

# THE ROCKHOUND RECORD

Volume 75, Issue 4 Newsletter for the Mineralogical Society of Arizona  
April 2009



***NEXT MEETING:***  
***FRIDAY, APRIL 10, 2009***  
***AT 7:00 PM***

## **MEETING TOPIC & SPEAKER**

OUR SPEAKER FOR APRIL WILL BE  
BRAD ROSS,  
Manager, Infrastructure  
Resolution Copper Mining Superior, AZ

Besides his professional life as a mining engineer, Mr. Ross was a dealer of fossils and mining artifacts at the Tucson Show for over twenty years.

Currently, he is working on his Ph.D. in Mining Engineering at the University of Arizona. His dissertation topic is the sustainability of artisanal miners in Namibia. These miners use chisels to produce mineral specimen and gemstone rough that includes aquamarine, tourmaline, topaz quartz, and diopase.

His interest in the artisanal miners developed when he and his family lived in Namibia for over three years. He has offered to give our group a PowerPoint presentation and talk about Namibia, the minerals that are found there, and the miners that produce the minerals; and show specimens from Namibia.



## **ARIZONA MINERAL COLLECTOR**

### **NUMBER 118**

By Raymond Grant

Here are three new minerals for the Arizona mineral list.

Coloradoite, which is a mercury telluride ( $\text{HgTe}$ ), has been found in a gold nugget at the Middle Placers Camp claim. It occurs as microscopic masses with pyrite as inclusions in the gold. It was found by Erik Melchiorre who is working on a book about the gold from the Quartzite region. He is coauthor of Rich Hill, The History of Arizona's Most Amazing Gold District that you can buy at the Mineral Museum.

The second new mineral is Munakataite. Joe Ruiz found it at Tiger and had it identified. Munakataite is a lead copper selenate sulfate hydroxide  $-\text{Pb}_2\text{Cu}_2(\text{SeO}_3)\text{SO}_4(\text{OH})_4$ . It occurs as blue fibrous material with boleite and leadhillite. The interesting thing is it is the first selenium mineral found at Tiger.

The third mineral is calderonite, which is a lead iron vanadate hydroxide -  $\text{Pb}_2\text{Fe}(\text{VO}_4)_2(\text{OH})$ . It occurs as small lathlike brown crystals at Tres de Mayo mine group, Santa Cruz County. You can see photographs of the specimen at <http://rruff.info/>. This the U of A site for their research in minerals. You type in the mineral in which you are interested to find information and photographs. Not every mineral is there, but they are working toward a complete list.

We have to take one mineral off the list. In the Arizona Mineral Collector number 114, I listed mattheddleite from Tiger. More work has been done on the specimen and it appears to be a new mineral not mattheddleite. We can't list it until someone does the work to characterize it and give it a name.

That gives us at present 870 minerals on the Arizona list, if you are keeping track.

We had some great talks at the Minerals of Arizona symposium. Jan Rasmussen gave an interesting talk about "Wulfenite in Arizona" and you can download her paper from the internet. Just Google Jan Rasmussen and go to her research section. Evan Jones gave a good talk about paramelaconite from Bisbee. I'll say more about that and some of the other speakers on Arizona in a future column.

## **APRIL BIRTHSTONE**

Aries (March 21 – April 20)

Taurus (April 20 – May 20)

By Heather Hill

The birthstone for April is the diamond, also an alternate Zodiac stone for the Constellation of Aries. Pure diamond is completely colorless and transparent over a larger range of wavelengths (from the ultraviolet into the far infrared), they may be nearly any color of the rainbow plus browns, grays, and white. Shades of yellow are most common, followed by colorless. Blue, black, reddish, and greenish are more valuable (some extremely so). Diamonds have a relatively high index of refraction (ability to bend light), which gives it the high luster called adamantine, and high optical dispersion which gives diamond the "fire", the unique ability to reflect and refract light into vivid flashes of brilliant color. Nothing can scratch a diamond other than another diamond. And a diamond can scratch anything, even a sapphire. The only gemstone highest on the Mohs' hardness scale....a 10.

Diamonds are simply crystallized carbon formed deep within the earth by volcanic activity brought to the earth's surface in volcanic eruptions, and found in a type of rock called "Kimberlite", which comprises the core of certain volcanoes over especially thick portions of the earth's crust. In many cases, the diamonds weathered out of the kimberlite by natural processes, and were transported downstream by water. Kimberlite is mined, crushed between giant steel rollers then reduced to fine gravel, yet the extremely hard diamonds come out unharmed; water is added and a grease covered roller sorts the diamonds from the gravel, as the diamonds stick to the grease. Typically, a single carat of diamond is recovered from a ton of rich ore.

It is well known that Diamond is the hardest substance found in nature, but few people realize the Diamond is four times harder than the next hardest natural mineral, corundum (sapphire and ruby). Diamond has four directions of cleavage, meaning that if it receives a sharp blow in one of these directions it will cleave, or split. A skilled diamond setter or jeweler will prevent any of these directions from being in a position to be struck while mounted in a jewelry piece.

Diamond conducts heat better than anything - five times better than the second best element, Silver. This characteristic is the basis for "diamond tests", as it is simple and cannot be faked.

The name diamond refers to its hardness, the Greek word "adamas", meaning "unconquerable." The ancient Hindus called the Diamond "Vajra," meaning lightning, both because of the sparks of light thrown off by this gem as well as its invincible strength.

No more notable in its uncut state than a plain pebble upon the beach, the true beauty of the Diamond was not revealed until the 16th century, when gemstone cutting and polishing techniques were perfected. Prior to this time, it was considered taboo to modify the original state of a Diamond. Today, the value and appeal of this stone depends largely upon how skillfully it is cut and faceted.

Often mistaken for a diamond, the cubic zirconia was created to have the highlight qualities of a diamond, the brilliance of a diamond, but the price significantly less than even a white zircon. The derivative of the name zircon is unknown, but natural zircon has been known since antiquity for its brilliance; thus the name cubic zirconia refers to a superb zircon-like, man-made gemstone with a cubic crystal system.

Diamonds have been revered throughout history. Used to embellish crowns, swords and emblems as well as jewelry, they've even been part of national holidays. Queen Victoria declared the celebration of her 50th year of reign a "Diamond Jubilee." A gift of a Diamond is symbolic of everlasting love. There is no more convincing a promise of an enduring relationship than the brilliant gemstone that has endured in people's hearts throughout the ages.

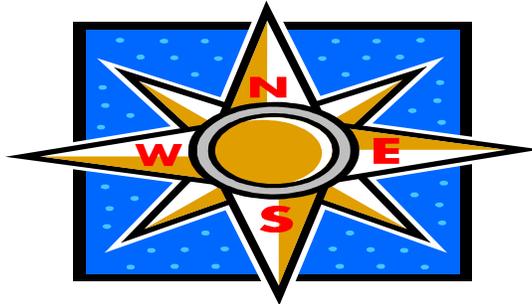
India is thought to be the first river-bed source of Diamond mining, but today these gemstones are found primarily in Australia, the Soviet Union, and Africa such as along the coast of South Africa, and can even be found in the U.S.A. in Arkansas.

*SOURCES: Birthstones.com, Aboutbirthstones.com, Galleries.com*

## COALITION TRIP FOR APRIL

**WILL BE ANNOUNCED AT THE MEETING, AS WE HAVE NO INFORMATION AT THE TIME OF PUBLISHING.**

**THANK YOU FOR YOUR PATIENCE.**



### MSA APRIL FIELD TRIP

**SATURDAY, APRIL 18, 2009**

Our field trip for April will be to a mine/mill site owned and operated by one of our members, Frank Burns.

We will meet first at the exit off I-17 - exit 223A. Go right east to the Mobil gas station on right side of road. I'll have the yellow MSA sign there. Meet at 7:00 A.M. Leaving there about 7:30 A.M. This will be the only stop with gas, food, restrooms, etc.

We get back on I-17 heading north to the Bumble Bee exit 248. Maps and directions will be available there.

Collecting at the mine site will be at designated areas that Frank will explain and he will also give information about mining processes used in the past and present day mines.

Inherent dangers on mine property include open shafts, loose footing, trip hazards, and snakes.

High clearance vehicles are recommended, 2-wheel drive is okay. All minors must be accompanied by a parent or guardian with good supervision.  
Bring water, food and wear good boots for walking.

All attending must sign the waivers provided by the mine owner.

Ed Nichols  
YeOlde Rockhound

## ***ROCK SHOWS***

**April 4, 5, 2009 Kingman Annual Show**

**Kingman Academy of Learning**

**3419 Harrison St. Kingman, AZ**

**Sponsored by: Mohave County Gemstoners**

P.O. Box 3992

Kingman, AZ 86402

Displays, silent auction, dealers, raffle, and door prizes.

Hours: Sat. 9-5, Sun. 9-4

Admission and parking: Free

More Info: Pete 928-565-4321 or

Dave 928-692-3797

**April 10-12 in LONG BEACH, CALIFORNIA:**

***"The New Jewelry, Gem, Bead & Mineral Show"***

***High Sierra Investment Group Inc.***

Long Beach Convention Center, 300 E. Ocean Blvd.

Fri. 12-6, Sat. 10-7, Sun. 10-5; adults \$6, seniors and students \$3, children free - Door prizes, gold panning specialist and certified gemologist and appraiser on hand

Contact: High Sierra Investment Group, Inc.

20385 Pahute Rd., Apple Valley, CA 92308

(702) 869-0269 / E-mail: [GEFisher39@aol.com](mailto:GEFisher39@aol.com)

Web site: [www.HighSierraInvestments.net](http://www.HighSierraInvestments.net)

**April 11-12 in PARADISE, CALIFORNIA:**

***55th Annual Show***

***Paradise Gem & Mineral Club***

Paradise Elks Lodge, 6309 Clark Rd.

Sat. 10-5, Sun. 10-4; adults \$1, children free - Raffles, demonstrations, auctions, exhibits, youth activities;

Contact Carol Eggleston, 3745 Cosby Ave.,

Chico, CA 95928, (530) 343-0894

E-mail: [cjeggy@chico.com](mailto:cjeggy@chico.com)

**April 17-19 in SAN DIEGO, CALIFORNIA:**

***Gem Faire, Inc. Show***

Scottish Rite Center, 1895 Camino del Rio S.

Fri. 12-7, Sat. 10-7, Sun. 10-5; \$5 weekend pass

**April 17-19 in STOCKTON, CALIFORNIA:**

***"The New Jewelry, Gem, Bead & Mineral Show"***

***High Sierra Investment Group, Inc.***

San Joaquin Co. Agritourism Conference

2101 E. Earhard Ave.

Fri. 12-6, Sat. 10-7, Sun. 10-5; adults \$6, seniors and students \$3, children free - Door prizes, gold panning specialist and certified gemologist and appraiser on hand

Contact: High Sierra Investment Group, Inc.

20385 Pahute Rd., Apple Valley, CA 92308

(702) 869-0269; E-mail: [EFisher39@aol.com](mailto:EFisher39@aol.com)

Web site: [www.HighSierraInvestments.net](http://www.HighSierraInvestments.net)

**April 24-26 in DENVER, COLORADO:**

***"Colorado Mineral & Fossil Show-Spring"***

***Martin Zinn Expositions***

Holiday Inn-Denver Central,

4849 Bannock St.

Free admission; 80 wholesale and retail dealers, minerals, fossils, gems, jewelry;

Fri. 10-6, Sat. 10-6, Sun. 10-5;

Contact: Martin Zinn Expositions

P.O. Box 665, Bernalillo, NM 87004-0665

Fax (505) 867-0073

E-mail: [mz0955@aol.com](mailto:mz0955@aol.com)

Web site: [www.mzexpos.com](http://www.mzexpos.com)

**April 24-26 in SALT LAKE CITY, UTAH:**

***"2009 Spring Festival of Gems"***

***Wasatch Gem Society***

115 North 10th West,

Utah State Fair Park, Zions Bldg.

Fri. 10-6, Sat. 10-6, Sun. 10-5; adults \$2, children, scouts and leaders in uniform free;

Member displays, craft and lapidary demonstrations, dealers, equipment, rocks, gems, kids' grab bags, Wheel of Fortune, silent auction, door prizes;

Contact: Jeffery Huefner, (801) 467-6850

E-mail: [jeffjane@juno.com](mailto:jeffjane@juno.com)

Web site: [www.wasatchgemsociety.com](http://www.wasatchgemsociety.com)

**April 24-26 in SANTA ROSA,**

**CALIFORNIA: *Gem Faire***

Sonoma County Fairgrounds/Grace

Pavilion, 1350 Bennett Valley Rd.

Fri. 12-7, Sat. 10-6, Sun. 10-5

Admission \$5 (weekend pass);

Contact Yooy Nelson (503) 252-8300

E-mail: [info@gemfaire.com](mailto:info@gemfaire.com)

Web site: [www.gemfaire.com](http://www.gemfaire.com)

**April 25-26 in SANTA CRUZ,**

**CALIFORNIA:**

***Annual Show- Santa Cruz Mineral & Gem Society***

Santa Cruz Civic Auditorium, corner of Center St. and Church St.;

Sat. 10-5, Sun. 10-5; adults \$3

Treasure Wheel, demonstrations, more than 20 dealers, gems, minerals, beads, jewelry, fossils;

Contact: Dean Welder, P.O. Box 343, Santa Cruz, CA 95061, (408) 353-2675

E-mail: [wdeanwelder@yahoo.com](mailto:wdeanwelder@yahoo.com);

Web site: [www.scmgs.org](http://www.scmgs.org)

## **"KJ" Werner's Moving and Mineral Sale**

KJ, after 53 years in the USA, for several reasons, but mainly because of his long illness and five different surgeries in 2008 that practically put him into a severe financial situation, has decided to return to Europe for good.

Therefore, between Saturday, April 11th, and Sunday, May 17th, on the weekends, he will hold an extensive mineral and related sale. The sale will include minerals he usually sold at mineral shows - some of his valuable award and trophy winning specimens from his personal collection, as well as inexpensive minerals.

Also, for sale is his fluorescent case, with fluorescent minerals, and he will sell two of the last made new like Pony Cases, made by Mr. Anderson in the early 90's for him; they are complete with risers, lights and locks.

Several boxes of mineral related magazines (like Mineralogical Record, Rock and Gem, etc.) are also available.

Everything must go! Please contact KJ at (602) 758-1443 for an appointment.

**MSA CONTACT INFO:**

President:  
Lois Splendoria  
[chimes@extremezone.com](mailto:chimes@extremezone.com)  
602-571-4577

Vice President  
& Field Trip Coordinator (Club Trips):  
Ed Nichols  
[epidote555@yahoo.com](mailto:epidote555@yahoo.com)  
(480) 636-1251

Treasurer and Coalition Field Trip Coordinator:  
Betty Deming  
[bd\\_mac2003@yahoo.com](mailto:bd_mac2003@yahoo.com)  
(602) 242-1553

**Secretary: Position vacant. Interested?  
Contact Lois Splendoria**

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[sagegirl777@juno.com](mailto:sagegirl777@juno.com)

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John McLaughlin  
(623) 979-5246

Librarian/Door Prizes/Hospitality:  
Bob Holm (623) 247-1325

Refreshments: Lynne Dyer  
(480) 396-2393

**MSA BOARD OF GOVERNORS:**  
LYNNE DYER, TERRY DYER  
BOB HOLM

**HEATHER HILL  
MINERALOGICAL SOCIETY OF ARIZONA  
1502 West Washington Street  
Phoenix, AZ 85007**

**ADDRESS CORRECTION REQUESTED**

[www.azminerals.com](http://www.azminerals.com)



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**Mineralogical Society of Arizona  
Founded 1935  
A Non Profit Organization**

**Purpose:** To promote popular interest in the various Earth Sciences, and particularly the fields of Geology, Lapidary, Mineralogy, Paleontology, and other related subjects.

ID badges are available from the Treasurer.

**Meetings:** 7:00 p.m. at the Arizona Mining and Mineral Museum, 1502 W. Washington, Phoenix, AZ - on the second Friday of the month, September through June (*except February, which is the third Friday*). No meetings in July or August.

**Dues:** Adults – Single Adults \$12.00, Juniors (18 yrs. and under) -\$2.50, Families & Couples - \$20.00.

**Mail dues to Betty Deming at  
2922 W. Claremont, Phoenix, AZ 85017**

The Mineralogical Society of Arizona is a member of the American Federation of Mineralogical Societies and the Rocky Mountain Federation of Mineralogical Societies.



[www.amfed.org](http://www.amfed.org)

[www.rmfmts.org](http://www.rmfmts.org)

Member of the Arizona Coalition of Rock Clubs

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