



## SAN DIEGO ASSOCIATION OF GEOLOGISTS

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### SDAG MEETING ANNOUNCEMENT

Joint Meeting with the Inland Geological Society  
Wednesday October 16, 2002

#### *“Debris Flows in Southern California”*

*presented by* **DOUG MORTON**

**Where:** TEMECULA EMBASSY SUITES

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

**Directions:** Temecula, 29345 Rancho California Road. Take I-15 north to Temecula. Exit at Rancho California. The hotel is on the corner of Rancho California and Ynez Rd.

**Dinner:** Chicken Picatta - Grilled Chicken Breast served over a blend of Wild Rice with a Mushroom Caper Sauce, includes Chef's Selection of Vegetables, Tossed Green Salad, Rolls and Butter and Coffee and Iced Tea and Dessert.

**Cost:** \$25.00/person, \$10/student

**Reservations:** Make your reservation online through the SDAG website at [www.sandiegogeologists.org](http://www.sandiegogeologists.org) or call the SDAG Reservation Line at: (619) 521-0165, ext. 190, **no later than NOON! Tuesday, October 15<sup>th</sup>**. Contact Margaret Eggers at (619) 521-0165, ext. 132 with any questions.

#### *Debris Flows in Southern California*

**Speaker:** **Doug Morton, USGS and Adjunct Professor, University of California, Riverside**

Most debris flows in southern California are generated by winter rains, especially in the so-called El Nino years. Other debris flows are generated during earthquakes, by monsoon rains, and by the melting of snow. Debris flows can be divided into primary debris flows, those initiated as debris flows and secondary, those that begin as another form of landslide and transform into debris flows. Most debris flows generated by monsoon rain and channel scour are primary. Most generated by the melting of snow and El Nino winter rains are the end product of a landslide process. Flow in most of the debris flows is laminar; some monsoon generated debris flows incorporate sufficient water to develop into turbulent debris avalanches.

Southern California possesses spectacular world-class landslides such as the Blackhawk and Martinez Mountain landslides. At the other end of the landslide spectrum is the rainfall generated soil slip that individually are geologically insignificant, but cumulatively displaced enormous amounts of material. Soil slips originate during the rain and are of short duration. Most rainfall generated soil slips disintegrate to form debris flows that carry the soil slip material down slope at various distances. In contrast to 'bedrock' or 'deep-seated' landslides, the soil-slip debris-flow processes is the geomorphic agent that maintains slopes through parallel slope retreat. Unlike bedrock landslides that are recognizable for long periods of time, soil-slip debris-flows are quickly obscured. Examples will be given for Ventura-Santa Paula, Laguna-Trabuco, and the San Timoteo Badlands area. If time permits examples of our current state of developing debris flow susceptibility maps for El Nino generated debris flows will be presented.

Monsoon rain generated debris flows are generally associated with the desert areas, especially the Colorado Desert. However some areas of the San Gabriel and San Bernardino Mountains have ideal settings for generating debris flows and some of these areas have much shorter debris flow recurrence intervals than the desert areas. These flows are produced by short-duration high rainfall, and are short lived. Examples of debris flows, debris flow fan morphology, and the July 11, 1999 debris avalanche will be presented for the Forest Falls area.

Areal and quantitatively restricted are debris flows generated by the melting of snow. These appear to be essentially limited to the Pelona Schist. Investigated debris flows appear to be the final part of a long term landslide cycle. Unlike the short duration rainfall generated debris flows, these debris flows occur over protracted periods of time – days through weeks. Examples will be given for the eastern San Gabriel Mountains.

### **RECORD ATTENDANCE AT AUGUST MEETING**

The SDAG meeting for August at the Chula Vista Nature Center produced a record number of attendees. About one hundred geology folks attended the Dibblee Medal Presentation for Dr. Gordon Gastil. The record number of attendees as well as a large number of folks who had no reservations stressed the meeting room as well as our caterer – but seems like the beer and the good vibes were in plentiful supply and there were a lot of folks enjoying talking about old times and sharing their “Gordon” stories. We were pleased to have several senior people from the Dibblee Foundation in attendance, most especially Tom Dibblee himself. Tom Dibblee personally awarded Dr. Gastil his medal and placed it around his neck. We were all glad to share in the moment with Dr. Gastil and his family.

Thanks to all our members and attendees who made the evening special!

### ***2002 FIELD TRIP - A TERRIFIC SUCCESS!!!***

- **2002 Field Trip - SDAG with Universidad Autonoma de Baja California (UABC):** About 60 people from SDAG and 10 from UABC enjoyed a neat field trip on September 21 and 22. Field trip stops included examples of tonalite, granodiorite, and gabbroic plutons that help make up the peninsular range batholith; skarn and pegmatite deposits at the El Fenómeno tungsten mine; rhyolitic dike swarms that extend northwest from Ojos Negros nearly 100 km; the Agua Blanca fault and uplifted marine terraces at Punta Banda; and a tour of UABC's fisheries replenishment program where totoaba are being bred and raised for release to their native habitat in the northern Sea of Cortez. Everyone enjoyed camping at East Kennedy Cove beneath a full moon with dinner catered by Celia's at La Bufadora and pie (yes, pie!) from Janet's Restaurant. Thanks to all those who attended and especially those who helped with the planning and presentations, including:



Sunrise view from Camp Site at Kennedy Cove

- Jorge Ledesma Vásquez, UABC
- Phil Farquharson, SDSU
- Doug Peeler, Bechtel National Inc.
- Pat Brooks, Anteon International Corp.
- Julie Crosby-Brooks, Anteon International Corp.

The field trip guidebook is in preparation and should be ready soon. Thanks again to all who attended!!!

### ANNOUNCEMENTS:

**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, Margaret Eggers at 619-521-0165 OR [meggers@hargis.com](mailto:meggers@hargis.com).

**SDAG NEWSLETTER IS DIGITAL!** If we don't have your e-mail address, or your email address changes, or if you have problems with the electronic format please contact Margaret Eggers at [meggers@hargis.com](mailto:meggers@hargis.com), or call at 619-521-0165, ext. 132.

**SDAG Wear:** - Monte 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.

**SDAG Scholarships:** - Please see Bob Stroh regarding potential candidates for 2002 SDAG scholarships.

**SDSU Geology Department Seminar Series** – Wednesday Afternoons - The seminar announcement page is at: [www.geology.sdsu.edu/seminars/](http://www.geology.sdsu.edu/seminars/)

### Upcoming 2002 Meetings:

November 20 <sup>th</sup>	“Geotechnical Input to Tunnel Construction Projects,” by Dr. Ronald Smith of Kleinfelder, Location Tom Hamms Lighthouse
December	Annual Holiday Meeting

### **2002 EXECUTIVE COMMITTEE**

**PRESIDENT** - Bob Stroh; Kleinfelder, Inc.; Ph: (858) 320-2000; fax: (858) 320-2001; [rstroh@kleinfelder.com](mailto:rstroh@kleinfelder.com)

**VICE PRESIDENT** - Patrick Brooks; Anteon Corp.; Ph: (619) 532-0930; fax: (619) 532-0995; [brooksgp@efds.w.navy.mil](mailto:brooksgp@efds.w.navy.mil)

**TREASURER** - Monte Murbach; Southern California Soil & Testing; Ph: (619)-280-4321; fax: (619)-280-4717; [mmurbach@scst.com](mailto:mmurbach@scst.com)

**SECRETARY** - Margaret Eggers; Hargis + Associates, Inc.; Ph: (619)-521-0165; fax: (619) 521-8580; [meggers@hargis.com](mailto:meggers@hargis.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; Ph: (858) 549-3396; [carolion@znet.com](mailto:carolion@znet.com)

## 2002 CORPORATE SPONSORS

**THANK YOU!!** to ALL our 2002 Corporate Sponsors! And a Special THANK YOU! to Geotechnics, Inc. for their \$1000 contribution to SDAG. A significant portion of the SDAG operating budget is provided by corporate sponsorship. Please consider becoming a Corporate Sponsor! 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.

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### POSITIONS AVAILABLE:



**HARGIS + ASSOCIATES, Inc.** San Diego: is looking for a **CIVIL ENGINEER**. 10 years minimum experience required in soil and groundwater remediation and regulatory interface. Excellent opportunity for an experienced, registered California Civil Engineer. Strong leadership skills required. Excellent salary/benefits and work atmosphere. Send resume to: Kim Stransky, Hargis + Associates, Inc., 2365 Northside Drive, Suite C-100, San Diego, CA. 92108. EOE M/F/D/V. Hargis + Associates is a SDAG Corporate Sponsor. Visit us at [www.hargis.com](http://www.hargis.com).



TerraPacific Consultants, Inc. is a San Diego based geotechnical consulting firm specializing in soil and foundation engineering throughout the southwest. We are seeking a motivated **engineer** or **geologist** for our San Diego office who is interested in finding solutions to challenging geotechnical problems. We are looking for an honest, hard working, technically minded person to perform subsurface investigations, collect field data, perform geotechnical analysis and write reports. Qualified candidates must be close to registration, minimum of 2 years experience and possess good communication skills. Some experience in geotechnical forensic investigations is preferred. Field work and out of town travel will be required on regular basis throughout California, Nevada, New Mexico and Arizona. Position demands an organized, self-starter with the ability to get things done in a timely manner. TerraPacific offers the opportunity to learn and advance your career by working with seasoned professionals. We are a small but growing company with a staff of 14. We also have our own soils laboratory. The right qualified, independent and hard-working individual will be offered an excellent salary, profit sharing and benefit package commensurate with their experience. If you are interested please submit a resume and cover letter to: **TerraPacific Consultants, Inc. 12245 World Trade Drive, Suite G, San Diego, CA 92128** fax to 858-521-1199. e-mail to [rheap@terrapac.net](mailto:rheap@terrapac.net)

- Job Opening: **Field Geologist**. 3-7 years of experience. Experience with well drilling, installation and maintenance; core sampling, drilling rig experience and report writing required. Environmental background desirable. Position is in San Diego. Contact Onsite Companies. Contact Russell C. Waehler 619-278-3007 (business line) 619-278-3090 (fax line); [rwahler@onsitecompanies.com](mailto:rwahler@onsitecompanies.com).
- **Geocon Consultants, Inc.**, a San Diego-based environmental services firm, is seeking **Senior Staff** Geotechnical Engineer with 2 to 4 years experience. BSCE required, MSCE preferred. Registration desirable. Previous experience in land development a plus. **Project Geotechnical Engineer** with 3 to 5 years experience. BSCE required, MSCE preferred. Registration required. Experience in land development a plus. **Engineering Field Technician** with 2+ years experience desired but not mandatory. Land development and/or hillside experience a plus. E-mail resume to [hr@geoconinc.com](mailto:hr@geoconinc.com) or fax (858) 558-6159 or mail to Human Resources, 6960 Flanders Drive, San Diego. 92121.
- **STAFF ENGINEERS & SOIL TECHNICIANS** – Southern California Soil & Testing, Inc. (SCST) has 2 - 3 positions available for experienced staff engineers and soil technicians with several years experience towards registration and certification. SCST offers a comprehensive compensation and benefit package, and the opportunity to work on a wide range of projects. Submit resumes in confidence to SCST, 6280 Riverdale Street, San Diego, California 92160-0627, Attn: Steve Jensen, or fax to (619) 280-4717.
- [Ninyo & Moore](#) has the following positions to be filled in San Diego:  
**Project-level Geotechnical Engineers and Geologists** (5+ years experience)  
**Staff and Senior Staff-level Geotechnical Engineers and Geologists** (2+ years experience)  
**Staff and Senior Staff-level Environmental Scientists, Geologists and Engineers** (1+ years experience); **Field Technicians** with appropriate soils and materials testing certifications;  
**Deputy Inspectors** for concrete, masonry, welding and structural steel. ICBO certification required, DSA and City of San Diego certification a plus. Please submit resumes in confidence to the Corporate Personnel Director at: Ninyo & Moore, 5710 Ruffin Road, San Diego, California, 92123, or via e-mail at [careers@ninyoandmoore.com](mailto:careers@ninyoandmoore.com). EOE. [Ninyo & Moore](#) is a **SDAG Corporate Sponsor**.

**San Diego Association of Geologists  
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