Super Heating, Refrigeration, and Air-Conditioning Engineers

in this issue

Meeting Preview	pg.1
Past Gatherings	pg.2
President's Message	pg.3
Coming Attractions	pg.4
Within The Industry	pg.5
Within The Industry	pg.6
Educational Opportunities	pg.7
Partial Roster	pg.8



Meeting information

Meeting Location

Date: September 20, 2011 Location: J.Filippi Winery

Rancho Cucamonga, CA
Board Meeting: 5:00
Winery Tour: 5:30-7:00
Dinner @ New York Grill: 7:00
Cost: \$35





We look forward to seeing you again next meeting. New York Grill is located just outside of the Ontario Mills Mall just southwest of 4th Street and the 15 Freeway.

Please e-mail Adam at adam.stadnik@gmail.com to reserve your spot for the upcoming meeting.

New York Grill 950 Ontario Mills Drive Ontario, CA 91764

Meeting Preview

We hope that you will consider joining us for the first meeting of our new season at Tri-County ASHRAE. Our program this meeting will be a tour of the wine-making facilities at the J. Filippi Winery in Rancho Cucamonga. For those planning to attend, please meet us at the winery at 5:30 pm on Tuesday, September 20. Following the facility tour, the winery will be offering an optional wine tasting for \$10 as well as offering everyone in attendance 15% off of anything in the shop.

After the tour we invite everyone to join us for a delicious dinner at New York Grill at the Ontario Mills Mall. We are back at New York Grill for another year as it seems to be a location and venue that lots of us appreciate! The food has been great; the service wonderful; but the networking opportunities have been the best.

To help prepare the winery for our visit, RSVPs are a must! Please make your RSVP by e-mailing me at adam.stadnik@gmail.com.

ADAMSTADNIK

NOTE: Statements made in this publication are not the expressions of the Society or of the Tri-County chapter but may not be reproduced without special permission of the Tri-County chapter.

Past gatherings



President's message

Trv-County ASHRAE:

This is my first President's message so I am feeling the pressure to write something motivational, witty and funny. But since I am neither of those things, I'll just stick to the facts.

I would first like to thank Tim Hald and the Board of Governor's for a great 2010-201! I want to highlight a couple of accomplishments from last year. First, after a year hiatus we brought back our golf tournament fundraiser. As always, our tournament was a good time had by all. Second, because of a successful golf tournament we were able to give (2) scholarships to (2) Cal Poly students. We were able to accomplish these and other goals because of **YOU**. Hopefully we can pick up where we left off so we can have a great year, but we will need **YOUR** help.

Our first meeting of 2011-2012 is upon us. In the past we have made it a point to line up programs and speakers that will spark YOUR interests and over the summer have worked hard and continued this effort. I believe that the speakers and topics that we have for you this year will be some of the best we have had in recent memory. We wanted to start off the year in a fun way so we have scheduled a tour of Joseph Filippi winery in Rancho Cucamonga. Who doesn't like a glass of wine (or two) after a long day of work? To make this a great meeting we will need YOUR help, so come out and support YOUR chapter!

If any of you out there have any questions, comments or suggestions please do not hesitate to contact me. We are here to serve you and our industry. We encourage suggestions and new ideas!

Welcome to the 2011-2012 ASHRAE year. Let's make this one the best!!!

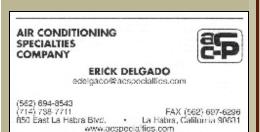
JAIMELOPEZ President











PLEASE SUPPORT OUR BUSINESS CARD ADVERTISERS LOCATED HERE AND ELSEWHERE IN THIS PUBLICATION...

MAKE AN INVESTMENT IN OUR INDUSTRY'S FUTURE!

If you would like to place a business card ad in Super Heat, please contact Adam Stadnik via e-mail at adam.stadnik@gmail.com!

THANK YOU FOR YOUR SUPPORT!!!

ARROWHEAD MECHANICAL, INC. ARROWHEAD SHEET METAL

HEATING, AIR CONDITIONING & VENTILATING CONTRACTORS
GENERAL SHEET METAL
Contractor's Lic. No. 334422
ROBERT GASTEL

(909) 889-2813 (909) 884-0174 FAX (909) 884-4849

209 N. WATERMAN AVENUE P.O. BOX 8063 SAN BERNARDINO, CA 92412

Glenn Branson, Cell: (951) 283-5668 Commercial & Industrial Sales e-mail: glenn@deltaqinc.com

Delta-Q, Inc.

510 E. Jamie Avenue La Habra, CA 90631 (714) 879-0622 Fax (714) 879-0623

Coming attractions

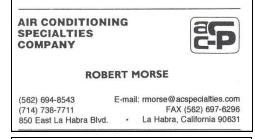
What you can expect for the rest of 2011 at Tri-County ASHRAE



PLEASE SUPPORT OUR BUSINESS CARD ADVERTISERS LOCATED HERE AND ELSEWHERE IN THIS PUBLICATION...

MAKE AN INVESTMENT IN OUR INDUSTRY'S FUTURE!

If you would like to place a business card ad in Super Heat, please contact Adam Stadnik via e-mail at adam.stadnik@gmail.com!







upcoming events

Don't miss out on the excited events coming up in the meetings to come! Bring a friend and enjoy the time with friends, colleagues, and network within your industry!



Students Dig Deep in Practical Design Knowledge to Win ASHRAE Design Competition

ATLANTA—ASHRAE's 2011 Student Design Competition drilled students on their knowledge of HVAC&R system selection and design as well as integrated building design to encourage practical design.

This year's Competition featured a mock design of the Drake Well Museum located in Titusville, Pa., the site where Edwin L. Drake drilled the world's first oil well in 1859 and launched the modern petroleum industry. Among the 20-plus entries from around the world, three were awarded first place in the three categories that the Competition offers.

First place in HVAC System Design is awarded to Holly Brink, Michael Crabb, James Dougherty Jr., Andrew Gilliam and Gina Halbom of the University of Nebraska. Their faculty advisor is Grenville Yuil, Ph.D.

After analyzing three system designs, the team chose a variable air volume system with heat and ground cooled geothermal heat recovery chiller/heater. The higher initial cost of the system is countered by its overall efficiency, low maintenance and federal tax incentives. The final system design outperformed baseline case energy by 33 percent.

The team noted that, "sustainability is a difficult achievement when considering the design for museum buildings. For HVAC design, the strict temperature and humidity requirements increase the amount of energy needed for tempering outdoor air. Also, the additional MERV filters that protect air quality increase the ductwork's static pressure and thus increase the amount of fan energy needed for maintaining airflow. It is the team's opinion that the positive aspects of the design outweigh the higher cost. These positive aspects help preserve the history of the nation's oil industry while reducing the museum's impact on the environment."

First place in HVAC System Selection is awarded to Lynn Gualtieri, Evan Oda, Kristin Porter, Navid Saiidnia, Jeffrey Wong and Cameron Young of California Polytechnic State University, San Luis Obispo, Calif. Their faculty advisor is Jesse Maddren.

The team chose a water-source variable refrigerant volume (VRV) system, which includes a ground-source water loop, a dedicated outdoor air (DOA) unit and humidifiers, as well as addition of a solar array. The VRV is split into two systems: a constant environmental control system for the collections areas and galleries, and a standard environmental control system for the offices, education center, auditorium and lobby. In each separate system the latent and sensible load were decoupled – the VRV fan coils handle the sensible load while a DOA unit with humidifiers handles the latent load.

This setup allows the entire VRV system to control the indoor environment to specified conditions. The advantage of having two systems is the standard environmental control system can be completely shut off during non-occupied hours, which saves energy when compared to running a single large DOA at very low part load.

First place in Integrated Sustainable Building Design is awarded to Te Qi, Zhang Qiqi and Chen Yuanyi of Tianjin University, China. Their advisors are Liu Junjie and Long Zhengwei.

The students integrated a ground-source heat pump for space conditioning and domestic hot water; optimized the fenestration (quantity, location and type of windows); added a solar heat storage system with thermal solar collector; changed the building orientation to 5 degrees south to the east for more efficient orientation; and used thermal mass in walls to reduce heating and cooling loads.

The team had to build detailed energy simulation models, and they demonstrated they understood synergy and compromise when they noted "as for modeling and simulation research, it is essential to integrate different modeling strategy to evaluate a building performance. Through this process, we find sometimes they contradict each other. However, they sometimes support each other."

The competition recognizes outstanding student design projects, encourages undergraduate students to become involved in the profession, promotes teamwork and allows students to apply their knowledge of practical design.

The first place teams are given 10-15 minutes to present their projects at the 2012 Winter Conference in Chicago, Jan. 21-25.





Within the industry



Dear ASHRAE Members

On June 10, 2011, ASHRAE and the National Environmental Balancing Bureau (NEBB—www.nebb.org) sent a joint letter to both memberships indicating our common goal of improving building performance and, in furtherance of that goal, that we were considering consolidating the two organizations. The main purpose of that letter was to include everyone in the discussion. To promote an open discussion we set up an email alias that received close to 400 individual comments and held an "open mic" forum at the Sunday Board of Directors meeting at the 2012 Annual Conference in Montréal.



First, I would like to thank all those who have participated in the discussion so far! We have not been able to respond individually to each comment, but rest assured all comments are being shared with each Board member. Your input is exactly what we need as we move forward. I would also like to confirm that no action was taken by the Board in Montréal, nor was any intended. We are still very early in these discussions. In fact, we are so early in the discussions that many of you asked questions we do not yet have answers for. We apologize for the lack of information in our first letter but felt it was critical to have an open, transparent discussion with all members of both organizations prior to the commencement of the negotiations.

The most common question asked is "why?" Both organizations share a belief that most buildings do not meet their potential. Our discussions have always been centered on how we could make all buildings deliver optimal performance. We each felt that by joining our two strong organizations we could create a nucleus that would strive to deliver true optimal performance. We have also agreed that to reach our goal, more organizations than just NEBB and ASHRAE need to be involved.



Based on the input we received from our joint memberships, the negotiating team has recommended to both the NEBB and ASHRAE Boards that we reach out into our industry to gather input and support from other organizations. Instead of focusing on a NEBB/ASHRAE consolidation, we are now working to build a coalition of organizations that together can influence and shape building practices to deliver buildings that consistently perform as designed. Over the next few months, we will discuss our goals with likeminded organizations.

Your continued input is critical so please share your thoughts on how we can act boldly and decisively on reaching the goal of making every building perform at its highest potential.

Sincerely, Ron Jarnagin 2011–12 ASHRAE President

Educational opportunities

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 183.1 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

Visit www.ashrae.org/hyacdesign to register

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



2011-2012 partial roster

Officers

President Jaime Lopez

RF McDonald Company — 714-257-0900

Erick Delgado **President-Elect**

Air Conditioning Specialties Co. — 714-738-7711

Yung Lin **Treasurer**

US Air Conditioning — 800-937-7222

Position Currently Open Secretary

Apply Withint!

Board of Governors

Tim Hald Past-President

Retrofit Services Company — 909-941-3494

Adam Stadnik

Southern California Edision — 909-261-7632

Richard Randall

DMG Corporation — 562-692-1277

Committee Chairs

Jim Toda Historian

Conditioning Components — 562-461-1372

Joe Sanders **Resource Promotion**

DES - 951-310-3235

Mike Lo **Student Activities**

SCE Customer Energy Efficiency & Solar Division — 626-633-3035

Adam Stadnik **Newsletter Editor** SCE-SBRO — 909-261-7632

Kyle Landis Home Page Webmaster

SCE-CTAC — 626-261-0879

Jim Parker **Technology Transfer**

Carrier — 714-985-5308

Erick Delgado **Membership Promotion**

Air Conditioning Specialties Co. — 714-738-7711



Everyone in Tri-County is responsible for building a better tomorrow!

Hea

13796 San Luis Rey Court Rancho Cucamonga, California 91739

CELEBRATING,

RI-COUNTY ASHRAE!

PASTPRESIDENTS

1988-1989 **SUKHDEVMATHAUDHU** SUKHDEVMATHAUDHU

1989-1990 1990-1991 **JEFFLEONARD**

1991-1992 **DELTHOMAS**

1992-1993 **TONYPIERCE**

1993-1994 **GREGMORIN**

1994-1995 **TONYHENKEL**

1995-1996 **JOHNHAVILAND** 1996-1997 **JOELCARTER**

1997-1998 **CHANDRACHINDE**

1998-1999 JIMTODA

1999-2000 RICHARDMCLEOD

2000-2001 **KERRYPARKER**

2001-2002 **DEBRACHAVIRA-SMITH**

2002-2003 **LUCASHYMAN**

2003-2004 **JOESANDERS**

2004-2005 **BOBGASTEL**

2005-2006 **ARTANDRES**

2006-2007 **JIMPARKER**

2007-2008 **KYLELANDIS**

2008-2009 RICKCREED

2009-2010 **ROBERTMORSE**

TIMHALD

2010-2011

—- journal of the tri-county chapter of the —

American Society of Heating, Refrigerating, and Air Conditioning Engineers

ASHRAE, founded in 1894, is an international organization of 55,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.