



**APRIL 2, 2002 MEETING INFO:  
 RESEARCH PROMOTION NIGHT**

- 5:30 Tech Forum: Risk Management Guidance for Health & Safety Under Extraordinary Incidents**  
**Speaker:**  
 Mr. Phil Trafton – Donald Dickerson Associates
- 6:05 Social Hour (Fun Time!)**
- 6:45 Dinner**  
 \$25 with reservation  
 \$28 without reservation  
 \$10 student member
- 7:45 Main Program: Life Cycle Cost Analysis – An Abridged Technique**  
**Speaker: Alexandra Dragan, Ph.D., P.E.**
- 9:00 Meeting Ends**  
 Please place reservations to Jennifer Farr, (310) 671-6915, Fax (310) 671-1467 by Mon., April 1, 2001.

**APRIL MAIN MEETING: LIFE CYCLE COST ANALYSIS – AN ABRIDGED TECHNIQUE**

by Alexandra Dragan Ph.D., PE.

The cost effectiveness of an investment can be assessed by many economic indicators such as: net savings, simple pay-back, savings-to-investment ratio, adjusted internal rate of return, etc.

To determine the relative cost effectiveness of two or more project alternatives, the most comprehensive and straightforward economic method is the life-cycle cost (LCC) analysis. This method that incorporates all the cost elements of an investment during its life-cycle is the standard method required by the Department of Energy’s Federal Management Program (FEMP) for evaluating energy and water conservation investments in federal buildings. The method is described at length in the “Life-Cycle Costing Manual for the Federal Energy Management Program” NIST Handbook 135.

The life-cycle cost analysis is labor intensive and usually not paid for in the private industry. To minimize the calculations at a level at which the HVAC engineers could use it and benefit from it in the normal course of design, a fast, abridged technique was developed by Alexandra Dragan, Ph.D., P.E. and it will be presented at our March meeting.

The presentation will also include topics such as:

- ❖ Why simple pay-back leads sometimes to wrong conclusions;
- ❖ Why establishing the length of the study period is important for obtaining accurate results

***In this issue:***

*April 2, 2002 Meeting Info: Research Promotion Night*  
*April Main Meeting: LIFE CYCLE COST ANALYSIS – AN ABRIDGED TECHNIQUE*..... 1  
*President’s Zephyr*..... 2  
*April Tech Forum: Risk Management Guidance for Health & Safety Under Extraordinary Incidents*..... 2  
*ASHRAE Research Promotion Night*..... 2  
*March Tech Program Recap: 2000 Uniform Mechanical Code*..... 3  
*Fady also touched upon issues that include combustion air, machinery room, and condensate drain requirement changes*  
*March Main Program Recap..* 3  
*2001-2002 ASHRAE Southern California Chapter Program Schedule*..... 3  
*Help Wanted*..... 3  
*From the Editor’s Desk* ..... 10  
**MEMBERSHIP WATCH**..... 10



## *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!

### **APRIL TECH FORUM: RISK MANAGEMENT GUIDANCE FOR HEALTH & SAFETY UNDER EXTRAORDINARY INCIDENTS**

*By: Ralph Panting*

On January 12, 2002, a report was presented by a Presidential appointed study group to members of ASHRAE. The intent of this report is to provide guidance on health and safety issues as related to the building envelope and building life safety systems when faced with extraordinary incidents caused by war, terrorism, accident, or natural disaster.

Phil Trafton, a principal of Donald Dickerson Associates, will review some of the concerns and issues that the study group should address. He will discuss areas of filtration, ventilation, air quality, entry and exit points to the building, and safety systems that need to be addressed under these circumstances. And finally, recommended issues that ASHRAE should not be involved. Please join us for a very different talk.

### **ASHRAE RESEARCH PROMOTION NIGHT**

*Mike Gallagher, P.E.*

The April Meeting is our chapter's Research Promotion night. We will recognize those who have invested in our future via ASHRAE Research so far this year. As you know, ASHRAE has what is typically the largest member-funded research program year in and year out. By investing in ASHRAE Research, your tax deductible contribution does several things for you and for the rest of us.

Among the on-going accomplishments:

- ❖ Design information, ranging from duct and pipe loss coefficients to thermal mass and insulation values.
- ❖ Design tools or improvements on tools for such purposes as modeling outside air distribution within a building or evaluating operating costs.
- ❖ Answering application questions for specific system issues, such as comparing various pumping schemes.

There are many other benefits to our Society's research program, but one of my favorites is the way that Congress and the Federal Government respects our opinions and stays for the most part out of our hair. The fact that we put our own money where our mouth is makes a big difference in credibility at the federal level, since we are NOT perceived as perpetually shaping our message just to qualify for more federal research funds. In fact, we are perceived as funding our own efforts to find solutions, without having to have either government money or government mandates in order to make it happen. It will be even more important to maintain our credibility at the federal level over the next decade, and ASHRAE Research is possibly the most important component of our effort to maintain this position.

Invest! Your money will not only go to improve our profession; it also helps protect us from misguided government attempts to fix things that may not even be broken. Our last big push for the 2001/ 2002 year is at hand. We need you.

## MARCH TECH PROGRAM RECAP: 2000 UNIFORM MECHANICAL CODE

Speaker: Mr. Fady Mattar



March Tech Program speaker, Fady Mattar with Ralph Panting

Fady Mattar, Building Official for the City of Long Beach, delivered a presentation on the most significant differences between the current 1997 Uniform Mechanical Code (UMC) and the 2000 edition of that code. In brief:

- ❖ 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.
- ❖ Fady Mattar identified these differences.
- ❖ The 2000 edition of the UMC is expected to be adopted by the California Building

Standards Commission in mid to late March.

## FADY ALSO TOUCHED UPON ISSUES THAT INCLUDE COMBUSTION AIR, MACHINERY ROOM, AND CONDENSATE DRAIN REQUIREMENT CHANGES MARCH MAIN PROGRAM RECAP



March Main program speaker, Tom Cabezut with Bob Brennan

Tom Cabezut of LAKOS spoke on wet side filtration and particle separation, mostly as applies to the cooling tower. His main points:

- ❖ The cooling tower is an unwitting air scrubber and collector of debris.
- ❖ Various configurations are used for filtration circuits, including handling the total flow and sidestream layouts.
- ❖ Filtration can be achieved by an element such as sand, mesh, strainer, or paper.
- ❖ Filtration or separation can also be achieved by using a centrifugal separator.

- ❖ Calcium or water hardness is especially a problem in the western United States.
- ❖ Filtration and separation schemes have trade-offs in initial costs, life cycle and operating costs, and maintenance necessity.



Mike Taylor of Dawson Company with guest Rick Serafin, CFO

## 2001-2002 ASHRAE SOUTHERN CALIFORNIA CHAPTER PROGRAM SCHEDULE

**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:

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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.

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Association of Energy Engineers  
Southern California Chapter

# Reducing Electricity Cost for Your Facility

Thursday, April 18, 2002  
La Mirada

- |                       |   |
|-----------------------|---|
| 9:00 – 9:05           | WELCOME<br>Reza Ohadi, Chapter President  |
| 9:05 – 9:15           | OPENING REMARKS<br>Moudood Aslam, Seminar Chair   |
| 9:15 – 10:00          | ELECTRICAL CONTRACTS<br>Mark Gutheinz, CSU, Chancellor's                                  |
| 10:00 – 10:15         | BREAK   |
| 10:15 – 11:00         | ELECTRICAL OUTLOOK; 2002-2004<br>Ross Miller, CEC, Electrical Supply Office               |
| 11:00 – 11:45         | ENVIRONMENTAL CONSIDERATION FOR ON-SITE<br>GENERATION<br>Judy Yorke, Yorke Engineering    |
| 11:45 – 1:15          | LUNCH<br>OPTIONS FOR GENERATING POINT OF USE<br>POWER<br>Kevin Best, Real Energy          |
| 1:15 – 2:00           | COGENERATION OPTIONS & ECONOMICS<br>Shiv Desai, Onsite Energy                             |
| 2:00 – 2:45           | Sub-Zero Thermal Energy Storage<br>Dr. Frederick Jay, Cristopia Thermal Energy<br>Storage |
| 2:45 – 3:00           | BREAK   |
| 3:00 – 3:45           | PHOTOVOLTAICS<br>Steve McKenery, Powerlight   |
| 3:45 – 4:15           | SUMMARY   |
| Until 4/11:           | Member \$85 / Non-Member \$95   |
| At the door:          | Member \$95 / Non-Member \$105  |
| For more information: | <a href="mailto:AEE@P2SENG.com">AEE@P2SENG.com</a> / fax: (562) 497-2990                  |



*Thursday, April 11, 2002*  
*Brookside Golf Club, Course #2, Pasadena*  
*Time: Sign in at 11:00 a.m.*  
*Shotgun start at 12:30 pm.*  
*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
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**Group Contact Name:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

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

**Totals**                                    \$ \_\_\_\_\_

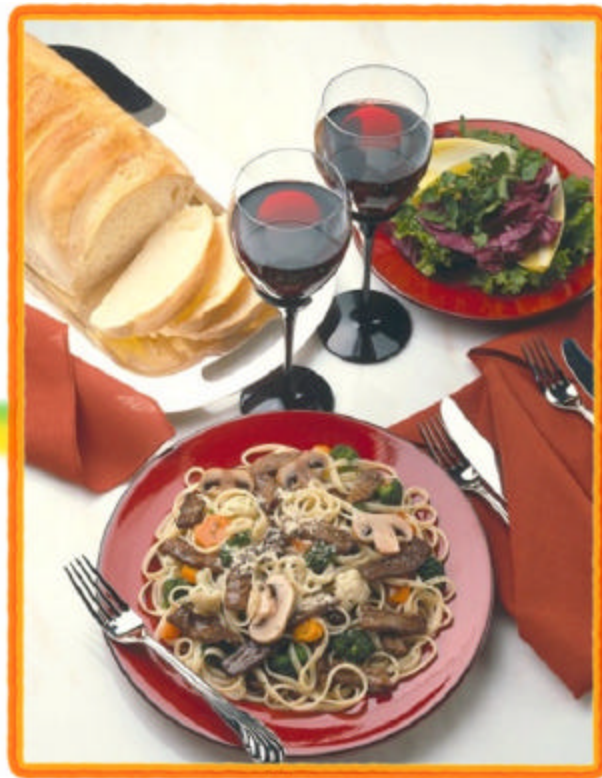
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# ASHRAE SOUTHERN CALIFORNIA CHAPTER INSTALLATION BANQUET

Saturday June 8, 2002 at 6:00 p.m.



## Swiss Park Banquet Center

1905 Workman Mill Rd., Whittier, California 90601

Name: \_\_\_\_\_ E-Mail: \_\_\_\_\_

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

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Fax No. ( ) \_\_\_\_\_

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

Please reserve as follows:	Number of guests X \$75 per guest	\$ _____
	Tables x \$750 per table (10)	\$ _____
	<b>Total Amount Due:</b>	<b>\$ _____</b>

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



# Southern California Chapter ASHRAE

# 2002 SPRING SEMINAR

**GREEN Buildings and Sustainable Design**

**Wednesday, May 1, 2002**

**The TRANE Company, City of Industry**

**Registration/Sign In 9:30 AM**

**Seminar Time: 10:00 AM to 2:00 PM**

**Lunch will be provided.**

**Featured Speakers:**

**ROBERT BOLIN, P.E.**

**Vice President and Director of Sustainable Design, Syska & Hennessy**

**Topic: "Designing Sustainable and High Performance Buildings"**

**VICTOR NEUMAN, P.E.**

**Consultant to the USEPA and Lawrence Berkley National Laboratory**

**Topic: "Proposed LEED Rating System for Laboratory Buildings"**

Name	Company	Phone #
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Registration Fee: \$125/ person.

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

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*From the Editor's Desk*

by Joe Ablay

The April meeting is dedicated to the Research Promotion Night. ASHRAE's Research Programs enhances our industry's development.

Let's all get involved.

**MEMBERSHIP WATCH**

By: Ted Hanft

**July 1, 2001 through February 28, 2002**

*(Society Activities through Society Activities through December 31, 2001)*

Regular Paid Chapter Members:	320
Contributing Life Chapter Members:	77
New Society Members:	20
Reinstated Society Members:	9
Dropped Society Members:	27

**Monthly Activities:**

Regular Paid Chapter Members:	8
Contributing Life Chapter Members:	1
New Society Members:	3
Reinstated Society Members:	4
Dropped Society Members:	4

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

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