

# SAN DIEGO ASSOCIATION OF GEOLOGISTS

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

## SDAG-SCGS JOINT MEETING ANNOUNCEMENT

**WEDNESDAY, JUNE 19, 2013**

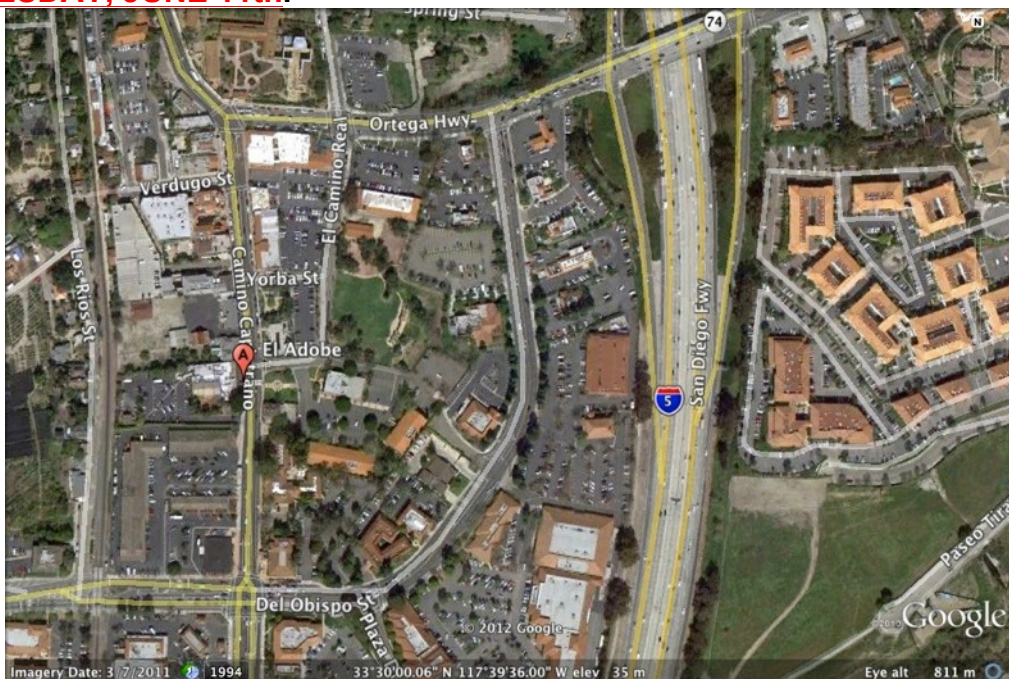
### HISTORY CHANNEL CALLS – THE MAKING OF A TV SERIES

*Presented by*

**Dr. Patrick Abbott**

- Where:** **El Adobe de Capistrano**  
31891 Camino Capistrano, San Juan Capistrano, CA 92675  
(949) 493-1163
- When:** 6:00 pm – Social Hour  
6:50 pm – Dinner  
7:45 pm – Program
- Dinner:** Mexican Buffet. Coffee, tea and soft drinks are included.
- Cost:** \$35 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, **TUESDAY, JUNE 11th.**



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

## **SPEAKER ABSTRACT**

**Dr. Patrick Abbott  
San Diego State University**

### **History Channel Calls -- The Making of a TV Series**

Abstract: From errant email message start to 10 week-long TV series in 2012, learn how it came to be. The basic premise was to take YouTube videos of natural disasters and add some depth of understanding to them. So, how does Hollywood work? All will be revealed on June 19. Please join us.

## **SPEAKER BIO**

Patrick Abbott is a native San Diegan who earned a Ph.D. in geology from the University of Texas at Austin. His primary career has been as a Professor of Geology at San Diego State University. Pat's publications include the college textbook *Natural Disasters* (9th edition) published by McGraw-Hill, and *The Rise and Fall of San Diego* published by Sunbelt. He also enjoys teaching through television including TV news -- and a series with H2 (The History Channel 2).

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## 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.

|                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|
| July 17 <sup>th</sup> , 2013      | Jill Krezoski - An Update on the Mars Science Lab Project: Curiosity at its Best! |
| August 21 <sup>st</sup> , 2013    | Dr. Tom Rockwell - Rose Canyon Fault                                              |
| September 25 <sup>th</sup> , 2013 | SONGS Update - Joint Meeting with EERI                                            |
| October 16, 2013                  | Len Sinfield - A Year in Kandahar                                                 |
| November 20, 2013                 | Nick Clapp - Mojave Mining History                                                |
| December 18, 2013                 | Tom Demere                                                                        |

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## Classic Peanuts by Charles M. Schulz



## PRESIDENT'S CORNER

Hello Earth Scientists:

Our May meeting at Phil's BBQ was another great one! Mr. Jonathan Goodmacher gave us a wonderful presentation (that included many penguins) and the ribs were, as always, delicious.

June brings us our traditional joint meeting with our friends to the north, the South Coast Geological Society (SCGS) at the ever-popular El Adobe in San Juan Capistrano. Dr. Pat Abbott will regale us with his adventures in a presentation titled *History Channel calls -- the making of a TV series.*

This meeting promises to be a really fun time. I hope you can all make it!

Cari Gomes  
2013 SDAG President

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## GEOLOGY PHOTO OF THE MONTH



“The Bucolic Joys of Coastal Development”

The top of a 138' deep boring 25 feet from the bluff edge south of Torrey Pines. GEI and Pacific Drilling. Submitted by Don Vaughn of Geotechnical Exploration, Inc.



## GEOLOGY IN THE NEWS

**BISON LATIFRONS DISCOVERED AT FREEWAY CONSTRUCTION SITE** On April 10, 2013, workers constructing a new interchange between Highway 76 and Interstate 15 near Pala Mesa uncovered the fossil remains of a *Bison latifrons*, a mammoth-sized, Pleistocene-aged bison. Officials from the San Diego Natural History Museum reported that the specimen is at least 100,000 years old, and is the most complete of its kind ever found in San Diego County. The bones, including a skull, lower back, and hips, were unveiled at the Natural History Museum on May 13, 2013.



Click [here](#) to watch paleontologists at work on this exciting discovery!

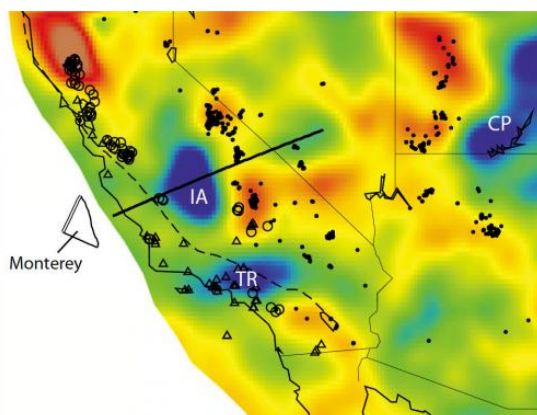


Fossilized skull of *Bison latifrons* in cast at San Diego Natural History Museum.  
*Photo credit: San Diego Reader*

**“LOST” FARALLON PLATE FOUND BENEATH CALIFORNIA** A portion of the Farallon plate has been discovered approximately 100 km beneath California, according to geophysicist Donald Forsyth of Brown University. Scientists now believe the Isabella Anomaly (IA), a large slab of cool, dry rock beneath central California near the Sierra Nevada, is actually a piece of the Farallon plate that broke off before being subducted into the mantle. The presence of the Isabella Anomaly has been known for some time, and several years ago a similar anomaly was discovered beneath Baja California. Due to the proximity of the Baja anomaly to known coastal remains of the Farallon plate, researchers determined that they were likely related. Scientists compared tomography data for the Baja and Isabella anomalies with that of known Farallon slabs beneath Washington and Oregon, and found that all the anomalies are strongest at the same depth, are located due east of other known Farallon fragments, and have similar seismic tomography signatures. The discovery may lead scientists to re-evaluate the tectonic history of western North America.

For more information, see the Brown University press release:

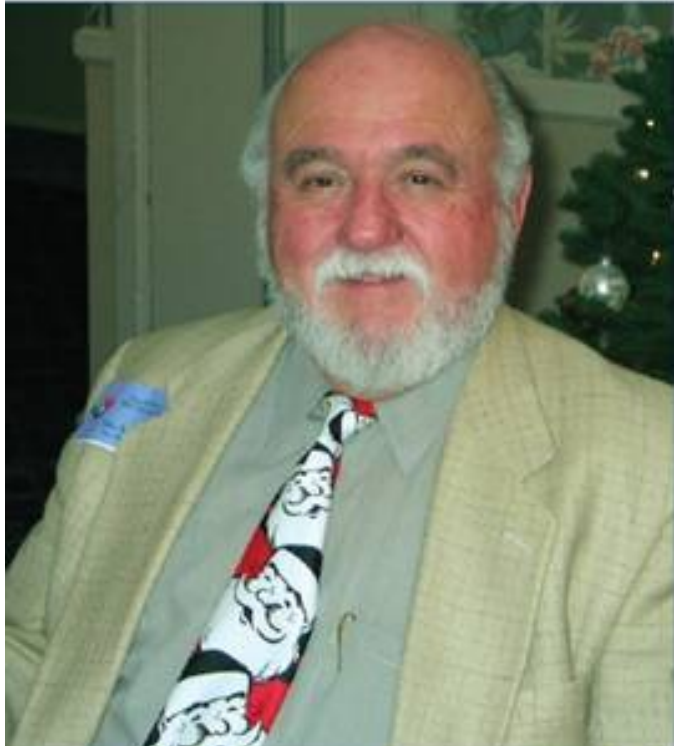
<http://news.brown.edu/pressreleases/2013/03/farallon>



The Isabella Anomaly, indicated as IA, is in line with a known fragment of the Farallon plate. *Credit: Forsythe Lab, Brown University*

## ANNOUNCEMENTS

**Charles G. "Mike" Bemis**  
1940 - 2013



**Ninyo & Moore**  
Geotechnical & Environmental Sciences Consultants

It is with great sadness that we announce the passing of Charles G. "Mike" Bemis, Principal Geologist/Director of Business Development for Ninyo & Moore's San Diego office. After a long fight with leukemia, Mike peacefully passed away Saturday evening, April 27, with his wife, Shannon, at his side. Mike will be fondly remembered and greatly missed by his family, friends and colleagues.

Mike was known by most San Diegans for his big smile, hearty laugh, and the way he made everyone he met comfortable with a great joke or story. Mike was an avid fisherman, hunter, and gardener. He was also a great family man. He was often found praising his family; wife Shannon, and 4 children.

Mike had many accomplishments in his professional life, having been very involved with many professional associations, as well as the mentoring of young geologists. Mike had a 50-year history of contributions to the engineering geology profession. His first position after receiving his Baccalaureate in Geology from SDSU was with the State of California Department of Highways, in 1963. He spent 11 years at Woodward-Clyde Consultants, directing geotechnical investigations domestically and overseas, 5 years at Robert Prater & Associates, 4 years at Bemis - Dilkes, and the last 24 years with his extended family at Ninyo & Moore. Mike was a co-founder of the San Diego Association of Geologists (SDAG), and served as their first President.

Mike was recently bestowed the 2013 Baylor Brooks Honored SDSU Alumni Award, and he will be honored at the May 9 APWA Annual Awards lunch with a 2013 APWA Outstanding Service Private Sector Award.

## **ANNOUNCEMENTS**

**ONE STOP WONDER – MINERAL AND GEM SOCIETY MUSEUM** Please join us **Saturday, June 15<sup>th</sup> at 9am** for the next OSW at the San Diego Mineral & Gem Society Museum in Balboa Park. Our SDAG member, Garry Cannon, is assisting with a behind the scenes tour. We will see the museum's San Diego County specimens, take a look at the gemological equipment, gem testing, and tour the lapidary shop.

SD Mineral & Gem Society Museum. **1770 Village Place, Balboa Park, San Diego, CA 92101** (SDMG is located at the northwest corner of Spanish Village Art Center in Balboa Park, between the San Diego Zoo to the north and the San Diego Natural History Museum to the south. Enter from Village Place).

For more information about the museum, visit <http://www.sdmg.org/>.

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**SCRIPPS LECTURE EXPLORES DARWIN'S DEEP CONNECTION TO THE OCEAN** On June 14<sup>th</sup> at 11 a.m. Alistar Sponsal of Vanderbilt University will be speaking on "How Studying the Ocean Launched Charles Darwin's Scientific Career" at the Robert Paine Scripps Forum for Science, Society and the Environment (Scripps Seaside Forum) on the Scripps Institution of Oceanography campus, 8610 Kennel Way, La Jolla. The event is free and open to the public; seating is available on a first-come, first-served basis.

For more information, visit <http://scrippsnews.ucsd.edu/Releases/?releaseID=1360>

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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 the Geology Photo of the Month section of the newsletter. Please submit your photo along with a caption to the SDAG secretary via email.

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**VINTAGE SDAG GUIDEBOOKS NOW AVAILABLE FOR FREE DOWNLOAD!** If you want to complete your collection, or just see what SDAG was up to in the 1970s, check out our website's publication page, and scroll all the way down: <http://www.sandiegogeologists.org/Publications.html> In addition to our very first publication in 1972, a field trip to Otay Mesa, you'll find our 1973 *Geology and Hazards of San Diego* volume, the first of two guidebooks to the Coronado Islands, in 1978, and our 1987 field guide to the gold mines of Julian. Happy reading!

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## ANNOUNCEMENTS

**SDAG RESEARCH TOOL** A comprehensive listing of all papers published by SDAG, whether as annual field trip guidebooks or special publications, is available on our website. Entries are sorted by primary author, or chronologically by date of publication, from our first guidebook in 1972 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 OPENINGS**

### **Geologist/Hydrogeologist III**

Brown and Caldwell currently has an opportunity for a staff level Geologist/Hydrogeologist to join our staff in Los Angeles, California. The selected candidate will have the opportunity to work with strong, nationally recognized, senior technical staff on various environmental and water resources related projects.

The Geologist III performs geological/ hydrogeological work while providing field task-level and project level support within our environmental and water resource practices. This position is responsible for making independent decisions, conducting and participating in environmental studies, and preparing environmental reports. The Geologist III collects, tests, and analyzes samples, as well as compiles and records testing and operational data for review and further analysis. Candidate will perform work requiring full professional competency and with considerable latitude to make independent decisions.

#### **Responsibilities:**

- Provides geological or hydrogeological support on a variety of environmental services and water resources projects.
- Applies geologic knowledge to conditions that affect planning, design, construction, operation, and safety of engineering projects.
- Conducts and manages field investigation activities, including installation of soil borings, monitoring well installations, collection of soil and water samples, installation of vapor probes and collection of vapor samples, and preparation of planning documents and investigation results reports.
- Oversees drilling subcontractors, lithologic logging of soil, interpretation of geologic depositional environments and hydrogeologic conditions.
- Conducts well and aquifer testing.
- The ability to work with and utilize GIS applications, database management, and/or groundwater modeling software a plus.
- Performs data collection and documentation related to field activities, including site investigation (soil and groundwater), sampling of surface water and storm water, and stream flow monitoring.
- Oversees design, maintenance and operations of remediation systems.
- Conducts additional environmental compliance services.
- Participates in the preparation of technical memoranda, reports and design documents such as quarterly groundwater monitoring reports, compilation of data into spreadsheets, and preliminary cost estimations.

#### **Position Requirements:**

M.S. degree and 4 years of professional geological or hydrogeological experience or B.S. degree and 6 years of professional geological or hydrogeological experience.

- Professional Geologist (PG) License in the State of California or the ability to acquire one within 12 months of hire.
- OSHA 40 hour HAZWOPER training certification.
- Demonstrated skills in conducting environmental investigations, including but not limited to installation of soil borings and monitoring wells, collection of soil and groundwater samples

from various types of geologic formations, and geologic interpretation of soil and rock samples.

- Requires working knowledge of various types of drilling technologies and environmental media sampling methodologies.
- Requires excellent verbal and written communications, including technical writing capabilities.
- Excellent geological interpretation and lithologic identification skills.
- Field assignments require extensive travel year-round with overnight stay outside of the Southern California Metro area, potentially for extended periods of time.
- Field assignments require ability to perform physically demanding work.

This position is subject to a pre-employment background check and a pre-employment drug test.

We offer a competitive salary and benefits package. Please visit our Web site at [www.browncaldwell.com](http://www.browncaldwell.com) to apply online and for additional career opportunities. We value workforce diversity. EOE/AA

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**EXPERIENCED CHEMIST FOR DATA REVIEW** H&P is looking for an experienced analytical chemist for a part time position to review analytical data reports. The position requires a complete understanding of EPA Methods and other regulatory methodology in compliance with Quality Assurance Programs and SOP's to validate and review data for accuracy. Experience and working knowledge of LIMS Systems will also be required. This position is located in our Carlsbad, CA office.

This chemist will perform a comprehensive review of all analytical data generated by the various testing methods in our fixed base and mobile analytical laboratories and will confirm that all quality assurance objectives have been met prior to releasing analytical data to clients and end user of the data to ensure it's quality as well as support all facets of the data review process.

**Requirements:**

- A Bachelor's Degree in Chemistry.
- Prefer at least 5 year's experience performing data review.
- A working knowledge of EPA Method 8260B, TO-15 and other EPA Methods
- Experience with LIMS system.

We are pleased that you are seeking employment with H&P Mobile Geochemistry, Inc. (H&P). Applicants are considered without regard to race, color, sex, or national origin, or any factors prohibited by local, state, or federal law. We are proud to be an Equal Opportunity / Affirmative Action Employer.

Please email or fax resume, salary requirements and best time you can be reached:  
[michele.luna@handpmg.com](mailto:michele.luna@handpmg.com) or fax resume to 760-804-9159.

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## **SEEKING JOB OPPORTUNITIES**

**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: 2013 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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**Contact: Dr. David R. Hargis**



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**Contact: Jim Ashby**



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Contact: **Steve Zigan**



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