

SAN DIEGO ASSOCIATION OF GEOLOGISTS

http://www.sandiegogeologists.org/

PRESIDENT

VICE PRESIDENT

SECRETARY

TREASURER

Heather Reynolds (540) 525-6475 heather@sandiego

geologicalsociety.org

VACANT

Jasmine Peach (909) 800-6622 peach@geoconinc.com Xiomara Rosenblatt (619) 208-9369 Xiomara@sandiegogeo

logicalsociety.org

WEBMASTER: Carolyn Glockhoff carolyn@caro-lion.com

SDAG MEETING ANNOUNCEMENT

Wednesday, January 15th, 2025

Where: Marina Village

Catalina Room 1936 Quivira Way San Diego, CA 92109 When:

6:00 pm - Social Hour

7:00 pm - Dinner 8:00 pm - Program

Dinner: All American Buffet

Cost: Member \$60; Non-Member \$70; Student \$30

Reservations: Make & Pay your reservation online through the SDAG website, before

NOON WEDNESDAY, JANUARY 8TH. (Please note, all meeting reservations require online pre-payment due to venue costs, venue

contracts, and loss of money due to no shows)

Speaker: Scott Rugg, RG CEG

Principal Engineering Geologist, Kleinfelder

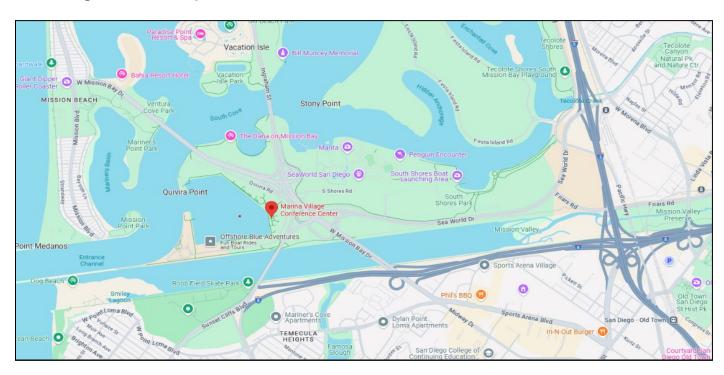
Title: Factors Effecting the Interpretation of Faulting in Cone Penetrometer Test

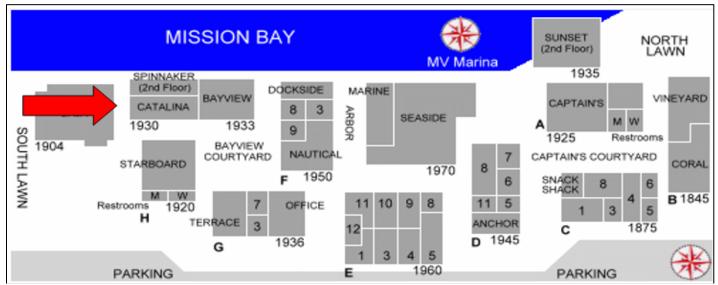
Sounding Investigations

Abstract: Cone Penetrometer Test Soundings (CPTs) are an often-used method to characterize subsurface soil behavior properties mostly in soft material conditions. The method has many geotechnical applications, some of which include liquefaction analysis, mapping of alluvial deposits and fill, evaluation of soil density improvement and determination of seismic S- and P-wave velocities. When a series of CPTs is advanced, the subsurface stratigraphy can be profiled. This was recognized early on and soon CPTs were engaged to identify stratigraphic disruptions indicative of faulting. This method is now widely used in the coastal province of Southern California, mostly in upper Quaternary materials. Oftentimes, only several feet or less of vertical differential across unit horizons or thickness variations in strata are used to identify potential faulting. This means it is imperative that depth recording of CPTs are as

accurate as possible. Several factors can cause errors in depth readings, leading to erroneous interpretations of faulting. These factors will be discussed in this presentation as well as a quality control procedure to track actual depths and thus mitigate errors. In addition, several examples will be presented where inaccurate depth readings resulted in misinterpretation of faulting. Finally, both the advantages and limitations of the CPT method will be discussed.

Meeting Location Map:





Directions:

From I-5:

- 1. Exit Sea World Drive. Turn RIGHT if you have exited going south, turn LEFT if you have exited going north.
- 2. Continue on Sea World Drive for about 2 miles.
- 3. West Mission Bay Drive will be on your right, just beyond the lanes marked with arrows to Sea World's entrance.
- 4. Stay in the right-hand lane, continue around loop to right.

- 5. After loop, merge all the way to the furthest left lane.
- 6. At signal for Quivira Road, turn left.
- 7. Go left again immediately (Quivira Way).
- 8. Continue about a half mile.
- 9. Destination is large parking lot on the right-hand side, past Seaforth. <u>Catalina Room is</u> near the south end.

From I-8:

- 1. Take 8 West to the "Beaches" exit, past I-5. Exit to West Mission Bay Drive, turn right.
- 2. After the bridge ends, West Mission Bay Drive continues on about 100 yards UNDER the overpass, stay in right lanes and curve in the loop to the right. Do NOT continue straight on Ingraham.
- 3. After loop, merge all the way to the furthest left lane. At signal at Quivira Road, turn left.
- 4. Go left again immediately (Quivira Way).
- 5. Continue about a half mile, destination is large parking lot on the right-hand side, past Seaforth.

Speaker: Scott Rugg, RG



Bio: Mr. Rugg has 38 years of experience in the fields of engineering geology and geotechnical engineering, having worked on thousands of sites throughout California and the Southwest. He has focused his vocation on fault and seismic hazard assessment, having worked extensively on all types of projects including high-rise buildings, hospitals, water and wastewater treatment plants, airports. transportation, education facilities, and residential sites. Early in his career he evaluated hundreds of sites damaged during the 1986 Palm Springs, 1987 Whittier Narrows, 1989 Loma Prieta, and 1994 Northridge earthquakes. A sampling of fault hazard projects he has led are the Master-plan Investigation of San Diego International Airport, San Diego, CA, - Mid-Coast Trolley Extension, San Diego, CA, - Airfield Expansion, Naval Weapons Station, China Lake, CA, - Biosolids and Clarifiers Replacement, Orange County Sanitation District, Huntington Beach, CA - Exxon Mobil Carbon Capture Facility, Baytown, TX - Camp Blaz Satellite Facility, US Territory Guam, and the Automated People Mover, Inglewood, CA. He has proficiency in all methods of fault investigation with extensive experience in the use of Cone Penetrometer Test Soundings for fault hazard analysis.



President's Corner

Hello SDAG Members,

Happy New Year, and I hope each of you had a wonderful holiday season!

I am excited to be your President this year! We already have some great speakers lined up so far, and not to mention we will have our Annual Field Trip (San Andreas Fault in the Wrightwood area) on September 26th-28th, 2025!

We had another memorable Annual SDAG Holiday meeting in December at the San Diego Natural History Museum (The Nat), and what a great turnout we had! Not to mention celebrating the 150th Anniversary milestone of The Nat! Thank you, John Teasley, for leading us through 2024 and handing over the reins. Big thank you to Tom Deméré for giving us a behind the scenes tour of the new and very fabulous "Below Grade: Tom Deméré Paleontology Collection"!!

It was a real treat to be able to explore the vast fossil collections storage area and the state-of-the-art processing lab. Talking about the storage area, what about those robust metal storage lockers on sliding tracks! They were pretty impressive...hopefully no one got preserved between them and catalogued into Tom's Collection!

Special shout out to all who contributed to the Walawender Student Scholarship Fund in 2024, thank you! We were able to award three deserving students (Nicholas Oliver, Emily Imperato, and Jordan Jaeger) with scholarships at our Annual SDAG Holiday meeting! Congratulations again, and we look forward to hearing more about their research when they give their talks at our April 16th meeting!

Alright folks, it's that time of year again to renew your SDAG membership, if you haven't already. For any prospective or seasoned geologists in the crowd or geology enthusiasts, make those New Year Resolutions a reality and become a member now! You'll be glad you did.

Next up, our speaker this month will be Scott Rugg RG CEG, Principal Engineering Geologist with Kleinfelder, who will give a presentation on "Factors Effecting the Interpretation of Faulting in Cone Penetrometer Test Sounding Investigations," which emphasizes the importance of and how to obtain accurate depth of CPTs for investigating faults.

Thanks, and see you all at the January 15th Meeting!! It's less than 2 weeks away!

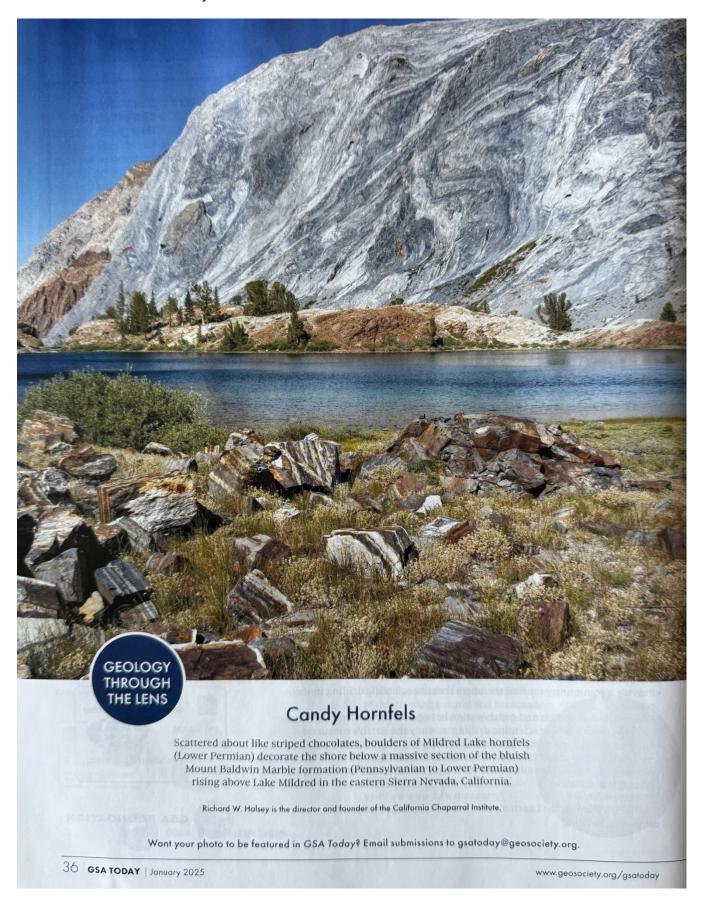
-Heather Reynolds 2025 SDAG President

UPCOMING 2025 SDAG MEETINGS

February 19, 2025	Karl Mueller on A New Seismotectonic Framework for Active Faults in Metropolitan San Diego	
March 19, 2025	Don Barrie on New Zealand Geology	
April 16, 2025	Student research presentations by student scholarship recipients	
May 21, 2025	TBA	
June 18, 2025	SDAG / SCGS Joint Meeting	
July 16, 2025	TBA	
August 20, 2025	TBA	
September 26-28, 2025	SDAG Annual Field Trip, San Andreas Fault in the Wrightwood area, Transverse Ranges (no meeting this month)	
October 15, 2025	TBA	
November 19, 2025	Joint Meeting with AEG Inland Empire Section	
December 17, 2025	Traditional Holiday Celebration at the San Diego Natural History Museum with Tom Deméré	

<u>Member Spotlight</u>

From member Rick Halsey:



2025 SDAG MEMBERSHIP

Renew or become a new SDAG Member - 2025 Member Dues are Due if you have not already done so. On-line Payment (\$30 Member; \$10 Student):

https://www.sandiegogeologists.org/MemberFormPP.html

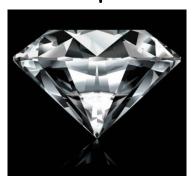
Mail in or Bring FORM to Meeting: https://www.sandiegogeologists.org/MemberForm.pdf

2025 Corporate SDGS Sponsors

Renew or become a new 2025 SDAG Sponsor – Minimum \$100 includes annual Membership.

https://www.sandiegogeologists.org/SponsorForm.pdf

DIAMOND Sponsors +\$1,000





https://handpmg.com

H&P Mobile GeoChemistry, Inc. is an industry leading provider of environmental lab services.



Kuper Consulting LLC specializing in aggregate characterization, reclamation & permitting.
tom@kupercon.com & dorian@kupercon.com



Geocon Incorporated https://www.geoconinc.com

A professional engineering consulting firm providing comprehensive geotechnical engineering.

Dr. Pat Abbott

https://www.sdsu.edu/expertsdirectory/patrick-abbott

To Promote Geologic Knowledge



https://www.geotours.us Matt Ebiner has led GeoTours groups to 82 countries.



RUBY Sponsors +\$500





<u>ENGEO</u> has an office in San Diego and offices throughout the United States, New Zealand and Australia. ENGEO offers geotechnical, environmental, water resources engineering and construction services.

PROJECT X CORROSION ENGINEERING





Thermal Resistivity
Thermal Resistivity Dry-Out
Curve from zero to 110% of
proctor moisture with 3-Day or
less Turn-Around-Time.
Only 3 lbs of soil needed!

https://projectxcorrosion.com

EMERALD Sponsors +\$100



Dave Bloom	Tom Lamb
Todd Wirths	Lowell E. & Diana Lindsay
Dr. Monte Marshall SDSU Geology Professor Emeritus	Chris Livesey http://www.geotekusa.com/
Larry Cann	Joan & Dave Kimbrough
Joe Corones	San Diego Car Accident Attorneys
Greg Cranham Consulting Geologist	Carolyn Glockhoff Caro-Lion Enterprises
Dr. Vic Camp	Tod Clark - Pacific Drilling Co.
John Hoobs	Gerald Shiller
Dr. Margaret R. Eggers Eggers Environmental, Inc.	Monte & Diane Murbach <u>Murbach Geotech</u>
Phil Farquharson - <u>Geology Guy</u>	Carole L. Ziegler
Eldon Gath Earth Consultants International	Scott Snyder
GEI - Geotechnical Exploration Inc.	Starbucks Coffee Company Cardiff CA

Cari Gomes - Pinao Consulting	David and Jan Steller
Rob Hawk	Dr. Anne Sturz
Stan Helenschmidt Helenschmidt Geotechnical, Inc.	Sue Tanges
Kip Hering	John Teasley
George H. Ramos Jr. & Associates <u>San Diego Criminal Defense</u> Attorney	Mark Holt <u>Discovering Lost America</u>
Randy Wagner	Mary Walke
Anonymous Sponsor	Custom Diamond Rings Vanessa Nicole Jewels

SDAG HAS A FACEBOOK PAGE

Here is a link to the SDAG Facebook page:

https://www.facebook.com/sandiegogeologists.org

Photos From The Holiday Meeting 2024























