



# AGS NEWSLETTER

ARIZONA GEOLOGICAL SOCIETY, INC., JULY 2007

## DINNER MEETING, JULY 3, 2007

Gabrielle Giffords

U.S. Representatives, 8th District, Arizona

*Southern Arizona in the 21st Century: Meeting the Challenges of Land Use, Water Resources, and Population Growth*

## Ores & Orogenesis Symposium General Update

The opening of the *Ores and Orogenesis* symposium is now only three months away. Registrations poured in before the end of the Early Registration period on June 1st, and by mid-June we had about 500 registrants.

We are in need of new volunteers who can help during the meeting itself. Ideal volunteers are AGS members and their spouses and children and University of Arizona graduate students. We need manual labor to help set up audio visual equipment early each morning from 6 to 8 am, Wednesday through Saturday, and to help take it down again every evening from 5 to 6 pm. We need volunteers for the registration desk, especially computer-savvy helpers for Tuesday evening, Wednesday morning, and Friday morning. We need volunteers to attend to the AGS booth to help sell publications, and finally, we need volunteers to act as official photographers of people and events.

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## CALENDAR OF EVENTS

- August 7: AGS Dinner Meeting – Mike Timmons, NM Bureau of Geology and Mineral Resources, *Late Precambrian Grand Canyon Supergroup, Intracratonic Basin Formation and Deformation During Rodinia Supercontinent Assembly and Breakup*
- September 4: AGS Dinner Meeting – Keith Long, U.S. Geological Survey, *Life-Cycle of a Technological System: The Inspiration Copper Mine, Miami, AZ*
- September 24-30: Ores & Orogenesis: Circum-Pacific Tectonics, Geologic Evolution, and Ore Deposits – A Symposium Honoring the Career of William R. Dickinson.
- October 2: NO AGS Dinner Meeting
- November 6, 2007 – Ralph Stegan, Phelps-Dodge, *Climas or Cerro Verde*
- December 4, 2007 – Lee Allison, Arizona Geological Survey, *Intelligent Design and the Attack on Science*

## Dinner Meeting Schedule — Inn Suites, 475 North Granada, Tucson

To reserve your place for dinner, please call 520-663-5295 before 5 pm, Friday, June 29, 2007. Indicate if a low-salt or vegetarian meal is required. Please cancel if you are unable to attend.

Cost: With reservation: Members \$24, Guest \$26, Students \$10. Without a reservation, \$3 additional.

Cash Bar @ 6 pm

Dinner @ 7 pm

Talk @ 8 pm



## Field Trip Update

**W**hat! You haven't booked a field trip for the AGS symposium? You know, Ores and Orogenesis – with 19 great field trips, pre and post-meeting?

Don't wait too long! Six trips have met the minimum number of registrants and are confirmed. They may fill up shortly. These trips and trip numbers are:

1. Epithermal gold deposits in southern Kyushu, Japan.
4. Laramide Porphyry Copper Systems and Superimposed Tertiary Extension: A Life Cycle Approach to the Globe-Superior- Ray Area.
6. Leached capping and enrichment in porphyry copper deposits of Arizona and New Mexico (SEG-sponsored trip).
7. Roots of a pluton and porphyry copper system, Pima District, Arizona
10. Pb-Zn deposits of Chihuahua, Mexico.
19. Structural geology of the Santa Catalina metamorphic core complex, Arizona.

A number of trips are close to the required minimum number of registrants and need only a few more people to put them over the top. The deadline to meet the minimum is the first week of July. After that, because of time constraints for planning, trips with few registrants are likely to be canceled. So if you want to attend one of these excellent field trips, sign up today.

### New Mexico Geological Society Annual Fall Field Conference Jemez Region, September 19-22, 2007

**Day 1** – Travel from Pojoaque/Espanola around north side of the Jemez to Youngsville, then south to La Grulla plateau, Encino Point, Santa Fe Group phreatomagmatic deposits and a sectioned volcano, to the north rim of the caldera; then east to Lobato dacites, Rio del Oso fault zone, and Clara Peak, to Espanola and Los Alamos.

**Day 2** – Entirely within the caldera, including El Cajete crater, Redondo Creek megabreccia, Redondo Creek rhyolites, Valle

General Update, Continued from P. 1

If you have not registered for the meeting yet, you can do so now at the Regular Registration rate. If you have already registered, you can go back and add field trips, luncheons, dinners, etc. Note that the deadline for field trip registrations is July 1<sup>st</sup>.

Friday night of the symposium is Reunion night. Exploration and mining companies (dead or alive), government organizations, and universities will be holding reunions at various indoor and outdoor venues around the El Conquistador Resort from 6 pm to midnight, and there will be a central buffet dinner. Whether or not you have yet registered, you can go to the part of the Reunion page of the symposium web site and sign up, noting your current or prior company, government organization, or school affiliations. Those organizations with the largest sign ups will get the premier venues.

We again thank our corporate sponsors for keeping the cost of the symposium affordable for individual attendees and students.

### *Try a Short Course at the Ores and Orogenesis Symposium!*

Short courses at the O&O symposium offer an excellent opportunity to update needed exploration skills. Whether you're a project manager needing a concise overview on the current NI 43-101 reporting process, or an employer hoping to hone your team's mineral estimation skills, a short course is an efficient way to add new skills and pick up critical current information. Consider the following topics and sign up today!

#### *Short Course 1: Mineral Resource Estimation*

Participants will become familiar with the processes involved in evaluating, developing and estimating a mineral resource.

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Santa Rosa lake beds, rhyolite intrusives in north caldera wall, an enigmatic thick sedimentary sequence, volcanic stratigraphy at Cerro Pinon, and a barbecue at the Valles Caldera National Preserve head-quarters before return to Los Alamos.

**Day 3** – Pajarito Plateau hydrology and environmental geology, paleoseismic studies, Pajarito fault kinematics, Bandelier Tuff, and south to Triassic structure and stratigraphy north of Ponderosa.

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# Other Geoscience News

## **A**GS Publications

Over the years the Arizona Geological Society has published numerous seminal digests and field-trip guide books. Many of these publications are still available; they can be purchased at AGS monthly meetings and from the AGS by mail or telephone. Below are the publications that are still available and their prices.

PUB. NO.	TITLE	PRICE
	Southern Arizona Guidebook, 1968	\$12.00
Digest 7	none	\$ 5.00
Digest 9	none	\$ 6.00
Digest 10	Tectonics Digest	\$14.00
Digest 13	none, 1981	\$12.00
Digest 14	Relations of tectonics to ore deposits in the southern cordillera, 1981	\$17.00
Digest 15	Gold and silver deposits of the Basin and Range Province, western U.S., 1984	\$17.00
Digest 16	Frontiers in geology and ore deposits of Arizona and the southwest 1986	\$25.00
Digest 17	Geologic evolution of Arizona, 1989	\$60.00
Digest 18	Mesozoic rocks of southern Arizona and adjacent areas, 1987	\$17.00
Digest 19	Proterozoic geology and ore deposits of Arizona, 1991	\$35.00
Digest 20	Porphyry copper deposits of the American Cordillera, 1995	\$75.00
Digest 21	Desert Heat - Volcanic Fire, The Geologic History of the Tucson Mountains and Southern Arizona, 2002	\$16.00

### **Arizona Geological Society**

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No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.

— Isaac Asimov (1920-1992)

## **M**ember News:

AGS offers our sincere condolences to long-time members, Russ Corn and Bob Metz, both of whom lost their wives recently.

Many thanks are extended to our newest O&O sponsors for their generous symposium support:

Anglo American Exploration — up to a Gold Sponsor  
Donald Hammer — Copper Sponsor  
Newcrest Resources — Copper Sponsor  
VANE Minerals Plc. — Copper Sponsor  
Volker Spieth — Molybdenum Sponsor

Short Course Update, Continued from P. 2

### *Short Course 2: NI 43-101 Reporting Process*

This course looks at the NI 43-101 reporting process from the perspective of the Securities Regulators and those in industry who prepare the reports. This course will give you the information you need to fully understand the process.

### *Short Course 3: Uranium Deposit Models*

This course will focus on ore deposit models, which are continually evolving with new discoveries and research, for worldwide uranium occurrences in various host rocks and deposit types. (Also has an optional 4-day field trip.)

### *Short Course 4: Ore Fluids*

This course will introduce the student and professional exploration geologist to basic concepts related to our current understanding of the distribution of fluid inclusions in magmatic-hydrothermal ore deposits, and more.

### *Short Course 6: Target Prediction in Mineralized Terrains*

This course focuses on interactions between tectonics, emerging geological architecture and the physical processes involved in hydrothermal mineralization, and how numerical simulation can be applied to improving targeting efficiency.

Short courses are one day each and include instructional materials. For full information, go to the symposium web site:

<http://agssymposium.org/pages/short-courses.php>



## ARIZONA GEOLOGICAL SURVEY

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For information on ordering AGS  
publications, visit  
[www.arizonageologicalsoc.org](http://www.arizonageologicalsoc.org).

AGS books and maps are also sold at the dinner  
meeting and by the  
Arizona Geological Survey.

*As always, please keep us up-to-date as you move, change jobs, or E-mail address. Thanks to all our wonderful Membership Directory Sponsors for a great directory.*

### 2007 AGS MEMBERSHIP APPLICATION OR RENEWAL FORM

Please mail check with membership form to: Arizona Geological Society, P.O. Box 40952, Tucson, AZ 85717.  
Dues (circle one): 1 year: \$15; 2 years: \$30; 3 years: \$40. Full-time students receive free membership (E-mail only).  
However, a membership application form must be returned to AGS annually to remain on the membership list.

Name: \_\_\_\_\_

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Please send the newsletter by E-mail only ☐ by regular mail only ☐ by E-mail AND regular mail ☐

If registered geologist or engineer, indicate registration number and state: \_\_\_\_\_

Enclosed is a \_\_\_\_\_ tax-deductible contribution to the J. Harold Courtright Scholarship Fund.

Enclosed is a \_\_\_\_\_ tax-deductible contribution for the 2007 AGS Symposium.