## **Inland** Geological Society

## January 2019

## Next Meeting: Wednesday January 9<sup>th</sup>

Time: Social: 6:00pm Dinner: 7:00pm Lecture: 7:30pm

Location:
Jurupa Mountains
Discovery Center
7621 Granite Hill Dr.
Jurupa Valley, CA
92509
(Map on pg. 7)

Coming to
Dinner?
Please RSVP
by Monday, 1/7
rsvp.igs@gmail.com

## **Newsletter of the Inland Geological Society**

Volume 35 No. 1

## In this issue:

•	January Speaker: Margaret Gooding1-2	2
•	Announcements2-3	3
•	Upcoming Events/IGS Meeting Schedule4-5	5
•	Meeting Location & Current IGS Officers	6



### January Speaker:

## **Margaret Gooding**

#### "Seismic Hazard of the Fontana Seismic Trend"

#### Abstract:

Southern California is a seismically active region with a large population. The Study Area is the Fontana Seismic Trend, an area of intense earthquake activity in western San Bernardino County. There has not been much significant work done to quantify the potential seismic hazard posed by it. This presentation will show that there is potential for a moderate seismic event on the Fontana Seismic Trend that will likely cause quite a bit of damage and disrupt lives. The major faults nearby have been studied extensively, but this is not the case for the Fontana Seismic Trend. When plotted on a map, the earthquake epicenters of the Fontana Seismic Trend display a significant linear pattern both two dimensionally and three dimensionally.

(continued on p. 2)

PAGE 2

## Abstract (cont.):

This presentation discusses the methods used to determine the fault parameters and details the results from the seismic hazard analysis. In this presentation, the location and direction of movement of the underlying fault are identified and configured to fit the earthquake data. Using the plotted fault location, direction of movement and length, the maximum potential event that might occur on this fault was also quantified. HAZUS-MH (a FEMA software extension for ArcGIS) was used to perform a seismic hazard analysis to find out what type of damage and casualties can be expected if a moderate event occurs on this fault.

## Speaker Biography:

Margaret Gooding is a well-rounded, well-educated person with many years of varied work experience. She has been working in the GIS field for the last 20+ years for several employers. Specialties include cartographic output for printing or reports, writing and/or editing reports, GIS analysis and more. She has a Master of Science in GIS from Manchester Metropolitan University through the UniGIS program and a Bachelor of Science in Geology with a minor in Art from Cal State Fullerton. She is also involved in the community as Treasurer for the Inland Geological Society and as a committee chair for the Redlands Art Association.

Her master's thesis (Seismic Hazard Analysis of the Fontana Seismic Trend, located at http://goodingfamily.biz/MargGIS.htm) is the topic of this talk with some new, refined data to better locate the Fontana fault.

Check out IGS's Facebook Page at https://www.facebook.com/groups/InlandGeo/

Contact Margaret Gooding at at mgooding@roadrunner.com to join.

## ANNOUNCEMENTS AND UPCOMING EVENTS

#### **BPELSG Announcement:**

On November 30, 2018 the California Board for Professional Engineers, Land Surveyors, and Geologists (Board) published the Geology Education Rulemaking Notice. The Board proposes to adopt Title 16, California Code of Regulations sections 3022, 3022.1, 3022.2, and amend Title 16, California Code of Regulations section 3031.

Please visit our webpage to view the Initial Statement of Reasons and the proposed text. <a href="https://www.bpelsg.ca.gov/about\_us/rulemaking.shtml">https://www.bpelsg.ca.gov/about\_us/rulemaking.shtml</a> Comments from you are very important. Comments regarding suggested changes as well as comments indicating areas of agreement are equally important to the process. Instructions for providing comments are included with the public notice.

**AEG** is accepting abstracts for a Shlemon Specialty conference titled *State of the Science: Investigation of Active Fault s in the Basin and Range Province* to be held at the UNLV Campus, Las Vegas, Nevada on March 28-29, 2019. The deadline for abstract submittal is January 15, 2019. For additional information, see the flyer at https://www.aegweb.org/resource/resmgr/shlemon\_march\_28-29\_2019\_ver.pdf, or contact John H. Peck (702-556-5229, email: peckj1@juno.com) or Gary Luce (775-883-1600, email: lucegc@charter.net).

Marino Engineering Associates, Inc. (MEA) announces a workshop titled *Introduction to Numerical Modeling in Geotechnical Engineering with Emphasis on FLAC Modeling* to be held January 25-26, 2019, in downtown Los Angeles. The course will be taught by Dr. Siavash Zamiran, P.E., the 2018 ASCE St. Louis Young Engineer of the Year, and is recommended for civil, geotechnical, mining, petroleum, and geological engineers. MEA is offering a \$200 registration discount to AEEG Inland Empire members by using the code "AEEG" when submitting the registration form. For additional information about the course and registration, visit the web page at http://meacorporation.com/event/flac/.

## REGISTRATION NOW OPEN!



# **GEO-CONGRESS 2019**

8th International Conference on Case Histories in Geotechnical Engineering Philadelphia, Pennsylvania | March 24-27





## **Top 5 Reasons to Attend**

- Network with your colleagues from around the world.
- Attend Terzaghi, Peck, and Seed Award Lectures.
- Gain essential ethics and geo-business information at sessions provided by GBA.
- Visit exhibitors to find the latest tools, techniques,
   e-programs.
- Earn Professional Development Hours (PDHs) to maintain your professional licensure while gaining focused knowledge.
- Experience Philadelphia. A First World Heritage City, with its iconic 300 years of history amidst a vibrant 21st century culture and streets lined with parks, shops, public art, restaurants, and museums. Philadelphia is home to four Civil Engineering Historic Landmarks – a perfect landing spot for civil and geotechnical engineers!

## www.geocongress.org

PAGE 4

Registration is now open for AEG's *Risk Assessments for Dam and Levee Foundations Workshop* to be held April 24-26, 2019, in Denver, Colorado. This workshop will focus on the role and contributions of engineering geologists and geotechnical engineers in the Risk Informed Decision Making process in managing dam and levee safety programs, risks associated with geological potential failure modes, and communication with Risk Assessment teams. For additional course and registration information, visit the website at https://www.aegriskworkshop.org.

## **AEG 2019 Annual Meeting Call for Abstracts**



The Association of Environmental & Engineering Geologists 2019 Annual Meeting invites you to submit an abstract for publication and presentation at the 67th Annual Meeting in Asheville, North Carolina September 17-22, 2019. Abstract online submittal is now open. The deadline to submit your abstract is May 1, 2019. For complete meeting details and to register, please visit <a href="https://www.aegannualmeeting.org">www.aegannualmeeting.org</a>.

# Visit the Jurupa Mountains Discovery Center

7621 Granite Hill Drive, Jurupa Valley, California 92509 951.685.5818

The Jurupa Mountains Discovery Center hosts the Ruth and Sam Kirkby Earth Science Museum, which houses a unique collection of exhibits including the Crestmore Quarry, fluorescent minerals, Indian artifacts, mining exhibits, petrified wood, sea shells, dinosaur exhibits, fossils, rocks and minerals, and many more.

The onsite Granite Hill Nursery stocks a large variety of cacti and succulents, and the gardens showcase mature and unique species over several acres. A collection of butterfly gardens is under construction as part of ongoing Eagle Scout Service Projects. The Center also provides hands-on educational kits for educators, houses a critter corner in the gift shop, and hosts themed toddler times on Friday afternoons.

The Center is always looking for volunteers to assist in the many on-going activities from light construction work to assisting with tours and programs. This is a worthwhile and fulfilling opportunity for scientifically-minded individuals of all ranks, from students through working professionals to retirees. This service will look great on your resume! Please contact Executive Director Wes Andree at 951/685-5818 or director@imdc.org for further details.

Visit the website at https://jmdc.org to learn more about the Jurupa Mountains Discovery Center!







## **SAVE THE DATES**

33rd Annual

## **Desert Symposium and Field Trip**

Symposium: April 19-20, 2019—Zzyzx, CA Field Trip: April 21-22, 2019—Ivanpah to Tecopa *Theme*:

## Exploring Ends of Eras in the Eastern Mojave Desert

We'll examine historic mining in the area, the biologic changes associated with the Pleistocene to Holocene climate transition and potential sky island effects, and the timing and styles of Mesozoic thrusting and Cenozoic extensional tectomes.

Plan to submit a paper on one or more of these topics!

And share your research with an oral or poster presentation.

Abstract and paper deadline:
Final submission of reviewed and revised papers:
Registration deadline:

5 February 2019 12 March 2019 22 March 2019

We encourage students to attend and compete for the Adams Best Student Presentation Award

The field trip will return to Zzyzz Sunday night (April 21).
The final day will end at Zzyzz so we can extpool on both days of the trip.

For more information please visit

## DesertSymposium.org

The 2019 Desert Symposium is being held in cooperation with the Desert Studies Consertiom, California State University, Fullerton

The Desert Symposium has long featured the Adams Award for the best student talk or poster. This \$50 award is given at the annual meeting. It is funded by donations on the registration form.

Additionally, a new major Award for student research, the Robert Reynolds Student Research Award, has been established in honor of Bob Reynolds' decades of service. The award will be made annually to a student proposing research in and near the deserts of California, as funds permit and a qualified project is identified. The award will be for a maximum of \$1500.00. A short application that includes a research proposal is required to be submitted by February 15 of each year. An associated recommendation from a faculty mentor, on institutional letterhead, must be received by the same deadline. Proposals will be evaluated and a top candidate identified by March 15. The selected candidate will be encouraged to present a poster or talk about the proposal at the April Desert Symposium, at which time the general announcement of the winner will be made. Registration for the symposium will be waived for attendance by the winner. Students may contact David Lynch, Inc., Secretary DS david@alumni.caltech.edu for the application form.

We hope to create a large enough fund to provide sustainable support for this award. Please show your gratitude for Bob's work

by donating to the Award. Donors will be identified in the annual volume published by the Desert Symposium. Checks should be made out to: Desert Symposium Inc. Reynolds Award and mailed to: Bruce Bridenbecker, DSI Treasurer, 64451 Brae Burn Ave., Desert Hot Springs, CA 92240. For additional information, contact Bruce Bridenbecker@cmccd.edu, or Dave Miller at dmiller@usgs.gov.

Plan ahead for the **Geological Society of Nevada**'s 2020 Symposium, *Vision for Discovery: Geology and Ore Deposits of the Basin and Range*, scheduled for May 12-24, 2020, at the Nugget Casino Resort in Sparks, Nevada. Abstract submittal will open soon! For more information, visit the organization's website at http://www.gsnv.org/2020-symposium/.

## **Upcoming Meetings/Events**

## **Inland Geological Society**

In 2019, the Inland Geological Society will meet the first Tuesday or Wednesday of each month. The next meeting is scheduled for Tuesday, February 5th. For more information, visit our website at <a href="https://www.inlandgeo.org">www.inlandgeo.org</a>.

## **South Coast Geological Society**



Monthly dinner meetings are typically the first Monday of each month. The January meeting will be a joint meeting of SCGS and SDAG on January 16th at the Green Dragon in Carlsbad. Diane Murbach, Matt Burgess, and Ken

Hudnut will present *A landscape altered: the explosive end to Kīlauea's summit lava lake and the lower East Rift Zone eruption of 2018.* For more information, visit the association website at www.southcoastgeo.org.

## **AEG—Southern California Chapter**



The AEG — Southern California Chapter typically meets the second Wednesday of each month at Victorio's Ristorante in North Hollywood. The January meeting has not been announced yet. For more information, visit the association website at

www.aegsc.org.

## AEG—Inland Empire Chapter



The AEG — Inland Empire Chapter typically meets the third Wednesday of each month at Pinnacle Peak Steakhouse, 2533 S. La Cadena Drive, Colton. The January meeting has not been announced yet. For more information, visit the

association website at <a href="https://www.aegsc.org/chapters/inlandempire">www.aegsc.org/chapters/inlandempire</a>.

### **Rock & Gem Shows—various locations**

Various rock and mineral shows will be held throughout southern California. To find one near you, visit www.rockngem.com, then select the Show Dates tab.

## San Diego Association of Geologists



Meetings are usually held the third Wednesday evening of each month. The January meeting will be combined with SCGS. SDAG also has a field trip planned for Saturday, January 5th. For more information, visit the association website at <a href="https://www.sandiegogeologists.org">www.sandiegogeologists.org</a>.

## **Los Angeles Basin Geological Society**



Monthly lunch meetings are typically the 4th Thursday of each month from 11:30 am to 1:00 pm at the Willow Street Conference Center, 4101 E. Willow Street, Long Beach. The January meeting has not been announced

yet. For more information, visit the association website at <a href="https://www.labqs.org">www.labqs.org</a>.

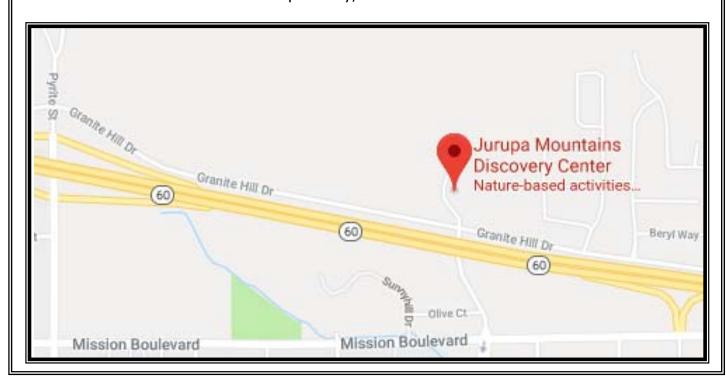
## **Get Your IGS Coffee Mug!**

IGS coffee mugs are available at the monthly meetings for \$10. Get yours at the upcoming meeting!



#### IGS MEETING LOCATION:

Jurupa Mountains Discovery Center 7621 Granite Hill Drive Jurupa Valley, California 92509



## **IGS OFFICERS**

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