



# South Coast Geological Society

P.O. Box 10244  
Santa Ana, California 92711  
[www.southcoastgeo.org](http://www.southcoastgeo.org)

President: Monte Murbach (619) 865-4949, Vice President: Maria Herzberg (714) 412-1502,  
Secretary: Stephen Jacobs (760) 434-8503, Treasurer: David Randell (714) 828-7568,  
Publications: Jeff Miller - [Jmiller@e2mt.com](mailto:Jmiller@e2mt.com)  
SCGS March 2010

## March 2010 MONTHLY MEETING

<b>Date:</b>	Monday March 1, 2010
<b>Time:</b>	6:00 P.M. - Social Hour 6:50 P.M. - Dinner 7:45 P.M. - Presentation
<b>Place:</b>	<b>DoubleTree Club Hotel - Santa Ana</b> <a href="#">See enclosed map</a>
<b>Cost:</b>	<b>\$25 (member), \$30 (non-member) - RESERVATION FEE</b> - when made by the end of the Friday prior to meeting <b>\$15 - STUDENT/PROFESSOR FEE</b> - includes a free gift for first-timers! <b>\$5 - LATE FEE</b> - for reservations made <u>after</u> 5PM on Friday - February 26, 2010
<b>RSVP:</b>	Please make your Reservation Online <a href="http://www.southcoastgeo.org/meetings.shtml">www.southcoastgeo.org/meetings.shtml</a> Late reservations/cancellations are preferred over walk-ins or no-shows. Fees payable at the meeting.

This lecture will discuss the theory behind soil gas migration, the many factors that affect migration and the variability of chemical constituent concentrations in the subsurface. Proper construction and placement of soil gas probes will be discussed as well as proper sampling techniques. The significance and variability of purge volume testing will be presented as well as the significance of purge volume testing on concentrations of specific chemical constituents. Examples of soil gas surveys from contaminated sites will be presented for plume delineation and vapor intrusion to indoor air. Soil gas monitoring, or the repeated measurement of soil gas from the same vapor probes over time, will be discussed as well as the affect of temperature and soil moisture on results. Lastly, anticipated future revisions to the current DTSC soil gas guidelines will be discussed as well as the use of soil gas surveys for the evaluation of the soil and groundwater remediation.

**Speaker:** Anthony F. Severini, P.G.; B.S. and M.S. Geology, University of Connecticut.

Mr. Severini is the President and Owner of Environmental Support Technologies (EST) headquartered in Irvine, California. Mr. Severini is a licensed Geologist in eight states including California. Mr. Severini holds a General Engineering "A" Contractor's license, a C-57 Drillers License and is an AHERA Certified Asbestos Building Inspector and Management Planner. For over 30 years, Mr. Severini has performed environmental work on over 2000 sites spanning 44 states in the US. Mr. Severini provides expert witness testimony for environmental litigation on sites involving soil and ground-water contamination, environmental stigma, cost allocation, NCP applicability and financial damage assessment. He has both testified and provided expert opinions on court cases involving CERCLA claims, toxic torts, and PRP cost allocation. Mr. Severini has managed offices for Blasland, Bouck & Lee as well as TRC Companies. Currently, Mr. Severini oversees all operations of EST. EST is a field services company, with a fleet of direct-push drilling rigs, certified mobile laboratories and vapor extraction systems. EST has performed over 4,000 soil gas surveys in the past 20 years.

## "Soil Gas Surveys – Do's and Don'ts, Myths and Truths"

Soil gas surveys are used extensively as a screening tool for delineating contaminant plumes in the subsurface. For 20 years, local regulatory agencies accepted and often required soil gas surveys on sites to "pin point" contaminant hot spots for further investigation and delineation. In 2003 the DTSC provided guidelines for performing soil gas surveys and they are currently working on a revised guideline. More recently, soil gas surveys are used by regulators to evaluate whether a site is adequately remediated and providing no vapor intrusion risk to site occupants. In 2005, the DTSC provided an additional guideline on the evaluation and mitigation of vapor intrusion to indoor air. But are all soil gas surveys the same? Are different surveys necessary for different site conditions, or different project goals? What conditions affect the results of surveys? What types of lab analyses will provide the most accurate results for the project goals?



# South Coast Geological Society

March 2010

**\*\* MEETING PLACE FOR SCGS:** SCGS meetings are currently held at the DoubleTree Club Hotel in Santa Ana ([www.dtcluborangeco.com](http://www.dtcluborangeco.com)). The hotel is located at about one block southwest of the MacArthur Boulevard exit on the 55 Freeway in the Hutton Centre (see map for location).



## ANNOUNCEMENTS

**President's Corner:** March Meeting. Please join us Monday, March 1st for our monthly meeting. We are switching gears to the environmental side. Mr. Anthony F. Severini will be discussing soil gas surveys and the complexities associated with these type of surveys. - Should be very interesting.

**Future Speakers/Meetings.** Our Past President, Boris, will be talking about his 2009 field trip at one of the next meetings. Also, June is slated for a joint meeting with the San Diego Association of Geologists (SDAG) hopefully at the El Adobe in San Juan Capistrano.

**Ouch.** Last month's meeting we had close to 50 people. Unfortunately we had 15 no-shows but fortunately we had a bunch of walk-ins. SCGS lost money since we had a guaranteed number. Did I say ouch. So, if you make a reservation, please show up!

The 2010 fall Field Trip is quickly shaping up. As I indicated last month, this is going to be a joint field trip with SDAG. The Lows and Highs of Anza Borrego State Park will be a great field trip, tentatively scheduled for October 15, 16 and 17. The route will be finalized as soon as we have access to the "high" roads which are under snow or too wet from these rains... We still have room for a few new papers related to groundwater, natural history, and of course geology. Please contact me if you would like to contribute.

Please join us for the March 1 meeting! And PLEASE tell/bring a geo-friend! – we want a full house!. Cheers.

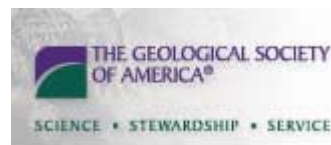
Monte Murbach, CEG  
President 2010

**2010 SCGS Membership Dues:** It's that time of year. The annual SCGS membership fees are due for 2010. Please complete the attached membership form and return to SCGS at P.O. Box 10244 Santa Ana, CA 92711, or deliver it to the SCGS Treasurer at the next monthly meeting. **NOTE:** If you are a continuing or honorary member of SCGS, we ask that you put your name and date on the form, and if all else is the same, write "SAME" in the mailing address section. We also request that all Honorary Members complete the membership form so that we can update our membership database.

**2010 Monthly Newsletter:** SCGS would like to encourage those members who currently receive the monthly newsletter via "regular mail" to **switch to the e-mail version** if you have a currently active e-mail account. The regular mail option increases costs for SCGS in postage, supplies and requires additional time from volunteer officers. If you do not have an e-mail account, your newsletters will continue to be sent via "regular mail". Thank you.

**SCGS Sponsors:** The generosity of our sponsors helps defer much of the financial burden the membership would otherwise have to shoulder. We once again ask for your continued generous support of our upcoming endeavors. Sponsors are listed in the monthly newsletter, displayed on the SCGS website, recognized in the fall fieldtrip guidebook, and provided a complimentary copy of the guidebook. There is **always** room for additional participants!

## Miscellaneous



### SAVE THE DATE

106th Annual Meeting of the Cordilleran Section of the Geological Society of America

Joint with  
Annual Meeting of the Pacific Section of the American Association of Petroleum Geologists

When: 27–29 May 2010 (Thursday – Saturday)  
Where: Anaheim Marriott in Anaheim, California  
(<http://www.anaheimoc.org/>)

We are now soliciting theme sessions, symposia, field trips, and short courses/workshops. The success and impact of our sectional meetings depends on the quality of the sessions, field trips, and workshops. Please help us make this meeting a success by contributing



# South Coast Geological Society

March 2010

proposals for sessions, field trips, and workshops. We are especially interested in combined sessions and field trips, and our meeting dates are perfectly timed for excellent Cordilleran field trips.

**Deadline for session, symposia, field trip, or workshop proposals: 1 August 2009**

To propose a theme session or symposia, contact:  
Jeff Knott ([jknot@fullerton.edu](mailto:jknot@fullerton.edu))

To propose a field trip, contact:  
Brady Rhodes ([brhodes@fullerton.edu](mailto:brhodes@fullerton.edu))

To propose a short course or workshop, contact:  
Diane Clemens-Knott ([dclemensknott@fullerton.edu](mailto:dclemensknott@fullerton.edu)) for technical short courses or workshops  
Galen Carlson ([gcarlson@fullerton.edu](mailto:gcarlson@fullerton.edu)) for educational short courses or workshops

Please be sure to join us for 2010 joint annual meeting of the Cordilleran Section of the Geological Society of America and the Pacific Section of the American Association of Petroleum Geologists at the Marriott Hotel in Anaheim, California, co-hosted by the Department of Geological Sciences at California State University Fullerton.

Our theme is "From Mountains to Main Street." Anaheim lies amid Orange County in Southern California, which is a "Geologic Disneyland" of high mountains and deserts, wide beaches and scenic rocky coasts, oil fields and rich aquifers, active faults, and landslide-prone hills. The combination of suburban comforts, easy transportation, diverse geology, and sunny skies makes "The OC" a perfect meeting venue. The Anaheim Marriott is located conveniently in the heart of the Anaheim Resort District and just steps away from Disneyland, California Adventure, and Downtown Disney®. A few steps in the other direction will take you to the Anaheim Garden Walk, an oasis of outdoor shopping, dining and entertainment.

See you in Anaheim.  
Phil Armstrong, [parmstrong@fullerton.edu](mailto:parmstrong@fullerton.edu)  
2010 Cordilleran Section Meeting Chair  
Geological Society of America

Orange, CA 92866  
714-633-1549

**Store Hours:**  
10:30AM - 6:00PM  
Monday - Saturday

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## Employment Opportunities:

**CGS** needs to recruit and hire new engineering geologists to maintain staffing levels as staff retires or moves on. This may not be the obvious time to look for a job with the state, but CGS gets most of its funding through special funds and contracts, not the general fund. When CGS needs to hire, an announcement is posted on the State Personnel Board's "VPOS" web site <http://jobs.spb.ca.gov/vvpos>. Searching for "Engineering Geologist" there will find the positions that the State is now accepting applications for. Those currently include a position in CGS's Geologic Mapping Program. That position is listed as within the Department of Conservation. See the web page for the full job description and application instructions. Please note that to be hired by the state, a candidate must pass and place in the highest three ranks on a civil service exam. The Engineering Geologist exam, jointly developed by the Department of Conservation and the Department of



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# South Coast Geological Society

March 2010

Water Resources, is an online qualifications appraisal. It is possible to take the exam at the same time you send in an application, but both steps are required. The online application and "supplemental questionnaire" (exam) are at this web page.

<http://jobs.ca.gov/CASPB/sup/BulPreview.asp?R1=095699&R2=00103756&R3=9PB02>

Chris Wills  
Supervising Engineering Geologist  
California Geological Survey  
801 K St. MS 12-32  
Sacramento, CA 95814-3531



## Project Geologist/Scientist Irvine, CA

CRA has openings in its Irvine offices for a Project Manager who aspires to become an active employee in a vibrant, well established worldwide engineering, environmental, construction, and IT consulting firm. We offer a compensation package fully commensurate with experience.

### What we are looking for:

- BS/BA in Geology (preferred) or Environmental Science
- Must have knowledge of site investigation techniques such as drilling and sampling, analytical data interpretation, remediation system processes and performance analysis;
- Requires 3-5 years in industry with progressive, relevant experience and 40-hour OSHA HAZWOPER training.
- Professional Registered Geologist a plus.
- Valid California drivers' license and vehicle for use to travel to various sites and clients
- Must be able to speak and write clearly and concisely in the English language

**If you are ready for something new**, please submit your resume, and cover letter to [hr.west@croworld.com](mailto:hr.west@croworld.com)

We prefer MSWord resumes over Monster auto resumes! SUBJECT LINE MUST READ: "Project" and Irvine Because of the large volume of spam, all other e-mails will be deleted.

### Staff Geologist Irvine, CA

CRA has an opening in its Irvine, CA office for a Staff Environmental Geologist who aspires to become an active employee in a vibrant, well established worldwide engineering, environmental, construction, and IT consulting firm. We offer a compensation package fully commensurate with experience.

### What we are looking for:

BS/BA in Geology (preferred) or Environmental Science  
.1+ years industry experience or entry level  
Valid California drivers' license and vehicle for use to travel to various sites. Clean record.  
Must be able to speak and write clearly and concisely in English language.

**If you are ready for something new**, please submit your resume, and cover letter to: [hr.west@croworld.com](mailto:hr.west@croworld.com)  
We prefer MSWord resumes over Monster auto resumes!

SUBJECT LINE MUST READ: YOUR NAME and "Staff Geologist Irvine"

Because of the large volume of spam, all other e-mails will be deleted.

NO PHONE CALLS, PLEASE.

NEXT MEETING:

**April 5, Monday**

DoubleTree Club Hotel - Santa Ana

**Speaker**

tba



# South Coast Geological Society

March 2010

## 2009 Corporate Sponsors



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# South Coast Geological Society

2010

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 South Coast Geological Society, P.O. Box 10244, Santa Ana, CA 92711-0244.

<b>MEMBER STATUS (circle one):</b>				
New (\$20)	Regular (\$20)	Student (\$10)	Corporate (\$250)	Honorary (no charge)

<b>Name:</b>	<b>Date:</b>
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<b>Mailing Address:</b>
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<b>Work Phone #:</b> (Optional)	<b>Home Phone #:</b> (Optional)
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<b>E-mail address:</b>
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<b>Would you like to be included in the SCGS Membership Directory (circle one):</b>	<b>YES</b>	<b>NO</b>	<b>MAYBE</b> (Contact me before its publication)
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Are you willing to serve as an SCGS officer?	YES	NO
Are you willing to donate time/services to SCGS?	YES	NO
Are you willing to volunteer as a guest speaker?	YES	NO

<b>If yes, what topic?</b>	
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<b>FIELDS OF INTEREST (please circle)</b>			
Engineering Geology	Environmental Geology	Tectonics	Geophysics
Groundwater	Marine Geology	Mineralogy/ Petrology	Paleontology
Petroleum Geology	Quaternary Geology	Stratigraphy	Mining Geology

<b>SUGGESTIONS?</b>
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