

Association of Engineering Geologists

Southern California Section

NEWSLETTER-September 1991



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12 Issues/year-\$25 to "AEG"
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c/o Leighton & Associates
1470 S. Valley Vista Dr. #150
Diamond Bar, CA 91765

2550 Beverly Blvd.
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Dinner Meeting *Tuesday September 10th*

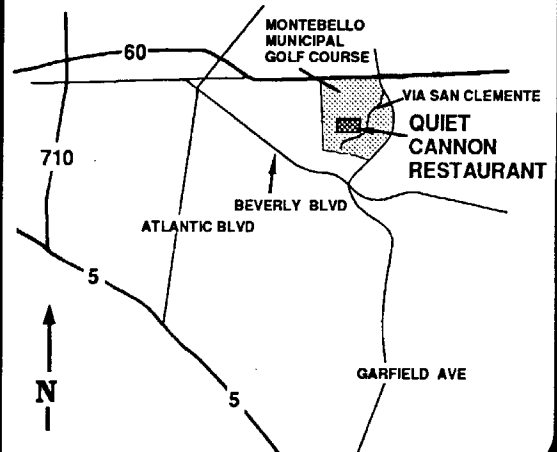
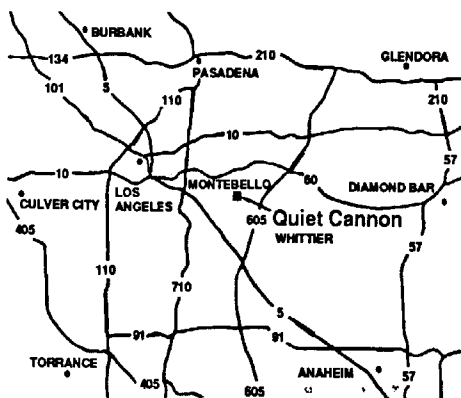
- The Quiet Cannon Restaurant
901 North Via San Clemente
Montebello
- Cost - \$20.00 (Full-Time Students - Free)
- Make reservations by Friday September 6!!!**
Grace (Leighton & Associates) 714-860-7772
(Leave Your Name & Number of People in Your Party)
- 5:30 Social Hour
- 6:45 Dinner
- 7:30 Announcements
- 8:00 Program

Program

TOPIC Earthquake Hazard Problems
Evaluation in the Los Angeles Re-
gion

SPEAKER Kenneth W. Hudnut, Ph.D. Seismol-
ogical Laboratory, CalTech

MAP to Meeting



PROGRAM Topics & Speaker

Earthquake Hazard Problems Evaluation in the Los Angeles Region

**Kenneth W. Hudnut, Ph.D.
Seismological Laboratory,
California Institute of Technology**

Recent earthquakes in our region, such as the June 28th Sierra Madre earthquake, have brought renewed attention to the earthquake hazard posed by faults that lie beneath the Los Angeles area. This same fault system produced the 1971 San Fernando (Sylmar), 1987 Whittier Narrows, 1988 Pasadena, and 1990 Upland earthquakes. Compared to the San Andreas fault, this fault system (extending beneath the San Gabriel Mountains) is a secondary feature with relatively little recent movement. Unfortunately, past activity of this fault system is not nearly as well known as it is for the San Andreas fault, partly because many of the faults don't break the ground surface. Instead, the major strands of this fault system are deeply buried and nearly horizontal. Mapping and well data on bedding orientations, as well as multi-channel seismic data collected from oil exploration, have allowed geologists to constrain the geometry of these deep faults. These studies also provide us with brackets on the displacement rates across these faults.

What we cannot know from the geological or seismological data, however, is whether the long-term displacement on these deep faults occurs in occasional large earthquakes or not. If so, Los Angeles faces a very poorly evaluated hazard from future large earthquakes directly beneath it which could be truly devastating. Instead, however, perhaps all of the displacement on these deep faults occurs

as slow and steady creep, in which case the main earthquake hazard is posed by relatively small earthquakes such as we have been experiencing lately.

This major unresolved question can potentially be answered by monitoring the deformation of the region by very high-accuracy surveying measurements for several years. This project has been under way since 1990, with much help from local government surveying divisions. Some of the first results show the small coseismic movements that accompanied the Sierra Madre earthquake. Also, by comparing the results of the initial surveys to historical survey data, there is an indication that the pattern of deformation has been changing during this century, perhaps responding to the same forces that are producing a notable increase in the region's seismicity.

Dr. Ken Hudnut is currently the Coordinator for the use of the Global Positioning System (GPS) for the Southern California Earthquake Center. He received his B.A. at Dartmouth College, and his M.A. and Ph.D. in Geology at Columbia University. He has been at Cal Tech the last two years specializing in fault studies, GPS, and research on regional tectonics. For his talk, Dr. Hudnut will elaborate upon work related to the above discussion and the results of evaluating data from the recent Sierra Madre earthquake.

HEY - SUPPORT YOUR ASSOCIATION!!!!

The Southern California Chapter of AEG (that's us) is hosting the 1992 National Meeting. To assure a successful and measurable meeting, we (that's us) need sponsor contributions (\$\$\$) from the local geotechnical consulting community (that's you). Please call Greg Rzonca at Converse Consultants Inland Empire (714-889-8004) for further information.

We thank you.

**NOTES ON THE 1991
ANNUAL AEG FIELD TRIP
(by Robert A. Larson,
Chairman, Field Trip Committee)**

A professional organization's strength is measured by its volunteers. Seventy-three of our colleagues contributed to the success of this field trip. I want to acknowledge their efforts with a big "THANK YOU."

Field Trip Leader: Thomas F. Blake

Field Trip Committee:

Thomas F. Blake	David B. Ebersold
Robert A. Larson	Tania Gonzalez
Ken Leslie	Lori Prentice

Speakers:

Tom Blake	Jack Collender	Tom Dibblee
Eldon Gath	Tania Gonzalez	Pam Irvine
Quin Kinnebrew	John McNamara	
Tom Rockwell	Bob Ruff	Chuck Swift
Jerry Treiman	Bob Whitney	

Guides:

Tom Blake	Greg Denlinger	Robert Larson
Mike Phipps	Craig Prentice	Tom Slosson

Registration:

Bill Cavan	Dave Ebersold	Tania Gonzalez
Vic Gothers	Chris Sexton	Chuck Swift

Logistics/Refreshments:

Jim Bianchin	Jack Collender	Ken Leslie
Jim O'Tousa	Lori Prentice	Joe Schaaf
Staal, Gardner & Dunne		D-H Drilling

Guidebook Assembly/Binding:

Tom Blake	Vince Carnegie	Mary Cook
Dave Ebersold	Annette Festa	Rachel Fischer
Silvia Frassoldati	Richard Gladson	
Rani Hildenbrandt	Lionel Kimura	
Shirley Landers	Robert Larson	
Ken Leslie	Debi L. Mackey	Steve Miller
Lila Ramirez	Marsha Ramos	Steve Ridenour
Chris Sexton	Annette L. Varner	
California GeoSystems		Staal, Gardner & Dunne
Sousa & Associates	A.E. Seward Eng. Geol. Inc.	
D-H Drilling	GeoSoils, Inc.	

Authors:

P. Armand	Mark A. Barrett	Jeff Bensch
James A. Bianchin	Thomas F. Blake	
Patrick V. Boales	Gary Butler	
William F. Cavan, Jr.	Jack M. Collender	
Thomas L. Davis	Gregory S. Denlinger	
Thomas W. Dibblee, Jr.	S. Thomas Freeman	
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Mountain Geology, Inc. Pacific Soils, Inc.
R.L. Sousa and Associates
Staal, Gardner & Dunne, Inc.

Major support for this field trip was provided by Staal, Gardner & Dunne, California GeoSystems, and Leighton and Associates.

This was Tom Blake's field trip from start to finish. He did a great job at recruiting authors and organizing the schedule of the trip. Thank you, Tom.

We have about 30 guidebooks assembled and another 70 waiting to be assembled. These guidebooks will be distributed, in order to 1) those who paid their money but were unable to attend the trip; 2) those people who reserved guidebooks in advance; 3) everybody else. The cost for these remaining guidebooks is \$35.00. A second printing has been planned, but will likely cost more, so get these books while they last. Guidebooks (or reservations form them) will be on sale at the next AEG meeting. Please contact the Publications Chairperson for further information. The field trip was attended by 175 people.

SECTION COMMITTEE CHAIRS

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Please use the services of these members and businesses. Their advertisements help pay the publication costs of the newsletter.

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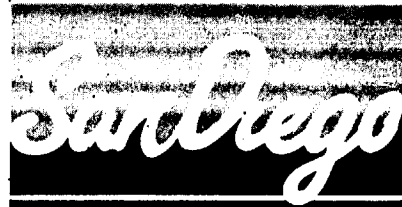
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GEOLOGICAL SOCIETY OF AMERICA



GSA 1991

1991 ANNUAL MEETING

San Diego, California
October 21-24

GLOBAL PERSPECTIVE



GLOBAL CHALLENGE

The 1991 GSA Annual Meeting in San Diego will attract geoscientists from around the globe. Come and experience one of the finest combinations of technical sessions, scientific and technical exhibits, field trips, and short courses.

Abstracts due WEDNESDAY, JULY 3

Program, Housing, and Registration Information
Available AUGUST 1

Preregistration due FRIDAY, SEPTEMBER 20

Call Today (303) 447-2020 or 1-800-GSA-1988 • fax (303) 447-1133

Positions Available

Ads in this section are welcome at no cost.

Career Opportunities for mid-level geotechnical an/or Environmental Geologists and Engineers

Converse Consultants, a leading geotechnical, Environmental and Materials Engineering firm in California is presently interviewing for Project and Senior level geologists and engineers for the Inland Empire office, located in San Bernardino, California.

The positions require a minimum of 4 to 5 years of individual or combined experience in the Geotechnical or Environmental Engineering consulting field. Applicants should have BS degree in geology, geohydrology, civil engineering or related discipline. Written and verbal communications are mandatory and registration is preferred (RG/CEG/RCE/GE). Qualified candidates should submit resumes in confidence to:

Converse Consultants
630 E. Brier Drive, Suite 100
San Bernardino, California 92408
Attention: David Simon

Job Opening for a Senior Engineering Geologists for the City of San Diego

Requirements: Certification as an Engineering Geologist with the California Board of Registration. Candidates must submit a copy of their certification at the time of application.

Education and/or experience in geotechnical engineering and knowledge of the geological characteristics of the San Diego area are highly desirable.

Senior Engineering Geologists work in the City's Building Inspection Department and Engineering and Development Department. Duties include review building permit applications to determine the necessity and extent of geological evaluation needed; review submitted geological reconnaissance and investigative reports; evaluate proposed geological hazard mitigation measures; resolve investigation, report or mitigation disputes; review building and land development plans to ensure that designs include the proposed measures necessary to mitigate geologic hazards; visit project sites as necessary to identify or verify the existence of geological hazards; advise engineering geologists, engineers, architects, contractors and property owners of the City's geologic hazard requirements; update geologic hazard maps; prepare reports; and maintain records of geological reports, studies and data.

Salary: \$4115-\$4978 monthly, \$49,380-\$59,736 annually. Salary includes 10% additional pay for registration as a Geologist and certification as an Engineering Geologist with the State of California.

Apply: Employment Information Center,
City Administration Building, Lobby 202 C Street,
San Diego, California 92101-3861,
or contact Mr. Edward L. Spicer, Deputy Director,
Building Inspection Department @ (619) 236-6463.

Career Opportunity for Mid-career Environmental Scientists and Engineers

with experience in one or more of the following
Soils and ground water assessment and remediation
Site audit/compliance/permitting
Hazardous materials management
Professional registration a plus

Excellent salaries and benefits commensurate with technical and managerial capabilities. Please submit resumes (in confidence) to:

Ninyo & Moore
15375 Barranca Parkway, Suite A-101
Irvine, CA 92718
Attention: Dr. Peter R. Supko, General Manager

Position Available for Environmental Scientist

with 2 to 3 years experience in environmental risk assessments, underground storage tanks, compliance audits, oversight of drilling activities and soil/ground water sampling. Working knowledge of State and county regulations and excellent writing skills required. Send resume (in confidence) to:

Ninyo & Moore
6150 Lusk Boulevard, Suite B-200
San Diego, CA 92121
Attention: L. Ashworth

Geotechnical Opportunities

Leighton and Associates, a leading geotechnical and environmental consulting firm has career opportunities available in their Los Angeles Region for projects in the West San Fernando Valley area and Ventura County for projects involving site and hillside development, planning and public works facilities.

PROJECT/SENIOR PROJECT GEOLOGIST PROJECT/SENIOR PROJECT GEOTECHNICAL ENGINEER

Minimum eight years experience in project management, field supervision, proposal preparation and client contact. Advance degrees preferred, registration required (RG/CEG).

STAFF GEOLOGIST

Degreed geologist with minimum 2 years experience in field investigation, data review and analysis, and report preparation.

Leighton and Associates offers a competitive wage and benefits package. Candidates should submit resumes to:

LEIGHTON AND ASSOCIATES
2121 Alton Parkway
Irvine, California 92714

Environmental Opportunities

Leighton and Associates, a leading geotechnical and environmental consulting firm has career opportunities available in Los Angeles and Orange Counties:

PROJECT/SENIOR PROJECT ENVIRONMENTAL SPECIALIST

MS/PhD in Geology or Engineering and a minimum of eight years of environmental experience as well as professional registration (RG or PE) required. Candidates must also have applied expertise in project management, field supervision, report and proposal preparation, regulatory agency contacts and business development.

STAFF ENVIRONMENTAL SPECIALISTS

BS/MS in Geology/Engineering and at least two years of experience in hazardous waste site investigation. Knowledge of government regulations and possession of 40 hour OSHA certification desirable.

Leighton and Associates offers a competitive wage and benefits package. Candidates should submit resumes to:

LEIGHTON AND ASSOCIATES
2121 Alton Parkway
Irvine, California 92714

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Join our clients which will include Environmental Engineering Consulting Firms and Fortune 500 Companies in an Environmental Science Job Fair in Irvine.

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Hazardous Waste Management
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Toxicologists
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Geotechnical Engineers
Chemical Engineers
Air Quality Specialists
Industrial Hygienists
Remediation Specialists
Waste Management Specialists
Health & Safety Specialists
Environmental Planners
Meteorologists
Ecologists

Friday, September 20 10:00 a.m. to 5:00 p.m.
Saturday, September 21 9:00 a.m. to 2:00 p.m.

For pre-registration, FAX resumes to (805) 494-1870, or send to Career Connection, P.O. Box 7046, Thousand Oaks, California 91359. For more information call (805) 494-3856. Free admission. Please bring resumes.

Companies interested in participating or in receiving more information should call (800) 266-3010.

Seminars/Meetings/Field Trips

OCTOBER 1991

September 30 -October 4 34th Annual AEG Meeting, Exposition and Field Demonstrations, "**Environmental and Geotechnical Challenges for the Decade**", Pheasant Run Resort, St. Charles (Chicago), Illinois. **CONTACT:** AEG, MEMS, One Northgate Square, Suite 211, P.O. Box 270, Greensburg, PA 15601. (800) 343-5129, (800) 441-1674.

11-13 Rocky Mountain Friends of the Pleistocene Field Trip: Quaternary Geology of Lake Boneville in the Sevier Desert, near Delta, Utah. **CONTACT:** Richard Van Horn, U.S. Geological Survey, Box 25046, MS 966, Denver, CO 80225. Send a self-addressed stamped envelope to receive Final Announcement.

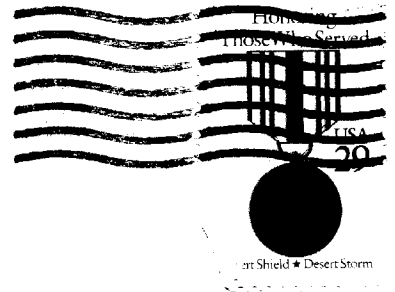
21-24 1991 Annual Geological Society of America Meeting in the San Diego Convention Center. The meeting will emphasize environmental geology. **CONTACT:** GSA @ (800) 472-1988.

Short Course Announcements:

California Registration Exam Review Courses and Study Manual: REG Review, Inc. offers review courses in the southern California area to prepare for the California Geology Registration and Engineering Geology Certification exams. Review courses concentrate on problem-solving skills in the fields of structural geology, map interpretation, hydrogeology, and engineering geology. Other topics covered are given less emphasis. For REG Review, Inc.'s 1991 brochure giving the course schedules and Study Manual ordering information, **CONTACT:** Patti Osiecki, President, @ (415) 852-9099, or Lisa Dirth (Vice-President), @ (415) 339-3771, or write to REG Review, Inc., 6555 Oakwood Drive, Oakland, California 94611.

Fall Seminars on Soil Compaction Techniques in Fresno, Anaheim, Van Nuys, Sacramento and Concord, California, presented by Bender & Associates. For more information contact Bender & Associates at E. 3820 Broadway, Spokane, Washington 99202 (509) 534-1426.

Tania Gonzalez
AEG Secretary/Newsletter Editor
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