

# SAN DIEGO ASSOCIATION OF GEOLOGISTS

[www.sandiegogeologists.org](http://www.sandiegogeologists.org)

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## SDAG MEETING ANNOUNCEMENT

**WEDNESDAY, FEBRUARY 19, 2014**

### PICACHO Y LOS CARGO MUCHACHOS: EL LIBRO

*Presented by*

Todd A. Wirths, M.S., P.G.  
Brian F. Smith & Associates

**Where:** Marina Village Conference Center – Catalina Room (south end of MVCC)  
**SEE MAP**  
1936 Quivira Way  
San Diego, 92109

**When:** 5:30 pm – Social Hour  
6:30 pm – Dinner  
7:15 pm – Program

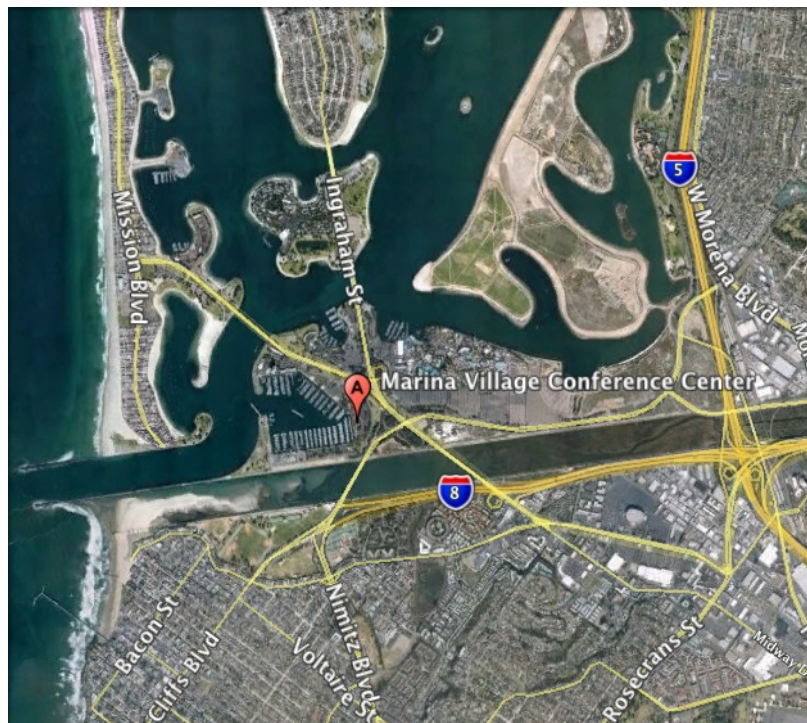
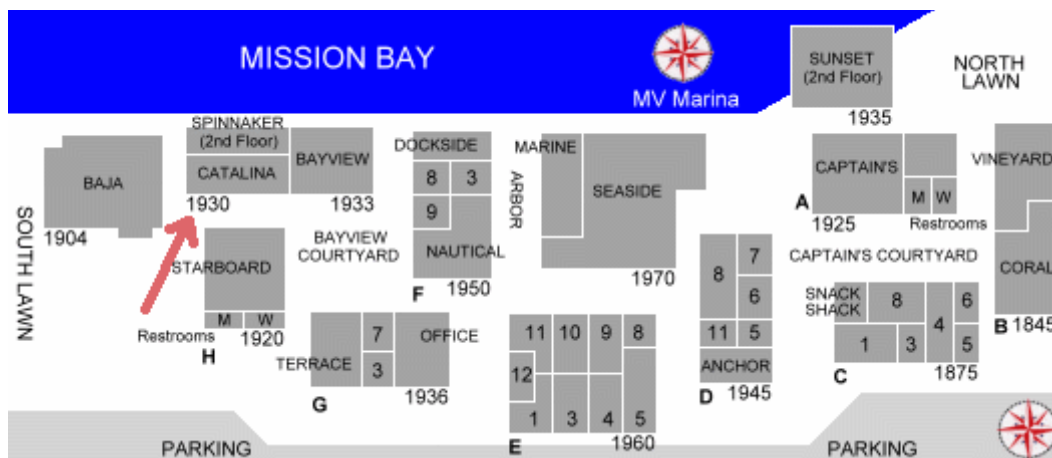
**Dinner:** Hawaiian Buffet (Teriyaki Pork Ribs and Chicken, Vegetarian Stir Fry, etc.)  
Beverage station, dessert  
Cash Bar (proceeds to benefit the Mike Walawender Scholarship Fund) –  
please bring small bills!

**Cost:** \$30 per person, \$5 discount for members, STUDENTS: \$20. Add \$5 if you did  
not make a reservation.

**Reservations:** Make your reservation **online** at [www.sandiegogeologists.org](http://www.sandiegogeologists.org) **no later than  
noon, Monday, February 17th.**

**Directions:** FROM INTERSTATE 5: Take the SEA WORLD DRIVE exit. From SEA WORLD DRIVE, take WEST MISSION BAY DRIVE on your right. When you see the large green sign that says QUIVIRA ROAD, get in the farthest left of the two left turn lanes. Turn left, go one very short block and turn left again. Drive about one half mile and MARINA VILLAGE will be on your right.

FROM INTERSTATE 8: Take the WEST MISSION BAY DRIVE exit to the right. You will be on INGRAHAM STREET for a short distance from which you will take the next exit marked WEST MISSION BAY DRIVE on your right. When you see the large green sign that says QUIVIRA ROAD, get in the farthest left of the two left turn lanes. Turn left, go one very short block and turn left again. Drive about one half mile and MARINA VILLAGE will be on your right.



**RESERVATIONS CANNOT BE GUARANTEED AFTER MONDAY AT 12 NOON  
BUT THEY ARE ALWAYS PREFERRED OVER WALK-INS**

## **ABSTRACT**

You've flipped through the book, now experience the PowerPoint! For many of us, we experience the far southeastern corner of California in a few seconds, doing eighty-five on Interstate 8. Tonight, take a dusty, wash-board detour to a virtually forgotten region of complex geology, 200 years' worth of gold mining heartbreak and heaven, and off-road racing – pre WWI vintage.

Geologically, the Chocolate Mountains fault, a Late Cretaceous/early Paleocene thrust plane re-activated as an Oligocene-aged detachment fault, is a major structural feature, separating the underlying Orocochia Schist and the overlying Jurassic Winterhaven Fm. and orthogneiss units in the Picacho area. Lower Miocene volcanic flows and pyroclastics dominate the region, with associated extensional faulting. In the last 9.45 million years, north-south regional shortening is recorded in the form of the Chocolate Mountains Anticlinorium, conjugate strike-slip faults, and a newly discovered reverse fault. These structures likely represent the initial stages in the development of the Eastern California Shear Zone at the latitude of Picacho State Recreation Area.

While gold placers and quarries were established in the Picacho and Cargo Muchacho areas by Mexican families since the early 1800s, the inhospitable climate and limited access prevented large-scale development. Industrial methods were introduced with the arrival of Anglo-Americans in the 1880s. Success was mixed, and Anglo-Hispanic relations could be tense, as the minority whites supervised and governed the majority Latino populous.

## **SPEAKER BIO**

Todd Wirths is a professional geologist and paleontologist with Brian F. Smith & Associates in Poway. He has degrees from Santa Barbara City College (A.A.), UC Santa Cruz (B.A.), and SDSU (M.S.), all in geology. Notable academic achievements include three months of geologic studies in New Zealand (with SBCC), riding out the Loma Prieta earthquake (at UCSC, during physics lab), and mapping the Superstition Mountain fault on his two-stroke Honda ATC three-wheeler (with SDSU). He survived all these to enter in the environmental consulting workforce in San Diego, where he thrived for 14 years primarily as an investigator of leaking underground fuel storage tanks for major oil companies. Recent adjustments to the global economy allowed Todd to refocus his career toward his childhood dream, that of a paleontologist. Todd was the 2012 SDAG president.



## SDAG MEETING SCHEDULE - Mark Your Calendars!

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

<b>March 19, 2014</b>	The geology, glaciology, and wildlife of the Baffin Island-Greenland region
<b>April 16, 2014</b>	Saline Groundwater Movement in San Diego's Coastal Aquifer
<b>May 21, 2014</b>	Student Scholarship Talks - Emceed by Anne Sturz



### 2014 EXECUTIVE COMMITTEE

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## PRESIDENT'S CORNER

Welcome to the shortest month of the year. I was born on February 22, 1970, so the third week of this month will be one of presidential birthday celebrations for certain. So feel free to wish me a happy birthday later this month, at this month's meeting. No gifts please. The focus will be on Todd Wirths, as he takes us to Picacho - down into the easternmost, and southernmost, part of California. He introduced many of us to this unheralded part of our state in 2011 as SDAG vice president, but now has a detailed update on the "Gold, Guns and Geology" of the area. I still love that title.

Hopefully most of you have been paying attention and have been taking part, or plan on taking part, in some of the extracurricular geologic activities offered of late. On February 1, many of us took advantage of the low tide and joined our beloved *Geologists Drinking Beer* (<https://www.facebook.com/#!/groups/297259306826/>) on a reconnaissance of the Rose Canyon Fault System as it is exposed along the shoreline south of the La Jolla Shores. Later this month the *Friends of the Pleistocene* (FOP) will be heading down into the Laguna Salada to enjoy the "4D architecture of an oblique rift margin". I do encourage all to pay attention through SDAG's valuable email announcements. Jennifer, and now Matan, will continue to try to keep everyone aware of such opportunities when they are announced. And if you have geologic notes suitable for newsletter publication, just let us know. Sooner rather than later is always best, as you probably know we try to get this "rag" out sometime in the first week of each month.

And yes you read right. The nostalgic SDAG'er in me is taking us back onto Mission Bay, to the Catalina Room and the Marina Village! Don't worry, I still plan on moving us around town from month to month, but I am personally craving some aloha.

Brian J. Olson  
2014 SDAG President



# 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 Abstracts: Friday, May 16<sup>th</sup>, 2014**

Please submit the following information along with abstracts:

- Title
- Author(s) and affiliation
- Address, email, and telephone numbers for the author(s)

Please submit abstracts by email to Jennifer Morton [geologyjen@yahoo.com](mailto:geologyjen@yahoo.com)

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**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.

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**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.

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**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 (40 years ago ) to all things Picacho in 2011. 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_authors.pdf)

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## JOB OPENING

*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.

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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](mailto:jkeener@demaximis.com)

and,

Steve Myers  
*de maximis, inc.*  
Albany, New York  
[smyers@demaximis.com](mailto:smyers@demaximis.com)

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## **SEEKING JOB OPPORTUNITIES**

**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](mailto:tessaj@gmail.com) for more information.

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**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](http://www.linkedin.com/in/cbclifton2010). Email [cbc2006@cox.net](mailto:cbc2006@cox.net) or 619-964-1776.  
Contact: Clay Clifton

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**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](mailto:Afyodorova103@gmail.com)

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**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](mailto:georgichertkov@gmail.com) or call me at 505-412-3107.

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## **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.



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