



SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT

Wednesday, April 20, 2005

JUST HOW DO PLATE MOTIONS CREATE BEAUTIFUL MOUNTAINS LIKE THE SWISS AND NEW ZEALAND ALPS?

presented by

Dr. Monte Marshall

SDSU

Where: Emiliano's Mexican Restaurant
6690 Mission Gorge Road
San Diego, CA 92120
619-232-3821

When: 6:00 pm – Social Hour
7:00 pm – Dinner
8:00 pm – Program



Photo by © Monte Marshall

Matterhorn, Swiss Alps

Directions: The old *Eva's*. Just north of Zion Avenue, where Friars Road east turns into Mission Gorge Road. It's at the far north end of the strip mall, northwest side of the street.

Dinner: Mexican Buffet.

Cost: \$20 per member and guests, \$10 for students. Add \$5 if you did not make a reservation.

Reservations: Make your reservation **online** at www.sandiegogeologists.org or call the SDAG Reservation Hotline at (619) 255-8380, **no later than 9:00 a.m. Monday, April 18th**.

RESERVATIONS CANNOT BE ACCEPTED AFTER Monday AT 9 AM.

2005 EXECUTIVE COMMITTEE

PRESIDENT - Margaret R. Eggers; *Eggers Environmental, Inc.*; Ph: (760) 757-7711; meggers@eggersenv.com

VICE PRESIDENT-Phil Farquharson; *CG-Squared Productions*, Ph:(619)224-8463; fax:(619)255-8380; geoguy@cg-squared.com

SECRETARY - David Bloom; *Anteon*; Ph: (619) 571-3470; secretary@sandiegogeologists.org

TREASURER - Sarah Gray; *University of San Diego*, Ph: (619) 260-4098; fax: (619)260-6874; sgray@sandiego.edu

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

BIOGRAPHICAL SKETCH: DR. MONTE MARSHALL



I was born and grew up in San Diego. After high school I attended Villanova University, PA, where I received a BA in philosophy, with a minor in math and physics. I then returned to San Diego and received my second bachelor's degree in geology at SDSU. Not completely saturated with school, I received my PhD from Stanford in geology and geophysics in 1971. After working in the paleomagnetism lab at the USGS in Menlo Park for four years, I returned to SDSU—where I have taught structural geology, geophysics, petroleum geology, paleomagnetism and plate tectonics (and rocks for jocks) for almost 30 years. My research has largely been the application of gravity to the study of faults, especially in metropolitan San Diego, and the application of gravity, magnetism, and paleomagnetism to structural and tectonic problems in southern and Baja California.

For a number of years I have given talks to the SDAG that were a series of “What exotic place did Monte visit/study this year?” ☺ Now that I have retired, I may just visit/study several exotic places each year! ☺

SUMMARY: JUST HOW DO PLATE MOTIONS CREATE BEAUTIFUL MOUNTAINS LIKE THE SWISS AND NEW ZEALAND ALPS?

The genesis of mountain ranges by plate tectonics, specifically the interactions of two plates at their joint margins, is common knowledge today. Less well known and understood are the specific mechanics of exactly how two plates involved in a convergence zone, whether it be collision or subduction, form earth's great mountain ranges. And what happens along a transform fault that has a component of convergence, or transpression? What exactly the thick continental and thin oceanic crust and the upper mantle below them do deep in an active convergence zone is largely hidden from our sight. It is the job of the geophysicist to image the buried processes and the job of the metamorphic petrologist and structural geologist to infer these processes from surface outcrops of rocks that geologically recently were thrust up from depths of 20 km or more.

I will try to show you, with scenes of beautiful alpine scenery and cross-sections, how earth scientists think such awesome places have been formed.

ANNOUNCEMENTS:

South Coast Geological Society Field Trip Guidebook 2004 (Catalina Island) will be available at our next meeting for \$45. See Bill Elliott.

70th Street Trolley Station will open this summer. Would anyone be interested in helping provide information, graphics, or ideas for a public display showing the geology (e.g., geologic history, stratigraphy, tectonics, etc.)? If so, please contact David Bloom at 619-571-3470 OR secretary@sandiegoeologists.org

DO YOU HAVE AN ANNOUNCEMENT?? Do you have an event, job opening, field trip or other announcement you would like to share with our members?? Just call or email our SDAG Secretary, **David Bloom** at 619-571-3470 OR secretary@sandiegoeologists.org.

SDAG Wear: - Monte (Murbach) has a variety of shirts, hats, visors and even a nice vest with the SDAG logo. A small selection is available for purchase at the meetings; all SDAG wear can be ordered from Monte.

ANNOUNCING THE SDAG 2005 ANNUAL FIELD TRIP and CALL FOR PAPERS!!



CARRIZO GORGE and SURROUNDING AREA October 22nd - 23rd

This beautiful gem of Southern California will be the destination for our 2005 field trip. We are hopeful of a special means of conveyance for this trip, which is still being arranged. SDAG members will camp at Dos Cabezas siding, and we will visit several points of interest: geologic, mining and cultural. The trip will be limited to 100 individuals, and carpooling is a must to keep things moving smoothly. Field trip stops have not been finalized so contact Phil Farquharson (sdag@cox.net) if you have a specific suggestion. We will make every effort this year to have the field guides printed and available the day of the trip so please submit papers early.

CALL FOR PAPERS!!

The field trip will focus on the old San Diego and Arizona Eastern Railroad right-of-way, but submissions which include or focus on eastern San Diego County and western Imperial County, as well as the border area of Baja California are welcome. Potential subjects may include updates on geologic/fault interpretations, weathering phenomena, local flora and fauna, and cultural, mining or historical interests. Please contact Phil if you would like to discuss a potential paper. The deadline for submission of papers and associated graphics is June 30th. Text can be an unformatted WORD file, with graphics in jpg, tiff, pdf, ai, or AutoCAD formats. CG-Squared Productions can handle it (he said bravely...).

MARK YOUR CALENDARS TODAY!

ANNOUNCEMENTS:

2005 SDAG MEETING SCHEDULE - Mark your Calendars!

We'll fill out the schedule as we get speaker confirmations and finalize meeting places. Meetings are usually on the 3rd Wednesday of the month but may change to accommodate speaker and meeting place schedules. Check here for updates!

| | |
|---|---|
| May 19** **NOTE This is a Thursday!! | Rick Halsey, The Chaparral Institute Mission Trails Park Nature Center |
| June 15 | TBD |
| July 20 | TBD |
| August 17 | TBD |
| September 21 | Phil Farquharson - Carrizo Gorge talk |
| October 22-23 | Annual Field Trip – Carrizo Gorge!!! (Note: dates are tentative.) |
| November | TBD |
| December 21 (?) | Annual Holiday Meeting at San Diego Natural History Museum! |

SDSU Geology alumni field trip. This year's field trip to the Mecca Hills/San Andreas Fault was led by SDSU's own Monte (Montek) Marshall, previously M-squared now known as M-cubed.

Monte Marshall, Robert Wallace, David M. Bloom, Vic Camp, P.J. DeRisi, Carole Ziegler, Sue Tanges, Damon DeYoung, Perry Crampton, Steve Zigan, Maria Nevarez, Steve Edelman, Joe Migliore, Chris Jones, Ann Jones, Gardner Jones, Erin ?, Mark Repking, Bob Repking, Steve Harrison, Bill Carrier, Scott Bryan, Danielle Verdugo, Julia Clark, Tim Middleton, Matthew Sisk, Audrey Reznik, Jose Reznik, Steve Glass, Joe Coronas, Mike Doss, Tone Turbyfill, Patrick Hinrichser, Rosemarie NMN Balance, Debbie Stonehouse, Jeremy Gunter, Zach Rayburn, Andrew Gritz, Damon Nygren, Joanna Nygren, Baby Nygren, Lisa Guertin, Dale Roseberry, Carole Roseberry, Adin Roseberry, Kay Mason, Nancy Rees, Joe Walsh, Bert Vogler, Gladis Chagollan.



Photo credit: Carole Ziegler

These are the 50 people we had signed in; if I missed anyone I am sorry. If your name is misspelled it's because I could not read your printing. Better luck next year.

- Joe Coronas, Alumni Field Trip Chairman

2005 Inland Geological Society Meetings

May 17, 2005 (Tuesday) - Speaker(s): Sponsored by CSU-SB, Geology Department, Dr. Alan Smith, Department Chair (with Erik Melchiorre): "Tour of New Facilities and Short Discussions of Programs, Geology Department, California State University, San Bernardino," hosted by CSU-SB, joint IGS joint meeting with Southern California Section, Society of Mining, Metallurgy and Exploration (SME).

June 1, 2005 - Dr. Gary Fuis, U.S. Geological Survey, Menlo Park, CA: "Geophysical and Geological results of active-source (dynamite) deep seismic work in southern CA leading to identification of a hazard in the form of a major decollement beneath the San Gabriel Mountains, and apparent connection to the Puente Hills thrust fault system" (subject, not talk title)

IGS Short Course May 14: Introduction to well surveying and borehole geophysics (10am to 3pm)

Thank you SDAG Corporate Sponsor Sherry Bloom, Coldwell Banker Real Estate for use of printer and copy machine to produce this newsletter!

JOB OPENINGS!

Ninyo & Moore's San Diego Environmental Division has immediate employment opportunities for individuals with California certifications and experience performing and overseeing asbestos and lead-based paint field projects. Appropriate certifications include Certified Asbestos Consultant, Site Surveillance Technician, and Lead Inspector/Assessor/Project Monitor. Individuals with California asbestos and lead experience and certifications is preferred. Experience with Phase I and II Environmental Site Assessments is a plus, but is not required. Please forward resumes to the attention of Ms. Margot Graves, Ninyo & Moore, 5710 Ruffin Road, San Diego, California 92123 or mgraves@ninyoandmoore.com. Ninyo & Moore is an Equal Opportunity Employer.

Positions Available - Hydrogeologists and Engineering Geologists

GeoSyntec Consultants is a growth-oriented national environmental consulting firm providing innovative solutions in the fields of contamination assessment/remediation, environmental due diligence/compliance, solid waste and water resources. We are seeking top candidates for positions in our Southern California offices. Candidates must be working towards a B.S. or advanced degree in geology with an emphasis in hydrogeology, geochemistry, or engineering.

GeoSyntec's goals are to provide the best possible service and value to our clients, to advance technology in our primary practice areas, and to provide a stimulating, progressive, and friendly work environment that will enable us to continue to recruit and retain great staff. Find out more about us on the internet at <http://www.geosyntec.com>.

GeoSyntec Consultants is an Equal Opportunity/Affirmative Action/Equal Access employer. We welcome the applications of all qualified males, females, minorities, veterans, and the disabled.

Applicants should forward qualifications and a list of references to: joinussandiego@geosyntec.com

2005 CORPORATE SPONSORS - THANK YOU!!

Corporate sponsors provide a significant portion of SDAG's operating and scholarship budget. Please renew your Corporate Sponsorship for 2005! In addition to monthly recognition for your contribution, you will be entitled to a free Internet "link" from the [SDAG Website](#), and all Corporate Sponsors are listed in the front of the annual SDAG Field Trip Volume.

| | |
|---|--|
| Ninyo & Moore , Jonathan Goodmacher | Lowell Lindsay, Sunbelt Publications |
| Katherine Freese | Lee Vanderhurst, Geotechnics, Inc. |
| Hargis + Associates, Inc. , Mike Palmer | David and Jan Steller |
| Southwest Geophysics, Inc. | Phil Farquharson, CG-Squared Productions |
| Dr. Margaret Eggers Eggers Environmental, Inc. | Sue Tanges, Southland Geotechnical Consultants |
| Joe Coronas, City of San Diego | John Hoobs - Geocon, Inc. |
| Donald Sorben | Monte and Diane Murbach |
| William J. Elliott, Engineering Geologist | Carole L. Ziegler |
| Geopacifica, Inc. - James Knowlton | Vinje & Middleton Engineering, Inc |
| John Peterson, Peterson Environmental Services | Tom Rockwell, Earth Consultants International |
| Pat Brooks and Julie Crosby | Laura Maghsoudlou, EnviroMINE, Inc. |
| Dr. Monte Marshall | Dr. Anne Sturz |
| Dr. Richard Berry | Carolyn Glockhoff , Caro-Lion Enterprises |
| First National Oil, Inc. | Sherry Bloom , Coldwell Banker Real Estate |
| GeoSoils, Inc. , Robert Crisman and John Franklin | Fugro West, Inc. / Fugro Pelagos, Inc. – Jerry Wilson |
| Dr. Sarah Gray - University of San Diego | Doug Peeler, Bechtel Environmental, Inc. |
| "Fast Eddie" G. Hammond, Robert Walters Equipment Rental | |

**San Diego Association of Geologists
c/o David M. Bloom
3728 Mt. Almagosa Place
San Diego, CA 92111**