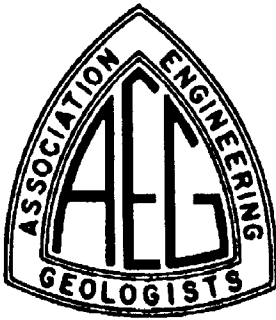


Association of Engineering Geologists

Southern California Section

NEWSLETTER - November 1990



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2550 Beverly Blvd.
Los Angeles, CA 90057

Dinner Meeting *Tuesday November 13th*

- The Quiet Cannon Restaurant**
901 North Via San Clemente
Montebello
- Cost - \$20.00 (Full-Time Students - Free)**
- For reservations call by August 9th!!!**
Grace (714) 860-7772 (Leighton & Assoc.)
(Leave Your Name & Number of People In Your Party)

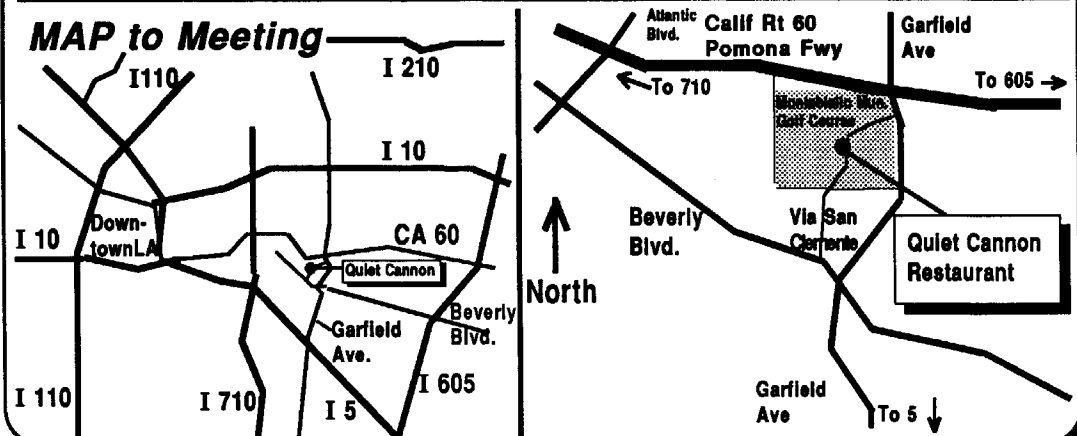
Make reservations by Noon on the Friday before the Meeting

- 5:30 Social Hour**
- 6:45 Dinner**
7:30 Announcements
- 8:00 Program**

Program

**TOPIC Earthquakes, and Faults
in the Los Angeles Basin**

**SPEAKER Egill Hauksson, Ph.D. - Geophysicist,
Senior Research Fellow with Caltech, Pasadena**



2550 Beverly Blvd.
Los Angeles, CA 90057

Program

Topic & Speaker

Earthquakes, and Faults in the
Los Angeles Basin

Egill Hauksson, Ph.D.

Since 1920 fifteen moderate-sized ($M_L = 4.9-6.4$) earthquakes have been reported in the Los Angeles basin. The three largest and most damaging earthquakes were the 1971 $M_L = 6.4$ San Fernando, the 1933 $M_L = 6.3$ Long Beach, and the 1987 $M_L = 5.9$ Whittier Narrows and most recently the 1990 $M_L = 5.2$ Upland earthquake. These events are associated with both mappable surficial faults and concealed faults beneath the basin sediments.

The Los Angeles basin is cross-cut by northwest striking surficial strike-slip faults such as the Whittier fault, the Newport-Inglewood fault and the Palos Verdes fault. It is also bounded to the north by high-angle reverse faults. Two zones of concealed faults exist in the basin. The first, the Elysian Park fold and thrust belt, coincides with anticlines along the eastern and northern flank of the Los Angeles basin extending into Santa Monica Bay. The second, the Torrance-Wilmington fold and thrust belt, coincides with anticlines mapped on the southwest flank of the basin and extends from offshore Newport Beach to the northwest into Santa Monica Bay.

Oblique faulting that could be inferred by the merging of strike-slip and compressional tectonics does not occur in the basin. Instead, the coexistence of zones of thrusting and large strike-slip faults in the basin suggests that the thrust and strike-slip movements are mostly decoupled. Today the deformation of the basin consists of uplift and crustal thickening and lateral block movement to accommodate the north-south compression across the basin.

Egill Hauksson, Ph.D., is a geophysicist, Senior Research Fellow at Caltech in Pasadena. Dr. Hauksson received his degree in geophysics from Columbia University. He specializes in seismology with emphasis on analysis of seismic network data for earth structure, state of stress, earthquake hazards and prediction studies, analysis of digital waveform data from local networks and downhole seismometer arrays to quantify earthquake source parameters and ground motion. Dr. Hauksson has numerous publications associated with his work at Columbia, USC and Caltech

THIS MONTH

November 1990



Kelly E. Rowe
Hydrogeologist

Vote November 6th

On the 3rd of this month is the Annual AEG SCS Field Trip. It will explore the geology and engineering geology aspects of the Soledad Basin. The meeting place is the Via Princessa Park & Ride Parking Lot, between Sierra Highway and the Antelope Valley Freeway (Highway 14), 6 miles east of Valencia or 6 miles north of the junction of Interstate 5 and Highway 14. Be there at 8:00 am. Reservations should have been made to attend by October 20. If you want to find out if space is still available for additional information call California Environmental (818) 991-1542. Our regular monthly meeting on the 13th will be held at the Quiet Cannon Restaurant where Dr. Egill Hauksson, from Caltech, will speak about the seismology of the Los Angeles Basin.

The 1990 AEG Annual Meeting was held in Pittsburgh October 1-5. It was attended by nearly 800, featured some excellent symposia, e.g., Geologic Registration and Mine Subsidence, and was extremely well run. For those of you who haven't been to Pittsburgh recently, it is a beautiful city, nestled on the 100 year flood plain at the fork of the Susquehanna and Allegheny Rivers, which combine to form the Ohio River. Notably lacking in attendance listing were AEG Southern California section members, only 18 attended. The 1991 meeting will be in Chicago, Illinois, same time next year. We should all plan to be there.

Other news is on the on-going efforts to ensure the Orange County's attempts to revise their grading code is not done at the expense of engineering geology. The revisions were prompted by their previous requirement that a geotechnical engineer sign all soil engineering reports. As Geotechnical Engineer is a Title Act, and not a Practice Act, the courts ruled that any licensed Civil Engineer was legally capable of submitting soils reports. Thus that section of the Orange County Grading Code required changing. The problem is that during the deletion of licensing requirements for geotechnical engineers, the requirement for a licensed engineering geologist was also deleted.

Eldon Gath, John Hansen, and Bob Hollingsworth all appeared at the Civil Engineering - Technical Advisory Board in Sacramento to provide some help to them on the

Continued from page 2

agenda item: "Can a Civil Engineer prepare in-situ geotechnical reports involving soils and engineering geology?" They were joined by representatives from the AEG Sacramento Section, AIPG, CGEA, and John Wolfe - Executive Director of the California Board of Registration for Geologists and Geophysicists. The discussion was triggered by letters written to the Engineering Board by Buzz Spellman, John Wolfe, and Bob Hollingsworth criticizing their Executive Director's interpretation of the field of expertise document, and her subsequent letters to the County of Orange during their Grading Code revision process. Although this was only discussion before an advisory board, there is no doubt that we all have to better communicate the role of geological sciences in public safety and engineering projects, and more frequently.

The weekly AGU magazine EOS reports that the technical report "Proceedings From the 2nd U.S.-Japan Workshop on Liquefaction, Large Ground Deformation and Their Effects on Lifelines" is available free of charge from the National Center for Earthquake Engineering Research (NCEER), headquartered at the State University of New York at Buffalo. The 499-page proceedings contain more than 30 reports on case studies of liquefaction and earthquake-induced ground deformation from previous earthquakes in the U.S. and Japan.

The proceedings are the result of the second in a three-part series of workshops sponsored by NCEER and the Assoc. for the Development of Earthquake Prediction (Japan). The goal of the series, which continues through 1990, is to develop international guidelines for improved engineering solutions and assessments related to earthquake-induced ground deformation. Free copies may be obtained by calling NCEER at 716-636-3391 and asking for Tech. Report 89-0032. (Since EOS reported its availability NCEER has received many requests and subsequently it is out of print. Marjorie Buscher, with NCEER, said they will get more copies printed for distribution. When you call you may be put on the mailing list.)

It is hard to believe that it's been twenty-five issues since my first AEG Southern California Section newsletter. It is now time for me to change my duties of managing to monthly inform you of current events and activities of interest to engineering geologists, to the duties of managing to prepare the monthly program of guest speakers for our meetings. Part of this job is that I will now provide the information for the "Topic and Speaker" portion of the newsletter to the editor. You will, therefore, no longer will you see my caricature at the top of this column.

While newsletter editor and secretary I have learned much about the engineering geologists and geologists in southern California and their interesting pursuits.

The southern California area certainly offers many challenges to tax our knowledge. AEG members should continue to be valuable to the community as a base of geological knowledge for planning and engineering projects to protect the public welfare. To increase the potential for meeting engineering geologists in northern- and southern- southern California, the 1991 AEG SCS officers have plans to hold four monthly meetings away from the Quiet Cannon Restaurant location in Montebello. These will probably be held irregularly in the northern San Fernando Valley area and in San Juan Capistrano.

Desk top publishing the newsletter, through my Macintosh computer, has also been very interesting and educational. It is good to see that desk top publishing is continuing to become more common in our profession, not only in the Macintosh environment but also in the limited and more difficult to use PC environment. (Just kidding. I own and use both types of computers.) Desk top publishing incorporates word processing, spreadsheets, databases, and graphics programs. The more I learned using these programs my work got easier and more professional looking. I can foresee that with the exception of our need to visit the field to evaluate situations, we may soon simply work out of our homes and only occasionally visit the office. The continuing advances in communications through FAXes and modems, and cheaper, highly sophisticated computer hardware and software make the need for all of us to continue to increase our knowledge of how to use this equipment in our work. As a final note on this subject, I encourage everyone to have their own computer and to use it on their work space. I found that you only learn to use a computer if it is constantly available for you to understand how it can make your work easier.

The duties of the newsletter editor/secretary are now going to be in the hands of Tania Gonzales, engineering geologist with Leighton & Assoc. Tania is an associate member who is relatively new in the southern California area. She is excited about doing the newsletter this year. Tania owns a Macintosh computer and may keep the style of the newsletter the same as the last two years. However, as editor she will have all of the latitude to publish the newsletter as she sees fit. As vice chairman, I will keep in close contact with Tania and will advise her on completing the first few issues. Please give her support for material to be published. Sometimes there is a lack of material to publish or Tania may not know of news important to AEG members. Keep in mind that material for job ads and news need to be submitted by about the 20th of the month so they can be published in the next newsletter.

Positions Available

Career Opportunity For Geologist

Openings are available for an entry level or project level geologist. Experience desirable, but not essential. Candidate must have strong interest and knowledge of geologic processes; geologic mapping; and good writing ability. Candidate must be willing to learn all aspects of ground water hydrology. Small, well-established firm based in the Los Angeles area.

CONTACT: (213) 255-4511

or send resume to:

GSI/water (Geothermal Surveys, Inc.)
520 Mission St.
South Pasadena, CA 91030

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 medical; exempt from 6.2% Soc.Sec.deduction.

Send resume to:

County Sanitation Districts of
Los Angeles County
Attention: M. Murillo
P.O. Box 4998
Whittier, CA 90607

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
Irvine, CA 92718
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 experience, 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 Olivias 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 investigations.

CONTACT: (619) 294-9400.

or send resume to:

Woodward - Clyde Consultants.
1550 Hotel Circle North
San Diego, CA 92108
Attn: Personnel Manager

Seminars/Meetings/Field Trips

NOVEMBER 1990

3" Annual AEG SCS Field Trip - Soledad Basin - Upper Santa Clara River Area" East of Valencia, CA. CONTACT: California Environmental (818) 991-1542.

4-9" AWRA 26th Annual Conference - The Science of Water Resources: 1990 & Beyond; Symposium on Transferring Models to Users; Symposium on Urban Hydrology" Denver, CO. Amer. Water Resources Assoc. (AWRA). CONTACT: AWRA(301)493-8600 5410 Grosvenor Lane, Suite 220, Bethesda, Maryland 20814-2192.

6-8" Theory and Application of Vadose Zone Monitoring, Sampling, Remediation" Las Vegas, NV. Assoc. of Ground Water Scientists and Engineers (NWWA). CONTACT: NWWA (614)761-1711/P.O. Box 182039/Dept. #017/ Columbus, Ohio 43218.

6-8" Haz Mat 90 West" Long Beach, CA. HAZMAT WORLD & Tower Conference Management Co. CONTACT: Tower (708)469-3373, 800 Roosevelt Road, Bldg. E-Suite 408, Glen Ellyn, IL 60137-5835.

8-9" Designing with Geosynthetics" Denver, CO. CONTACT: (215)895-2343 Geosynthetic Research Institute, Drexel U., West Wing - Rush Bldg. #10, Philadelphia, PA 19104.

9" Environmental Site Assessments One-Day Legal Course" Las Vegas, NV. Assoc. of Ground Water Scientists and Engineers (NWWA). CONTACT: NWWA (614)761-1711/P.O. Box 182039/Dept. #017/ Columbus, Ohio 43218.

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

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.

APRIL 1991

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

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 4of each month, Revere House, 900 West First Street, Tustin, CA

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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 not 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.

Name _____ Phone _____
School or _____
Company _____ Fax _____
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City _____ State _____ Zip _____
_____ Preferred Mailing Address _____

Tapia Gonzalez
AEG Secretary/Newsletter Editor
d/o Leighton & Assoc.
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Diamond Bar, CA 91765

