

February 2021

The purpose of the Gem, Lapidary, and Mineral Society of Montgomery County MD, Inc. is "to increase knowledge and popular interest in earth sciences, geology, mineralogy, paleontology, lapidary arts, and related subjects."

**NOTE:** Please send any submissions for the March issue of The Rockhounder to Editor Olivia Luzier at <u>editor@glmsmc.com</u> by Monday, February 22, 2021.

# **Regular Meeting Announcements**

Ken Reynolds, Vice President

# February Speaker Information:

**Speaker:** Kathy Hrechka

#### Focus of Talk:

Snow Crystal Photomicrography 101

We learn early on in life that every snowflake is different. But did you know that each snowfall has its own signature snow crystal patterns based on temperature and humidity? So says Kathy Hrechka, who has been observing, studying, documenting, and photographing snow crystals for the past five years. She would set up her microscope, cameras, and collecting plates on her front porch during snowfalls. Mother Nature determined the schedule, so at times, Kathy was the first person in the neighborhood to be awake to study snow crystals when the snow started falling. The anticipation was like awakening on Christmas morning. She would wonder what kind of snow crystals would arrive at her microscope.

#### **Next Regular Meeting:**

Date: February 8th, 2021 Time: 7:30 PM Place: Virtual (online Zoom meeting)

#### Next Board of Directors Meeting:

Date: February 15th, 2021 Time: 8 PM Place: Virtual (online Zoom meeting)

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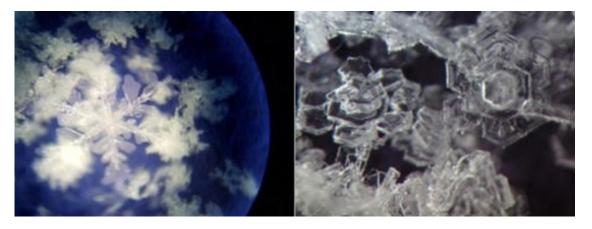


# Speaker Information (Cont'd)

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Kathy will be sharing images she has captured of one of nature's most elusive and ephemeral artforms- the snow crystal.

Born in Wisconsin, Kathy Hrechka grew up playing in the snow. Today she is a retired flight attendant, residing in Virginia. Her favorite hobby has always been geology. She collects microminerals, which require magnification for identification. Kathy is a volunteer editor of *The Mineral Mite,* a newsletter for micromineral collectors like herself. (See more at <u>www.dcmicrominerals.org</u>.) She also volunteers in the Geology Gems & Mineral Gallery at the Smithsonian's Museum of Natural History in Washington, D.C.



Photos courtesy of Kathy Hrechka

Please note that this is an online Zoom meeting. A link to join has ben emailed.

#### **Looking Ahead to March!**

#### March 8th Speaker:

Dr. Jeffrey Post, Curator in Charge, Gems & Minerals, Smithsonian National Museum of Natural History

Please note that this will be an online Zoom meeting. A link to join the meeting will be emailed.



#### **President's Message**

#### Holly Heighes

Hello all,

I suspect you have all heard and/or realized by now that we will not be able to have our show again this year. Unbelievable. We will have to make the 2022 show something spectacular– if you have any ideas, please share them.

It also looks like we may be having a couple significant collections to auction once the restrictions are lifted. To date, the Board has only briefly discussed this and will be exploring ideas; one thought was to make it a members-and-family-only event of some type.

We had a couple members take me up on the offer to join our monthly Board meeting – thank you. Your input was appreciated. The offer stands to all members, please email me and I'll make sure you are included on the Board Zoom invite.

Thank you to Kathy Hrechka, our speaker for February, and to Dr. Post, who will speak to us in March with an update on what he has been doing.

All the best and I hope to virtually see you at the meeting!

Holly

# **GLMSMC Regular Meeting Minutes from January 11, 2021**

Jeff Cessna

The January 11, 2021 meeting was called to order by President Holly Heighes at 7:45 PM. There were approximately 57 people in attendance. The meeting was conducted online. A motion passed to approve the minutes of the November 9, 2020 regular meeting. A motion passed to approve the minutes of the November 16, 2020 Board of Directors meeting.

**President:** President Holly Heighes welcomed members and guests. Guests introduced themselves from Pennsylvania, Baltimore, and Tucson.

Chris Luzier announced the club had lost 2 members in the prior 3 weeks. We remembered William Nagy, father of Jeff Nagy, as a yearly demonstrator of faceting at our annual show. He was also a

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member of the Leisure World Club. Chuck Hyland was remembered for his yearly 2 exhibit cases of calcite and coordinating volunteers among the Boy Scouts for the show, as well as being a speaker for the club. Both members will be missed. (Editor's Update: In the last week, we also lost JoAnn Mohr, who welcomed so many guests to our show each year and sewed the many, many cloth bags for kids to take their new mineral specimens home in. All three members will be very missed.)

**Show:** Downstairs Chair Chris Luzier reported that the BOD had voted to cancel the 2021 show. It was the only option, given the advance preparation required. Chris thanked the members for all their support for our shows.

**Treasurer:** Jonathan Harris delivered a Treasurer's report. Club expenses since last report were for the club Zoom account. A budget has been prepared, taking into account the cancelled show. Some expenses remain, so the club will run a deficit, but will withstand the loss. Some show deposits will be rolled over to the next year.

**Membership:** Doug Baum thanked those who had already sent in their membership payments. The memberships expire on Dec 31st.

**EFMLS Liaison:** Andy Celmer reported that the Wildacres Spring session will occur 17-23 May. In July, the EFMLS convention will occur. He announced upcoming shows in PA and NY.

**Vice President:** Ken Reynolds announced upcoming speaker Kathy Hrechka in February and Dr. Jeffrey Post in March.

**Program:** We were introduced to our speaker for the evening, Dr. Gabriela Farfan, The Coralyn Whitmer Endowed Curator of Gems and Minerals at the Smithsonian Museum of Natural History. Dr. Farfan used an example of a research project to reveal the basic science that is possible behind the scenes at the museum. The project centered on the investigation of trapiche-like patterns of inclusions in quartz crystals from the Huanggang Mines, an Fe-Sn skarn deposit in Inner Mongolia, China. Using Optical Imaging, Energy-Dispersive X-Ray Spectroscopy, X-Ray Diffraction, Raman Spectroscopy, X-ray CT, Cathodoluminescence, and Cathodoluminescence with Microprobe each revealed separate portions of the story. Dr. Farfan noted this capability is rare in the museum world and drew her to pursue a position at the museum. Collaborations with internal and external experts aided in the interpretation. The inclusions are Fe-rich clay deposits in very small cavities left behind



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by crystals splitting during growth in a hydrothermal environment, but at low temperature for quartz crystals. Additionally, the inclusions took two forms: clumps and noodles shapes. This presented the opportunity for Raman (of) Noodles (credit to Alana in the chat). The results are under review for publication in *American Mineralogist.* Dr. Farfan answered far-ranging questions from those in attendance. Thanks, Gabriela.

**Show Table:** A special request for the show table was to include calcite specimens in honor of Chuck Hyland.

Andy Celmer showed thunderegg slabs from Richardson Ranch, OR. Jeffrey Cessna showed a fluorescent response photo of the rear side of zoned calcite from Santa Eulalia, Chihuahua, Mexico; a calcite cleavage from Medford Quarry, MD, formerly in the collection of the Ballards; and a tube-like aggregate of calcite crystals from Santal Eulalia, Mexico. Jonathan Harris showed a large specimen of over 6-inch calcite crystals from Medford Quarry, MD. Andrea Lubawy showed suspected barite crystals in a layered specimen, self-collected during a hike in Palos Verdes Peninsula, CA. Chris Luzier showed a terlingua calcite from Terlingua, TX (a former Fred Parker specimen). Kathy Hrechka displayed an amethyst specimen from Minas Gerais, Mexico (a gift from a thoughtful son). With their thrift shop and yard sales purchases curtailed, the Leamans showed Internet purchases. Gary showed a zoisite, var. thulite specimen from Norway. Diane showed a quartz, var. amethyst from South Africa. Dee Weiss showed a calcite and pyrite specimen from Mexico. Pat Repik-Byrne showed a mangano calcite purchased at the 1990 Ultraviolation Show. She demonstrated the pink fluorescence.

Ken Reynolds shared fond memories of Chuck. He showed a franklinite crystal on calcite from the Sterling Hill Mine, NJ and a photo of fluorescent crystals from Franklin, NJ under a microscope.

Holly Heighes showed a calcite from Chihuahua, Mexico, purchased from Octahedron, a former deal at our shows.

Adjournment: It was M/S/P to adjourn the meeting at 9:25 PM.

Jeff Cessna, Secretary



The RockhounderFebruary 2021GLMSMC Board Meeting Minutes from January 18, 2021

#### Jeff Cessna

**Board Members present:** Doug Baum, Andy Celmer, Jeffrey Cessna, Jonathan Harris, Holly Heighes, Chris Luzier, Ken Reynolds, Joel Rosen, and Dave Tiktinsky. **Guests present:** Dan Kohn, Gary Leaman, and Diane Leaman.

President Holly Heighes called the January 18th meeting to order at approximately 8:01 PM.

**President:** Holly introduced Dan Kohn, who has kindly volunteered to assist the club with any website needs. She discussed a thank you note received from Lynne and Bernie Emory. The club was complimented on the quality of the speaker at the last meeting and the quality of our show. The praise was appreciated, considering Dan Kohn noted Bernie is in the Rockhound Hall of Fame and Chris Luzier also noted he is Show Chair of several local shows.

**Programs:** Past programs were discussed with emphasis on striking a balance among the several types of presentations available. It is noted that the pool of possible presenters may be larger due to the lack of travel requirement. Ken Reynolds discussed upcoming scheduled and potential programs. It was noted that the meeting link should only be provided on request to avoid exceeding the meeting software limit of 100 or exceeding the limits required to keep the connection stable. Finding an option to mute all other participants in the Zoom meeting, aside from the speaker, during a presentation, was discussed. Disabling participants' video views to preserve users' bandwidth and improve the presentation experience was also discussed. Doug Baum will handle Facebook requests for meeting links. Jonathan will handle requests received at the club information email.

**Show:** The show was cancelled by electronic voting of the BOD over the period of January 3rd-5th. The third weekend in March was selected to for the 2022 show in order to reserve the venue. Dave Tiktinsky has notified the dealers and discussed the held deposits.

**Treasurer:** Jonathan Harris circulated the proposed 2021 budget (version dated January 18th, 2021) for discussion. It was M/S/P to approve this version of the 2021 budget. The club income and expenses report was discussed. Chris Luzier proposed Holly review the 2020 club finances in the 2021 audit. Holly accepted. Jonathan will provide the records in electronic form.

**Upcoming Speakers:** Ken Reynolds reported he has speakers for February and March. He solicited input for speakers in April and May. Several potential contacts were provided.

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**Membership:** Doug Baum reported membership payments were being received at roughly the rate as seen in the past. He has supplied membership cards to those who supplied self-addressed stamped envelopes.

**EFMLS Liaison:** Andy Celmer reported on current activities with the EFMLS. Club insurance provided through EFMLS was discussed.

**Property:** Joel Rosen reported he had checked on the large club trailer and performed maintenance. The trailer is dry inside. He complimented the weather sealing performed by Jonathan.

**Newsletter:** Chris Luzier reported that editor Olivia will request member submissions for the newsletter on the subject of memories of rockhound-related activities and times before the pandemic.

**Website:** Potential improvements to the website were solicited. The provision of the club membership form as a fillable PDF form was discussed. The 2022 show should be mentioned.

It was M/S/P to adjourn at 9:15 PM.

Jeff Cessna, Secretary

Follow us on Facebook at

https://www.facebook.com/ groups/984241208329511/



# Future Rockhounders of America (The MOCKS) Ages 10-15

Mark Dahlman

Next Meeting Date: Time will tell

Meeting Time: 7:45-9:00 PM when we're back in action

Meeting Location: Sunroom Cafeteria at the Rockville Senior Center

Continuing our Fossil badge, one of the badge activities is to learn about types of fossils, as in how the fossil formed. The latest edition of the FRA handbook (available for browsing or download at <a href="http://www.amfed.org/fra/AFMS\_Badge\_Manual\_Fifth\_Edition\_2020.pdf">http://www.amfed.org/fra/AFMS\_Badge\_Manual\_Fifth\_Edition\_2020.pdf</a>), includes the following paragraph. The YouTube video linked below is worth watching, since it is a good explanation.

Fossils are preserved remains or evidence of past life: plant and animal, microscopic and macroscopic. These include actual remains of the plant or animal (such as teeth), carbonized impressions, molds and casts of shells and other body parts, etc., as well as evidence of an organism's activity, such as chemical traces, burrows, footprints, and fossil poo or coprolites (known as trace fossils). A simple YouTube video provides a clear explanation: www.youtube.com/watch?v=TVwPLWOo9TE.

I'd love to see pictures of your rock ornament (see December's article), or your collection showing off your fossils, which is another badge activity (see the October article), as well as any interesting fossil-related web links to share with the group. My email address is shown below.

For more information on the Future Rockhounds of America program, please contact Mark Dahlman at <fra\_advisor@glmsmc.com> or 301-428-0455.

## **Article of Interest: Cookie Monster Geode Found!**

Provided by Chris Luzier

Article Link:

https://nypost.com/2021/01/24/rock-that-looks-like-cookiemonster-could-be-worth-more-than-10k/





# The RockhounderFebruary 2021Remembrance Through Rocks:A Visit to the Cathedral of the Pines in Rindge, NH

## Holly Heighes

A hurricane in 1938 that destroyed a vast grove of pine trees on the recently acquired property of the Sloane family had revealed a previously unknown, but spectacular, mountain view. The family was awestruck, and one of the four children, Sanderson Sloane, decided this was the view he wanted and planned to one day build his home on the site.



In February of 1944, Sanderson's plane was shot down over Germany. The family held a memorial service for him on 'his' spot, and such was the local outpouring of support that they decided to build an outdoor chapel using rock.

Sanderson's father, a member of the Sons of the American Revolution, reached out to the societies in the other states and requested they send some of their local rock to be used in the construction, along with the local New Hampshire rock (lots of granite). Word got around and soon rocks from all over the world were turning up as a token offered for loved ones who lost their lives in war. The location was re-dedicated as a memorial for all American war dead.



The site has expanded to include other chapels and small places of reflection in secluded groves or tucked into the side of a hill. But the donations of rock specimens from people in all 50 states and around the world to remember someone is what you take away from this place.



# Beachcoming

#### Chris Luzier

One of my favorite places to collect things is on any kind of beach. It can be gravel or sand, mud and clay or any combination of sediment. A lakefront beach or stream, bay or river, the ocean or creek, any kind at all. I love the gravel bars on rivers and streams, the tidal wash zone on any coastal area or estuary, and the sometimes calmer waves of a large lake. It is the churning motion of the waves, the constant ebb and flow, the rhythm of the washing and tumbling of anything and everything in the water.

The scattering of objects where the water meets the land has always attracted people to the beach to see what has been lost, what can be found and also, that moment where some objects are seen for the first time ever, by the eyes of a human being. Think about a freshly washed agate from a gravel bar on Superior, that has just washed out after a couple of billion years from its basalt birthplace. A shark's tooth or massive whale vertebrae, from a diatom-filled clay on the side of a Virginia river or a Maryland waterway. When you walk along these beaches and find the wave's provision at your feet, you may be the first to set eyes and fingers on the object before you. This is why I have always collected and looked down to see something that I don't want to miss!

This curiosity and wonder of "what can I find?" has been with me since I was a small child, from picking up periwinkle snail shells on a sandy creek shore at my grandmother's house in Virginia, to sand glass hunting and picking up driftwood pieces to put my periwinkle shells on! I think this excitement of the hunt for the unknown, and the surprise that goes along with it, is what drives mineral collectors and collectors in general. This real possibility that you can find something truly wonderful and rare, just by stumbling upon it, is a delightful surprise. But many times it is the discovery of just exactly what you were looking for, but after much research of a location and the various fossils, minerals, artifacts, etc. that you sought that can be found there. When you find that exceptional specimen, it shows all of your diligence and hard work has just paid off.

These walks and trips that we take in search of our quarry, whether it be rockhounding, beachcombing, or just a general walkabout that you find yourself on, these are also about being able to just relax and unwind, to let our cares just drift away with the tide. The rhythm of the waves is peaceful and relaxing, with the rush and retreat of water that casts the treasures at our feet. It is the looking and searching, but also slowing down and taking that time we all need, to get lost for a while and appreciate the small things that we may typically miss in our busy lives. The pace of walking and searching slows us down, the stillness and quiet draws us into noticing the small creatures and life around us and under our feet everyday. Looking through the waterwash, you can see minnows move

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## Beachcoming (Cont'd)

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and dart, jellyfish jostle in the current, and the crustaceans meander through the gravel and sand that hides what we seek. We slow down further and squint to see, the glint of gold or a slice of history, 20 million years old. We peer through the waves and there it is, the stone that you sought, just cast by the wave, is now pulled back and rolls away. Will it come back or did you miss that chance?

It is the chance again, that simple pleasure of slowing down and searching, letting ourselves relax and retreat into something as simple as a beach. It is in being with friends or family on trips like these that so many of us remember, or that solitary journey that we took to get away for a few hours or a day. To leave our thoughts and burdens behind and take away good memories, some clarity, and whatever the waves have graced at our feet...

#### How to Pay Your 2021 Dues

Doug Baum

#### How to pay your 2021 GLMSMC dues, if you have not already:

- 1) \$20 for Family and \$15 for individual membership.
- 2) Send check made out to GLMSMC to Doug Baum, 11205 Golden Meadow Court, Germantown MD 20876.
- 3) If you send a self-addressed stamped envelope, I will mail your Membership Cards.
- 4) Any questions? Email Doug Baum at DBaum18@aol.com.

Thanks, Doug Baum



# Re-print of "Young Gem and Mineral Collector Wins Big Prize"

**\*\*Editor's Note:** Member Erich Grundel brought it to my attention that he had written an article about our January speaker, Dr. Gabriela Farfan, and some of her early accomplishments years back. This is a re-print of Erich's article all the way back from our May 2009 Rockhounder!

#### Erich Grundel

#### YOUNG GEM AND MINERAL COLLECTOR EARNS BIG PRIZE

The Intel (formerly Westinghouse) Science Talent Search is the premier forum for showcasing America's future leaders in scientific research. High school students from throughout the country compete for scholarships based on their science projects. These projects are typically conducted at government or university laboratories and are on a level of those conducted by senior investigators. Traditionally the winners have come from just a few disciplines: biology, chemistry, mathematics and physics. This year may have produced a first: a top place prize on a project in the earth and planetary science category that looked at the properties of a popular gemstone mineral.

Gabriela Farfan is a high school senior from Madison, Wisconsin. She is a member of a local club and is particularly interested in minerals and gems. One mineral that caught her eye is "Oregon Sunstone", the state rock. This is a feldspar that usually has a red color and can display a schiller. It has been known that the color is due to copper inclusions. Gabriella was curious as to why some of the specimens from the Dust Devil mine in Oregon looked red from one angle and green from another.

Using x-ray diffraction, optical microscopy and electron microscopy she found the answer. Present in the host crystal are also inclusions of zinc. Gabriela's theory is that there are aligned nano-scale metal platelet inclusions which, when viewed from different angles, give rise to the observed colors. Gabriela also presented this last year work at a meeting of the Gemological Institute of America (GIA). For this work Intel presented her with a \$20,000 scholarship.

#### **References:**

http://www.scisvc.org/sts/68sts/FarFan.asp http://geology.about.com/b/2009/03/27/congratulations-gabriela-farfan.htm

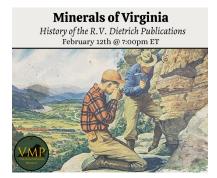
By Erich Grundel



### **Upcoming Events**

Virginia Mineral Project Event: History of the R.V. Dietrich Publications (February 12th)

> History of the R.V. Dietrich Publications Date: February 12th, 2021 Time: 7:00pm ET



**Description:** The *Minerals of Virginia* books by R.V. Dietrich inspired an entire generation of Virginia mineral collectors. The 1990 publication (including the 1991 update) has become a hegemonic text for those interested in studying Virginia mineral localities. Despite these later works being more prominent, earlier copies and smaller publications date back to the 1950's under the Virginia Tech Engineering Experiment Station. The VMP will go back in time and break down the evolution of these publications and how they became the ultimate resource for Virginia mineral collectors. A discussion of the book chapters and format will be included, along with an open discussion where participants can ask questions and engage in conversation about each text. A short update of the VMP goals and objectives for 2021 will conclude the presentation!

**RSVP LINK:** <u>https://us02web.zoom.us/meeting/register/tZYpcOytrz4sH9Af7X9kA4HhxAGdEb-xuoRr</u>

If you are planning a trip and want to know what clubs you might be able to visit, it would be worthwhile to visit the American Federation of Mineralogical Societies website. Check out their newsletter archives at <u>http://www.amfed.org/news/default.htm</u>.



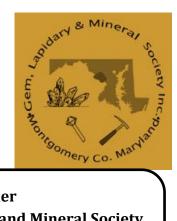


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- Bulletin Editor Olivia Luzier
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- Society Address: Gem, Lapidary, and Mineral Society of Montgomery County MD., Inc.
- P. O. Box 444, Gaithersburg MD 20884-0444
- Website: http://www.glmsmc.com/

All Society correspondence is to be sent to this address except that which is intended for The Rockhounder and its editor. Such items are to be sent to the editor's email address at <u>editor@glmsmc.com</u>.





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