as they are firmed up.

We are now accepting sponsorship donations for the 2008 seminar; the earlier you submit, the longer the exposure will be.

Sponsorship Levels:

Platinum = \$1,000

Gold = \$500

Silver = \$250

Personal Contributor = \$50

Note: all proceeds will go towards ASHRAE research and local student scholarships!

If you are interested in sponsoring as an individual or company, please contact Tyler Bradshaw at tbradshaw@rumseyengineers.com to receive a sponsorship payment form or for additional details.

Job Postings

Senior Mechanical Engineer – HVAC Design

Gordon-Prill is experiencing phenomenal growth. Our Clients are the hi-tech sector in Silicon Valley. Projects are challenging, often the first design entry into a new and expanding technology base.

Requirements:

- 7+ years industrial/office building HVAC design
- Consulting engineering or mechanical contractors performance or supervision HVAC ME design
- Large central plant systems design - chillers, cooling towers, boilers, pumping/piping
- Process systems design - compressed air, vacuum, process cooling water, gas delivery
- ME degree
- California PE License
- Management/supervision experience and AutoCAD a plus
- Perform submittal/site review
- Manage design team through development/document phases

Mountain View, CA. Competitive compensation benefits package.

Please email your resume to: jobs@gordonprill.com

Sr. Energy Engineer Wanted

RESPONSIBILITIES: Under the general direction and guidance of Manager of CPEM Engineering and Technical Services, the Senior Engineer (Energy) is responsible for planning, monitoring and coordinating energy programs/projects/contracts and EMCS for the University.

QUALIFICATIONS: Graduation from college with a degree in engineering and five (5) years of engineering experience, including two (2) years of responsible design work in the area of building HVAC systems; or equivalent combination of education and experience; professional engineering license; at least eight years of mechanical engineering and energy related experience, and a current P.E. Mechanical registration.

To review full position description & requirements, please go to <http://ucsfhr.ucsf.edu/jobs> and apply directly to requisition 21523BR.

Contact: Eli Peña, HR Analyst, 415-476-1536

Seeking Mechanical HVAC Engineers & Designers

A premiere Healthcare Engineering Consulting Firm is seeking Mechanical HVAC Engineers & Designers for our offices in California (Oakland & Pasadena)

Experience:

2 - 5 years + of relevant experience preferred (EIT, PE, CPD a plus)

Email resume to: hr@tjeg.com

Website: www.tjeg.com

Senior Mechanical Engineers & Designers with a Strong Interest in Sustainability

Why do YOU go to work? The camaraderie? The chance to work on challenging projects? Is it life balance you're looking for? How about staying informed about the latest mechanical engineering technologies?

CDi Engineers in Lynnwood, WA is one of the Northwest's largest mechanical engineering consulting firms. We've earned our excellent reputation for the quality of our work and the thoughtful, current, and practical advice we provide our clients.

But those aren't the only reasons to join us.

To learn more about CDi's challenging projects, open and friendly culture, and job opportunities, visit our website at www.cdiengineers.com.

Or contact Vickie Yaros at hr@cdiengineers.com

We look forward to hearing from you!

Sr. Mechanical Engineer Wanted

The UCSF Capital Programs & Facilities Management Department (CPFM) designs, builds, operates and maintains UCSF facilities in support of its research, teaching, health care and community service missions.

Under the general direction and guidance of the Principal Engineer, the Senior Mechanical Engineer is responsible for performing project plan and specification reviews, and field post construction evaluations, providing mechanical engineering consulting as required, performing utility capacity reviews, and utility energy conservation and utility support evaluations and reports, and providing input for various update efforts for the campus Facility Design Guidelines and other standards.

HOW TO APPLY: To review the full job posting and to be considered for this position, please go to <http://ucsfhr.ucsf.edu/jobs> and apply directly to requisition 25934BR.

Eli Peña
Sr. HR Analyst
CPFM
415.476.1536
Eli.Pena@ucsf.edu

Announcements

HVAC Control and Energy Management Systems Offered Spring 2008

HVAC Control and Energy Management Systems, a core course for the UC Berkeley Extension/Golden Gate Chapter co-sponsored HVAC/R certificate program will be offered this spring. This is a practical course that covers the design of control systems soup to nuts including topics of pneumatic, electric and DDC controls; sensors and control devices; development of point lists; energy efficient control sequences; open control protocols; issues for control retrofits; control system performance verification; and other topics. Several classes will be done in a workshop format. The course manual will include parts of the ASHRAE Self-Directed Learning Course on HVAC Controls with supplemental notes by the instructors Steve Taylor and Mark Hydeman. **This course is only offered once a year.**

Details:

- 10 evenings
- March 19th to May 28th Wed., 6:30-9:30 pm
- San Francisco: Room 819, San Francisco Downtown Center, 425 Market St., 8th Floor (enter on Fremont St.). Located near the Embarcadero BART/MUNI station.
- \$625 (EDP 316636)

You can register on-line at <http://www.unex.berkeley.edu/cat/course159.html>.

About the instructors:

Steve Taylor, PE and Mark Hydeman, PE are Principals at Taylor Engineering. Steve and Mark have extensive practical experience in the design and commissioning of control systems. Together they have designed and commissioned over 40 projects representing nearly 20 distinct product lines. Their customers include Oracle Corporation, Symantec Corporation, UC Merced, Stanford University, Pacific Gas and Electric Company, and the State of California. This is their 5th year offering this highly popular course.

For information contact:

- Steve Taylor (staylor@taylor-engineering.com, 510-263-1540)
- Mark Hydeman (mhydeman@taylor-engineering.com, 510-263-1543)

Topics Include:

- Basics of electricity
- Motors, drives and starters
- Brief overview of pneumatic controls
- Control valves and dampers
- Sensors and auxiliary control devices
- Introduction to DDC controls
- DDC protocols and gateways
- How to specify DDC controls for top performance with details on:
 - Quality of sensors
 - Points lists
 - Sequences of operation
 - Submittals
 - Roles and responsibilities
 - Trending
 - Alarming
 - Control interface
- Steps for performance verification of DDC systems
 - Submittal review
 - Prefunctional tests
 - Functional tests
 - EMCS trend reviews

San Jose ASHRAE Technology Transfer Seminar

Z²: Zero Carbon, Zero Energy

David Kaneda will speak about IDeAs new Z² design facilities. This seminar will discuss several aspects of zero carbon, zero energy including what it is, what are the benefits, what does it cost, and how do you do it.

Presented by

David Kaneda, P.E., A.I.A., LEED AP

Date and Time

Wednesday, April 9, 2008

12:30 pm- 4:30 pm

Lunch Included

Location

Pipe Trading Trainings Center

780 Commercial Street

San Jose, Ca 95112

Fee

\$25.00 per person

Includes lunch and course materials

Please make checks payable to San Jose ASHRAE

Please register via fax to 650-324-4946 or email to knaillon@westernallied.com. Should you have any questions, please contact Krystal Naillon at 650-326-0750

2007 - 2008 Event Calendar

| <i>Date</i> | <i>Venue</i> | <i>Presentation Topic</i> | <i>Speaker(s)</i> |
|---|--------------------------------|--|---|
| Thursday April 3, 2008 Dinner | Pacific Energy Center, S.F. | Product Show, Awards and Student Night | Various |
| May 1, 2008 Virtual Building Tour Dinner (5:30 pm to 8:30 pm) | Scott's Seafood, Oakland | Virtual Building Tours – Projects from Arup, F&K, Syska Hennessey, IBE, and others | Various |
| May 1, 2008 9:00 am to 4:30 pm www.ggasrhae.org/climatechange | Pacific Energy Center, S.F. | Personal, Professional, and Political Climate Change Solutions | Various |
| Thursday, June 5, 2008 Dinner (5:30 pm to 8:30 pm) | Scott's Seafood, Oakland | Greater Efficiency Today, Blue Skies Tomorrow: Innovation for a Sustainable Built Environment | Kent Peterson, ASHRAE Society President |

Visit www.ggashrae.org/calendr.htm for updates, presentation summaries, speaker biographies and to register for the meetings. If you have suggestions for meeting topics, please contact Jeff Blaevoet at jblaevoet@gb-eng.com.

Photos from the March 2008 GG ASHRAE Meeting



Left: Krisin Demartini, Gary Harbison

Right: Carl Jordan, Dave Troup



Left: Steven Lan, Isabelle Lavedrine

Right: James Nemecheck, Scott Wayland



Left: Pat Bailey

Right: Hans Kaufmann

