



# SAN DIEGO ASSOCIATION OF GEOLOGISTS

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

## SDAG MEETING ANNOUNCEMENT

WEDNESDAY, NOVEMBER 18<sup>th</sup>, 2009 (*"normal" day*)

### **SOME MARTIAN LANDSLIDES AND THEIR EARTHLY HOMEOMORPHS**

*Presented by*

**Mike Hart, CEG 706**  
San Diego, California, [mwHart@aol.com](mailto:mwHart@aol.com)  
[www.mhart-geoservices.com](http://www.mhart-geoservices.com)

**Where:** Catalina Room (southern end of MVCC) **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:** Vegetable and fruit platter appetizers. Baron of Beef and Oven Roasted Chicken, garlic mashed potatoes, grilled vegetables, coffee and tea, cake for dessert. Cash bar (beer and wine).

**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, November 16<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.**



## 2009 SDAG MEETING SCHEDULE - Mark your Calendars!

Just one left: December 16<sup>th</sup>, San Diego Natural History Museum (my guess)

### 2009 EXECUTIVE COMMITTEE

**PRESIDENT** – Scott Snyder; *Ninyo & Moore*; Ph: (858) 576-1000; [sdag2006@prodigy.net](mailto:sdag2006@prodigy.net)

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

**SECRETARY** – Phil Farquharson; *CG-Squared Productions*; Ph: (619) 224-8463; [sdag2009@geology-guy.com](mailto:sdag2009@geology-guy.com)

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

**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)

### Mike Hart Biographical Sketch:

Mike is a Certified Engineering Geologist in California and has practiced in the San Diego area for approximately 30 years. Mike is a graduate of San Diego State University (M.S., 1972). In 1975 he joined Geocon, Inc. as Vice President and Principal Engineering Geologist. Since leaving Geocon 1992 he has been an independent engineering geology consultant. Mike is past chairman of the AEG Landslide Committee and past Chair of the Engineering Geology Division of the Geological Society of America. His interest in landslides began during undergraduate studies at SDSU and led to graduate work on landslides in Eocene rocks of the San Diego area.

## SOME MARTIAN LANDSLIDES AND THEIR EARTHLY HOMEOMORPHS

A study of images from several sources including NASA, the ESA (European Space Agency) Google Mars, and JPL reveal that in Mars' early history liquid water was an important factor in shaping the Martian landscape by erosion and massive landsliding. Stream erosion, hydrostatic pressure, meteorite impacts, and seismic shaking were probably all major landslide triggers on Mars. Four major landslide types; slumps, flows, complex slides, and long run-out rock avalanches are identified on Mars that are similar in appearance to their earthly counterparts except that they are typically at least an order of magnitude larger. For example, a long run-out rock avalanche on the northern flank of Olympus Mons, Mar's highest volcano, is approximately 350 km long. Similar landslides on earth are usually no more than 8 to 10 km in length. Slumps and complex landslides on Earth typically suggest the presence of specific geologic conditions. Slumps indicate homogenous materials of low shear strength. Complex landslides suggest the presence of clay-rich, thinly-bedded sedimentary rocks. Because of the similarities

between the slides on Earth and Mars it is concluded that that geologic conditions leading to landsliding on the two planets are also similar.

### **President's Corner, November 2009**

We have a great talk this month coming up with the esteemed Mike Hart of SDAG and SCGS fame, and want to thank Dr. Monte Marshall for his "History of the World Part I" to get us geared up for the Field Trip on November 6, 7, and 8. It will be a great trip with lots of information, good food and drinks, and warm days and chilly nights under clear skies and shining stars.

Where has the time gone? We are quickly approaching the end of the year, Halloween decorations are coming down and Holiday stuff is on sale in the stores (as they have been since July!) This is the last SDAG meeting of the year in our typical format and were are steadily working on the details for the annual December Holiday Party, so stay tuned for more details on that. If you have been thinking about how you can get more involved in SDAG, well...now is the time to step up. We are looking for two people from the membership to step up into the SDAG roles of Secretary and Treasurer. There is no prerequisite to become an officer, and you will have a lot of help from the current and past officers of SDAG. If I can do it, so can you! Think about it, and please let me know if you are interested, as soon as possible.

*Scott*

### **2009 CORPORATE SPONSORS - THANK YOU!!**

Corporate sponsors provide a significant portion of SDAG's operating and scholarship budget. In addition to monthly recognition for your contribution, you are entitled to a free Internet link from [SDAG's Website](#). We also list Corporate Sponsors in our annual SDAG Field Trip Volume.

<a href="#">Dr. Pat Abbott, SDSU (Emeritus)</a>	Joe Coronas, <a href="#">City of San Diego</a>
Tod Clark - Pacific Drilling Co.	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	David and Jan Steller
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</a> , Inc.
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>
Katherine Freese	<a href="#">Southwest Geophysics, Inc.</a>

***For the latest developments in the on-going saga of the California Board of Geologists and Geophysicists (BGG), please check the SDAG website...***

# ANNOUNCEMENTS

## SDGS/SDAG

As many of you are aware, the San Diego Geological Society (SDGS) was formed early this 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, as well as me, Scott Snyder, current SDAG President. 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) (Not to be confused with the San Diego Genealogical Society of course...)



*Celebrating 90 years of inspiring a passion for the natural world*

### **TOM DIBBLEE CELEBRATION LUNCHEON**

**Celebrating the scientific and historic legacy of Tom Dibblee and the completion of publishing the Dibblee Map Collection at the Santa Barbara Museum of Natural History.**

Santa Barbara Museum of Natural History is hosting a luncheon on Saturday, November 21<sup>st</sup> to celebrate Tom Dibblee's legacy and the completion of publishing the Dibblee Map Collection.

Keynote speaker Dr. Tanya Atwater, retired UCSB Professor of Geosciences, will be presenting on the plate tectonic history of western North America and the San Andreas Fault system.

The lunch is \$50 per person and begins at 11:00 AM in Fleischmann Auditorium at the Museum.

For more information or to make a reservation please contact Nicole at 805-682-4711 ext. 110 or e-mail [nketterer@sbnature2.org](mailto:nketterer@sbnature2.org).

### **About the Dibblee Geological Foundation**

The Dibblee Geological Foundation was created as a non-profit California education organization by those who admire the quality and quantity of Tom Dibblee's geologic mapping. The Foundation's mission was to help preserve the scientific, technical, educational and economic values of Dibblee's life work through timely publication. In 2002 the Santa Barbara Natural History Museum partnered with the Dibblee Geological Foundation to create the Dibblee Geology Center. The initial goal of the Dibblee Geology Center was to complete the publication of all of Tom Dibblee's 550 quadrangles as 419 maps. That goal has been reached.

### **About the Santa Barbara Museum of Natural History**

Founded in 1916, the Santa Barbara Museum of Natural History was the first museum in Santa Barbara. For nearly 100 years, the Museum has collected, studied, preserved, and displayed the region's biological, anthropological, and archeological heritage to inspire a passion for the natural world. The Museum also owns and operates the Ty Warner Sea Center located on Stearns Wharf featuring the engaging, interactive exhibits where visitors can experience hands-on science and discover the wonders of the marine world.



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

- Four offices vary in size from 156 square feet to 360 square feet with 1,869 square feet of warehouse space.
- Owner is willing to offer one month of FREE RENT for every year the facility is leased!
- Contact Terry Cochran at 619-258-4905, ext. 110 or [tcochran@sunbeltpub.com](mailto:tcochran@sunbeltpub.com) for more information.

---

## **SEEKING JOB OPPORTUNITIES!**

**Daniel Meeh:** I am interested in obtaining an entry level position in a Geology related field. I have received my Bachelors of Science degree in Geology from Wheaton College and I am looking forward to putting my knowledge to practical use. I am also a dedicated, driven individual who desires excellence in everything that I do. Not only am I well educated, but I am willing to learn a job and give above and beyond what is expected. I am confident that I can be a great asset to any organization. I appreciate any help you can offer and I would very much like to discuss my qualifications with you in person. I can be reached at 281-701-0826 or by e-mail at [Daniel.Meeh@my.wheaton.edu](mailto:Daniel.Meeh@my.wheaton.edu).

**Jake Lippman:** I am looking for an entry-level position as a geologist. In particular, I am interested in hazard assessment (seismic, landslide, flooding, etc.) I am a recent graduate with a BS in Geology from UC Davis and an MA in Climate from Columbia. Please e-mail me with any employment opportunities at [jdl2129@columbia.edu](mailto:jdl2129@columbia.edu) or call (415) 672-0918. Thank you very much!

**Patrick Rentz:** I am currently a graduate student at Scripps Institute of Oceanography, obtaining my M.S. in Earth Science. My defense and graduation is planned for the near future (September 2009 if things go according to plan). I am interested in employment opportunities in the San Diego through Riverside areas. For contact information, resume, and details on my research, please feel free to visit my website [www.patrentz.com](http://www.patrentz.com). I look forward to hearing from you!

**Jared Warner:** He was our student scholarship winner last year, who made his fine presentation at our March meeting. He wrote me (PTF) in a recent E-mail: "I just recently finished up my internship with Occidental Petroleum up in Bakersfield and found it rather enjoyable. Now it's off to races with applying to jobs!" He can be contacted at [jared.j.warner@gmail.com](mailto:jared.j.warner@gmail.com) or (661) 972-5332.

## **JOB OPENINGS!**

**Brian F. Smith and Associates (BFSA)** has immediate openings for several qualified individuals including **Paleontological Monitors**, and **Project Paleontologists** for projects in San Diego, Riverside, and San Bernardino Counties. Positions require a B.A. or M.A. in geology, paleontology, or a related field, and field experience in southern California. Current City of San Diego Paleontological certification preferred, or must be able to become certified immediately. Compensation will depend upon qualifications and ability. Please send or fax a current resume, or vita and references to [resumes@bfsa-ca.com](mailto:resumes@bfsa-ca.com) or fax to 858-679-9896.

**Brian F. Smith and Associates ([www.bfsa-ca.com](http://www.bfsa-ca.com))** offers consulting services pertaining to all aspects of paleontology, archaeology, biology, history, air, traffic, noise and investigations throughout the southwest, primarily in southern California. The combined experience of the principal consultants and associates represents over 100 years of involvement in the study of the history and prehistory of this region. BFSA's capabilities are highlighted by the range of current projects, including construction monitoring, data recovery mitigation programs, historical structure assessments, surveys and evaluations for both the California Environmental Quality Act (CEQA) and Section 106 of National Historic Preservation Act (NHPA).

---

**The San Diego Natural History Museum** is run and operated by the San Diego Society of Natural History, a private non-profit scientific organization incorporated in 1874. The Museum's mission is to interpret the natural world through research, education and exhibits; to promote understanding of the evolution and diversity of Southern California and the peninsula of Baja California; and to inspire in all a respect for nature and the environment.

Within the Museum, the Department of PaleoServices (DPS) specializes in paleontological resource management. Our focus is on the recognition, recovery, and preservation of the significant and unique paleontological resources that occur in this region. The activities of DPS are helping to preserve significant fossil assemblages and are directly contributing to the growth of the important paleontological research collections at the Museum. We are currently looking to fill the following position:

**Paleontological Field Manager:** Position responsibilities include coordination of paleontological field activities (i.e., supervision of field monitors in prospecting for and collection of fossils and the recording of stratigraphic, taphonomic, geographic, and topographic data) and production of final project reports that summarize the methods and preliminary results of paleontological salvage activities. Other duties include generation of initial discovery letter reports for City, County, and/or State agency managers and generation of paleontological resource assessment technical reports. Opportunities also include paleontological field work in the Southern California region and working with the extensive fossil collections of the San Diego Natural History Museum.

Qualified candidates must have at least a B.S. Degree in Geology or Paleobiology; 2 to 3 years of relevant experience (especially sedimentary geology and paleontology); excellent supervisory/managerial, verbal, written, and interpersonal skills; and a strong work ethic, intense drive, and initiative for quality and customer service. This position is a regular, full-time salaried position with a generous benefits package (e.g., full medical and 401K plan). Compensation will be based on individual qualifications and experience (annual salary range \$40,000 to \$60,000).

**This just in from Sue Tanges:**

>>> DNR-HR 11/2/2009 4:46 PM >>>

Listed below is one announcement that is available on the Utah Job Match Recruitment system. Go to <https://statejobs.utah.gov> to view and apply for these and other state positions.

**UTAH GEOLOGICAL SURVEY**

**PROJECT GEOLOGIST (INDUSTRIAL MINERALS GEOLOGIST):** This is a full-time career service position located in the Salt Lake Office. Replacing Wally Gwynn who is retiring.

Requisition #20432

CLOSES: 11/30/2009

\*\*\*THIS IS A PUBLIC RECRUITMENT\*\*\*

If you have any questions, please call the Human Resource Office at 801-538-7210.

~~~~~  
**YOUR JOB ANNOUNCEMENT COULD GO HERE:**  
~~~~~

**NEVADA MINERAL & BOOK COMPANY**

**HAS MOVED TO CALIFORNIA!**

**Please visit us at our new Orange County Bookstore and Natural History Gallery at:**

342 S. Tustin Street, Orange, CA 92866 (in Eldorado Plaza)

We have over 100,000 New & Used Books, Field Guides, Magazines & Journals, Government Reports and Maps on: *Geology, Natural History, Mineralogy, Paleontology, Gemology, Jewelry, Lapidary, Meteorites & Astronomy, Rockhounding, Prospecting, Mining, Western & Mining History, Hydrology, Geochemistry, Geophysics, Mining Engineering, Metallurgy and Chemical Engineering; also Mineral Specimens, Fossils, Decorator Items, Educational Kits, Mining Stock Certificates & Ephemera.*

For more information, including Grand Opening and store hours, please contact us at [minbooks@aol.com](mailto:minbooks@aol.com) or 714-633-1549.



# SAN DIEGO ASSOCIATION OF GEOLOGISTS

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

## 2010 MEMBERSHIP FORM

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

Please type or print clearly, and check your chosen delivery address below.

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

Include in directory \_\_\_\_\_

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

Include in directory \_\_\_\_\_

*Please include company or other affiliation*

Preferred Mailing Address (Check One):  Home  Work

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

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

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

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

**NEW POLICY:** Your membership dues include email delivery of the monthly newsletter. If you wish to receive a hardcopy of the newsletter through US Mail, please add \$10.00 to your membership dues.

Dues:	_____ Student Member (email delivery only)	\$ 5.00
(check choice)	_____ Regular Member (email delivery only)	\$ 25.00
	_____ Subscription to hardcopy newsletter	\$ 15.00
	_____ Corporate Sponsor (email delivery only)	\$100.00

*(Name as you would like it to appear in guidebook and website)*

New Member  Continuing Member

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