



MARCH 5, 2002 MEETING INFO

- 5:30 Tech Forum:**
 2000 Uniform Mechanical Code Significant Changes
Speaker:
 Mr. Fady Mattar
- 6:05 Social Hour (Fun Time!)**
- 6:45 Dinner**
 \$25 with reservation
 \$28 without reservation
 \$10 student member
- 7:45 Main Program**
Speaker:
 Mr. Tom Cabezut, LAKOS Separators & Filtration Systems
- 9:00 Meeting Ends**
 Please place reservations to Jennifer Farr, (310) 671-6915, Fax (310) 671-1467 by Mon., March 4, 2001.

In this issue:

<i>March 5, 2002 Meeting Info.....</i>	<i>1</i>
<i>March Meeting</i>	<i>1</i>
<i>President's Zephyr.....</i>	<i>2</i>
<i>March Technical Forum: 2000 Uniform Mechanical Code Significant Changes.....</i>	<i>2</i>
<i>February Main Program Recap</i>	<i>2</i>
<i>February Tech Forum Recap: Seven Judgement Calls in DX Design.....</i>	<i>3</i>
<i>SCHOLARSHIP AVAILABLE.....</i>	<i>3</i>
<i>National Engineers Week 2002</i>	<i>4</i>
<i>Historical Note: Guthrie/Ishii – Familiar Names, Friendly Partnership.....</i>	<i>5</i>
<i>2001-2002 ASHRAE Southern California Chapter Program Schedule.....</i>	<i>5</i>
<i>Help Wanted.....</i>	<i>6</i>
<i>CTAC Technical Training: Power Quality Series</i>	<i>7</i>
<i>From the Editor's Desk</i>	<i>12</i>
<i>MEMBERSHIP WATCH.....</i>	<i>12</i>

MARCH MEETING

By: Randy Delenikos

With a background in drafting, design and engineering, Tom Cabezut is a leading example of today's technically grounded sales professionals. As Regional Sales Manager for LAKOS, Tom brings the highest level of technical expertise and product knowledge to his representatives. Often, he is directly involved in designs and application drawings for submittals and sales presentations.

Prior to LAKOS, Tom worked for one of the nation's leading manufacturers of wheelchairs, designing new concepts, injection mold components and various metal parts. He was trained and active in both ANSI and ISO standards.

He also once worked for a major closed circuit video/surveillance camera manufacturer, designing various components and overseeing selected engineering procedures to meet company and industry standards.

Tom Cabezut first started with LAKOS in the engineering department. He was instrumental in the original development of the LAKOS TC Systems and Hydro Booster designs for tower basin cleaning, and he provided key technical assistance on all LAKOS products to marketing & sales. He has served as a LAKOS Regional Sales Manager for nearly three years now. His experience includes both industrial and heat transfer accounts.

Top sales honors went to Tom last year as he led his region to over 20% sales growth. Combining his technical background, training skills and personal commitment to first-class service, Tom is highly motivated to succeed and works hard at maximizing the potential of his representatives.

(continued on page 2)



The President's Zephyr

By Bob Brennan

Spring is coming fast and I would like to take the opportunity to appreciate the Southern California Chapter Life Members. Beyond acknowledging their tenure with Society, we note that upon becoming a Life Member that person no longer needs to pay dues to the Society or the Chapter any more. Many Life Members voluntarily send in a donation to help defray costs of servicing their membership and Chapter costs. So again, a big THANK-YOU to those Life Members for being there, heartily supporting the Chapter year after year.

Swinging into spring, please mark your calendars for the upcoming Spring Seminar and the Golf Tournament. Your support and attendance is always highly needed and valued. You will usually pick up a tool or two for the old tool chest in the offing.

The Chapter's Regional Conference is coming in May, this year in Las Vegas. If you have an issue (burning or smoldering) you think should become a CRC motion, please submit it to the Board as soon as you can.

Remember also that Chapter members who faithfully attend the monthly meetings do not have to "beware the ides of March"!

Finally, best wishes to those observing Passover/Good Friday, Easter and of course, happy St. Patrick's Day!

March Main Program (continued from page 1)

His education comes from Fresno State University, specializing in industrial technology and computer-aided design (CAD). Married with three children, Tom is an avid golfer and enthusiast of fine dining throughout California.

MARCH TECHNICAL FORUM: 2000 UNIFORM MECHANICAL CODE SIGNIFICANT CHANGES

Speaker Mr. Fady Mattar

Fady Mattar, Building Official for the City of Long Beach, and our Code Committee Chair, will brief the membership on the most significant differences between the current 1997 Uniform Mechanical Code (UMC) and the 2000 edition of that code.

The most notable issue is that the current edition of the code was published by the International Conference of Building Officials (ICBO) while the newly adopted 2000 edition is by the International Association of Plumbing and Mechanical Officials (IAPMO). This makes it difficult to recognize the changes between the two codes as the differences are not marked nor identified. This should make the technical session very beneficial since those most significant differences are all identified in the handout that Mr. Mattar will provide.

The 2000 edition of the UMC is expected to be adopted by the California Building Standards Commission in mid to late March, with publication soon thereafter. 180 days from the publication date will be the effective date of the Code throughout the State. This date is estimated to be October 1, 2002. Keep tuned for the exact date to be announced (soon).

Fady Mattar will discuss issues that include combustion air, machinery room, and condensate drain requirement changes. The session should be interesting and informative. Fady indicates that he is honored to be asked to speak to the Chapter membership, and volunteers his assistance to any member with questions regarding the Mechanical or the Plumbing Code provisions.

FEBRUARY MAIN PROGRAM RECAP

By: Sol*Air Staff



The topic was Firestopping and our speaker was Michael Hassenauer from the 3M Company. Mr. Hassenauer's comprehensive presentation reviewed some key points:

- ❖ Error factors in firestopping installation are in the 90% range!
- ❖ There are 10 to 17 trades involved in installing the firestopping.
- ❖ The primary remedy is to have a single source install the firestopping. Another primary remedy is to do factory mock ups to facilitate comprehension of the necessary design and/or installation.
- ❖ Requirements in firestopping are changing on a **daily** basis!
- ❖ How working documents are moving the very dynamic industry.
- ❖ What the applicable specification sections are with respect to firestopping.
- ❖ Hardware from competitive companies should not be mixed. This can lead to systemic failure.

Finally, Mr. Hassenauer stressed the need for the firestopping material supplier to review the proposed design.

FEBRUARY TECH FORUM RECAP: SEVEN JUDGEMENT CALLS IN DX DESIGN

Speaker: Mike Gallagher

Mike Gallagher discussed seven judgment calls in DX design. Discussion items included evaluating when to use an accumulator; a liquid line solenoid valve; a TXV when the system is

5 tons or less; and variable speed head pressure controls. Also discussed were line sizing under various circumstances and everybody's favorite, "when are the refrigerant lines too long???" The question and answer discussion covered double suction risers (which Mike considers to be a cut and dried issue, not a judgment call) and also spent some time on the difficulties of properly charging a system when an accumulator is present, and also when the outdoor air temperatures are cool. The impact of various accessory items, such as vibration eliminators, mufflers, etc, were also discussed with regard to long lines and properly charging the system, and thoughts were offered regarding how the system designer should take these items into account.



*Mike Gallagher and Ralph Panting
(Technical Speaker)*

SCHOLARSHIP AVAILABLE

By: Clay Lampman

This year cycle of scholarships has started. After completing an application, interviews will be scheduled with scholarships awarded at the May Chapter meeting. Applications are being sent to all area community colleges, universities, engineering professors, instructors and department chairs. This year the

Chapter is looking for students that show an academic interest in heating, refrigeration and air conditioning technology with a thought of entering this field after graduating. The 2000-2001 budget is \$13,000 to \$15,000 for student scholarships. Contact Will Clark at will@dmg-la.com or Ishtiaq Chisti at chistiia@sce.com, or Mary Johnson at mary.johnson@sbt.siemenns.com or myself for information.

CASINO NIGHT



Sponsored by
Orange Empire ASHRAE



Date:
Saturday, April 13, 2002

Place:
Phoenix Club
1340 S. Sanderson Ave.
Anaheim, CA

Time:
Reception: 7 p.m. – 12 a.m.
Casino Gambling: 7:30 p.m. –
11:30 p.m.

Prepaid Price (before April 1, 2002):
\$35/person
\$60/couple

At the door:
\$40/person
No couple discount.

Information:
Gail Ziello (909) 466-0890
Steve Rawski (714) 634-3246



**NATIONAL ENGINEERS
WEEK 2002
FEBRUARY 17-23**

by: David M. Kuo, P.E.



Southern California Chapter of ASHRAE participated in National Engineers Week by holding an outreach activity on February 22nd, targeting secondary school students on a career in engineering. Titled “**Learn what engineers do!**” the activity was hosted by Ford Motor Company at their new Premier Automotive Group (PAG) North American Headquarters located in Irvine. Over **60** attendees participated in this fun-filled event, comprised primarily of students from five

high schools (Passport, Canyon, Valencia, Saugus, and Hart) in the William S. Hart High School District.

The activity began with presentations from seven individuals that represented multiple engineering disciplines. Topics covered included HVAC, architecture, automotive, electric vehicle, and academia.

Victor Borghese, Ford Property Manager, gave an overview of Ford Motor Company and described the different brands

(Aston Martin, Jaguar, Land Rover, Lincoln, Mercury, and Volvo) within the Premier Automotive Group division. He then presented information about the building, five-story Office Tower and single-story Product Development Wing, and pointed out their state-of-the-art design features: underfloor air distribution, high performance glazing, natural gas fuel cell, T-5 indirect lighting, etc. (energy simulation of the building as designed showed that it is 18

percent better than Title 24 requirements). The building was the first one in Southern California to obtain a LEED (Leadership in Energy and Environmental Design) certification awarded by the U.S. Green Building Council.

Deanna Roll, Lincoln Brand Manager, shared her experiences at Ford as a suspension engineer and enlightened the audience with her hands-on experience of test-driving vehicles on Ford’s test tracks. She concluded her presentation by discussing the essential skills one needs to become a successful engineer: math and science, organization, communication, and creativity.

Larry Sun, Past Regional Vice Chair for Student Activities, shared his personal experiences on the decisions he has made leading to a career in engineering and ultimately to a business partner at Tsuchiyama & Kaino. As the engineer of record for the building, Larry discussed the building HVAC system in simple terms that students understood. He described air conditioning as the task of “pulling heat” into or out of a building. Air handling units were “large fans” and VAV boxes were described simply as “devices.” He

described the underfloor air distribution creatively as a system “flipped upside down” and was very effective in educating the students about the energy and comfort benefits associated with a proper design. In addition, he noted that a successful HVAC design is one that the user will never take notice of – because he/she is comfortable.

Sudhir Agrawal, Past Chapter President, is an adjunct professor at California State University of Los Angeles and spoke about engineering



curriculum in academia. He utilized a whiteboard, classroom style, and shared some of his interactive teaching techniques. Sudhir also brought eight engineering students from who participated in discussions by sharing their experiences as engineering students.

Robert Saunders, Project Manager at Southern California Edison, discussed the future of electric vehicles and challenged the students to think about career opportunities associated with the expansion of electric vehicle infrastructure. He brought a brand new Th!nk (an enterprise of Ford) electric vehicle to display and discussed its performance characteristics, environmental friendly attributes, and market niche. The Th!nk vehicle generated a lot of students amongst students.

After lunch, the students went on a tour of the building and its mechanical systems. They walked through the lobby of each floor in the Office Tower and witnessed the unique brand identity incorporated in the designs. They then went on the roof of the Tower and toured the mechanical room, seeing first-hand the large-than-person chillers, air handlers, and towers. A stroll around the catwalk exposed them to the green roof over the Product Development Wing that housed a showroom and a full-scale clay modeling room.

Clayton A. Lampman, P.E., Student Activities Chairman, concluded the seminar with a speech about ASHRAE and encouraged the students to seek a career in an area of their interest. Overall, the students were very enthusiastic and well mannered. Prior to adjourning, one student asked "When do I get to come back?"

The activity was a great success. I like to thank all the speakers that participated in this event. In addition, I like to thank our Chapter Historian, *Pat Lanphere* of AireLink Products, for his role in making this activity a success. Pat was instrumental in contacting school districts and generating the interests of key decision makers.

HISTORICAL NOTE: GUTHRIE/ISHII – FAMILIAR NAMES, FRIENDLY PARTNERSHIP

After starting in the industry working for a large mechanical engineering company, and then spending some eight years doing design/build and bid jobs for one of the most recognized local mechanical contractors, Dean Guthrie went back to engineering, working with an old friend, Ray Frericks, in 1970, at Frericks Engineering, in Torrance Ca.

He took the "Big Step" in 1975, going into business for himself, working from his house with his wife, Pat, doing the accounting and handling the general office duties.

At about this same time, 1974 to be exact, a young man with a familiar name in our local industry graduated from the University of Southern California and was promptly employed by his father, at Wm. Ishii Engineering doing electrical and mechanical projects. In 1992 W. Clifford Ishii also stepped out on his own and started his business. At the time, Cliff Ishii needed a cad drawing service and started using a service that was renting space from Dean Guthrie, who had now expanded his staff and office space into a building in Torrance. Dean and Cliff became

friends, started doing some projects together, Guthrie Eng. doing plumbing and mechanical, and Cliff Ishii doing the electrical engineering.

This year it occurred to both principals at approximately the same instant, that since they were about the same size companies, doing about the same volume, and each specializing in separate disciplines, they might join forces and set out on a five-year plan to double their business.

They now have the ability to do all of the mechanical, plumbing, and electrical engineering on shopping centers, retail supermarkets, strip centers as well as commercial office buildings, hospitals, clean rooms, apartment complexes and tenant improvement.

When not working at the new challenge, Cliff Ishii and his wife, Becky, enjoy traveling, while Dean Guthrie and his wife, Pat, find time to visit their daughter who lives in Northern California.

It pays to be friendly; you don't know who your next partner might be!

2001-2002 ASHRAE SOUTHERN CALIFORNIA CHAPTER PROGRAM SCHEDULE

April 2, 2002

To be announced.

May 7, 2002

To be announced.

**June 8, 2002:
Installation Banquet**

Swiss Park Banquet Center
1905 Workman Mill Road,
Whittier, California 90601
Time: 6:00 p.m.

HELP WANTED

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

JOE C. ABLAY, P.E.
10775 Business Center Dr.,
Cypress, CA 90630
(714) 816-1434
(714) 826-9592 fax
joe.ablay@sbt.siemens.com

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

Others who are seeking employment may place an ad at no charge.

POSITION SOUGHT #1

HVAC Analyst: New in SoCal. MS/ME, 30-year HVAC experience. Passed 10/01 PE exam. On top of predominant systems intricacies energy efficiency, economizing, designing/management/commissioning, tuition/instruction, DDC/BAS/WAN/LAN's & VFD's. Ditto investment efficacy, rebates, Std. 90.1, Title 24 & the Energy Star provisions. 25-year ASHRAE membership. Full or part-time engagement.

e-mail: Cjaneke@aol.com

POSITION SOUGHT #2

I am looking for an opportunity and hopefully you know of one within your company, organization or possibly other source. Although I have been doing Project and Implementation Management for 2 years with Computer Sciences Corporation, my skill sets and experience do not end there.

I have spent over 10 years in the Marine Corps and have training, presentation and proposal skills. Business development, Quality Assurance (Software),


Total Quality Management and Helpdesk experience. I have completed Theory of Constraints, PMI courses, and have a BS in Computer Information Technology. I can provide you with an intelligent, dynamic and fast-learner that's willing to roll up the sleeves to get the job done.

Contact: James M. Bright
(636) 734-4041 (Primary)
(636) 327-5580 (Home)
(972) 575-3649 (Voice)

AIR CONDITIONING SPECIALTIES COMPANY 

RALPH PANTING

(562) 694-8543 E-mail: acspco1@earthlink.net
(714) 738-7711 FAX (562) 697-6296
850 East La Habra Blvd. • La Habra, California 90631


American Air Balance Company
Air • Sound • Hydronic

Bob Conboy
Tel: 714/693-3700
Fax: 714/693-9509
4887 East La Palma Avenue
Suite 708
Anaheim, CA 92807
E-Mail: aabo@deltanet.com

Control Modes: Analog • Low Voltage • Sun Drier

APPLIED COMPANIES 

Manufacturer of:
Compact - Lightweight
Military Air Conditioners


Kenneth C. Keck
Executive Vice President

28020 Avenue Stanford (661) 257-0090
Valencia, CA 91355-1105 FAX (661) 257-3770
E-Mail: appliedcomp@earthlink.net



Mike Peyer, Sales Engineer
(818) 550-0377 • Fax (818) 550-0379
Phone (800) 937-7222 • (800) YES-SCACD
Pager (213) 240-5616 • Phone (626) 854-4616

Southern California Air Conditioning Distributors
16900 CHESTNUT STREET
CITY OF INDUSTRY, CALIFORNIA 91748-1012

CTR 

Beverly Ayn Bender
President

1815 W. 205th St., Suite 206
Torrance, California 90501
Phone: (310) 783-4546
Fax: (310) 783-4718 CONTRACTOR'S LIC. #735346


YOUR FLUID TECHNOLOGY RESOURCE

FRANK E. DUNN TEL: 626-797-9710
VICE PRESIDENT FAX: 626-798-4659
GENERAL SALES MANAGER EMAIL: FDUNN@DAWSONCO.COM

2124 N. LINCOLN AVE., P.O. BOX 10001
ALTADENA, CA 91001-5450

Phillip M. Trafton, C.I.P.E.
EXECUTIVE VICE PRESIDENT

donald f. dickerson associates
— consulting engineers

LOS ANGELES HEADQUARTERS (818) 385-9600
5900 SEPULVEDA BOULEVARD (310) 277-1865
SUITE 101 e-mail dtda@aol.com
VAN NUYS, CA 91411 FAX (818) 890-1669



Mechanical Architectural Sheet Metal
General

Charlie Iomo

15228 Raymer Street, Van Nuys, CA 91405
(818) 373-7584 Fax (818) 782-5099
License #689956

Jerry Conklin

Kaiser Sales Corporation
Manufacturers Representative


1341 Mill Creek Ct Thousand Oaks, CA 91380

Phone (805) 493-2348
Fax (805) 241-7638


LENNOX INDUSTRIES, INC.

JERRY PASCO
Commercial Territory Manager

12775 Reservoir Street
China, California 91710
phone 909.627.7647
fax 909.627.6370
voice mail 800.323.3356 box 0593
pager 310.936.3164


LOS ANGELES AIR BALANCE CO., INC.
AIR SOUND HYDRONIC PROFESSIONALS

Eddie Alejandro, P.E.
President


NEBB
Certified No. 208

2125 Wright Ave Suite C5 Tel: 909-593-0906
La Verne, CA 91750 Fax: 909-593-2328
Email: LAAB@aol.com Pg: 909-603-6502
Website: <http://www.airbalance.org> 800-429-6880

PACO
Pumps



PAUL M. GOUDSMIT
SALES REPRESENTATIVE
PUMPS, PARTS & SERVICE

3215 Producer Way
Pomona, CA 91768

Phone: (909) 594-9959, Ext. 338
Fax: (909) 594-1335
e-mail: pacola@flow-products.com

Phoenix Controls Corporation

Providing precision airflow controls for critical room environments, including:

- laboratories
- hospital isolation rooms
- vivariums
- clean rooms
- pharmaceutical process areas

www.phoenixcontrols.com
Represented locally by:
George Yardley Company, Inc.
(714) 241-7700

QUALITY COMPRESSOR
Air Conditioning & Refrigeration Compressors



REMANUFACTURERS, SALES & PARTS

- Trane
- Carrier
- Copeland
- Worthington
- Dunham-Bush
- York, etc.

available from stock:
Quality Compressor, Inc.
7500 S. Gervino Avenue
Bu. 2000, CA 92001 (562) 806-5185 FAX: (562) 806-5191

John A Clark
District Manager
Worldwide Applied Systems Group



TRANE

Los Angeles Sales District
The Trane Company
17780 Rowland Street
City of Industry CA 91748
TEL/FAX 626 435 1188
johna.clark@trane.com

An American Standard Company



Valley Mechanical Services
AIR CONDITIONING • ENERGY MANAGEMENT

21600 Canard Street
Suite 2100
Woodland Hills, CA 91367
TEL: (818) 716-2654
FAX: (818) 716-2605

Carlos Villarreal
General Manager

State Contractors License No. 74808



Valley Mechanical Services
AIR CONDITIONING • ENERGY MANAGEMENT

21600 Canard Street
Suite 2100
Woodland Hills, CA 91367
TEL: (818) 716-2654
FAX: (818) 716-2605

Carlos Villarreal
General Manager

State Contractors License No. 74808



weil aquatronics
Engineered Pumps and Hydronic Equipment

BOB BRENNAN

800.747-8677
818.244-5582
619.233-1716 San Diego
702.388-7300 Las Vegas
818.247-0083 Fax

115 E. Palmer Ave.
Glendale, CA 91205-3122
bob@weilaquatronics.com
www.weilaquatronics.com

WESTERN ALLIED SERVICE COMPANY

Michael Gallagher, P.E.
VM est 250
Air Conditioning Service & Systems Correction

(562) 944-6341
(714) 523-1000
FAX (562) 944-7000


12048 E. Florence Ave.
Sunnyvale, CA 94087
State License No. 329204 E-mail: mgallagher@westernallied.com



SIMON S. WONG & ASSOCIATES, INC.
Building Systems Consultants

Simon S. Wong, P.E.

3435 S. Sepulveda Blvd. Los Angeles, CA 90034
tel 310.313.0090 fax 310.313.0090
sswong@earthlink.net



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL® Company

CTAC TECHNICAL TRAINING: POWER QUALITY SERIES

Power Quality Fundamentals
Date: Wednesday, April 10, 2002 #C6865
Time: 8:30 a.m.-4:00 p.m. w/lunch

Utility Power Quality and Mitigation
Date: Wednesday, May 15, 2002
Time: 8:30 a.m.-4:00 p.m. w/lunch

Power Quality Grounding and Wiring
Date: Wednesday, June 5, 2002
Time: 8:30 a.m.-4:00 p.m. w/lunch

Efficient Technologies for Commercial Refrigeration

This course designed to give an understanding of commercial Refrigeration principles, refrigerant impacts and choices.

Presenter: Dave Wylie, ASW Engineering Management Consultants
Date: Tuesday, February 26, 2002 (Event #C6848)
Time: 8:30 a.m.-4:30 p.m. w/lunch

EE Supermarket Refrigeration

Participants become acquainted with critical sources of refrigeration energy waste in today's supermarkets. Solutions are provided to address these concerns. SCE's scientific testing of case studies are shared.

Presenter: Ramin Faramarzi, P.E., SCE
Date: Wednesday, March 27, 2002 (Event #C6749)
Time: 8:30 a.m.-12:30 p.m.

Industrial Refrigeration

Learn how to improve the operating efficiency of your industrial refrigeration systems.

Presenter: Dave Wylie, ASW Engineering Management Consultants
Date: Tuesday, March 29, 2002 (Event #C6859)
Time: 8:30 a.m.-4:30 p.m. w/lunch

Classes held at Edison CTAC 6090 N. Irwindale Ave. Irwindale, CA 91702
Classes are free of charge
Call (626) 812-7537 to register



Wednesday, April 10, 2002 (CORRECTED DATE!)

Brookside Golf Club, Course #2, Pasadena

Time: Sign in at 11:00 a.m.

Shotgun start at 1:00 p.m.

Banquet & dinner to follow

Limited to 144 golfers

Fee: \$130 per player

Dinner only: \$40 per person

Format: 4 Man/Women Scramble

Awards: Golf awards, door prizes, & raffle prizes

Donations: Company golf gifts are encouraged

Name	Company Phone	S.C.G.A. Handicap
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

Group Contact Name: _____ **Phone:** _____

Corporate Hole Sponsor @\$125 \$ _____

Totals \$ _____

Golf Chairperson: Edward H. Schmidt Phone: (818) 734-1600/Fax: (818) 734-1420

**CommAir Preferred Mechanical Services
C/o Ed Schmidt
18135 Napa Street, Northridge, CA 91325**



Classes for Mechanical Engineers



Air Conditioning Clinic Classes For Beginning Mechanical Engineers

Cooling and Heating Load Estimates	March 14
VAV Systems	March 28
Air Conditioning Fans	April 11
Refrigeration Cycle and System Components	April 25
Refrigeration Compressors and CFCs	May 9
Centrifugal and Helical Rotary Chillers	May 23
Chilled Water Systems	June 6
Water Source Heat Pumps	June 20

Time: 5:30 p.m. and 9:00 p.m. each evening

Cost: \$90.00 per evening (dinner and materials included)
\$675.00 for the entire course

Control of Airborne Biological Hazards Through Air Conditioning Installations

Bacteria and viruses that are hazardous to our health How air conditioning installations disseminate airborne diseases The art and science of air distribution. Reducing biohazards through HVAC design

Date: March 22, 2002

Time: 8:00 a.m. and 4:00 p.m.

Cost: \$350.00

Airside Fundamentals for Mechanical Engineers

- Load Design
- Psychrometrics
- Duct Design
- Fans and Fan Laws
- Acoustics

In this class, students will learn concepts and immediately apply the knowledge with application problems. Quizzes also measure the effectiveness of the teaching, so that the student continually receives feedback which promotes learning.

Dates: April 1-5, 2002

Time: 8:00 a.m. to 5:00 p.m. daily except Friday when class ends at 2:00 p.m.

Cost: \$995.00

**Call Cathrynn Frederick at 626-435-1109
for registration information and a course schedule.**



RESEARCH INVESTORS 2001-2002
 Southern California Chapter

- | | | |
|-------------------|-----------------------|-------------------|
| BARNEY KLINGER | J MICHAEL BURKE | NARENDRA AMARNANI |
| CHAD A HERRICK | JAMES B WEIL | OWEN J LYNCH |
| CHARLES RICHTER | JAMES C GROFF | PAUL S KAHNG |
| CLAYTON A LAMPMAN | JERRY CONKLIN | PETE YBARRA |
| CRAIG F HOFFERBER | JOHN C LARSEN | PHILLIP L WEAVER |
| DALE M SACKETT | JOHN E ZEILE | RALPH E PHILLIPS |
| DOMINIC CHAU | JOHN L SMITH | RALPH R PANTING |
| DON LAMARR | JOHN L SUNDAHL | RAMON R COX |
| EDUARDO CABRA | JOHN W JOHNSON | RAY BAUDELLOT |
| EDWARD H GRAY | JOSEPH BARKER | RAY H MORTON |
| EDWARD SALTZBERG | JOSEPH L LEE | RICHARD L GILBERT |
| EDWIN H WILLIAMS | JOSHUA KHEEL | ROBERT F BRENNAN |
| ELBERT E KELLY | KENNETH D SIMON | ROBERT H WOODS |
| ELIAHU SILON | LAURENCE K BRINK, JR | ROBERT L HEISLER |
| ERIC S SLAASTED | LEE F SANDAHL | ROBERT M KOVAL |
| ERIC TINGLOF | LEE SHULTS | THEODOR M HANFT |
| ERNEST S LANGER | LOUIS G HORSEFIELD | TSENG-YAO SUN |
| GERALD A HOWELL | MAHENDRA MISTRY | VERNON E DENNY |
| GLENN C SZALAY | MANOJIT SINHA, PhD | WILLIAM W CLARK |
| HAROL T KUSHNER | MARS AIR DOORS MANUF. | YIUFAI M YUNG |
| HOWARD A WOLFBERG | MAX ZOLLMAN | |
| | MICHAEL GALLAGHER | |

Please call Narendra Amarnani at (323) 267-2441 for Research Promotion

- YES!** I want to support ASHRAE Research. Please accept my tax deductible contribution of \$ _____
 (Any amount is greatly appreciated and name recognition in *Sol*Air*)
- PERSONAL Contribution (Honor Roll* Recognition in ASHRAE Journal begins at \$100)
- COMPANY Contribution (Honor Roll* Recognition in ASHRAE Journal begins at \$150)

Please pay to: ASHRAE Research
Mail To: ASHRAE Research, 1791 Tullie Circle NE, Atlanta, GA 30329

Name: _____

Company: _____

Address: _____

City, State, Zip _____

Telephone No. _____

* All the Honor Roll investors are presented with a collectable commemorative coin honoring John Engalitcheff, Jr., who is the inventor of the cooling towers.



From the Editor's Desk

by Joe Ablay

As you may know, there are lots of chapter activities in the making. Two of them are the annual Golf Tournament and Spring Seminar. Your participation will help our chapter programs such as scholarship and research.

Please get involved

MEMBERSHIP WATCH

By: Ted Hanft

July 1, 2001 through January 31, 2002

(Society Activities through November 30, 2001)

Regular Paid Chapter Members:	286
Contributing Life Chapter Members:	74
New Society Members:	23
Reinstated Society Members	4
Dropped Society Members	8

Monthly Activities:

Regular Paid Chapter Members:	22
Contributing Life Chapter Members:	6
New Society Members:	9
Reinstated Society Members:	0
Dropped Society Members	1

Dropped Society members include deceased, resignations and nonpayment of dues.

Published by the Southern California Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Los Angeles. Statements made herein are not expressions of the Society or of the Chapter. Republication of material printed herein is expressly forbidden without Chapter authorization.

Southern California Chapter 2001-2002 Board of Directors

- President:..... Bob Brennan
- President-Elect: Ralph Panting
- Secretary:.....Bob Woods
- Treasurer:..... Don La Marr
- Directors: Jerry Conklin
Mike Gallagher
Chad Herrick
Mike Poyer

Past President/Director:..... Sudhir Agrawal, P.E.

Editor:.....Joe C. Ablay, P.E.
Editor Office:

10775 Business Center Drive, Cypress, CA 90630
(714) 816-1434 / Fax: (714) 826-9592
joe.ablay@sbt.siemens.com

www.ashrae-socal.org



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