



SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT

WEDNESDAY, JANUARY 15, 2014

TO BE OR NOT TO BE: COMET C/2012 S1 - ISON

Presented by

Chuck Houser
SCS Engineers

- Where:** Casa Machado
3750 John J. Montgomery Dr.
San Diego, 92123
- When:** 5:30 pm – Social Hour
6:30 pm – Dinner
7:30 pm – Program
- Dinner:** Deluxe Mexican Buffet. Shrimp, Chicken and Beef Fajitas, Cheese Enchiladas.
Cash bar.
- Cost:** \$30 per person, \$5 discount for members, STUDENTS: \$15. Add \$5 if you did not make a reservation.
- Reservations:** Make your reservation **online** at www.sandiegogeologists.org **no later than noon, Monday, January 13th.**



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

ABSTRACT

From “The Comet of the Century” in early 2013, to “well maybe not” in mid-2013, to “um...well...???” in October, to “She’s breaking up! She’s breaking up!” (ref. Six-Million Dollar Man) a few days before perihelion, to “This is an ex-comet!” (ref. Monty Python, parrot) at perihelion, to “Ghost of ISON” right after perihelion, to “Only mostly dead” (ref. Princess Bride) a few hours after perihelion, to “Zombie Comet” a few more hours after perihelion, to “All we are is dust in the (solar) wind” by December 1st, Comet ISON had its ups and downs and, in the final analysis, took astronomers and the global community for a real “E-ticket” ride. This talk will delve a little into comets in general, look briefly at some great comets of the past several decades, and run through a chronicle of the last few days of the life of comet ISON. My hope is to inspire an interest in these “dirty snowballs” so the next time I’m freezing my tail off at 4 AM in the mountains, maybe I won’t be alone.

SPEAKER BIO

Charles Houser is a consulting geologist, a past president of SDAG, an avid mineral collector, a fly fisherman, a soccer-dad, and a pilot. Word on the street is he will be leaving the Prius at home and flying a plane to the meeting, utilizing the convenient airstrip adjacent to our venue, the Casa Machado! He’s also a decent follow on Facebook, as many of us were well aware of his chase of the comet ISON as it was unfolding. Welcome Chuck as he eases us into 2014 with an intriguing chronicle of ISON, and looks at other memorable “dirty snowballs”.



SDAG MEETING SCHEDULE - Mark Your Calendars!

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

| | |
|-------------------|--|
| February 19, 2014 | Todd Wirths, Picacho and The Cargo Muchachos, a Geological and Historical Perspective. |
| March 19, 2014 | The geology, glaciology, and wildlife of the Baffin Island-Greenland region |
| April 16, 2014 | Saline Groundwater Movement in San Diego's Coastal Aquifer |



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PRESIDENT'S CORNER

Happy New Year to SDAG. Thank your Cari Gomes for your four years of service! Time for the yearly shuffle. As your incoming president of the San Diego Association of Geologists, I'd like to welcome the new roster of officers for 2014: Jennifer Morton (Vice President), Lee Vanderhurst (Treasurer – *again*), and Matan Salmon (Secretary).

Prepare yourselves because the third Wednesdays will be coming quick in 2014. On January 15th in fact, we will have Chuck Houser (for those that didn't get their shots in around the San Luis Rey trip campfire) speak to us on the comet ISON. He evidently took quite an interest in it as it made it's visit this past year, and would like to tell the "real story" for us all. Looking forward to it Chuck, and thanks for stepping up when the third Wednesday of the year is only 15 days in.

Like the comet ISON, 2013 came and went. Another big thank you to everyone that helped the SDAG continue to thrive. Meeting attendance continues to impress, and I was so proud of the 60+ attendees at the fall field trip up the San Luis Rey (or SLR as I now like to call it). I can't thank you enough to all who helped me pull it off – you know who you are. Please take note that your new Vice President, Jennifer Morton, has already hit the ground running with a call for papers and plans for our 2014 trip (congratulations on the early traction Jennifer!)

Looking forward to 2014. Please don't hesitate to drop me a line or run up to me to introduce yourself anytime. I've gotten to know plenty of you over the last few years, but by no means am I done. I've only started.

Brian J. Olson
2014 SDAG President



SALSIPUEDES LANDSLIDE

North of Ensenada

That was Then (1989)...



Field Trip Road Log October 21 & 22, 1989

Fault Features Between La Jolla, U.S.A. and Ensenada, Mexico



Approximately 10 miles north of Ensenada along Mexican Highway 1 is the Punta Salsipuedes area. As we drive through this area, note the hummocky topography and lineaments. The Punta Salsipuedes area is underlain by sediments of the Cretaceous Rosario Formation and capped by basalts of the Middle Miocene-age Rosarito Beach Formation. Quaternary-age marine terrace deposits are found at lower elevations adjacent to the existing coastline. Exposed within the Punta Salsipuedes area the Rosario Formation consists predominately of mudstones interbedded with sandstones and conglomerates (Yeo, 1984). The basalts of the Rosarito Beach Formation unconformably overlie the Rosario Formation with the contact between the two formations dipping generally to the west.

Within this area, numerous composite landslides can be recognized. These include large-scale rotational slumps and translational slides incorporating both the Rosario and Rosarito Beach Formations. Also major lineaments have been recognized within the basalt which are probably associated with previous fault activity and possible landslide movement (Figure 10 and 11).

Figure 10

Punta Salsipuedes

...This is Now (2014)

Photograph taken on Sunday, Dec. 29, 2013, of the 300-meter (983-foot) stretch of the Tijuana-Ensenada Scenic Highway that collapsed due to a mudslide, forcing officials to close the important road in the northwestern Mexican state of Baja California indefinitely. EFE —



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 16th, 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

SCIENCE OLYMPIAD VOLUNTEERS NEEDED! Marshall Middle School’s Science Olympiad Team is seeking volunteers to help students with the Rocks and Minerals portion of the competition. The team meets Wednesday evenings at Marshall Middle School in Scripps Ranch. The Science Olympiad is a national science competition for middle school students; this year’s competition will be held on February 8th, 2014. If interested, please contact Christopher Casper, ckasper@qualcomm.com

For more information on the Science Olympiad please visit the following websites:

<http://www.soinc.org/>

http://www.soinc.org/rocks_minerals_b

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.

ANNOUNCEMENTS

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_chronological.pdf

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JOB OPENINGS

Position: Project Geologist/Engineer (Environmental)

Location: San Diego, California (no relocation allowance available)

Duration: Full Time

Salary: Dependent upon qualifications

TriEco, LLC is seeking a Project Environmental Geologist or Project Environmental Engineer to support its Naval Facilities Engineering Command Southwest (NAVFAC SW) and U.S. Army Corps of Engineers (USACE) contract work within California and other western U.S. locations. The qualified candidate will be based in our San Diego office and report directly to TriEco's Program and Operations Managers.

The Project Geologist or Project Engineer shall be responsible for estimating, planning, and executing environmental consulting work under CERCLA, RCRA, MRP, UST, and Compliance programs. Scope includes Site Inspections, Remedial Investigations, Feasibility Studies, Proposed Plans, and Records of Decision. The job position will require management of multiple task orders. Typical duties include managing staff resources, budget, schedule, procurement/subcontractor oversight, tracking and reporting progress, and technical report writing. It is anticipated that the job position may also require up to 40% field time supervising and performing field work on an as-needed basis.

Skills and Experience: The ideal candidate shall have the following skills and experience:

- 5 years or more years experience managing and executing environmental projects.
- Experience with Navy and/or USACE environmental work is highly desired.
- Skilled in environmental field work, including soil and groundwater sampling, well installation, soil gas sampling, etc.
- Familiar with human health and ecological risk assessments.
- Familiar with FS preparation and innovative remediation technologies.
- Excellent technical writing, editing, and communications skills.
- Proficient in MS Word, Excel, Powerpoint, and Project scheduling.

Education and Registration:

- Bachelor's or high degree in Geosciences or Civil Engineering
- Registration in California as a Professional Geologist or Professional Engineer, or ability to obtain registration/license in 12 months.

If interested, please send a copy of your current resume and cover letter, if desired, to s.arnzen@trieco.net.

TriEco, LLC is a U.S. Small Business Administration (SBA) certified firm specializing in environmental consulting services to meet customer needs and federal, state and local requirements. We provide innovative, comprehensive architect/engineer and remediation services and products for both private sector and government sections throughout the U.S. TriEco is currently engaged in a joint venture partner ships with Tetra Tech, Inc. supporting Department of Defense contracts and customers. Visit us at www.trieco.net for more information.

JOB OPENINGS

Position: Staff Geologist/Engineer (Environmental)

Location: San Diego, California (no relocation allowance available)

Duration: Full Time

Salary: Dependent upon qualifications

TriEco, LLC is seeking a Staff Geologist or Staff Engineer to support its Naval Facilities Engineering Command Southwest (NAVFAC SW) and U.S. Army Corps of Engineers (USACE) contract work within California and other western U.S. locations. The qualified candidate will be based in our San Diego office and report directly to TriEco's Program and Operations Managers.

The Staff Geologist or Staff Engineer shall support project and senior-level professionals in planning and executing environmental consulting work under CERCLA, RCRA, MRP, UST, and Compliance programs. Scope includes Site Inspections, Remedial Investigations, Feasibility Studies, Proposed Plans, and Records of Decision. The job position will require approximately 50 to 75% field time performing field work, providing health and safety support, and overseeing subcontractors. Office duties include supporting proposal efforts, preparing work plans (WPs), sampling and analysis plans (SAPs), Health and Safety Plans, analyzing and interpreting environmental and laboratory chemical data, and preparing small technical reports and portions of large reports.

Skills and Experience: The ideal candidate shall have the following skills and experience:

- 2 or more year's field and office experience executing environmental projects.
- Experience with Navy and/or USACE environmental work is highly desired.
- Skilled in environmental field work, including soil and groundwater sampling, well installation, soil gas sampling, QA/QC procedures, etc.
- Excellent technical writing, editing, and communications skills.
- Proficient in MS Word, Excel, Powerpoint, and Project scheduling.
- Familiarity with human health and ecological risk assessments, and FS preparation is also a plus.

Education and Registration:

- Bachelor's or higher degree in Geosciences or Civil Engineering
- Registration in California as a Professional Geologist or Professional Engineer, or ability to obtain registration in two years is preferred.

If interested, please send a copy of your current resume and cover letter, if desired, to s.arnzen@trieco.net.

TriEco, LLC is a U.S. Small Business Administration (SBA) certified firm specializing in environmental consulting services to meet customer needs and federal, state and local requirements. We provide innovative, comprehensive architect/engineer and remediation services and products for both private sector and government sections throughout the U.S. TriEco is currently engaged in a joint venture partnerships with Tetra Tech, Inc. supporting Department of Defense contracts and customers. Visit us at www.trieco.net for more information.

JOB OPENINGS

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
de maximis, inc.
Albany, New York
smyers@demaximis.com

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 for more information.

I am a recent MS graduate in Geological Sciences, Hydrogeology from SDSU looking to work in hydrogeology, water resources, or natural resources management. My thesis was a study involving groundwater modeling. Additionally, I have eight years of local experience in environmental consulting. Please contact Cheryl Martin (Johnson) at cheryl_k_johnson@yahoo.com or call me at (619)-992-9335.

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

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