## Association of Engineering Geologists

Southern California Section

## NEWSLETTER - December 1990



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12 Issues/year-\$20 to "AEG"
(Full-Time Students \$10/year)
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c/o Leighton & Associates
1470 S. Valley Vista Dr. #150
Diamond Bar, CA 91765

2550 Beverly Blvd. \times \text{Los Angeles, CA 90057}

## Dinner Meeting Tuesday December 11th

- ☐ The Quiet Cannon Restaurant 901 North Via San Clemente Montebello
- Cost \$20.00 (Full-Time Students Free)
- Make reservations by Friday December 7th!!!

  Grace (714) 860-7772 (Leighton & Associates)

Grace (714) 860-7772 (Leighton & Associates) (Leave Your Name & Number of People in Your Party)

- ☐ 5:30 Social Hour
- G:45 Dinner

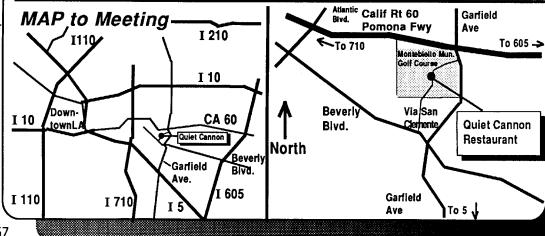
7:30 Announcements

8:00 Program

## Program

TOPIC The Use of Soil Vapor Analyses for Estimating the Extent, Degradation, and Migration of Subsurface Organic Contaminants

SPEAKER Donn L. Marrin, Ph.D. - Principal Scientist and Founder of InterPhase, Inc.



## PROGRAM Topic & Speaker

# The Use of Soil Vapor Analyses for Estimating the Extent, Degradation, and Migration of Subsurface Organic Contaminants

Donn L. Marrin, Ph.D.

Throughout the U.S. much work has been done in the last decade to assess the extent of soil and groundwater contamination due to spills and/or leaks of organic solvents and fuels. Vastly improved field and laboratory analytical techniques make the guantification of organic compounds easier to accomplish. We can expect continued improvements in these techniques to assist us in our role of investigators and toward protection of the public health and environment. The use of soil vapor surveys at sites is basically known to be a cost-effective screening technique to assess the areal extent and concentration of the more volatile organic compounds. It is now much more than that. An expert in soil vapor surveys, our speaker, will address the following topics on this subject:

- Use of soil vapor analyses to detect the presence and extent of volatile organic chemicals in soil and groundwater;
- Application of soil vapor surveying results in estimating the vertical diffusion of volatile contaminants underlying foundations, parking garages, etc.
- ☐ Interpretation of soil vapor surveying results to indicate the biodegradation of organic chemicals in soil and groundwater;
- ☐ The use of soil vapor results to design extraction systems for the remediation of soil contamination; and
- Assessing the hazards associated with the subsurface vapor phase migration of gases from landfills and hazardous waste sites.

Donn L. Marrin, Ph.D., is presently the principal scientist and founder of the firm Interphase, Inc., specializing in the development of on-site chemical analysis techniques, contaminant fate/transport studies and applied environmental chemistry. He co-developed many of the techniques and theoretical concepts which are currently used in the field of soil gas surveying. Dr. Marrin went to UC Irvine for this BS inBiology, UC Berkeley for his MS in Environmental Sciences, and to the U of Arizona for his Ph.D. in Water Resources.

## THEMONIE

New officers for the Southern California Section of AEG were presented at the November 13th meeting. Eldon Gath, New Chairman, presented the following address at this time:

"I thank all of you for your confidence in selecting me as Chairman for the coming year. You all know Kelly Rowe, that famous face in our newsletter every month. Kelly is now our Vice Chairman, responsible for the organization of our meetings and speakers. We now have a very professional newsletter, thanks to Kelly's efforts, one I am confident that Tania Gonzales, our new Secretary—Editor, will continue this next year. Most of you know Jim O'Tousa, our past Membership Chairman, and now our new Treasurer. Most of you don't know Tony Stirbys, our new Membership Chairman, but I am certain that many of you will throughout the coming year. The new Publications Chairman is Terri Beehner.

"As Chairman, I now get the microphone longer at each meeting than I did before. And I intend to use that power tonight to address issues that I believe are critical to all of us in engineering geology.

#### **INVOLVEMENT**

"Being a professional means something more than going to work six days a week. It means bringing something to the profession, and to the community. It means involvement. In the next few minutes, I will be presenting my ideas for this section; these may not reflect your ideas. Unless you tell me, I don't care. You are not involved! When you speak up, you are getting involved; when you act, you are involved.

"Involvement in the local section must be improved. There are too many members who are not involved, who are "using" the energies of others to run the association for them. Without involvement, there is no organization. We are fortunate that we have the largest section membership in the country. We are fortunate that we are all busy doing exciting work. Go to the National meeting and tell a few people what you are working on - they will be astounded at the magnitude and complexity of projects that we shrug off as routine. Fault trenching is almost a religious concept to a geologist from New Jersey. Landslides? There aren't any in Minnesota, and in Kentucky, the civil engineers are responsible for identifying them anyway.

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"But, with all this work comes the other side of the coin. We have a section which has had negligible subcommittee activity in years. Probably most of you are not even aware that we have subcommittees. Maybe there are several of you out there who even chair subcommittees, and who don't even know it, or worse, don't care because no one else seems to. Well, we will again have active subcommittees, we need active subcommittees, and for that we need involvement. We need you. There's no one else here, and if they aren't here, they're even less involved than you are.

"As Chairman, my duties are directing the Section. To me the Section means more than five minutes of brief announcements before desert. It means member activity. Consequently, I propose to assume responsibility for the organization and direction of section committees. Later tonight (and following this section in the newsletter) I will announce a list of all of the proposed committees, and I intend to see that active people get involved in them. Some committees are going to be more active than others. Some are just needed in case of need. Talk to me, I'll certainly tell you my ideas, but I promise that I'll also listen to yours.

#### REGISTRATION

"By now we are in serious danger of having geology registration in the State of California rendered worthless. We have been complacent, we have been ignorant, and we are being beaten by the press, by the Civil Engineering Board, and by the legislature. I am proposing the creation of a Professional Registration Subcommittee to aggressively pursue this issue. Their task is monumental, their time is short, and their commitment will need to be absolute. We will have a representative at every Board of Registration meeting. We will attend the Engineering Board. We will regularly attend legislative hearings. We will conduct legislative briefings. We will revise the Geology Registration Act to allow the Board to function effectively in the present world. We will be involved. If we are not involved, we will be regressing geologic practice to the 1950's; and I've been assured by those who were there, that we do not want to be.

#### **PERCEPTION**

"How can we expect to be taken seriously by the legislature, when the Oakland Tribune calls us whores? Those of you who read those articles were no doubt outraged, and justifiably so. But weren't there some truths being exposed, wasn't that what probably contributed to your disgust? In this country, how people perceive us, quickly becomes how we are. This is the 1990's, and we must be aware that public perception is important. Far more important to the success of the engineering geology profession than an impressive list of technical publications. We must communicate on the public's level. We must; the press does.

"I am proposing the formation of a Public Affairs Subcommittee to investigate, and act upon, the avenues we can take to bolster the public's perception of engineering geology. Let's start at the Elementary Schools, and work up into the High Schools. Let's talk to Citizen's Groups, let's set up library displays, let's meet with City Managers. Let's communicate in simple language where, what, and how the engineering geologist can make a difference. Public Health and Safety, remember? It's in our Association Bylaws as our number one mission. It's the reason we were able to push so successfully for State Registration. Public Health and Safety: If we can't successfully convince people that that is our goal, then we deserve to read about ourselves in the papers.

#### NATIONAL AEG

"How many of you out there are members of AEG? How many attended the National Meeting last month in Pittsburgh? Do you see the problem? Let me tell you that you missed a smoothly run meeting in a beautiful city, attended by 800 engineering geologists, all but about 100 of them from East of the Mississippi River. Where was the California engineering geologist? Only 18 from this section bothered to attend! Why?

"As to business, there are several items pending on the National level that need to be discussed here, because they potentially impact all Section members. First off is the entire issue of Section Membership. There really is no such thing. Unless you are a Member or Associate Member of AEG, you cannot be a section member. You can subscribe to the section newsletter and you can attend section meetings (although this is probably going to be circumscribed a bit), but you are not a section member. AEG pays insurance premiums for local sections to hold field trips and meetings such as tonight's. This insurance policy covers only AEG members, and their guests. There needs to be a clear distinction between member and guest, and in the next couple of months we will be working on some ways to clarify this issue.

"There is a proposal before the National Board of Directors to make section fees mandatory and collectible on the Annual Dues Statement. I, along with strong support from the Sacramento and San Francisco section chairmen was able to get the vote postponed until the April Business Meeting. We need to think about this issue. By making the section fees mandatory, will we lose AEG members who never attend the section meetings? Will we gain attendees at the meeting because of it? What will be the effect upon non-AEG members? I need to hear from you if you have any thoughts on this issue.

#### **ELECTIONS:**

"You all know that you are not really electing us to these positions. What you are in effect doing is ratifying the selections of the nominating committee. Who is the

#### Continued from Page 3

nominating committee? Very good question here on the local level. It's supposed to be made up of past presidents, that's plural. It isn't always. That's another committee that needs work.

"At the National level, it is also made up of past presidents. Their selections are presented to the mid-year Board of Directors meeting, for ratification. The Board of Directors is composed of all Section Chairmen, as well as the Executive Council - the current Secretary, Treasurer, and President. At this time, the Board has the opportunity to reject a candidate, and have sometimes done so. After the Board approves the slate, it is mailed to all 3000 members for ratification. Not election, ratification. Twenty-five percent of the ballots are returned, and, have universally swept in the proposed slate of officers, excluding the occasional write-in [usually for Donald Duck or Mikeal Gorbachev or some such]. It costs the Association \$2500 to conduct this pseudo-election.

"It is being proposed that we do away with it. I agree with this approach. As I see it, your vote is through your local section chairman. Not that you will necessarily know who is being proposed for National officers, but if you've got enough confidence in someone to elect them Chairman, then I believe you must also trust them to make wise decisions on the National level. You need to take this into account when you elect your local leaders. Which brings me to my final topic.

#### **LEADERSHIP**

"California founded the Association of Engineering Geologists. We were leaders in the direction and management of the Association. We pioneered the CDMG Notes on recommended investigation and report contents. We produced the Professional Practice Guidelines. We compiled some of the classic engineering geology references of their time and published them as Engineering Geology in Southern California and Geology, Seismicity, and Environmental Impact. We pushed for and got the first state geology registration act, but last had a National President in 1979 with Dick Proctor. What have we done in the last 10 years? Not much. Leadership in engineering geology has passed us by.

"In the last two years, we have not had a Southern California Section member publish a paper in The Bulletin of Engineering Geology, except for Dick Proctor and Carl Vonder Linden's excellent memorial to Dick Jahns. No technical papers, a memorial. That tells me a lot about our leadership in engineering geology. And now we are seriously threatened with losing our registration. The registration that all those leaders of the past gave to us. How surprising.

"I am Chairman of the largest section, the leadership section, and I've never been to a National Meeting before. How sad. How fat and cocky we've all become.

"Until last month at National's I was pretty cocky too. Well I'm pissed off now; because, I learned a lot in Pittsburgh.

- ☐ I learned that AEG is a good old boy's club. It's a good old boy's club because there are so few others who give a damn.
- ☐ I learned that there is a ton of work to setting up a National Meeting, and that John Byer deserves all the respect and help we can give him for taking on the 1992 meeting responsibility, despite his not wanting the meeting in the first place.
- ☐ I learned that the registration we all take so for granted is a bitterly contested issue in most states. I learned that without it we would be called project engineers, or field tech's, or cab drivers.
- ☐ I learned that AEG has plans, has goals, and that with the exception of Dennis Hannan and his Long Range Planning Committee, we are not a part of them. We are not part of them because we are being excluded. We have excluded ourselves. We are not involved!

"Where is southern California? What is happening in southern California? Why are there so few new members involved in the organization? These are the questions being asked by the Executive Council. Well, the opportunity is now - we've got a National Meeting coming up in 22 months. I am totally confident that John Byer will head an excellent meeting. I am also totally confident that this membership will be ready to assume once again a visible leadership role in the profession of engineering geology.

"We dare not allow it otherwise.

"THANK YOU

## COMMITTEE DESCRIPTIONS PROFESSIONAL REGISTRATION COMMITTEE

"The aim of this committee is to aggressively pursue all registration related issues. Liaisons will need to be firmly established with the new Board Executive Director, with the Civil Engineering Board, with the San Francisco and Sacramento Sections, with Bob Tepel of AEG National, and with the local regulatory agencies—city and county. There should be an AEG member at all Board meetings. There should be a list prepared for the Governor to review when a Board vacancy occurs. There should be a proactive approach to conflict resolution. There should be an effort to review the current regulation acts and suggest any alterations that may be necessary. This committee will be expected to contribute a column each month to the newsletter so that the membership is kept apprised of the issues, concerns, progress, and assistance needed. This will be a busy committee.

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#### **PUBLIC RELATIONS COMMITTEE**

"The aim of this committee is to increase the exposure and recognition of the practice of engineering geology to the public at large. This could mean talks, trips, or presentations at local schools, at municipal libraries, at career day activities, or even at legislative hearings. The committee's task is to explore all of these avenues, design or prepare appropriate materials, and then aggressively seek out the opportunities. It should not necessarily be the function of the committee to give all of the talks per se, but they should definitely be the lead agency in finding appropriate volunteers within the organization who will do so. This is an important committee, it represents the value of engineering geology to the public, and those are the people whose health and safety we are supposed to be protecting, not to mention hopefully stimulating a greater appreciation of the wonders of a geology career into impressionable youngsters. This should, and will be a busy committee.

#### LEGISLATIVE AFFAIRS COMMITTEE

"This committee has been ably chaired by Hugh Robertson for several years, and need not be a large committee. But there are opportunities for others here as well. Differing opinions are valuable, and Hugh can certainly use some help now and then with review of pending legislation. There is also the issue of grading code revisions or creations, and this committee [with help from Joe Cobarrubias] seems like a natural place to respond. What is the possibility of taking a proactive approach to grading codes? What is the possibility of revising the current Registration Act? Is it needed? Interaction with the Registration Committee will obviously be necessary, but what about with the PR Committee? What about those legislation hearings? This committee will be as busy as its members want it to be.

#### SHORT COURSE COMMITTEE

"One of the projects that we have shirked for a long time is the holding of professional short courses. They are a good source of revenue to the Section, but more importantly they demonstrate the profession's commitment to continuing education and training. We need to hold a few short courses on topics that are vibrant, that are not taught in school, and that will draw a regional audience. Steps in Landslide Litigation Mapping: Landslide Investigation—Stabilization Alternatives; Techniques in Soil Stratigraphic Analysis: Fault Characterization—Active. Potentially Active, Inactive: What Does It Mean; etc. The purpose of this committee is not to give the short course; rather it is to explore the market, the interest, the potential presenters, and get the ball rolling unstoppably. This should be an exciting committee, and should be on the frontier. Where is the frontier?

#### FIELD TRIP COMMITTEE

"We need to begin the planning again for another field trip. This year we want to avoid the October crush, and aretentatively planning for a trip in early June. Any takers? As in the previous committees, the committee members are not necessarily expected to run the field trip. What their goal should be is to identify the preferred field trip locality from member interest, and then who is doing what and where. From this intelligence, they should begin the effort of assembling the field trip, guiding and assisting the actual field trip leader. We have never had a Riverside, or San Bernardino, or San Diego, or Ventura, or Santa Barbara field trip. Have we? This committee should be the place for members to focus their intensity and their drive to learn about places other than where they work everyday. Assembling field trips is actually fun, and there is no better way to learn an area.

"Meet your peers. Help the Section and your profession. Learn about what is going on around you. Get involved! GROW! It works."

The November 3rd AEG Field Trip to the Soledad Basin was very successful, and the largest ever, with 140 people attending. Congratulations to the field trip organizers and leaders for a job well done! Additional Field Trip Guidebooks are being printed, and will be available for \$20.00 in the near future. Contact Kelly Rowe or Tania Gonzalez for more information.

The Dibblee Foundation is planning to publish a special map, the combined Hollywood-Burbank quadrangles, in memory of Lucy Birdsall. Any contributions to prepare this special publication are welcome. Contact: Dibblee Geological Foundation, P.O. Box 60560, Santa Barbara, California 93160.

Dr. Egill Hauksson, Senior Research Fellow with Caltech, was the keynote speaker at last month's meeting. Dr. Hauksson talked about lessons learned from the earthquakes in Long Beach (1933; which he says should be called the Huntington Beach Earthquake because its epicenter was in Orange County), San Fernando (1971), Whittier Narrows (1987), and Upland (1990). These events show that damaging earthquakes can result from movement along strike slip faults, and both gently dipping and steeply diping reverse faults. In addition, he showed the results of his recent work plotting the focal mechanisms of smaller historical earthquakes in southern California to obtain information regarding the state of stress in the basin. The state of stress in the Los Angeles Basin, where both vertical and horizontal tectonic stresses merge, has been similar for the last 3 million years. This state of stress also makes the geology of this area very complex.

Happy Holidays!

#### **Positions Available**

#### Career Opportunity For Hydrogeologist/Engineering Geologist

Openings are available for a geotechnical position in the Solid Waste Management Department. Position requires BS in Geological Engineering or MS in Geology and several years of experience in hydrogeology/engineering geology. Civil engineers with strong geology backgrounds considered. Salary ranges from \$46,020 to \$51,252 depending on qualifications. No deductions for Public Retirement System; family med/dental; exempt from 6.2% Soc.Sec.deduction. Send resume to:

#### County Sanitation Districts of Los Angeles County

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#### Career Opportunity For Geologists, Hydrogeologists & Geotechnical Engineers

Openings are available in the Irvine office for entry and senior level geologists, hydrogeologists and geotechnical engineers. Salary is negotiable and is commensurate with experience.

send resume to:

#### ICG Incorporated

15 Mason

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Attn: Personnel Department

#### Career Opportunity For Senior Geotechnical Engineer

Immediate opening is available for a senior geotechnical engineer in the SGD Ventura office. The position requires a minimum of 7 years of consulting xperience, CA P.E. license (G.E. preferred), good written and verbal communications skills, and strong marketing/client relations skills. CONTACT: (619) 653-5556.

or send resume to:

#### Staal, Gardner & Dunne, Inc.

5855 Olivas Park Drive Ventura, CA 93003-7672 Attn: Timothy N. Dunne

#### **Career Opportunity For** Registered Geologist/Registered Civil Engineer

Openings are available for project level civil engineer and geologist in the San Diego office. CA registration required; 3 to 7 years experience in project management: engineer; ground water and soils remediation hands on implementation; geologist: engineering geology, geotechnical engineering, and hydrogeologic

CONTACT: (619) 294-9400.

or send resume to:

#### Woodward - Clyde Consultants.

1550 Hotel Circle North San Diego, CA 92108 Attn: Personnel Manager

#### **Career Opportunity For** Licensed Soil Engineers

Position available for a CA-registered civil engineer with 3-5 years experience in geotecnical engineering. CONTACT: Juan A. Vidal or Al Guerrero (818) 989-5338. or send resume to:

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#### Seminars/Meetings/Field Trips

#### **DECEMBER 1990**

6-7 "Introduction to the Application of Geostatistics and Kriging to Spatial Estimation Problems" Dr. Robert Hoeksema, (GEO-EAS) International Ground Water Modeling Center. CONTACT: Holcomb Research Ins. Butler U., 4600 Sunset Ave., Indianapolis, Indiana 46208 (317)283-9519.

#### JANUARY 1991

22-24 "Introduction to Ground Water Geochemistry", Long Beach, CA. CON-TACT: National Water Well Association, 6375 Riverside Dr., Dublin, OH 43017 (614) 761-1711.

31 "Symposium on Ground Water and Vadose Zone Investigations" San Diego, CA. CONTACT: (215)299-5413, Dorothy Savini, Symposia Operations, ASTM, 1916 Race Street, Philadelphia, PA 19103.

#### **MARCH 1991**

12-14 "Sensors Expo West" San Jose, CA. Will include a series of short courses and a technical conference program that will introduce the latest in sensors and related equipment, including applications in earthquake engineering and environmental geology. CONTACT: (203) 374-1411 Ext. 131.

25-27 Cordilleran Section of GSA Meeting, San Francisco. CONTACT: Ivan Wong, Woodward-Clyde Consultants, 500-12th St., Suite 100, Oakland, CA 94607 (415) 874-3014.

#### **APRIL 1991**

10-12 "Engineering Geology and Geotechnical Engineering" Logan, UT. Utah State Univ. and Idaho and Nevada Universities. CONTACT: Utah State U. (801)750-1220 Dept. of Geology, Utah State University, Logan, Utah 84322-4505.

22-24 Rocky Mountain-South-Central Section of GSA Meeting, Albuquerque, New Mexico. CONTACT: Michael Campana or Lee Woodward, Dept. of Geology, University of New Mexico, Albuquerque, NM 87131 (505) 277-4204. Abstract deadline: December 20, 1990.

#### MAY 1991

13-16 "Fifth National Outdoor Action Conference on Aquifer Restoration, Ground Water Monitoring and Geophysical Methods" Las Vegas, Nevada. CON-TACT: National Water Well Association, 6375 Riverside Dr., Dublin, OH 43017, (614) 761-1711.

### Other Local Professional Meetings Held Regularly

Coast Geological Society: Dinner meetings every third Tuesday of the month, October-June; American Legion Hall, 83 S. Palm St., Ventura, CA. Inland Geological Society, Dinner Meeting third Thursday of each month, San Bernardino County Museum, Orangetree, Redlands, CA Contact: Jay Martin (714)888-2422.

Los Angeles Basin Geological Society: Lunch meetings third Thursday of every month; now at Luminarias Restaurant, Monterey Park, CA San Diego Association of Geologists: Dinner meetings third Wednesday of every month - locations throughout San Diego area. Contact: (619)292-8030 (Leighton & Assoc., San Diego office)

San Joaquin Geological Society: Dinner meeting second Tuesday of every month except July-September, American Legion Hall, 2020 "H" Street, Bakersfield, CA

South Coast Geological Society, Inc.: Dinner Meetings first Monday of each month, Revere House, 900 West First Street, Tustin, CA

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Contact: Newsletter Editor

## It's Time to Renew Your Annual Fees for the AEG Southern California Section. Your annual fees to AEG

International do not include the Section fees. The \$20.00 fee covers the operation of the section through publishing & mailing the monthly newsletter, paying for expenses of program speakers, meals for students at meetings, and the expense of our lobbyist in Sacramento.

You will <u>not</u> receive an invoice for renewal other than the notice located here. This notice will be printed here for the December, January and February issues. You will notice on your mailing label, to the right of your name, the month and year when your fees will be due. Past this date you will no longer receive copies of the section newsletter. You can ignore this notice if you made the effort of renewing. Members are, however, encouraged to participate at any time of the year.

To renew, send a check in the amount of \$20.00 made out to "AEG" or "Association of Engineering Geologists" to the Section Secretary/Newsletter Editor at the address below. Please note any change of address on the mailing label below or the form to the right.

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