



# **SAN DIEGO ASSOCIATION OF GEOLOGISTS**

<http://www.sandiegoeologists.org>

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## **SDAG MEETING ANNOUNCEMENT**

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**Wednesday November 18<sup>th</sup>, 2020**

**Student Speakers; 2nd Round**

### ***A-CN-K Trends Along The San Jacinto Fault in Alkali Wash***

**Presented by Eric Surratt**

### ***Evolution of Lower Continental Crust***

**Presented by Sean Curran**

**Where:** In the comfort of your own home.

**Topic:** SDAG's 6pm November 18th Zoom Meeting  
**Time:** Nov 18, 2020 06:00 PM Pacific Time (US and Canada)

**Join Zoom Meeting**  
[https://us02web.zoom.us/j/84910732530?](https://us02web.zoom.us/j/84910732530?pwd=WThHSmhBeEVrQUhtM3lxcVlwUIMvUT09)  
[pwd=WThHSmhBeEVrQUhtM3lxcVlwUIMvUT09](https://us02web.zoom.us/j/84910732530?pwd=WThHSmhBeEVrQUhtM3lxcVlwUIMvUT09)

**Meeting ID:** 849 1073 2530  
**Passcode:** 621715  
**One tap mobile**  
**+16699009128,,84910732530#,,,,,0#,,621715# US (San Jose)**  
**+12532158782,,84910732530#,,,,,0#,,621715# US (Tacoma)**

**When:**  
6:15 to 7:00 – social hour via web platform (Zoom)  
7:00 to 7:10 – announcements  
7:10 to 8:20 – presentations

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## ABSTRACTS & BIOS

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### A-CN-K Trends Along The San Jacinto Fault in Alkali Wash

Presented by: Eric Surratt

**Abstract:** In general, as mapped by R.V. Sharp, the San Jacinto fault consists of a series of NE and SW verging thrusts that are connected by longer straight segments with subvertical dips. The observation, that the SW verging segments occur within the SW block while the NE verging occur in the NE block, suggests that these now displaced segments may have once formed a flower-like structure prior to being dismembered and displaced. One of the NE verging thrust segments is located ~9-10 km SE of Anza, California. At this locality, high-grade metamorphic rocks of the pre-Cretaceous Burnt Valley complex form the hanging wall block and are juxtaposed against Pleistocene alluvial sandstones and conglomerates of the "Bautista beds" along a 10-40° SW dipping thrust fault. Within Alkali Wash, damaged rock adjacent to the NE verging thrust, consists of an ~10-20 cm thick band of cataclasites derived from the Bautista, an ~30 cm black ultracataclasite core, and a thick section consisting of ~5 m of cataclasite and ~10 m of breccia derived from the Burnt Valley complex. Experimental data suggest that within fault zones, damage zones are regions of high permeability relative to adjacent fault cores and undamaged parental rocks. As noted by Evans and colleagues in 1997, such work implies that "...fault zones with well-developed damaged zones can lead to enhanced fluid flow through a relatively thin tabular region parallel to the fault plane, whereas the fault core restricts flow across the fault." Within Alkali Wash, evaporite crystals, identified through XRD analysis, as the calcium sulfate mineral bassanite (calcium sulfate hemihydrate,  $2\text{CaSO}_4 \cdot \text{H}_2\text{O}$ ), have been found in multiple samples within the fault core and damage zones. In thin section and hand samples, undeformed individual and clusters of bassanite crystals appear to have grown within open cracks and voids. The above relationships suggest that bassanite likely formed from fluids moving through the porous network of fractures and voids within the modern-day setting of the San Jacinto fault zone. Based on molar A ( $\text{Al}_2\text{O}_3$ ), CN ( $\text{CaO}^* + \text{Na}_2\text{O}$ ), and K ( $\text{K}_2\text{O}$ ) data, fluid/mineral interactions in fault zones commonly form CN-depletion trends reflective of the alteration of plagioclase relative to unaltered quartzofeldspathic host rocks. The occurrence of bassanite in the damage zones and fault core at Alkali Wash implies an addition of molar Ca, and thus the potential to reverse or complicate this trend. Fifty two samples of the host rocks ( $n=26$ ) and damage zones and fault core ( $n = 26$ ) at Alkali Wash have been collected and analyzed for major elements. Splits from each damage zone and fault core sample have been sent to Activation Laboratories Ltd for  $\text{SO}_4$  analysis. Resulting data will be used to correct the molar CN component for the presence of bassanite, and thus reveal the pre-modern long-term A-CN-K trends within the fault zone.

**Bio:** I am a second year Master's student at San Diego State University pursuing a MS in Geology under the guidance of Dr. Gary Girty. I attended SDSU for my undergrad as well working with Dr. Jillian Maloney on the southern shores of Fiesta Island. This past summer I participated in a virtual internship with Chevron and have accepted a full-time offer for employment working out of the San Joaquin Valley office in Bakersfield, California starting in the summer of 2021.

## **Evolution of Lower Continental Crust**

**Presented by: Sean Curran**

**Abstract:** While surficial geologic processes on continents have come to be well understood, there is still uncertainty as to how the lower continental crust evolves through time. The stability of lower crustal materials is largely dependent on density and degree of hydration. At depth H<sub>2</sub>O exists interstitially within nominally anhydrous minerals (NAMs) though partitioning is poorly constrained. We report H<sub>2</sub>O contents in NAMs measured in situ on petrographic thin sections by secondary ion mass spectrometry (SIMS) of Proterozoic deep crustal xenoliths from Colorado, USA. In addition, we report trace element values measured in situ with laser ablation inductively coupled plasma mass spectrometry (LA-ICPMS). Through bulk rock H<sub>2</sub>O and trace element reconstructions we assess the petrogenesis of the xenoliths. Reconstructed bulk rock H<sub>2</sub>O ranges from 75 – 400 ppm; Garnet, clinopyroxene, and orthopyroxene have average H<sub>2</sub>O contents of 85, 560, and 347 ppm, respectively. Preliminary analyses suggest the xenoliths represent cumulates fractionated from a primitive, hydrous melt at high pressures, akin to conditions in modern subduction zones and potentially associated with arc accretion that formed the craton of North America in the Precambrian.

**Bio:** My name is Sean Curran and I am a graduate student at Scripps Institution of Oceanography (SIO). I found I have an affinity for Earth Science topics through coursework at Santa Barbara City College where I had the pleasure of tutoring oceanography and geology classes. My interest in geology was bolstered by the wonderful landscapes I surfed and hiked about in my free time. In 2016 I came to San Diego in pursuit of warmer waters and a college degree with a focus in geology. I finished my B.S. in 2018 through UCSD SIO and subsequently worked at SIO as a curator for the school's geology and paleontology collections. In 2019 I enrolled as a graduate student at SIO to work with Emily Chin. My research is focused on petrology and geochemistry though through my studies I have also developed an interest in geomorphology, resource management, and ore geology. I look forward to working as a professional geologist after obtaining an M.S. and hope to find career opportunities that allow me stay in the San Diego region.

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## **UPCOMING MEETINGS**

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

Wednesday, December 16, 2020	Tom Demere - Topic is TBD
January, 2021	Paul Burgess - Shallow landslide and debris flow activity in San Diego County, April, 2020
February, 2021	TBD

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## 2019 SDAG EXECUTIVE COMMITTEE

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<b><u>PRESIDENT:</u></b>	Adam Avakian; armenianmenace1@gmail.com
<b><u>VICE PRESIDENT:</u></b>	Luke Weidman; lcweidman@gmail.com
<b><u>SECRETARY:</u></b>	Nadja Scholl; secretary@sandiegogeologists.org
<b><u>TREASURER:</u></b>	Keith Kastama
<b><u>PUBLICATIONS:</u></b>	Lowell Lindsay; <i>Sunbelt Publications</i> ; Ph: (619) 258-4911, x111; llindsay@sunbeltpub.com

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## SDAG PRESIDENT'S CORNER

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November, 2020

Hi SDAG Members,

Hope you are all doing well. I wanted to throw out another reminder to get your 2021 membership dues in. An email was sent out about a week ago regarding this. It is important we keep up with these membership renewals so that we can continue to support scholarship rewards for deserving students like the two presenting this month. Below is a quick message from our Vice President Luke Weidman, who pushed through many obstacles in order to put on a great field trip for us last month:

"This year's field trip was a success! THANK YOU to everyone who attended, it was so good to see everyone's smiling faces!

We had 41 people show up and take the tour. Of those, some went out of their way to volunteer or contribute to the success of the trip. Thank you to the following: Athena Catanzaro and Kent Haase for helping as stop leaders. The ever-helpful Murbachs for getting the masks together and bringing the SDAG gear (including the group's default mascot, Topaz). Larry Busch, thank you for dedicating your entire Saturday to our trip, you're the man. And, what a treat to have Russ Miller with you! Thanks to Russ as well. Kerry Cato, thank you for putting up with wet weather to give us a custom tour of Oak Mountain's wine cave, how cool. Finally, Dave Bloom and Greg Cranham. You, gentlemen, are rockstars (pun intended). Thanks for filling the many gaps during the planning of this trip and for being patient with me.

Looking forward to our next adventure!"

-Luke Weidman, 2020 SDAG VP, 2021 SDAG Prez



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## PHOTOS OF THE MONTH

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If you would like to submit a photo, email them to [secretary@sandiegogeologists.org](mailto:secretary@sandiegogeologists.org) and I will try and put them in the newsletter. Provide a short description of the picture.



**2020 SDAG Annual Field Trip - Temecula**

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## Support SDAG/SDGS using AmazonSmile



### **What is AmazonSmile?**

AmazonSmile is an automatic way for you to support the **“San Diego Geological Society”** (SDGS) SDAG’s 501(c)(3) as your favorite public charitable organization every time you shop on Amazon at no cost to you at [smile.amazon.com](https://smile.amazon.com).

### **How do I select a charitable organization to support when shopping on AmazonSmile?**

On your first visit to AmazonSmile [smile.amazon.com](https://smile.amazon.com), you need to select a charitable organization to receive donations from eligible purchases before you begin shopping. Please select the **San Diego Geological Society**. Amazon will remember your selection, and then every eligible purchase you make at [smile.amazon.com](https://smile.amazon.com) will result in a donation to SDGS (SDAG).

### **How much of my purchase does Amazon donate?**

The AmazonSmile Foundation will donate 0.5% of the purchase price from your eligible AmazonSmile purchases.

### **How can I learn more about AmazonSmile?**

Please see complete AmazonSmile [program details](#).

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## SDAG Research Tool

**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, starting with our first guidebook in 1972, from Coast to Cactus in 2014, and finally on the Julian 'Road to Gold' in 2017. 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, "oikocryst" 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)

[http://www.sandiegogeologists.org/SDAG\\_Pubs\\_chronological.pdf](http://www.sandiegogeologists.org/SDAG_Pubs_chronological.pdf)

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## **Interactive Fault Map for San Diego - Tijuana**

As part of the update for the San Diego-Tijuana Earthquake Planning Scenario, Working Group No. 1's "Fault Map Subcommittee" completed the first publicly available bi-national active and potentially active fault map ([http://sandiego.eeri.org/?page\\_id=265](http://sandiego.eeri.org/?page_id=265)). This interactive GIS map includes the first publicly available active and potentially fault map locations from the City of San Diego. The map also integrated the faults south of the border for a bi-national cross border view. This map is an on-going project as our knowledge increases about local active and potentially active faults.

You can expand the map legend on the left side to select layers that can be turned on or off for the map view. You can also select from 1 of 12 base maps at the base map icon. You can click on the fault line in your map layer view to see the meta-data source. In addition, the City of San Diego Seismic Safety Study Geologic Hazards & Faults Maps are available in the layer titled "GeoHaz SD City." Please note that the City "Zone 12 Potentially Active" fault layers was not included in this data, therefore you will need to use the City Maps to find Zone 12.

The Fault Map link is available at: [http://www.sandiegogeologists.org/Faults\\_map.html](http://www.sandiegogeologists.org/Faults_map.html)

Please contact Diane Murbach ([dianemurbach@gmail.com](mailto:dianemurbach@gmail.com) 619-865-4333), Chair for the SDTJ Earthquake Scenario Working Group #1 - Earth Science, if you have any questions, or see any errors on this new fault map.

I would like to thank Carolyn Glockhoff for her endless GIS work, Jim Quinn and the City for providing their data and time, Jerry Treiman with CGS for his time preparing the Surface Rupture and providing their new State fault data layer, and Luis Mendoza at CICESE for providing the faults south of the border. Please contact Diane Murbach ([dianemurbach@gmail.com](mailto:dianemurbach@gmail.com)), Chair for the SD-TJ Earthquake Scenario Working Group #1 - Earth Science, if you have any questions, or see any errors on this new fault map.

**Diane Murbach** (619) 865-4333

Engineering Geologist, C.E.G.

**[www.murbachgeotech.com](http://www.murbachgeotech.com)**

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## Request for 2020 SDAG/SDGS 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 for our San Diego Association of Geologists (SDAG) group. The list of paid Sponsors and the forms to become a Sponsor are located on the SDAG web site at: <http://www.sandiegoeologists.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.sandiegoeologists.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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## 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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# Geo Job Listings

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Bay West LLC is a recognized leader delivering Environmental Solutions nationwide. Now in our 44th year of service, we are continuing to grow and expand on a national platform. Bay West offers a diverse mix of expertise in the following areas; environmental consulting, engineering, emergency response, waste management and Federal contracting services.

Bay West has opened a San Diego, CA office and is seeking a mid-level **California licensed Professional Geologist** with hands-on experience supporting Federal Project Managers who enjoys a variety of responsibilities that include working in the field as well as in the office. This role is considered a career-track position to become a Federal Project Manager or Senior Technical Advisor who provides support to Project Managers.

## **Responsibilities:**

Responsible for supporting multiple concurrent long-term projects from cradle to grave. Office administrative tasks will include supporting estimates and proposals, effectively qualifying and selecting subcontractors, supporting contracts to maintain budgets and track schedules (office and field). A significant percentage of the individuals time will be spent authoring and reviewing technical documents including Work Plans, Engineering Evaluation/Cost Analyses (EE/CA), Uniform Federal Policy Quality Assurance Project Plans (UFP-QAPPs), Technical Memoranda, Records of Decision (ROD), Remedial Investigation/Feasibility Studies (RI/FS), Proposed Plans, and periodic monitoring reports. The individual will assist the project manager with the coordination of field activities and support various projects being performed under CERCLA/RCRA on active military installations, Formerly Used Defense Sites (FUDS), and Base Realignment and Closure (BRAC) facilities. The individual may be asked to maintain and/or create project schedules using Microsoft Project or Primavera.

## **Requirements:**

- Bachelor's degree in Engineering, Geology, Environmental Science, or a related technical field.
- Registered California PG or PE
- Minimum 5 years of project support experience; with federal environmental restoration projects under the DoD (including USACE, USAEC, AFCEC & NAVFAC and/or US-EPA).
- Thorough understanding of RCRA and CERCLA processes.
- Must have the willingness and ability to accurately interpret and apply knowledge of environmental theories, processes, and state and federal reporting requirements.
- A thorough working knowledge of Microsoft Word and Excel are required with strong data management skills.
- Outstanding technical writing and communication skills.
- Ability to present technical site summaries to the project team.
- Must foster friendly, positive, productive, and team relationships.
- Ability to read and understand maps, schematic drawings, diagrams, and instruction manuals.
- Must be willing and able to travel between 20% - 25% of the time.
- The successful candidate must be capable of receiving a US Government security clearance.
- US Citizenship Required

## **Preferred Requirements:**

- 40 Hour HAZWOPER is preferred but not a requirement (Bay West will provide this training for candidates that currently lack it).
- 30 Hour USACE Construction Quality Management Certification
- Experience working with MS Project and Primavera
- Experience working for an environmental consulting firm.
- College coursework in organic and inorganic chemistry and contaminant fate and transport.

## **Compensation:**

In exchange for your high performance and team participation, Bay West offers long term growth potential, competitive salary and benefits package, and bonus potential in a business casual environment.

Bay West is an equal opportunity employer that recognizes the value of a diverse workforce. Bay West is an EEO/AA Employer Minority/Female/Disabled/Veteran/Sexual Orientation/Gender Identity employer.

## **Liz Schmillen**

Director, Human Resources

direct: 651-291-3490 · cell: 952-239-8693

[lizs@baywest.com](mailto:lizs@baywest.com)

[www.baywest.com](http://www.baywest.com)

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## University of California Santa Cruz - GIS Programmer Analyst

### DESCRIPTION

The Institute of Marine Sciences (<https://ims.ucsc.edu/>) at the University of California at Santa Cruz (UCSC) invites applications for a GIS programmer analyst. The GIS programmer analyst will work under the supervision of Drs. Michael Beck and Borja Reguero in the UCSC Coastal Resilience Lab (<https://www.coastalresiliencelab.org/>) and will help assess flood risk and the benefits of nature-based solutions such as reefs and wetlands at local to global scales. The incumbent will examine the social and economic consequences of risks from coastal hazards and climate change and the benefits of and opportunities for natural solutions such as habitat conservation and restoration. Additionally, the incumbent will synthesize hydrodynamic, social, economic, and ecological data sets (both field- and model-based) for inclusion in spatial prioritization of risks and solutions. The GIS programmer analyst will have opportunities to work on projects supported by and done in collaboration with US Geological Survey, The Nature Conservancy, the insurance industry, and development banks.

The position requires that the GIS programmer analyst successfully work as part of the team and consistently demonstrate strong communication skills.

Applicants with knowledge or experience with respect to some or all of the following areas are strongly encouraged to apply:

- An MA/MS (or equivalent foreign degree) in Geographical Science or Geographic Information Science or related fields.
- Fluency with ArcGIS.
- Experience with other tools (such as Python, Illustrator) for making production-quality maps and figures.
- Research and analysis of coastal risk and/or the benefits of nature-based solutions for adaptation.
- Research and analysis of coastal and marine data (bathymetry, topography, waves, ocean climate).
- Experience with analyses of social and economic consequences of coastal risks.
- Experience with QGIS or remote sensing techniques.

### ACADEMIC TITLE

Assistant to Associate Specialist, see rank qualifications at:  
<https://apo.ucsc.edu/policy/capm/602.330.html>

### SALARY

Commensurate with qualifications and experience. Minimum salary \$60,000.

### BASIC QUALIFICATIONS

- A BA/BS (or equivalent foreign degree) in Geographical Science or Geographic Information Science, with a minimum of two years of post-graduate experience. Candidates holding a BA/BS in other disciplines but with knowledge, skills, or a degree concentration in spatial analysis or GIS will be considered. Degree requirements must be met at the time of application.
- Experience with Geographic Information Systems (GIS), geographic analysis, and cartography and their application to coastal and marine science.
- Experience with ArcGIS and associated extensions, such as Spatial Analyst, 3D Analyst, Benthic Terrain Modeler [BTM], XTools Pro, NOAA's Habitat Digitizer Extension.
- Computer programming and scripting skills using Python, Matlab, or R for automation of tasks, customization, and enhancement of GIS processing and spatial analysis of data sets.

## **POSITION AVAILABLE**

As soon as possible after initial review of the applications. Initially, the duties of the position will be completed remotely, but once the stay-at-home restrictions are lifted, work will resume on campus.

## **DURATION OF POSITION**

Initial appointment will be full-time for one year. Reappointment may be considered contingent upon the availability of work and appropriate funding.

## **APPLICATION REQUIREMENTS**

Applications are accepted via the UCSC Academic Recruit online system. All documents and materials must be submitted as PDFs. Applicants must provide the names and contact information of their references (a minimum of three are required and a maximum of five will be accepted). The hiring unit will request confidential letters\* from the references of those applicants who are under serious consideration. Please note that your references, or dossier service, will submit their confidential letters directly to the UC Recruit System.

\*All letters will be treated as confidential per University of California policy and California state law. For any reference letter provided via a third party (i.e., dossier service, career center), direct the author to UCSC's confidentiality statement at <http://apo.ucsc.edu/confstm.htm>.

APPLY AT: <https://recruit.ucsc.edu/apply/JPF00951>

Please refer to Position # JPF00951-21T in all correspondence.

## **RECRUITMENT PERIOD**

Full consideration will be given to applications completed by 25 November 2020. Applications received after this date will be considered only if the position has not been filled.

**VISIT THE UCSC WEB SITE AT:** <https://www.ucsc.edu>

## **JOB LOCATION**

Santa Cruz, California

## **REQUIREMENTS**

Document requirements

- Cover Letter - Letter of application that briefly summarizes your qualifications and interest in the position.
- Curriculum Vitae - Your most recently updated C.V.

Reference requirements

- 3-5 required (contact information only)
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**GEI Consultants, Inc.** is a leading consulting engineering and environmental firm ranked #92 in the ENR top 500 (2018), with over 800 employees in multiple offices throughout the U.S. and Canada. We serve hundreds of government, energy, industry and institutional clients, and have completed 50,000 project engagements throughout the United States, Canada, and more than 20 other countries. Our technical experts are involved in dozens of specialty services emanating from our core solutions in water, energy, buildings, infrastructure and industrial.

We are seeking a full-time **Senior Engineering Geologist** for our Carlsbad, CA office. Experience in geologic investigations for dams and other water infrastructure projects is a plus.

**Essential Responsibilities & Duties**

- Manage the technical, financial, and client relationship aspects of a variety of geologic/geotechnical engineering projects throughout the country, with a geographic emphasis in California.
- Prepare technical scopes of work and budgets for proposals, and prepare requests for proposals for subcontractor services.
- Plan and lead the implementation of geologic/geotechnical site assessments and subsurface investigations, which include: field mapping, aerial photograph interpretation, rock and soil borings, surface and downhole geophysics, LiDAR analysis, preparation of technical reports, and providing technical oversight of subcontractors including review/approval of invoices and work proposals.
- Participate actively in professional organizations and conferences; deliver presentations, and write technical papers.
- Generate new business.
- Prepare and deliver technical presentations to clients and regulators.
- This position has a field component; travel, and some overnight travel are required.

**Minimum Qualifications**

- B.S. in Geology; M.S. is a plus.
- P.G. and C.E.G. with registration in California.
- 10+ years of previous professional experience in engineering geology.
- Excellent technical report writing and communication skills.
- Willingness and ability to travel on short-term assignments as needed.
- Valid U.S. driver's license.

GEI is an EEO/AA/M/F/Vet/Disability employer

Apply here: <https://jobs.ourcareerpages.com/job/396913>

For other opportunities within GEI, go to: <https://geiconsultantsinc.ourcareerpages.com/>

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## **PROJECT GEOLOGIST**

*Geotechnical Exploration, Inc.*, a geotechnical engineering company founded in 1976, is seeking a qualified individual for a Project Geologist position available immediately. Position duties, criteria & requirements are as follows:

- Manage and/or perform all phases of a wide variety of development/construction projects
- Supervise the work of staff geologists and technicians
- Prepare geologic/geotechnical reports and review reports prepared by staff geologist and engineers
- Prepare and review boring and trench logs
- Perform and supervise field exploration programs, background reviews, and geological mapping
- Prepare and present proposals, scopes of work and budgets for new projects
- Interface with the client and team to proactively troubleshoot and problem-solve using practical, client-focused solutions
- Manage projects, budgets, scope, change orders and collections (from start to finish)

A strong command of regional soils and rock identification and properties, geologic hazards identification, and all applicable forms of construction observation/testing is mandatory. In addition, the qualified individual should

- Be technically competent in routine geotechnical matters and have a complete understanding of geologic factors which affect engineering design
- Have excellent communication skills (written and verbal)
- Have strong computer skills - Word, Excel, and Google Earth
- Be able to organize priorities and multi-task effectively in a team environment and play well with others
- Have a BA/BSc in Geology plus a minimum of 5 years project-level experience

***Must have Professional Geologist Registration for State of California***

***Certified Engineering Geologist for State of California is preferred but not required***

Salary commensurate with experience. Please email resumes to [info@gei-sd.com](mailto:info@gei-sd.com)

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## Vacancy in the Site Restoration and Agricultural Program Unit

The San Diego Water Board, part of the California Environmental Protection Agency, has an opening for a full-time Engineering Geologist position in San Diego. The position involves a wide range of geological work and projects throughout a large area of Southern California. Get your applications in now for this exciting opportunity to work with other environmental professionals to protect and restore our natural resources.

Complete applications are due February 19, 2020. Get started now and the first step is to make sure you are on the eligibility list by taking the “exam” here:

<https://www.jobs.ca.gov/CalHrPublic/Exams/Bulletin.aspx?examCD=8PB70>

All the information about the position and how to apply is here:

<https://www.calcareers.ca.gov/CalHrPublic/Jobs/JobPosting.aspx?JobControlId=189049>

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SnapNHD is looking to hire an experienced geologist to review our natural hazard disclosure report and act as an ongoing advisor to the company. If you are interested in learning more, please contact [will@snapnhd.com](mailto:will@snapnhd.com). A sample report can be found here: [Sample Report](#)

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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**



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**



**Contact: Rupert Adams, CEG**

**Geocon Incorporated**  
6960 Flanders Drive, San Diego, CA 92121  
P | 858.558.6900

*San Diego / Riverside County / Palm Desert / Los Angeles /*

*Orange County / Bakersfield / Bay Area / Fairfield / Sacramento*



# Leighton

Leighton is a multidiscipline engineering firm, providing geotechnical, environmental, and testing and inspection services. Founded in 1961, Leighton provides engineering solutions to public agencies, property owners, and facilities. With offices located in San Diego, Irvine, Los Angeles, Temecula, Rancho Cucamonga, Palm Desert, Santa Clarita, Ventura, and Bakersfield, we efficiently service any region of Southern California. Our professional staff of Registered Geotechnical Engineers, Professional Geologists and Certified Engineering Geologists, Registered Hydrogeologists, and Registered Environmental Assessors and Certified Inspectors provide decades of local experience for the successful completion of your projects.

For additional information, please contact Bob Stroh ([rstroh@leightongroup.com](mailto:rstroh@leightongroup.com))

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