



EARTHQUAKE

e-Newsletter about what's movin' and shakin' at the Earth Science Museum

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Flagg Mineral Foundation's Minerals of Arizona Symposium Highlights

By Shirley Coté, Ray Grant and Harvey Jong

Recently, several members of the ESM attended the 21st Annual Minerals of Arizona Symposium where the ESM set up a display of teacher's kits and a periodic table of the elements prototype.

The symposium features speakers on the historical, scientific, and educational aspects of Arizona minerals. Each speaker presents photos of the minerals found at the locale of their topic along with pictures, both historical and recent, of the mines, mountains, buildings and people.

A favorite presentation this year was regarding the mineralogy along Route 66 in Northern Arizona by Anna Domitrovic of the Arizona-Sonora Desert Museum and long time member of the Tucson Gem and Mineral Society.



Anna is distinguished as the only speaker who has given a presentation at all twenty-one mineral symposiums.

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New this year at the symposium, was a micromount session on Friday afternoon. Foundation members enjoyed the afternoon picking through a myriad of specimens from Roland Fogg's micromount collection and

inspecting the beautiful minerals through microscopes and hand lenses.

Then, at 4 p.m., Mr. Joe Marty discussed the new minerals recently found in the western United States and showed locality pictures, maps and photomicrographs.

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Each year at the mineral symposium, the Flagg Mineral Foundation awards the A.L. Flagg Distinguished Service Award which is presented to a member who exemplifies the ideals of Arthur L. Flagg. This year's recipient is Mardy Zimmermann of Tempe. Mardy is a retired teacher and is currently the VP of Education and Outreach Coordinator for the Earth Science Museum.



Like Mr. Flagg, Mardy has tirelessly promoted earth science education through the egg carton program she developed over 20 years ago, the ESM teacher kits and the school outreach program where students receive hands-on experience with rocks, minerals and fossils.

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Enhanced ESM teacher kits

With a grant from the Staples Foundation's "2 Million & Change" program, the ESM enhanced the teacher kits which now include a hand magnifier and books on rocks, minerals, fossils and geology.

These kits are provided at no charge to schools that submit a request through the ESM Outreach Program. The learning materials along with an interactive classroom presentation are delivered by trained volunteers. For more information, please click on the following link www.earthsciencemuseum.org/node/56



Another feature at this year's symposium was a display of the *Mineralogical Record* magazine along with some of their other publications.



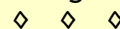
The following is an excerpt from their website at <http://www.minrec.org/about.asp>

"The *Mineralogical Record* magazine is issued six times a year and is the most authoritative and widely respected mineral collector's journal in the world; no serious advanced collector would

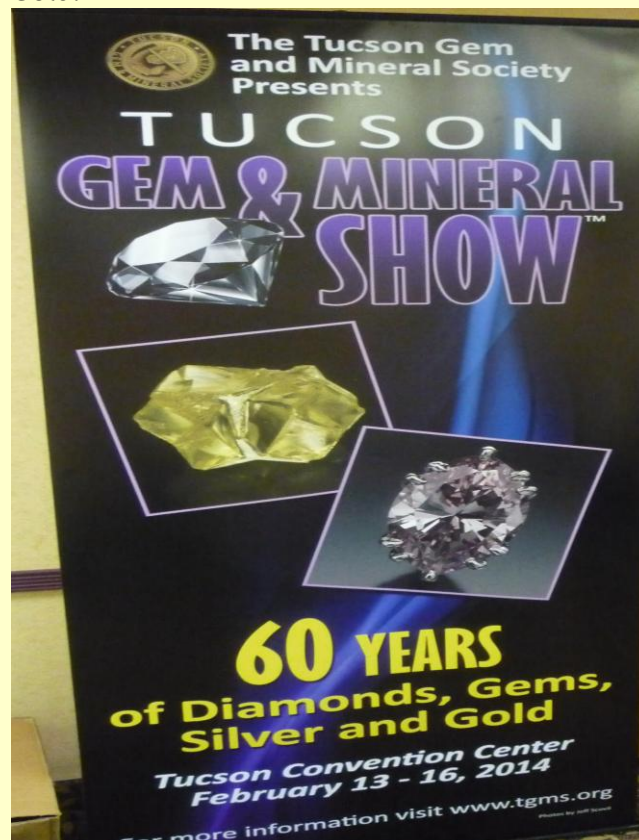
be without it. Over the years many newcomers to the field have learned from it the extensive information they need to go from novice to expert-and to have fun in the process."



Mineralogical Record magazine & book display



The symposium included a Tucson Gem and Mineral Show banner that announced the theme for the next show: Diamonds, Gems, Silver and Gold.



MARK YOUR CALENDAR!!!

ESM Periodic Table of the Elements Challenge



ESM Periodic Table of the Elements display

The new Earth Science Museum plans to have an interactive periodic table of the elements as one of its featured exhibits. This display will use the latest technology to create an exciting visual exploration of the elements, their properties and use in everyday life. At present, a prototype of the periodic table (shown in the above photograph) has been constructed to generate interest and collect inputs about the display. The prototype is used as part of the ESM Outreach Program and is presented at school events, such as science fairs.

There are 92 natural occurring elements (88 for those purists who insist on stable isotopes) and these combine to form the about 4,700 known minerals. The periodic table shows the relationship of the various elements to each other and helps us to understand the formation of the different minerals. Minerals are a good way to introduce students to chemistry as they can hold the minerals in their hands and learn about the elements they contain. One example is galena, lead sulfide, which is heavy because of its lead content and represents the ore mineral that is mined to produce lead.

The Earth Science Museum is updating the current periodic table of the elements prototype

with the “Adopt-An-Element” project. It is looking for either more colorful representative minerals containing various elements or samples of the native or refined forms of each element. The specimen should be thumbnail size (fit in a one inch cube) and your contribution of one or more of the following items would greatly enhance the appeal of the display.

Element Number	Element Name	Mineral Example
22	Titanium	Rutile
24	Chromium	Fuchsite
30	Zinc	Sphalerite
31	Gallium	Sphalerite or gallite
32	Germanium	Sphalerite or germanite
37	Rubidium	Lepidolite or zinnwaldite

If you have one of the above minerals and would like to donate it to the ESM, please contact Shirley Coté at scote@earthsciencemuseum.org or Harvey Jong at harvey.jong@earthsciencemuseum.org
Thank you for your consideration.



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www.earthsciencemuseum.org

MANY THANKS TO OUR MAJOR DONORS!

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Mission

Establish an innovative, world-class destination museum in the Phoenix area dedicated to inspiring all generations about earth sciences.

Vision

We envision a community where students and the general public have curiosity about, passion for, and understanding of the underlying principles of earth sciences.

Please join us at the next ESM board meeting
Wednesday, May 8, 2013, at the Burton Barr
Library in Phoenix at 6:30 p.m. Rm. B.

For more information about the ESM, how
to become a member or how to arrange
for a school visit go to:
www.earthsciencemuseum.org.

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