

ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

SOUTHERN CALIFORNIA SECTION, SAN DIEGO CHAPTER

"Serving Professionals in Engineering, Environmental and
Ground-Water Geology"

San Diego Chapter, June 2006 Newsletter

JUNE MEETING NOTICE: TUESDAY, JUNE 13, 2006. Social Period starts at 5:30 PM, talk at 6:30 pm. The meeting will be at the offices of Ninyo & Moore, 5710 Ruffin Road, San Diego. Dinner is buffet-style. Cost is \$20. Please contact Ashley Galland (agal-land@ninyoandmoore.com) to RSVP.

June's meeting features a presentation by Dr. Thomas Rockwell, of San Diego State University. Dr. Rockwell will present an overview of the neotectonics of the San Diego region. It will include work relative to the Agua Blanca Fault in northern Baja California and how there are ties northward along the coastal system of faults into Los Angeles basin. The Rose Canyon and related faults will be discussed in some detail, including the likely size of the past large earthquakes that have struck the San Diego area. There will be a brief discussion on long-term patterns of strain release and their implications to near-term seismic hazard assessment.

Dr. Thomas Rockwell is an internationally renowned paleoseismologist and geomorphologist. He is an expert on the soils and tectonics of southern California and Baja California. He has conducted extensive trenching programs to date earthquakes on faults in the western U.S., Middle East and Asia, and his research is routinely used to date and reconstruct landscapes, assess rates and determine the age of faulting, as well as assess flood hazards. In addition to his duties as a professor of neotectonics and Quaternary geology at San Diego State University, Dr. Rockwell has been the principal investigator for numerous research studies funded by the National Science Foundation, the U.S. Geological Survey, and the Southern California Earthquake Center. He serves on several national-level research panels, including NEHRP, NASA, and SCEC, and has served on the Board of Directors for the Seismological Society of America and the Southern California Earthquake Center.



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SUMMARY OF MAY'S MEETING (Notes by Jonathan Goodmacher, President)

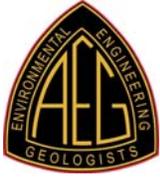
Dr. Peter Robertson of the University of Alberta and Gregg Drilling presented an overview on CPT and related technologies and their uses in geotechnical and environmental applications. Major areas of application in the geotechnical arena have been soil liquefaction, earthquake analyses and soil structure interaction problems. Major areas of application in the environmental arena have been in situ analyses of contaminants using a fuel fluorescence detector (UVIF) to measure hydrocarbons present in soil and groundwater, electrical resistivity cones to profile the presence of DNAPLs in the subsurface, and specialty samplers to collect groundwater, soil-vapor and soil samples. Here's a link to Gregg's website for additional CPT information: <http://www.greggdrilling.com/insitu.html>

PRESIDENT'S MESSAGE:

The AEG National Convention will be held in Los Angeles, September 24 through 28, 2007. The 50th Anniversary of the founding of the AEG will be celebrated at this convention. The committee organizing that convention has made quite a bit of progress. As of today we are looking at 25 half-day technical sessions and/or symposia. Different ideas for symposia include:

- Regulatory Reviews
- Paleoseismology
- Visioning the Future
- An unspecified environmental geology subject
- Levees
- Tunnels
- Landslide issues
- Coastal erosion issues
- An unspecified groundwater subject

Although we as local group don't require membership to attend meetings I also want to strongly recommend membership in the AEG. A recent survey of AEG members showed that the most important benefits they derive from AEG are technical publications and networking opportunities. AEG was considered most effective in disseminating timely, practical information through publications and meetings, and providing multiple avenues for networking with other profession-



AEG SAN DIEGO CHAPTER, MARCH 2006 NEWSLETTER

"Serving Professionals in Engineering, Environmental and Ground-Water Geology"

als. Some of the specific benefits AEG offers you as a professional member include discounts on attendance at educational workshops, short courses, field trips, and technical sessions annual meetings, a subscription to the peer-reviewed Environmental and Engineering Geoscience journal and the AEG News magazine, on-line job listings help in finding new career opportunities, reduced rates at Avis and Hertz car rental, access to a variety of health, dental and disability insurance programs through GeoCare Benefits. I am attaching an application for membership to this copy of the newsletter. However, you may also wish to visit the AEG national website at: www.aegweb.org.

UPCOMING SAN DIEGO AEG MEETINGS:

We are always in need of interesting talks in the environmental and engineering geology arenas. Please send your ideas in to me (jgoodmacher@ninyoandmoore.com). Right now we have on tap Dr. Jerry Higgins to speak on "Rockslides" in July and Dr. Blayne Hartman to speak on "Environmental laboratory analyses" in August or September.

MEETINGS OF AFFILIATED GROUPS AND SAN DIEGO AREA SEMINARS/PRESENTATIONS/EDUCATIONAL OPPORTUNITIES

San Diego Association of Geologists (SDAG) June 14, 2006: SDAG will be having a joint meeting with the South Coast Geological Society. The meeting will be held at the El Adobe Restaurant in San Juan Capistrano. John Foster will speak about the Echo Arch Landslide (San Onofre State Beach).

The National Weather Service in San Diego is sponsoring a **Tsunami Workshop**, Saturday, July 29, 2006. Speakers will include: Dr. Mark Legg of Legg Geophysical and representatives from: State Office of Emergency Services, San Diego County Office of Emergency Services, National Weather Service. Topics include discussion of the threat of tsunamis in southern California and tsunami preparedness and response activities. Please see attached flyer for details.



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The **Groundwater Resources Association of California** has several events coming up in June that may be of interest to the consulting community. A list is presented below. Go to www.grac.org for more information on these events.

- June 7-8, Emerging Contaminants in Groundwater in Concord.
- June 8-10, Principles of Groundwater Flow and Transport Modeling in Orange
- June 29, GRA Legislative Symposium and Lobby Day in Sacramento

Educational Opportunity – Flow of Non-Aqueous Phase Liquids

Confused about the science related to Dense and Light Non-Aqueous Phase Liquids (DNAPLs and LNAPLs) in the subsurface? Taken aback by the concepts of soil capillary characteristics, NAPL saturation, non-wetting phase residual saturation, relative permeability? Do you have a need to predict the mobility of DNAPLS and LNAPLs in the subsurface, or their longevity as a source of dissolved groundwater contamination? The Department of Geological Sciences at San Diego State University is providing an opportunity for professionals in Southern California to further their understanding of these concepts through a two-weekend workshop. This workshop will be offered on June 25-26, 2006 by David Huntley, Professor of Geological Sciences and Associate Editor of both Ground Water and Ground Water Monitoring and Remediation, and a specialist in NAPLs. Interested students June enroll in this class through SDSU Open University through June 25. The cost is \$585. The Open University enrollment form can be obtained directly from Dr. Huntley (<mailto:dhuntley@geology.sdsu.edu>).

Educational Opportunity – Rock Slope Stability Investigation and Analysis for Geologists

Two-Day Short Course, June 23 and 24, 2006 (Friday and Saturday), Temecula, California. Geologists and Engineering Geologists who want to know and learn about introductory and advanced methods and topics for new skills, update, and review training are invited for this specialized short course focusing on traditional, and inland area southern California, issues regarding geologic hazards of rock fall and rock slope stability in soft, stiff or competent earth materials. Practical and applied concepts and applications will be presented for those participat-



AEG SAN DIEGO CHAPTER, MARCH 2006 NEWSLETTER

"Serving Professionals in Engineering, Environmental and Ground-Water Geology"

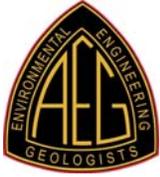
ing, whether gaining new knowledge or for new techniques, interpretations and applications. CEU (Continuing Education Unit) credit will be earned upon attendance and completion of time-frames for the course. Instructors will include: Brendan Fisher, Senior Engineering Geologist, Kleinfelder, Inc., Bellavue, Washington; William (Bill) Gates, Ph.D., Principle Geological Engineer, Kleinfelder Technical Resource Center, Auburn, Washington; and, Chester (Skip) F. Watts, Ph.D., Director, Institute for Engineering Geosciences, Dalton Distinguished Professor of Geology, Radford University, Virginia. Please see attached flyer for details.

MISSION STATEMENT

The San Diego Chapter of the AEG subscribes to the national AEG's mission statement. The Association of Environmental & Engineering Geologists (AEG) contributes to its members' professional success and the public welfare by providing leadership, advocacy, and applied research in environmental and engineering geology.

AEG AND USEFUL LOCAL LINKS

- Southern California Section AEG: <http://www.aegsc.org/>
- National AEG: <http://www.aegweb.org/>
- San Diego Association of Geologists <http://www.sandiegogeologists.org>
- American Society of Civil Engineers,
San Diego Geotechnical Group http://www.asce-sd.org/groups_geotech.asp
- San Diego State University,
Geology Department <http://www.geology.sdsu.edu>



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EMPLOYMENT

As a service to our members, AEG San Diego welcomes job postings - either for open positions or jobs wanted. Please contact Lee Vanderhurst (lvanderhurst@geotechnicsinc.com) for information on advertising in this newsletter. The cost for an ad is \$25 per month. As an incentive your ad posted in the San Diego Chapter Newsletter is included in the version of the newsletter posted on the Southern California Section website. A check for \$25 made out to the San Diego AEG should also be mailed to Steve Bradley, AEG San Diego Treasurer, Tetra Tech EMI, 1230 Columbia St., Ste. 1000, San Diego, CA 92101.

Construction Testing & Engineering (CTE) is searching for qualified entry to senior level geotechnical engineers and geologists. Entry level candidates should have a BA, BS, or MS in physical sciences or engineering. Prior field experience in geotechnical investigations preferred. Senior level candidates should have prior consulting experience and professional registration. Compensation is competitive and dependant on experience and level of professional registration. Growth and management potential exists for all positions. Forward resumes to: CTE, Attention Natasha, Phone 760-746-4955, Fax: 760-746-9806, Email Natasha@cte-inc.net



Ninyo & Moore has openings in the geotechnical division of our San Diego, California office for entry- and project-level soil engineers and geologists. Candidates should possess a Bachelor's degree (Master's a plus) in engineering and/or geology.

For entry-level must have excellent academic references and good GPA. For project-level candidates should have a minimum of three years experience and professional registration is a plus. Must be able to effectively work in a cooperative, team-oriented environment. The candidate should possess good computer skills (e.g., Word, Excel, etc.), have excellent verbal and written



AEG SAN DIEGO CHAPTER, MARCH 2006 NEWSLETTER

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communication skills, and be energetic. Ninyo & Moore is an equal opportunity employer and offers excellent benefits and a rewarding professional environment. Compensation is competitive and commensurate with experience. Please respond to nmcareers@ninyoandmoore.com

CHAPTER CONTACT INFORMATION

President	Jonathan Goodmacher	Ninyo & Moore	858.576.1000	jgoodmacher@ninyoandmoore.com
Treasurer	Steve Bradley	Tetra Tech EMI	619.321.6717	steve.bradley@ttemi.com
Newsletter Editor	Lee Vanderhurst	Geotechnics, Inc.	858.536.1000	lvanderhurst@geotechnicsinc.com

Tsunami



SAVE THE DATE!



The National Weather Service in San Diego is sponsoring a

Tsunami Workshop

Open to the Public

Date: Saturday, July 29, 2006
Time: 9:30 a.m. to 12:30 p.m.
Location: Town and Country Convention Center
Mission Valley, San Diego

Speakers will include: Dr. Mark Legg of Legg Geophysical and representatives from: State Office of Emergency Services, San Diego County Office of Emergency Services, National Weather Service

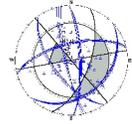
Topics include discussion of the threat of Tsunamis in southern California and Tsunami preparedness and response activities.

Space is limited so RSVP early to Edwin.Clark@noaa.gov

The workshop is free but there is a \$5.00 per vehicle fee for validated parking.



Association of Environmental and Engineering Geologists
Inland Empire Chapter



Rock Slope Stability Investigation and Analysis for Geologists

Two-Day Short Course

8:00 am - 4:00 pm (in field Saturday am)
June 23 and 24, 2006 (Friday and Saturday)

Temecula, California (Marie Calenders)
\$250, \$275 Non-Members, \$300, at door

Who

Geologists and Engineering Geologists who want to know and learn about introductory and advanced methods and topics for new skills, update, and review training are invited for this specialized short course focusing on traditional, and inland area southern California, issues regarding geologic hazards of rock fall and rock slope stability in soft, stiff or competent earth materials. Practical and applied concepts and applications will be presented for those participating, whether gaining new knowledge or for new techniques, interpretations and applications. CEU (Continuing Education Unit) credit will be earned upon attendance and completion of time-frames for the course.

Instructors

Brendan Fisher, Senior Engineering Geologist, Kleinfelder, Inc., Bellavue, Washington.

William (Bill) Gates, Ph.D., Principle Geological Engineer, Kleinfelder Technical Resource Center, Auburn, Washington.

Chester (Skip) F. Watts, Ph.D., Director, Institute for Engineering Geosciences, Dalton Distinguished Professor of Geology, Radford University, Virginia.

Course Topics

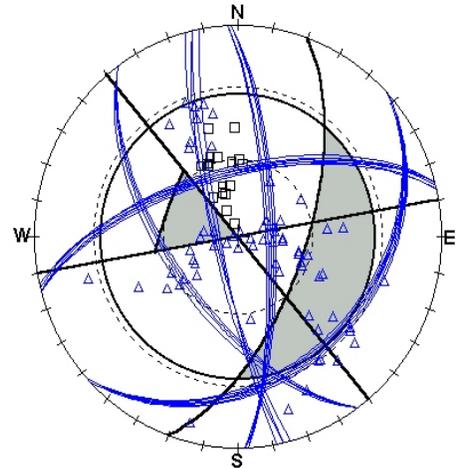
This two-day short course will focus on basic rock slope engineering presented from the standpoint of practitioners responsible for the design and construction aspects of excavations in rock.

Topics – Day One _____ Course focus (instruction in class):

- Rock slope field data collection methods and drilling and sampling techniques
- Rock mass rating systems
- Estimation of discontinuity and rock mass shear strength
- Kinematic slope stability analysis via stereonet projection
- Two and three dimensional limit equilibrium block stability analysis
- Markland's Kinematic Evaluation
- Rockfall hazard rating systems

- Slope remediation strategies including:
 - Slope reconfiguration
 - Drainage
 - Block reinforcement
 - Mesh
 - Buttresses
 - Blasting techniques
 - Case histories, if time allows

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Topics – Day two Course focus (field exercise and lab data analysis: field teams and class):

Course will consist of a morning field trip to nearby rock outcrop(s) where the group will be split up into “teams”. We will perform outcrop and line mapping and collect information pertaining to rock discontinuities and rock mass engineering properties. During the afternoon, we will return to the class meeting location and use the computer program ROCKPACK III to plot stereonets and perform stability calculations.

Course theme/strategy

Basic engineering theory will be covered during the course although the focus will be on the practical applied aspects of rock slope design and remediation tailored to engineering geologists. Each participant will receive class notes, which will consist of the PowerPoint slides that are presented in class. Other references provided to the participants will include journal articles that are pertinent to the course teachings. Participants will also receive a fully functional copy of ROCKPACK III (written by Professor Skip Watts) for use during the course and for a six-month evaluation period.

Course Itinerary (detailed actual course curricula/agenda will be in training materials)

8:00 - 4:00 Friday, 23-Jun-06: Classroom

Starting with Breakfast Buffet, class instruction until Banquet Lunch, followed by classroom instruction to close of day, then optional at lounge

8:00 - 4:00 Saturday, 24-Jun-06: Field/Classroom

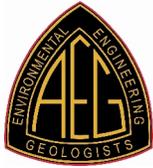
Starting with Breakfast Buffet, proceed to field exercise until return, then Banquet Lunch, followed by session of data work-up for presentation.

Bring laptop computer if you have one you can bring.

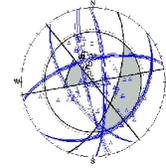
Location and Directions

Marie Calenders Family Restaurant
29363 Rancho California Road
Temecula, CA 92591
(951) 699-9339

Travel to Temecula. Directions are in reference to I-15 and Rancho California Road. East 0.4-miles on right from I-15 in Temecula from the Rancho California Road exit.



Association of Environmental and Engineering Geologists
Inland Empire Chapter, Southern California Section
P. O. Box 8944 www.aegsc.org/chapters/inlandempire
Moreno Valley, CA 92552-8944 www.aegsc.org
Phone (951) 924-6756, (951) 276-6624, ext. 257 www.aegweb.org



REGISTRATION FORM FOR COURSE ENROLLMENT

Rock Slope Stability Investigation and Analysis for Geologists

Complete and return to register for enrollment with check payment as directed below, please:

Name (Title ?): _____

Affiliation: _____

Street No./PO: _____

Mail Address: _____
City State ZIP

AEG Member #: _____ Work Ph. No. _____ Other Ph. No. _____

Please complete above accordingly: Name (as you would like it for name label), Affiliation (company name, employer, etc.), Title (optional), Mail for receipt, etc., Phone Nos. for contact, or any emergency.

Course Fee (please mark amount remitted): \$250 (AEG Member) ___ \$275*(non-member) ___ \$300 (at door) ___

Please send e-Mail message when sending registration Form and payment to Treasurer rick.gundry@verizon.net . E-Mail confirmation of enrollment will be by return e-Mail/Mail (choose), and will constitute receipt of payment.

Submit please ASAP this Registration Form to Enroll and make payment and remit by check payable to:

AEG Inland Empire Chapter
P. O. Box 8944
Moreno Valley, CA 92552-8944 Registered Business Recipient at Postal Box

* Note: If you are not an AEG Member, it is easy to become one. Regular Professional AEG Membership Fee is \$105/year; however, new Members pay \$30 per year less for three years, ie. \$75 per year for the first three years. So why not join AEG today for \$75.00 this year, and save \$25.00 on Course Fee ? (Means only \$50 really for one-year Membership !) You can join online via credit card with very easy limited amount of information needed by seeking Membership at the AEG Web-Site, for Association of Environmental and Engineering Geologists.

Contact Becky Roland aeg@aegweb.org Ph. No. (303) 757-2926 FAX 303.757.2969
Why be a Professional that is a Member ? <http://www.aegweb.org/i4a/pages/index.cfm?pageid=3327>

See brand new AEG WEB-SITE opened last week at <http://www.aegweb.org>