

SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegoeologists.org

SDAG MEETING ANNOUNCEMENT

WEDNESDAY, NOVEMBER 14, 2012

Joint Meeting with EERI, San Diego Chapter

Earthquake and Post-Earthquake Fire Testing of a Full-scale 5-story Building outfitted with Nonstructural Components on the World's Largest Outdoor Shake Table

Presented by

Dr. Tara C. Hutchinson
University of California, San Diego

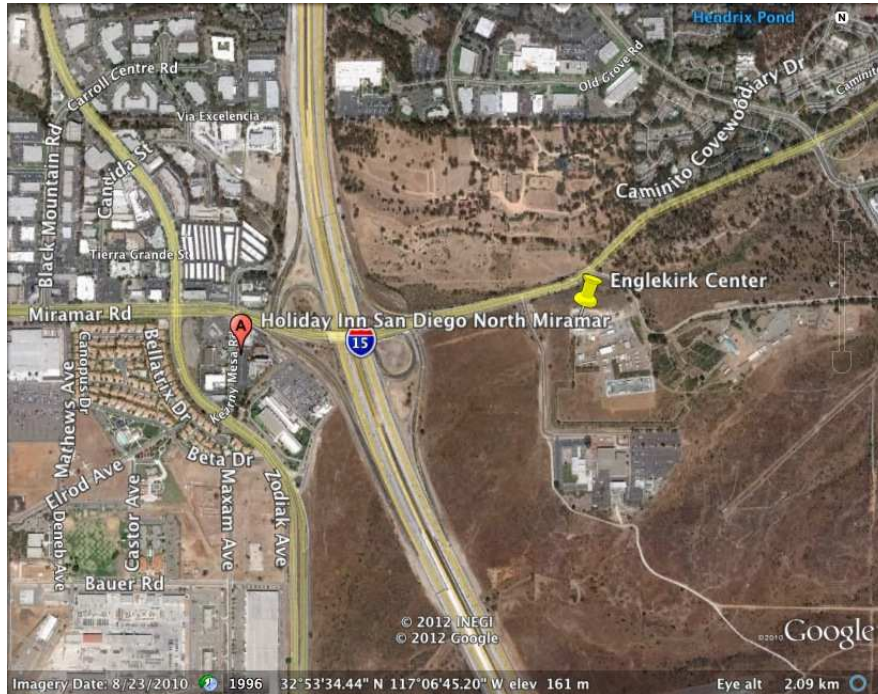
- Where:** **Holiday Inn San Diego, North Miramar**
9335 Kearney Mesa Road, San Diego, 92126
(858) 695-2300
- When:** **4:00 – 5:30 – Optional tour of Shake Table at Englekirk Structural Engineering Center, 10201 Pomerado Rd, San Diego**
5:30 pm – Social Hour
6:30 pm – Dinner
7:30 pm – Program
- Dinner:** South of the Border Buffet. Beverage station. Cash bar.
- Cost:** \$40 per person, \$10 discount for members, STUDENTS: \$15. Add \$5 if you did not make a reservation.

Reservations: Make your reservation **online** at www.sandiegoeologists.org **no later than noon, Friday, November 9th.**

If you would like to visit the Shake Table prior to the meeting, please send an email to the SDAG secretary by clicking [here](#) to reserve your spot

For more information on the Shake Table, please click [here](#)

**RESERVATIONS CANNOT BE GUARANTEED AFTER FRIDAY AT 12 NOON
BUT THEY ARE ALWAYS PREFERRED OVER WALK-INS**



SPEAKER ABSTRACT

Earthquake and Post-Earthquake Fire Testing of a Full-scale 5-story Building outfitted with Nonstructural Components on the World's Largest Outdoor Shake Table

Dr. Tara C. Hutchinson
University of California, San Diego

Earthquakes and post-earthquake fires have demonstrated extensive losses, both monetary and humanitarian, in past earthquakes. Much of this has been due to the reduced integrity of nonstructural components and systems (NCSs) housed in buildings. Yet, remarkably until recently, very little research has been conducted to investigate the performance of NCSs during earthquakes and particularly considering fire following earthquake scenarios. In this presentation, the recent testing of a full-scale five-story building furnished with a broad array of nonstructural components and systems will be described. The test building incorporates, among other things, a functioning passenger elevator, stairs, a complete exterior facade, interior partition walls, piping, HVAC, ceiling, sprinklers, building contents, as well as passive and active fire systems. The building-NCS system is first supported on high rubber damping isolators, and following a suite of earthquake motions it is lifted and subsequently fixed to the shake table platen, in an effort to demonstrate the effectiveness of isolation technology in protecting the NCSs and preserving the buildings functionality. Finally, live fire tests are performed in select compartments with reduced integrity due to the prior seismic motions. Data obtained from this program will be used to evaluate and refine current code assumptions and computer models which are used to predict the behavior of nonstructural components and systems, and to find ways to minimize undesirable damage to NCSs during an earthquake.

SPEAKER BIO

Tara Hutchinson is a Professor in the Department of Structural Engineering at the University of California, San Diego with research interests in the area of earthquake engineering, with particular activity in the area of large scale seismic testing. She obtained her MS from the University of Michigan, Ann Arbor and PhD from the University of California, Davis. She is an active member of ASCE, EERI and CUREE and also on the editorial board for EERI's professional journal *Earthquake Spectra*. Hutchinson is the principal investigator of this unique \$5M+ multi-University, academic-industry-government collaborative effort.

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!

December 19, 2012	Dr. Tom Deméré, Curator of Paleontology, San Diego Natural History Museum
January 16, 2013	Joint meeting with EERI, speaker TBA
February 27, 2013	Al Trujillo, Professor of Oceanography, Palomar College

2012 EXECUTIVE COMMITTEE

PRESIDENT – Todd Wirths; Brian F. Smith and Associates Ph: (858) 337-0098; todd@wirths.com

VICE PRESIDENT – Cari Gomes; cg7783@yahoo.com

TREASURER – Brian J. Olson; FSR Engineering; Ph: (858) 750-9243; bolson@fsrengineering.com

SECRETARY – Jennifer Bauer Morton; geologyjen@yahoo.com

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

PRESIDENT'S CORNER

I like the idea of being an author/editor, especially when I get to show off the “Picacho” book. So last month I jumped at the invitation by the Imperial Valley Gem and Mineral Society to attend their meeting as a speaker, to present a talk on the book. PowerPoint slide show in hand, I drove out to El Centro to meet some of the IVGMS officers at a Farmer Boys restaurant for dinner. Afterwards, we headed to the Imperial Valley Expo grounds, just north of El Centro. The IVGMS has their own building there, chock-full of lapidary equipment and impressive mineral specimens. Each March, the IVGMS takes part in the California Mid-Winter Fair & Fiesta held at the Expo, where the group presents gems and minerals for sale, games and prizes, demonstrations in lapidary, gold panning, geode cutting, fossil cleaning, cabochon making, gem faceting, wire wrapping and more. The money the organization takes in at the fair goes back into the club and community scholarships provided by it.

This was THE audience for this talk, as the group has active mining claims all over the Cargo Muchacho Mountains. Indeed, many of the members are expert gold miners and know the area quite well, including a weathered old prospector who showed me some specimens of actual gold from Picacho, saying the he bought them from the Mendivil family years ago. First order of business: the Pledge of Allegiance. Then, announcements, followed by me. This audience knew their stuff, and posed great questions. For example, this one from Frank, another “old” miner: “Have you ever panned for gold?” Me: “uh, ahem, well... no. But I would like to!” So who’s the expert now?!

I was so impressed with the IVGMS, I became their newest member. They have a strong membership; members bring their kids to the meetings. I had a great time and I think the audience did too.

Last, but certainly not least, thanks to Chuck Houser for a terrific presentation last month, everyone enjoyed it!

Todd Wirths
President



ANNOUNCEMENTS

NEW SDAG RESEARCH TOOL NOW AVAILABLE! 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 (40 years ago!) to all things Picacho in 2011. 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

WAREHOUSE & OFFICE SPACE AVAILABLE in El Cajon, short-term rental or long-term lease. Warehouse from 3125 to 6250 s.f. Two offices. Mix and match to fit your needs. Ideal for geotech operations; best possible rates and we are geology-friendly! Contact Lowell Lindsay (619) 258-4911 x111, LLindsay@Sunbeltpub.com

~~~~~

## SEEKING JOB OPPORTUNITIES

**Qualifications Summary and Objective:** I have 14 years experience directing surface water quality monitoring programs with a proven record of excelling in monitoring plan implementation, quality control, public notification and continuous improvement in operational effectiveness and efficiency. I have built and maintained relationships with key staff in academia, industry, and all levels of government in San Diego and California. I have a widely applicable skill set which includes: analytical thinking, communication and writing skills, data analysis and management, inter and intra-agency project coordination, and staff supervision and training. My objective is to obtain a career position with an industry leader where I can contribute my skills to build the success of my employer as well grow professionally. Detailed work experience, education and more at [www.linkedin.com/in/cbclifton2010](http://www.linkedin.com/in/cbclifton2010). Email [cbc2006@cox.net](mailto:cbc2006@cox.net) or 619-964-1776.  
Contact: Clay Clifton

---

**ENGINEERING GEOLOGIST-** California PG, MS Geology, over 13 years of applied geotechnical experience, proficient in geotechnical investigations, hazard evaluations, geophysical surveys, construction management and quality control, engineering analyses, special interest in earthquake-hazard and seismic design related applications, strong problem-solving and organizational skills. Detailed resume upon request: Anna, 201-407-7461, [Afyodorova103@gmail.com](mailto:Afyodorova103@gmail.com)

---

**ENTRY-LEVEL ENVIRONMENTAL SCIENTIST** - I am a recent UCSB graduate with a double major in Environmental Studies (BS) and Geology (BS, Earth Systems emphasis) who is looking to begin a career in environmental consulting. I have prior lab experience in both professional and academic settings. I am looking to establish myself with a passionate and hard working environmental firm in the San Diego region. For further information about my credentials and work experience please contact Georgi Chertkov at [georgichertkov@gmail.com](mailto:georgichertkov@gmail.com) or call me at 505-412-3107.

---

~~~~~

Request for Sponsors: 2012 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 at our San Diego Association of Geologists (SDAG). 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.



CORPORATE SPONSORS



HARGIS+ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

Hargis + Associates, Inc. is an environmental consulting firm specializing in hydrogeology and engineering. We are headquartered in San Diego, California and have offices in Mesa and Tucson, Arizona. Our practice areas include all aspects of hydrogeology and engineering.

As a client service organization, we pride ourselves in being attentive and efficient in meeting our client's needs and solving their problems. In addition to our technical expertise, communication and responsive coordination are hallmarks of our reputation.

We invite you to explore our website to learn more about our firm and the services we provide. We welcome the opportunity to discuss our consulting expertise directly with you.

Contact: **Dr. David R. Hargis**



H&P Mobile Geochemistry is an industry-leading provider of environmental lab services. With ten mobile labs and five direct push sampling trucks and unparalleled experience, H&P's repertoire of environmental lab services includes many forms of environmental lab sampling techniques all the way to on site field analysis services. H&P has successfully and accurately performed environmental lab services delivering quality results to our clients for over 16 years.

2470 Impala Dr., Carlsbad, CA 92010
(800) 834-9888

Contact: **Louise Adams or Suzie Reed**



TETRA TECH

complex world | **CLEAR SOLUTIONS™**

Tetra Tech is a leading provider of consulting, engineering, and technical services worldwide. We are a diverse company, including individuals with expertise in science, research, engineering, construction, and information technology. Our strength is in collectively providing integrated services—delivering the best solutions to meet our clients' needs. <http://www.tetrattech.com>

Contact: **Dave Bloom**



MISSION GEOSCIENCE, INC.

ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS

Since 1991, Mission Geoscience has provided consistent and reliable professional services with our dedicated staff of highly credentialed professionals, who are committed to both timeliness and cost-effectiveness as the cornerstones of their work. MISSION's staff remains amongst the most highly respected firms in the environmental and geotechnical industry, which is why many of our clients tend to assign us their most difficult and challenging projects.

<http://www.missiongeoscience.com/>

Contact: **Jim Ashby**



Shaping the Future

At Cardno ERI, we're experts at providing safe, high quality, cost-effective solutions to environmental concerns. We're large enough to tackle extensive, complex projects, yet small enough to provide exceptional service in a timely manner while paying close attention to controlling costs. In short, we combine the expertise, technology, and dedicated service you need to receive the best possible solutions to your environmental concerns. <http://www.cardnoeri.com>

Contact: **Steve Zigan**



Chambers Environmental Services, Inc.

Dan Chambers

President

Phone/FAX (858) 279-3266

Cellular: (619) 889-9331

E-Mail: DWChambers@Hotmail.com

4510 Mt. Henry Avenue

San Diego, CA 92117

- [Dr. Pat Abbott](#) - SDSU Prof. of Geology, Emeritus
- Sally & Dennis Avery
- [Dr. Richard Berry](#) - SDSU Prof. of Geology and Geophysics, Emeritus
- Curtis Burdett
- Joe Coronas - [City of San Diego](#)
- Greg Cranham - Consulting Geologist
- Dr. Neal Driscoll – UCSD Professor of Geology and Geophysics
- Dr. Margaret R. Eggers, CHG - [Eggers Environmental, Inc.](#)
- William J. Elliott, Engineering Geologist
- Phil Farquharson - [CG-Squared Productions](#)
- Carolyn Glockhoff - [Caro-Lion Enterprises](#)
- Cari Gomes
- [Dr. Sarah Gray](#)
- Rob Hawk [City of San Diego](#)
- Lowell A. Lindsay and Diana Lindsay - [Sunbelt Publications/AESE](#)
- [Dr. Monte Marshall](#) - SDSU Prof. of Geology and Geophysics, Emeritus

- Monte and Diane Murbach - [Murbach Geotech](#)
- [Ninyo & Moore](#) - Jonathan Goodmacher
- Brian J. Olson
- Peets Coffee and Tea, Store No. 342 , Carlsbad www.peets.com
- Les Reed – Geotechnical Exploration Inc.
- Rigid Lifelines www.rigidlifelines.com
- SEALASKA Environmental Services, LLC, Mukesh Mehta, PG, CEG
- Bob Smillie – TerraCosta Consulting Group Inc.
- David and Jan Steller ("two-fer" - thanks!)
- [Dr. Anne Sturz](#)
- Sue Tanges - Southland Geotechnical Consultants
- Terra Costa Consulting Group, Inc.
- David & Jan Steller
- Mary Walke
- Carole L. Ziegler
- Don Wilson Clark and Katy Freese
- Gerald Shiller
- <http://www.youtubedownloadersite.com/>

Add yourself to this list - Sponsors, Corporate Sponsors, and Patrons provide a significant portion of SDGS's and SDAG's operating and scholarship budgets. SDGS is a 501(c)3 public benefit nonprofit educational corporation. For more information, please see our Sponsorship Form.

