



THE NORTHERN VIRGINIA MINERAL CLUB INC



Crystals are the flowers of the Mineral Kingdom



THE MINERAL NEWSLETTER

Meeting: January 23 Time: 7:30-10 p.m.

Long Branch Nature Center, 625 S. Carlin Springs Rd. Arlington, VA 22204

Program: Silver Hill, Presented by Michael Kaas, Geologist U.S Bureau of Mines

Micheal Kaas will start our year off with a presentation on Silver Hill. Michael was a geologist with the U.S. Bureau of Mines for many years, then joined the U.S. Geological Survey as part of the Mineral Economics group. He now volunteers at the Smithsonian as "Miner Mike" to teach visitors about the uses of minerals. He reprised this role at our last club show. He also has an active interest in mining history.

Michael is retired now but also had an involvement in mineral land assessments during part of his 20 years with the US Bureau of Mines (until the lights were turned out).

Biography of Michael Kaas:

Michael Kaas's interest in mining history started when he was a kid in NJ. They have a lot of mining history there, but no operating mines these days! The Sterling Hill Mining Museum is the old NJ Zinc Company operation in Ogdensburg (just south of the more famous Franklin mining area). He worked as a mining engineer at Sterling Hill briefly, before heading to grad school. A real hidden treasure, only about 5 miles away, is the remains of Thomas Edison's magnetite mining operations where he nearly lost his fortune trying to perfect magnetic separation. The extensive foundations in the woods attest to the huge scale of the effort, decades before Minnesota taconite mining really took off. It also worth visiting before the urban sprawl takes over the place.

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Also find information on our Club website:
<http://www.novamineralclub.org/>

New Editor

Hi! I'm Julia Hrechka, a junior at Bishop Ireton High School. I first joined the NVMC in grade school because of my mom's passion for minerals. I accepted the responsibility of Newsletter Editor because my favorite subject is English. I especially enjoy grammar, computer usage, and reading. Last January, our family adopted a black cat with amber hued eyes. Guess what we called her? Amber! My dad and I named her for her eye color and we shared a laugh upon realizing the meaning of the word to my mom: the resinite meaning.



(Continued Biography of Michael Kaas)

You probably know about the Mining History Association. It has a website, www.mininghistoryassociation.org (Michael is the so-called webmeister). It is currently being revamped to add more content about old mining areas, especially those at which the group has held past meetings. They are always looking for new members. It was started by several western history profs but now includes lots of miners, geologists, amateur history buffs, etc. Take a look at the website and see what you think. Next MHA meeting is in June 2012 in Prescott, AZ.

President's Message:

By Sue Marcus

As we begin a new year, I am grateful to all of our members. Some have stepped back to take a breather from their service to our club, while others step forward. And some, like Barry and me, try a job swap! If each of us helps a bit, the burden is much easier for all of us. Looking backwards and forwards, like the Greek god Janus, Robert Winsor created and published our award-winning newsletter for four years. A big tip 'o the rock hammer to Rob for keeping us consistently connected in fine style! Julia Hrechka has volunteered to be our new editor. I was going to write that she was willing to pick up the pen to be our editor--but that is so non-digital! *Thank you, Julia!*

January means dues are due. Along with dues, we ask for current contact information. We have not had a membership list, *available only to members*, in a while. It would be useful to have one. The membership form offers members the opportunity to opt out of sharing their contact information. Those who opt out would receive the newsletter, no other communications.

I look forward to seeing you on Monday, Jan. 23. Please feel free to call or send me an email if you have ideas on programs (I'll pass these to Barry), concerns, or ways we can share our interest in minerals, fossils, gems, and all other aspects our earth sciences hobby. Warmly, Sue Marcus, 703-502-9844, r1haskins@verizon.net. We have a phone answering machine, so please leave a message!

December Minutes:

By Kathy Hrechka, Secretary

Holiday Party: Club members enjoyed sharing a meal and great company for the December 19 meeting.

President Barry Remer opened the business meeting at 7:50 p.m. He first asked for officer nominations from the floor. Then he presented the new officer positions for 2012 to include:

President - Sue Marcus

Vice-President - Barry Remer

Treasurer - Rick Reiber

Secretary - Kathy Hrechka

The membership unanimously voted for the nominations as announced.

Barry presented an award for Editor, Robert Winsor in appreciation for his four years of service as the editor of *The Mineral Newsletter*. Barry announced that Robert is unable to continue as editor, so the position needs to be filled.

Ti Godfrey facilitated the door prize drawing. Poinsettias were won by Rick Reiber, Robert Clemenzi, and Michael Pabst. Roger Haskins won a stuffed snowman. The business meeting concluded by 8:10 p.m. Club members returned to eating holiday food. Sheryl Sims led the game "I have a secret" which was humored by everyone to include many surprises.

Previous Program Reviewed: 12/19/11

By Kathy Hrechka, Secretary

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Field Trip - Mineralogy Laboratories and Museum at James Madison University

February 18, 2012 at 9:00 AM

By Tom Tucker

Dr. Lance Kearns has again invited MSDC, along with the MNCA Micromounters and the Northern Virginia Mineral Club to visit the mineralogy labs and the fabulous mineral museum at James Madison University, in Harrisonburg, Virginia. We'll "pass the hat" so everyone will have an opportunity to make a small donation to the mineralogy department for the furtherance of their activities and acquisitions, and to pay for the hot coffee and breakfast buns or donuts that Lance will have awaiting our arrival.

The Museum alone is worthy of a trip to Harrisonburg, being the finest collection of minerals in the State. There are a dozen or so large wall cabinets filled with minerals from around the world, but with an obvious emphasis on Virginia specimens, like the turquoise from Lynch Station, or apophyllite from Centreville or aragonite from Buchanan. After your visit I'm sure you will have selected your own favorites. There is also a small room with a stunning fluorescent mineral display.

During the morning Lance will be available to identify those unknown specimens you have accumulated over the years. I'm sure he will demonstrate the use of the x-ray diffractometer for crystal determinations and the Ramen spectrometer. The lab has enough stereo microscopes for all those interested to examine their specimens, or perhaps those that others have brought to share on a "freebie" table. Bring anything you have to share.

There will be various mineral specimens in all size ranges from micro to cabinet sized, and numerous books available for purchase at unusually reasonable prices or free will donations - acquired

from various donations to the labs. Arrive early for the best selections.

We will probably go out for pizza at lunch, and return in the afternoon to visit the "micro probe" and scanning electron microscope laboratory on the other side of the campus. We might use it to determine the chemical make-up of our unknowns, or to see close-up the crystals at hand.

The mineralogy labs are in the Geology Department which is in Memorial Hall (the former Harrisonburg High School building), on South High Street. For a map of the campus, go to the University website: www.jmu.edu/map/. On the index map, the Memorial Area is an inset at the upper right. Click the small map, and a detailed area map will appear.

Driving directions: It takes approximately two and a quarter hours to reach JMU from the DC Beltway. From the Beltway, go west on I-66 approximately 65 miles to its intersection with I-81. Take the left fork, and go south on I-81 approximately 54 miles to Harrisonburg. Take Exit 245, Port Republic Road, and go right about a mile to High Street. Turn right, and proceed north about a half mile to a light at Cantrell Avenue. Memorial Hall will be to the left, with abundant parking. Being a weekend, parking passes will not be needed, but if you do have a problem, Lance can probably take care of it.



If you plan to attend, please let me know the number in your party, so that we can let Lance know how many to expect for coffee and buns. Email: threedogtom@earthlink.net, or phone: 540-347-9098.

Mineral Identification using the Raman Spectrometer at JMU

By David Hennessey



During our upcoming field trip to James Madison University we will have the opportunity to use the Raman spectrometer to help us identify unknown mineral specimens. Their Raman spectrometer is a nifty little device. It has the footprint of a microscope hooked up to a laptop computer. You touch a flat surface of your specimen to a part of the spectrometer that emits a laser light, and the spectrometer does the rest. And it is non-destructive – it does not consume any part of the specimen.

The Raman spectrometer works by bouncing the laser light off the flat surface of the specimen which interacts with the molecules of the specimen, causing vibration. Then it “reads” the vibration pattern and compares it with vibration patterns stored in the laptop’s database to determine what it most closely matches.

It’s not perfect, especially if you don’t have a good flat surface to present to the spectrometer, but I watched it in operation correctly discriminate between specimens that looked alike to my eye. The Raman spectrometer correctly identified an anglesite (lead sulfate) versus a cerussite (lead carbonate) when the two nearly identical appearing specimens were tested. Even more impressive, when presented with three carbonate specimens that looked nearly identical (clear colorless rhombic crystals of calcite, dolomite and magnesite) it could tell the difference. I couldn’t. Before using the Raman spectrometer I was sure one particular specimen was a magnesite. It looked just like one of the excellent magnesites from Brumado, Brazil. Except, it wasn’t. It was a calcite. Another one of the trio was the magnesite.

Via MSDC Mineral Minutes 2-12

AFMS & EFMLS NEWS

(excerpts & photos from EFMLS & AFMS January 2012 Newsletters).

AFMS Scholarship Foundation News Reivan Zeleznik, AFMS Scholarship Foundation Coordinator



The AFMS Scholarship Fund is an anonymous plan of giving to a yet-to-be-determined scholarship recipient. The acknowledgment of contributions will continue with the recognition of donations by clubs and their members. Certificates will continue to be granted as visible incentives to encourage donations from members and club budgets.

Each One Teach One (EFMLS)

Hazel Remaley, EOTO Chair



Do you know of fellow club members who are teachers, instructors, writers, movers and shakers in your club? If so acknowledge their sharing and caring by nominating them for the “Each One Teach One” award. Nominations should be sent to me by June 15th at: northridge5@verizon.net.

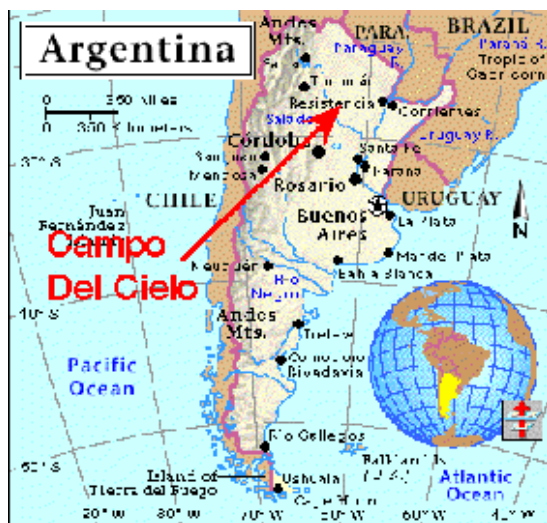
Visit www.efmls.com and www.afms.com for more information on federation news and activities.



**MY LITTLE PIECE OF THE ROCK:
METEORITE FROM CAMPO DEL CIELO**

By Sheryl E. Sims

Campo del Cielo, or the field of the sky, is where my meteorite was found. Campo del Cielo is in Gran Chaco Gualamba, Argentina. The location is approximately 500 miles north-northwest of Buenos Aires. The name, Campo del Cielo, came from the area that the Indians called the "iron pieces which fell from the sky." These days, we believe that they were referring to meteorites. The location where these meteorites are found is an open area. Due to the open plain, it's easy to locate meteorites.



<http://www.meteoritemarket.com/CCMAP.GIF>

The craters found in Campo del Cielo come from both large and small meteorites. 12 craters have been found – the largest crater being 78 by 65 meters, and one of the smaller one being 56 meters in diameter and 5 meters deep.¹ According to scientific records, the carbon dating of charred wood found in the craters, date the time of the fall of the meteorites to 5800 and 3950 years or so –

¹ http://en.wikipedia.org/wiki/Campo_del_Cielo.

consistent to Indian oral tradition of when the meteorites fell to the earth. It's reported that many of the Campo meteorites are highly rusted and corroded by terrestrial chlorides. Still, some meteorites were found to have significant areas of fresh fusion crust, which indicates that their fall was in the not-so- distant past.²



(photo by Sheryl Sims)

**Uranium in Virginia –
From a Naturalist Point of View**

<http://www.pwconserve.org/events/index.html>

When: Thursday, Feb 2, 7:30-9:00pm

Where: Bull Run Unitarian Church, 9350 Main Street, Manassas

Speaker: Charlie Grymes, Chair, Prince William Conservation Alliance Virginia has a uranium deposit worth as much as \$10 billion. Other uranium deposits are concentrated east of the Blue Ridge, including in Fauquier County.

The General Assembly and local officials are debating right now if mining is appropriate... or not. If we develop the natural resource, what's the threat to Lake Manassas and the Occoquan Reservoir - and to the water supply of Virginia Beach?

Is it better for the environment (and/or the pocketbook) to get electricity in Virginia from coal, natural gas, or nuclear energy? Come learn about uranium in Virginia at our First Thursday Speaker series on February 2.

² Ibid.

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Upcoming Geology Events:

January 20: "Shark Tooth" Hunts for NVMC Club

"Private Fossil Program" at Flag Ponds Beach & Nature Park, Chesapeake Bay, Md. 11am - 2pm
Contact: Pat Rehill at patriciarehill@gmail.com

January 25: Micro Workshop, Micromineralogists of the National Capital Area, Long Branch Nature Center 7:30 – 10 p.m.

February 18: Field trip to James Madison University to visit Dr. Lance Kearns and JMU's mineralogy labs.

February 18: Southern Maryland Rock and Mineral Club. The 22nd Annual Mineral, Jewelry & Fossil Show, 10am-5pm. The Show Place Arena, Upper Marlboro, MD. <http://www.smrnc.org/2012-rock-show.html>.

March 7: MSDC Meeting Program: Author Alan Cutler will speak on the geological and mineralogical vision of Nicholas Steno, the founder of modern geology. He authored the book: The Seashell on the Mountain Top. For further information, see <http://www.amazon.com/Seashell-Mountaintop-ebook/dp/B001NGN2HI>

March 17-18: The Gem, Lapidary and Mineral Society of Montgomery County, 48th Annual GLMSMC Gem, Mineral and Fossil Show. Saturday 10am-6pm, Sunday 11am-5pm. Montgomery Co. Fairgrounds, 16 Chestnut St., Gaithersburg, MD. <http://www.glmsmc.com/show.html>

March 24-25: Sayre, PA – The 43rd Annual Che-Hanna Rock & Mineral Club Rock & Mineral club show will be held on March 24 (9-5) and March 25 (10-5) at the Athens Twp. Vol. Fire Hall, 211 Herrick Ave., Sayre, PA. Admission is \$3/adults, \$1/students, kids under 8 years old are free. Contact Bob McGuire 570-928-9238 for more info. www.chehannarocks.com

April 4: MSDC Meeting Program: Professor Joe Marx will present "Details on Some New Kimberlite Pipes Found in Falls Church. Joe is a geology professor at Northern Virginia Community College. For further information, see <http://www.nvcc.edu/home/jmarx>

April 19-22: 39th Rochester Mineralogical Symposium. Radisson Hotel, Jefferson Rd. Rochester, NY

April 27-29: Atlantic Micromounters Conference will be held on at the MHA Conference Center in Elkridge, MD

April 10-15 & Sept. 3-9: Wildacres Workshop

Complete descriptions of all classes can be found on the EFMLS website <www.amfed.org/efmls>. Just click on the Wildacres tab.



2012 Club Officers

President: Sue Marcus
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sesims4@cox.net

Greeter/Door Prizes: Ty Godfry
twhtknig@aol.com



PLEASE VISIT OUR WEBSITE:
HTTP://www.novamineralclub.org

The Northern Virginia Mineral Club

You can send your Newsletter articles to:

Julia Hrechka
7201 Ludwood Ct.
Alexandria, VA 22306

Or via email: news.nvmc@gmail.com

Visitors are Always Welcome at our Club Meetings.

RENEW YOUR MEMBERSHIP!

SEND YOUR DUES TO:

**Rick Reiber
Treasurer, NVMC
PO Box 9851
Alexandria, VA 22304**

OR

Bring your dues to the meeting

Purpose: To promote, educate and encourage interest in geology, mineralogy, lapidary arts and related sciences. The society is a member of Eastern Federation of Mineralogical and Lapidary Societies (EFMLS) <http://www.amfed.org/efmls> and American Federation of Mineralogical Societies (AFMS) <http://www.amfed.org>.

Dues: Due by 1 January of each year; \$15.00 Individual, \$20.00 Family, and \$6.00 Junior (under 16, sponsored by an adult member).

Meetings are held at 7:45 p.m. on the fourth Monday of each month (except May and December*) at [Long Branch Nature Center](#), 625 Carlin Springs Road, Arlington, VA 22204. Phone (703) 228-6535. (No meeting in July & August.)

(* Changes announced in the newsletter.) Snow schedule - Arlington county schools.