

SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT

Wednesday, November 15, 2006

THE SAN JACINTO FAULT

presented by

Dr. Tom Rockwell San Diego State University

- 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
- **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 <u>online</u> at <u>www.sandiegogeologists.org</u> or call the SDAG Reservation Hotline at (619) 255-8380, no later than 5:00 p.m. <u>Monday</u>, November 13th.

RESERVATIONS CANNOT BE ACCEPTED AFTE<u>R Monday AT 5 PM</u>. IF YOU DO NOT MAKE A RESERVATION, WE CANNOT GUARANTEE YOU A MEAL.

2006 EXECUTIVE COMMITTEE

PRESIDENT - Phil Farquharson; CG-Squared Productions Ph(619)224-8463 fax(619)255-8380 geoguy@cg-squared.com VICE PRESIDENT- David Bloom; Anteon; Ph: (619) 571-3470; vp@sandiegogeologists.org SECRETARY – Scott Snyder; Ninyo & Moore; Ph: (858) 576-1000; sdag2006@prodigy.net 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 SUMMARY: DR. THOMAS ROCKWELL

Dr. Thomas Rockwell is a nationally and internationally renowned paleoseismologist and geomorphologist. He is an expert on the soils and tectonics of southern California and Baja California. He has conducted extensive trenching programs to date earthquakes on faults in the western U.S., Middle East and Asia, and his research is routinely used to date and reconstruct landscapes, assess rates and determine the age of faulting, as well as assess flood hazards. He often acts as a consultant for local geotechnical and archaeological consulting firms, providing input on the age of the soils or geomorphic surfaces of interest and assisting with fault evaluations. In addition to his duties as a professor of neotectonics and Quaternary geology at San Diego State University, Dr. Rockwell has been the principal investigator for numerous research studies funded by the National Science Foundation, the U.S. Geological Survey, and the Southern California Earthquake Center. He serves on several national-level research panels, including NEHRP, NASA, and SCEC, and has served on the Board of Directors for the Seismological Society of America and the Southern California Earthquake Center.

THE SAN JACINTO FAULT

In June of 2005, several moderate earthquakes struck the San Jacinto Fault. A 4.9-magnitude guake occurred three miles northeast of Yucaipa in the foothills of the San Bernardino Mountains. There were no reports of damage or injuries, but people throughout Southern California felt the tremor. Two days before, on Tuesday evening, the state issued a tsunami warning after a 7.0-magnitude guake off the coast of Northern California, west of Crescent City. The warning was later canceled. And two days before that, a 5.2magnitude quake struck near Anza, 20 miles south of Palm Springs. This caused laypeople to ask: "Could this mean a catastrophic

earthquake is imminent in Southern California?"

Tom Rockwell was one of the first geologists the San Diego Union-Tribune went to for answers. He felt that Tuesday's guake near the Oregon border was almost certainly not related to the Southern California guakes because of the distance between them. But he didn't know whether the two Southern California guakes that week were related, or if they portend more or larger ones.

Some say the two Southern California guakes are notable for their size and proximity to a span of the San Jacinto fault called the Anza seismicity gap. This gap, a 12 -mile-long stretch of the fault south of Hemet, hasn't been seismically active for at least 245 years.

"It's been very quiet, which we've interpreted to mean it's locked and storing energy for a large quake," said Rockwell.

Meanwhile, the Yucaipa temblor occurred on the San Andreas fault, also in a region that hasn't ruptured for more than 300 years. Two hundred years is the average return time for guakes in the region registering over a 7.0 magnitude.

Rockwell said these guakes may be precursors of a larger one. But when and if that major guake happens are still unanswerable questions. Scientists cannot predict when earthquakes will strike, and Rockwell's comments - filled with qualifiers - echoed that fact.

"That they occurred so close in time and in significance is very interesting, but it's pure speculation to say what they mean," he said. "We're due for a big quake in the near geologic future, but that could still be decades away - or much sooner."

Tom will be filling us in on what's been shaking in the Anza seismicity gap, as well as the many other sections of the San Jacinto fault zone in which he has been working for many years.

SDAG - 2



2006 SDAG MEETING SCHEDULE - Mark your Calendars!

Meetings are usually on the 3rd Wednesday of the month but may change to accommodate speaker and meeting place schedules. Check here for updates!

November	Tom Rockwell, The San Jacinto Fault
December	San Diego Natural History Museum (Party Time!)
January	TBA

PRESIDENT'S CORNER:

October (TWICE) - Monte(k) Marshall gave us a preview of his part of the 2006 SDAG Field Trip at the regular meeting. Then, a mere ten days ago (how is that possible?), we ventured out past "where the pavement ends." The field trip came off without a hitch - no fires, no running out of food or beverage, etc. Catering was handled by Toni Menghini and accomplices, with lots of leftovers.

November - Dr. Tom Rockwell of SDSU will enlighten us on the latest doin's of the San Jacinto fault, rather than the neotectonics of Panama, where he's been working of late. He is not at liberty to share the information regarding Panama just yet. The meeting place for Tom's talk will be Emiliano's again - be sure to make your reservation!

December - San Diego Natural History Museum, of course. I'll hand the gavel/hammer over to Dave Bloom, who is already bursting with ideas for next year's programs.

P.S. We are looking for a new treasurer for next year. Be ready for a four-year commitment to our organization, where you will move through the officer positions: treasurer, secretary, vice president (+ field-trip coordinator), then president. Who is ready to throw his/her name into the hat? Stay tuned...

ANNOUNCEMENTS:

The National **Association of Earth Science Editors (AESE**), a GSA and AGI affiliate organization, is holding its 40th annual meeting in San Diego at the Hacienda Hotel in Old Town November 8-11, 2006. The mission of AESE is to enhance the communication of earth science information and education and to strengthen the profession of earth science editing. Membership is \$35/year and offers a Web page www.aese.org www.aese.org to members who freelance within the profession. Please contact Lowell Lindsay or Phil Farquharson for further information.

100 years ago, California's largest lake – the Salton Sea – was formed when Colorado River levees broke along the California/Mexican border. But this was only the latest episode in the Sea's long and rich history. The Colorado has flooded and poured down the Salton Trough for millennia, forming lake bodies far greater than the Sea as we know it today. Over the last century, the Sea has become haven to one of the most diverse assemblages of plant and wildlife in all of North America and remains critical habitat and an important stopover for over 400 species of birds alone.

In recent years, the Sea's fragile ecosystem has become overburdened from agricultural runoff and other accelerated environmental changes. Today, the future of the sea is uncertain. Its woes are the focus of a major restoration effort by the state and others who have been tasked with recommending options for managing this extraordinary resource by the end of this year.

To assist the public in understanding the story and finding out why we should care about this ailing Sea, the Anza-Borrego Institute, in partnership with California State Parks, is offering a 3-day symposium on November 10-12, 2006 for the general public to explore the geological and cultural history and future challenges of California's most dynamic ecosystem. With a combination of lectures

and guided field tours, you will witness for yourself the spectacular diversity of flora and fauna and geological wonders of this special place and come to appreciate the challenges facing land managers today.

A copy of the brochure for the program is attached in PDF form. For more information about this event and our other programs, please contact us at www.theabf.org or 760.767.4063.

2006 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 <u>SDAG's Website</u>. We also list Corporate Sponsors in our annual SDAG Field Trip Volume. *Please consider SDAG sponsorship in 2006!*

A special thank you to **Ninyo & Moore** for sponsoring the preparation, duplication, and mailing of the newsletter for 2006 and 2007!

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, <u>CG-Squared</u>		
	Productions		
Dr. Margaret Eggers	Sue Tanges,		
Eggers Environmental, Inc.	Southland Geotechnical Consultants		
Joe Corones, 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	Leighton and Associates		
John Peterson,	Tom Rockwell,		
Peterson Environmental Services	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.,	Fugro West, Inc. / Fugro Pelagos, Inc. –		
Robert Crisman and John Franklin	Jerry Wilson		
Robert Walters Equipment Rental	Helenschmidt Geotechnical, Inc.		
Christian Wheeler Engineering	Geotechnical Exploration, Inc.		
Dr. Sarah Gray - University of San Diego	<u>Geocon</u> , Inc.		

Southern Anza-Borrego Desert and Coyote Mountains, California - Recap October 28 and 29, 2006

If you missed the 2006 SDAG field trip, you surely missed a special event. Our group was near capacity at about 70 participants. Charlie Winker, Charlie Lough, George Morgan, and Monte Marshall led discussions. Charlie Winker drove from his home in Houston, Texas, and shared some of his findings based on new unpublished mapping. Charlie did not travel the farthest to be with us. I hope you met SDAG member John Burnam, who traveled all the way from his home in London, England, to join us. We did more hiking than in recent field trips.

About 30 die-hards made the Friday hike to the Domelands. On Saturday most people made the shorter hike up the east fork of Canyon Sin Nombre for a spectacular view of the Carrizo Badlands and little-known exposures of Alverson lava flows and underlying red beds. I think we did not leave anyone in the ravines. Back at Agua Caliente, we enjoyed the hot springs pools at the campground and Carole Ziegler provided the evening entertainment with her "60 million years in 60 minutes" presentation. We ate excellent catered meals thanks to the services of Toni Menghini. That dinner was incredible, Toni.

Our student grant program was a success! We had several students on the trip who were there because of it. We'll roll over the extra funds to provide student grants on next year's trip.

For those who missed the field trip, the 2nd printing of the guidebook will be available for sale at the December meeting. You can then retrace our steps.

Additional supplemental material, including color geologic maps, and handouts can be found on the field trip section of our website.

There was a lot of excitement about all the studies that are being done in the Coyote Mountains area, much of it unpublished. There might be an opportunity for SDAG to co-sponsor a conference in 2008 or 2009 to highlight the work being done in this area.

Thank you to all the experienced SDAG field trip organizers for helping to make this field trip a success: Diane Murbach, Monte Murbach, Sarah Gray, Carole Ziegler, Phil Farquharson, Lowell Lindsay, Greg Cranham,

Joe Corones, Curtis Burdett, George Morgan, JR Morgan, and everyone else who helped out.

JOB OPENINGS!

Ninyo & Moore has immediate openings for Staff and Project-Level Geotechnical Engineers and Geologists in their Las Vegas, Oakland, Irvine and San Diego offices. The successful candidates should have a BS or MS degree and a minimum of two years experience in geotechnical field, and should be detail oriented and have excellent verbal and written communication skills. Professional Engineer (PE) and/or Professional Geologist (PG) registrations preferred.

Submit resumes to our Corporate office: mmcareers@ninyoandmoore.com - Ninyo & Moore, 5710 Ruffin Road, San Diego, California 92123, Attention: Ms. Elaine O. Autus (EOE) Please visit us at our website at www.ninyoandmoore.com

Continued on next page...

TN & Associates, Inc. specializes in environmental services, natural resources, infrastructure engineering, and construction services. Our San Diego office is currently looking to fill the following positions:

Staff Geologist: Geologist to perform office and field assignments for environmental site assessment and remediation projects. Position will involve soil borings, monitoring well installations, soil and water sampling, historical research investigations, data management, construction documentation and construction QA/QC, and report writing. Ability to adapt to both office and field environments a must. OSHA 40-hour training a plus. Periodic travel is required.

Project Geologist: Geologist with 3 to 7 years experience required in conducting all aspects of field investigations including limited site assessments, multi-task remedial investigations and remedial actions with a strong emphasis in technical writing skills. The ideal candidate will have experience in data analysis and reporting. PG registration and OSHA 40-hour training a plus. Work will entail some fieldwork and travel, mainly within California . Experience with government projects (DOD, USACE, AFCEE, Navy and USEPA) landfills and stormwater engineering/compliance a plus.

We offer a competitive salary, benefits package and friendly working environment. Equal Opportunity Employer. Please mail or fax your resume and letter of interest to: T N & Associates, Inc., 2247 San Diego Avenue, Suite 238, San Diego CA 92110, fax 619-291-8100.

Hargis + Associates, Inc., a San Diego based consulting firm specializing in hydrogeology and engineering, and SDAG Corporate Sponsor currently has opportunities in our San Diego, California and Mesa Ari office. We are currently looking to fill the following positions:

Field Technician: Candidate would have OSHA 40-hour training with appropriate updates, a minimum of 3 years of environmental consulting industry experience, and strong mechanical aptitude. Ideal candidate would have experience with soil and groundwater sampling, monitor well installation, aquifer testing, and soil and groundwater remediation system operating, maintenance, and monitoring. Position will be based in San Diego, California, and will require some travel.

Staff Engineer: Candidate would have a B.S. Degree in Chemical, Civil, or Mechanical Engineering, EIT Certification and/or a Masters Degree is a plus. Only entry level candidates will be considered. Candidate should possess strong writing and presentation skills. Position will be based in San Diego, California, and will require some travel and field work. OSHA 40-hour training preferred, but not mandatory.

Staff Hydrogeologist: Candidate would have a B.S. Degree in Geology, and 3 to 5 years relevant experience, including experience with soils and groundwater sampling, well installation, work plan and report preparation, task management, cost estimating and scheduling. Candidate should possess strong organizational, writing and presentation skills. California Professional Geologist (PG), or ability to obtain within two years, groundwater modeling experience, and Masters degree is a plus. Position will be based in San Diego, and will require some travel and field work. OSHA 40-hour training required.

Hargis + Associates offer competitive salaries and benefits, and a challenging work atmosphere. Hargis + Associates in an Equal Opportunity Employer. To learn more about Hargis + Associates, please visit our website at: www.hargis.com.

No phone calls please. Qualified candidates should send resumes, along with a cover letter summarizing experience and salary requirements to: Hargis + Associates, Inc., Attention: Phil Rosenberg, 2365 Northside Drive, Suite C-100, San Diego, CA 92108

Rincon Consultants, Inc. is an environmental sciences, planning, and engineering consulting firm with offices in Ventura, San Luis Obispo, and Carlsbad, California. The firm, a leader in environmental impact assessment, planning, biological resources, and soil assessment and remediation, seeks **Mid-Level** and **Senior Level Environmental Scientists** to work in the **Carlsbad** office.

Mid-Level Requirements:

• Bachelor's degree in Geology, Biology, Environmental Science, Environmental Engineering, or related field (advanced degrees welcomed).

- 3-6 years experience in Phase I ESAs and soil/groundwater assessment/remediation.
- Excellent verbal and written communication skills.
- Field capabilities including logging borings, collecting soil and groundwater samples, and mapping and collecting soil samples for large remediation projects.
- OSHA health and safety training for hazardous waste sites.
- Well-organized, analytical, hard-worker, sense of humor, and good team player/leader.

Senior Level Requirements:

• In addition to fulfilling the Mid-Level Requirements above:

• Manage projects and personnel: prepare proposals, job assignments and schedules, track budgets, coordinate personnel and subcontractors, attend meetings, interact with clients and agencies, enforce use of guidelines and proper permits, troubleshoot problems, etc.

Professional registration preferred.

E-mail your Microsoft Word cover letter and resume to Julie Marshall at jmarshall@rinconconsultants.com



SAN DIEGO ASSOCIATION OF GEOLOGISTS www.sandiegogeologists.org

2006 MEMBERSHIP FORM

NAME:			
Please type	e or print <u>clearly</u> , and <u>check</u>	your chosen de	elivery address below.
Home Address:			
□ Include — in directory			
Work Address:			
□ Include — in directory —	Please includ		r affiliation
Preferred Mailing	Address (Check One):	□ Home □	□ Work
Website:] Check box for email delivery		
Phone: Home: () Work: ()	Cell: ()
Dues: (check choice)	Student Member (emai Student Member (add L Regular Member (emai Regular Member (add L Corporate Sponsor (□e	JS mail delivery I delivery only) JS mail delivery)	\$ 15.00 \$ 20.00
New Member Date:	□ Continuing Membe Check for char	er nge of mailing addi	ress:
Please enclose a c	heck payable to SDAG, and mail	to:	
Sarah Gray Marine and Environ University of San D 5998 Alcala Park San Diego, CA 921	0		

San Diego Association of Geologists c/o Scott Snyder Ninyo & Moore 5710 Ruffin Road San Diego, CA 92123