

SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT

WEDNESDAY, February 18, 2015

Got Calcite?

Presented by: Chuck Houser

Where: Marina Village Conference Room - Catalina Room

South end of the Marina Village Complex

1936 Quivira Way, San Diego, CA 92109



SDAG-1 2-2-2015

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: Italian Buffet. Cash bar

Cost: \$35 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 February 16th. Reservations cannot be guaranteed after Monday; but are always preferred over walk ins. Reservations well before the deadline are MUCH appreciated.

ABSTRACT

Calcite makes up about 4% of the earth's crust. The interesting thing about calcite is the sheer number of crystal forms and habits this mineral exhibits, as many as 3,500, depending on who you ask. Moreover, calcite forms twin crystals....following FOUR twin laws! So building a calcite collection offers virtually unlimited possibilities with respect to crystal forms, twins, localities, associations, color.....it is as close to a "bottomless pit" as any collecting possibility I know of. It also offers an interesting challenge: getting color into the collection. Calcite itself comes in two colors, white (actually colorless), and pale yellow. So getting colors other than white and pale yellow in your display cabinet requires a little work, but that is part of the fun.

As for calcite localities, they are, like the crystal forms, varied and abundant. Calcite collections will include specimens from every major country (and a number of minor ones), and from a wide array of occurrences. And of course there are those "classics," occurrences and localities that anyone collecting this mineral must have to claim rights as a true calcite collector. This talk presents an expose of this mineral from the standpoint of mineral specimen collecting. We will discuss its crystal forms, twinning, the big challenge to calcite collecting, localities, classics and finally we will see what happens when six calcite collectors get together and are allowed to have ideas unchecked by reasonable people.

By the way, as you recall from your mineralogy classes, calcite has a hardness of 3 on Mohs hardness scale, so you might consider removing your wedding ring before you handle your fine specimens of this abundant and varied mineral.

> SDAG-2 2-2-2015

SPEAKER BIO

Chuck Houser

In the early 80's, while a student at SDSU working toward a bachelor's degree in geology, I took a mineralogy class with Dr. Richard Berry. Shortly after taking that class, while on a driving trip from Missouri to California, I encountered a mineral and rock shop somewhere in western Missouri. Perusing the fine mineral specimens in that shop, I realized that I recognized many of the species, and so I purchased many of them (thanks Dr. Berry!). At that mineral shop began the Houser Mineral Collection.

There can be a bit of an art to mineral collecting, and only the richest can afford to simply collect EVERYTHING that catches their eye. Most collectors specialize: a specific country, a mining district or even a specific mine, or a single mineral species. Due largely to the influence of a long time neighbor who collected calcite specimens, I began to specialize in calcite from worldwide localities, a specialization that I have continued over a roughly 32 year collecting history, as well as other minerals from San Diego County, and from the Elizabeth R Mine in Pala. At one point I even sold most of the calcite collection in order to fund the purchase of one kunzite specimen from the Pala Chief Mine. However I kept the twins and some of the unusual and hard to find specimens, which became the basis for eventually re-building the calcite collection. Today that collection is around 200 pieces.

In my spare time, I am a hydrogeologist and project manager for SCS Engineers in San Diego.

SDAG MEETING SCHEDULE

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.

March 18, 2015	Student Presentations – Part I
April 15, 2015	Student Presentations – Part II
TUESDAY, MAY 12th!	Monte Marshall – Geology of the Polynesian Islands

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2015 SDAG EXECUTIVE COMMITTEE

PRESIDENT - Jennifer Bauer Morton; geologyjen@yahoo.com

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

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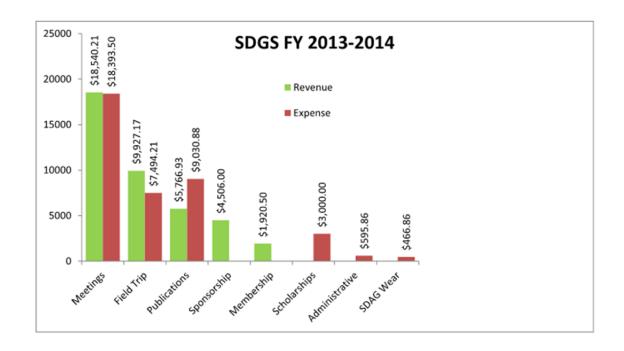
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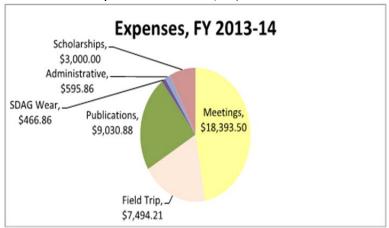
SDGS ANNUAL REPORT

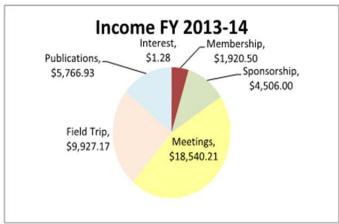
The most recent San Diego Geological Society Fiscal Year (FY) ran from July 1, 2013 to June 30, 2014. Our largest program is SDAG, which operates monthly meetings, and annual weekend field trip, and short "one-stop wonder" field trips. We also keep a backlist of previously published field trip guidebooks and other books in print, and provide student scholarships to community college, undergraduates, and graduate students who show promise as geological researchers. Our notable operational achievements this year were:

- 12 monthly SDAG dinner meetings each featuring a technical lecture
- A field trip to the San Luis Rey River watershed, led by Brian Olson
- A OSW to the Rose Canyon fault at La Jolla Shores
- \$3,000 of scholarships to three worthy students
- Publication of two new field trip guidebooks: San Luis Rey on Display and Palms to Pines



Our corporate treasury has been in good shape in no small part because of the careful diligence of our corporate treasurer. Our total year revenues were \$40,661 and total expenses were \$34,919. Our total cash assets this year ended with \$16,974.



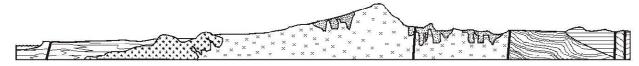


Dave Bloom SDGS president

2015 SDAG MEMBERSHIP

It's that time of the year to renew your membership. 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.

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SAN DIEGO ASSOCIATION OF GEOLOGISTS

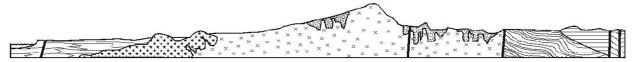
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2015 MEMBERSHIP FORM

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NOTE: Your members email addresses giver		SDAG newsletter and announcements to the
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San Diego Association of Geologists (SDAG) 3130 N Evergreen Street San Diego, CA 92110

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SAN DIEGO ASSOCIATION OF GEOLOGISTS 2015 SPONSORSHIP FORM

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Are you interested to serve as an off	cer? Willing to volunteer as a guest speaker?	
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San Diego Geological Society, Inc.	Donations may also be made	

San Diego, California 92110 Thank you!

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Revised 11/18/2014

SDAG PRESIDENT'S CORNER

Greetings SDAG Members!

I hope everyone's New Year has started out great! Our January meeting was great fun with only a few glitches – hopefully no one got lost in Balboa Park trying to find the back entrance to the San Diego Model Railroad Museum! We had a great turnout and attendees were given tours of the museum. Reena Deutsch provided an informative talk with wonderful historic photos of the San Diego and Arizona Railroad. And I must give a big "thank you" to past president Cari Gomes for bartending!

In January we were treated to a One Stop Wonder lead by Don Vaughn. It was a perfect SoCal January morning for a hike into the marine terrace at Sunset Cliffs. I now know that "Urban Geology" means watch out for broken glass and hazardous waste!

This month, you won't want to miss former SDAG President Chuck Houser's talk on the mineral calcite. Chuck's talks area always fun and entertaining, and his enthusiasm for this common yet surprisingly varied mineral is sure to be contagious.

I'd like to remind everyone to check out SDAG's new Facebook page – please "like" it and feel free to post articles, announcements, geology photos, etc. And please recommend it to your friends and colleagues!

Lastly, the planning for SDAG's 2015 field trip is well underway, and papers are being accepted for the guidebook. This year we are headed to – and up – the Coyote Mountains for an intense field trip to see some amazing geology! Stay tuned for more info!



One-Stop Wonder at Sunset Cliffs

Jennifer Bauer Morton, PG SDAG President

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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 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

2014 Outstanding Student Award Winners

Congratulations to our 2014 SDAG Student Award Recipients! The five \$1,000 Outstanding Student Awards were presented at the December SDAG meeting to the following students:

Xiomara Rosenblatt-Dailey, Southwestern College

Through an internship at the San Diego Natural History Museum, Ms Rosenblatt is working on the identification of Eocene Chondrichthyans.

Clifford Hoang, undergraduate, University of California San Diego

Mr. Hoang is working on small-scale sea surface salinity variability in the Middle Atlantic Bight.

Tyler Barnes, undergraduate, University of San Diego

Mr. Barnes is monitoring turbidity in bays with coral reefs, St. John, US Virgin Islands

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Bridget Borce, undergraduate, San Diego State University

Ms. Borce is working on the development of the Florissant Fossil Beds National Monument Geologic Guide in Teller County, Colorado.

Ashley Heath, graduate student, San Diego State University

Ms. Heath is working on effects of illuviation on the petrology and chemistry of tonalitic saprock.

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

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Geology Books for Sale

A local geologist has a large collection of historic books for sale on coastal geology, sedimentology, marine geology, and oceanography, many of which are out of print. If interested, please email Gerry Kuhn at gerrygkuhn@gmail.com.

Here is a preliminary list of the publications for sale:

- 1858. Mathew F. Maury. The Physical Geography of the Sea. Harper and Brothers, Publishers., New York, 570pp. w/plates (Good).
- **1880.** Dana, J.D., Manual of Geology: Treating of the Principles of the Science, with special reference to American Geological History. 3rd edition, Ivison, Blakeman, Taylor and Co., Publishers, Trubner and Co. London. (Good)
- 1886. Winchell, A. Walks and Talks in the Geological Field. Chautaugua Press, NY., 329pp. (Good).
- **1890.** Charles Darwin. On the Structure and Distribution of Coral reefs; also Geological Observations on the Volcanic Islands and parts of South America; Ward, Lock and Co., London., 549pp. (The Minerva Library of Famous Book, ed. G.T.Bettany). (Fair to Good).
- 1891. Le Conte.J., Elements of Geology., Appleton and Co. NY., 640pp. (Fair).
- **1898**. Green, J.R., A Short History of the English People (with maps and tables), New Edition, Revised., Harper and Brothers, Publishers., New York and London, 871pp. (Fair to Good).
- 1903. LeConte, J., Elements of Geology, 5th edition., D. Appleton and Company., 667pp. (Fair).
- 1904. Chamberlain, T.C., and Salisbury, R.D., Geology. Vol. I-Geologic Processes and Their results., Holt and Co., 654pp. (Fair to Poor).
- **1905.** Fairbanks, H.W., Practical Physiography (with 900 colored maps and three hundred ninety four illustrations, Allyn and Bacon, Publishers, Boston and Chicago., 542pp.(Good to Very Good).
- 1907. Salisbury, R.D., Physiography., Henry Holt and Company, NY., 770pp.(Good).
- 1907. Chamberlain, R.T., and Salisbury, R. D., Geology., Vol. II Earth History., 2nd Ed., Revised., Holt and Co., 692pp. (Fair to Poor).
- 1908. Davis, W., M., Practical Exercises in Physical Geography. Ginn and Company, Boston, MA. 148pp. (Good).
- 1909. Chamberlain, T.C. and Salisbury, R.D., A College Textbook of Geology., Henry Holt and Company, New York, NY., 978pp. (Fair).
- 1915. Piersson, L.V., and Schuchert, C. A Text-Book of Geology., Wiley & Sons. 1051pp.
- **1920.** Piersson, L.V., and Schuchert., C.. A Textbook of Geology: Part One Physical Geology, 2nd edition-revised, Wiley and Sons Inc., 471pp.(Fair to Good).
- **1924.** Alfred Wegener. The Origin of Continents and Oceans. Translated from the 3rd German Edition, with introduction by J. W. Evans, E.P.H. Dutton and Company, Publishers. Great Britain, 212pp. (Fair).
- 1925. Johnson, D. The New England-Acadian Shoreline. Wiley and sons., NY.,608pp. (Good).
- 1926. Daly, R.A.. Our Mobile earth. Charles Scriberner's Sons, NY., 342pp.
- **1928.** W.A. J.M. Van Waterschoot Van Der Graucht et al. A Symposium on the Origin and Movement of Land Masses both Inter-Continental and Intra-Continental, as Proposed by Alfred Wegener., Amer. Assn. Petroleum Geologists, Tulsa, OK., 240pp. (Good).
- 1929. Cleland, H.F.. Geology: Physical and Historical. Amer. Book Company, NY., 718pp. (Good)
- 1929. Gieke. A., (Sir). Text-Book of Geology. 3rd edition., P.F. Collier and Sons., NY., 503pp. (Fair).
- 1929. Pirsson, L.V., and Schuchert, C., A Textbook of Geology, Wiley and Sons., 3rd Ed., 488pp. (Fair to Good).
- 1930. Tarr, R.S., and Martin, L., College Physiography. MacMillan Company., NY., 837pp. (Good).
- 1931. Hobbs, W.H., Earth Features and Their Meaning: Geology, 2nd. Ed., MacMillan Co., N.Y., 517pp. (Good).
- 1931. Fenneman, N.M.. Physiography of Western United States, 1st edition, 2nd impression. McGraw-Hill Book, Company, Inc., NY., 534pp. (Good)

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- **1931.** Longwell, C.W. and Schuchert, C., Foundations of Geology., Wiley and Sons., (Physical Geology Section, 256pp.); (Historical Section, 2nd edition, rewritten, 328pp.). (Fair to Good).
- 1932. Scott, W.B., An Introduction to Geology., Vol. I, Physical Geology, 3rd Ed., MacMillan Co., N.Y., 604p.
- 1932. Trask, P.D., Origin and Environment of source Sediments of Petroleum, Amer. Pet. Institutut., 309 (Poor).
- 1938. Johnson, D.W.. Shore Processes and Shoreline Development., Wiley & Sons., 1st ed., 4th printing, 584pp. (Good).
- 1938. Fenneman, N.M., Physiography of Eastern United States., 1st edition., McGraw-Hill Book Company, Inc., 714pp. (Good).
- 1939. Lobeck, A.K., Geomorphology. 1st edition., McGraw-Hill Publishing Company, Inc., NY., 731pp. (Good).
- 1939. A Textbook of Geomorphology. D. Van Nostrand Company, Ltd. 565pp.
- 1947. Jaggar, T.A., Origin and Development of Craters., Geol. Soc. Of Amer. Memoir 21., 508pp. (Very Good).
- **1948.** Larsen, E.S., Jr., Batholith and Associated Rocks of Corona, Elsinore, and San Luis Rey Quadrangles, Southern California., Geol. Soc. Of Amer. Memoir 29., 182pp. (Good).
- **1957**. Hedgepeth. J.W., Editor. Treatise on Marine Ecology and Paleoecology., Vol. #1-Ecology. Geol. Soc. Of Amer. Memoir 67., 1296pp., (Very Good).
- 1957. Ladd, H.S., Editor., Treatise on Marine Ecology and Paleoecology., Vol#2 -Paleoecology. Geol. Soc. Of Amer. Memoir 67., 1077pp. (Very Good).
- 1951. Phleger and Parker. Ecology of Foraminifer, Northwest Gulf of Mexico., Geol. Soc. Of Amer. Memoir 46, 64pp. with plates. (Good).
- 1951. Kay, M. North American Geosynclines., Geol. Soc. Of Amer. Memoir 48, 143pp. ((Very Good).
- 1958. Cooper, W. S. Coastal Sand Dunes of Oregon and Washington., Memoir 72, 169pp. (Very Good).
- 1956. Hamilton, E. L., Sunken Islands of the Mid-Pacific Mountains, Geol. Soc. Of Amer. Memoir 64, 96pp., with Plates. (Very Good).
- **1971.** Khudoley, K.M., and Meyerhoff, A.A., Paleogeography and Geological History of Greater Antilles., Geol. Soc. Of Amer. Memoir 129, 199pp. (Very Good)
- 1977. Enos, P., and Perkins, R.D., Quaternary Sedimentation in South Florida., Geol. Soc. Of Amer. Memoir 147. (Very Good).
- 1981. Kulm, L.D., et. al., Eds. Nasca Plate: Crustal Formation and Andean Convergence., Geol. Soc. Of Amer. Memoir 154. 824pp. (Very Good

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Geology Job Opportunities/Requests

Staff to Project Level Geologist

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.

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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.

The following are our 2013-2014 Sponsors:

SDAG-14 2-2-2015