

# SAN DIEGO ASSOCIATION OF GEOLOGISTS

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

## SDAG MEETING ANNOUNCEMENT

WEDNESDAY, MARCH 17<sup>th</sup>, 2010

### *Analysis of Groundwater in Coastal San Diego, California*

*Presented by*

**Dr. Zhen Li**

**Where:** Catalina Room (southern end of MVCC) (*not Emiliano's!*) **SEE MAP**  
Marina Village Conference Center  
1936 Quivira Way, San Diego, CA 92109

**When:** 5:30 pm – Social Hour  
6:30 pm – Dinner  
7:15 pm – Program

**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.

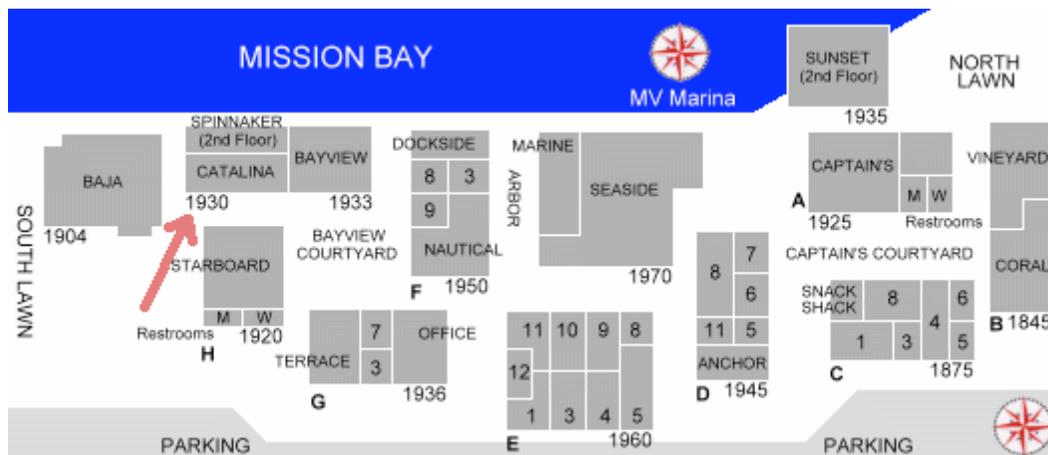
FROM INTERSTATE 8: Take the WEST MISSION BAY DRIVE exit to the right. You will be on INGRAHAM STREET for a short distance from which you will take the next exit marked WEST MISSION BAY DRIVE on your right. When you see the large green sign that says QUIVIRA ROAD, get in the farthest left of the two left 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.

**Dinner:** A St. Patrick's Day buffet. Beverage station. Dessert. Cash bar.

**Cost:** \$30 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, Monday, March 15<sup>th</sup>**.

**RESERVATIONS CANNOT BE ACCEPTED AFTER MONDAY AT 12 NOON.  
IF YOU DO NOT MAKE A RESERVATION, WE CANNOT GUARANTEE YOU A MEAL.**



## 2010 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!

April 21	TBA
May 19	John Izbicki, USGS
June 7 (Monday)	Joint meeting with the South Coast Geological Society (SCGS), hopefully at the El Adobe in San Juan Capistrano.

## 2010 EXECUTIVE COMMITTEE

**PRESIDENT** – Bryan Miller-Hicks; *Cuyamaca College*; Ph: (619) 733-3724; [geobry@aol.com](mailto:geobry@aol.com) ; [bryanmillerhicks@gmail.com](mailto:bryanmillerhicks@gmail.com)

**VICE PRESIDENT** – Chuck Houser; *SCS Engineers*; Ph: (858) 571-5500; [CHouser@scsengineers.com](mailto:CHouser@scsengineers.com)

**SECRETARY** – Todd Wirths; Ph: (858) 337-0098; [todd@wirths.com](mailto:todd@wirths.com)

**TREASURER** – Cari Gomes; [sdagtreas@sandiegogeologists.org](mailto:sdagtreas@sandiegogeologists.org)

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

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

## SPEAKER BIO

Zhen Li

Zhen Li is a hydrologist with the U.S. Geological Survey in San Diego, California. She received her B.S. and M.S. degrees in Geology from Nanjing University, China, and her Ph.D. degree in Hydrology from the University of Arizona. Her work with the USGS involves characterization and conceptualization of groundwater basins; simulation and visualization of regional-scale groundwater flow and non-reactive transport; quantitative analysis supporting water resource planning and management; and hydrogeologic data collection, archiving, and database development. During her 9 years with the USGS, she has been the lead modeler and hydrologist for several USGS regional groundwater studies, including coastal Los Angeles, San Diego, Santa Clara Valley, and desert Twenty-nine Palms area.

## SPEAKER ABSTRACT

### “Analysis of Groundwater in Coastal San Diego, California”

Understanding of groundwater in coastal San Diego is limited. Over the past 10 years, the United States Geological Survey (USGS) has been drilling deep monitoring wells and collecting geologic and hydrologic data. Water-level data from these wells, along with water-level contour maps made in the early 1900s, aid us in understanding the groundwater flow system. Recent data illustrate three-dimensional changes in water levels and responses to groundwater pumping. These data help us infer geological structures, which in turn control groundwater flow.

#### PRESIDENTS CORNER, MARCH 2010

Welcome to March, everyone! We have had our share of storms that brought us some welcome (at times) rains. Now as we roll towards spring, our local deserts should provide some spectacular flower shows.

Our One Stop Wonder on February 20 was a rousing success. Just enough rain to slick down the trails but not enough to deter a sizable group of intrepid geologists and beachwalkers. Once again, we thank SDSU's student chapter of the AAPG for sponsoring the trip, and Prof. Pat Abbott for being our submarine canyon and lagoonal facies guide. Also, thanks to Prof. Dave Kimbrough and his student for their discussion of the sedimentary provenance of the deposits we were looking at.

This month, since our meeting date falls on St Patrick's Day, we will have a St. Patrick's themed dinner prepared for us by our friends at Ranch Catering. Hope to see you all, wearing green is acceptable!

Cheers to all,

Bryan

#### 2009 and 2010 SPONSORS - THANK YOU!!

Note the new nomenclature for 2010: Sponsors, Corporate Sponsors, and Patrons provide a significant portion of SDGS's and SDAG's operating and scholarship budgets. By making your payments to SDGS (a 501(c)3 public benefit nonprofit educational corporation) you may be able to claim a tax deduction. In addition to monthly recognition for your contribution, you are entitled to additional benefits as listed on the Sponsorship Form included in this newsletter.

<a href="#">Dr. Pat Abbott, SDSU (Emeritus)</a>	Joe Coronas, SDSU Geo-Alumni Assn.
Tod Clark - <a href="#">Pacific Drilling Co.</a>	Phil Farquharson, <a href="#">CG-Squared Productions</a>
<a href="#">Carolyn Glockhoff</a> , Caro-Lion Enterprises	Lowell Lindsay, <a href="#">Sunbelt Publications</a>
Monte and Diane Murbach, <a href="#">Murbach Geotech</a>	David and Jan Steller (“two-fer” – thanks!)
Carole L. Ziegler	<a href="#">Sherry Bloom</a> , Coldwell Banker Real Estate
David Bloom	<a href="#">Dr. Monte Marshall</a>

George Copenhaver, PG, CEG	Sue Tanges, Southland Geotechnical Consultants
<a href="#">H&amp;P Mobile Geochemistry</a>	<a href="#">Dr. Sarah Gray - University of San Diego</a>
<a href="#">Amec Earth &amp; Environmental</a>	<a href="#">Geocon, Inc.</a>
Jim Ashby & Eric Hendrix - <a href="#">Mission Geoscience, Inc.</a>	Dr. Margaret Eggers <a href="#">Eggers Environmental, Inc.</a>
<a href="#">Dr. Richard Berry</a>	<a href="#">Ninyo &amp; Moore</a>
William J. Elliott, Engineering Geologist	<a href="#">Mike Palmer</a>
<a href="#">Anderson Drilling</a>	<a href="#">Dr. Anne Sturz</a>
<a href="#">Hargis and Associates, Inc.</a>	<a href="#">Julie Moore, SPL Laboratories</a>
Greg Cranham	<a href="#">Southwest Geophysics, Inc.</a>

## ANNOUNCEMENTS

# 24th. ANNUAL SDSU GEOLOGY FIELD TRIP

## LANDSLIDES IN THE VICINITY OF CLARK LAKE & COYOTE MOUNTAIN, ANZA BORREGO STATE PARK

### MARCH 26, 27, & 28, 2010

**The 24th Annual SDSU Geology Alumni Field Trip/Campout** will be in Anza Borrego State Park this year. Nissa Morton, a graduate student at SDSU, working for Dr. Tom Rockwell on the San Jacinto Fault and Mike Hart, San Diego's Planetary/Local Landslide Expert, will be leading this year's trip. Clark Lake was not accessible except by kayak as of February 1st, 2010 so the itinerary may vary depending on future storm events.

Seismic activity serves as a major trigger for land-sliding in areas of steep topography. Northeast of Borrego Springs, large, deep-seated landslides have occurred in granitic and metamorphic rock on Coyote Mountain and along the southwestern side of the Santa Rosa Mountains. This area is located within a complex zone of conjugate strike-slip faulting that is locally defined by activity on the Coyote Creek, Coyote Mountain, and Clark faults along with several northeast-striking cross faults. The field trip will examine the geomorphic and structural features of these landslides and consider the failure mechanisms needed to produce them.

The Field Trip will start Saturday Morning March 27th, 2010 at 10:00 AM on top of the Visitor's Center at the Anza Borrego State Park Headquarters. Look for the flagpole, just past the flagpole coming from the parking lot there is a path to your right that leads you on top of the visitor's center. We will do some arm-waving there and then caravan/carpool out to the base of Coyote Mountain and hike up to examine the morphology of the landslides so plan on packing a lunch. Sunday, if the lake level is low enough to allow vehicles to pass (4-Wheel Drive recommended for this part of trip), we will go up towards Rockhouse Canyon to look at more landslides and possibly some petroglyphs. If the lake level is still high and you have not been to the visitors center I think you will enjoy just hanging around there for a couple of hours and maybe taking your time driving home to look for wildflowers.

We will be camping at the main Borrego Palm Canyon Campground just west of the town of Borrego Springs. The Alumni Group will have one Group site reserved for Friday, Saturday and Sunday night and one additional site for Saturday Night. I cannot guarantee additional spaces nearby so you may have to

occupy and pay for individual sites near the Group Camp Ground if we have a large crowd. There are restrooms and solar showers close to the Group Site but you need quarters for the showers so plan ahead! Please observe all Park Rules & Regulations which are posted at each site. Each site has several tables, BBQ and fire ring for burning wood (not provided so bring your own). Highs and lows in late March can be in the mid 80's down to the high 40's, so be prepared.

**DIRECTIONS:** Hopefully you can find your way to Borrego Springs! From the traffic circle just go west and watch for signs to main campground or visitor center depending on where you are headed.

**COMMUNICATIONS:** There appears to be phone service in much of the campground but you may need to walk around a bit to find it. If you have a Family Radio Service (FRS) radio we will be monitoring channel 11 with no Private Tones programmed in them. The Palomar Amateur Radio Repeater, 147.030 + (103.7 pl) and 2 Meter simplex 146.520 will also be monitored.

**SUPPLIES/SERVICES/FUEL:** All are available in Borrego Springs 7 days a week during normal business hours as per John Petersen an SDSU Alumni who now is the proud owner of his "Second Home" in Borrego Springs.

*If any of our Alumni are interested in becoming involved with any of our Alumni Activities, like to assist with future trips or has a special place in mind that would be good for a future Alumni Field Trip please let me know. If you have any questions regarding this trip email or call me. Joe Coronas, Alumni Field Trip Chairman. [jcorones@gmail.com](mailto:jcorones@gmail.com), Home (858)-484-3582, Cell (858)-603-5545.*



## Call for Papers: Peninsular Ranges Batholith Deadline for manuscript submission: **June 2010.**

A GSA volume on the Peninsular Ranges batholith, Baja and southern California, is currently in the early stages of preparation. The volume will address both the Jurassic and Cretaceous batholiths and related extrusives. Plans are for a series of overview papers; a number of trans-batholith transects; topical papers dealing with isotopic, chemical, structural, and geophysical aspects of the batholith; as well as structural effects recorded in prebatholithic rocks during the evolution of the batholith. Also to be included are studies of individual plutons, ranging from gabbro to pegmatites, that characterize various elements of the batholith. A section is planned for geologic problems, such as Tertiary fault history, that have been solved through the analysis of batholithic data.

If you would like to submit a paper, or if you know of someone who might be interested, please contact one of the editors: Doug Morton, [douglasmorton@gmail.com](mailto:douglasmorton@gmail.com); Scott Johnson, [johnsons@maine.edu](mailto:johnsons@maine.edu); Dave Kimbrough, [dkimbrough@geology.sdsu.edu](mailto:dkimbrough@geology.sdsu.edu); Scott Paterson, [paterson@usc.edu](mailto:paterson@usc.edu); Keegan Schmidt, [klschmidt@lcsc.edu](mailto:klschmidt@lcsc.edu); Vicki Todd, [vtodd2@comcast.net](mailto:vtodd2@comcast.net); or Paul Wetmore, [pwetmore@cas.usf.edu](mailto:pwetmore@cas.usf.edu).

## SDGS/SDAG

As many of you are aware, the San Diego Geological Society (SDGS) was formed early last year as an official non-profit 501(c)3 corporation, and SDAG is now an organization under this corporation. The reasons for doing this were many and they are spelled out in an informational sheet, the Business Plan of SDGS. The officers of SDGS should be very familiar to you, as they are all past presidents of SDAG. For those of you that would like to read more about SDGS and what it means to SDAG, check out the informational page on the website. Also check out the website [www.sandiegogeologicalsociety.org](http://www.sandiegogeologicalsociety.org).

## Latest on the defunct Board for Geologists and Geophysicists

Legal updates on the elimination of the Geology Board: On February 8, 2010, the CALIFORNIA ASSOCIATION OF PROFESSIONAL GEOLOGISTS (CAPG) filed a Petition for a Writ of Mandate and First Amended Complaint for Declaratory Relief against Governor Schwarzenegger and Brian Stiger (director of DCA). This supersedes the Preliminary Injunction motion. A hearing date for the Writ of Mandate will be set. This will be a long battle and funds are still direly needed to support this effort. If CAPG wins on the Petition for Writ of Mandate, BGG would be reinstated.



The Board for Geologists and Geophysicists is currently under the Engineers Board: The Board for Professional Engineers and Land Surveyors (BPELS) has a LISTSERVE which automatically sends out information to people who sign up. We encourage all geologists to sign up. The link to subscribe is <https://www.dca.ca.gov/webapps/pels/subscribe.php>.

BPELS is now soliciting members for its Geology and Geophysics Technical Advisory Committee. Please pass this on to anyone you know who might be interested (including the former PAAC members, SDAG, and SCGS, etc.) and encourage them to apply. The link for more information is [http://www.geology.ca.gov/licensees/tac\\_vacancies.shtml](http://www.geology.ca.gov/licensees/tac_vacancies.shtml).



### 2010 Joint GSA Cordilleran Section and AAPG Pacific Section Meeting: Anaheim, May 27-29

**Deadline for Abstract submission: 9 March 2010.**

You are invited to the 2010 annual meetings of the Cordilleran Section of GSA and the Pacific Section of the AAPG at the Marriott Hotel in Anaheim <http://geosociety.org/sectdiv/cord/2010mtg/>. The theme for the meeting is "From Mountains to Main Street," and the local host is the Department of Geological Sciences at California State University-Fullerton. The meeting will take place at the Anaheim Marriott, which is located conveniently in the Anaheim Resort District, just steps away

from Disneyland, California Adventure, and Downtown Disney. A few steps in the other direction will take you to the Anaheim Garden Walk, an oasis of outdoor shopping, dining, and entertainment.

### February's OSW: A Wet Hangover

Most of us know that the State of California is going through what could be called a tough financial hangover, but who knew that California was also suffering from a massive geologic hangover! Well, Dave Kimbrough said so during this month's One Stop Wonder field trip. U-Pb crystallization dates derived from detrital zircons collected from local post-batholithic (Tertiary) sedimentary formations demonstrate that almost all these sediments are the erosional debris of Cretaceous Sierra Nevada-Peninsular Ranges rocks (except Poway clasts) and are continually being recycled. Pass the aspirin!

Despite the stormy weather the previous night with more showers forecast to dampen the morning, this OSW excursion along the Torrey Pines cliffs was well attended. Pat Abbott led the way, eventually leading the group to a jaw-dropping, "world-class" outcrop of the headwall of an overhanging submarine canyon wall, just up from the beach on the Torrey Pines trail. At the culmination of the hike, Pat pointed out an exposed paleosol in the cliffs, associated with the Late Paleocene Thermal Maximum. Composed of only 2/3 residual kaolinite clay and 1/3 quartz grains, the paleosol, developed in the Mt. Soledad Fm., really hammered those "indestructible" Poway clasts.



Left: The queue to summit Bathtub Rock. No casualties were reported.

Right: L-R: Mike, Bryan, Monte, Diane, and Greg- four decades of SDAG presidents. Photos courtesy of Diane Murbach.



**FOR LEASE**  
1250 FAYETTE STREET  
EL CAJON, CA 92020

- Four units available, each with 3,125 square feet of warehouse and office space.
- Contact Terry Cochran at 619-258-4916, ext. 110 or to [tcochran@sunbeltpub.com](mailto:tcochran@sunbeltpub.com) for more information.

### **FOR LEASE**

2160 AVENIDA DE LA PLAYA  
LA JOLLA, CA 92037

- Office available, just under 500 sq. ft. One and a half blocks from La Jolla Shores beach, and just down the road from Scripps Institute. Fully wired for phone and internet.
- Contact Izzy at 858-531-3025 for more information.

## **SEEKING JOB OPPORTUNITIES!**

**Todd Wirths, M.S., P.G. #7588:** Environmental geologist seeking a senior project manager-level position. I have over twelve years experience conducting environmental subsurface investigations. Responsibilities included project and data management at leaking underground storage tank sites, conducting Phase II Environmental Site Assessments, large-scale remedial soil over-excavations, and risk assessments throughout San Diego County. Experience with over 50 projects associated with assessment and remediation of petroleum hydrocarbon-impacted retail fuel facilities in the San Diego Region and supervised the installation of nearly 500 wells and borings. Read more on my LinkedIn Profile: <http://www.linkedin.com/pub/todd-wirths/10/3b/939>. Better yet, ask for my resume- call 858-337-0098, or email [todd@wirths.com](mailto:todd@wirths.com).

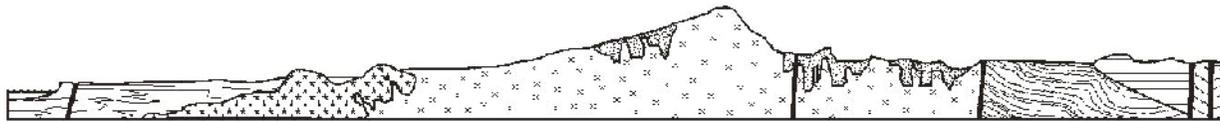
**Jared Warner:** I am a graduate of San Diego State where I received both my B.S. and M.S. in geological sciences ('06 and '09). I have experience in multiple fields including production geology, fractured reservoirs, reservoir characterization, basic geologic model building, geophysics, paleontology, sedimentology, oceanography, and teaching. I've recently moved back down to San Diego after working for Occidental Petroleum and looking for immediate employment opportunities. For information on my research, contact information, or a resume please feel free to contact me at [jared.j.warner@gmail.com](mailto:jared.j.warner@gmail.com) or call me at (661) 972-5332.

**Greg Fisch:** I have been an Electronic Engineer and Software developer for many years. I originally started out wanting to be a Geologist, but family and friends convinced me to get into electronics and computers instead. So now after 20+ years, it's time to make a career change, get back to my original goal and go back to school to obtain my degrees in Geology. I have been involved with a wide variety of projects including six-legged walking robots, remote telescope/ccd imager/observatory control systems, GPS tracking systems utilizing the Iridium satellite network, GIS mapping and programming, asteroid/comet orbital determination and advanced image processing. I would like to be able to apply my knowledge and skill set in the technology areas to research tasks in the Geoscience area (with a special interest in remote sensing) while I'm continuing my education. Please contact me at (858) 692-2909 (cell) or send email to: [gfisch9862@aol.com](mailto:gfisch9862@aol.com) and I will be happy to send you my current resume.

## **JOB OPENINGS!**

***Sorry, no job openings were announced!*** 😞





# SAN DIEGO ASSOCIATION OF GEOLOGISTS

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

## 2010 MEMBERSHIP FORM

NAME: \_\_\_\_\_

Please type or print clearly.

Home Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Work Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Please include company or other affiliation*

E-mail Address: \_\_\_\_\_

Website: \_\_\_\_\_

Field(s) of Interest: \_\_\_\_\_

\_\_\_\_\_

Phone: Home: (\_\_\_\_) \_\_\_\_\_ Work: (\_\_\_\_) \_\_\_\_\_ Cell: (\_\_\_\_) \_\_\_\_\_

**NOTE:** *Your membership dues include email delivery of the monthly newsletter.*

Dues: \_\_\_\_\_ Student Member (email delivery only) \$ 5.00

(check choice)

\_\_\_\_\_ Regular Member (email delivery only) \$ 25.00

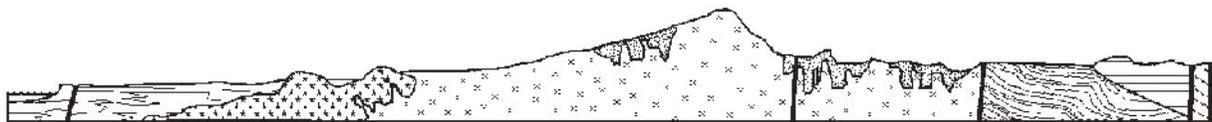
New Member  Continuing Member

Date: \_\_\_\_\_

Check for change of E-mail address:

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

San Diego Association of Geologists  
PMB 157  
5694 Mission Center Road, Suite 602  
San Diego, CA 92108



# SAN DIEGO ASSOCIATION OF GEOLOGISTS 2010 SPONSORSHIP FORM

**NAME:** \_\_\_\_\_  
(as you would like it to appear in guidebook and website)

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

**Residential Address:** \_\_\_\_\_

**Office/School Address:** \_\_\_\_\_

**Website:** \_\_\_\_\_

**Phone:** Home: ( ) \_\_\_\_\_ Office: ( ) \_\_\_\_\_

**Fax:** ( ) \_\_\_\_\_ **e-mail:** \_\_\_\_\_

**Donation Level and Consideration:** \_\_\_\_\_ **Sponsor \$ 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)

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

\_\_\_\_\_ **Patron \$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

Date: \_\_\_\_\_ Check for change of mailing address:

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

*Donations may also be made  
at monthly meetings.  
Thank you!*