

HUI PŌHAKU 'O HAWAI'I

Rock & Mineral Society of Hawai'i, Inc.



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MINERALS OF INDIA

BY DEAN SAKABE

February's topic is minerals from the India peninsula. The first one will be **Indialite**, named after India. This Magnesium, Aluminum, Silicate was formed by fusion and recrystallization of rocks above burning coal seams. Indialite is essentially a high temperature polymorph of Cordierite. Indialite was first found in the Bokaro coal seam, which is southwest of Hazaribagh, India. However the picture shown is of the German variety. It is just a nicer looking crystal.



Indialite
Nickenicher Weinberg, Germany

Golconda Diamonds are the standard for very high quality diamonds, often absolutely colorless, with a high level of transparency. They are chemically pure natural type-IIa diamonds. What makes these diamonds special is that they have very little nitrogen, and do not react to infrared spectroscopy. Some of the Golconda diamonds include the Great Table Diamond, the Koh-i-Noor Diamond, the Orlov Diamond, the Sanc Diamond, and the Great Mongul Diamond. The Hope Diamond (also known as the recut French Blue) also originated in India, however it is blue and it is highly reactive to infrared light.

The **Padparadscha** Sapphire from Sri Lanka is a very special variety of gem corundum, a natural mixture of pink and orange. The name Padparadscha is derived from the Sanskrit *pad-maraga*, "a color akin to the lotus flower". Today other sapphires have

been found in Vietnam's Quy Chau district, Tanzania's Tunduru district, and Madagascar. However these stones are often heat-treated or Beryllium diffused to reach a rich "orange-juice" or "papaya" orange. The difference between these stones and Padparadscha's are that Padparadscha's were natural and the heated or Beryllium diffused stones tend to be darker, with brownish overtones.



Heulandite

MEETING

Wednesday
February 22
6:15-8:00 pm
Makiki District
Park
Administration
Building

NEXT MONTH

Wednesday
March 28

LAPIDARY

Every Thursday
6:30-8:30pm
Second-floor Arts
and Crafts Bldg
Makiki District
Park

MEMBERSHIP COSTS

2011

Single: \$10.00
Family: \$15.00

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Kashmir Sapphires, these blue sapphires are first discovered in the Padar region of Kashmir. This mine is in a remote region very high in the Himalayan mountains of northwestern India. Lying at an elevation of approximately 15,000 feet, they are located in the small Kudi Valley, in the Paddar region of Kashmir. In its glory years crystals as large as 5 inches were found. They range in color from near colorless to a deep blue, including a highly prized, rich "velvety" blue that is considered the sapphire color.

Moonstones from Sri Lanka, the classical country of origin of the moonstone, shimmer in pale blue on an almost transparent background. Specimens from India feature an interplay of light and shadow on a background of beige-brown, green, orange or brown. This gemstone belongs to the feldspar mineral group, which almost two thirds of all the rocks on Earth consist of. Moonstone is a 'adularia', a potassium aluminosilicate, which is also found in the Alps near the Adula Group – hence the name 'adularia'. The Moonstones from Orissa, India have been found with a smoky color and a champagne colored. Some of these also have a cat's eye effect or a four-spoked star.

Apophyllite, whose name roughly means "to leaf apart" in Greek, was given its name because its crystals tend to peel or flake apart when they are heated, due to the loss of water molecules. This



Stilbite, Shahpur, Jalgaon, India



Okenite, Kandivali, Mumbai, Maharashtra, India

silicate is found in the Deccan Basalts in India especially around Poonah. The color is mostly clear or colorless, however it can also occur as yellow, red, or the most sought after green.

Cavansite is a hydrated calcium vanadium silicate which was only discovered in the last 30 years. The best crystals come from the zeolite quarries in the Poonah district. The deep blue spherical rosettes are generally found on matrix coated with snow-white crystallized Stibite.

Okenite, is a hydrated calcium silicate hydroxide. This unusual mineral is found in areas east of Bombay City (Kandivali and Kurar areas). Okenite frequently forms "cottonball" clusters where the crystals are so thin they look like tiny fibers. The clusters are composed of straight, radiating, thread thin, crystals, forming inside volcanic bubbles called vesicles. Inside there are lines with delicate balls of Okenite, you will find them called "Okenite Geodes". One note of caution, the clusters bring out an urge to touch the fine fibers and to "test" the minerals softness. Discourage this as Sawada san can tell you, the crystals are very delicate and once touched, are never the same again

Gyrolite is another Hydrated calcium silicate hydroxide, which often forms individual nodular aggregates. These aggregates can appear glassy, dull or even fibrous. Most of the Gyrolite forms inside volcanic bubbles called vesicles. Gyrolites were mined from the zeolite quarries around Bombay.

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News and Notes, page 3

WE HAVE A WEBSITE!

http://pohakugalore.net/Hui_pohaku/Hiu_pohaku_1.html

MAHALO TO MARKUS FOR HELPING US GET OUT OF THE ELECTRONIC STONE AGE!

Scolecite is a hydrated calcium aluminum silicate which forms sprays of radiating crystals. These zeolites are found in Nasik around the Mahodori River quarries. Scolecite's structure has a typical zeolite openness in that contains open channels that allow water and large ions to travel into and out of the crystal structure. The size of these channels controls the size of the molecules or ions and therefore a zeolite like scolecite can act as a chemical sieve. Scolecite, a calcium zeolite, [natrolite](#), a sodium zeolite, and [mesolite](#), a calcium and sodium zeolite, are closely related and sometimes found together.

Green **Aventurine** Quartz, is actually a quartzite (a rock), not a mineral. It is composed essentially of interlocking macrocrystalline quartz grains and other color imparting minerals. The green is from tiny platelets of green chromium mica called fuschite. There is also Yellow and Blue aventurine. Some aventurines contain different varieties of mica, hematite or other sparkly inclusions giving other colors from orange to red. These colorful specks add sparkle and also create or help create the body color of the aventurine they inhabit. The best green aventurine comes from the region of Bellary. A town in the state of Mysore in south central India, 270 miles northwest of Madras.



Cavansite on Stilbite.
Wagholi Quarry, Maharashtra, India



natural Padparadsha Sapphire
Ratnapura, Sabaragamuwa Province,
Sri Lanka

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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, 7:00 - 9:00 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.

Any newsletter comments are appreciated, and can be sent to elise.thomasson@gmail.com

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