The Mineralogical Society of the District of Columbia

THE MINERAL MINUTES

Vol. 74, No. 6 ***Founded 1942*** ***June 2015***

Welcome to summer!

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Mineralogical Society of the District of Columbia Meeting Dates, Time, and Location: The first Wednesday of each month. (No meeting in July and August.) The National Museum of Natural History, Smithsonian Institution, 10th Street and Constitution Ave, Washington D.C. We will gather at the Constitution Avenue entrance at 7:45 PM to meet our guard who will escort us to the Cathy Kirby Room. Street parking: **THERE ARE NOW PARKING FEES, PAYABLE AT THE KIOSKS, AND ENFORCEMENT UNTIL 10 PM.**

Pre-Meeting Dinner: Join us at 6:00 p.m. for dinner before the club meeting. Location: Elephant & Castle, 1201 Pennsylvania Avenue, NW. Please contact Dave Nanney, or Steve Johnson, *StevikJ@gmail.com*, to make a reservation if you wish to attend.

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Program for the June Meeting: An Update on Pegmatite Research - Dr Michael Wise

Wednesday, June 3, 2015 7:45 pm
Smithsonian Natural History Museum 10th Street and Constitution Avenue, NW

Dr. Michael A. Wise is a geologist in the Division of Mineralogy at the Smithsonian Institution and a long time member of MSDC. Dr. Wise received his doctorate from the University of Manitoba in 1987. Dr Wise's research interests center on the study of pegmatites. and the chemistry associated with the minerals found in these course grained igneous bodies. Dr. Wise has studied many of the pegmatites found in the United States and Canada and has published a number of well received papers on the crystal chemistry, petrology, and evolution of pegmatite systems. We look forward to hearing Dr. Wise update us on his latest research.

Synopsis of the May 2015 MSDC Meeting

- Andy Thompson, Secretary

Business Meeting

President Steve Johnson opened the meeting by asking for old business (none) and new business (none). Treasurer Rebecca Siegal wasn't present, but let Steve know that the club's bank balance was about the same as last reported.

We had two visitors, Margie Noonan, who is local to the DC area, and her father Joe Noonan, an active mineral collector who was visiting from Texas. She had found us online because she knew he'd enjoy coming to a mineral club meeting while visiting DC. Joe Noonan generously donated to the club a pieces a dozen hand-sized thin slabs of polished agate from his extensive collection of agates from Colorado, the Rio Grande, and west Texas.

For Geology in the News, Joe Noonan and club members noted the disastrous earthquake in Nepal, two volcanoes in Chili, another earthquake off the coast of Oregon, and the collapse of the Hawaii Kilauea caldera roof. Andy Thompson noted for those who missed our December 2014 holiday party and meeting that Tim Rose, our Smithsonian sponsor in the Mineral Sciences Department, had given us a photographic update of the recent increase of lave overflow activity at Kilauea.

Steve acknowledged the earlier service of two MSDC past presidents in attendance, Erich Grundel and Andy Thompson.

MSDC member Braden asked for assistance in identifying minerals and fossils he had recently received from a friend . During the social time after the meeting, Steve Johnson, Dave Hennessey and others identified and tagged each of his specimens. Suzie and John Weidner and Andy and Betty Thompson provided refreshments.

The Eastern Federation (EFMLS) provided MSDC with tickets for a fund raising drawing with the top prize being a very high end microscope donated by Rievan Zelnick, a frequent presenter at Wild Acres and long-time leader in mineralogical and lapidary expertise.
The door prizes for the evening included a beautiful spinel which had been donated to MSDC by Sue and Fred Dhyse. The second door prize had been donated that evening by Joe Noonan and was a beautiful blue agate thin section which he had collected from Creede Colorado and which included a streak of silver sufiide. The specimens were won by attendees Braden and Erich respectively.

Steve then concluded the business meeting by calling for a motion to adjourne and by introducing the evening's speaker, Dr. Keal S. Byrne, a post-doctoral fellow at the Smithsonian Mineral Sciences Department. His doctoral work in physics, at the University of Western Australia, focused on optics and lasers. The Rio Tinto mining company came to University faculty looking for someone to research why the famous pink diamonds of Australia's Rio Tinto Argyle mine are pink. Keal's work with Rio Tinto shaped his dissertation and led to his fellowship at the Smithsonian. His presentation gave clear answers to the questions of why

diamonds have color, even though the laws of physics preclude any color in diamonds, and what causes some diamonds to change color under various conditions. Members were clearly interested; they asked many follow-up questions in the Q&A following Keal's presentation.

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McGuinnessite – A Rare Delight!

(Mg, Cu)2(C03)(OH)2

By Sheryl E. Sims

(photo credit: Sheryl Sims)

Up until the time that I attended the annual micromounters conference this spring, I had never heard of McGuinnessite. Thanks to a mineral club friend, George Reimherr, who pointed it out to me, I now have a piece in my collection. He said that it had become a rare find. If I remember correctly, George collected it quite some time ago from the Rockville Quarry.

This mineral was named after Al McGuinness in 1981. Al was from Oakland California. He was born in1926 and died in 1990. His love for mineral grew from his time as a Boy Scout. Later in life he joined the military and attended the University of California when he got out. While at "UC," he studied mineralogy under an instructor named Adolph Pabst. He graduated with a degree in mining engineering.

McGuinness had a personal collection of about 950 mineral. They ranged in all sizes. He especially enjoyed collecting zeolites from the Pacific Northwest. He also collected quartz and various rare species form San Benito County, California. One of these rare species was what is now known as McGuinnessite.

McGuinnessite has a hardness of 2 ½ and is a member of the Rosasite Group. It is pale blue-green in color, but may also have some white.[1] McGuinnessite has a luster that ranges from vitreous to silky; and, it is usually found in serpentinized peridotite.[2] I'm very pleased that George pointed this pretty mineral out to me and that a piece can now be found in my own collection!

[1] Hhto://www.mindat.org/min-2615.html

[2] http://rruff.info/doclib/hom/mcguinnessite.pdf

Mineral of the Month: Azurite and Malachite - Fraternal Twins

- Susan Fisher

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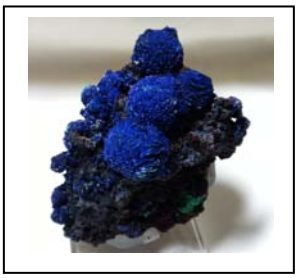

Azurite
Ibiajara, Bahia,
Brazil
(3.5x2.5x4 cm)

Malachite
Milpillas Mine,
Cuitaca, Mun. de
Santa Cruz,
Sonora, Mexico
(12.5x9.x7.3 cm)

Azurite:
Formula: $Cu_3(CO_3)_2(OH)_2$
System: Monoclinic
Color: Azure blue, light blue...
Luster: Vitreous
Hardness: 3½ - 4
Name: From the ancient Persian lazhward, meaning "blue".. The name was changed to azurite in 1824 by Francois Sulpice Beudant.

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Malachite:
Formula: $Cu_2(CO_3)(OH)_2$
System: Monoclinic
Color: Bright green,
Hardness: 3½ - 4
Name: Named in antiquity molochitus because it resembled the green color of the leaves. The spelling was changed to malachite sometime before 1661.

Malachite and azurite are closely related minerals. Both are secondary copper minerals frequently found in the oxidized zones of copper bearing ore deposits. Both are copper hydroxyl carbonate with just minor differences in the amounts of copper and the carbonate radical. Both are widely distributed and often occur together in numerous locations. Both have been known from antiquity and have been used for ores of copper, paint pigments and decorative stones. There are numerous striking mineral specimens containing vivid blue azurite and bright green malachite. Azurite is often pseudomorphed to malachite with much sought after specimens showing large azurite crystals partially modified to malachite.

Azurite is typically found as tabular to prismatic crystals of a deep "azure blue" color with lustrous faces. Many of these crystals are very complex so that it is difficult to identify and decipher the Miller indices of the faces. .Beautiful specimens are found in many locations, but those from Bisbee, Arizona; Tsumeb, Namibia; and Chessy, France are famous.

Malachite has widely variable habits. Typically it is found as crystalline aggregates or crusts, often banded in appearance. It is also often found as botryoidal clusters of radiating crystals. Single crystals and clusters of distinguishable crystals are uncommon. Many of the thick crusts are so compact that they can be cut and polished into ornamental stones or jewelry.

Like azurite, there are numerous locations that provide lovely pieces, but classic pieces have come from the Russian Urals; Bisbee, Arizona; and the Katanga province in the Democratic Republic of the Congo.

(Photos and minerals - Susan Fisher)

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Editor's "Two Cents" - I'm so confused

- Susan Fisher

Lou Costello, of the famous comedy team of Abbot and Costello, may have had great insight into the current mineral collecting scene when he said "I'm so confused!" At least that statement describes my current mental state. One aspect of my confusion began when I acquired portions of an older collection. In that collection there is a lovely small cabinet specimen from Tsumeb, Namibia, that has a rich covering of pistachio green micro crystals as well as small azurite crystals. The early 1970s era dealer label indicated that the green mineral is duftite. While this is a reasonable identification, Tsumeb has an abundance of minerals that occur as green micro crystals. After looking at the piece and the associated minerals on it for a while, I started to wonder if the green mineral might be arsentsumebite. I am now arranging to have a sample analyzed so I should be able to get a definitive answer on the mineral's chemistry. If the analysis comes back as $Pb_2Cu(AsO_4)(SO_4)OH$, lead copper arsenate sulfate hydroxide, what do I call it? Naming conventions in the mineral world are changing and a short search through my sources yielded several possible names - Arsentsumebite, As-Tsumebite, Tsumebite (As), duftite ± bayldonite or ???. The latest version of the Glossary of Mineral Species still lists arsentsumebite but for how long?

Other things have confused me recently. How does what appears to be a mediocre common mineral crystal from a currently producing, prolific site command the same four figure price online as a very fine example of a less showy mineral from a long-closed, classic location? Since I don't have a scanning electron microscope stashed in the basement, how do I identify/name that dark brown tourmaline in the growing list of New England's brown tourmalines with minutely different chemical formulas? (It was easy when they were all called dravite!) If I can identify a mineral from outside the US accurately, what is the current name for the location? The world's changing geo-political boundaries have adjusted the names and countries associated with many mining areas. Several pieces in my collection have labels dating back to the mid-nineteenth century. Many of those locations have gone through two world wars, many local conflicts, the Cold-War, the fall of the Soviet Union, the establishment of new nations and other name and boundary changes. With every geo-political realignment, names and ownership have changed so where is the site now? I sit for hours with books and maps spread everywhere and burn up the data lines following clues.

All in all, confusion reigns and Lou Costello may have been the most perceptive person of the twentieth century. Isn't it wonderful!!!! What would life be without a few challenges?

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Editor's note: Last month, I asked for comments on the roles of newsletters in the current electronic age. Thank you to the four members who returned comments to me. The consensus was that newsletters play a vital role in maintaining the cohesion of a group. Social media also has a role, but there are privacy and security issues to be considered. Other groups have experienced unfortunate results when information on sites and collections has been widely published. It seems that less informed individuals have visited sites and have done damage or have not respected the rights of property owners. These actions have resulted in sites being destroyed and/or being closed to all.

I would still like to hear from others on how to achieve a good balance of what should be included in newsletters and how and when social media should be employed.

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See you at the June meeting and then in September!

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Upcoming Events:

May 30: Towson, MD - 26th Annual Chesapeake Gem & Mineral Show. Ruhl Armory, I-695 exit 26 south., Towson, MD. 10 am - 4 pm

June 6: Macungie, PA - 64th Semi-Annual Spring Mineralfest Show sponsored by the Pennsylvania Earth Sciences Association. Macungie Memorial Park, Macungie, PA

June 6-7: Canandaigua, NY - GemFest 2015, sponsored by the Wayne County Gem and Mineral Club. NEW LOCATION: Greater Canandaigua Civic Center, 250 N. Bloomfield Road, Canandaigua, NY. <www.wcgmc.org>

June 6-7: Monroe, NY - 2015 Orange County Mineral Society will host its annual Mineral, Gem, Jewelry, Fossil SHOW SELL & SWAP at Museum Village, 1010 Rt. 17M, Monroe, NY 10950. 10AM-4PM rain or shine.

July 11-12: Syracuse, NY - GemWorld 2015 sponsored by he Gem & Mineral Society of Syracuse will be held at the SRC Arena and Events Center in suburban Syracuse, NY USA.

July 11-12: Bethel, ME - Annual show; Oxford County Mineral & Gem Association, Telstar High School; RTE #26; Sat. 10 am-5 pm, Sun. 10 am-4 pm;

July 25–26: Cutchogue, NY - Long Island Mineral & Geology Society, 34th Annual Gem, Mineral & Jewelry Show/. Sat., 10:00am - 5:00pm, Sun., 10:00am-5:00pm. Cutchogue East Elementary School, 34900 Main Road (Rte. 25), Cutchogue, NY 11935

July 25-26: Burlington, VT - Burlington Gem and Mineral Club, 36th Annual Champlain Valley Gem, Mineral & Fossil Show, Tuttle Middle School, 500 Dorset St., South Burlington, Vermont.

August 7 - 9: East Coast Gem, Mineral & Fossil Show, West Springfield, MA, 10 a.m.–6 p.m. Friday–Saturday, 10 a.m.–5 p.m. Sunday, Better Living Center at the Eastern States Exposition, 1305 Memorial Ave., West Springfield, MA 01089

Visitors are always welcome at our monthly meetings and dinners!

MEMBERSHIP APPLICATION OR RENEWAL
THE MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA (MSDC)

(___) Family ~ $25.00 per year. One address.
(___) Individual ~ $20.00 per year.
(___) New * (___) Renewal Dues are for Year _____*
For new members who join in the last months of the year, membership will extend through the following year with no additional dues.

ANNUAL DUES – PLEASE PAY YOUR DUES PROMPTLY.
Pay at next meeting or mail to:
Mineralogical Society of DC, P.O. Box 9957
Alexandria, VA 22304

Name(s) (First and Last)
_____
Address_____
City _____ **State** _____ Zip: _____
Phone(s): **Home/Work/Mobile**_____
Email(s) _____
OK TO INCLUDE YOU ON CLUB MEMBERSHIP LIST?
(__) Yes – Include name, address, phone, email.
If you want any information omitted from the membership list, please note:
Omit my: (__) Email, (__) Home phone, (__)Work phone, (__) Mobile phone, (__) Address, (__) Name
SPECIAL CLUB-RELATED INTERESTS?
_____

MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA
(2015 Officers & Board Members)

President: Steve Johnson, stevikj@gmail.com
Vice President & Program Chair: Dave Nanney, dnanney@cox.net
Secretary: Andy Thompson, thompson01@starpower.net
Treasurer: Rebecca Siegal, dcmineralclub@gmail.com, (mail: c/o MSDC, P.O. Box 9957, Alexandria, VA 22304)
Directors: Dave Hennessey, John Weidner, and Sheryl Sims
Editor (Acting): Susan Fisher, novaya2@cox.net
Co-Web Masters: Betty Thompson & Casper Voogt, http://mineralogicalsocietyofdc.org/

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Mineralogical Society of DC
% Susan Fisher
P.O. Box 881
Centreville, VA 20122

Time Sensitive Dated Material
First-Class Mail