WEDNESDAY, APRIL 15, 2015

A GEOLOGIC TETRAD!

THE EFFECTS OF ILLUVIATION ON THE PETROLOGY AND CHEMISTRY OF TONALITIC SAPROCK

Presented by:
Ashley Heath
Department of Geological Sciences, San Diego State University, San Diego
SDAG Scholarship Recipient

DEVELOPMENT OF FLORISSANT FOSSIL BEDS NATIONAL MONUMENT GEOLOGIC GUIDE

Presented by:
Bridget Borce
Department of Geological Sciences, San Diego State University, San Diego
SDAG Scholarship Recipient

SMALL-SCALE SEA SURFACE SALINITY VARIABILITY IN THE MIDDLE ATLANTIC BIGHT

Presented by:
Clifford Hoang
UC San Diego and Scripps Institution of Oceanography
SDAG Scholarship Recipient
TAXONOMY OF EOCENE CHONDRICHTHYANS

Presented by:
Xiomara Rosenblatt
Southwestern Community College
SDAG Scholarship Recipient

Where:  Filippi’s Pizza Grotto
10330 Friars Road
San Diego, CA 92120
Tel: 619-281-3511

Directions:  FROM INTERSTATE 15: Take the FRIARS ROAD exit. Proceed east. Turn left onto Riverdale Street and left again into the CVS parking lot.

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

Dinner:  Pizza & Cash bar

Cost:  $30 per person, $5 discount for members, STUDENTS: $15. Add $5 if you did not make a reservation.

Reservations:  Make your reservation online at www.sandiegogeologists.org, no later than noon, Monday April 13th. Reservations cannot be guaranteed after Monday at noon; but are always preferred over walk ins. Reservations well before the deadline are MUCH appreciated.
ABSTRACTS

Effects of Illuviation on the Petrology and Chemistry of Tonalitic Saprock

A. R. Heath¹, Department of Geological Sciences, San Diego State University, San Diego, California 92182, USA, ashleyrheath@gmail.com  
C. T. Replogle, Department of Geological Sciences, San Diego State University, San Diego, California 92182, USA, ctreplogle@gmail.com  
G. H. Girty, Department of Geological Sciences, San Diego State University, San Diego, California 92182, USA, ggirty@mail.sdsu.edu

Abstract
In order to characterize the petrological and chemical effects of illuviation, we collected 14 samples from a ~6.7 m high tonalitic corestone (tor) and 17 samples of saprock from an adjacent ~65 cm deep trench extending laterally ~1.5 m. Based on thin section observations, all saprock samples are characterized by a network of transgranular and intergranular cracks filled or lined with illuviated clay. The silicate mineral framework has been weakly to mildly weathered, and as result, biotite has been partially transformed into mixed-layer biotite/vermiculite, plagioclase has been weakly weathered to a dusting of smectite, and hornblende has been weakly weathered to Fe- and/or Mn-oxyhydroxide. The weathering of biotite translates into a 6 ± 4% loss of K mass. In contrast, the weathering of plagioclase resulted in no statistically significant loss of Ca or Na mass. A 38 ± 5% loss of Ba mass is likely due to the weathering of biotite. The above effects of eluviation contrast markedly with the statistically significant additions of Si, Al, Fe, Mn, Ti, Sc, Cr, Cu, Rb, Y, and Yb mass produced by illuviation. Illuvial additions translate into an overall statistically significant 12.5 ± 3.6% increase in bulk mass.

The increases in elemental and bulk mass are a reflection of eluvial processes operating in the overlying section of regolith removed by erosion. Within that overlying section, kaolinite; minute particles of biotite, hornblende, and ilmenite; and ions derived from leaching of these mineral were suspended into downward percolating fluids.

On centered p(A)-p(CN)-p(K) ternary diagrams, illuviation resulted in a well-defined compositional linear trend anchored by the geometric mean of the corestone samples and the projected composition of kaolinite at the p(A) apex. Notably, this trend is unlike that documented for biotite-controlled and plagioclase-controlled weathering.

¹Corresponding author: A. Heath  
San Diego State University, San Diego, Calif. 92182  
E-Mail address: ashleyrheath@gmail.com  
Telephone: 619-594-2552  
Fax: 619-594-4372
Development of Florissant Fossil Beds National Monument Geologic Guide

By Bridget Borce, Herb Meyer, Tim Connors, and Emmett Evanoff

The Florissant Fossil Beds National Monument Geologic Guide is designed to acquaint visitors with the geologic history of the monument with a self-guided tour. The geology includes the Proterozoic granitic pluton of the Pikes Peak Granite as well as Eocene volcanic, fluvial, and lacustrine units of the Wall Mountain Tuff and Florissant Formation. This guide communicates the geologic significance of Florissant Fossil Beds National Monument by relating these stratigraphic and igneous rock units to geologic events, then indicating specific locations to view tangible examples of the area’s geologic history. The guide begins with a small scale 1:117,000 map of the monument as well as areas to the north and south. The late Eocene Florissant Formation, the primary fossil-bearing formation in the area, is initially shown on this map as a homogeneous unit, showing its broader relation to the surrounding units. This view illustrates an outline of the ancient lake. The next geologic map is a 1:20,000 perspective showing the rock units and topography only within the monument’s boundaries. This map differentiates the Florissant Formation into its six separate lithologies previously defined. The third map shows an enlarged 1:10,000 perspective of the principle hiking trails within the monument, indicating specific points of geologic interest along those trails. Those points are explained below the map with photos and texts describing geologic significance. A table of waypoints is provided for GPS navigation.

The rock units portrayed on the geologic maps are then put into context with an illustration of a stratigraphic column. Each rock layer is further described with photos in outcrop and as a hand sample. Fossils are illustrated for the fossiliferous layers. In depth descriptions of each rock layer include lithology, deposition, paleontology (if applicable), and locations where outcrops can be viewed. The guide ends with a brief text describing the geologic history of the area and a customized time scale, placing the deposition of the Florissant Formation and other surrounding units into context with the entirety of geologic time.

Small-Scale Sea Surface Salinity Variability In The Middle Atlantic Bight

By Clifford Hoang

Validation and calibration efforts of the newly launched Aquarius/SAC-D satellite mission involve comparisons of satellite and in situ measurements of oceanic sea surface salinity (SSS). Small-scale salinity variations are averaged out in satellite retrievals, which have a footprint of ~100km, but may be captured by the in situ point measurements that are used to validate the satellite, leading to potential uncertainties in the validation. Within the context of recent remotely sensed observations of salinity, it is of central importance to understand the relationship between surface and subsurface salinity and how it relates to both atmospheric forcing and background ocean conditions for the success of validation and calibration of satellite products. Few instruments have measured true sea surface salinity, and the characteristics of small-scale sea surface salinity variations are not well understood. In the present study, data from thermosalinographs (TSGs) installed on vessels traversing the Middle Atlantic Bight region are examined to (a) understand how well TSG data (used for calibration/validation efforts) represent true SSS; and (b) quantify the differential between in situ and satellite SSS measurements in the Middle Atlantic Bight region on the basis of their sampling and spatial variability. Relating TSG measurements (at 5 meters depth) to salinity samples collected at the sea
surface (<0.5 m depth) during the EN534 UNOLS training cruise reveals that TSG salinity represents surface salinity. This indicates that the top 5 meters of the ocean is typically well mixed, and therefore that it is appropriate to use TSG observations to study SSS variability in this region. In the second part of this study, we use 36 years of TSG data from the Oleander Project to characterize small-scale SSS variability in the Mid-Atlantic Bight.

**Taxonomy Of Eocene Chondrichthyan**

By Xiomara Rosenblatt

At the [San Diego Natural History] museum I have been given projects of cleaning and sorting fossils from different sites. I am currently working on two projects; one is with Niki in the prep lab, where I am cleaning ribs from a sea cow. She has been teaching me how to use some of the power tools, glues, and how to make jackets out in the field along with fossil prep and cleaning techniques.

The second project I am working on is with Kesler, where I am learning the morphology of the most common Eocene Chondrichthyan that the museum has, to help me identify and put in taxonomic order uncatalogued specimens.

I have also made a data base that correlates what the museum has in their collection to the Handbook of Paleoichthyology, so future Paleontologists can easily refer to the data base to see page numbers, diagrams and descriptions to help identify specimens. The data base only has information on shark, skate and ray fossils. My main goal is to be able to identify Eocene Chondrichthyan and then be able to start developing my skills to identify Chondrichthyans from any age.

**SPEAKER BIOS**

**SPEAKER BIO – Ashley Heath**

Ashley Heath grew up in San Diego and like many others she developed a love for the outdoors while riding waves and hiking every local mountain peak. Upon completion of high school she decided to pursue higher education in the field of geology at Palomar College in San Marcos, California. She would later transfer to San Diego State University (SDSU), and in 2014 was awarded a bachelor’s degree in Geology with an emphasis in geophysics. Her senior thesis under the mentorship of Dr. Shuo Ma correlated seismicity in the Salton trough with wastewater well injections. She was named undergraduate of the year, was an Osher scholar and awarded the Gordon Gastil award for field excellence. She also worked with Dr. Pat Castillo at Scripps Institution of Oceanography in the summer of 2013 on a mantle fertility project. It was a prosperous and busy few years at San Diego State.
Encouraged by personal growth and rewarding academic experiences she decided to continue a project she had begun with Dr. Gary Girty at SDSU and work towards a master’s degree. The summer before the start of her master’s program she and Dr. Gary Girty submitted Ashley’s first publication to Catena titled “Effects of illuviation on the petrology and chemistry of tonalitic saprock”. The paper has since been accepted and it is this topic she will be discussing at the upcoming SDAG meeting. Currently, the authors are working to publish additional findings regarding the weathering of terrigenous rocks.

**SPEAKER BIO - BRIDGET BORCE**

I’m a San Diego native, currently in my last semester as a geology undergraduate at San Diego State University. During my studies, I developed a strong passion for paleontology. My interests in paleontology are broad, but I’m particularly intrigued by marine mammals and hope to study that area further in graduate school. I’m currently working as an intern at the San Diego Natural History Museum, where I’m responsible for fossils collected from BLM land. This past summer, I got the opportunity to work at Florissant Fossil Beds National Monument in Teller County, Colorado through the GSA’s GeoCorp program. My main project during that internship was to create the Florissant Fossil Beds National Monument Geologic Guide.

**SPEAKER BIO - XIOMARA ROSENBLATT**

Xiomara Rosenblatt is student at Southwestern Community College where she is studying Geology. This is her last semester there as she prepares to transfer fall 2015 to a four year institution. In 2013 she began volunteering at the Natural History Museum in Balboa Park working in the Paleontology department. In fall 2014 she became an intern and started working on her chondrichthyan Index project. Using the help of her advisor and texts from the museum she created an index of Eocene sharks found in North America. By using her index she began to identify and catalog chondrichthyan teeth for the museum. She also worked in the preparation lab learning how to prepare invertebrate and vertebrate fossils. She is very passionate about Paleontology and plans to continue her studies with an emphasis in it.
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.

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker and Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 12, 2015</td>
<td>Monte Marshall – Geology of the Polynesian Islands</td>
</tr>
<tr>
<td>June 1, 2015</td>
<td>Eric Drummond – Ice Cold Gold – Joint SDAG/SCGS Meeting</td>
</tr>
<tr>
<td>July 15, 2015</td>
<td>Diana Lindsay - Africa</td>
</tr>
</tbody>
</table>

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.sandiegeologists.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: (check choice)  _____ Student Member (email delivery only) $ 5.00

_____ 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
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
Greetings SDAG Members!

Last month we were treated to two wonderful talks. Tyler Barnes, USD student and one of our 2015 scholarship recipients, gave an excellent talk on his research in the Virgin Islands. Following Tyler was Dr. David Cruden, who, while on vacation from Alberta, Canada, took time out to attend our meeting and discuss his research on the classification of landslides. Dr. Cruden is looking for some local help with his study of the Black’s Beach landslide. Please contact me to get in touch with him if you are interested!

This month I hope you will all come out to support our remaining student scholarship recipients. Thanks to generous sponsorships we were able to provide five student scholarships this year. Four students will present their research this month. Due to the unexpected reduction in meeting space at Emiliano’s, we will be trying out a new venue – Filippi’s Pizza Grotto. Hope to see you all there for some delicious food and interesting talks!

*Please note the unusual meeting schedule for the next two months: Our May meeting will be held on Tuesday, May 12th, and our annual joint meeting with South Coast Geological Society will be held on June 1st.*

Jennifer Bauer Morton, PG
SDAG President
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 fanglomerates 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
No submittals this month, so here is one from the Secretary, Rupert Adams: A close up of glacially striated rock at the lip of a cirque known as Lake Blanche (a tarn) in Big Cottonwood Canyon, Salt Lake City, Utah.
**Geology Job Opportunities**

No new job postings this month. The following jobs were posted in last month’s letter and may or may not be still open.

**Tetra Tech EC, Inc. currently has an opportunity for an Associate Geoscientist at our San Diego, CA location.**

**PRINCIPAL DUTIES AND RESPONSIBILITIES:**

- Assist the Project Manager with project management related activities.
- Participate in project site management including health and safety oversight (approximately 25-50% travel/field work, typically 1 to 4 week duration, in a range of weather conditions).
- Direct field work associated with soil and groundwater investigation including; soil sampling; well installation, development and sampling; soil and groundwater remedial design, monitoring, and optimization.
- Prepare portions of project proposals and work plans, assisting in finalizing work plans.
- Review work plans for completeness and conformance to the project scope.
- Prepare Statements of Work for subcontracts and material and equipment procurements.
- Perform technical analysis of responses to RFPs for project subcontracts, materials and equipment.
- Remain current with applicable environmental, safety and quality control requirements.
- Prepare thorough documentation of site activities, monitor project schedules and subcontractor performance and take action to correct issues when needed.
- Prepare Project Closure and Remedial Action reports.
- Assist with preparing project reports, correspondence and cost tracking/status.
- Perform various other duties as assigned.

**EDUCATION AND EXPERIENCE:**

- Minimum Bachelor’s degree from an accredited institution with a focus in Geology, Hydrogeology, or a related field. Master’s preferred.
- 5-7 years of applicable experience in logging borehole geology and installing groundwater monitoring wells using hollow stem auger, direct push and sonic drilling techniques.
- PG or GIT registration.
- 40-HAZWOPER training certificate.
- Previous DOD, USACE, or other government contract experience a plus.
- Proficiency in CAD, GIS, Excel, Access, and aquifer modeling software would be a plus.

Tetra Tech is a leading provider of consulting, engineering, and technical services worldwide. We are a diverse company, including individuals with expertise in science, research, engineering, construction, and information technology. Our strength is in collectively providing integrated services—delivering the best solutions to meet our clients' needs. With more than 14,000 employees worldwide, 350 offices worldwide and $2.5 Billion revenue in 2014, Tetra Tech’s capabilities span the entire project cycle. We offer competitive compensation and benefits and are searching for innovative people to join our teams.
Candidates who are interested in joining our dynamic team should submit a resume to Tetra Tech Inc., at www.tetratech.com. Please mention the position that you are applying for in your cover letter and include salary requirements. A pre-employment drug screen is required. Tetra Tech, Inc. is an Equal Opportunity Employer and we value workplace diversity. We invite resumes from all interested parties including women, minorities, veterans and persons with disabilities. Tetra Tech is a VEVRAA federal contractor and we request priority referral of veterans for available positions.

Southern California Soil and Testing, Inc. (SCST) currently has an opportunity for a Staff/Project Level Geologist at our San Diego, CA location.

Southern California Soil and Testing, Inc. (SCST) has been providing professional engineering and construction support services since 1959. Our understanding of the region and experience with local conditions and agencies has resulted in the successful completion of thousands of projects for 55 years. With offices in Los Angeles, Inland Empire, Central Valley and San Diego, SCST provides the opportunity to work on a wide range of projects.

Currently, we are seeking an experienced geologist for our San Diego location. The ideal candidate will have 3 to 7 years of geotechnical experience. Soils technician is experience required; Southern California experience preferred but not mandatory. Job duties require experience with logging and sampling exploratory borings and test pits, in-grading problem solving, report writing, and proposal preparation. Must be proficient in MS Word and Excel; CAD preferred but not mandatory. SCST offers room for professional growth and management training.

SCST offers competitive compensation and a full benefit package that includes medical / dental / life insurance, 9 paid holidays, vacation time and sick leave, and a company 401(k) Plan. For immediate consideration please Email a resume and references.

---

**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/](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.