

# SOL AIR

Newsletter of the Southern California Chapter: American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.  
April 2000 website: [www.ashrae-socal.org](http://www.ashrae-socal.org) Vol. 45, No. 7

## APRIL MEETING INFO

### April 4, 2000 Research Night

Les Freres TAIX  
1911 Sunset Blvd., Los Angeles, California

- 5:30 Tech Forum  
**SCAQMD Regulations for Boilers**  
Speaker: Mr. Bob Jones
- 6:05 Social Hour (Fun Time!)
- 6:45 Dinner  
\$23 with reservation  
\$25 without reservation  
\$10 student member
- 7:45 Main Program  
**Meeting Code for Minimum OSA per person with VAV Systems**  
Speaker: Mr. Robert Sousa
- 9:00 Meeting Ends

Please specify beef or fish when making reservations. For reservations, please fax to Jennifer Farr, Fax (310) 671-1467 by Monday, April 3, 2000.

### APRIL MAIN MEETING

**Meeting Code for Minimum OSA per person with VAV Systems**  
by: **Ron Sweet**

How many times have you walked into a building and it felt "musty"? How many of us have worked in environments where colds and flu are passed around for months?! These situations can be annoying to say the least, but did you know that if you worked on the design and/or the construction of the building, you can be held liable for huge damages related to occupants illnesses?

What we are discussing is Indoor Air Quality, (I.A.Q.). A popular "buzzword" that has captured our interest over the last few years, but how many of us truly understand what our options are in participating in the solution, rather than in perpetuating the problem. We, in the Southern California Chapter of ASHRAE have the unique opportunity on Tuesday evening, April 4<sup>th</sup>, to share in a presentation provided by Robert Sousa of Air Monitor Corporation.

Robert will enlighten us on just how prevalent the problem is as well as offer real world solutions. How many of us have actually been successful at accurately measuring the quantity of outside air being drawn into an air handling system? Those who have tried, understand the complexities involved in such an endeavor. Robert will show us simple ways to resolve this situation and allow us all the opportunity to ask questions. If you are involved in the design and/or construction of new or retrofit projects, you simply cannot afford to miss this chance to listen, learn and participate.

### APRIL TECHNICAL FORUM

**SCAQMD Regulations for Boilers**  
by: **Bob Jones**

This presentation will cover the current SCAQMD rules and Regulations for Boilers and Water Heaters including recent Changes, which became effective January 1, 2000. SCAQMD Rules 219, 1146 and 1146.2 will be covered.

These Rules regulate the Nox emissions from fuel-fired boilers and heaters installed within the SCAQMD jurisdiction which covers most of Los Angeles County, all of Riverside and Orange Counties and most of the non-desert portion of San Bernardino County. The Rules for projects in the Ventura and San Diego County APCD areas will also be discussed.

The Nox emission limitations for new and existing boilers will be described in detail with the time frames for the required retrofit of existing boilers within the District.

A brief history of the development of these Rules will be given and a Summary including Charts will be available as handouts.



## Will's Testament

by: Will Clark

March was a great meeting! We had record crowds for the technical session on cooling tower issues by Jerry Conklin. Thanks to Jerry and our main program speakers for drawing such large attendance.

Our special guest for March was Kent Petersen, our Region X DRC. Kent's position allows him to support the individual chapters by keeping us up to date on ASHRAE Society issues and can also be a conduit for any feedback we have to Society. I encourage all members to take advantage of Kent's availability to get plugged into ASHRAE. Society runs through the participation of volunteers like you and I. The greater involvement we have, the better Society and industry we create for the next generation and ourselves. Thanks to Kent for joining us in March and for doing an outstanding job as DRC this year.



**March Technical Forum**

*Our Technical Forum speaker, Jerry Conklin, pictured above, from Engineered Comfort Systems gave a talk on "Fundamentals of Cooling Tower Design." His talk was well received and many questions were asked regarding the types of cooling towers used and materials used in the construction of these cooling towers.*



**March Main Program**

*Pictured above is our main meeting panel discussion presenters from left to right, Frank Spasaro, Southern California Gas Company, Greg Berlin, Southern California Edison Co., and chair person Alex Liams, Southern California Edison Co.*

## MAY MEETING PREVIEW

### Technical Session: A Chiller Overview

Speaker: Mr. John Clark, The Trane Company  
Learn more about chillers from a larger perspective. Why are there different types of chillers? What's the status of refrigerants? Why are different refrigerants used? What are the different compressor types? How are they applied? What's new in chiller controls. There are other topics will be discussed at the Technical Session.

### Main Meeting: Centrifugal Chiller Starters/Frequency Drives and Short Circuit Ratings for Non-Electricals, and Electricals

Speaker: Mr. Andy Nordeen, The Trane Company  
Review of chiller starting characteristics, starter types and the trade-offs associated with the common starter choices. In addition, the talk will cover the differences between the circuit breakers amp ratings vs. those associated with the starter. Variable frequency drives and their application including harmonics, will also be covered.

## ABOUT THAT ROSTER AND PRODUCT DIRECTORY...

by: **Bob Brennan**

If you've been wondering where the Chapter Roster and Product Directory are, please read on.

Historically the Chapter Secretary (that's me this term!) has taken all of the Dues Notices and has input them to create documents that in turn would be reformatted once or twice more to evolve them into the arrangement needed for publishing. This 1999-2000 term it was decided to strike out in a new direction and to streamline the infrastructure and logistics of converting the data into the publications.

There have been many Board level discussions regarding creating a centralized database that would suffice for many, if not all, of the Chapter needs. While the ultimate configuration of this centralized database is not finalized, a database was still necessary to fulfill the task of publishing the Roster and Product Directory. This entailed creating a new database from scratch. After consultations with Lo Ling Lozoya, who desktop publishes *Sol\*Air*, it was decided to press on with creation of a database. She created the skeletal structure, and subsequently I keyed all of the Roster and Product Directory data in.

This process of creating something new, with little way of anticipating problems and glitches, and the keying in of all of the data, has been protracted. Currently the Roster and Product Directory are in the final phase before physical publishing of them. Everything reasonably possible is being done to expedite their distribution.

The payoff on all of this is that future issues of the Roster and Product Directory publications should be created and disseminated with much greater speed and accuracy!

The Chapter very much appreciates everyone's patience and understanding of the difficulties of designing, and then building, this database. Future benefits derived from this arduous endeavor should make it worth the wait!!

## REGION X CRC

by: **Sudhir Agrawal**

This year the Chapters Regional Conference (CRC) will be held at Vancouver, Canada on May 11, 12 and 13th, 2000. Southern California Chapter Board desires maximum representation of the Chapter members at the CRC.

Membership, Programs, Research Promotion, Refrigeration, TEGA, Student Activities are some of the very important areas of the chapter operation. There are one day training workshops conducted in above areas for the incoming (year 2000-2001) chairpersons to assist them conducting their activities during the year.

Southern California Chapter Board is looking for the chairperson & co-chairperson for each one of the above areas. Please come forward and volunteer yourself and a friend to be the above positions. One day budget to attend the conference has been approved by the Board for these incoming chairpersons. These tasks are very simple and interesting. It requires a few hours a month of your time to help your own chapter. The current chairpersons are very experienced and will be happy to assist in your activities. Please call me at (213) 922 7233 or send me an e-mail at [agrawals@mta.net](mailto:agrawals@mta.net) so that I can forward your name for CRC. The success of the chapter depends on your active participation.

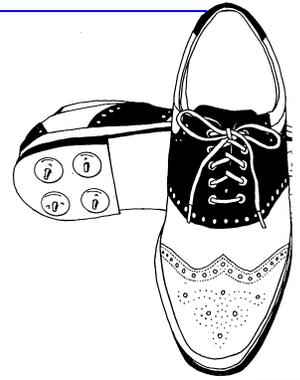
Please come forward and help your chapter.

## BOARD MEETING MINUTES

Assistant Regional Chair Kent Peterson reported CRC will be held in Vancouver this year. To date there has been no information on the meeting, but he hopes all the information will be posted on the web by next week. Kent stated it has been noted that the hotel is a little pricey. There is an opening for a Regional position for Student Activities which is a two-year term. A Regional position for Membership Chair is open. That position will be a three-year term since no one was nominated last year. Cindy Callaway is willing to be the TEGA Regional Chair, but she needs to be nominated by the Chapter. Kent reminded the Board that the Chapter needs to nominate people for awards and to present any motions they may have at the CRC Meeting. Bob Jones stated members have not received the handbook in CD-ROM form. Kent reported it will be available this year to all members who renew their membership.

*Southern California Chapter ASHRAE*

# 2000 SPRING GOLF TOURNAMENT



Wednesday, April 12, 2000

Brookside Golf Club, Course #2, Pasadena

Time: Sign in at 11:30 a.m.  
Shotgun start at 12:30 p.m.  
Banquet and dinner to follow.

Limited: to 144 golfers

Fee: \$110 per player  
\$40 dinner only

Format Individual SCGA Handicap and Handicap Scoring

Awards: Golf Awards, Door Prizes and Raffle Prizes

Donations: Company Golf Gifts are encouraged.

Name	Company	Phone	S.C.G.A. Handicap
------	---------	-------	-------------------

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

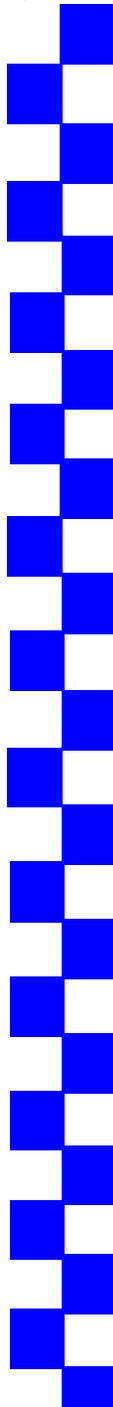
Group Contact Name \_\_\_\_\_ Phone No. \_\_\_\_\_

Corporate Hole Sponsor @ \$125\$ \_\_\_\_\_

Total\$ \_\_\_\_\_

Golf Chairperson:  
Robert Donat (562) 941-2233 / Fax (562) 944-2664

Checks payable to Southern California ASHRAE  
Key Air Conditioning Contractors, Inc.  
c/o Robert Donat  
10905 Laurel Avenue, Santa Fe Springs, CA 90670



SOUTHERN CALIFORNIA CHAPTER OF THE  
 AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS  
 PRESENTS

**ANNUAL SPRING SEMINAR**  
**CURRENT ISSUES IN LAB DESIGN**

**THURSDAY, APRIL 13, 2000**  
**8:00 A.M. TO 1:15 P.M.**  
**CALIFORNIA INSTITUTE OF**  
**TECHNOLOGY, BAXTER HALL,**  
**PASADENA**

Southern California Chapter of ASHRAE will present, with the support of Cal-Tech, what promises to be an interesting, exciting and timely topic: Current Issues in Lab Design.

The speakers will be the very best in their fields, known and respected in their respective disciplines for their experience, insight and knowledge.

The seminar will consist of four modern, highly relevant topics for the industrial hygiene community, mechanical engineers, owners, contractors and anyone interested in the intricacies of lab design.

Each presentation will be approximately 50 minutes with a 10 minutes break. A catered lunch will be served after the seminar and you should be on your way by approximately 1:15 p.m.

This half-day seminar located at the prestigious Cal-Tech campus includes lunch and is \$100/person.

Additional persons from the same company can attend for \$85/person. Students get 50% off (must submit current student I.D.).

Your Spring Seminar Technical Committee has gone to a great deal of work to ensure your chapter the very best speakers to cover a timely topic. Ignorance of lab design techniques can cost you time, money and exposure to legal liability.

The areas of presentation are in architectural and mechanical aspects of lab design. These include:

- Architectural Aspects of Modern Lab Design presented by Glen Barry, Vice-President and Director of Science and Technology at HOK, Newport Beach, California. He will review the parameters of lab design with an eye to designing labs for future expansion and change, as well as present use. ASHRAE members need to be aware of these issues in working with architects and owners.
- Lab Hood Exhaust Systems, Design, Location and Placement of Rooftop Exhaust Fans and Other Equipment, The Code Related to Stack Height, Recirculation, and Fan Controls presented by Victor Neuman of GPR Planners in Irvine, CA. Victor is on the ANSI committee regarding lab design and was formerly with Earl Walls Associates. Victor is a recognized expert in these topics and has lectured extensively. GPR Planners is a large lab

planning consulting firm located in Irvine.

- Design, Performance and Testing of Laboratory Hoods presented by Tom Smith. Mr. Smith is an Industrial Hygiene Engineer who specializes in laboratory ventilation systems with an emphasis on hoods, hood testing, hood standards and commissioning. Mr. Smith has evaluated many laboratory hood systems and served on committees for development of the ANSI Z9.5 and ASHRAE 110 "Method of Testing Performance of Laboratory Fume Hoods" standard.
- Commissioning will be presented by Peter Ebbink, a commissioning specialist with the firm of AEI located in Walnut Creek, California. AEI does lab and research facilities for pharmaceutical companies, bio-tech companies, and major universities throughout the country. Mr. Ebbink has been involved in many practical commissioning issues and advise on commissioning specifications and procedures.

**SPRING SEMINAR RESERVATION FORM**

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

Company Phone: (     ) \_\_\_\_\_ Company Fax: (     ) \_\_\_\_\_

Attending: \_\_\_\_\_ \$100

\_\_\_\_\_ \$85

\_\_\_\_\_ \$85

\_\_\_\_\_ Total

Please make checks payable to:

Southern California ASHRAE

Reservations: Kathy LaRue  
 2602 Pacific Park Drive, Whittier, CA 90601  
 Fax: (562) 695-8282 / E-Mail: kathy@dmg-la.com / Phone: (562) 692-1277

# go for it!

## Tri-County ASHRAE Golf Tournament

At the beautiful, private,  
**Spring Valley Lake Country Club**  
 Victorville, California

Directions: Only 20 minutes north of San Bernardino. Take I-15 north to Bear Valley Blvd. exit, turn right, go 5 miles to Spring Valley Lake Parkway on the left.

Monday, May 22, 2000  
 Putting Contest 9:00 a.m. - 10:00 a.m.  
 Check In: 9:00 a.m. / Start: 10:30 Shotgun  
 Format: Four person SCRAMBLE, GROSS & Net

Includes: Continental Breakfast, Putting Contest, Range Balls, Cart, Green Fees, Raffle Prizes and Awards Banquet

Proper golf attire, please... collared shirts (no jeans or short shorts).

Early "Birdie" Discounts received before May 1st: \$50/4-some of \$10/pp

<b>Team Name:</b> _____	<b>Contact:</b> _____	<b>Phone:</b> _____	
<b>Players</b>	<b>Index</b>	<b>No. Handicap</b>	<b>Amount</b>
1. _____	_____	_____	@ \$125.00 \$ _____
2. _____	_____	_____	@ \$125.00 \$ _____
3. _____	_____	_____	@ \$125.00 \$ _____
4. _____	_____	_____	@ \$125.00 \$ _____
<b>Dinner Only:</b> _____	_____	( ) _____	@ \$30.00 \$ _____
_____	_____	( ) Hole Sponsors	@ \$150.00 \$ _____
_____	_____	<b>Early Birdie Discounts:</b> _____	< _____ >
_____	_____	<b>Total Amount Enclosed:</b> _____	\$ _____

**Make check payable to: Tri-County ASHRAE**  
**Chairman: Vicki Rolofson @ Air Treatment (909) 869-7975. fax (909) 595-6874**  
**807 South Lemon Avenue, Walnut, CA 91789**

A portion of the proceeds will be used to support the ASHRAE Scholarship Fund

## **1999-2000 ASHRAE SOUTHERN CALIFORNIA CHAPTER AND WESTERN SECTION PROGRAMS**

### **SOUTHERN CALIFORNIA CHAPTER**

#### **MAY 5, 2000: STUDENT NIGHT**

Location: Les Freres TAIX  
Tech Forum: Chiller Fundamentals  
Speaker: Mr. John Clark  
Main Program: TBA  
Co-Chairs: Paul Dedona

#### **JUNE 10, 2000: INSTALLATION DINNER/DANCE**

Location: Magic Castle  
7001 Franklin Avenue,  
Hollywood, CA  
(213) 851-3313  
Time: 6:00 p.m.

### **WESTERN SECTION PROGRAMS**

#### **APRIL 11, 2000**

Location: Santa Barbara  
Topic: Fan Principals  
Demonstration  
Speaker: Ed Langlo, Independent  
Contractor

#### **MAY 9, 2000**

Location: Santa Maria  
Topic: Pump and Chiller  
Applications  
Speaker: Jack Dawson, Dawson  
Company

#### **JUNE 13, 2000**

Location: Ventura  
Topic: To be announced.  
Speaker: To be announced.

### **HELP WANTED COLUMN**

Anybody wishing to place an ad in this column for an engineering or other position please submit your request to:

RALPH PANTING,  
Air Conditioning Specialties Co.  
850 E. La Habra Blvd.  
La Habra, CA 90631  
(562) 694-8543  
Fax: (562) 697-6296  
e-mail: ralph\_judy@msn.com

Please make a donation of \$50 per ad made payable to:  
ASHRAE Southern California Chapter

People looking for a job may place an ad without donating.

#### **SALES ENGINEER**

An established Southern California HVAC manufacturer's representative is looking for a qualified and experienced sales engineer preferably with a M.E. degree, to handle an already developed territory of mechanical contractors and consulting engineers. Must have first hand knowledge of cooling towers, pumps and heat exchangers. An excellent compensation package is waiting for you.

Contact: Beverly Bender  
K.H. Watts Company, Incorporated  
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#### **TECHNICAL SALES ENGINEER**

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e-mail: djohnson@airtreatment.com

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and personnel resumes.

#### **HVAC ENGINEER & DESIGNERS**

Mechanical HVAC Engineer: Client located in Irvine, CA. PE is a plus. Salary range is \$60-70K. Must have facilities background.

HVAC Designer: Client located in Long Beach, California. Salary range is \$40-50K. Minimum five years experience in facilities/industrial HVAC systems design including computer room a/c equipment. Must be proficient in AutoCad.

For immediate consideration forward resume, 2-3 professional references and salary requirement to  
e-mail: Superb@aol.com  
or fax: (323) 293-9267

For additional information contact  
Halima @ (323) 292-4040



# Installation Dinner and Annual Award Ceremony

at the

**Magic Castle  
7001 Franklin Avenue  
Hollywood, CA  
(213) 851-3313**

**June 10, 2000**

**6:00 p.m.**

**For reservations contact:  
Sudhir Agrawal  
(213) 922-7233  
e-mail: agrawals@mta.net**




**Marley Cooling Tower**  
A United Dominion Company

**John Rees**  
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The Marley Cooling Tower Company  
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Brea, CA 92821  
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Pager 213-267-7918  
email: reesjp@marleyct.com



**Antti Korhonen**  
Branch Manager  
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Irvine, CA 92614-7546  
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13160 Mindanao Way, Marina del Rey, CA 90292  
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e-mail: SSWong@earthlink.net

# ISSUES IN FORENSIC ENGINEERING 2000

## Theme: Construction Forensic Engineering

The Fifth Annual Seminar/Workshop of the Forensic Engineering Technical Group of the American Society of Civil Engineers will be held on May 12, 2000 at the University of California, Irvine.

Panels of attorneys and technical experts will discuss their views on the following topics:

- Construction contract performance litigation
- Construction management and scheduling disputes
- Construction defect litigation
- Expert team formation
- Plaintiff/developer/subcontractor issues
- Personal injury claims arising from construction defects

The seminar/workshop will be held from 8:00 a.m. to 4:30 p.m. and will include continental breakfast and lunch, parking, and workshop materials. Exhibit space will be available.

For more information, contact Steve Helfrich at (909) 792-7366.

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## Newsletter of the Southern California Chapter American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Mail Change of Address to:

Southern California Chapter of the American Society of Heating,  
Refrigerating and Air Conditioning Engineers, Inc.

JODY RUSLING, Executive Secretary  
1942 Endicott Road, San Marino, California 91108  
Fax: (626) 285-9568

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