



## Inland Empire Chapter News

“Connecting Professionals, Practice and the Public”

Dec 1, 2007

Vol. 3, No. 12

# “Accelerating Seismicity Before Large Earthquakes: The Life and Death of an Earthquake Prediction Scheme”

**Wednesday 19-December-2007**

5:00 - 6:00	Geologist Orientation	Bar Room
6:20 - 7:20	Dinner Meeting	Banquet Room
7:30 - 8:30	Guest Speaker Presentation	Banquet Room

### **Cask ‘N Cleaver Steakhouse, Corona**

(Meeting Cost \$26 to \$31, includes taxes and gratuity)

(Fund-raising donation suggested is \$5.00, or more)

*(RSVP/Directions below)*

#### **Meeting Details** (see inside)

**RSVP Due by COB 13-Dec-07**

Send Name, Company/Affiliation to

[Rick.Gundry@verizon.net](mailto:Rick.Gundry@verizon.net) or call

(951) 924-6756..

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### ***This Month’s Speaker :***

***Dr. David Bowman, Associate Professor and Chair, Department of Geological Sciences, California State University, Fullerton, Fullerton, California***

#### **Abstract**

Increased regional seismicity has been proposed as a new class of precursory activity that may be used to forecast the occurrence of large, damaging earthquakes. This technique is based on the observation of a phenomenon known as "Accelerating Moment Release" (AMR), wherein the frequency and size of earthquakes increases within a precursory region hundreds of kilometers in diameter over a period of decades. Despite a thorough theoretical grounding in a combination of statistical mechanics and classical elastic-rebound theory, the technique has been notably unsuccessful when used as a true predictive tool. This seminar will trace the history and science of AMR, from its origins in mechanical

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The AEG Inland Empire Chapter *Newsletter* a monthly publication of Inland Empire Chapter of the Southern California Section, Association of Environmental and Engineering Geologists. For more information visit websites shown in Newshead page 1

Submittals: Deadline 28<sup>th</sup> of the month. Employment notices, job position vacancy announcements no cost. (See notice inside this *Newsletter*)

Address changes: Send e-Mail to Rick Gundry.

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engineering, through its heyday in the seismological community, and finally into the long grey twilight that has thus far characterized all attempts at earthquake prediction

## Biographical Sketch

Dr. Bowman received his Ph.D. in Geology from the University of Southern California in 1999, after which he did a post-doc in the Tectonics Lab of the Institute for Earth Physics at the University of Paris. He is a member of the Southern California Earthquake Center, the American Geophysical Union, and the Seismological Society of America, and has been a member of the faculty of the Department of Geological Sciences at Cal State Fullerton since May 2001. He is currently the Chair of the Department of Geological Sciences. Dr. Bowman's specialties are Earthquake Seismology and Tectonophysics. He has done field work in exotic locales such as northern Tibet, central Greece, and the San Fernando Valley. His current research interests are earthquake stress interactions, regional seismicity associated with large earthquakes, the formation and evolution of fault systems, and time-dependent seismic hazard analysis.

## Comments from the Chair

Hello to All !

Thanks to all who attended our November meeting at Cal State University San Bernardino (CSUSB). It was a great mixer for all to talk to the students of Cal State's Geology Club. About 15 students, 8 CSUSB professors and 14 Association of Environmental and Engineering Geologist (AEG) members were present for Dr. McGill's talk on recent age dating and slip rate analysis work on the San Andreas fault between Cajon Creek in the Cajon Pass and Plunge Creek in Highland. Very informative on some of the latest slip rate interpretations for this strand of the fault.

As indicated in last month's *Newsletter*, one of the AEG Inland Empire Chapter goals is for an active out reach program to the local Universities and our November meeting definitely fits with that goal. In meeting with the CSUSB Geology Club Co-President, Venessa Fava, there is interest in forming an AEG Student Chapter! In addition, the Geology Club is requesting that those of us in the profession contact her for a presentation at one of their up coming campus meetings. Topics could include information on your company, roles as a geologist or any other information you feel would be relevant or worthy sharing with the students. More information is presented later in this *Newsletter*.

Dr. Alan Smith, Department Chair for CSUSB announced that the Department is looking to expand their program by offering an M.S. degree in Geological Sciences. In order to petition the Chancellor's Office for this

program, the Department has to show that there is a need in the geosciences-based employers in the Inland Empire to hire students with advanced degrees. Alan requested the members of the AEG use a survey-questionnaire form to simply complete on-line at CSUSB's website. The Department's home page link is <http://geology.csusb.edu>.

As always, I would appreciate comments, requests and/or names of speakers/topics from our members that you would like to see in the coming months at our monthly meetings. Please forward the names and contact references of potential speakers to me at [mcook@kleinfelder.com](mailto:mcook@kleinfelder.com) or Rick Gundry at [rick.gundry@verizon.net](mailto:rick.gundry@verizon.net). Please be sure to check the Inland Empire Chapter web site regularly for news and updates at (<http://www.aegsc.org/chapters/inlandempire>).

And remember a geologist is someone who takes special interest in your granite countertops in the kitchen and after a few minutes will even produce hand lenses before giving other guests an igneous petrology lesson.

– Mike Cook  
Chapter Chairman  
AEG Southern California Section  
Inland Empire Chapter

## Thanks

Thanks to the professionals (21) and students (5) that attended the November Dinner Meeting and speaker presentation in San Bernardino in the Geology Lab Room at California State University, San Bernardino (CSUSB), as follows:

**Dr. Sally McGill (Speaker)**, California State University, San Bernardino (CSUSB), San Bernardino; **John McGill**, CSUSB, San Bernardino; **Gary Rasmussen**, Gary Rasmussen and Associates, Redlands; **Tiana Rasmussen**, Gary Rasmussen and Associates, Redlands; Bernardino; **Mike Cook**, Kleinfelder West, Redlands; **Doug Cook**, Consultant, Victorville; **Dave Gaddie**, Riverside County Planning Department; Riverside; **Lisa Battiato**, Kleinfelder West, Murietta; **Rick Gundry**, Inland Geologic, Inc, Moreno Valley; **Mark Spykerman**, Earth Systems Southwest, Rancho Cucamonga; **Jeff Fitzsimmons**, John R. Byerly and Associates, Bloomington; **Mark Doerschlag**, Consultant, Riverside;

**Philip Buchaiarelli**, Leighton Group, Rancho Cucamonga; **Richard Escandon**, Kleinfelder West, Redlands; **Donn Schwartzkoff**, TerraGeo, Loma Linda; **Rob Markoff**, LOR Geotechnical, Palm Springs; **Dr. Alan Smith**, CSUSB, San Bernardino; **Dr. Joan Fryxell**, CSUSB, San Bernardino; **Dr. Tina Ransey**, CSUSB, San Bernardino; **Dr. Argy Leyton**, CSUSB, San Bernardino; **Dr. Tom Baker**, CSUSB, San Bernardino; and, students **Vanessa Fava**, CSUSB, San Bernardino; **Sarah Schneide**, CSUSB, San Bernardino; **Alonzo Poach**, CSUSB, San Bernardino; **Debbie Kunneth**, CSUSB, San Bernardino; and **Christina Velaquez**, CSUSB, San Bernardino.

There were several Professors from Departments of Geography and Mathematics who also attended, in the list above, including others from the Department of Geology. About a dozen other students along with **Dr. Erik Melchiorre** (Geol.), and **Dr. Norman Meek** (Geography), attended the speaker presentation, as well.

## State Mining and Geology Board, Calif.

The May 10, 2007 preliminary draft Reclamation Plan Form (SMARA) for the Board is still under review. This is only for the situation when the Board is acting as Lead Agency under SMARA, rather than the responsible City or County, in California. SMARA is the acronym for the Surface Mining and Reclamation Act of 1975, *et seq.* (as enacted as Law, as revised, 2007), and as implemented in regulations for the Executive in California Public Resources Code, Division 2, Chapter 9, Section 270, *et seq.*

Minutes and results of the Board's November 8, 2007 meeting in Sacramento will be forthcoming. The next SMGB Meeting will occur on December, 13, 2007 (location and details yet to be disclosed).

The Meeting Agendas for next year 2008 are pending a list to be posted at the web-page.

The Board is composed of nine members appointed by the Executive (The State Governor). Governor Schwarzenegger announced the appointment of two persons filling the Board last Spring. Of the Board, two are Licensed Geologists (one of which is also a Licensed Geophysicist and Engineer). One is a Mining Engineer, and another is an expert in groundwater, while the rest are in some form or another, Members at Large.

The Board serves as a regulatory, policy, and appeals

body representing the State's interests in geology, geologic and seismological hazards, conservation of mineral resources and reclamation of lands following mining activities. The Board interfaces with the California Geological Survey and the California Office of Mine Reclamation

The Board operates within the Department of Conservation, and is granted certain autonomous responsibilities and obligations under several statutes including the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act, and the Surface Mining and Reclamation Act. The Current Executive Officer for the Board, is Stephen Testa, along with his helpful staff of Engineering Geologists, and other technical staff.

## California Geological Survey

The "CGS" (formerly "CDMG") released some new information in the past months, some of which you may know about, such as the first ever inland area Preliminary Seismic Hazard Map (although, it is currently preliminary), the Murrieta Quadrangle. (See below.)

More recently there are Palos Verdes Peninsula Landslide inventory map, the Revised Malibu Beach Quadrangle, Official Alquist-Priolo Earthquake Fault Zone Map, the Geologic Map (Regional Map Series), of the Oceanside Quadrangle, and the Lawson Report on the 1906 San Francisco Earthquake which is available for purchase. Please call (916) 445-5716..

Official Seismic Hazard Zone Map Release: Murietta quadrangle: The Official Map Release is December 5<sup>th</sup>, 2007. In addition to covering portions of Riverside County, the cities of Murrieta and Temecula also are mapped. The Murrieta Quadrangle will be online December 5<sup>th</sup> as a pdf as well as the GIS data and the Evaluation Report that accompanies the map. The Seismic Hazards Zonation Program homepage is <http://www.consrv.ca.gov/cgs/shzp/Pages/Index.aspx>. Any questions please contact Candace M. Hill, Associate Planner of CGS at (916) 322-2718 or [chill@conservation.ca.gov](mailto:chill@conservation.ca.gov) "At that time the GIS files will be online which hopefully will be easier for (you) to navigate", according to Candace Hill, California Geological Survey (pers. com., 13-Nov-07). This is the first in a series of releases for the inland Empire area (and first for Riverside County)

## Division of Oil, Gas and Geothermal, Calif.

The DOGGR (formerly "DOG") issued a complimentary Calendar for 2008, and also issued an order or new rules for installing conductors. At this time, that Calendar is suppressed or unavailable.

## Board for Geologists and Geophysicists, CA

Apparently there are two times the GIT and Fundamentals of Geology examinations are to be given in 2008 Spring and Fall, and only one time (Spring 2008) the other exams are given for Geophysicist, California Supplemental Component of the Professional Geologist (PG), CEG and CHG.

### 2008 Examination Schedule

(The date on the right, below, is Decision Deadline ("DD") postmark date for filing application materials).

### ASBOG National - (PG) and Geologist in Training Cert

7-Mar-08 (Fri)	DD: 27-Nov-07 (Tues)
3-Oct-08 (Fri)	DD: 24-Jun-08 (Tues)

Professional Geologist (PG) California Supplemental	
6-Mar-08 (Thurs)	DD: 27-Nov-07 (Tues)
4-Oct-08 (Sat)	DD: 24-Jun-08 (Tues)

### Professional Geophysicist Exam

8-Mar-08	DD: 27-Nov-07 (Tues)
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### Engineering Geologist (CEG) Certification

8-Mar-08 (Sat)	DD: 27-Nov-07 (Tues)
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### Hydrogeologist (CHG) Certification

8-Mar-08	DD: 27-Nov-07 (Tues)
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### Board Letter (Executive Officer)

As some of you may know, the Board issued a letter to all applicants for Registration as a Geologist and for Administration of the California Supplemental Examination (CSE) 3-Aug-07. It was sent by Richard "Rick" Rempel, Executive Officer, PG 6089.

This seems as a closure statement by the Board, sent by Rick, that the controversy of past years whether to have that specialized test will be implemented, and it is.. The Board approved a 75-question, multiple-choice, 2½-hr. California Supplemental Examination" (CSE for administration.

Rick's letter points out that "[t]his written examination fulfills the statutory mandate of the Business and Professions Code, Chapter 12.5 (ie., the Geologists and Geophysicists Act (Section 7841(d) to " ... test the applicant's knowledge of the state laws, rules and regulations, and the seismicity and geology unique to practice within this state."

### BGG Recruiting Subject Matter Experts

The BGG is recruiting Subject Matter Experts (SMEs) for examination development. Only those qualified for specific examinations may apply. For other information, please see the BGG website at [www.geology.ca.gov](http://www.geology.ca.gov)

## **CSUSB Geology Club Seeks Speakers**

### Speakers sought from Professionals

At the recent November AEG Meeting held jointly with the Geology Club at California State University, San Bernardino, Student Geology Club Co-President Vanessa Fava announced that the Club is seeking industry and consulting Professional Geologist speakers for the coming year, as we announced last month, as follows, as revised:

Here is your or your Companies' opportunity to speak to undergraduate Geology Majors in the inland area. The Geology Club, Geology Department, California State University, San Bernarino is seeking guest speakers for their schedule of meetings for coming part of the academic year, especially for January through March 2008. The student Geology Club would like to invite speakers for their monthly meetings. Anyone interested in speaking should contact Co-President, Venessa Fava, at [favav@csusb.edu](mailto:favav@csusb.edu). Meetings are anticipated to be in late afternoons during the weekday (tba).

## **Inland Students Seek AEG Student Chapters**

Cal Poly Pomona University undergraduates have discussed forming a new AEG Student Chapter in the Inland areas of southern California (see News, November edition). California State Univerisity student Geology Club is seeking a Student AEG Chapter formation, as well, according to Vanessa Fava, Co-President of CSUSB Geology Club, at the joint eeting of AEG with CSUSB Geology Club at CSUSB 14-Nov-07.

## **Information about AEG Student Chapters.**

An AEG Student Chapter can be joined from a host of

undergraduate majors, in other fields of earth sciences, or elated studies such as Geotechnical Engineering, or Soil Sciences, or Environmental Sciences for those in majors interested in the work and studies related to environmental and engineering geology. Student Membership Fee is \$25.00 per year. A Student Chapter may be formed by Three Student AEG Members filing petitions with the AEG National Association. AEG Student Chapters can be sponsored by local AEG Sections or Chapters. No fee. Student Chapters are tied to Official recognition by the University, and operate independently of AEG as a Student Club within the University and University requirements. A Stdent AEG Chapter is officially recognized by AEG, thus providing discounts, publications, and connections to student assistance. See [www.aegweb.org](http://www.aegweb.org) home page (Student Section)

(At present, there are two Student AEG Chapters in California. Apparently the historic and long-lived Student Chapter at Cal State Los Angeles is presently dormant). Currently a Student Chapter exists with the San Francisco Section, and the Sacramento Section. A new Student AEG Chapter in southern California would be in the AEG Southern California Section, sponsored by the Inland Empire Chapter, and thus under the Southern California Section because the Chapter is part of Section.)

(The AEG Southern California Section is the oldest, first-ever, and largest AEG Section in the World. Many of present Chapter Members/Attendees were a part of the former AEG Southern California Student Chapter at Cal State L.A.)

## **Masters Degree in Geology Program Sought**

### **- Professional Advice needed to Department Chairman**

Letters of support are requested concerning an advanced degree program at the Masters level in Geological Sciences at California State University, San Bernardino. Please send your support letter to Dr. Alan Smith, Chairman, Department of Geology, [AlSmith@csusb.edu](mailto:AlSmith@csusb.edu)

Apparently, the CSUSB School of Natural Sciences would entertain this need through support from the local area Professional Geologists indicating such interest and need. Other contacts who can assist a delegation of support are Professional Geologists Steve Mains, [watermains@aol.com](mailto:watermains@aol.com) and Jeff Ftzsimmons, [jeff@johnbyerlyinc.com](mailto:jeff@johnbyerlyinc.com)

See also, Chairmans' Comment, above, for input as online, survey-questionnaire, from employers

## Position Open - Cal State San Bernardino

The CSUSB Geology Department will be hiring a full-time, non-tenure-track lecturer. Duties will include teaching and coordinating introductory geology lectures (in the general education and teacher training programs), coordinating with other instructors, mentoring part-time faculty who may also be teaching introductory lectures and laboratories, possibly teaching other courses within the general education program (natural disasters, energy, history of life), or upper division courses within the candidates field of expertise, as well as other duties as assigned. A Master's degree in geological sciences is required; a Ph.D. is preferred. Must be able to relate well to a diverse, multi-ethnic student body. The complete job announcement and application instructions may be found at <http://geology.csusb.edu/index.htm> (look for the small link in lower right corner). Application deadline is December 1, 2007.

## AEG Meeting Details and Location

**RSVP is requested Thursday 13-Dec-07. Seating is limited to 45. Later RSVP must be submitted by 17-Dec and is subject to possible NO placement at meeting and NO food service..**

**Location:** Cask 'N Cleaver Steakhouse, Corona.

Cask 'N Cleaver Steakhouse  
100 N. Lincoln Avenue  
Corona, CA 92882  
(951) 735-8550



### Directions to Meeting.

Take US 91 west from I-15 to Corona, Exit north at Lincoln Avenue, and continue turning right into Parking lot. From the west, travel US 91 into Corona, and Exit at Lincoln Avenue, Turn LEFT (North) and cross freeway to immediately Turn LEFT and left again into parking lot. If taking US 91 heading East from Orange County or from Hywy 71, proceed East on Hywy 91 and EXIT at Lincoln Avenue, come to Stop (in the loop, you face West). Then turn Right (North) to cross over Hywy 91 and to immediately TURN Left (West, and immediately Turn Left (southward into parking lot to search for restaurant)

## Meeting Venue

Off the Menu Selections:

Pepper Steak or Top Sirloin	\$29.00
Teriyaki Chicken	\$26.00
Salmon (choices below)	\$31.00
Charbroiled Salmon	
Charbroiled Scampi-style Salmon	
Cajun/Blackened Salmon	

Sides

Hot, Thick-sliced Fresh-baked Breads
Caesar Salad
Garlic Roasted Mashed Potatoes (or substitute rice pilaf)
Fresh Garden Vegetables (in season)
Beverage service (non-alcoholic)

Beverages from Bar Room available

## Future Meetings

JAN Wednesday January 16th, 2008, Pomona

**\*\* Cal Poly Geology Club & AEG Joint Meeting \*\***  
**2008 GSA/AEG Jahn's Distinguished  
Lecturer in Engineering Geology**

-- "Earthquake Hazards and Risk in the Pacific Northwest"

Dr. John J. Clague, Shrum Research Professor, CRC  
Chair in Natural Hazard Research,  
Department of Earth Sciences, Simon Frasier  
University, Burnaby, British Columbia, Canada

FEB Wednesday February 20<sup>th</sup>, 2008, Moreno Valley  
-- "Tsunamis and Earthquake Dynamics"

Dr. David Oglesby, Professor of Geophysics, Univeristy  
of California, Riverside, Riverside, CA

MAR Wednesday Mar 20<sup>th</sup> -2008, Redlands

-- "Engineering Geophysics"

Anthony Martin, Geophysicist, Geovision Geophysical  
Consulting, Corona, California

APR Wednesday April \_\_ 2008, Temecula

-- "Rotating Crust along the San Andreas  
Plate Boundary"

Dr. Nate Onderdonk, Associate Professor of Geology,  
Department of Geological Sciences, California Stet  
University, Long Beach, Long Beach, California

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## Inland Empire Chapter Officers and Section/National Contact Information

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<http://www.aegsc.org/chapters/inlandempire>

**AEG Southern California Section Web-site**

<http://www.aegsc.org/>

**Association of Environmental and Engineering Geologists (Headquarters)**

<http://www.aegweb.org>

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Officers and Chairpersons, AEG Inland Chapter, beginning to the present (2005-2007): (Sept 15-2007)

**Back Row** (Left to Right): Frank Jordan, 1st Chapter President (2005), 1st Chapter Past President (2006), Vice President South (2006-2007); David Gaddie, Secretary (2006-2007); Scott Mathis, Vice President South (2006); Rick Gundry, Chapter President (2006-2007, Treasurer (2005 and 2006); Dr. Kerry Cato, Webmaster and Communications Chair (2005, 2006, 2006-2007); Mark Spykerman (Field Trip Chairman 2006, 2006-2007).

**Front Row:** Roz Munroe, Section Chairwoman, Southern California Section (2006-2007); Mitch Bornyasz, Vice President South (2007); Gary Wallace, 2nd Past Chapter President (Chapter President, 2006); Mike Cook, Vice President North (Secretary 2006); Doug Cook, Treasurer (Vice President North, 2006) not pictured: Richard Orr, Membership Chairman (2005, 2006, 2006-2007).

**Please also see next following page . . .**

Cal Poly Pomona University Students (w/others), Inland Empire Chapter Meeting, Temecula (17-Oct-07)

**Left to Right:** Jessy Bruns, July Brown, Rick Gundry (Newsletter Editor/Program Chair)), Dr. Jeff Marshall, Professor (Speaker), Robert Ellis, Mike Cook (Chapter Chair), Daniel Heaton, Kayla Kroll, Lauren Carey, and Kim Poste.

