

SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT

Joint Meeting with South Coast Geological Society

WEDNESDAY, June 18, 2014

Imaging Earthquake Surface Ruptures from M 4.7 to M 7.7

Presented by:

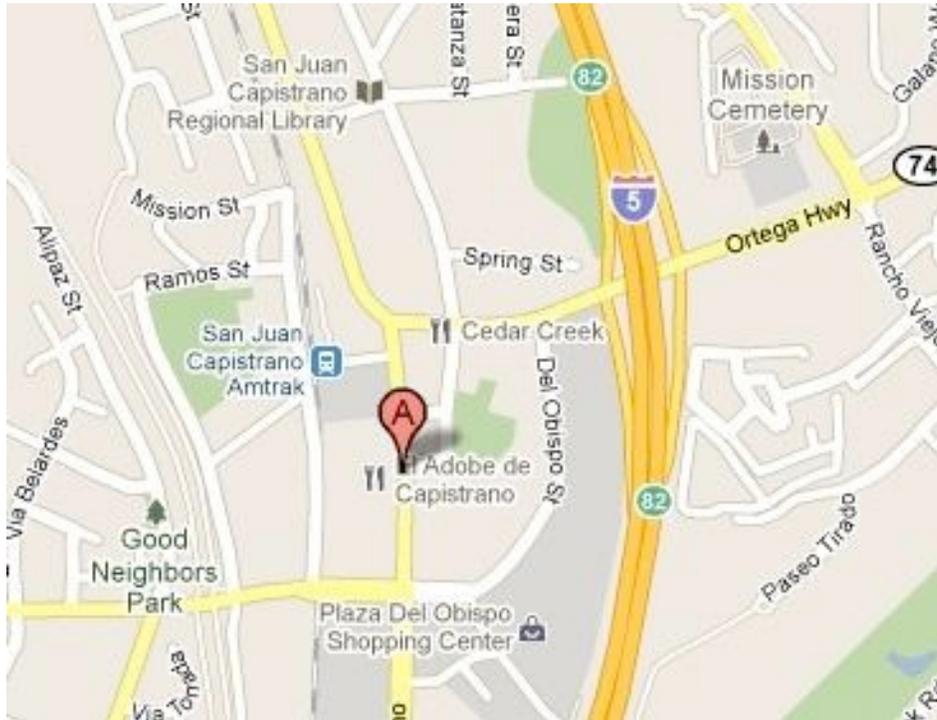
Ken Hudnut

United States Geological Survey

- Where:** El Adobe Restaurant See map on next page
31891 Camino Capistrano San Juan Capistrano, CA 92675
- When:** 6:00 pm – Social Hour
7:00 pm – Dinner
7:45 pm – Program
- Dinner:** Chips, Salsa, Mixed Green Salad, Chicken Enchiladas, Crispy Beef Tacos, Spanish Rice, Refried Beans, Ice Cream with Caramel Syrup, Vegetarian Option (please make reservation accordingly).
- Cost:** \$35 per person, \$5 discount for members, STUDENTS and PROFESSORS: \$15. Add \$5 if you did not make a reservation

Reservations: Make your reservation online at www.sandiegogeologists.org OR* www.southcoastgeo.org no later than noon, Monday, June 16th. Reservations well in advance of the deadline are MUCH appreciated.

* Please do make the reservation with the organization with which you are in up to date membership standing. We reserve the right to charge you for two meals if you manage to forget and make a reservation at each site (you laugh now).



ABSTRACT

From moderate to large earthquakes, surface faulting is being imaged by many new ground-based, airborne and satellite methods (not only LiDAR & InSAR). Such 'before & after' differential imagery has guided the search for surface ruptures following earthquakes in China, Haiti, Pakistan, Mexico and here in southern California. Also, re-investigation of the 1999 Hector Mine earthquake (M 7.1) has revealed that slip was even greater than had been shown in previous work, which had indicated a maximum slip of 5.5 meters. We have much to learn about earthquakes and faulting, and examples of new imagery and field techniques will be shown in successful application to this research on earthquakes ranging in size from M 4.7 up to M 7.7 worldwide.

SPEAKER BIO

Ken Hudnut is a Geophysicist for the Earthquake Science Center of the United States Geological Survey (since 1992) and a Visiting Associate in Geophysics on the faculty of the California Institute of Technology (since 1997) in Pasadena, California. He applies the Global Positioning System (GPS) as well as LiDAR to understanding earthquakes and faults in California. Currently, he is incorporating real-time GPS into the prototype statewide earthquake early warning system, as well as innovating methods for airborne imagery of active faults. From 2009-2012, he coordinated all USGS Earthquake Program work in Southern California, served as chair of the statewide California Integrated Seismic Network, and he has also served multiple terms on the boards of the Southern California Earthquake Center and UNAVCO, Inc. In 2010, he deployed for field studies after the earthquakes in Haiti and Baja California, Mexico and also recently provided expertise after damaging earthquakes in Japan, New Zealand and China. He led the earthquake source design for the 2008 ShakeOut, a simulated M 7.8 on the southern San Andreas fault, and directly advised the Governor of California on the 'Big One' and the statewide earthquake threat. He received his Ph.D. (in Geology) from Columbia in 1989, and his A.B. (high honors in Earth Sciences) from Dartmouth in 1983.

SDAG MEETING SCHEDULE

Meetings are usually held on the 3rd Wednesday of the month but may change to accommodate the speaker and meeting place schedules. Check here for updates.

July 16, 2014	Rob Anders, USGS – San Diego Coastal Aquifer Geochemistry
August 20, 2014	Monte Marshall –A Tale of Two Shields, The Canadian and Baltic
September 17, 2014	Jill Kezowski – The Mineralogy of Mars

2014 EXECUTIVE COMMITTEE

PRESIDENT – Brian J. Olson; *FSR Engineering*; Ph: (858) 750-9243; bolson@fsrengeering.com

VICE PRESIDENT – Jennifer Bauer Morton; geologyjen@yahoo.com

TREASURER – Lee Vanderhurst; Ph: (858) 531-7729; lee@leev-geology.com

SECRETARY – Matan Salmon matansalmon@gmail.com

PUBLICATIONS – Lowell Lindsay; *Sunbelt Publications*; Ph: (619) 258-4911, x111; fax:(619) 258-4916; llindsay@sunbeltpub.com

WEBMASTER – Carolyn Glockhoff; *Caro-Lion Enterprises*, Ph: (858) 549-3396; carolyn@caro-lion.com

PRESIDENT'S CORNER

School's out for summer! And this month's Corner comes to you from the waiting room of Mossy Toyota in Pacific Beach California. This is a superb, recently remodeled facility, with a very friendly service staff, all the espresso you can drink, and most importantly, free WiFi. But I digress.

Later this month, the San Diego Association of Geologists will be joining forces with the South Coast Geological Society, and convening at the El Adobe Restaurant in San Juan Capistrano. For many of us, this is a perfect opportunity to see some of the South Coast faces, maybe catch up with some of our brethren we have not seen in a while, and enjoy a great talk. Growing up in Mission Viejo, attending high school right there in the Capistrano Valley, and cutting my geotechnical teeth at Leighton on Cowan, I've always enjoyed this joint meeting. I'm glad to see that has become a bit of a tradition, and I am already looking forward to the trip myself.

Please note the delayed (6:00) social hour start is a bit later than we are used to, but this should give everyone a little extra time to get up through that North County traffic. Please don't hesitate to send out an email or two to try to get a carpool with your friend and/or neighbor. There are any number of park and ride lots on the way up that may make lubricate the trip for some.

As a footnote, the more eagle eyed readers (those that actually read to the bottom of the President's Corner) may have noted that the regularly scheduled speaker, Mr. Eric Drummon, is not longer billed for this June Meeting. The good news is that the Animal Planet has picked up his show, "Ice Cold Gold", for a third season! Unfortunately, he is slated to be in Greenland for a scouting trip with his producers this month, and is thus unavailable. Please be patient my speaker schedule from here on out, as I have been doing some shuffling of late.

Brian J. Olson
2014 SDAG President

Geology Photo of the Month
Catch a Wave
The Wave, Coyote Buttes, Arizona USA



ANNOUNCEMENTS

CALL FOR PAPERS - SDAG 2014 FIELD TRIP

“Traversing a Transform Boundary – Regional Tectonics, San Diego to the Salton Trough”

October 10 – 12, 2014

On this field trip we will explore the interaction of the major faults of Southern California to accommodate for motion between the Pacific and North American Plates. We will consider the tectonic evolution of the region and observe resulting landforms.

SDAG seeks new manuscripts based on original work relating to regional tectonics, from the San Andreas Fault through the continental borderland. We also invite authors to submit articles on the history of the region as it relates to the tectonics.

Deadline for Papers: Monday, June 30th, 2014

Please submit papers by email to Jennifer Morton geologyjen@yahoo.com

CALL FOR ARTICLES! SDAG invites members to submit articles on their current research or an interesting project they are working on for publication in the monthly newsletter. The article should be no more than 1 page in length. Photos are welcomed, too. Please submit articles to the SDAG secretary via email.

CALL FOR PHOTOS! SDAG invites members to submit photographs of an interesting geologic feature for publication in a new section of the newsletter – “Photo of the Month”. Please submit your photo along with a caption to the SDAG secretary via email.

SDAG RESEARCH TOOL A comprehensive listing of all papers published by SDAG, whether as annual field trip guidebooks or special publications, is now available on our website. Entries are sorted by primary author, or chronologically by date of publication, from our first guidebook in 1972, through the Palms to the Pines, and finally up the San Luis Rey River in 2013. These can be accessed or downloaded as .pdf files. They are fully searchable in Adobe Reader or Acrobat, so if you are researching a topic, "tsunami" for example, you can search for that keyword. This listing will be updated as new books are published. Thanks to Greg Peterson and Hargis + Associates, Inc., for making this possible. See the links below:

http://www.sandiegogeologists.org/SDAG_Pubs_authors.pdf

http://www.sandiegogeologists.org/SDAG_Pubs_chronological.pdf

ANNOUNCEMENTS (con't)

Geology Books for Sale

Local geologist has a large collection of historic books for sale on coastal geology, sedimentology, marine geology, and oceanography, many of which are out of print. If interested, please email the SDAG VP for contact information geologyjen@yahoo.com



The 2014 GSA Annual Meeting will be held from October 19th to the 22nd, 2014 in Vancouver, BC Canada at the Vancouver Convention Centre

Information on the meeting can be found at
<http://community.geosociety.org/gsa2014/home/>

The Abstract Deadline is: 29 July 2014
Registration Deadline is: 15 September 2014

for future reference:

The 2015 GSA Annual Meeting will be November 1 - 4, 2015
in Baltimore, MD, at the Baltimore Convention Center

ICE COLD GOLD SEASON 2

The first season of ICE COLD GOLD was but a glimpse of Greenland's power and potential. This season, the threats and rewards are multiplied. Nothing about Greenland is implied; a new world is about to be defined. In the ruby-packed second season of ICE COLD GOLD, our spirited team of American miners returns to the most remote mining location on the planet with its eyes on a prize. With possibly the world's largest ruby in the Arctic glinting within reach, Sixty Degree Resources stretches the logistical challenge of



returning to its deposit to life-threatening, thin extremes. In Greenland, some of the rules remain the same. The window to the mining season is tight, and with no roads within thousands of miles, Sixty Degree Resources must travel to the most remote mining region in the world by boat and helicopter to reach its deposit. Then, the team must sling in thousands of pounds of heavy-duty mining equipment to get the job done. Nearly killing themselves for what they believe, these ballsy American miners bare all their emotions in chapter two of this life-threatening journey.. The odds are stacked against them - with time being their worst enemy - as they face 24-hour sunlight, massive glaciers, unknown wildlife and remote, uncharted territories no American miner ever has set foot on before.

See Ice Cold Gold Thursdays at 10:00 pm on Animal Planet

JOB OPENINGS

CSU, San Bernardino, Temporary Teaching Position: The California State University - San Bernardino Department of Geological Sciences is seeking a temporary teaching replacement for Dr. Erik Melchiorre during his 2015-16 sabbatical. Specifically, the Department needs someone to teach the required classes for the environmental geology option. The courses are GEOL 375 Groundwater Hydrology, which is taught in the Fall, it is a lecture course with a total of 4 hours of lecture a week, dates and times when it can be offered are negotiable. The other course is GEOL 376-Field Methods in Hydrology which is offered in the winter quarter, this has 2 hours of lecture and 6 hours of lab per week, again days and times when it can be offered are negotiable.

If you are interested, direct any questions to Dr. Alan L. Smith, Chair, Department of Geological Sciences at (909) 537-5409, alsmith@csusb.edu

de maximis, inc., a nationwide firm specializing in project coordination, currently has opportunities for contract employees to provide services in Ecuador. We currently have an opportunity to provide these services and it is our understanding that there are several positions available. We understand that the initial assignment is 1 year. At least one position will require full time presence in Ecuador and the other positions could be done on a rotational basis. Strong Spanish skills are essential as well as 3 to 10 years of professional experience. Work assignments and logistics will be handled from domestic *de maximis* offices.

Project Staff and Project Managers: Candidates would have a B.S. Degree in Environmental Science with either an Engineering or Geology degree as a plus. Candidate should have 3 to 10 years relevant experience in the environmental consulting industry. Candidates needs to have demonstrated site investigation knowledge, work plan and report preparation, task management, cost estimating and scheduling experience. The candidates should be detail oriented and have excellent verbal and written communication skills. Professional Geologist or Engineer or ability to obtain within two years, and Masters degree is a plus. Positions will be based in Ecuador (initially), and will require travel and field work.

de maximis, inc. offers competitive salaries and benefits, and a challenging work atmosphere. To learn more visit our website at: www.demaximis.com.

No phone calls. Qualified candidates should send resumes, along with a cover letter summarizing experience and salary requirements to:

de maximis, inc.
Attention: Jack Keener
1322 Scott St, Suite 104
San Diego, CA 92106
jkeener@demaximis.com

and,

Steve Myers
Albany, New York
smyers@demaximis.com

SEEKING JOB OPPORTUNITIES

Graduating with BS in Geological Sciences: Hi there, SDAG. This is Matan A. Salmon, your 2014 SDAG secretary. This month I will be graduating from Cal State Fullerton with a BS in Geological Sciences and am currently on the hunt for work in San Diego. I'm looking to get into either the hydrogeological, geotechnical, or environmental fields and would greatly appreciate any help with this transition. Through the fantastic program at CSUF I've gained extensive experience in field techniques, lab procedures, and report writing across a broad range of disciplines within geology. If you're looking for an eager, hard working, details oriented, and computer savvy individual, I am your man.

Feel free to send any job postings, questions, or suggestions to my email: matansalmon@gmail.com. Thank you, in advance, for any help.

Geological Engineer: I am an outgoing and enthusiastic geologic engineer with several years experience working on geological field projects, writing technical reports, and completing rigorous data analysis on large and complex data sets. Through my experience I have developed the ability to think critically, learn quickly, and communicate exceptionally both at the technical and non-technical level. I am an MS graduate with a degree in geological engineering from South Dakota School of Mines and Technology. I have 3 years of experience doing geotechnical investigations, geochemical assessments, and groundwater modeling at compromised sites and underground environments. Detailed work experience, education and more at <http://www.linkedin.com/pub/tessa-van-beek/51/46a/272> . Email Tessa Van Beek at tessaj@gmail.com for more information.

Qualifications Summary and Objective: I have 14 years experience directing surface water quality monitoring programs with a proven record of excelling in monitoring plan implementation, quality control, public notification and continuous improvement in operational effectiveness and efficiency. I have built and maintained relationships with key staff in academia, industry, and all levels of government in San Diego and California. I have a widely applicable skill set which includes: analytical thinking, communication and writing skills, data analysis and management, inter and intra-agency project coordination, and staff supervision and training. My objective is to obtain a career position with an industry leader where I can contribute my skills to build the success of my employer as well grow professionally. Detailed work experience, education and more at www.linkedin.com/in/cbclifton2010. Email cbc2006@cox.net or 619-964-1776.

Contact: Clay Clifton

ENGINEERING GEOLOGIST- California PG, MS Geology, over 13 years of applied geotechnical experience, proficient in geotechnical investigations, hazard evaluations, geophysical surveys, construction management and quality control, engineering analyses, special interest in earthquake-hazard and seismic design related applications, strong problem-solving and organizational skills. Detailed resume upon request: Anna, 201-407-7461, Afyodorova103@gmail.com

ENTRY-LEVEL ENVIRONMENTAL SCIENTIST - I am a recent UCSB graduate with a double major in Environmental Studies (BS) and Geology (BS, Earth Systems emphasis) who is looking to begin a career in environmental consulting. I have prior lab experience in both professional and academic settings. I am looking to establish myself with a passionate and hard working environmental firm in the San Diego region. For further information about my credentials and work experience please contact Georgi Chertkov at georgichertkov@gmail.com or call me at 505-412-3107.

Request for Sponsors: 2014 SDAG/SDGS and Publication SPONSORS

On behalf of the San Diego Geological Society, Inc. (SDGS), a public benefit 501(c)3 nonprofit educational corporation, we would like to request tax deductible Donations at our San Diego Association of Geologists (SDAG). The list of paid Sponsors and the forms to become a Sponsor are located on the SDAG web site at: <http://www.sandiegogeologists.org/Sponsors.html>. Your donation will further the SDGS mission to promote geology and related fields in the greater San Diego region, operating through the San Diego Association of Geologists (SDAG), a committee of SDGS. To achieve our primary educational objective, we organize frequent field trips and maintain a program of monthly meetings featuring speakers on current geological topics. We also publish field trip guidebooks and other publications related to geology and natural history. We encourage scholarship and research by awarding scholarships from the elementary through graduate levels. With your \$100 "EMERALD" donation, your name/business will be listed as a sponsor on the SDAG web site (<http://www.sandiegogeologists.org/>) and in the monthly SDAG meeting newsletters. With your \$500 "RUBY" or \$1,000 or more "DIAMOND" level donation, your business card will also be included on the SDAG web site and in the monthly SDAG meeting newsletters. In addition, as a "\$1,000 or more DIAMOND" level donation you will be presented with a thank you plaque. Should you have any questions regarding a Sponsorship, please contact our non-profit SDGS Secretary (Diane Murbach) at 619-865-4333.

CORPORATE SPONSORS



HARGIS+ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

Hargis + Associates, Inc. is an environmental consulting firm specializing in hydrogeology and engineering. We are headquartered in San Diego, California and have offices in Mesa and Tucson, Arizona. Our practice areas include all aspects of hydrogeology and engineering.

As a client service organization, we pride ourselves in being attentive and efficient in meeting our client's needs and solving their problems. In addition to our technical expertise, communication and responsive coordination are hallmarks of our reputation.

We invite you to explore our website to learn more about our firm and the services we provide. We welcome the opportunity to discuss our consulting expertise directly with you.

Contact: **Dr. David R. Hargis**



Mobile Geochemistry Inc.

H&P Mobile Geochemistry is an industry-leading provider of environmental lab services. With ten mobile labs and five direct push sampling trucks and unparalleled experience, H&P's repertoire of environmental lab services includes many forms of environmental lab sampling techniques all the way to on site field analysis services. H&P has successfully and accurately performed environmental lab services delivering quality results to our clients for over 16 years.

2470 Impala Dr., Carlsbad, CA 92010

(800) 834-9888

Contact: **Louise Adams or Suzie Nawikas**



TETRA TECH

complex world | CLEAR SOLUTIONS™

Tetra Tech is a leading provider of consulting, engineering, and technical services worldwide. We are a diverse company, including individuals with expertise in science, research, engineering, construction, and information technology. Our strength is in collectively providing integrated services—delivering the best solutions to meet our clients' needs. <http://www.tetrattech.com>

Contact: **Dave Bloom**



MISSION GEOSCIENCE, INC.

ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS

Since 1991, Mission Geoscience has provided consistent and reliable professional services with our dedicated staff of highly credentialed professionals, who are committed to both timeliness and cost-effectiveness as the cornerstones of their work. MISSION's staff remains amongst the most highly respected firms in the environmental and geotechnical industry, which is why many of our clients tend to assign us their most difficult and challenging projects.

<http://www.missiongeoscience.com/>

Contact: **Jim Ashby**



Shaping the Future

At Cardno ERI, we're experts at providing safe, high quality, cost-effective solutions to environmental concerns. We're large enough to tackle extensive, complex projects, yet small enough to provide exceptional service in a timely manner while paying close attention to controlling costs. In short, we combine the expertise, technology, and dedicated service you need to receive the best possible solutions to your environmental concerns. <http://www.cardnoeri.com>

Contact: **Steve Zigan**



Chambers Environmental Services, Inc.

Dan Chambers

President

Phone/FAX (858) 279-3266

Cellular: (619) 889-9331

E-Mail: DWChambers@Hotmail.com

4510 Mt. Henry Avenue

San Diego, CA 92117



<http://www.fsengineering.com/>

- [Dr. Pat Abbott](#) - SDSU Prof. of Geology, Emeritus
- Sally & Dennis Avery
- [Dr. Richard Berry](#) - SDSU Prof. of Geology and Geophysics, Emeritus
- Curtis Burdett
- Larry Cann
- Don Wilson Clark and Katy Freese
- Joe Coronas - [City of San Diego](#)
- Greg Cranham - Consulting Geologist
- Dr. Neal Driscoll – UCSD Professor of Geology and Geophysics
- William J. Elliott, Engineering Geologist
- Phil Farquharson - [CG-Squared Productions](#)

- Carolyn Glockhoff - [Caro-Lion Enterprises](#)
- Cari Gomes
- [Dr. Sarah Gray](#)
- Rob Hawk [City of San Diego](#)
- Lowell A. Lindsay and Diana Lindsay - [Sunbelt Publications/AESE](#)
- [Dr. Monte Marshall](#) - SDSU Prof. of Geology and Geophysics, Emeritus
- [John Minch](#)
- Monte and Diane Murbach - [Murbach Geotech](#)
- Brian J. Olson
- [Pacific Drilling Company](#)
- Peets Coffee and Tea, Store No. 342 , Carlsbad www.peets.com
- Les Reed – Geotechnical Exploration Inc.
- Todd Wirths

- Rigid Lifelines www.rigidlifelines.com
- SEALASKA Environmental Services, LLC, Mukesh Mehta, PG, CEG
- Gerald Shiller
- Bob Smillie, Terra Costa Consulting Group, Inc.
- Scott Snyder <http://www.snydergeologic.com>
- [Southwest Geophysics, Inc.](#)
- David and Jan Steller ("two-fer" - thanks)
- [Dr. Anne Sturz](#)
- Sue Tanges - Southland Geotechnical Consultants
- Terra Costa Consulting Group, Inc.
- Mary Walke
- Carole L. Ziegler
- <http://www.youtubedownloadersite.com>
- Martin and Sherry Bloom – mbloom@san.rr.com

Add yourself to this list - Sponsors, Corporate Sponsors, and Patrons provide a significant portion of SDGS's and SDAG's operating and scholarship budgets. SDGS is a 501(c)3 public benefit nonprofit educational corporation. For more information, please see our Sponsorship Form.