HUI PŌHAKU 'O HAWAI'I
Rock & Mineral Society of Hawai'i, Inc.

Meeting Times

MEETING
Wednesday
April 25
6:15-8:00 pm
Makiki District Park
Admin Building

NEXT MONTH
South American Minerals
May 23

LAPIDARY
Every Thursday
6:30-8:30pm
Makiki District Park
2nd floor Arts and Crafts ldg

MEMBERSHIP DUE COSTS 2011
Single: $10.00
Family: $15.00

P.O. Box 23020
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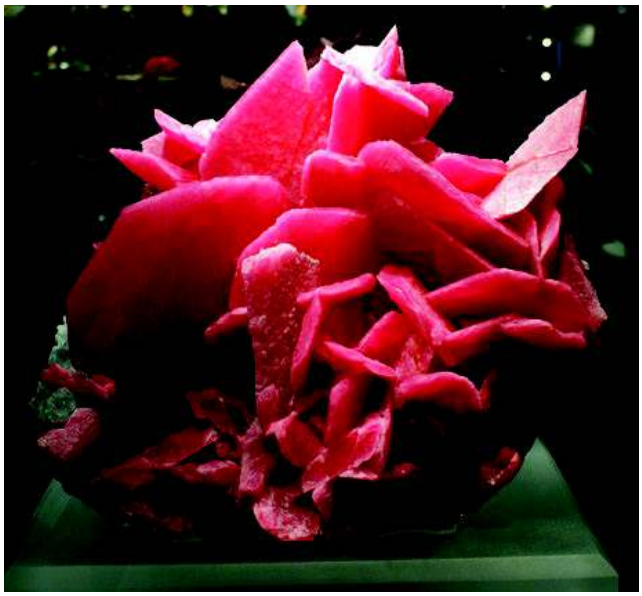
Chinese Minerals
By Dean Sakabe

The April minerals of the month are those from China. Historically, the stone most synonymous with China is Jade. All other minerals are a distant second. The distinction of Jade being either Nephrite or Jadeite is not that important. The Imperial Green Jade (Jadeite) is the top prize, however Mutton Fat Jade (Nephrite) is also prized.

Nephrite, is one of the two minerals called Jade. The other Jade mineral is Jadeite. Jade has been used for eons in China and Central America as ornamental and religious stones of deep significance. The Nephrite Jade was used mostly in China, although both have been used in both regions. Nephrite is more abundant than Jadeite and has fewer color varieties, ranging only from creamy white to green, to black.

Jade (both Nephrite and Jadeite) is found either alluvially in the stream beds or mined in the mountains. Burmese Jadeite has traditionally found its way to the Chinese Jade markets where, the rough has been sold alongside Chinese nephrite rough. Usually small windows are cut out of the stone to give a clue to the quality and color of the jade locked within the stone. However to the Jade buyers it is still a gamble, because it could be plain stone color, or the buyer could be very fortunate to find imperial green quality.



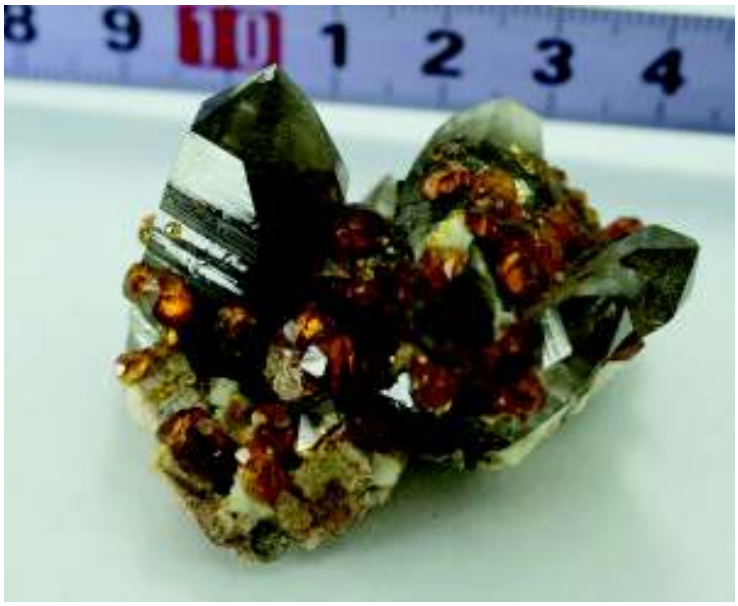
Rhrodocrosite – This Manganese Carbonate is known for its outstanding red color. Inpurities (and Calcite) cause the color to range from pink to white. This is exhibited in the massive

Emperess of China Rhrodocrosite – Wudong mine, Wuzhou, Guangxi, China

Blue Minerals

form or stalactite with the pink and white banding. Rhodochrosite is found in the Guanxi and Hunan provinces.

Spessartine Garnets found in the Fujian province of China are of the orange – reddish colored varieties. These garnets are colored by manganese, which produces the orange color. If some Iron is also present with the manganese then the hue is more towards the reddish range.



Spessartine on Quartz – Wushan, Yunxiao, China

Turquoise, this hydrous phosphate of Copper and Aluminium was named from the French "turquoise" meaning "Turkish." The original material from the south slopes of the Al-Mirsah-Kuh Mountains (Iran), found its way to Europe via Turkey. The Chinese Turquoise which has come out in abundance from the Hubei province occurs in blue and green varieties. It has been mined as early as 1700 B.C. and even imported from Persia. The reason is that the Chinese preferred to use Turquoise as carving material for statues and other art works. Thereby reserving Jade for jewelry. Blue Turquoise occurs from presence of Copper. Green Turquoise occurs when there is a high concentration of Iron. Iron will replace some of the Aluminium. When Zinc is present, the turquoise will take on a yellowish-green shade. China has all of these shades of turquoise.

Pietersite - Hunan, China

Pietersite, a variety of tigereye, in which the chatoyant red, blue, and gold are mixed and swirled together, producing a highly desirable lapidary material. Pietersite, was previously found in a small area in Namibia. A very similar material has been found near Nanyang, Henan in 1993. It is called "Eagle's Eye" in China, due to the blue chatoyancy. Unfortuantely, the mine is currently closed due to ground water problem.

Nantan Iron Meteorites, composed of 92.4% Iron and 7% Nickel. The Nantan region also has a unique distinction of having a meteorite witnessed and recorded as early as 1516. " During summertime in May of Jiajing 11th year, stars fell from the

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northwest direction, five to six fold long, waving like snakes and dragons. They were as bright as lightning and disappeared in seconds". It was not until China's "Great Leap Forward" program in 1958, when China needed lots of steel and everyone across China was smelting iron ore into Steel. The farmers in Nantan tried to smelt the iron rich rocks and found that their backyard steel factories would not melt these rocks and caused the government to start an investigation, which proved the "iron ore" to be iron meteorites. Further detailed mapping showed that the Nantan meteorites were distributed in an area of 27 - 28 Km long and 8 Km wide. Nantan meteorites range from 10 grams to 2,000 kg. An estimated 9,500 kg of meteorites have come from this area.

Stibnite an Antimony Sulfide can be found with fine crystal clusters and long curved (or straight) single crystals. Some slender, curved metallic blades of stibnite can resemble swords, the curving of the long bladed crystals is due to twinning where one twin plane bends the crystal one direction and another twin plane bends it in the other direction. Stibnite's crystal clusters are admired for their distinctive look with dozens of bladed crystals jutting out in many divergent directions. The best stibnite specimens are coming from the Lushi and Henan provinces.

Realgar, an Arsenic Sulfide gets its name from the Arabic words for "powder of the mine" (rahj al ghar). Realgar has a deep red color, with high clarity and luster. However, Realgar's red color can be fleeting, it can be unstable and will alter into a different mineral, Pararealgar and eventually to a powder. The process takes time and is accelerated by exposure to light. Therefore specimens should be stored in dark, enclosed containers, and only exposed to light for periods of time. There are ancient Chinese carvings of Realgar, however they are badly affected by the deterioration. The deterioration of Realgar was thought to produce the closely related yellow orpiment, but this was recently proven to be false and the deterioration product is in fact yellow-orange Pararealgar. Realgar from the Shimen province in Hunan produces superb crystals

Realgar - Shimen, Hunan, China

Orpiment an Arsenic Sulfide, usually forms with Realgar. The masses are sometimes transparent and have a gemmy quality to them. The yellow color is special to orpiment and can be confused only with a few other minerals. The name of Orpiment is derived from the latin *auripigmentum*, or golden pigment. Over time, orpiment will deteriorate into a powder. The process takes a long time, but exposure to light will accelerate it, therefore specimens should be stored in dark, enclosed containers. Orpiment is being mined in Shimen, Hunan, China.

Cinnabar (Mercury Sulfide) possesses a very red and stable color. Well shaped scarlet crystals have

Blue Minerals

been coming from Hunan, China. The twinned crystals are considered classic for Cinnabar and forms a penetration twin that is ridged with six ridges surrounding the point of a pryamid.

Azurite a copper carbonate hydroxide, is a mineral which gets its name from its azure color. Azure is derived from the arabic word for blue, which is due to the presence of copper. Azurite has been used as a dye for paints and fabrics for eons. The Chinese variety of Azurite does not have the sparkling transparent formation of those found in Morocco, instead it is massive, forming in connected balls. Azurite can be found in the Shilu, Yangchun, and Guangdong provinces.

Azurite - Shi Lu Copper Mine, Guangdong, China

Pyrite a Iron Sulfide, is the classic "Fool's Gold". The cubic pyrite crystals from the Wuxian, Guangxi area has been producing very interesting formations. It has a beautiful luster and interesting crystal shape.

Pyrite with Fluorite - Hunan, China

Blue Ball Fluorite - Henan, China

Fluorite a Calcium Fluoride, from China has a very distinctive green octahedron and cubic formation. Vast quantities have been coming out of the Xianghualing Mine in Hunan. The Lingwu, Hunan mines have produced Fluorite, mixed in with Quartz, and Scheelite, whereas the Fluorite from Pingwu, Sichuan has Fluorite with Scheelite on Mica-dominant matrix.

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Mahalo to Markus for establishing our *Rock Face*!

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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 Keeamoku St. starts at 5:30

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

Left: Malachite with Chryscolla on Quartz - Meigu, Sichuan, China

Above: Calcite Stalactite – Wenshan, Yunan, China

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. It would be wonderful to share stories, pictures, tips and tools.

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