

# HUI PŌHAKU 'Ō HAWAI'I

## Rock & Mineral Society of Hawai'i, Inc.



### Meeting Times

#### MEETING

Wednesday

May 23

6:15-8:00 pm

Makiki District Park

Admin Building

#### NEXT MONTH

African Minerals

#### LAPIDARY

Every Thursday

6:30-8:30pm

Makiki District Park

2nd floor Arts and  
Crafts Bldg

#### MEMBERSHIP

DUE COSTS 2011

Single: \$10.00

Family: \$15.00

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P.O. Box 23020

Honolulu, HI

96823-3020

### South American Minerals By Dean Sakabe

The topic for May's meeting is Minerals of South America. Just about everyone can look at your jewelry box and take out any commercially purchased Amethyst, Aquamarine, Citrine, Topaz, or Emerald piece. Chances are all of these stones originated from South America. I cannot tell you definitely what country or location they came from, but generically they came from somewhere in South America.

South America is blessed with just about every gemstone, so I will not be mentioning any gemstone or precious metal, with the one exception of the following. Near Diamantina, Brazil there is a place where special conglomerations are found. These at first look are brown and kind of ugly. However if you look carefully they have the habit of containing rough Diamonds and natural Gold wires. Mr. Kruger showed me some of them which he obtained in Tucson, needless to say the combination of these were very impressive. Unfortunately, they were lost when his van was broken into, so no one was able to see them.



Native Gold and Diamonds in conglomerate, Diamantina, Minas Gerais, Brazil

## South American Minerals

Pink Opal from Ica, Peru gets its color from the surrounding matrix which has palygorskite in it. The pink opal is high in silica, which gives it a hardness of 6. This makes them the hardest opal in the world.

Blue Opal also found in the Andean mountains of Peru, does not have the presence of Palygorskite, which turns it bluish. If the opal is formed in the presence of Sepiolite the color turns greenish. The Blue opal has a hardness between 5 and 5.5, Depending upon how much silica is in the opal.



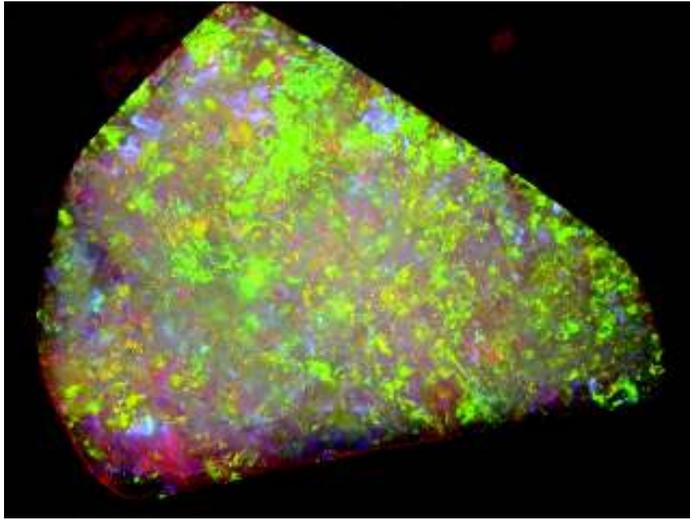
Pink and Blue Opal, Ica, Peru



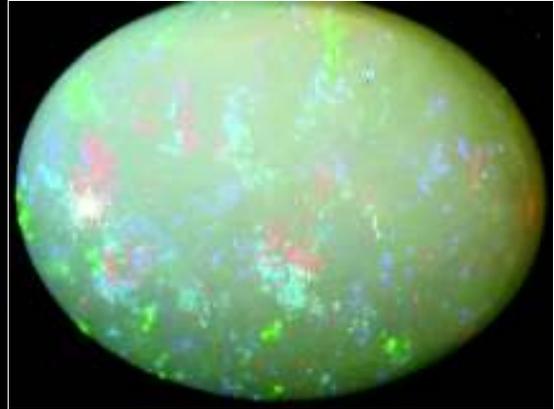
Brazilian Opal has been compared to the opal coming out of Cooper Pedy, Australia. The top end play of color in the crystal opal (and white based opal) is fantastic. This opal is also slightly harder than Australian opal (just over 5, versus around 4.5 for Australian opal). It is mined in the northeast region of the state of Piaua, Brazil. This opal is formed in sandstone and siltstone matrix. Additionally it has on average less than 5% water composition, which makes this a very stable opal.

In the Patagonia region of southern Argentina, in an area called the badlands (for all the reasons you might suspect), there are areas in which fantastically colored agates are found. Commercially

## South American Minerals



Opals, Piaua, Brazil



these are called Condor Agates and Puma Agates. One because Condors are in that area, and the other because there were many puma tracks in the area that this agate was found. The agate walls are a translucent or smoky chalcedony with inclusions of fine red hematite lines or bands of Blue, Red, or Orange. Additionally these agates sometimes strongly fluorescent green due to uranium salts present in the ground.



Left: Condor Agate, Patagonia, Argentina

Below: Fossilized Pine Cones, Patagonia, Argentina

There are those that consider Argentina as a "complete fossil bed". There are trilobites in the north, ammonites in the south and vertebrates and fossil plants found all over the country. In Cerro Cuadrado, Patagonia, there are some of the finest fossilized pine cones. They exhibit incredible preservation and very detailed. Currently it is illegal to dig these gems up and exportation of these are strictly forbidden.



Rhodochrosite is a manganese carbonate, it occurs as a hydrothermal vein mineral along side of other manganese minerals in low temperature ore deposits. The Incas believed that Rhodochrosite is the blood of their former rulers, turned to stone, therefore it is sometimes called "Rosa del Inca" or "Inca Rose". In Capallitas, Argentina they are min-

## South American Minerals



Rhodonite, Chiuruc Mine, Dos de Mayo, Peru

ing the banded Rhodocrosite which you see in cabochon jewelry. Catamarca, Argentina has produced very fine stalactites of Rhodochrosite.

Rhodonite, the magnesium inosilicate found in Peru and Brazil is not the usual massive Rhodonite used as an ornamental stone. This occurs in brilliant red-to-pink translucent crystals

Copper is mined Argentina, Bolivia, Brazil, Chile, and Peru. Where there is copper, there is a chance that other copper related minerals are also found. In Chile there is also Turquoise. The Aztecs knew turquoise as 'Chalchihuitl.' Turquoise has turned up in a lot of Aztec artifacts. It is also found in Argentina, and Brazil.

Copper pseudomorph after Aragonite,  
Corocoro District, La Paz, Bolivia



## WE HAVE A FACEBOOK PAGE! LET'S GO LIKE IT!

HTTP://WWW.FACEBOOK.COM/PAGES/ROCK-AND-MINERAL-SOCIETY-OF-HAWAII/103902329673700?V=WALL&REF=SGM

MAHALO TO MARKUS FOR ESTABLISHING OUR *ROCK FACE!*

### Officers

#### *President*

Faye Chambers

cateyes@hawaii.rr.com

#### *Vice President/Admin.*

Ed Sawada

#### *Vice President/Lapidary*

Dean Sakabe

(808) 526-6347

#### *Treasurer*

Debbie Iijima

#### *Secretary*

Jade Emory

#### *Newsletter Editor*

Elise Thomasson

elise.thomasson@gmail.com

The Rock & Mineral Society meets on the 4th Wednesday of each month (except for adjusted dates in November and December) at the Makiki District Park, 6:15-8 pm. Enter from Keeaumoku Street. Parking is free but limited.

The Newsletter is published monthly, some days prior to the meetings and is distributed in electronic format by email (Adobe Acrobat PDF file attachment). Printed copies are "snail" mailed to those who do not have email. The electronic format usually contains full-color images; the print version may be limited to B&W due to reproduction costs.

### DOOR PRIZES

Please note that we have instituted door prize drawings at our monthly meetings. Because of Hawaii's gambling laws, these drawings cannot be conducted in the common "raffle" format where tickets are sold. Rather, each *paid* member attending the meeting will receive a drawing ticket upon request. A voluntary donation of \$1.00 is requested and encouraged. Drawings will be conducted at the end of the meeting with available prizes awarded in random order. You must be present to win. Please remember: if you win a prize, please bring one to the next meeting. This helps to keep our drawings going. Thank you.

### Parking at Makiki Park

Parking along Keeaumoku St. starts at 5:30

After that, good luck because it drops off really fast!



Benitoite, San Benito County, California

### Have an idea for the newsletter?

We welcome all articles and ideas, and we want to make you a contributor. Feel free to send your idea to [elise.thomasson@gmail.com](mailto:elise.thomasson@gmail.com). It would be wonderful to share stories, pictures, tips and tools.



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