

# SAN DIEGO ASSOCIATION OF GEOLOGISTS

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

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## SDAG MEETING ANNOUNCEMENT WEDNESDAY, January 21, 2004

### *Pegmatites of San Diego County*

*presented by*

Chuck E. Houser, M.S., R.G., C.E.G., Senior Project Manager  
PETRA GEOTECHNICAL, INC.

**Where:** Bali Hai Restaurant  
2230 Shelter Island Drive  
San Diego, CA 92106  
(619) 222 - 1181

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

**Directions:** The Bali Hai is located on Shelter Island. Go west along Harbor Drive past the airport. Turn Left on Rosecrans (209), then make a left onto Shelter Island Drive. The Bali Hai will be in front of you.

**Dinner:** The Bali Hai will be serving us a Family Style meal with appetizers, soup of the day and entrees “Chicken of the Gods”, Oyster Beef; Sweet & Sour Pork, Cashew Chicken, Shrimp in Bali Hai Sauce and Vegetable Fried Rice.

**Cost:** \$25.00 per member; \$30 per non-member, \$10 for students

**Reservations:** Make your reservation online through the SDAG website at [www.sandiegoeologists.org](http://www.sandiegoeologists.org) or call Margaret Eggers at (760)757-7711, **no later than 5PM Monday, January 19<sup>th</sup>**.

### **WELCOME DAVID BLOOM!!**

Congratulations David for being voted the next Secretary of SDAG at December meeting. Thanks David for running and for being part of making SDAG a successful organization.

### **2004 EXECUTIVE COMMITTEE**

**PRESIDENT** - Monte Murbach; *Petra Geotechnical*; Ph: (858)-485-5530; fax -----; [mmurbach@petra-inc.com](mailto:mmurbach@petra-inc.com)

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**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@caro-lion.com](mailto:carolion@caro-lion.com)

### **SPEAKER:**

Chuck E. Houser, M.S., R.G., C.E.G.

In addition to having one of the best collections of San Diego gem minerals, Chuck has almost 15 years of experience in conducting geotechnical, environmental, and hydrogeological investigations. For the past 13 years he has worked for various firms conducting environmental investigations and soil and groundwater cleanups in the San Diego region at gas stations, schools, military facilities, and dry cleaners. He currently works as a Senior Project Manager for Petra Geotechnical. He received a B.S. and M.S. in Geology from San Diego State University.

### **ABSTRACT**

The pegmatites of San Diego County are a late-stage formation in the crystallization of the Southern California Peninsular Ranges batholith. Pegmatite refers to a coarse-grained (<1-2cm) igneous rock of granitic composition, typically intruded as dikes. The pegmatites of San Diego County have been mined for gem tourmaline, topaz, aquamarine, morganite, kunzite, and garnet, as well as a host of accessory minerals, since the late 1800's. The economic viability of a given pegmatite dike appears to be dependant on several factors including dike structure and chemistry. The Elizabeth R Mine in the Pala District in Northern San Diego County serves as model for these factors.

Economic minerals in pegmatite dikes are typically recovered from crystal-filled open spaces referred to as pockets. Pockets appear to form in the coarse core zone of the dike where volatiles dissolved in the intruding melt have exsolved and coalesced to form the open spaces. In many mines, this appears to have occurred in areas where the pegmatite dike attains a greater thickness than normal. Thickening of the pegmatite may be controlled by pre-existing weaknesses, such as fracture sets, in the host rock, or by changes in attitude or flexures in the intruding dike. The Himalaya Dike in Mesa Grande appears to be a notable exception to this.

The economics of the pegmatite are also controlled by the dike chemistry. Elements such as lithium, beryllium, manganese, and boron, among others, tend to be concentrated in the core zone and pockets of a pegmatite dike. Elements such as these appear largely responsible for the exotic colorations in various gem crystals found in pegmatite pockets. Many pegmatite mines in San Diego County seem to demonstrate the validity of these theories, however, exceptions are abundant.

### **ANNOUNCEMENTS:**

**It's that time of year again!! Please renew your SDAG membership!  
A membership form is included with this newsletter. We appreciate your  
updating your membership ASAP to keep your membership current!!  
Once again this year we offer the option of email newsletters at a reduced  
rate. Be sure to note your selection on your renewal form.**

**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 619-524-6967 OR [david.bloom@navy.mil](mailto:david.bloom@navy.mil)

**SDSU GEOLOGY DEPARTMENT SEMINARS for 2004: Departmental Seminars on Wednesdays.** <http://www.geology.sdsu.edu/seminars/>

**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 David Bloom at 619-524-6967 OR [david.bloom@navy.mil](mailto:david.bloom@navy.mil).

**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.

**2004 CORPORATE SPONSORS - THANK YOU!!**

A significant portion of the SDAG operating and scholarship budget is provided by corporate sponsorship. Please consider becoming a Corporate Sponsor for 2004! 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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**JOB OPENINGS!**

**Professional Service Industries, Inc.**, as a company and as individuals, has a clear vision of the future and our place in it. We seek individuals who "Choose To Lead" in the geotechnical and environmental professions - people who can step-up and make an impact in the marketplace and at job sites with their professionalism, integrity, dedication, and technical abilities. We seek to hire and retain the best and brightest people available. PSI's diverse client base offers an excellent opportunity to gain experience in a wide variety of project types and an outstanding career opportunity with our company. We are currently seeking **Staff and Project Geologists for our San Diego office**. Requirements: \* Degree in geology or environmental sciences preferred. \* 0 – 2 years experience required for Staff level \* Minimum 2 years experience required, California RG, CHG, or CEG preferred for Project level

Responsibilities: The positions include responsibilities in field data collection and analysis, report writing, client interface, business development, and project management. Most projects are within 50 miles of our San Diego office. PSI has over 140 offices nationwide with 3,000 employees. We offer a competitive salary and comprehensive benefits package. PSI is proud to be an Equal Opportunity Employer EOE M/F/D/V. Fax Resumes Attention: Human Resources, at 858-455-1170. 0104

**TRC** is a leading national engineering and consulting firm specializing in environmental management. The TRC San Diego regional office is seeking **GEOLOGISTS** and **HYDROGEOLOGISTS** with environmental training and experience for our San Diego regional office. Positions available for **ENTRY LEVEL** and **2 TO 3 YEAR** experienced professionals. Broad

based duties may include preparation of cost estimates, workplans and permits; scheduling and oversight of utility locating, geophysics, excavation, driller, and construction subcontractors; geologic and hydrogeologic interpretation from soil borings, excavations, trenches and monitor wells; installation of groundwater and vadose zone wells; sampling of groundwater, soil and soil gas; remediation feasibility testing, design, construction and implementation; data analysis and report preparation; and project and budget management.

Please send resume to: TRC 9471 Ridgehaven Court, Ste. E, San Diego, CA 92123.

E-Mail: [hrsandiego@trcsolutions.com](mailto:hrsandiego@trcsolutions.com) FAX: (858) 505-9515. Please visit our web site at [www.trcsolutions.com](http://www.trcsolutions.com). (0104)

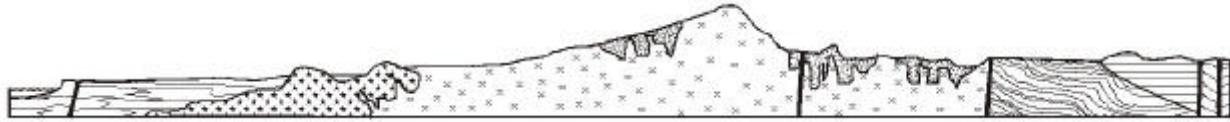
**Kleinfelder** is seeking a **Senior Environmental Engineer for their Temecula office**. Qualifications: Job Code #292: Seeking individual with management experience (personnel and projects). Positions require BS degrees in civil, chemical, mechanical, or environmental engineering; MS degrees with EIT, PE, or certification preferred. Ten plus related experience required. To submit a resume online, go to [Kleinfelder.com](http://Kleinfelder.com) and click on "Careers". (1203)

**AQUI-VER, INC.** (AVI) is looking for individuals who will build and develop a problem solving team that leads by example. This team will evaluate, design, implement, and execute leading edge assessment and remediation programs that emphasize site mitigation, property utilization and redevelopment. Located one block from La Jolla's beautiful Wind and Sea beach, AVI specializes in quantitative analysis of hydrogeologic and environmental problems that includes the design of cleanup systems, contaminant transport evaluations, environmental risk quantification, and other related services. Our firm is recognized for its unique science capabilities and strict adherence to a quality work and science ethic. See our web site for more information: [www.aquiver.com](http://www.aquiver.com).

**FULL-TIME WORK, ENTRY LEVEL:** AVI is looking for technically oriented individuals with strong analytical and problem solving skills. A degree in the earth sciences, mathematics, chemistry, or geography is required. We are looking for individuals who know how to map and interpret information, and are competent in one or more mapping programs (e.g., AutoCad, ArcView, Surfer, etc.), as well as good working skills with Microsoft Excel and word processing. Report writing skills are also of strong value, as is experience in the environmental consulting industry (though not needed).

**FULL-TIME WORK, SENIOR LEVEL:** AVI is looking for individuals who will build and develop a problem solving team that leads by example. This team will evaluate, design, implement, and execute leading edge assessment and remediation programs that emphasize site mitigation, property utilization and redevelopment. **Description:** Regular, high level communication with state and federal regulators on behalf of client base. Project management, data evaluation, and formulation and presentation of coherent arguments founded and supported by scientifically rigorous, and technically detailed analysis. Steward budgets, deliverables, and the team. **Qualifications:** MS or Ph.D. in earth sciences, hydrogeology, chemistry, physics, or related field. Good computer skills and comprehension of digital information. Competent in one or more mapping programs (AutoCad, ArcView, Surfer, etc.), as well as good working skills with Microsoft Excel and word processing. Strong leadership skills, report writing skills, and an ability to articulate science information in direct and simple terms are also highly desirable.

Please send resumes by E-mail or fax to Ms. Lori Bautista; 858 729-6564, [lbautista@aquiver.com](mailto:lbautista@aquiver.com). Starting wages depending on skills, background, experience and time commitment, with flexible hours, above industry standard. Professional advancement is likely for those qualified people that want to move forward with a career, with commensurate salaries and business opportunities. (1203)



# SAN DIEGO ASSOCIATION OF GEOLOGISTS

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## 2004 MEMBERSHIP FORM

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<b>Dues:</b>	_____ Student Member (email delivery only)	\$ 5.00
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Date: \_\_\_\_\_ Check for change of mailing address:

Please enclose a check payable to SDAG, and mail to:

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**San Diego Association of Geologists  
c/o Margaret R. Eggers, PhD, CHG  
Eggers Environmental, Inc.  
2181 El Camino Real  
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Oceanside, CA 92054**