

SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT #1

Due to the timing of our meeting in June, we have decided to issue a single, information packed newsletter containing all the pertinent details for this month's presentation by the esteemed Dr. Monte Marshall, as well as local TV icon, Eric Drummonds presentation on June 1st, which also happens to be our annual joint meeting with the South Coast Geological Society. Enjoy!

TUESDAY, MAY 12, 2015

THE GEOLOGY OF THE HAWAIIAN AND TAHITIAN ISLANDS - FROM ABOVE AND BELOW SEALEVEL

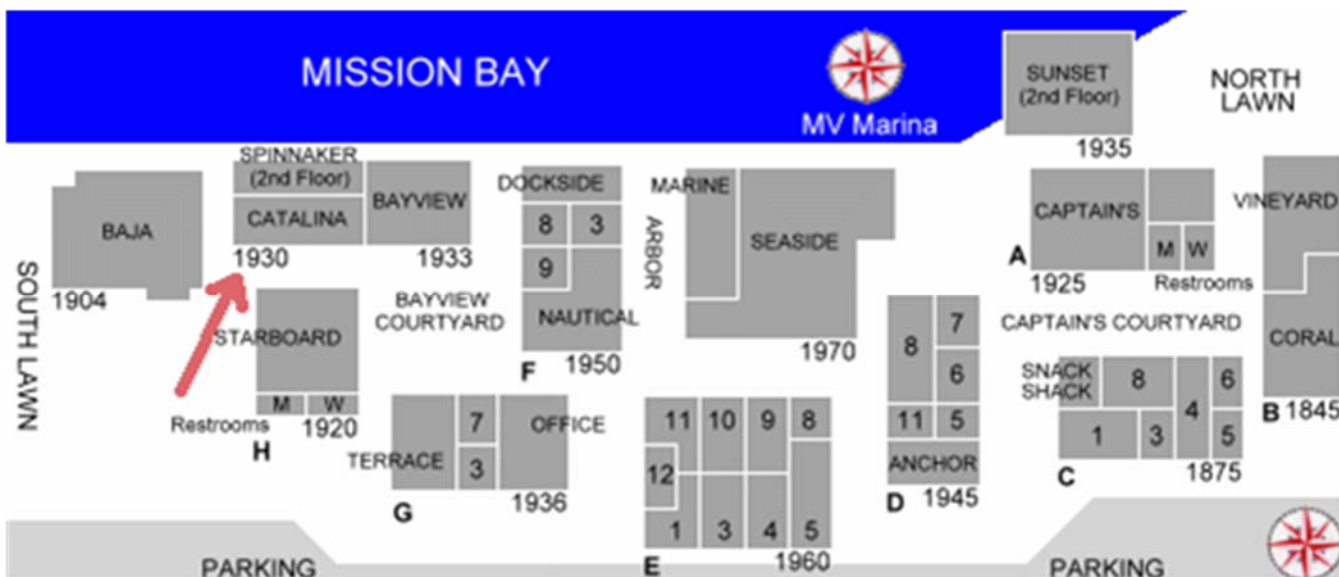
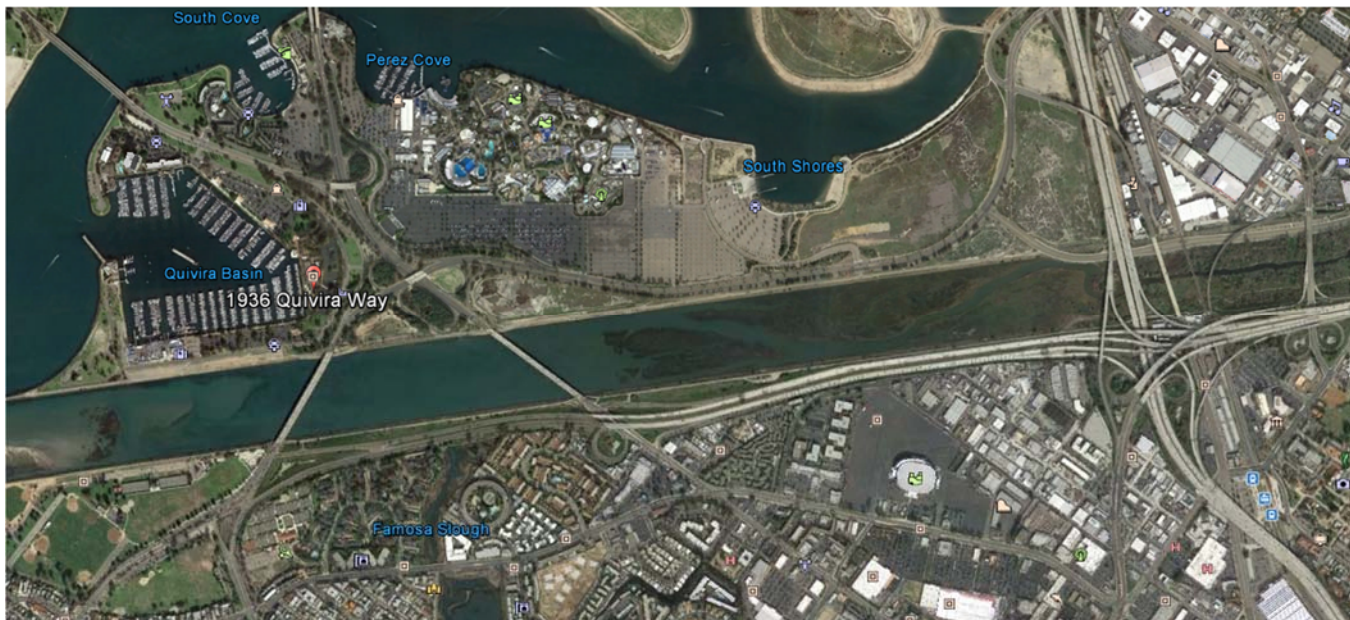
Presented by:

Dr. Monte Marshall

Where: Catalina Room (Southern end of MVCC; See Maps, Page 2)
1936 QUIVIRA WAY, SAN DIEGO, CA 92109

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.



When: 5:30 pm - Social Hour
6:30 pm - Dinner
7:30 pm - Program

Dinner: Border Grill Buffet. **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, **FRIDAY MAY 8th**. Reservations cannot be guaranteed after Monday at noon; but are always preferred over walk ins. Reservations well before the deadline are MUCH appreciated.

ABSTRACT

A cruise from San Diego to Hawaii and Tahiti and back entails two weeks in the open ocean—which gives a geologist, especially one who has had some experience with both the shallow and deep seafloor, lots of time to wonder what the land down under those thousands of feet of water looks like! The first part of this talk will be a quick survey of what we know about the seafloor, and how we have come to know it.

The first systematic survey of the seafloor was conducted by a USN ship off the US east coast in 1854. By lowering cannon balls, the continental margins were found to have shelves and slopes down to a seafloor that could be 24,000 feet deep. Between 1873 and 1876 the British surveyed the world's oceans in the first ship ever devoted entirely to oceanography, the HMS Challenger. It discovered that the seafloor is usually covered with organic oozes or red clay, and found the mid-Atlantic Ridge (MAR), and a trench off the Mariana Islands that is at least 27,000 feet deep! It made 300 wireline soundings with heavy weights that each took a whole day to complete! By the 1920ies, echo soundings began to be used and the water depth could be computed in only a minute. During the latter half of the last century, acoustics became highly sophisticated—in large part because of the cold war and concern for Russian submarines. These acoustic techniques were often kept classified for 20 years before being released to civilian scientists.

Using surplus depth charges, seismic surveys in the fifties in the Atlantic showed that the oceanic crust consists of three layers and improved sonar found that the MAR has a rift valley. By 1977, Marie Tharp and Bruce Heezen finished their beautiful perspective map of the world's oceans—giving to the world our first view of the seafloor! While correct in the big picture, their map contained much incorrect detail (it was too artistic!) and had a 20x vertical exaggeration. The sixties thru the nineties saw the advent of multibeam and sidescan sonar systems and the use of satellites (Geosat) that allow swaths and areas of the seafloor to be mapped fairly accurately.

The second part of my talk will be the geologic history of the Hawaiian and Tahitian islands, their hot spots, beautiful craggy mountains, the newest Hawaiian seamount, Loihi, that has yet to poke its summit above the water, and the Keck telescopes on the top of the tallest mountain in the world, Mauna Kea. We will visit the USS Arizona Memorial in Pearl Harbor, the coral atolls of Bora Bora, see the life of the local Polynesians, and trace their immigration of their ancestors from Asia 2000 years ago.

SPEAKER BIO

Monte has had many experiences with salt water.....his first was with a rush of amniotic fluid in Scripps-Mercy Hospital in 1939. As the years went by he spent many days body surfing at Mission Beach until he was 17, and then at the Jersey shore while an undergraduate at Villanova. Following a second bachelor's degree in geology at SDSU and a PhD in marine geology and geophysics at Stanford, he joined the USGS. While at the Survey, he went on a dredging expedition to the Emperor Seamounts in the north Pacific, and spent two months at sea drilling cores in the NW Pacific aboard the Glomar Challenger. Even though he spent most of his time on land during the 30 years he was stationed at SDSU, he went on numerous SCUBA diving expeditions in the Caribbean and Pacific. In the years following his theoretical retirement in 1974, he has gone on many cruises—to both poles and in both big oceans. This talk will show and relate some of his experiences and thoughts while on a recent one-month cruise to some of the mid-Pacific islands.

SDAG MEETING ANNOUNCEMENT #2

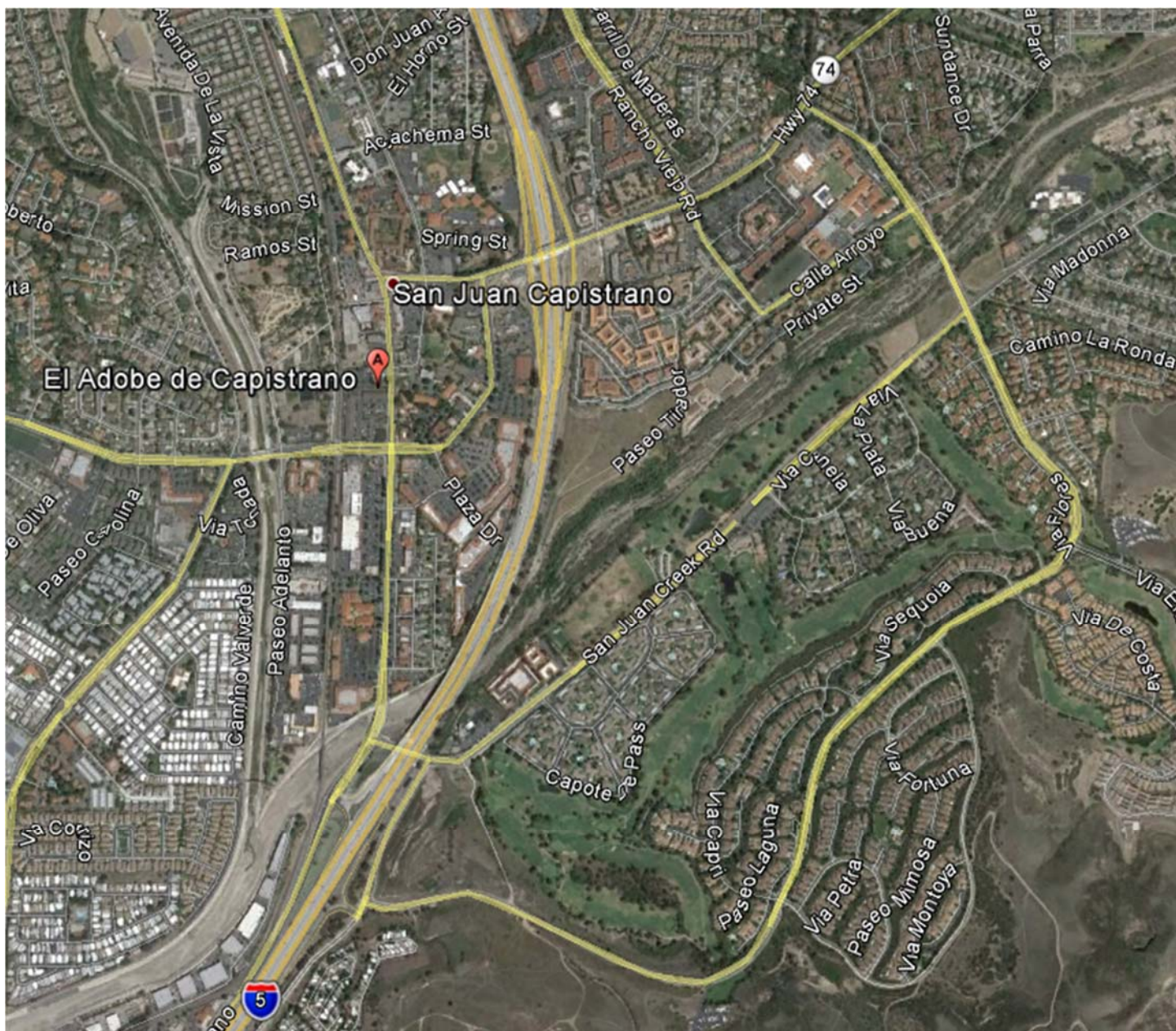
MONDAY, JUNE 1, 2015
JOINT MEETING WITH THE SOUTH COAST GEOLOGICAL SOCIETY

ICE COLD GOLD

Presented by:
Eric C. Drummond
Professional Geologist, HG, EG

Where: **El Adobe Restaurant**
31891CAMINO CAPISTRANO, SAN JUAN CAPISTRANO, CA 92675

Directions: FROM INTERSTATE 5: Take the CAMINO CAPISTRANO exit and turn left onto VALLE ROAD. Take the next left onto SAN JUAN CREEK ROAD and then the next right onto CAMINO CAPISTRANO. The restaurant is half a mile up on the left hand side.



When: 5:30 pm - Social Hour
 6:30 pm - Dinner
 7:30 pm - Program

Dinner: Mexican Buffet.

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, **THURSDAY JUNE 28th**. Reservations cannot be guaranteed after Friday at noon; but are always preferred over walk ins. Reservations well before the deadline are MUCH appreciated.

ABSTRACT

For the past three years Eric Drummond has co-starred in the non-scripted, reality TV show, Ice Cold Gold that has just aired its third season on the Animal Planet channel.

Eric's presentation to the joint meeting of the San Diego Association of Geologists (SDAG), and South Coast geologic Society (SCGS) will include a slide presentation of images Eric has captured over the past several years while exploring in Greenland. Descriptions of the geology of significant finds (including Ruby, Sapphire, Gold, etc.) will be included. A discussion of Greenland's potential as a world supplier of strategic minerals, and descriptions of the geologic complexity, cultural, and natural beauty of the country will also be discussed. Finally, a discussion of the challenges of practicing Geology and creating a TV show at the same time, in remote arctic conditions will be presented. The first ever, legally imported Rubies and Pink Sapphires from Greenland will be on display. Questions following the presentation – whether geological or otherwise, are welcomed.

SPEAKER BIO

Eric Drummond first became interested in Geology at a young age while exploring the wilds of New Jersey collecting rock, mineral, and fossil specimens to include in his always evolving rock collection. Eric always found a way to combine his love of natural science with outdoor pursuits including camping, fishing, skiing, mountaineering, boating, and scuba diving. Eric received his Bachelor of Arts degree in Geology from New England College, where he was active in the Geology club, played on the lacrosse team, and had a work-study job in the Geology lab. Eric spent the first seven years of his career based in Denver, Colorado, where he worked throughout the Rocky Mountain region as a wellsite Geologist for the oil exploration industry. During this period Eric was involved in several major oil discoveries. It was also during this period that Eric continued his pursuit of outdoor activities including rock and ice climbing, fly fishing, and mountaineering. For the past 25 years Eric has worked as a consultant in the southern California area in the fields of hydrogeology, engineering geology, and mineral exploration. Clients have included the US Navy, major and independent oil companies, land development companies, small scale gold mining operations, fellow prospectors, and TV production companies. Eric has travelled extensively throughout North America, South and Central America, Europe, Africa, New Zealand, Mexico, and Greenland. For the past three years, Eric has co-starred in the non-scripted, reality TV show: Ice Cold Gold that has just completed airing its third season on the Animal Planet channel. Eric is the Chief Geologist for Sixty Degree Resources, a small mineral exploration company prospecting in Greenland. During the off-season Eric researches the prospecting locations that are depicted in the show and does the licensing and planning necessary to explore in Greenland. Eric is founder of the company Red Ice Gem, which he formed to promote small

scale, artisanal mining in an environmentally and culturally ethical manner. Red Ice Gem was formed initially to help Greenlandic small scale miners develop their Ruby deposits but has expanded to include small scale miners in the US and other parts of the world. Eric is responsible for arranging the first legal import of Rubies and Sapphire from Greenland to the US. Eric lives with his wife Laura, and cats Mineral and Gem in the north San Diego county community of Rancho Santa Fe.

UPCOMING MEETINGS

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

June 1, 2015 (MONDAY)	Eric Drummond – Ice Cold Gold – Joint SDAG/SCGS Meeting
TBA	TBA
TBA	TBA

2015 SDAG EXECUTIVE COMMITTEE

PRESIDENT – Jennifer Bauer Morton; geologyjen@yahoo.com

VICE PRESIDENT – Randy Wagner; Ph: (760) 877-3490 randallwagner@live.com

SECRETARY –Rupert Adams, rsa_sdag@geoconinc.com

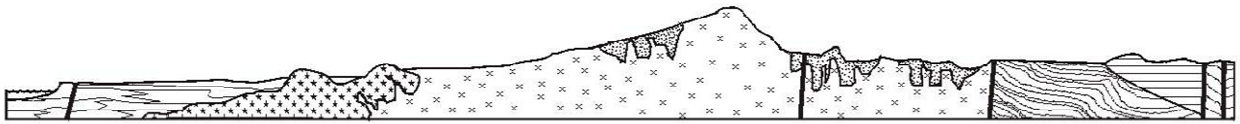
TREASURER – Chris Livesey, liveseychris@yahoo.com

PUBLICATIONS – Lowell Lindsay; *Sunbelt Publications*; Ph: (619) 258-4911, x111; fax:(619) 258-4916;
llindsay@sunbeltpub.com

WEBMASTER – Carolyn Glockhoff; *Caro-Lion Enterprises*, Ph: (858) 549-3396; carolyn@caro-lion.com

2015 SDAG MEMBERSHIP

Although its past the beginning of the year, dues are always welcome at any time!. The regular membership is \$25 (only \$5 for students) while the sponsor membership starts at \$100. Both forms are included on the following pages or they can be found on the home page of the SDAG website.



SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegoeologists.org

2015 MEMBERSHIP FORM

NAME: _____ DATE: _____

Please type or print clearly.

Home Address: _____

Work Address: _____

Please include company, university or other affiliation

Home E-mail Address: _____

Work E-mail Address: _____

NOTE: Your membership dues include delivery of the monthly SDAG newsletter and announcements to the email addresses given.

Phone: Home: _____ Work: _____ Cell: _____

Website: _____

Are you willing to serve as an **officer**? _____ Are you willing to volunteer as a **guest speaker**? _____

Field(s) of Interest: _____

Dues: _____ Student Member (email delivery only) \$ 5.00
(check choice)

_____ Regular Member (email delivery only) \$ 25.00

_____ Donation Student Scholarships \$ _____

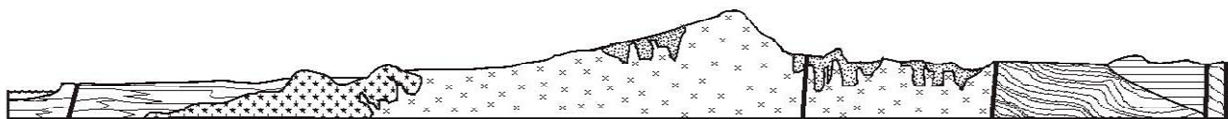
☐ New/Returning Member ☐ Continuing Member

Please enclose a check payable to SDAG, and mail to:

San Diego Association of Geologists (SDAG)

3130 N Evergreen Street

San Diego, CA 92110



SAN DIEGO ASSOCIATION OF GEOLOGISTS 2015 SPONSORSHIP FORM

NAME: _____ DATE: _____
(as you would like it to appear in Newsletter, Website, and Guidebook)

Please type or print clearly, and check ☒ preferred mailing address below.

☐ Residential Address: _____

☐ Office/School Address: _____

Website: _____

Home E-mail Address: _____

Work E-mail Address: _____

NOTE: Your Sponsorship includes a complimentary SDAG membership, and delivery of the monthly SDAG newsletter and announcements to the email addresses given.

Phone: Home: _____ Work: _____ Cell: _____

Donation Level and Consideration:

☐ **EMERALD \$100.00** (In addition to monthly recognition for your contribution, you are entitled to a free Internet "link" from SDAG Website. We also list all Sponsors in any publications printed this year)

☐ **RUBY \$500.00** (In addition to the above, you are entitled to an image of your business card in the monthly newsletter and SDAG Website)

☐ **DIAMOND \$1,000.00** (In addition to the above, you will receive a commemorative plaque in recognition for your most generous support of the organization)

New Member / Donor ☐ Continuing Member ☐ Change of mailing address: ☐

Are you interested to serve as an officer? _____ Willing to volunteer as a guest speaker? _____

Please make check payable to **San Diego Geological Society, Inc., a 501(c)3 public benefit nonprofit educational corporation** (in order to claim a tax deduction), and mail to:

San Diego Geological Society, Inc.
3130 North Evergreen St.
San Diego, California 92110 **Thank you!**

*Donations may also be made
at monthly meetings.*

Revised 11/18/2014

SDAG PRESIDENT'S CORNER

Greetings SDAG Members!

First and foremost, I would like to remind everyone of our unusual meeting schedule for May and June.

*Our May Meeting will be held on **Tuesday, May 12th** at Marina Village*

*Our June Meeting will be held on **Monday, June 1st** at El Adobe in San Juan Capistrano*

In July we will be back to our normal, third-Wednesday-of-the-month schedule.

Our April student presentations were top-notch. I think each one of them has a bright future ahead, and it is a joy to see SDAG have the ability to provide so many scholarships. I'd like to thank all of the students for sharing their research with us. I'd also like to offer my apologies for all the background noise at Filippi's. So much for trying out a new venue! This month we are back at the old, familiar, Catalina room. Bring your dollars for the Walawender Tavern!

We have some fantastic speakers lined up for the remainder of the year! This month Monte Marshall will be presenting on the geology of one of my favorite regions – Polynesia! And next month you won't want to miss our joint meeting with the South Coast Geological Society, where Eric Drummond will talk about his show Ice Cold Gold. Head up to El Adobe and visit with some South Coast friends you might not have seen for a while!

Jennifer Bauer Morton, PG
SDAG President

ANNOUNCEMENTS

CALL FOR PAPERS - SDAG 2015 FIELD TRIP

“Western Salton Trough Regional Tectonics, Coyote Mountains and Vicinity”

**Late October or Early November, 2015
(Most Likely November 6-8, 2015)**

On this field trip we will explore the complex geologic history of the western Salton Trough as expressed in the Coyote Mountains north of Ocotillo. Paleozoic miogeoclinal metamorphic rocks, coarse-grained Mesozoic intrusive rocks, and Cenozoic sedimentary rocks and conglomerates have been deformed by major faulting. Complex structure challenges interpretation. We seek to examine revealing outcrops that help to illustrate the stratigraphy, structure, and regional geology in this area. We will also consider the mineral potential, tectonics of the region, and resulting landforms.

SDAG seeks new manuscripts based on original work relating to regional geology and tectonics, from the western Salton Trough in San Diego and Imperial counties, and Baja California. We also invite authors to submit articles on the history of the region as it relates to geology and geomorphology.

Deadline for Abstracts: Friday, May 29, 2015

Please submit the following information along with abstracts:

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

Submit abstract by e-mail to Randy Wagner: randallwagner@live.com (760) 877-3490

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.

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, from our first guidebook in 1972, up the San Luis Rey River in 2013, and from Coast to Cactus in 2014. 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



**THE GEOLOGICAL SOCIETY
OF AMERICA®**

The 2015 GSA Annual Meeting will be November 1 - 4, 2015
in Baltimore, MD, at the Baltimore Convention Center

SDAG MONTHLY PHOTO COMPETITION

Calling all photographers! We haven't had any submittals recently, so please send in any interesting photos from your recent field endeavors!

Geology Job Seekers

We have heard from many upcoming geologists at our recent meetings, all of whom are seeking work opportunities here in San Diego. Included herein, in no particular order, are bio's and contact information of our members looking to gain a foothold in the local professional community:

ENVIRONMENTAL GEOLOGIST - I am a highly talented, innovative, and resourceful Geologist looking to take my skills to an environmental firm in San Diego County. I obtained my BS in Geology from University of California, San Diego. For the past 3 years I have been working at Scripps Institution of Oceanography as a research Geochemist where I have obtained the knowledge of proper field investigation technique in collecting groundwater and gas samples. I am very interested in geotechnical work, site assessment, and/or remediation work. I also have completed my 40hr HAZWOPER. Detailed resume upon request. Please feel free to contact me with any questions via email or phone. Keith Blackmon, blackmonkeith@gmail.com 805-910-6347.

SENIOR GEOLOGIST - Bilingual English and Spanish speaker with 12 years of experience in geological, geotechnical, and hydrogeological investigations for civil projects such as highways, railway lines, dumping sites, dams and residential buildings. A postgraduate specifically trained in environmental management and groundwater hydrology. Skilled in site management, drilling campaigns, and supervision of geotechnical laboratory and site tests.

Detailed work experience, education, and recommendations at <http://www.linkedin.com/in/sergiopostigo/>. Email sergiopostigo@yahoo.com or call Sergio Postigo at 619-450-3642

This is Farida Baxamusa, MS- Earth Science from Scripps Institution Of Oceanography (SIO), University of California, San Diego (UCSD). I am originally from India, and have another Master's in Earth Sciences from St. Xavier's College, University of Mumbai, India. I have also been granted the Dr. Ratan Nadirshaw Sukeshwala and Dr. Dayanand Dattatraya Yellur scholarship for securing highest rank in Earth Science at MS Part I and Part II. After completing my MS in India, I secured an internship at Oil and Natural Gas Corporation (ONGC), Mumbai, India. Later I worked as an Earth Science lecturer at St. Xavier's College, University of Mumbai, India where I held classes, directed discussions among large groups ranging from 35 to 80 students on mineralogy, petrology, geochemistry, crystallography, economic geology, oceanography, and plate tectonics and led lab courses involving mapping, stratigraphy, and paleontology. In September of 2013, I was accepted at SIO, UCSD for a master's program. Dr. Lisa Tauxe was my advisor and I worked as a research assistant under her in the field of paleomagnetism. I worked in the paleomagnetism laboratory where I skillfully selected quenched rock materials from lava flow samples to obtain accurate estimates of the Earth's magnetic field intensities. I developed python scripts to analyze individual samples to obtain their paleointensity values. I also worked as a teaching assistant

for a year where I assisted teaching undergraduates introductory geology and Earth processes, collaborated with other teaching assistants and professors to aid in conducting an introductory course about hydrologic processes on Earth and held office hours, tutored students, proctored and graded exams. Around the time of completion of my degree I presented my year's research to the faculty members of the Geoscience Research Division (GRD) and qualified for my MS in Earth Science and graduated in September of 2014. I am currently doing 3 part time jobs, one as a Staff Research Associate at SIO, the other as a Staff scientist at the Bodhi Group where I perform phase I site assessments, and the third as a geology education website volunteer at California Coastal Commission Public Education Department, CA. I am now actively looking for a job in environmental consultancy firms or educational institutions. I believe that I have a varied background and education and the perseverance and grit in achieving excellence in everything I do. If you have any advice, jobs, internships please feel free to contact me at fbaxamus@ucsd.edu or call me on 858-397-8456. Your help and guidance will be highly appreciated.

REQUEST for 2015 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 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.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.